Perceptions of Safety in UBC Campus Public Spaces
The Case of the University Neighbourhoods Association

May 12, 2014

Prepared for:

University Neighbourhoods Association (UNA)
UBC Campus + Community Planning (C+CP)
The University of British Columbia (UBC)

Prepared by:

UBC School of Community and Regional Planning (SCARP) - PLAN 515 Research Team
UBC SCARP Safe Spaces on Campus Working Group (SCARP-SSCWP)

SCARP
School of Community
And Regional Planning

a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA
Faculty of Applied Science


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Emergency

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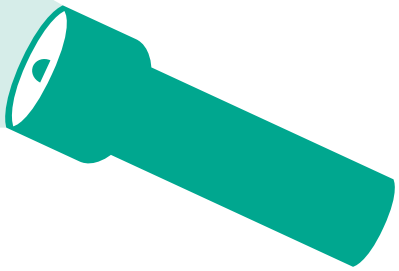
1.0 Introduction



1.0 Introduction

Between April 19th and October 19th, 2013, a series of six incidences of sexual assault at the University of British Columbia (UBC) Point Grey campus in Vancouver, BC were reported. These incidences prompted a number of responses: increased levels of security from the University Royal Canadian Mounted Police (RCMP) and UBC Campus Security, the expansion of campus safety programs such as the Alma Mater Society (AMS) Safewalk program, the establishment of a Point Grey Campus Safety Working Group, and a controversial campaign promoting the message of, "Stay Safe, Don't Walk Alone." Both the series of sexual assaults and the University's responses to the events have generated campus-wide conversations regarding the complexities and challenges of campus safety for students, faculty, and staff.

One common theme generated from these conversations has focused on how different individuals or groups of individuals have different perceptions of safety on campus, and how the University can work to implement appropriate safety initiatives to address these differences of perception. In particular, this conversation has been looked at through a feminist perspective and focused on how female perceptions of campus safety differed from male perceptions of campus safety. Two recent student studies at the UBC Institute for Gender, Race, Sexuality and Social Justice found that women's perceptions of threats on campus are more heightened than those of men, and that the University's responses to the 2013 sexual assault incidences thus far have only served to increase women's perceptions of insecurity (Burden et al., 2013; Hayes, 2013). As a result, the University must carefully consider how its safety initiatives may inadvertently target and benefit different groups of individuals on campus.

The objective of this study is to further explore how different individuals or groups of individuals perceive safety on campus. It is intended that the results of this study will further inform the University's responses to the sexual assaults. More importantly for long-term and equity considerations, it is intended that the results of this study will improve fair and equitable access and use of public space on campus in such a way that all users feel comfortable and safe in exercising their right to access public space.

This study was initiated in February 2014 under the direction of Dr. Nora Angeles at the School of Community and Regional Planning (SCARP) and Institute for Gender, Race, Sexuality and Social Justice (IGRSJ) for a graduate research methods class at SCARP, *Planning Research: Qualitative Methods and Research Design* (PLAN 515).

The SCARP PLAN 515 Research Team worked in collaboration with the SCARP Safe Spaces on Campus Working Group (SCARP-SSCWP), a student working group chaired by Sara Ortiz Escalante (SCARP PhD student) that formed following a SCARP panel discussion, "Don't walk alone at night? A discussion on women's rights to the public spaces at UBC campus" in November 2013 that sought to provide a critical perspective on discussions of the sexual assaults on campus.

1.1 Study Purpose

This study will examine a case study of University Neighbourhoods Association (UNA) residents and investigate the perceptions of safety of individuals and families who live on the UBC campus as year-round, long-term residents. The UNA represents a unique user group of the campus that is sometimes overlooked, considering the generally student-centered, academic, and institutional nature of campus affairs.

Perceptions of safety from the perspective of permanent residents on campus are not well examined. The study will address this research gap and will provide an analysis of residents' perceptions of safety at UBC. The study will build upon previous examinations of gendered perceptions of safety and fear (Burden et al., 2013; Hayes, 2013) and examinations

of student, faculty, and staff perceptions of safety (UBC Department of Health, Safety, and Environment, 2000).

There are five residential neighbourhoods as part of the UNA among the academic and institutional buildings at the UBC Point Grey campus (see Figure 1). Approximately 9,000 residents call the following their home (University Neighbourhoods Association, 2014):

- Chancellor Place;
- East Campus;
- Hampton Place;
- Hawthorn Place; and
- Wesbrook Place.

In addition to the five UNA neighbourhoods, there is an additional family residence housing on campus, Acadia Park, that is under the administration of UBC Student Housing and Hospitality Services (SHHS).

For comparison, the UBC campus has a daytime population of 49,896 students and 14,118 faculty and staff (UBC Planning and Institutional Research Office, 2014). In other words, UNA residents make up about 15% of the total daytime campus population.

Figure 1. UBC Point Grey campus and University Neighbourhoods Association context.

Understanding the perspectives of UNA residents as they relate to campus safety are important for a number of reasons:

- No campus user group should be marginalized regarding individual and community safety and well-being concerns;
- UNA residents may use campus public spaces in a distinct way that differs from the way students, faculty, and staff use public spaces; and,
- UNA residents provide an interesting and unique perspective of safety on the UBC campus because they are *permanent, long-term residents*.

Previous studies have focused on students, faculty, and staff—all of whom use the campus to a large extent on a non-permanent basis. Even students who live on campus in student residence only remain on campus for the academic year and/or for the duration of their studies. For UNA residents, the campus represents a permanent home that should be safe for all groups of people. These residents know the campus in a far more intimate way than other campus user groups simply because of the amount of time they have spent in the area. As a result, their daily habits and routines may differ from those of other campus user groups. Consequently, understanding perception of safety for residents on campus make an illuminating and important research application to inform campus and community planning at UBC.

1.2 Research Questions

The primary goal of this research is to add new knowledge about perceptions of safety at the UBC Point Grey campus from a residential perspective. To explore these perceptions of safety, the SCARP PLAN 515 Research Team conducted a community safety audit with UNA residents in March 2014. The study asks ***how do University Neighbourhoods Association residents perceive the safety of the UBC Point Grey campus?***

Specifically, the following research questions are examined:

1. How do UNA residents perceive the safety of the UBC campus, and how do those perceptions differ from students, faculty, and staff perceptions?
2. What built and natural environment qualities of the UBC campus affect the perception of safety for UNA residents?
3. What improvements can be made to address and improve perceived safety for UNA residents to support campus and community planning?
4. How should UBC incorporate different perceptions of safety when crafting responses to campus safety and ensuring safe and equitable access of campus public space?

The study identifies a list of recommendations for the consideration of the UNA, Campus + Community Planning (C+CP), and UBC in order to respond to and address perceived safety concerns of UNA residents.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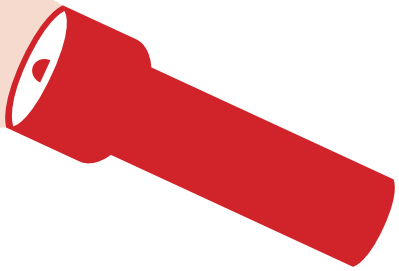
2.0 Literature Review



2.0 Literature Review

2.1 Safety and Urban Design

Crime Prevention Through Environmental Design (CPTED) is a multi-disciplinary approach that consists of design strategies to improve safety (both real and perceived) and deter criminal behaviour through environmental design (City of Edmonton, 1995; Draper & Cadzow, 2004; Stamps, 2005; Walsh, 1999). CPTED specifically highlights three concepts that influence both the level of crime and how people perceive the safety of an area (Draper & Cadzow, 2004):

- Access control—physical or symbolic barriers that control the movements of people through space;
- Surveillance—the ability of users of a space to see and be seen; and
- Territorial reinforcement—community ownership of a given area that sets a standard for permitted behaviour in an area.

These three categories can be further extrapolated into the following themes: awareness of surrounding environment, sightlines, lighting, predictable routes, entrapment or isolation, visibility by others, and the ability to seek and secure help (City of Edmonton, 1995).

CPTED was first developed by U.S. criminologist C. Ray Jeffery in the 1970s and popularized by researcher Oscar Newman in his work *Defensible Space* (1973). Since the early 1970s, Newman believed that crime problems could not be solved simply with increased policing. In contrast, Newman proposed that communities experiencing criminal behaviour were caused by a breakdown of social mechanisms in society, exacerbating criminal activity. Newman also recognized that denser urban environments impeded community unity and increased the number of strangers within a neighbourhood. As a result, to improve social cohesion, Newman proposed his defensible space model, an approach that promoted residential environments to be designed to create "the physical expression of a social fabric that defends itself" (Newman, 1973, p. 3). This type of neighbourhood design would demonstrate territoriality and emanate a sense of community to give people the feeling that residents were responsible for ensuring each other's safety. Ultimately, a potential criminal would perceive a neighbourhood with this sense of community as being controlled by its residents and deter criminal behaviour.

Some scholars trace the roots of the defensible space model back to Jane Jacobs's seminal work, *The Death and Life of Great American Cities* (1961) and her concept of the "eyes on the streets" (Walsh, 1999). This concept of neighbourly surveillance, or eyes on the street, provides opportunities for people to keep an eye on one another, to promote safety in numbers, and to be engaged with others in the local area.

Wekerle and Whitzman (1995) provide a set of guidelines and checklists to use for enhancing the built environment to cultivate safety within cities. They place a strong emphasis on women and their fear of violent crime. When asked what make women feel unsafe, women often cite poor lighting, places that are isolated or deserted, and locations where there is no access to other people. Wekerle and Whitzman emphasize the role of community involvement to promote safer cities. They argue for the inclusion of all people and not just women to be treated as experts in their community in order to generate solutions. In addition, Wekerle and Whitzman recommend planners to pursue community partnerships, as they are an important factor in enhancing safety between the public, local governments, police, private enterprises, civic groups, and faith-based organizations.

More recently, Jan Gehl has argued that cultivating a feeling of safety is crucial if we hope to have people embrace cities for people. People themselves make the city more inviting and safe in terms of both experienced and perceived safey—the more people there are in an area,

the safer it will be. Gehl also expresses that a sense of insecurity in cities is often rooted in existing social conditions, such as social and economic inequality. As a solution to these issues, planners should mix commercial land use with residential use to increase the number of people in the area and to enhance the feeling of safety among users of the street.

2.2 Youth Perceptions of Safety

Neighbourhoods form an important environment for adolescent development, as they provide opportunities to forge supportive networks with people and civic organizations. Likewise, adolescence is considered a crucial period for the development of youth's place attachment (the emotional bond between person and place) due to the amount of time young people spend in neighbourhoods and the opportunity for unsupervised exposure to neighbourhood settings and conditions. Place attachment may also serve as a resilience factor against identity crises that may occur in adolescence, by fostering individual, group, and cultural self-esteem, self-worth, and self-pride (Dallago et al., 2009).

Neighbourhood social capital is the broadest way of conceptualizing community-level social support and cohesion among neighbours. Social capital is promoted by neighbourhood residents through the formation of trust, sharing, and informal support. Vieno, Nation, Perkins, Pastore, and Santinello (2010) postulate that neighbourhood social capital, perceived neighbourhood social threats, and neighbourhood dangers are all factors that may directly affect early adolescent anti-social behaviour. Vieno et al. (2010) recommend parents to develop strong connections with their children, their children's schools, and their surrounding community in order to better social capital effects on the types and quality of the relationships children might experience within their neighbourhoods.

Furthermore, views of neighbourhoods can be very different for children, teenagers, adults, and seniors. As a result, youths' perceptions of neighbourhood features are representative of uniquely important predictors of social connectedness (Lenzi, Vieno, Pastore, & Santinello, 2013). Neighbourhoods characterized by higher population density contain lower levels of intergenerational closure (parents being friends with the parents of their children's friends), as well as lower levels of adolescents' personal connectedness with neighbours. Lastly, Lenzi et al. point out that in neighbourhoods characterized by higher levels of ethnic diversity, the establishment of social networks among residents may be more difficult. Putnam (2007) has a similar assessment where immigration and ethnic diversity leads to reduced social solidarity and social capital, more specifically in fostering trust, altruism or community cooperation. As a result, planners must actively foster and cultivate community connections to promote social capital among residents.

2.3 UBC Campus Safety

In 2000, the UBC Department of Health, Safety, and Environment (now Risk Management Services) conducted a survey among students, faculty, and staff to assess areas of fear and comfort on campus (UBC Department of Health, Safety, and Environment, 2000). The Personal Security Mapping Survey was designed to help campus planning staff to understand:

- Areas of campus that required safety improvements;
- Areas of campus that encourage feelings of comfort, and the reasons for their success; and
- Types of initiatives to be considered in the future to increase campus safety;

In addition to mapping areas of fear and comfort on campus, results found that nearly all campus users (97%) felt safe during the daytime hours, but only 43% of users felt safe during evening and night time hours. The majority of those who reported feeling unsafe at night were female

undergraduate students. The primary reasons for feelings of vulnerability were areas:

- With insufficient lighting.
- Considered isolated; and,
- Patrolled infrequently by security personnel.

Two recent student studies at the UBC Institute for Gender, Race, Sexuality and Social Justice examined the impacts of the 2013 sexual assaults and found similar results where female students are more highly represented as having perceptions of vulnerability on campus than male students (Burden et al., 2013; Hayes, 2013). The studies also identified similar themes of insufficient lighting and isolation as major contributors to perceptions of vulnerability on campus.

Burden et al. (2013) examined how individuals "self-regulated" (modified their behaviour) in their use of campus public space in response to feeling vulnerable. The research found a discrepancy in how male versus female users self-regulated their behaviour on campus. For example, female students were much more likely to actively enact self-regulation actions than their male students counterparts in regards to their campus activities, such as sticking to travelling in groups and avoiding poorly lit areas at night to avoid potentially dangerous situations. In addition, 28% of male students felt the University was taking appropriate actions to maintain campus safety whereas only 8% of female students felt the same (Burden et al., 2013, p. 10).

Hayes et al. (2013) examined the use of the AMS Safewalk Program in relation to the sexual assaults. Safewalk is a campus safety initiative where students who feel uncomfortable walking alone at night on campus can call Safewalk and request to be escorted to their destination by Safewalk staff. The research found that requests for Safewalk increased to 368 individual requests during the week of November 1–7, 2014 following the initial sexual assault incident. This was significantly higher than requests for walks during a comparable period during the spring semester. From March 1–7, 2013, only 12 walks were requested. In line with the previous UBC-specific studies, females were again found to be the primary users of Safewalk and expressed the highest levels of fear regarding safety on campus.

Hayes et al. (2013) also noted that the higher perceptions of vulnerability for female students on campus could be caused by campus safety initiatives whose general discourse appears to target females and promote more generalized assumptions regarding crime and female victimization. As a result, they highlighted social norms and pressures that may prevent males from using services like Safewalk or admitting to using them.

For the purposes of our research, these three studies underscore the importance of understanding how different user groups perceive safety on campus and what kind of conditions have contributed to these perceptions.

As a final note, the UBC Point Grey Campus Safety Working Group was formed in response to the sexual assaults and have released an interim report regarding priority areas for university safety initiatives. The report highlights the following areas as priorities for action (UBC Point Grey Campus Safety Working Group, 2014).

- Examining the use of surveillance cameras on campus.
- Coordinating approaches to safety with the RCMP.
- Creating better communication tools for students who feel threatened, such as continued use of Campus Blue Phones or

mobile applications.

- Increasing mobility and visibility on campus through lighting, landscaping, and transportation initiatives.

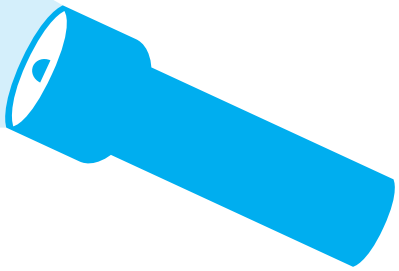
2.4 Safety Audits as a Tool for Measuring Perceptions of Safety

While other studies of safety perceptions at UBC campus have deployed research methods including surveys, interviews, focus groups, and mapping exercises, this is the first to utilize the safety audit method to our knowledge.

The safety audit has been used internationally as a tool to understand how specific groups interpret their environment, particularly in relation to safety. The audit was first conceptualized and used in Canada by the Metro Action Committee on Public Violence Against Women and Children in Toronto (METRAC, 1989). Typically, the safety audit has been used to measure women's perceptions of safety (Whitzman, Shaw, Andrew, & Travers, 2009). Whitzman et al. (2009) conducted a metastudy of six women's safety audit initiatives on three continents. The results of the study found that the safety audit tool can be effective in validating women's experiences and to help develop partnerships with local governments and policymakers. Furthermore, these partnerships create associated benefits to address social and economic inequalities through the development of women's employment programs, training for architects and planners, and making improvements to places previously unaccounted for.

The basic process behind a safety audit involves using a checklist that identifies factors that might contribute to or detract from safety, and a walking survey of an area in which participants make observations of spaces relating to safety. Typical questions on the checklist include whether there is sufficient lighting in an area, if an area can be perceived as isolated or as an entrapment area, if there is sufficient signage, and if the area is well-maintained (Whitzman et al., 2009). Most importantly, the safety audit involves the gathering of data based on the expertise and perspectives of the users of an area (METRAC, 1989). It is this participatory form of research that can have real implications for community development and governance to create realistic and supported recommendations for local planning authorities (Whitzman et al., 2009).

3.0 Methodology



3.0 Methodology

3.1 Safety Audit Checklist

A safety audit checklist was developed by the SCARP PLAN 515 Research Team to meet the specific needs of the research and the context of the UBC campus and UNA residents. The checklist was adapted from one developed in Australia (ACT Government, 2013).

Members of the Research Team participated in a photovoice exercise in February 2014 before beginning the research in order to form preliminary understandings of safety on campus. A pilot test of the safety audit walk was conducted in April 2014 and attended by volunteer SCARP students. The pilot walk enabled the Research Team to test the format and content of the safety audit; revisions were made based on feedback and recommendations from the volunteers.

3.2 Community Safety Audit Event and Data Collection

In order to create an atmosphere where residents felt comfortable in sharing their views and concerns about campus safety, a familiar community location was selected to host an intensive and interactive community safety audit event. UNA residents were invited to join their neighbours and SCARP students for a discussion on campus safety. Residents were solicited for input on places on campus that felt safe and the least safe, and what factors made them feel safe or unsafe. The safety audit event was held on March 26, 2014 from 6:00–9:00 pm at the Old Barn Community Centre and around some of the UNA neighbourhoods.

The following marketing channels were used to advertise and promote the event:

- The Campus Resident (UNA newsletter—print and online);
- myUNA (UNA biweekly online newsletter);
- UNA Facebook and Twitter page;
- UNA website;
- Old Barn Community Centre website; and
- SCARP-SSCWP Facebook page.

In addition, the Research Team engaged in widespread physical distribution of flyers throughout the UNA neighbourhoods and active, in-person promotion at the Old Barn Community Centre during the week of the safety audit event.

At the safety audit event, data was collected through six primary methods:

- Demographic survey questionnaire;
- Group mapping exercise;
- Safety audit walk;
- Individual safety audit checklist;
- Safety audit walk focus group debrief; and
- General observational data of the event.

3.2.1 Demographic Survey Questionnaire

In order to gain a better understanding of the residents who attended the event, each participant was given a short demographic questionnaire. The questions covered a number of topics, including age, gender, sex,

ethnicity, location of residence, and current occupation.

3.2.2 Group Mapping Exercise

Facilitators from the Research Team introduced the purpose of the safety audit event to the participants. Participants were asked to interact with each other and share their thoughts on campus safety. Using a large map, participants were encouraged to identify locations on the campus where they felt safe or unsafe through the use of coloured circle stickers: green (safe spaces) and red (unsafe spaces). Using sticky notes, facilitators assisted participants by guiding, interpreting, and mapping their thoughts through additional qualitative comments.

A note-taker recorded comments and discussions on large flipchart paper in order to summarize themes and ideas in a visual manner. This provided the opportunity for more open-ended conversation to flow from the mapping exercise to allow participants to openly identify and discuss other aspects of campus life as relating to their perceptions of campus safety. In addition, note-takers recorded observational data such as notable quotations.

The maps generated during the group mapping exercise were digitized. Additionally, any qualitative notes that were placed on the map were coded.

3.2.3 Safety Audit Walk

Following the group safety exercise, the participants were divided into three groups. Each group was assigned a pre-determined route where they identified and evaluated the various built and natural environment aspects that made them feel safe or unsafe. Participants were invited to join a route that they were most familiar with and/or travelled through regularly. The routes were carefully chosen with the assistance of the UNA Walk and Talk Club, a group of local residents who explore different routes on campus that lead to residential neighbourhoods, schools, parks, beaches, and forests at UBC and the University Endowment Lands (UEL).

Participants were provided a package including a copy of the route map, a demographic survey questionnaire, a safety audit checklist, and an individual map where participants could mark down safe and unsafe areas if they did not feel comfortable openly expressing themselves during the group mapping exercise.

Three members of the Research Team accompanied each safety audit walk group that included a facilitator, note-taker, and photographer. The facilitator was responsible for leading the group along the pre-determined path. Beyond providing geographical direction, it was the responsibility of the facilitator to engage the group with open-ended, but thematically appropriate discussion questions to better help respondents express their own thoughts and concerns on their perceptions of safety and the environmental surroundings.

The note-taker recorded comments and concerns from participants in the group and supported the facilitator when needed. The photographer visually documented the safety audit walk and various locations and characteristics of the built and natural environment as identified by participants.

3.2.4 Focus Group Debrief

Following the conclusion of the safety audit walk, participants were invited to return to the Old Barn Community Centre and attend a focus group debrief or choose to return home. Participants were given the opportunity to share their overall experience of the safety audit and have an open discussion on factors contributing to their perception of safety on campus.

3.3 Study Limitations

The study has several limitations that need to be considered when interpreting the results. Future studies should build upon our work and address these limitations. In framing the safety audit event, the Research Team deliberately defined the word "safety" in a neutral manner to avoid imposing one single definition that could potentially inhibit or deter the participation of UNA residents given the multiple meanings of "safety". Brief context was given to the sexual assaults as one impetus driving the research. However, participants were able to interpret the word "safety" freely as they chose and not necessarily 'safety' as it related to personal safety within the context of the sexual assaults.

The sample of participants was not representative of the UNA due to limited time for outreach. In addition, due to the lack of census-specific information for the UNA, it is unknown whether various demographic measures were sufficiently represented by the sample collected at the event.

While the UNA has a large Mandarin-speaking population, the event did not adequately cater to their specific language needs through the provision of trained facilitators who were fluent in Mandarin and the provision of translated material and documentation for the safety audit checklist. This would have removed a significant barrier to participation to elicit richer participation and better accurate responses among the Mandarin-speaking participants. Nevertheless, bilingual participants provided Mandarin translation for facilitator announcements, instructions, and directions. Moreover, culturally specific conceptions of safety should be better accounted for in the future as participants may have different perceptions of safety based on their cultural background and place of origin, which would affect the data collected.

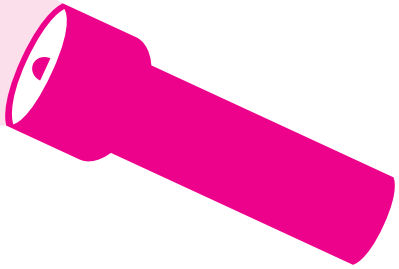
The survey would have benefited from additional questions including asking for length of residence in the UNA and whether the participant was a recent immigrant as these variables may have an influence on perceptions of safety. Recent residents may have different perceptions of safety when compared to more established residents due to their overall familiarity with the neighbourhood.

For the group mapping exercise, two maps were used to allow each resident easy access to a map. The two different groups used the maps differently, with one group having many more dots and sticky notes on the map, while the other group had more discussions and required more encouragement to use the map itself.

During the safety audit walks, the facilitators found it challenging to start engaging conversations without posing leading questions that may have elicited certain answers from the participants. This may have been intrusive and had the potential to alter the received answers. In addition, while participants were encouraged to fill out the checklist on multiple occasions, many of them were more comfortable voicing their concerns than writing them down and answering specific questions on the checklist.


Lagoon
Musqueam Lands
City of Vancouver

4.0 Results



4.0 Results

4.1 Event Statistics and Demographics

A total of twenty-three (23) people attended the safety audit event. However, only nineteen (19) valid surveys were completed due to participants leaving early or families sharing surveys. Descriptive statistics are calculated using the nineteen responses.

Despite not being a representative or statistically significant sample of the UNA population, the demographic information provides insight into the perceptions of safety for specific groups of UNA residents, particularly immigrant youth. Moreover, the heavy youth turnout was a welcome presence as youth are generally an underrepresented demographic in community planning processes.

Of the participants surveyed, 78.9% were female and 21.1% were male. The majority of participants (57.9%) were between the ages of 10 and 20, followed by those between the ages of 31 and 40 (31.6%). The self-reported ethnic composition of respondents was overwhelmingly of Chinese descent at 75.0%, with the remaining 16.7% identifying as White and 8.3% identifying as Southeast Asian (see Figure 2). Only 12.5% were Canadian-born, leaving 87.5% as foreign-born residents, of which 75.0% were originally from China. Following these trends, 81.3% of respondents stated that their primary language was some form of Chinese, while 18.8% spoke English as their primary language.

A majority of participants (89.9%) resided at UBC, with only 11.1% living off-campus in the City of Vancouver. Of those participants that resided in the UNA, 35.2% lived at Wesbrook Place, followed by 17.6% at Hawthorn Place, and one respondent each living at East Campus, Hampton Place, and Acadia Park (see Figure 3).

40.0% of respondents lived in a three-person household, followed by 26.7% each for households with two persons and four to six persons. Two

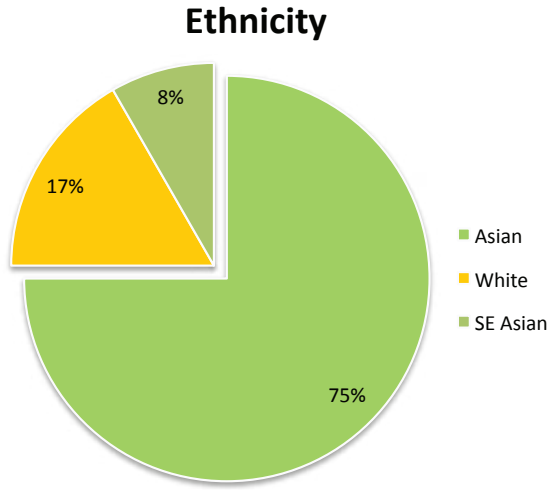


Figure 2. Self-identified ethnicity of participants.

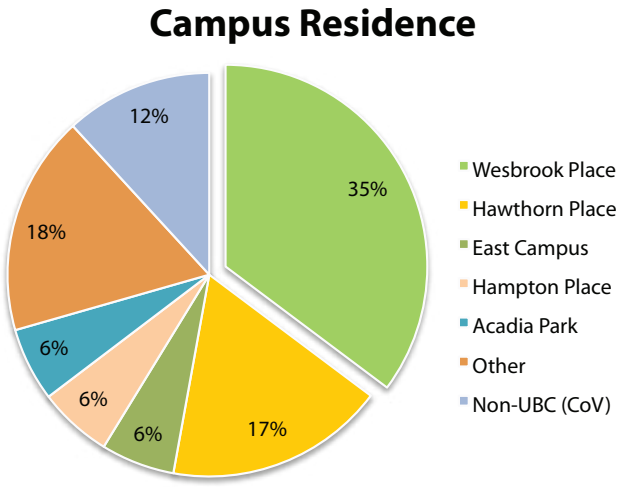


Figure 3. Location of residence of participants.

thirds of respondents stated that they lived in a house that was owned, and 68.4% of participants stated that they do not have children. Two thirds of respondents were students without regular employment, 11.1% stated they were in retirement, while two people work in an arts and culture-related field, one in business, and one was unemployed. Given the high proportion of secondary school students attending the event, educational attainment of degrees was relatively low, with only one person with an associate's/technical degree, undergraduate degree, and doctoral degree, and three persons having completed a master's degree (see Figure 4).

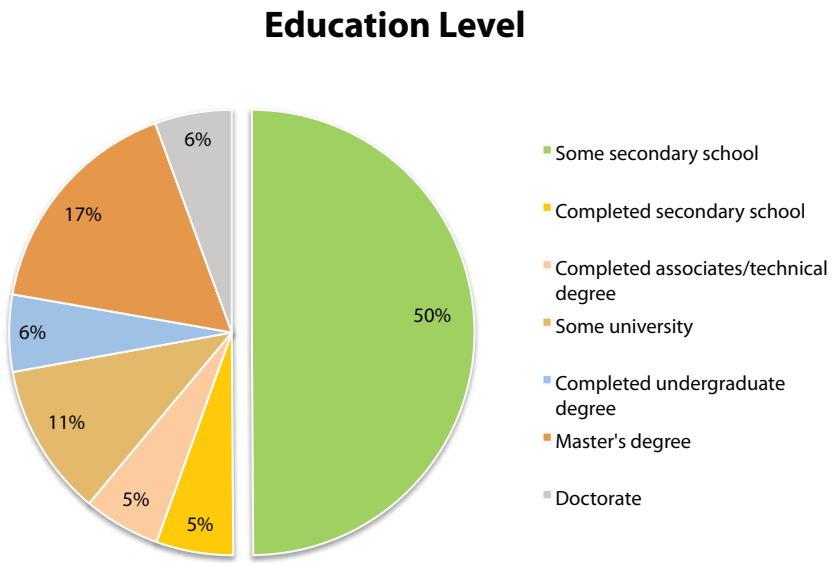


Figure 4. Educational attainment of participants.

Table 1. Description of the participants (cont'd next page).

Participants, *N*[a]	19
Age (years), *n* (%)	
10–20	11 (57.9)
21–30	1 (5.3)
31–40	0 (0.0)
41–50	6 (31.6)
51–65	0 (0.0)
66–75	1 (5.3)
> 75	0 (0.0)
Women/Men, *n* (%)	15/4 (78.9/21.1)
Ethnicity, *n* (%)	
Chinese	9 (75.0)
White	2 (16.7)
Southeast Asian	1 (8.3)
Country of Origin, *n* (%)	
China	12 (75.0)
Canada	2 (12.5)
Taiwan	1 (6.3)
Belgium	1 (6.3)
Primary Language, *n* (%)	
Chinese	7 (81.3)
Chinese (Mandarin)	6 (37.5)
English	3 (18.8)
Home Municipality, *n* (%)	
University Endowment Land	16 (89.9)
City of Vancouver	2 (11.1)

Residence, *n* (%)	
Wesbrook Place	6 (35.2)
Hawthorn Place	3 (17.6)
East Campus	1 (5.9)
Hampton Place	1 (5.9)
Acadia Park	1 (5.9)
Other	3 (17.6)
Non-UBC (City of Vancouver)	2 (11.8)
Household Size, *n* (%)	
1	1 (6.7)
2	4 (26.7)
3	6 (40.0)
4–6	4 (26.7)
≥ 7	0 (0.0)
Household Children, *n* (%)	
Yes	6 (31.6)
No	13 (68.4)
Household Ownership, *n* (%)	
Own	11 (64.7)
Rent	6 (35.3)
Student Status, *n* (%)	
Full-time	13 (68.4)
Part-time	0
Non-student	6 (31.6)
Occupation, *n* (%)	
Student (without employment)	12 (66.7)
Arts, culture, recreation, sport	2 (11.1)
Business, finance, administration	1 (5.6)
Retired	2 (11.1)
Unemployed	1 (5.6)
University Employee, *n* (%)	
Yes	0 (0.0)
No	19 (100.0)
Highest Level of Education, *n* (%)	
Some secondary school	9 (50.0)
Completed secondary school	1 (5.6)
Completed associate's/technical degree	1 (5.6)
Some university	2 (11.1)
Completed undergraduate degree	1 (5.6)
Master's degree	3 (16.7)
Doctorate	1 (5.6)

Note: Percentages may not add up to 100 due to rounding.

[a] 23 people attended the event, but only 19 valid surveys were completed.

4.2 Group Mapping Exercise

Spaces perceived as "safe" are represented by green dots and spaces perceived as "unsafe" represented by red dots. Qualitative comments fell into two categories: lighting and traffic. They are represented as blue and orange dots respectively.

Certain themes were expected to emerge from the group mapping exercise, such as perceptions of safety in high pedestrian traffic areas and darker areas of campus feeling less safe. While in certain circumstances these themes are evident, the manner in which the map was used by the residents makes clear determination of the trends somewhat difficult.

Some areas that were labelled as unsafe included:

- Residential area of the UEL north of Acadia Park;
- Southern half of Hawthorn Place;
- Sports fields at Thunderbird Park;
- Forest surrounding the campus and UBC Farm;
- SW Marine Drive;
- University Boulevard west of Main Mall; and
- Major intersections at 16th Avenue and Wesbrook Mall, 16th Avenue and East Mall, and Wesbrook Mall and Chancellor Boulevard.

Figure 5. Areas identified as safe and unsafe with coded qualitative comments.

Areas labelled as safe included:

- Northern section of Acadia Park;
- Portions of Wesbrook Place;
- Agronomy Road east of Main Mall; and
- Scattered areas around Main Mall, East Mall, and Wesbrook Mall.

The qualitative data provided by residents on the sticky notes was coded and fell into two categories: lighting and traffic. Places where lighting was identified as an issue included:

- Hampton Place;
- Thunderbird Park;
- 16th Avenue; and
- Lower Mall.

Traffic issues were identified along:

- Northern portion of Wesbrook Place;
- Stadium Road; and
- Wesbrook Mall.

It is worth noting that many of the "unsafe" dots were placed on the map due to one of these two issues, so the locations identified specifically as being related to traffic or lighting are by no means exhaustive.

Overall, only a few clear themes could be easily discerned from the map. Safety around the major intersections is a strong concern for residents, while other areas are perceived as being safer, such as Agronomy Road and Acadia Park. However, due to the map covering the entire campus, it is difficult to define specific locations based on the dots placed. In order to do this, three short routes were devised to provide more detailed data about areas of campus that are specifically used by UNA residents.

4.3 Safety Audit Walk

4.3.1 Route #1: Hawthorn

Route Overview

Number of Participants: Seven (7)

The Hawthorn route started with a walk through the Main Mall Greenway. The Greenway is a pedestrian-only corridor lined with trees and townhouses, with windows and patios facing onto the Greenway from all sides. The group proceeded to walk past a Campus Blue Phone (public phone that connects to a Campus Security dispatcher for emergencies, directions, and assistance) located at the intersection of the Greenway and Eagle Drive. The group passed a community garden and a forest along the Greenway, and then turned right onto Stadium Road. A hospice was the only building located along this road. From Stadium Road, the group turned right onto West Mall, which is lined with townhouses on one side and green space on the other, and then took another left on to Thunderbird Boulevard, returning the group to the Old Barn Community Centre. Some participants continued and walked another small loop from Thunderbird Boulevard on to East Mall and then cut through a footpath to return to the Old Barn once again.

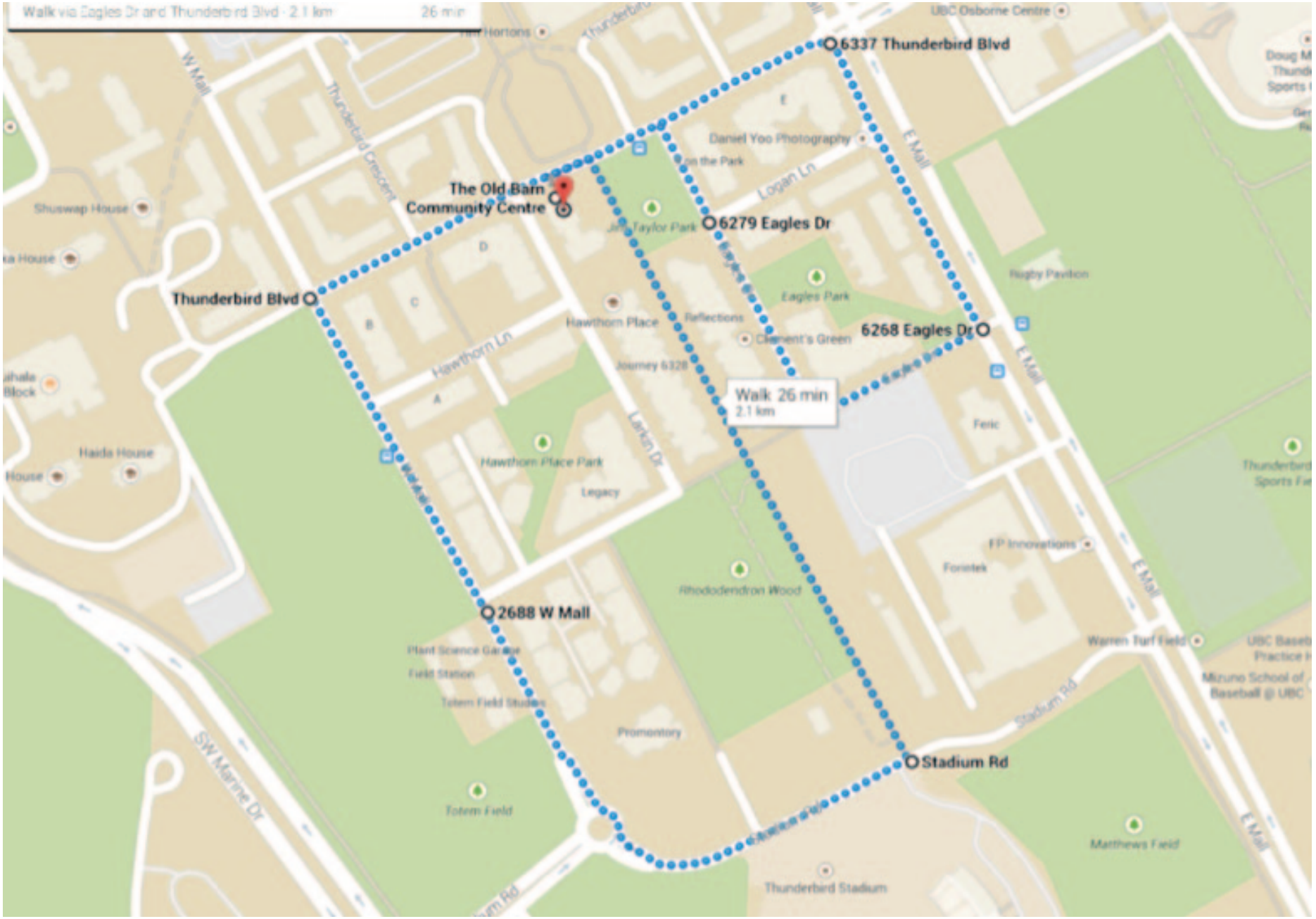


Figure 6. Map of Route #1: Hawthorn.

The Greenway: The group was positive about the Greenway. The participants felt children could play unsupervised along the corridor. Residents can hear almost everything from their balconies, which fosters a safe walking environment for residents and pedestrians alike. Two participants live directly overlooking the Greenway and allow their children to play in the forest. The visibility through the trees is good as the underbrush was cleared to create better sight lines. Children were also reported to play in the gardens to the east of the Greenway. The ability for children to play unsupervised is a strong indicator of safety. Research found that along pedestrian streets, children typically are able to run freely without holding their parents hand. However, on streets with traffic, children usually stay very close to their parents due to fear of safety (Gehl & Svarre, 2013).

Participants also expressed feelings of safety along the Greenway due to the Campus Blue Phone located at the intersection of Greenway and Eagle Drive, which the group identified as a major hub for pedestrians. Although none of the participants had ever used the Campus Blue Phone, or others around campus, they felt safer with it nearby.

Stadium Road: There were many safety concerns raised by participants while walking along Stadium Road. These included a lack of lighting, inadequate crosswalks, and the high speed of automobiles [**#1-1**]. There was also concern raised for cyclists riding down Stadium Road because the bike path is very poorly defined.

The group noted feeling safe when walking and driving at the roundabout at Stadium Road and West Mall because it is a single lane, traffic is slower, and the visibility is good as sight lines are not impeded by trees growing in the roundabout.

West Mall: The participants generally felt safe along West Mall. There was adequate lighting in most places, speed signs slowing drivers down, and houses were close enough to the road and sidewalks that people felt they could be heard. The main concern identified along West Mall was related to public transportation. The group identified the infrequency of the bus, lack of sheltered bus stops, and inadequate lighting around bus stops as the primary safety problems.

Thunderbird Drive and East Mall Loop: The group expressed traffic concerns as participants indicated that the roads were not designed to accommodate pedestrians and the speed along these roads was too fast. In addition, the bushes along these two roads also created a feeling of unease because they could not see what was behind them.

Recommendations

Lighting: Lighting was identified as one of the main concerns along the Hawthorn route. Some of the streetlights along the Greenway were burnt out at the time of the tour. Along Thunderbird Drive and East Mall Loop, it was suggested that more streetlights should be installed to illuminate the existing crosswalks.

Traffic: All participants mentioned that vehicle speeds were a major issue throughout the route. Putting in speed bumps along Stadium Road could increase the safety around cars, as well as posting speed limit signs and even reducing the speed limit from 50 km/hour along East Mall. It was recommended that crosswalks be put in along Stadium Road and on East Mall where it meets Logan Lane.

Transportation: The participants recommended more frequent bus service along West Mall and Larkin Drive and improved bus stops that include lighting and shelter from the weather.

#1-1

4.3.2 Route #2: Hampton Place

Route Overview

Number of Participants: Nine (9)

The Hampton Place route began on Thunderbird Boulevard outside of the Old Barn Community Centre. The group walked west up Thunderbird Boulevard, a two-lane street lined with academic buildings, the Thunderbird Arena, and a parkade. The group continued across Wesbrook Mall and turned right on Osoyoos Crescent, which brought the group into a residential, family-oriented area of campus with apartment blocks, parks, and daycares. The group walked along Osoyoos Crescent to the Sword Fern Trail. The Sword Fern Trail is part of a greater trail network that goes through Pacific Spirit Park, but this particular trail links Osoyoos Crescent and Hampton Place. The trail is heavily forested, although is short in length and close to residential buildings. The group emerged from the forest onto the residential street Hampton Place. The group walked south along Hampton Place to 16th Avenue, and then turned west along the north side of West 16th Avenue, a busy thoroughfare. The sidewalk on the north side of West 16th is separated from the road and lined with a berm on one side and trees on the other. The walk concluded at the intersection of West 16th and Wesbrook Mall.

In a previous community consultation, a resident had identified issues with the crosswalks just west of the Old Barn Community Centre on Thunderbird, indicating that they are poorly marked and that cars do not stop there. This was a primary reason for including the area in this route.

Thunderbird Boulevard: Walking along Thunderbird Boulevard before dark, participants generally felt safe. Most of the comments were around poor lighting in this area. At the intersection of Thunderbird and East Mall, participants commented that the wait times at this crosswalk were too long, cars sometimes travel too fast on East Mall, and that the placement of the crosswalk button on the pole was strange, being placed on the grassy side, rather than the sidewalk side, of the pole [**#2-1**]. One participant noted that they were not aware of the bicycle lane on the street. The Osborne Centre was identified as one area with particularly poor lighting and poor identifiers; most participants had never been there and did not know what it was. A forested area on the north side of Thunderbird and east of Wesbrook Mall was identified as a scary place due to the possibility of people being concealed in the dark, wooded area.

Osoyoos Crescent: The construction sites along the east side of Osoyoos Crescent were dark, muddy, and seemed unused [**#2-2**]. Participants expressed that they would feel unsafe in this residential area alone at night. Some discussion of the trees in the area ensued, with some participants saying the trees made them feel less safe, but others saying that despite that, they wanted to preserve the trees. The daycare on Osoyoos seemed to be a safe place for children due to the fencing and lighting.

Sword Fern Trail: This forested trail seemed to be the least safe in the eyes of participants [**#2-3**]. It was dark with poor visibility and participants worried about the presence of wild animals. One resident commented how people take this path as a shortcut to get across the neighbourhood quickly. Some participants said they would feel safe on the trail during the day, but one participant who had attended the school adjacent to the trail said that she had never been on the trail and had avoided it as a child. Some participants suggested solutions to make the trail feel safer such as a Campus Blue Phone or security presence. The thick forest and narrow trail with a fence along one side made the forest feel difficult to escape in the presence of a perceived threat.

Hampton Place: Participants felt relieved to have left the forest and felt safer along Hampton Place due to the perceived presence of more people and increased light in the area [**#2-4**].

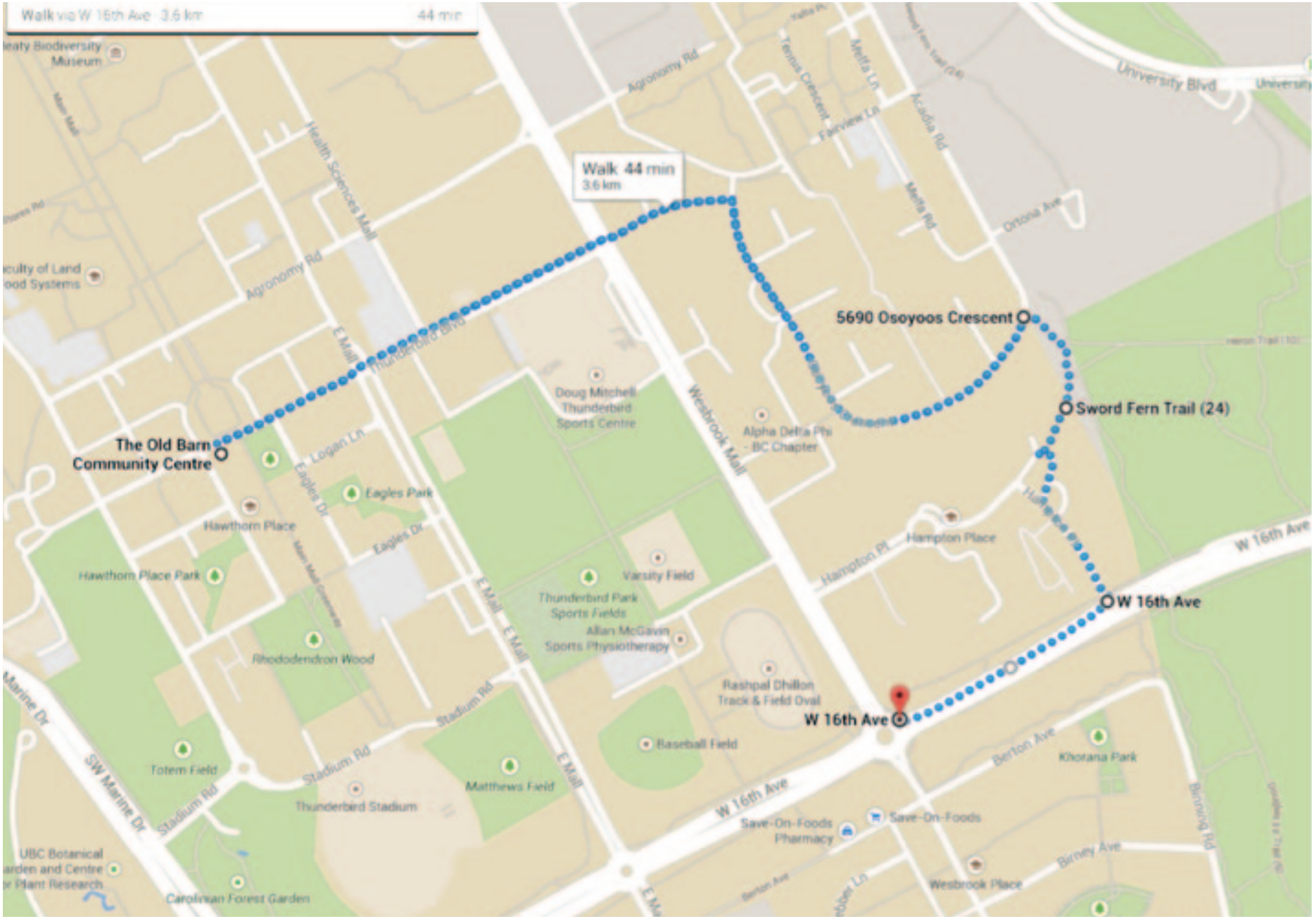


Figure 7. Map of Route #2: Hampton Place.

West 16th Avenue: Traffic was identified as the major problem along West 16th Avenue due to cars moving fast as a result of a higher speed limit with crosswalks few and far between. Although lighting was generally considered sufficient in this area, some participants expressed concerns that assailants could be hiding in the bushes and that nobody was nearby to hear them call out in the case of an emergency.

Recommendations

Lighting: Improved lighting was identified as an opportunity to address the safety concerns along most of this route. The round street lamps were identified as being particularly dim and modification of the light fixtures could be a simple and expedient solution.

Traffic: Crosswalk improvements are recommended along Thunderbird Boulevard and West 16th Avenue. The intersection of Thunderbird and East Mall was of particular concern due to the length of wait times and placement of cross buttons. West 16th Avenue was identified as particularly problematic due to lack of crosswalks, width of the street, and the speed of traffic. Traffic should be calmed with additional crosswalks constructed east of the intersection with Wesbrook Mall.

Wayfinding: Improvements to wayfinding are recommended as many participants felt they were unfamiliar with many areas on campus. Adding more languages to maps and signs could help to improve wayfinding for residents whose first language is not English.

Forested Areas: Lighting along the periphery of forested areas would address safety concerns, as well as the removal of invasive bush species that conceal the ground. Forested areas along Osoyoos Crescent were a concern and the current construction projects present an opportunity to rectify this situation.

#2-1


#2-2


#2-4


#2-3

4.3.3 Route #3: Hawthorn Place – Southwest Marine Drive

Route Overview

Number of Participants: Five (5)

The Hawthorn Place – Southwest Marine Drive Route starts with a walk through the Main Mall Greenway, the pedestrian corridor adjacent to a forested area. The group then followed Stadium Road, adjacent to the Stadium and field, onto East Mall, and then west on the major arterial West 16th Avenue. The group continued along the major gateway into UBC, Southwest Marine Drive, back onto Stadium Road, and north on West Mall, a predominantly residential area. The route concluded back at the Old Barn Community Centre.

Main Mall Greenway: The group's major concern on this Greenway was familiarity. The group distinguished the important difference between feelings of safety in this area as a resident compared to a visitor. The group believed the area is considered safe to someone who is familiar with the area, but may not feel safe to someone who has never visited. Reasons included the possibility of knowing neighbours and the comfort level with the nearby community centre. The group also expressed concerns of lighting. This was mostly the result of the adjacent forested area, which raised concerns from the group due to the lack of lighting near the forest. However, the group did mention a recent community event, Deck the Dark, which took place in the forested area to light up the forest and help dissolve the perception of the forest being unsafe. Deck the Dark was organized by the UTown@UBC Youth Leadership Group and originally conceived by students at CityStudio Vancouver to light up the dark and under-utilized spaces in Vancouver neighbourhoods building in Jane Jacob's "eyes on the streets" (see Figure 9). The residents believed the event was effective in making the area feel safer.

When the facilitator pointed out the presence of the Campus Blue Phone, none of the residents knew it was there. Most of the residents did not know what it was or how to use it, and saw the only benefit of it as extra lighting for the pedestrian walkway. The group believed the Campus Blue Phones would be more useful if residents actually knew what they were and how to use them.

Intersection at Main Mall Greenway and Stadium Road: The group felt this area was very unsafe due to the lack of crosswalk to cross to the Stadium Road sidewalk. The group also mentioned the use of the shortcut near Thunderbird Stadium can be very unsafe during the night due to the lack of lighting. Concern was also expressed over the presence of buildings in the area that are unused at night. There was concern that the lack of "eyes on the street" can make for a much more dangerous scene at night compared to during the day.

Figure 8. Map of Route #3: Hawthorn Place – Southwest Marine Drive.

Roundabout at East Mall and West 16th Avenue: The participants had a variety of opinions concerning the roundabout at East Mall and West 16th Avenue. Some residents believed the area felt safer due to the construction of the new roundabout. Reasons given included cars were more likely to stop for pedestrians due to increased lighting, yellow crosswalks, and improved wheelchair accessibility. However, some residents were still against the roundabout due to it not being effective in reducing the speed of passing vehicles. Concerns expressed were mainly for high school students travelling to school through this roundabout. Some residents believed roundabouts only improve traffic flow and do not increase pedestrian safety compared to a stoplight or four way stop. Concerns were also expressed over the difficulty for new residents to understand the rules of the roundabout and the constant change of traffic strategies.

Intersection at West 16th Avenue and SW Marine Drive: The participants felt this intersection was very unsafe because of its confusing nature **[#3-1]**. The change of directions for pedestrians and the very high speeds at which cars travel on this road made this intersection feel unsafe to residents On the SW Marine Drive side, the residents liked the presence of the fence lining the side of the pathway because they felt it created a sense of safety by providing protection from the unknown. However, one resident also noted it could be dangerous because it does not provide a way out from an attacker.

Roundabout at Stadium Road and West Mall: The group also felt the roundabout at Stadium Road and West Mall was unsafe due to the cars travelling at very high speeds. The residents also noted the presence of the hospice and the effect it had on the community. Residents noted that many people moved away from the area due to cultural beliefs surrounding places where people are dying. However, one resident mentioned how new residents are beginning to learn about different customs and beginning to become accustomed to the idea. Residents also felt this issue was a mixture of misunderstanding and a clash of different cultures.

West Mall: The participants felt the four-way stop located on West Mall felt much safer than the previous roundabouts. The residents felt it was more effective at reducing the speed of the vehicles, thus making it safer for pedestrians to cross. The residents noted the area also felt safe due to the adjacent public open space and community centre. However, the residents still felt the lighting could be improved in the area.

Recommendations

Lighting: The participants placed a great deal of importance on lighting to increase safety during the night near the forest along Main Mall Greenway, the shortcut through Stadium Road, and along West Mall.

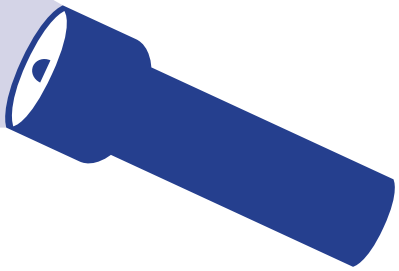
Traffic: This was a major recurring theme and was mostly related to the speed of cars and the fear of a pedestrian collision. The participants' suggestions were to increase safety through the following: a crosswalk at Stadium Road and Main Mall Greenway; and slow down speed for roundabouts at East Mall and West 16th Avenue, and at Stadium Road and West Mall.

Community: The participants noted that events like Deck the Dark, which help to familiarise people with their neighbourhood, might help a lot with ensuring feelings of safety at different locations and time of the day for people that might otherwise restrain themselves from accessing certain areas.


#3-1


UNA

5.0 Recommendations



5.0 Recommendations

While much of the recent discussion about campus safety has stemmed from the assaults of 2013, the intention of this study was to understand the perceptions of safety among the UNA residents in order to improve equitable access to campus public space. Although we acknowledge the importance of addressing the serious events, our focus was on understanding what factors led UNA residents to restrict their use of or feel vulnerable within campus public spaces at different times of the day.

Most of the comments and recommendations that were collected from the residents were concerned with practical issues such as traffic and lighting. However, the size of the sample was not sufficient to draw conclusions for comparison among different groups. Yet, some women mentioned during the safety audit that they would never walk by themselves at night. This suggests that there continues to be a discrepancy in the way different groups use public spaces. Further studies are needed in order to better understand what prevents certain groups to access public areas.

Based on the results of the safety audit event, a number of recommendations are brought forward based on the feedback from the participants. The following recommendations are specific to our sample. We tried to include as many of the recommendations put forward throughout the event. Our findings suggest that they could result in an increase in the perception of safety for UNA residents.

However, it is important to emphasize that more research is required to assess the specific nature of the areas identified as problematic by the participants, and the feasibility and potential environmental and health impacts (e.g. light pollution) that would result from these recommendations suggested by the participants.

5.1 Lighting

Lighting was a predominant theme throughout the event and in all three groups. While the overall conclusion is that better lighting provides a feeling of safety, specific areas were pointed out that could benefit from improved lighting for UNA residents.

- **Hampton Place:** Modify round streetlamps to give off more light.
- **Hampton Place:** Improve lighting along forested areas.
- **Osborne Centre:** Increase lighting around the Centre.
- **Thunderbird Park:** Better lighting in and surrounding Thunderbird Park.
- **Main Mall Greenway:** Replace light bulb in burnt out streetlights.
- **Thunderbird Drive:** Improve lighting along shortcut near Stadium Road and along street.
- **Thunderbird Drive and East Mall:** More lights to illuminate existing crosswalks.

5.2 Traffic

Safety concerns due to vehicle traffic was also raised consistently throughout the safety audit event. The recurring themes were about deficient pedestrian infrastructure and the speed of vehicles.

- **East Mall:** Reduce speed of cars.
- **Stadium Road:** Install speed bumps.
- **Stadium Road:** Define or segregate the bike path.
- **Thunderbird Drive and East Mall:** Reduce wait times for pedestrian crossing.
- **Thunderbird Drive and East Mall:** Move placement of crosswalk button.
- **West 16th Avenue:** Reduce vehicle speed.

- **West 16th Avenue:** Increase number of pedestrian crossings.
- **Stadium Road and Main Mall Greenway; East Mall and Logan Lane; West 16th Avenue and Wesbrook Mall:** Install crosswalks.

5.3 Transportation

Good access to public transit is one of the major themes addressed by the literature for safety audits, and consequently was part of the elements listed on the checklist of participants.

- **West Mall and Larkin Drive:** Increase the frequency of buses.
- **West Mall and Larkin Drive:** Provide bus stops that provide lighting and shelter.
- Paint bicycle lanes using green paint as North American standard to clearly identify them.

5.4 Wayfinding

Although many participants considered the signage on UBC campus to be sufficient, some people thought it could be improved for the benefit of people's safety.

- Improve campus wayfinding maps with major indicators in multiple languages.
- Improve signage for buildings on campus so that they clearly indicate the name and use of a building.

5.5 Community Connection and Forested Areas

For residents, the feeling of safety near forested areas on campus was addressed frequently in different ways. While some mentioned feeling safe in natural surroundings, it appears to create uncomfortable feelings for others, often related to the lack of lighting. This supports the finding from Burden et al. (2013) regarding negative feelings of safety around forested areas on campus. The lack of familiarity might also be a factor in the level of comfort experienced by residents.

Residents described the event Deck the Dark organized by the UTown@UBC Youth Leadership Group as very positive. They mentioned how much familiarity with an area has to do with improving the feeling of safety, and how events like Deck the Dark helped residents familiarize themselves with an area of the neighbourhood that some of them had never gone to. This might encourage residents to travel in spaces that they might otherwise avoid over safety concerns. Events like this that provide temporary lighting installations combined with community programming will increase familiarity with areas of campus and help to ensure that everyone in the community has equitable access to the public spaces.

- Initiate more community events like Deck the Dark on a regular basis.

5.6 Campus Blue Phones

There are conflicting results regarding the effectiveness of the Campus Blue Phones in improving perceptions of safety. While some residents were aware of the program (and in turn reported feeling safer by their presence), other residents reported that they were both unaware on how to locate and use the Blue Phones in an emergency situation. Overall, it was determined that current educational efforts surrounding the location, purpose, and use of the Campus Blue Phones are insufficient. Furthermore, additional investigation into whether or not the Campus Blue Phone system actually promotes perceptions of safety on campus is required.

- **Sword Fern Trail:** Install a Campus Blue Phone near the trail.
- Launch an educational campaign or provide a welcome package to teach new residents and students how to use the Campus Blue Phones.
- Develop a partnership with residents, Campus Security, and the University RCMP to promote awareness and best practices for the use Campus Blue Phone.

5.7 CPTED and "Eyes on the Street"

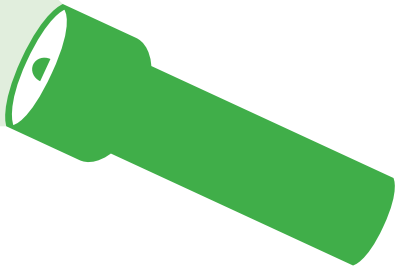
The Research Team recommends that Crime Prevention Through Environmental Design (CPTED) continue to be a criteria in planning and design decisions for current and future development on campus. Concepts like CPTED and Jacobs's "eyes on the street" can help to enhance the perceptions of safety. Where possible, C+CP should investigate existing residential neighbourhoods on campus to evaluate how they can be improved with CPTED standards.

5.8 Safety Messaging

The Research Team recommends that UBC should consider how its safety messaging is understood and received by residents of the campus as they may interpret personal "safety" in a different way that is not necessarily associated with the sexual assaults that has been promoted from student-centric perspective. Based on our preliminary results, UNA resident-specific messaging may need to be developed to address other safety-related concerns such as traffic and familiarity with the campus to increase residential neighbourhood livability.


UNA

6.0 Conclusion



This study looked at the perceptions of safety from the perspective of year-round, permanent residents on campus in order to build upon existing research focusing on UBC students, faculty, and staff. Using a variety of methods including group mapping and a safety audit, the data collected provides preliminary, yet valuable insights that identify campus public spaces that were perceived as safe or unsafe by UNA residents, and what built and natural environment qualities affect their perceptions of safety of campus public spaces.

Concerns raised by UNA residents fell under the following categories:

- Lighting;
- Traffic;
- Transportation;
- Wayfinding;
- Community Connection and Forested Areas; and
- Campus Blue Phones.

Recommendations were developed based on feedback from participants were. In addition, the need for UNA resident-specific messaging was identified to address their specific experience of living on and accessing campus public spaces.

7.0 Acknowledgements

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- **Jan Fialkowski** and **Qiuning Wang** (UNA) for their invaluable assistance, time, energy, and financial support—the project would not have been a success without their involvement and dedication;
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CPH

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UNA
NEIGHBOURHOOD SAFETY AUDIT

All UNA residents are welcome!

Join your neighbours and UBC Planning students in talking about safety on campus!

Wed March 26
6:00 pm

Snacks provided!

We want your input:

- Where on campus do you feel safest and the least safe?
- What factors make you feel safer in a space?

Date: Wednesday, March 26th
Time: 6:00 pm
Location: Meet at The Old Barn Community Centre
Bring: Flashlight and dress for weather
RSVP by March 25th, with any questions or concerns to Camille at: camille.lefrancois@alumni.ubc.ca

Activities: **6:30 pm: Short mapping exercise and snacks**
7:30 pm: Group safety audit walk

* Please let use know in advance of any transportation, child care, language, or mobility needs

Poster Advertisement

Join your neighbours and UBC Planning students in talking about campus safety!

UNA
NEIGHBOURHOOD SAFETY AUDIT

All UNA residents are welcome!

Wednesday March 26
6:00 pm

The Old Barn Community Centre

Snacks provided!

We want your input!

Activities include mapping exercise and walk

Please RSVP with any questions or concerns to Camille at: camille.lefrancois@alumni.ubc.ca

UNA The Campus Resident Advertisement

Demographics Survey – *Information collected in this survey is anonymous. It will help us in our data analysis to identify any trends based on demographics and perceptions of safety.*

1.) Gender: _____

2.) Age
- ☐ 10-20
- ☐ 21-30
- ☐ 31-40
- ☐ 41-50
- ☐ 51-61
- ☐ 66-75
- ☐ ≥ 75

3.) What is your ethnicity?

_____

4.) What is your country of origin?

_____

5.) What is your primary language?

_____

6.) In what municipality do you live?
- ☐ UBC Campus / University Endowment Lands
- ☐ Vancouver
- ☐ Outside Vancouver

7.) In what UBC residence do you reside?
- ☐ Hawthorne Place
- ☐ Hampton Place
- ☐ Wesbrook Place
- ☐ East Campus
- ☐ Chancellor Place
- ☐ Green College
- ☐ St. John's
- ☐ Acadia Park
- ☐ Other

8.) What is the size of your household including yourself?
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4-6
- ☐ ≥ 7

9.) Do you have children?
- ☐ Yes
- ☐ No

10.) Do you rent or own your home?
- ☐ Own
- ☐ Rent

11.) Are you a student?
- ☐ Not a student
- ☐ Full-time student
- ☐ Part-time student

12.) What is your occupation?
- ☐ Retired
- ☐ Student (without employment)
- ☐ Unemployed
- ☐ Art, culture, recreation, sport
- ☐ Business, finance, administration
- ☐ Education, law, social or government services
- ☐ Health
- ☐ Manufacturing or utilities
- ☐ Natural or applied sciences
- ☐ Sales or service
- ☐ Trade or transport

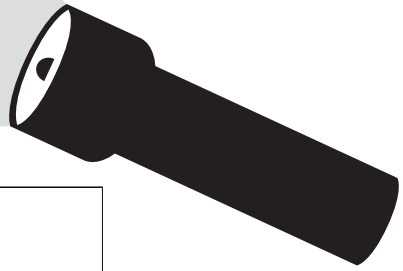
13.) Are you a UBC employee?
- ☐ Yes
- ☐ No

14.) What is the highest level of education you have attained?
- ☐ No schooling
- ☐ Some primary or secondary school
- ☐ Completed secondary school
- ☐ Some technical or community college
- ☐ Completed associates degree or technical certificate or degree
- ☐ Some university
- ☐ Completed undergraduate degree
- ☐ Master's degree
- ☐ Doctorate

1

Demographic Survey Questionnaire

Appendix



Safety Audit Checklist

UNA neighbourhood:	Time + date of audit:
Route Audited:	Weather:

Observations	
Wayfinding **a)** If you were not familiar with the area would it be easy to find your way around? Why? **Lighting** **b)** Is there sufficient and well-paced lighting along the route? **Transport** **d)** Is public transport available and easily accessible? (E.g. regular bus service) **e)** How far is the nearest bus stop? **f)** Are there safe pedestrian crossings? **g)** Can a vehicle access the site easily? **Movement predictors and entrapment** **h)** Is there an alternative well-lit and frequently travelled route or path available? **i)** Can you tell what is at the other end of the path, tunnel, or walkway? **j)** Are there small, confined areas where you would be hidden from view? **h)** What is the condition of the vacant/unused land? **k)** Does the presence or absence of trees and bushes affect you perception of safety? **Factors that Make the Place more Human** **l)** Does the place feel abandoned? **m)** In your opinion, are there offensive (e.g. racist or sexist) slogans/signs/images? **n)** Are there signs of vandalism? **o)** How do you feel about the materials, tones, or colours?	

1

Your participation in this activity is completely voluntary and you are free to withdraw at any time. We appreciate your valuable contribution to our research!

Safety Audit Checklist (page 1)

Official messaging **p)** Is there a security presence (e.g. security cameras, Blue Phones, security guards, etc.)? **q)** What official messages do you see in the space (e.g. building names, street signs, block watch signs, etc.)? **Social usage of space** **r)** Are there people near or around you? **s)** Describe the general demographics of users (e.g. are they mostly students, families with children, a mix ages and genders)? **t)** Are people rushing through or lingering? Is this a space were you would expect to find people?	

Summing up your findings

Problems:

Solutions:

Recommendations:

Other comments:

2

Your participation in this activity is completely voluntary and you are free to withdraw at any time. We appreciate your valuable contribution to our research!

Safety Audit Checklist (page 2)