

University of British Columbia

Social Ecological Economic Development Studies (SEEDS) Sustainability Program

Student Research Report

Reimagining Active School Transportation in the Acadia Park Neighborhood

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Resources, Environment and Sustainability (RES)

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Reimagining Active School Transportation in the Acadia Park Neighborhood

Final Project Report
December 10, 2021

Submitted by:
Jessica Koski, Raihan Hassen & Savonnaé Street

RES 505: Qualitative Methods for Interdisciplinary Research
The University of British Columbia (UBC)
Institute for Resources, Environment and Sustainability (RES)

In Partnership with
UBC Campus and Community Planning
SEEDS Sustainability Program

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Executive Summary

Acadia Park is a residential community within UBC that houses several families with school-aged children who commute to school. The goal of this project was to provide preliminary information and recommendations to UBC's Campus and Community Planning (C+CP) to help inform possible further phases and next steps for a potential child-centered placemaking pilot project in the Acadia Park neighbourhood. The project was guided by three objectives: (1) to explore factors influencing active transportation for school children in the Acadia Park neighbourhood, (2) to identify opportunities to engage children in reimagining place-making efforts, and (3) to identify ways to support active transportation in the Acadia Park Neighbourhood.

Literature related to active school transportation (AST) as well as child-centered engagement case studies for community planning and placemaking provided the conceptual background for the research. Prior to the research project, C+CP conducted a survey with over 200 parents across campus that identified safety concerns for active school transportation for their children. This project sought to build upon the survey's initial findings by administering a secondary neighbourhood-focused survey, conducting an observation of the commute to a local elementary school, and leading a focus group to better understand perspectives on AST and placemaking opportunities.

Observations revealed that there were two areas of interest within the Acadia Park Neighbourhood. One point of interest was the intersection of Melfa Road and Acadia Road, which was found to be congested during school drop-off, and was a safety hazard. The second area of interest was a trail leading to green space lying west of Melfa Road. This was observed to be a central area because it connected to main roads in the area and offered a frequently used pathway for children commuting to school.

Through analysis of the survey responses and the focus group interview, the research team identified five major themes: 1) parents expressed anxiety and worry related to road and forest safety; 2) there was an appetite for education about active transportation safety; 3) active transportation was seen to be a model for community-building; 4) parents hoped for infrastructure changes to facilitate safer commutes; 5) parents encouraged inviting children into conversations about active transportation.

The research findings and literature review suggest that reimagining active school transportation with youth can be successful when it is supported through collaborative partnerships and centres on principles of community-building and inclusiveness. In the process of reimagining active school transportation, the research team offers recommendations for future development. These recommendations include involving children in the design process, conducting research directly with children, increasing capacity for youth, and increasing efforts for building community.

Table of Contents

Introduction.....	4
Background.....	5
Conceptual Framework.....	6
Methods.....	10
Discussion of Findings.....	12
Key Themes from the Research.....	15
Conclusions & Recommendations.....	18
Appendices.....	22
Appendix A: Figures & Images.....	23
Appendix B: Survey Questions.....	26
Appendix C: Focus Group Questions.....	29
Appendix D: Focus Group Recruitment Flyer.....	30

Introduction

In partnership with the University of British Columbia (UBC) Campus and Community Planning Department's (C+CP) Social Ecological Economic Development Studies (SEEDS) Sustainability Program, the purpose of this student-led research project was to inform university strategies to promote wellbeing on campus through reimagining and placemaking opportunities to support active school transportation in the Acadia Park neighbourhood. Acadia Park is a residential community within UBC in the city of Vancouver, BC. One of the oldest neighbourhoods on campus, it consists of a vibrant multicultural community primarily families with children. Residents identify Acadia Park as a safe and friendly place and one of its greatest assets being the children who bring vitality and energy to the community.¹

The SEEDS Sustainability Program partnered with three UBC graduate students participating in a qualitative research methods class through the Institute of Resources, Environment and Sustainability during the months of September - December, 2021. The students brought a variety of background experiences including urban planning, community-level nutrition, and community capacity-building for environmental restoration. Additionally, one of the three student researchers was also a resident and parent in Acadia Park with first-hand active school transportation experience including a parent-led Acadia Park Bike Bus.

The goal of this project was to provide preliminary information and recommendations to UBC's C+CP to help inform possible further phases and next steps for a potential child-centered placemaking pilot project in the Acadia Park neighbourhood. By involving children in the community to reimagine a space they are excited to walk and roll on, C+CP hopes they will be empowered to share their thoughts and have their voices heard, feel a sense of pride and ownership, and be encouraged to advocate for safe and sustainable active school transportation. The project asked how we can reimagine safe and active transportation by engaging children and was guided by three objectives: (1) to explore factors influencing active transportation for school children in the Acadia Park neighbourhood, (2) identify opportunities to engage children in reimagining place-making efforts, and (3) identify ways to support active transportation in the Acadia Park Neighbourhood.

To follow, the report will provide background for the research project and its evolution during the semester. Then, the conceptual framework and literature reviewed for the project will be introduced related to active school transportation and child placemaking. Next, the qualitative data collection methods used are outlined in the Methods section. Then, a discussion of the findings provides the results and key themes that arose. Lastly, the student-researchers' provide recommendations for possible next steps and final conclusions.

¹ Barter, S. *Community Needs Assessment & Asset Mapping with Acadia Park Residents Final Report*. BC Healthy Communities. August 2012; *The Acadia Park Community Needs Assessment Results Report*. AMS Office of VP Academic and University Affairs. August, 2013.

Background

Many school-aged children from the Acadia Park neighbourhood use active transportation to travel to nearby schools, including walking, biking and other non-motorized modes such as scooters and skateboards. Two elementary schools and one secondary school are in close proximity to Acadia Park. Norma Rose Point elementary is immediately adjacent to the neighborhood, although a majority of Acadia Park housing units fall under the University Hill Elementary school area located about 1.5 km north of the community.² University Hill Secondary School is located about 1.5 km south of Acadia Park, near Westbrook Village. UBC Child Care Services are also situated near Acadia Park.

Through its Wellbeing Strategic Framework, UBC recognizes how the built and natural environment are key components to community wellbeing.³ As UBC families with school-aged children commute to school, ensuring safe and biodiverse environments are important to the Campus and Community Planning (C+CP) department. In fact, this project was initiated by C+CP through its SEEDS Sustainability Program, a program that creates partnerships across the campus and community to advance sustainability ideas and practices by using the campus as a living laboratory. It was initially conceptualized by C+CP when there were previously unaddressed safety concerns along a segment of Melfa Road located in Acadia Park, and inspired by child-centered placemaking initiatives for active transportation in Europe shared online in webinar format.⁴

As the project got underway, the scope shifted somewhat from an initial intent to focus on safety and placemaking for active transportation specifically on Melfa Road (see Figure 1 in Appendix A). Part of Melfa Road is a main thoroughway for children walking and biking to Norma Rose Point Elementary school and had, until recently, also been used by motorists accessing an adjacent parking lot in Acadia Park. This posed significant safety concerns for children with narrow walking space, no sidewalk or clearly demarcated pedestrian path coupled with a sharp turn and high fence creating a blind-spot. Upon preliminary on-site observation of Melfa Road, however, it was discovered that the road had already been blocked off to motorists and converted to pedestrian and active transportation use only, with alternate parking lot access for motorists. The research team informed SEEDS Sustainability Program partners and confirmed this addressed previous safety concerns identified at the site.

In addition, immediately prior to the research project, C+CP had completed a survey with approximately 200 families across campus that thoroughly identified various safety concerns for active school transportation. The survey did not identify Melfa Road as an area of concern,

² Vancouver School Board Boundary Map. Available at:

<https://www.vsb.bc.ca/School/directory/Documents/VSB%20Boundary%20Map%202020.pdf>

³ The University of British Columbia (2019). Wellbeing Strategic Framework - Built & Natural Environments; https://wellbeing.ubc.ca/sites/wellbeing.ubc.ca/files/u9/wellbeing_strategic_framework_FINAL_0.pdf

⁴ Placemaking Europe. Let Children Rule the Streets Webinar. June 2021. Available at: <https://placemaking-europe.eu/listing/recap-let-children-rule-the-streets-webinar/>

however, it did identify safety concerns with an adjacent connected unpaved narrow trail used as a primary walking and biking path to school for many children (see Figure 2 in appendix). The fact that parents had already largely identified safety areas of concern combined with university authority limitations to deliver specific infrastructure design needs identified in the survey (i.e. street crossing infrastructure), the research partners sought to focus more on the engagement component of the project proposal with intent to remain open to additional safety concerns and opportunities related to active school transportation. Especially community or program oriented opportunities that may be more readily and directly feasible to implement through the university.

Thus, the original project idea focused on Melfa Road broadened and shifted, though was still explored through on-site observation to assess viability as a possible placemaking pilot location with less focus on safety. Due to the condensed time-scale for the project, shifting the scope and focus was somewhat challenging after completion of an initial literature review for the project and compilation of detailed proposal information for UBC's Behavioural Research Ethics Board. The adapted project, 'Reimagining Active School Transportation in the Acadia Park Neighborhood,' remained focused on active school transportation though less on safety and more on engagement and placemaking. With community-member researcher insights, the project was also broadened to be more inclusive during neighbourhood outreach and open to identifying community-determined pilot location opportunities for reimagining.

Conceptual Framework

The project was grounded upon local university strategic planning goals. UBC's Wellbeing Strategic Framework recognizes the built and natural environments as key components to wellbeing: *"UBC's campus environments play an important role in enhancing the physical, mental, social, and ecological well being of our community. The ways in which we design our spaces and provide access to nature can have a profound impact on people's health and resilience and can facilitate better learning outcomes."*⁵ The project was also informed by recent C+CP research data. In July 2021, a survey of over 200 parents' beliefs on safety and active transport for children living at UBC identified key and shared areas of safety concern for active transportation to area elementary schools.⁶ This project sought to build upon these initial findings with a neighbourhood-focused survey and focus group to better understand perspectives on AST, as well as ideas to reimagine AST particularly through community-based and placemaking opportunities.

This research project was primarily informed by literature related to active school transportation (AST) as well as child-centered engagement case studies for community planning and placemaking. It is estimated that only about a third of Canadian children use AST, and it has

⁵ The University of British Columbia (2019). Wellbeing Strategic Framework - Built & Natural Environments; https://wellbeing.ubc.ca/sites/wellbeing.ubc.ca/files/u9/wellbeing_strategic_framework_FINAL_0.pdf

⁶ UBC Campus and Community Planning Survey Data 2021.

been in decline across North America over the past 50 years.⁷ In British Columbia, the province seeks to double the percentage of trips using active transport by 2030.⁸ Similarly, reducing automobile trips by promoting public transit and active transport are critical to meeting UBC's sustainability goals.⁹

Many factors influence AST from personal-level decision-making, to social, institutional, and policy considerations, to several modifiable elements of the built environment.¹⁰ In a study examining the interrelation of different key factors for active transportation, perceptions of safety were identified as the primary influence for school travel mode decision-making.¹¹ Safety was also a key theme that arose through this project, though additional research would be needed to assess the extent it affects local AST decision-making and adjustments. Studies related to safety, the built environment and AST highlight the importance of local community-driven approaches to address safety challenges.¹² While this research project sought to engage parent's perspectives on AST more generally, safety was indeed a primary concern that arose during both a focus group interview and neighbourhood survey, discussed further below.

It is well known that physical activity, such as that provided through active transport, provides health benefits and promotes learning for children.¹³ Given the health benefits associated with AST, as well as environmental-related outcomes,¹⁴ AST offers a myriad of partnership and collaboration potential across sectors and areas of interest, including urban

⁷ Rothman, Linda, Brent Hagel, et al. (2021). Active school transportation and the built environment across Canadian cities: Findings from the child active transportation safety and the environment (CHASE) study. *Preventative Medicine*, 146(106470); <https://doi.org/10.1016/j.ypmed.2021.106470>

⁸ Government of British Columbia. Active Transportation, available at <https://www2.gov.bc.ca/gov/content/transportation/transportation-environment/active-transportation>.

⁹ The University of British Columbia. UBC Sustainability: Transportation. Available at: <https://sustain.ubc.ca/campus/transportation>

¹⁰ *Id* Rothman, et al. 2021; Hagel, Brent, Alison MacPherson, et al. (2019) The built environment and active transportation safety in children and youth: a study protocol. *BMC Public Health*, 19(728); <https://link.springer.com/article/10.1186/s12889-019-7024-6>; Spinney, Jamie E. Hanna Moah, & Hugh Milward (2019). Factors affecting mode choice for the home–elementary school journey: evidence from Halifax, Canada. *The Canadian Geographer/Le Géographe canadien*, 63(2): 254–266; https://onlinelibrary.wiley.com/doi/epdf/10.1111/cag.12494?saml_referrer; Ross, Allison, Ariel Rodríguez & Mark Searle (2017). Associations between the Physical, Sociocultural, and Safety Environments and Active Transportation to School. *American Journal of Health Education*; <http://dx.doi.org/10.1080/19325037.2017.1292877>; Kovacs, Ildiko G (2015). Child Friendly Toronto: Engaging Children and Youth in the 'TOcore' Downtown Planning Project Final Report; <https://yorkspace.library.yorku.ca/xmlui/bitstream/handle/10315/34800/MESMP01955.pdf?sequence>

¹¹ *Id* Ross, et al. (2017).

¹² *Id* Rothman, et al. (2021).

¹³ Lindqvist, Anna-Karin and Stina Rutberg (2018). One Step Forward: Development of a Program Promoting Active School Transportation. *JMIR Res Protoc* 7(5): 123. Available at: 10.2196/resprot.9505

¹⁴ Hoff, Adriane (2020). Urban Approaches to Sustainability: Transportation and Walkability. In: Brinkmann R. (eds) *The Palgrave Handbook of Global Sustainability*. Palgrave Macmillan, Cham. Available at: https://doi.org/10.1007/978-3-030-38948-2_3-1

planning and public health,¹⁵ transportation design, sustainability and community well-being, researchers, schools and educators, policy and decision-makers, and children and youth. And, as the placemaking case studies highlight below, there are further opportunities to weave in partnerships for youth civic engagement, the arts, participatory processes, and community-building.

The second major component for this project's conceptual framework are child centered engagement strategies for community planning and design. As mentioned above, the idea for this project grew out of AST safety concerns and was inspired by a child-centered placemaking initiative for kid-friendly active transportation in Europe. While this research project did not engage children directly, it did engage parents and began to identify kid-friendly engagement opportunities for future placemaking initiatives. All too often, children are overlooked in planning discourse, and this risks excluding a significant percentage of the population from participating in and achieving walkable neighborhoods that are socially and spatially just.¹⁶ During the course of this project, an example arose illustrating this point in the context of the Acadia Park neighbourhood, discussed in the findings key themes section.

Placemaking principles are increasingly recognized as a way to promote more sustainable, equitable, and inclusive community development.¹⁷ As a concept, placemaking acknowledges community members as experts with lived experience and a right to access and transform the places they inhabit.¹⁸ Though there are limited peer reviewed articles of child-centered placemaking engagement for co-creating the built environment, there are a number of case studies available online to inform possibilities and recommendations for a possible SEEDS Sustainability pilot project. For further reading on this topic, there are a few published books including *Placemaking with Children and Youth*,¹⁹ *Designing Cities with Children and Young People*, and *The Routledge Handbook of Designing Public Spaces for Young People: Processes, Practices and Policies for Youth Inclusion*.²¹ In addition, Mara Mintzer, co-founder and program director of Growing Up Boulder through the University of Colorado Boulder, has a Ted Talk on "How kids can help design cities," available online.²²

¹⁵ Godward Green, Christine and Elizabeth G. Klein. 2011. Promoting Active Transportation as a Partnership between Urban Planning and Public Health: The Columbus Healthy Places Program. *Public Health Reports* 126(1):41-49. Available at: [10.1177/00333549111260S107](https://doi.org/10.1177/00333549111260S107)

¹⁶ Stafford, Lisa & Baldwin, Claudia (2018) Planning walkable neighborhoods: Are we overlooking diversity in abilities and ages? *Journal of Planning Literature*, 33(1), pp. 17-30; <https://eprints.qut.edu.au/107180/>

¹⁷ Toolis, Erin E. 2021. Restoring the Balance between People, Places, and Profits: A Psychosocial Analysis of Uneven Community Development and the Case for Placemaking Processes. *Sustainability* 13(13); 7256. Available at: <https://doi.org/10.3390/su13137256>

¹⁸ *Id* Toolis, Erin E. 2021.

¹⁹ Derr, Victoria, Louise Chawla, and Mara Mintzer. (2018). *Placemaking with Children and Youth*. New Village Press.

²⁰ Bishop, Kate and Linda Corkery. (2017). *Designing Cities with Children and Young People*. Routledge.

²¹ Loebach, Janet, Sarah Little, Adina Cox, and Patsy Eubanks Owens, ed. (2020). *The Routledge Handbook of Designing Public Spaces for Young People: Processes, Practices and Policies for Youth Inclusion*. Taylor and Francis.

²² Mintzer, Mara. 2018. "How kids can help design cities." Ted Talk. Available at: https://www.ted.com/talks/mara_mintzer_how_kids_can_help_design_cities

Recently, a middle school student in the city of New Westminster in the metro Vancouver area raised safety concerns to the city associated with cars going too fast and failing to yield to students cycling to school. As a result, the city partnered with the school and Happy City, an urban planning and design consultancy, and others to design a co-creative process led by the students.²³ Over 60 students participated in a bump-out artwork design competition to make the route safer for students. The top designs were painted with students and staff at an intersection, improving safety while also increasing capacity for youth civic engagement and a sense of ownership.

In another example, children in Toronto were supported in a placemaking project to co-create their school grounds. In this case, a School Design Team was established consisting of 10 students and 4 faculty to lead the project and was supported by a collaborative green cities design non-profit organization, Evergreen.²⁴ The project included a school-wide design blitz consisting of a democratic visioning experience that engaged every student followed by an art-based design jam workshop to inform the detailed design of a master plan. Creative design methods included drawings, Legos and Play-Doh.

Toronto offers additional youth placemaking examples from connecting teen youth artists with mentors to contribute to a cultural hotspot project,²⁵ to a Child Friendly Toronto (CFT) project that engaged youth perspectives on growth-related challenges and opportunities in downtown Toronto.²⁶ The latter was largely based on the United Nations Children's Fund's (UNICEF) Child Friendly Cities Initiative,²⁷ which has also been active and growing in Quebec since 2009. The CFT project was a collaboration among a graduate student, the city's planning division, two schools, and two after-school care centres. It consisted of youth drawing or answering short questionnaires about their favorite activities, places and types of transportation, followed by a student-led walking tour. During the walking tour, youth took photos and created a photovoice of the neighbourhood with 'likes' and 'dislikes.' The final activity was a report consisting of the 'likes,' 'dislikes,' along with recommendations from children's ideas on how to improve aspects of their neighbourhood. Youth were also encouraged to conduct internet research to identify possible solutions to issues from other places in Canada and the world.

²³ Happy City. 2021. "Crosstown Greenway: Youth-led placemaking for safer streets." Available at: <https://thehappycity.com/project/crosstown-greenway-youth-led-placemaking-for-safer-streets/>

²⁴ Evergreen. 2019. "Placemaking with Children: Getting students involved in the planning process: How students helped reimagine their school grounds at Lord Lansdowne and daVinci School in Toronto." Available at: <https://www.evergreen.ca/blog/entry/placemaking-with-children-getting-students-involved-in-the-planning-process/>

²⁵ Art Starts. 2018. "The Placemaking Project," Available at: <https://artstartsto.com/cultural-hotspot/>

²⁶ Kovacs, Ildiko G. 2015. Child Friendly Toronto: Engaging Children and Youth in the 'TOcore' Downtown Planning Project Final Report. Available at: <https://yorkspace.library.yorku.ca/xmlui/bitstream/handle/10315/34800/MESMP01955.pdf?sequence=2&isAllowed=y>

²⁷ UNICEF. Child Friendly Cities Initiative. Available at <https://childfriendlycities.org>

Another child friendly city initiative example is Growing Up Boulder,²⁸ a partnership led with the support of the University of Colorado Boulder's Community Design and Engagement Center. The program brings together the university, city, politicians, non-profits, businesses, and children and youth to include their input in the design of public spaces, transit systems, housing, and resilience planning. It has inspired other child friendly placemaking initiatives from New Zealand to Mexico and hosts additional resources on its website.

Let Children Rule the Streets is another child-centered placemaking resource from Europe.²⁹ In a two-hour webinar recording, youth and adults from across different European cities share creative ideas and discuss the topic of mobility and active transportation from children's perspectives. Ideas include family cycling days; junior bike city mayorship; engagement processes for involving children in the development of school mobility plans and walking routes to school to the product design of their bikes; the importance of organized walking and biking programs to support younger children getting to and from school; an innovative digital social mobility game; and many more ideas shared throughout.

Lastly, a project in the city of Newcastle, UK, Streets for People, provides a socio-technical child placemaking engagement example. Children were supported through their local school to contribute their ideas for an urban design proposal through a three phase process: neighbourhood walks; issue mapping with peer-to-peer discussions through an online platform; and civic engagement through a 'Town Hall' event where children presented their ideas to residents and the local planning authority.³⁰ This example shows how such engagement processes can successfully facilitate intergenerational dialogue and child advocacy capacity, as well as challenges and ethical questions such as being mindful to ensure safe online peer-to-peer space (e.g. cyber bullying) and accounting for tensions that could arise between children and stakeholders when opening up such participatory spaces.

These case studies provide a starting point for considering the wide-range of strategies and approaches for engaging children at various ages in placemaking. The recommendations section summarizes these engagement strategies to help inform possible future directions for a site-specific and/or neighbourhood-wide placemaking project in the Acadia Park neighbourhood. Such a pilot project could serve as an important case study in itself and experiential example for other locations within and beyond the university environment.

²⁸ Growing Up Boulder: Boulder's child and youth friendly city initiative. Available at: <https://www.growingupboulder.org>; Derr, Victoria and Ildikó G. Kovács (2017). How participatory processes impact children and contribute to planning: a case study of neighborhood design from Boulder, Colorado, USA. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, 10(1): 29-49; <https://doi.org/10.1080/17549175.2015.1111925>

²⁹ Placemaking Europe (2021) Story Video: Let Children Rule the Streets - Children's mobility in cities; <https://placemaking-europe.eu/listing/recap-let-children-rule-the-streets-webinar/>

³⁰ Peacock, Sean, Robert Anderson, and Clara Crivellaro. Streets for People: Engaging Children in Placemaking Through a Socio-technical Process. Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems April 2018 Paper No.: 327 Pages 1–14. Available at: [10.1145/3173574.3173901](https://doi.org/10.1145/3173574.3173901); Project presentation also on YouTube, available at: <https://www.youtube.com/watch?v=c4TrvRrvYA>

Methods

The Reimagining Active School Transportation in the Acadia Park Neighborhood research project used three different forms of data collection. First, the researchers conducted observations around frequently used commuting spaces near the Acadia Park neighbourhood. Secondly, the researchers conducted a survey administered to parents with children who commute to school and to live in the Acadia Park neighborhood. Lastly, the researchers hosted a focus group to invite parents to share their perspectives on local active school transportation and ideas for child placemaking engagement. This section provides a brief overview of these three qualitative methods used. The subsequent section, Discussion of Findings, will provide more depth into the results and insights provided through these methods.

Observation

Observations were conducted at multiple points in the Acadia Park Neighbourhood though centered around the use of Melfa Road as this was an initial area of interest by SEEDS Sustainability Program partners as a possible child placemaking pilot project location. It was also an area of observation interest with an adjacent trail indicated as safety concern through a recent C+CP survey on safe and active transportation with many UBC families. These areas represented commonly used commuter spaces and a high density motorist-pedestrian-cyclist intersection near Norma Rose Point Elementary school (See Figure 3 in Appendix A). The researchers observed the safety risks and the use of the space by students and other community members, and documented field notes to record these observations. In addition, the community-member researcher contributed lived experience observation throughout the study as a member of the Acadia Park community who also used active school transportation with a school-aged child, particularly a community-based parent-led bike bus, between Acadia Park and University Hill Elementary.

Surveys

Prior to the student researchers' involvement in this project, a preliminary survey was developed by the UBC Campus and Community Planning (C+CP) in 2021 and completed by over 200 participants who live in the UBC area. Results of survey responses related to active transportation were shared with the research team. These survey results provided substantial information about participants' perception of safety and active transportation. Open-ended questions included barriers to owning a bike, areas of concern along childrens' routes to school, what would encourage more frequent active transportation, and community programming ideas to support active transportation. Results from this preliminary research data provided foundational information on participants' safety concerns and active transportation.

A subsequent survey was developed by the research team soliciting responses from parents who resided in the study area of the Acadia Park Neighbourhood. Participants. Members were recruited through an Acadia Park Facebook group and flyers that were posted in the Acadia Park Housing shared spaces such as laundry rooms and community posting boards. The survey asked questions about the use of active transport by children who live in the neighbourhood. Additionally, the survey asked questions about opportunities to increase community engagement with children to reimagine safe and active transportation to school (see list of survey questions in Appendix B). The survey also served as a tool to identify families interested in contributing further through a focus group.

Focus group

The third data collection method was a semi-structured focus group interview. The purpose of the focus group was to provide deeper insights from families about their childrens' use of active transport in the neighbourhood as well as ideas and opportunities for reimagining active transportation and engaging children in placemaking. Focus group participants were recruited through the Acadia Park Facebook group and through flyers posted in common Acadia Park spaces (see flier in Appendix D). Interested participants were invited to fill out a short screening questionnaire to assess their eligibility to participate. Participants were eligible if: (1) they lived in the Acadia Park neighbourhood, (2) they were parents of children who attended one of the local schools, and (3) if the child or children were involved in active transport in their commute to school. The focus group questions sought to learn family use of the Acadia neighbourhood during school commutes, perceived limitations and changes that could support AST, ideas for how a reimagined space for AST might look, and suggestions for engaging children more directly in placemaking. The focus group questions are located in Appendix C.

Discussion of Findings

This section discusses the findings and insights from the methods described above (observation, surveys, and focus group interview). Five key themes arose and are discussed further below: anxiety about road and forest safety; education on active transportation safety; community-building for active transportation; infrastructure changes for street crossings; and including children in decision-making.

Observation

The research team observed families and students using active transport near Melfa Road and Norma Rose Point Elementary school and surrounding routes during a morning commute. Overwhelmingly, families used cars and other motorized vehicles to drop off their children at school in the morning, causing considerable traffic outside the school building. Among those who used active transport, the vast majority walked, with cycling being the second most common form of active transport. A handful of children also used rollerblades and skateboards. Eastbound Melfa Road was closed to traffic using a large barrier (see Figure 4 in Appendix A). This road was used by active commuters.

Two points of interest were identified during the observation. First, Point A, represented the intersection of Melfa Road and Acadia Road. This location was a major traffic point. This intersection had a pedestrian crossing sign, but no crossing light. A stop sign was also present for vehicles traveling east to west along Melfa Road, although the eastbound street to a parking lot in Acadia Park was closed to traffic as noted in the introduction section of the report. Students walking and cycling used the pedestrian crossing to access school. Due to the lack of a crossing light and north/south stop sign along Acadia Road, students were observed waiting for a clearance in the traffic before crossing, in which individual children relied heavily on their own safety judgements although younger children were often accompanied by an adult.

The second point of interest, Point B, represented a trail leading to a green area lying west of Melfa Road (see Figure 5 in Appendix A). The green space is situated in the center of several childcare facilities and residential homes and features some designated seating areas. Students and parents were seen using the trail to commute to school. In addition, the researchers observed the space being used by dog walkers and children with parents and care providers from the childcare facilities. Point B was observed as a central area because it connected to main roads in the area and offered a frequently used pathway notably for children commuting through the neighbourhood to Norma Rose Point Elementary school. Many of the observed students who engaged in active transport commuted alone, with a parent, or with peers.

Additionally, weather (rain and downpour) was an observed factor influencing day-to-day parent AST (active school transportation) decision-making in the Acadia Park neighbourhood. During research observations, the weather was overcast with light rain. Commuters were wearing rain jackets and carrying umbrellas as they made their way to the school. The city of Vancouver has a moderate oceanic climate and receives a significant amount of rainfall, especially during the rainy season of November - March consisting of much of the school year. The research team suspects more students would have engaged in active transport during sunnier weather, and that there would have been fewer vehicles.

The identification of weather as an AST factor arose during the research literature review process and is believed to be a key factor (in addition to safety) for the local community based on additional lived experience observation of the community-member researcher. A 2019 study, *Factors affecting mode choice for the home–elementary school journey: evidence from Halifax, Canada*, uses student travel diaries to document active transport decision-making and may serve as a helpful example should future research seek to explore local weather characteristics in

addition to other factors for local AST.³¹ The community-member researcher observed AST noticeably decreases with fewer bicycles parked at the University Hill Elementary school and an increased volume of vehicles dropping off and picking up children, especially with heavier rain days. However, the community-member researcher also reported that a number of families do consistently use AST even during rainy weather. This includes walking, cycling, and scooting, equipped with umbrellas, rain ponchos, and other appropriate rain-weather gear. For example, one rainy afternoon, a parent on an e-bike towed two young children on a bench above the back tire, each child carrying a small umbrella.

Surveys

The preliminary survey conducted by Campus and Community Planning (C+CP) collected information from over 200 participants and highlighted key concerns about safety and active transportation. The survey posed three open-ended questions applicable to this study:

- a) Are there any areas of concern along your child's current route to school (on campus)? Please include the location, as well as the concern you have encountered*
- b) If no, what is a barrier to owning a bike? C+CP works with organizations on campus that provide skill training, bike repair, and access to bike share, and are interested in knowing how we can better support our campus communities in accessing these resources.*
- c) What would encourage you to walk or bike to and from school more regularly? Do you have any community programming ideas to support walking and biking to school?*

This preliminary survey identified that a major barrier to active transport was perceived safety. This was consistent with the literature identifying safety as a primary factor in AST decision making. Safety concerns were related to speeding cars and buses along major routes, lack of traffic cross lights, and lack of supervision. When asked about elements to encourage active transport, the majority of participants indicated improved infrastructure and regular programming like a bike bus or walking bus. The subsequent neighbourhood-focused survey designed by the research team sought to elicit additional insights about active transportation and community engagement from parents in the Acadia Park Neighbourhood (see Appendix B). The survey collected insights from eight participants. Respondents shared their opinions about safety during active transportation and shared their ideas about active transportation engagement strategies. Results from the survey were coded and grouped into themes. These themes are discussed in the following section.

Focus Group

³¹ *Id* Spinney, et al. 2019.

The focus group sought to understand participants' perceptions of active transport and opportunities for increased community and child engagement related to active transportation. Though focus group questions sought to learn family use and reimagining ideas for the Acadia Park neighbourhood during school commutes, it quickly became apparent that within the neighbourhood space was perceived and used for playing and visiting with friends, and that school commuting took place outside the neighbourhood on the streets and through the forest. This finding was consistent with community-member lived experience observation and subsequent review of Vancouver school area maps, where a majority of school-aged children in Acadia Park commute to a school 1.5 km away, even though another elementary school, Norma Rose Point, is located immediately adjacent to the neighbourhood.

Four individuals registered to participate in the focus group, however, three of the participants were later unable to attend the scheduled session. One participant remained, and the focus group proceeded as a semi-structured interview. The research team suspects a number of possible factors could have affected low participation, including a short time-window for focus group outreach between an ethics board proposal approval process and expected project report-out associated with a condensed semester research timeline; a school professional-development day where children were home and parent day-time schedules were not as usual; participation accountability in a group vs individual scheduled setting; and other time-constraints experienced by parents balancing children, working and/or studying.

However, the individual focus group participant who was interviewed was a very valuable informant with a lot of experience and insight. The participant was a parent of three children ranging in ages 7 to 17 who attend nearby elementary and secondary schools. The participant lived in the Acadia Park community for several years with their family. All children used a form of active transport in their commute to school, and in their free time. For instance, the teenager walked on their own, the older child walked with a peer, and the younger child used a bike or skateboard with another parent.

The focus group interview session lasted approximately 35 minutes and was facilitated over Zoom by two of the research team members. The session was recorded and transcribed. The researchers conducted open line-by-line coding to elicit themes from the data which was categorized into five themes outlined below. The findings were also triangulated with the survey data, on-site research observation, and lived experience observation.

Key Themes from the Research

I. Anxiety about road & forest safety

Road and forest safety was of paramount concern. The survey responses and the focus group interview identified that safety influenced the decision to engage in active transport. Parents were concerned that the lack of infrastructure like stop signs and traffic lights made it dangerous for their children to travel along common roads. Similarly, one parent disclosed her

concern of allowing her children to walk in the forested areas within UBC because of the safety risks associated with the unlit and unsupervised area. In addition, safety was a shared key area of concern reported through the lived experience of the community-member researcher, especially between the Acadia Park Neighbourhood and University Hill Elementary 1.5 km away which includes a high mixed traffic route along Acadia Road where there are no bike lanes and children and parents maneuver around parked cars, motorized traffic in both directions, vehicles pulling out of driveways, and larger vehicles associated with housing renovation projects.

II. **Education** on active transportation safety

To encourage more active transportation, education on road and bike safety was seen as a viable opportunity. Here, parents shared that teaching children about road safety would be a way to equip them with the skills needed to assess the risks and navigate roads in a safer way:

“I think it would be great if there was, maybe you know - towards the end of summer or something- something offered in Acadia that's like ‘bike safety’ so that the kids understand the rules and their parents are also on the same page”.

Educational events were seen as a way to network and build a sense of community, especially for newcomers to the community:

“If there was more of a ‘Welcome to Acadia. If you want your child to participate in bike safety day let's go through all these things’ and then families could meet each other and maybe say ‘OK if the children are old enough to go on their own, they can go together’. You know, just have more community around the transportation.”

III. **Community-Building** for active transportation

Active transport was seen as a way to form and maintain relationships within the community. In addition to commuting to school, participants shared that their children engaged in active transport during their free time. For children, riding their bikes, skateboarding, or rollerblading were seen as fun activities to do with their friends. The focus group participant identified that one of the values of the bike bus was that it provided a way for members of the Acadia Park to get to know one another and form a community. In this Acadia Park bike bus, parents take turns leading a group of children to and from school and a key element of the bike bus is a sense of belonging and community.

When asked about opportunities to engage the community, the focus group participant shared previous successes of supporting youth-visioned community spaces in the neighbourhood. For example, a member of the community provided a covered gazebo where families could meet and where children could play together and youth could visit outside when it's raining. With the Covid-19 pandemic, this covered space proved to be a key location for safer visiting outdoors rather than indoors. The participant shared her perspectives that open outdoor spaces provide a

space to develop relationships in the community while serving as a place to engage in activity. The focus group participant also saw community-building as a means of supporting active transport:

“...Relating that to active transportation, I think any type of community building kind of supports that goal because it's something that we kind of have to collaborate on. Not everybody gets in their individual cars and drives and is separated. It's much more of a community thing and we have to collaborate with other parents if we want to share the responsibility and make the place safer.”

Similar sentiments were shared by a survey respondent:

“We were part of the Acadia Park Bike Bus - it is a great model, encourages community connections and we were able to rely on it.”

IV. Infrastructure changes for street crossings

Participants were informed that this research project may not be able to influence changes to infrastructure, however, as this was a central piece of the data received and documentation is an important starting point for identifying concerns, we include it here. The focus group participant shared ideas for improving infrastructure along her childrens' common routes to University Hill Elementary school. In a reimagining prompt, the focus group participant expressed interest in the idea of closing down part of Acadia Road to motorists during school drop off and pick up hours to encourage active transport and eliminate safety risks associated with traffic:

“I could just see a whole bunch of [people] on bikes going down Acadia, and some people skateboarding and some people scootering and there being no worry about cars.”

While it may not be feasible to completely close the road to local and thru traffic, which could also pose hurdles for other families who rely on vehicle transport to school without an alternate route, it highlights the need to take a closer look at this particular school route area of concern, as well as others identified in the C+CP survey, and explore and advocate for ways to promote more safe active transport for UBC families aligned with the university's strategic community well-being goals. Another common suggestion was to include more pedestrian crossings and crossing lights along commonly used routes:

“...my daughter is...really responsible... But my 7 year old, I still worry about him crossing University Boulevard...there is no crossing therethey cross by that church- I think it's called U Chapel - There is no crossing there. But, that's a really popular place to cross. I think even there's a group of parents ...the Acadia bike bus ...the parents take turns taking a group of kids to school and...I think that that's the route that they go so that they can bike through the forest. But there's no crossing there...for the younger kids like for my son, I don't feel like he's always that aware of his environment and I would love there to be like a light there...”

This focus group interview response was consistent with responses received in the C+CP survey and community-member researcher lived experience observation for this active transportation route to University Hill Elementary through the forest which entails no crosswalk (no sign, markings, or light) at a commonly used crossing at University Boulevard near the UBC University Chapel parking lot. This non-designated crossing is nonetheless a commonly used crossing to access a trail through the Pacific Spirit Forest. This is indeed the primary route the Acadia Park Bike Bus uses to transport children of various ages to school. Without a designated crosswalk, parent volunteers wait for a reasonable clearing of traffic, then walk out into the middle of both traffic directions of the boulevard to stop motorists and buses with their bodies and parked bikes, then the bike bus parent leads allow up to twelve children to walk their bikes across as a group.

V. **Including children** in decision-making

An additional theme for including children in the decision-making process was identified through the focus group interview, though not evident in the survey responses. When asked about strategies to engage children to increase active transport, the focus group participant suggested asking children instead of asking parents, because *“these kids are just as much part of this community as the adults.”* The participant voiced concern about signage posted at infrequently used covered vehicle loading zones beneath some townhouses in Acadia Park that discourage physical activity and children's play that may pose noise disturbance to residents above (see Figures 6 & 7 in Appendix A). She conveyed that these areas are otherwise perceived as safe and communal spaces for children to meet their friends and play, especially on rainy days, which are frequent with Vancouver's climate, as they are outdoor covered spaces.

These largely unused spaces could be a reimagining opportunity and support child physical activity like rollerblading and tennis which are more difficult for kids on uneven brick tiles throughout Acadia Park whereas these unused loading zones beneath homes often have smooth surfaces. The participant shared how current signage in these spaces throughout Acadia Park deter children from using these areas and can make them feel like they are not members of the community. While the posted signs convey an indefinite prohibition of activity, she questioned if there could be times when it wouldn't be a problem and if dialogue among residents and children could be a more appropriate solution in more of a community spirit if ever there was an inconvenient or bothersome time for activity. While the participant also acknowledged many positive aspects of the community, this example stood out as an example for how children are currently being overlooked in neighbourhood decision-making while also presenting an opportunity for reimagining spaces for child-centered placemaking.

Conclusions & Recommendations

The Reimagining Active School Transportation in Acadia Park Neighborhood project brought to light several challenges and opportunities to consider related to active school transportation, safety, involving children and youth in decision-making, child-centered placemaking, partnerships, and community-building. Aligned with UBC's sustainability and wellbeing goals, the aim of this research study was to understand parent perspectives on active school transportation and child-centered placemaking, with a goal to provide preliminary information and recommendations to help guide a possible pilot project. Perspectives shared through the focus group interview and surveys brought to light a cross-cutting theme of community-building as it relates to both active school transportation and placemaking in the local neighbourhood context.

The research team reviewed recent literature related to active transportation to conceptualize the study through a larger research framework. On-site observation at a high-density traffic-active school transport location in the Melfa Road area provided site-specific context and ground-truthing for assessing the feasibility of a possible pilot project area. Lived experience observation through a team member who was also a community-member helped to triangulate and add additional detail to some of the findings. Campus-wide and local neighbourhood survey data provided local active school transportation perspectives. A focus group interview with a long-term Acadia Park resident added critical insights, examples and visions focused on community, safety, and inclusiveness. Lastly, successful case studies of child placemaking engagement from other places provide insights into what's possible and guide the recommendations that follow.

A key issue discussed in this project was safety related to active school transportation. In addressing safety and built environment challenges to support AST, it is important that approaches are local and community-driven.³² Similarly, the research findings and previous case study examples suggest that reimagining active school transportation with youth will be successful if it is supported through collaborative partnerships and centered on principles of community-building and inclusiveness. As the SEEDS Sustainability Program continues to advance this project, centering local community needs that prioritize the safety of children traveling to and from school is essential to providing the most relevant solutions for the Acadia Park neighbourhood. Community-building is also recognized as central for successful implementation of the recommendations that follow.

In the process of reimagining active school transportation, children's experiences and perspectives should be engaged and centered as they are the primary users of outdoor spaces while travelling to school. Moving towards imaginative intergenerational placemaking with users who are often overlooked in design and planning processes requires creative strategies and partnerships. Reimagining active transportation and child-friendly neighbourhood spaces requires

³² *Id* Rothman 2021.

exploring ways to include children and youth during planning and design phases. Designing and planning through child eyes can draw upon a variety of creative ideas that can be tailored to different age groups. Many example ideas were described in the conceptual framework section above and summarized here:

- ❖ *Engaging children in design*: artwork design competitions; a school-wide design blitz; and play-doh; innovative digital mobility gaming; child involvement in bringing design ideas to life such as painting the streets; and art-based design workshops that use creative and playful elements such as drawing, Legos; in the Acadia Park neighbourhood context, a well-attended monthly family Lego night may be a great opportunity to partner and explore placemaking through Legos as well;
- ❖ *Child-centered planning*: development of school mobility and community walking/cycling route plans with child and youth involvement; establishment of a school or community design team comprised primarily comprised of children along with adults;
- ❖ *Engaging youth*: youth questionnaires that prompt drawing or other forms of response with their placemaking ideas; neighbourhood walks and student-led walking tours with use of photography or photovoice to identify issues, likes and dislikes; socio-technological methods such as an online platform to upload walking tour photos, map issues, and engage interactively (i.e., emojis, peer-to-peer discussion);
- ❖ *Increasing youth capacity*: youth solution-based research skill development; civic engagement and intergenerational dialogue through a ‘town hall’ event; establishment of youth neighbourhood or school bike mayors to represent children’s active transport interests to decision-makers and planning authorities; connecting youth with mentors for arts-based placemaking;
- ❖ *Community-building*: family/community cycling days; organized walking and biking programs, especially to support younger children getting to and from school and to support parents as group programming and coordination and multiple schedules requires a lot for parent volunteers; and as suggested through one of the respondents for this research project, an annual community-wide active school transport safety day to welcome new families, network with one another to support smaller-scale walking/cycling groups, and ensure children are aware of safety best practices and how to safely get to and from school.

Positive outcomes of child placemaking include youth civic engagement, increased youth advocacy capacity, sense of ownership, sense of community, inclusive participation, intergenerational dialogue, and community-building. Shifting from engagement to

implementation, decision-makers and planning authorities should also have a framework in place for supporting child-centered ideas and outcomes. It is ethical and important to understand how children's' ideas will be considered, supported, and implemented by decision makers following engagement. This was also identified by the research team as an area where more research would be helpful. Acadia Park presents an opportunity for a potential pilot to study these issues in a real-world context.

Many of the case studies from the engagement ideas listed above illustrate the importance of partnerships to support successful child and youth engagement strategies. This often involves close partnership with area schools and engagement with students in a school-setting or after-school program setting. Additional examples of partners included consultancies specializing in design, planning and design experts, city and local planning officials, university researchers and programs, school faculty and educators, non-profit organizations, young adult youth mentors, artists, as well as network partners from other cities and countries to share ideas and support.

In terms of more specific next step recommendations, a site-specific reimagining pilot project could be organized as originally envisioned in the Melfa Road area, the trail adjacent to Melfa Road, a combination of both, or broader neighbourhood-wide or school-based approaches. The Melfa Road location by Norma Rose Point, which has been blocked off to motorists, would present a unique space for children to take ownership of the road through artistic street placemaking like in the Happy City example from the conceptual framework section. Two primary partnership opportunities for engagement at this site would be Norma Rose Point Elementary and UBC Child Care Services, and Acadia Park (including a residents association, resident staff, and community). A couple of considerations, though, are that the research team isn't aware of any current safety concerns on Melfa Road itself where it is blocked off to motorists, based on the campus-wide survey that did identify numerous other safety concern areas and recognition that safety is a primary community-driven concern related to active school transportation.

The adjacent trail to Melfa Road was identified as an area of concern in need of improvement in the C+CP survey, and was documented during on-site research observation to be a highly used active school transportation space for children. A main consideration for any future engagement for this area is that although the site is located near the Acadia Park neighbourhood area, the majority of Acadia Park family housing units appear to reside within the University Hill Elementary school area.³³ Thus, identification of the primary users of the trail should be the first step in order to appropriately target engagement and partnerships. For instance, the Westbrook Village neighbourhood falls under the Norma Rose Point school area and family engagement strategies may be more challenging with separated neighbourhood-commuting contexts which is a unique challenge in the UBC's campus-community context this research project identified. A school-based partnership approach would likely be the most appropriate for this specific

³³ *Id* Vancouver School Board Boundary Map.

location. Possible partnership opportunities would include Norma Rose Point Elementary school, UBC Child Care, UBC families at large, and Acadia Park as a limited number of units and a high rise are adjacent to this area and fall under the Norma Rose Point school area.

If the scope of a pilot project were to be considered at the neighbourhood-wide scale, the school-supported socio-technical example highlighted from the UK in the conceptual framework section,³⁴ is a recommended reference as a starting point. Recommended partnerships would include support of a university researcher with more dedicated time such as through a degree-oriented project, collaboration with both elementary schools (Norma Rose and University Hill), UBC Child Care Services, and the Acadia Park neighbourhood. We also recommend further identification of supportive partnership possibilities in addition to the initial suggestions provided here.

Possible future research directions include increased understanding of the intersecting role of community-building for active school transportation and child placemaking, a local case study of child-placemaking engagement to contribute to the literature as there are few peer-reviewed published examples and especially placemaking related to active school transportation, and how to effectively transition from engagement to implementation of child placemaking ideas. In addition, exploring local university and community jurisdictional limitations and opportunities for active school travel planning and design processes could also be helpful for more fundamentally addressing active transportation safety concerns raised by UBC students and families and potentially policy-making more broadly.

Finally, effectively sharing information and communicating shared active school transportation safety concerns with UBC families is another important next step and could support opportunities for community-led mobilization for important changes to protect children. An annual community active school transportation safety event, or awareness week, is also recommended as a next step that would not only provide a community-based opportunity to promote safety and networking, it could also possibly provide space for dialogue and collaboration among residents, planning authorities and other stakeholders. We hope these preliminary research efforts are a helpful guide for reimagining safe and active school transportation for UBC families.

³⁴ *Id* Peacock, et al. 2018.

Appendix A: Figures & Images

Figure 1: Location of Melfa Road. Courtesy UBC Community and Campus Planning Dept.



Figure 2: Trail connecting to Melfa Road used as a primary walking/biking path for school children commuting to Norma Rose Point elementary school. Courtesy UBC Community and Campus Planning Dept.



Figure 3: a map of the observed setting. The red dot represents observation Point A and the blue dot represents observation Point B.

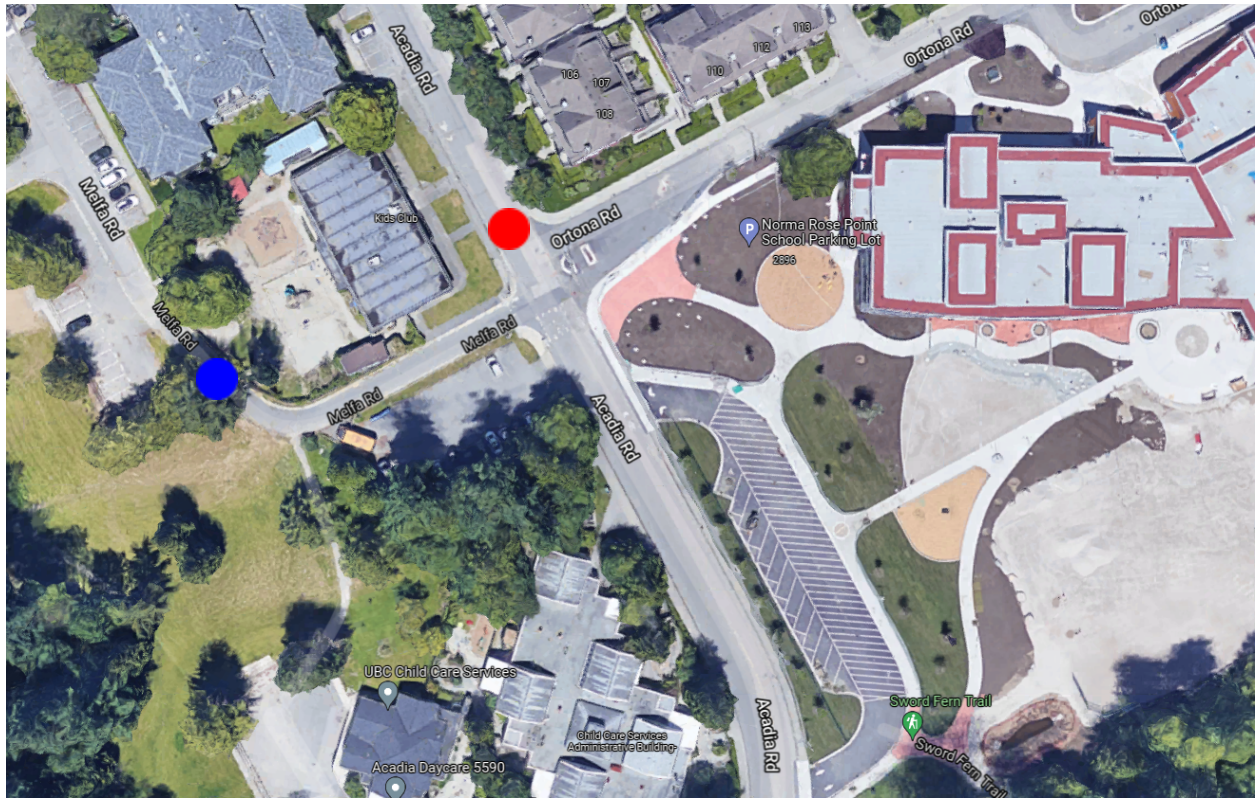


Figure 4: Eastbound Melfa Rd was closed to cars by a concrete barrier.



Figure 5: A closer look at the trail leading into the forested green space, which was identified as a commonly used commute route.



Figure 6 and 7: Signs prohibiting sports and other activities in a seldom used car park in Acadia Park.



Appendix B: List of Survey Questions

Does your family reside in the Acadia Park neighborhood?

- Yes
- No

How many children in your household attend elementary school?

What elementary school(s) do your child or children attend?

What grade levels is/are your child(ren) in?

How does your child or children typically travel to and from school? (check all that apply)

	TO school	FROM school
Walk	<input type="checkbox"/>	<input type="checkbox"/>
Walking group (more than one family)	<input type="checkbox"/>	<input type="checkbox"/>
Bicycle	<input type="checkbox"/>	<input type="checkbox"/>
Bicycle group (more than one family)	<input type="checkbox"/>	<input type="checkbox"/>
Scooter/skateboard	<input type="checkbox"/>	<input type="checkbox"/>
Personal vehicle (car, truck, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
Public bus transportation	<input type="checkbox"/>	<input type="checkbox"/>
Rideshare (Uber, Lyft, carpool, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
Transportation provided by before/after school program (Please specify mode of transportation):	<input type="checkbox"/>	<input type="checkbox"/>

Other (Please Specify):

What factors limit and/or motivate your family and/or child to travel to/from school in this way? (check all that apply)

	TO school	FROM school
Enjoyment	<input type="checkbox"/>	<input type="checkbox"/>
Exercise	<input type="checkbox"/>	<input type="checkbox"/>

Age of child	•	•
Weather	•	•
Distance to school	•	•
Convenience	•	•
Time or schedule constraints	•	•
Before/after school activities or care	•	•
Cost/affordability	•	•
Limited/restricted parking around school	•	•
Transportation congestion or safety on route	•	•
Personal safety	•	•
Environment/sustainability	•	•
Disability/specific mobility needs	•	•

Other (Please Specify):

Which of the following would support or encourage your child to walk to/from school? (check all that apply)

• Child already walks	• Pedestrian safety support/training
• Not applicable	• Improved walkways or crossings
• Walking group/program	• Reduced traffic
• Once child is older	• Other reasons described below:

Which of the following would support or encourage your child to cycle to/from school? (check all that apply)

<ul style="list-style-type: none"> • Child already cycles 	<ul style="list-style-type: none"> • Cycling safety, maintenance or skills training
<ul style="list-style-type: none"> • Not applicable 	<ul style="list-style-type: none"> • Access to equipment (bicycle, helmet, lock)
<ul style="list-style-type: none"> • Cycling group/program 	<ul style="list-style-type: none"> • Secure bicycle storage at school
<ul style="list-style-type: none"> • Once child is older 	<ul style="list-style-type: none"> • Reduced traffic enroute or in school zone
<ul style="list-style-type: none"> • Safe and cycle-friendly routes 	<ul style="list-style-type: none"> • Other reasons described below:

Are there other limitations for your child or children to walk/cycle to/from school?

<ul style="list-style-type: none"> • Parent/child care limitations 	<ul style="list-style-type: none"> • Cost of equipment
<ul style="list-style-type: none"> • Scheduling conflicts 	<ul style="list-style-type: none"> • Parent/child care limitations
<ul style="list-style-type: none"> • Weather 	<ul style="list-style-type: none"> • Other reasons described below

Do you have any ideas for future engagement opportunities with school children to reimagine and co-design safe and active transportation to school?

Is there anything else you would like to share about your family's school transportation concerns, limitations, motivations or ideas?

Appendix C: List of Focus Group Questions

1. Tell us about your family's use of the Acadia neighbourhood space during school commutes.
2. Does your family experience any specific limitations or concerns for active school transportation?
3. Are there any changes that could support active school transportation in the neighbourhood?
4. If you/your child could reimagine a space for active transportation at Acadia Park, what would it be like?
5. Do you have any ideas for engaging children more directly in a possible placemaking pilot project in the future?

Seeking Parents to Participate in a Focus Group

We want to learn about child engagement strategies for reimagining active transportation for schoolchildren in the Acadia Park neighbourhood

Participate in a 60 minute focus group about active transport in the Acadia Park neighbourhood. Share your opinions about reimagining the space and allow for community and child engagement.

You must be a parent of a child/children that participates in active transportation on the UBC campus

The focus group will occur at **11:00am on November 26, 2021 over Zoom**

This study is conducted by UBC graduate students enrolled in Resources, Environment, and Sustainability's Qualitative Research Methods (RES 505) in collaboration with The Social Ecological Economic Development Studies (SEEDS) Program, and UBC Campus and Community Planning.

If you are interested in participating or would like more information, please follow the link or scan the QR code, or email raihanh@mail.ubc.ca



https://ubc.ca1.qualtrics.com/jfe/form/SV_1S2plvTtGVde4Ae