UBC Social Ecological Economic Development Studies (SEEDS) Student Report

Anastassiya Smirnova, Claire Bunton, Hyun Soo Kanyamuna, Jessica Antkiw, Marisa Gullaci, Nicola Salvino University of British Columbia GEOG 371 November 26, 2015

Disclaimer: "UBC SEEDS Program provides students with the opportunity to share the findings of their studies, as well as their opinions, conclusions and recommendations with the UBC community. The reader should bear in mind that this is a student project/report and is not an official document of UBC. Furthermore readers should bear in mind that these reports may not reflect the current status of activities at UBC. We urge you to contact the research persons mentioned in a report or a SEEDS team representative about the current status of the subject matter of a project/report".

UBC SEEDS SOCIAL MAPPING PROJECT



A Space of Mind: Mapping Spatial Usage at the University of British Columbia UBC Social Ecological Economic Development Studies (SEEDS) Student Report

Hyunsoo Kanyamuna Jessica Antkiw Claire Bunton Marisa Gullaci Nicola Salvino Anastassiya Smirnova

November 26, 2015 University of British Columbia GEOG 371: Research Strategies in Human Geography Instructor: Dr. Siobhán McPhee

TABLE OF CONTENTS

| Acknowledgements | 3 |
|----------------------------|----|
| Executive Summary | 4 |
| Introduction | 6 |
| Methodology | 8 |
| Literature Review | 12 |
| Analysis | 17 |
| Significance of Research | 20 |
| Future Research Directions | 22 |
| References | 24 |
| Appendix | 27 |

ACKNOWLEDGEMENTS

We would like to extend our most sincere thanks to everyone who has contributed to the success of the Social Mapping Project. It is our hope that the findings of this report will serve to the betterment of the University of British Columbia's public realm.

UBC Campus + Community Planning (C+CP):

• Scot Hein, Urban Designer

UBC SEEDS (Social Ecological Economic Development Studies) Sustainability Program:

- George Patrick Richard Benson, Project Coordinator
- Liska Richer, Manager

UBC Department of Geography, GEOG 371 — Research Strategies in Human Geography:

- Dr. Siobhán McPhee, Instructor
- Debolina Majumder, Teaching Assistant

EXECUTIVE SUMMARY

Situated on the western extremity of the Point Grey peninsula, the University of British Columbia's Vancouver campus is a distinct community that weaves world-class academics with a population whose diversity rivals that of the country it rests upon. The Social Mapping Project is a new initiative that aims to understand the intricate relationships that exist between the materiality of campus space and the lived experiences of its users. Conducted in partnership with the Social, Ecological, and Economic Development Studies (SEEDS) program, the purpose of this research is to assist UBC Campus + Community Planning (C+CP) in assessing and understanding social vibrancy and community building on the UBC Vancouver campus.

The product of the Social Mapping Project is a comprehensive matrix that categorizes the features of individual outdoor public spaces on the UBC Vancouver campus. A combination of visual and textual descriptors provides information in a standardized manner, allowing for accurate comparisons to be made between different spaces. The data organized in the project's matrix was accumulated over a three-month period which began in September, 2015. Within this timeframe a variety of methods were employed: narrative analysis through participant observation, contextual analysis, and an online survey. The information obtained from these sources was transferred onto layers atop a map of the UBC Vancouver campus, creating a visual-spatial supplement to the matrix.

As represented in the Appendix B, the campus is segmented into six areas that frame the findings of the Social Mapping Project. An analysis of the accrued data displays trends relating to land use, revealing areas A and D to be the most frequented among survey respondents. A gradient exists in this regard, evidenced by the low usage of sections C and F which are situated on the opposite extremity of the map. The directions of these findings are studied in conjunction with the survey's results for potential uses of campus spaces. Food trucks, public art, and live music are the three dominant programming recommendations, followed respectively by a desire for more rain cover, seating, lighting, bike racks, and tables.

Several limiting factors may be revised in future iterations of the Social Mapping Project. For one, the timeframe of the project does not allow cross-seasonal observations to be made. Due to the reduced amount of sunlight and cold weather conditions at the time of this study, the data may not be reflective of the land use habits that people display in milder weather. The study may also benefit from the use of focus groups. This approach would expand upon the survey, producing detailed inputs that will strengthen its results. Focus groups may also yield a more representative sample population because we can select a proportionate number of representatives from different social groups.

The Social Mapping Project matrix will be made accessible to the public, inviting future researchers to add new spaces to the dataset. In doing so, the limitations of the study may be alleviated as information is corrected and modified in subsequent editions. This continuity will accomplish the project's goal of evaluating social vibrancy and community building on campus as UBC Vancouver evolves over time.

INTRODUCTION

The UBC campus has been described by Scot Hein, the University of British Columbia's (UBC) Urban Designer, as a living organism that is in constant motion. The university is constantly changing and developing to adapt to the needs of those who experience it, whether they be a student, faculty member, neighbourhood resident or a visitor. Alongside our community partners, the Social, Ecological, and Economic Development Studies (SEEDS) program, we assisted UBC Campus + Community Planning (C+CP) in assessing the social sustainability of UBC's campus community. Accordingly, the focus of our study is on the outdoor public spaces within UBC's Vancouver campus that have the capacity for social engagement. We conducted a study of the spaces through narrative analysis, an online survey and contextual analysis. By narratively analyzing a total of 60 individual spaces we aimed to understand their urban framework, establish the real and potential social uses of each specific space, and develop a cataloguing tool that places the various attributes of spaces into an accessible format. Through the distribution of an online survey we were able to provide context to our observations and analysis of outdoor spaces on campus. Given both the survey and narrative information, we contextually analyzed the spaces for the purposes of future campus planning. Throughout the study we sought to explore the public realm of UBC through the lens of geographical research, to address the problem that we lack a strong understanding of the outdoor public spaces on the UBC Vancouver Campus. Therefore, our study's primary objective is to answer the question of how individual outdoor spaces and places within UBC's public realm are used and defined by their physical, social, environmental, cultural, and historical attributes. Based on our findings we provide future programming recommendations to improve the social capacity of outdoor spaces on the UBC Vancouver campus.

By conducting a study of this nature, we provide the groundwork for a variety of future projects that may be implemented through SEEDS and other UBC organizations. With the information provided in this study, future projects have the potential to improve the social sustainability of UBC's campus. For example, through the observation of 60 spaces on campus we were able to recommend tangible and sustainable changes that could improve a space's social capacity, such as displaying student artwork, outdoor concerts, food trucks, and increased lighting in certain spaces. Another example is that, through the descriptions of spaces, we have located areas on campus that have drainage issues. This information will now be used by SEEDS to help advise a future drainage project on the UBC campus. However, though not all of the information collected through our observations, survey, and contextual analysis will be used, the information will provide a base from which future UBC campus planning can stem. In addition, the cataloging tool we have created in cooperation with SEEDS provides a framework for other university campuses and city planning agencies to use for conduct similar research. Finally, because the catalogue is dynamic, it allows for diverse applications to various future projects that involve collecting large quantities of data for individual spaces within a larger context.

METHODOLOGY

The methodology for our research project was developed in conjunction with our community partners through the UBC Social, Ecological, and Economical Development Studies (SEEDS) program. The timeframe for this project was three months in the Winter Semester of 2015. The study area consists of the UBC Vancouver campus, as seen in Appendix B, with the six subsections of that space. The project's methodology consists of three primary methods. These involve both secondary and primary data collected through narrative analysis, contextual analysis, and a survey distributed to UBC students, faculty, staff and neighbourhood residents. Our primary data was obtained through both our survey and participant observation.

First, the narrative analysis was conducted through participant observation, including the use of written descriptions of the physical, social, environmental, historical and cultural aspects, aerial and oblique photographs from Google Earth, and diagrams of individual spaces on UBC's campus. Physical descriptions are comprised of aspects such as the hard environmental features (e.g. trees, vegetation), lighting, topography, slope, adjacencies, and tangible services that the space may provide. Social descriptions denote information pertaining to the audience of a space, how they utilize it, and how they are experiencing the space. Environmental aspects address the variability of sun, shade, weather, and temperature changes within the space. Finally, the historical and cultural descriptions aim to determine if there are significant historical or cultural dimensions to the space that have been neglected in previous analyses. This was done primarily by conducting research on the history of the space and its preceding functions. Narrative analysis was chosen as a method as it helped us to determine our unit of observation, primarily which spaces we planned to further observe. We chose a space on the conditions that it had features that invited social activity (ex. a bench), was an outdoor area, if it was on UBC's Vancouver campus, and if it was a 'contained' space. A space was considered contained if it was in between buildings, sidewalks, trees or other features that created a presence of a separate space within the surrounding area. In addition, narrative analysis through participant observation allowed us to understand the attributes described above

that make up a space. This was important as our next step was to provide programming recommendations to improve social activity within these spaces based on said attributes.

A primary goal that we aimed to achieve through the employment of our methodology was to cover the entire area of the UBC Vancouver campus and to provide information on the social potential of outdoor public spaces. Therefore, each researcher was designated with one of six specific areas on campus and observed 6-12 spaces within their designated area, as illustrated in Appendix B. Each researcher spent approximately 1 hour in total at each space to complete their narrative analysis of the area. We aimed to collect data during the following time increments: 8:00-12:00, 12:00-4:00, 4:00-8:00pm, and 8:00pm onwards to determine the volume of people and environment attributes, measured at each space throughout the day.

Second, the contextual analysis aims to extrapolate upon the data obtained through the narrative analysis to make pragmatic suggestions and commentary on what works to cultivate a larger and more engaged social presence within the individual spaces. This serves as an informant for improvements to the social experiences that the space provides. For example, the analysis may include researching a particular space and discovering historical and cultural significance that had not been previously recognized, thus recommending a name change for that space based on the newly acknowledged history. Through contextual analysis we sought to understand the strengths and issues a space had in creating an effective social environment. Further, this may contribute to future programming improvements within the observed spaces. Both the programming recommendations and the attributes were given a category within a spreadsheet and expanded upon within each cell. A spreadsheet (Appendix A) was used as it is a medium that allows one to understand each space within the context of the stated categories alongside photos and programming suggestions.

Finally, we administered our survey online to students and faculty through UBC-affiliated groups, including the following:

- <u>Geography Students' Association</u> [Facebook]
- <u>UBC Class of 2019 (Official Group)</u> [Facebook]

<u>UBC Engineering</u> [Facebook]

Our personal social networks and Facebook timelines

 <u>Twitter</u> (Retweeted by <u>@UBCGeog</u>, the Department of Geography's official Twitter account) Further, we engaged students, faculty and neighbourhood residents through the use of our personal online social networks. We used stratified sampling and obtained a total of 55 responses. Our survey included both multiple choice questions that we could measure quantitatively and qualitatively through open-ended questions. Once all of the data was collected, the qualitative data was codified in order to enable a quantitative analysis. Therefore, we could accommodate a wide range of responses while still obtaining a uniform form of measurement. In addition, we had a section of our survey where respondents could click on an interactive online map of UBC Vancouver and place a marker on the outdoor spaces they used on campus. This feature allowed us to see the exact spaces used, including the social spaces we did not take into account in our own observations for the study. Throughout the entire research project we actively reviewed and amended our methodology with the advice of our community partners. We chose an online format as we felt it opened us up to more respondents through our online social networks and it was more time efficient than if we asked people individually in person. The layout of the survey consisted of our most comprehensive questions at the beginning (i.e. what areas do respondents use and why?) and our simplest questions (i.e. what is their year level and affiliation with UBC?) at the end. This was done to reduce the chance of having people forfeit the survey part way through. This method was chosen as it provided context to our observations and a variety of different perspectives about which spaces people chose to use and how. In addition, the online survey provides a supplementary layer of context for which outdoor spaces on campus are experienced by UBC students, faculty, and neighbourhood residents. Finally, we chose the UBC campus as it was relevant to our own interests as students at UBC and to our community partners at SEEDS.

For this project we chose to use the methods of narrative analysis through participant observation, contextual analysis, and an online survey for several reasons. Firstly, it allowed us to

use and obtain a mixture of quantitative and qualitative data. The mixture of methods was important as the qualitative responses allowed us to gain in depth information from our narrative analysis and survey responses. Additionally, quantitative measurements of the spaces and responses in the survey were optimal as they allowed us to obtain comparable empirical data. However, although there were many strengths of our data, there were also limitations. Limitations of the data included the inability to determine the sequence of a respondent's answers. Therefore, we could not view a respondent as a whole, rather, we could only view their different answers as separate entities. For example we may know that 60% of respondents were art students, but we don't know that one arts student respondent is also in 3rd year and uses Martha Piper Square for its food trucks. Finally, a limitation of our qualitative data is that it is highly subjective to the researchers who observed each space and respondents who answered our survey.

LITERATURE REVIEW

The concept of urban social space is understood by many theorists as the indissoluble combination of a built environment and its living occupants, who infuse the space with life and meaning. For example, Haas and Olsson see the urban realm as a collection of "buildings, squares, streets, landscapes, and ecosystems, as well as processes, mindscapes, and people that make up and shape any environment," (2014). What follows from this is the intimate dual relationship between the built space and the body of the individual experiencing it; the body acts on the built environment and infuses it with meaning, while the built environment also acts on the body as a reference system, dictating how it should act and think within the space (Archer 2005). This notion of dual relationship is extremely important to our field research, as we put ourselves inside a space in order to analyze it, and must therefore practice reflexivity in order to understand how the space is capable of deploying power (Archer 2005). Additionally, it is vital to note what Pugalis refers to as activity programming. Seeing as a social space is only made social through the presence of individuals, it is the job of our research team to understand what activities occur within various social spaces of UBC, and how these social activities may be 'programmed' (i.e. modified, eliminated, added) in order to maximize their vibrancy and use factors (Pugalis 2009). Additionally, Pugalis' research showed that the use of plans (i.e. aerial or AutoCAD representations of space) can reduce the "life of space from something to be experienced and lived to a passive space of detachment," (2009). Since we are using plans as part of our research, it is vital that we keep track of our own perceptions of these spaces to ensure that we do not cognitively remove bodies from them.

Synthesizing these academic theories with previous studies conducted by the University of British Columbia enables a deeper understanding of the context in which our research is taking place. The work of theorists such Haas and Foucault provide a philosophical framework that guides our observations and analysis in an empirical direction. Comparing these philosophies of "space" and "place" alongside reports such as the Vancouver Campus Plan or Public Realm Plan (UBC Planning, 2009; 2010) illustrates what research has already been done on this topic. These documents produced by department of the University of British Columbia's Campus and Community Planning Department focus on the built form of the Point Grey Campus. Our project is set to expand upon these pre-existing categorizations by exploring the dynamics of spaces on campus and gaining an understanding of how these locations are experienced by individuals. These sources are of particular importance as they display the priorities of our SEEDS community partners while also serving to exemplify the application of Urban Design theories in the "real world". Other projects produced by the University that stand to benefit our research include The University Boulevard Land Use Plan as well as the Library Gardens Values and Revitalization document. In particular, the source on the reimagining of the public space outside of Koerner Library is of importance to our project as it recognizes the Musqueam First Nations peoples that are often neglected from research conducted on campus. Given that our study area falls upon the ancestral land of this nation, our research must be respectful of the veiled histories that may exist across the University of British Columbia. Our project has the potential to increase awareness of the issues surrounding aboriginal rights by recognizing the stories of the Musqueam people in locations beyond just the library. Exploring philosophical theories alongside urban design projects will keep our project grounded in academia while simultaneously ensuring that our results are relevant to our SEEDS partners. Furthermore, incorporating spatial analyses that have been conducted at other academic institutions will serve to enrich our understanding of how our project fits in with past research.

It seems as though a new construction site is popping up daily on the UBC campus, and the Campus Plan Synopsis includes further ideas to be implemented in order to meet the university's prospective needs (UBC Planning, 2014). These plans are written in order to serve the estimated future growth of undergraduate enrolment and to increase sustainability and environmental awareness on campus. Other universities in British Columbia - namely the University of Victoria, Simon Fraser University, and the University of British Columbia's Okanagan campus – have plans put in place to suit their estimated growth and sustainability as well. SFU's campus plan includes rezoning areas to better suit specific needs (SFU Development Plan, 2010), whereas UVIC and UBCO both focus more on building a more sustainable campus for the future (UVIC Campus Planning, 2015; UBCO Planning, 2015). The theme of change is exemplified in a multitude of ways on college and university campuses (Lidsky, 2002), and research shows that trends are constantly fading and new ones are gaining popularity. It's for this reason that universities have to embrace change in their plans and must be focused on the day-to-day, complete with alternatives to suit their needs (Lidsky, 2002). The focuses on sustainability as well as respect for the history of campus are growing trends in campus planning (Turner, 2015). In this vein, UBC's plan includes a focus on the "valuable open space network" (UBC Planning, 2014) and emphasizes the natural elements of the Vancouver campus' space. If UBC Vancouver continues to grow in a sustainable direction, the frequency of use of public space by patrons will likely increase and could shift towards more of a focus on outdoor learning spaces (Vredevoogd, 2014). However, according to research done by both Turner and Temple, new construction is a fading trend due to budget or funding issues by some universities (Temple, 2008; Turner, 2015). So what does this mean for the future plans of British Columbia's universities? Perhaps UBC could take note of SFU's rezoning plan instead of creating additional floor space (UBC Planning, 2014) while still maintaining focus on increased sustainability in public spaces.

At the intersection of the social, environmental, and the economic facets of geography lies the abstraction that is sustainability. As sustainability gains traction as "a pressing global issue," (Finlay & Massey, 2012) there has been a growing interest in developing university campuses with these three measures taken into account. Isolated from the materiality of the urban core, the campus model has, since its origin, aimed to foster an enclosed space that allows for the development and dissemination of knowledge. Equipped with institutions necessitated for autonomous function, the university campus is analogous to a proper city. Forsyth and Crewe (2010) bring light to the historical continuity of this objective, pointing to evidence of the campus model's existence in late 18th century Rome. Martius, an enclosed community situated in the heart of the Italian capital, is largely thought to have been the inspiration behind the urban design of higher education institutions that followed. At the turn of the 20th century, the spatiality of this design found itself at the core of the Ebenezer

Howard's 'Garden City' and the 'City Beautiful movement', emphasizing "ordered and comprehensive planned campuses" (Forsyth & Crewe, 2010) that integrated the natural environment with expansive, aesthetically pleasing built landscapes. Using urban design as a conduit for social, environmental, and economic sustainability, campuses aspired towards the "park style" (Su, 2012) which is characterized by low-density and large-scale spaces. This planning technique effectively expanded public space, a result that has not risen without criticism. Su (2012) accuses the campus model of fabricating monotonous environments, instigated by the "lack of the necessary humanity and communication atmosphere" that are conducive to forming a captivating public space. On a local level, recent efforts to centralize campus activities around the AMS Student Nest and other departmental nodes have sought to counter such structural repercussions.

Outdoor design elements influence how people use different spaces and make meaning from those places. It has been well defined that the relationship between, outdoor spaces and buildings, have a significant impact on the level of social activities taking place (Lawson & Zhang, 2009). Not surprisingly then, a common theme in urban design and planning is social behaviour (Trancik, 1986). Supporting this theme, theorists such as Robert Trancik, Clare Marcus and Carolyn Francis provide us with a basis for conducting hands on research for spatial analysis of the University campus. Specifically, Tranciks Place Theory emphasizes the historical, cultural, and social values attached to spaces around the University campus we will be observing and surveying (Trancik, 1986)). Tranciks theory is significant to our research because we will be recommending programming and opportunities to different spaces based on social, cultural and historical attributes. By applying Tranciks theory to the University, we will be introducing a much needed exploration into, not only a spatial analysis on a university campus, but also a deeper understanding of how human behaviour shapes specific campus spaces. Connecting with the theme of social behaviour, Marcus and Francis (1990) have identified twelve characteristics that are central features in successful outdoor social spaces. Their analysis is of particular importance for our research because it provides a guideline for interpreting specific public outdoor features. These design guidelines will allow us to identify and

analyze opportunities in different spaces around UBC Campus while also allowing us to make recommendations for redesign. Our research is capable of providing valuable information associated to University planning that is non existent in current design guidelines based on a spatial analysis focusing on a theme of social behaviour.

ANALYSIS

Data Coding and Common Themes

The primary concept of our research is outdoor space. For our spatial analysis of the survey, this primary concept was further broken down into six categories that respondents identified as desirable attributes of outdoor spaces. The six categories that we found were most desirable include environment, utility, convenience, social, sound, lighting and temperature. By reducing the data into these six categories, we were able to identify that outdoor spaces which contain features in all six categories were the spaces which are most used on the University Campus. A common theme that emerged from this breakdown is that there is a strong preference for well furnished outdoor spaces located in between buildings and Lecture Halls.

The survey provided six areas on UBC campus for respondents to designate as spaces they spend most of their time (areas A, B, C, D, E, and F as indicated in Appendix B). The outdoor areas that the survey found to be most used are A and D. Our data found that location of outdoor spaces used by respondents is connected to their role within the university and the faculty they are associated with. For example, 90% of respondents identified themselves as students of which 59% are in the Arts Faculty. This is significant because areas A and D house the most desirable student amenities that respondents marked. Faculty is also an important factor because the areas that the survey found most popular (A and D) are in close proximity to Arts Faculty classrooms. Students relax, eat and study in outdoor spaces that are near their classes. The survey found that the least used areas were C and F. Both of these regions do not include the amenities that students identified as important to them in outdoor spaces, specifically, they are not located in between or within close proximity to Lecture Halls and do not contain the environmental, social, utility, sound, lighting and temperature features that they seek out in courtyard spaces.

Attractive Attributes of UBC Social Spaces

The use of social spaces on campus is based on a number of factors, the main one being utility (i.e. availability of seating, tables/desks, and electrical outlets). One of the main space uses by students being studying and working on group projects, people tend to choose their spaces based on the utility attributes rather than environmental or aesthetic aspects. For example, 7% of respondents have chosen the Irving Library Garden as the main space they regularly use for studying purposes, and they have mentioned that the availability of tables and the ample amount of seating is extremely useful to them (Appendix C, Appendix D).

Another major use factor is convenience. We have found, through the use of our survey and personal observations, that well used spaces are those which are located near food vendors/ restaurants, are in 5-minute walking distance away from the bus loop, and those in close proximity to students' classes. For example, central locations such as the University Square outside the AMS Student Nest and the Money & Raymond M.C. Lee Square (area outside the UBC Bookstore) are heavily used due to their proximity to restaurants and bus stations; these spaces are also well-known meeting spaces for students.

We also found that the overall environment-related attributes (such as greenery, rain shelter, and scenery) also contributed significantly to the attractiveness as spaces, as 21% of survey respondents mentioned these attributes as their preferences (Appendix C). Essentially, the campus environment relies heavily on its aesthetic and weather-resistant characteristics and an open, green space with appealing scenery (such as the Rose Garden) appeals greatly to UBC students for the purposes of relaxation and leisure. Other categories, such as sound preferences (i.e. running water), amount of sunlight, and temperature levels also affect social space use, however the opinions are divided between respondents as to what they prefer, and further research such as extensive shadow studies must be conducted to determine how the ratio of sunlight to shade correlates with space use.

Programming

Through our personal observations of spaces across campus, we have determined that lack of easy access to food (specifically food trucks) in specific parts of the campus has played a major role in the use rates of various spaces. The response of the online survey has furthered this notion, with 24% of the respondents mentioning that they would like to see more food trucks in specific parts of the campus, such as the spaces near Engineering buildings (Appendix E). As students and faculty are often busy, it is important for them to be able to receive nutrition and relax between classes/research without having to move too far from where they reside, and thus food trucks should be available in more remote areas of the campus rather than the most central locations.

Interest in the Arts (including performing arts, public art, local art, First Nations art, live and instrumental music performances, or simply speakers) is another popular programming suggestion by survey respondents, and our research team alike, with 42% of the survey participants asking that there be more visual and auditory expressions of creativity around campus in order for the institution to become more lively and vibrant through colour and sound.

Finally, rain cover (10%), additional seating and tables (13%), and lighting (6%) were found to be significant potential areas of campus improvement. Seeing as outdoor space becomes less usable for social purposes whenever precipitation strikes the Point Grey region, either temporary or permanent covers from rain (particularly along Main Mall) are likely to drastically increase space use throughout the late fall and winter seasons. Improvements in lighting and, consequently, safety of specific spaces (such as the courtyard between Chemistry Blocks B & C) would allow for social use during a wider time range, particularly during the winter season.

SIGNIFICANCE OF RESEARCH

The results of the research conducted through this social mapping project have the potential to be significant for several different stakeholder groups. Academics, university administrators, and community planners represent some of the many individuals that would find this socio-spatial exploration to be of particular relevance.

From an empirical perspective, this project is of significance as the examination of the University of British Columbia's public realm serves as a case study that can inform the field of urban geography as a whole. Several theories on place are further validated through the completion of this project. For example, the influences that a physical space can have on the individual as described by Haas (2014) are seen through this project. The results of our project also serve as an illustration of Trancik's "place theory" (1986) as the emotive elements attached to a physical space are unveiled through this socio-spatial analysis. By incorporating these theoretical concepts of place into a real world spatial analysis, this study serves to help bridge the gap between theory and practice that exists across the social sciences.

Conducting this research project in conjunction with the planning department of the University of British Columbia ensured that the results of this spatial analysis would be significant from a practical perspective as well as academically. Through participation in the SEEDS program, the Campus and Community Planning Department was provided with a better understanding of how spaces are currently used by the people of this university. The results of this project will better enable UBC to meet its goals of creating an environmentally, economically, and socially sustainable community by exploring the social dimensions of the public realm at the Point Grey Campus. Dozens of recommendations regarding future uses of public spaces were made based analysis of qualitative and quantitative data gathered for this project. In addition, the results of our observations and survey unveiled the desires of the campus community for expanded programming across UBC's public realm. This demand for more programming including food trucks and live music illustrates the appetite for a more vibrant UBC. Through our research, the concerns about safety that are present within the student body were unveiled through the expressed desire for increased lighting at night. The customizable matrix created for this venture will allow the university to continue to gather data on social spaces and better understand the concerns and desires of the UBC community. This can then be used to help inform the creation of a vibrant campus that embodies the social elements of sustainability.

This research project could also prove to be of significance to urban planning departments beyond the University of British Columbia. The importance of outdoor public spaces in the lives of individuals are highlighted through the results of research conducted for this social mapping venture. Furthermore, the creation of a matrix that has the ability to be customized serves as an example of one method of ensuring that any member of a community can be engaged in the planning process. In conclusion, the partnership between students and the Campus and Community Planning Department of UBC through the SEEDS program illustrates the potential for participant action research that is relevant from both a practical and empirical perspective.

FUTURE RESEARCH DIRECTIONS

Our project has the ability to grow into an important aspect of UBC's social spaces. The research we have done has the ability to expand alongside future collaborations with students, staff, and faculties. Through our research, we were able to capture 58 outdoor spaces on UBC's Vancouver campus, with many being left out due to the sheer size of the campus and time constraints. Also, we were only able to observe the usages of these spaces at three times of day during a three-month period. It is highly likely that the use and concentration of people in these spaces varies seasonally. For example, there are likely more people spending recreational time in outdoor spaces such as athletic fields, around fountains, and in other open areas during the warmer months of the regular academic year (likely April or May), rather than the beginning of the year. For this reason, it would be interesting to conduct the same observations if this course were to be taken in the spring semester. If future researchers were able to somehow observe all of the listed spaces for a longer period of time during the day, and over all four seasons, they could synthesize their results and find more precise evidence of how the average space on campus is used, and when. For completeness sake, it would be imperative for future researchers to look at more open spaces on campus, specifically the areas not included in the boundaries of our map.

Another aspect that would improve the quality of our research would be to develop deeper thought on reasons why and how spaces on campus are used by conducting focus groups and interviews with a random sampling of people. This could be done by randomly selecting people who wrote the survey, and interviewing them to further develop their points, or by approaching people who were already using the spaces. Due to UBC's campus being on unceded Musqueam territory, future research projects on the use of space on campus should incorporate the viewpoints of the local First Nations communities. This would be beneficial in order to further investigate the historical and cultural aspects of space and place on campus. This could include focus groups and interviews with members of these groups. Additionally, most of our respondents were art students (approximately 60%), as our own social networks are made up of mainly students in that faculty. It would be imperative to focus research on members of other faculties.

Once research on the Point Grey campus is exhausted, it may be beneficial and interesting to look at the use of spaces at UBC Okanagan's campus, as it could give insight on the similarities and differences between the students, staff, and visitors between the two campuses. Additionally, this research could be applied further to cities as a whole such as Vancouver in order to conduct comparisons between the usages of outdoor space by people in the general population of cities as opposed to citizens of university campuses.

REFERENCES

- ARCHER, JOHN. 2005. Social Theory of Space: Architecture and the Production of Self, Culture, and Society. Journal of the Society of Architectural Historians 64 (4). University of California Press: 430–33.
- CANADA. (2015). Brimingham & Wood. 'Growing UBC Okanagan'. Kelowna. University of British Columbia.
- CANADA. (2015). Brimingham & Wood. 'Library Garden Values + Revitalization'. Vancouver. University of British Columbia.
- CANADA. (2010). University of British Columbia Campus and Community Planning. 'Land Use Plan'. Vancouver. University of British Columbia.
- CANADA. (2009). University of British Columbia Campus and Community Planning. 'UBC Public Realm Plan for the Vancouver Campus'. Vancouver. University of British Columbia.
- CANADA. (2004) University of British Columbia Campus and Community Planning. 'University Boulevard Neighbourhood Plan'. Vancouver. University of British Columbia.
- CANADA. (2014). University of British Columbia Campus and Community Planning. Vancouver Campus Plan. Vancouver. University of British Columbia.
- FINLAY, J, MASSEY, J. (2012) 'Eco-campus: Applying the ecocity model to develop green university and college campuses', International Journal of Sustainability in Higher Education, vol. 13, pp. 79-92
- FORSYTH, A, CREWE, K. (2010), 'Suburban technopoles as places: The international campus-garden-suburb style', Urban Design International, vol. 15, no. 3, pp. 165-182
- FRANCIS, C., MARCUS, C. (1990). People Places: Design Guidelines for Urban Open Space. New York, N.Y. : Van Nostrand Reinhold.
- HAAS, TIGRAN & KRISTER, OLSSON. (2014). Space and culture: Transmutation and reinvention of public spaces through ideals of urban planning and design. 17, (1): 59

- LIDSKY, A. J. (2002) 'A perspective on campus planning', New Directions for Higher Education, 119, pp. 69-77, Academic Search Complete, EBSCOhost, viewed 30 October 2015.
- PUGALIS, LEE. (2009). The culture and economics of urban public space design: Public and professional perceptions. Urban Design International 14 (4): 215-30.
- SIMON FRASER UNIVERSITY. (2010). Burnaby Mountain Campus Development Plan. [Online]. Available from: http://www.sfu.ca/fs/files/Campus_Planning/ SFU_Site____Guidelines.pdf. [Accessed: 2nd November 2015].
- SU, P. (2012). 'Study on Urban Design Methods of Currently Campus Planning', Applied Mechanics and Materials, vol. 174, pp. 2457-2460
- TEMPLE, P. (2008) 'Learning spaces in higher education: an under-researched topic', London Review of Education, 6, 3, pp. 229-241, Academic Search Complete, EBSCOhost, viewed 1 November 2015
- TRANCIK, R. (1986). Finding Lost Space: Theories of Urban Design. New York : Van Nostrand Reinhold.
- TURNER, M. L. (2015) 'Campus space-shapers', University Business, 18, 1, pp. 44-46. Academic Search Complete, EBSCOhost, viewed 1 November 2015.
- UNIVERSITY OF BRITISH COLUMBIA. (2010) Vancouver Campus Plan. [Online] Available from: http://planning.ubc.ca/sites/planning.ubc.ca/files/documents/planningservices/policies-plans/VCPUpdate2014_Part1.pdf. [Accessed: 2nd November 2015].
- UNIVERSITY OF BRITISH COLUMBIA OKANAGAN. (2015) Okanagan Campus Plan.
 - [Online] Available from: https://cdn.ok.ubc.ca/_ubc_clf/_clf7_assets/sites/ campusplanning/assets/Final-Campus-
 - Plan_Sept_2015_Low_Bookmarked_Desitinations.pdf#page=8. [Accessed: 2nd November 2015].

UNIVERSITY OF VICTORIA. (2015) University of Victoria Campus Plan. [Online] Available from: http://www.uvic.ca/campusplanning/assets/docs/Campus-Plan-Update-2015/ Draft.Campus.Plan.Oct.14.2015.pdf. [Accessed: 2nd November 2015].

- VREDEVOOGD, J. (2014) 'The case for space on campus', University Business, 17,3, pp. 24-24. Academic Search Complete, EBSCOhost, viewed 30 October 2015.
- ZHANG, W. & LAWSON, G. (2009). "Meeting and greeting: Activities in public outdoor spaces outside high-density urban residential communities", Urban Design International, vol. 14, no. 4, pp. 207-214.

APPENDIX

Appendix A: Matrix template

| Location | Space | Aerial | Oblique | Attributes | Attributes | | | | Programming | | |
|----------|-------|--------|---------|------------|------------|---------------|---------------------------------|---------------------------|-------------|--|--|
| | Index | | | Physical | Social | Environmental | Histori- cal and Cultural | Recom- menda- tions | Diagrams | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Appendix B: UBC Campus Map demarcations (UBC Planning, 2009)



Appendix C: Pie chart describing the attractive attributes of UBC social spaces based on survey responses



Appendix D: Table explaining the categories in Appendix C

| Utility | Environment | Convenience & proximity | Social | Sound | Lighting & temperature |
|---------------|--------------|-------------------------|---------------------|---------------------------|------------------------|
| Seating | Openness | Classes | People- watching | Quiet | Sunlight |
| Tables/desks | Greenery | Food | Food | Sound of running water | Shade |
| Power outlets | Scenery | Bus loop | Sports | | |
| | Rain shelter | | | | |
| | Cleanliness | | | | |
| | Beach | | | | |

Appendix E: Bar graph describing recommended programming statistics, obtained via the online survey responses



Appendix F: Additional recommended programming

- Bake sales
- Food trucks: poutine, tacos/burritos, east Indian, Italian
- Music: live music, faculty of music performances
- · Public art: B.C first nations art, interactive art, art exhibits, sculptures
- Performances: dance, talent show
- Temporary/permanent rain cover
- Bake sales
- Green spaces
- Seating & Tables
- Swings
- Sporting activities
- Movies
- Giant chessboard
- Outdoor market
- More bike racks
- Better drainage
- Improved Lighting
- Native B.C vegetation
- More flowers



Appendix G: Mapped Spaces: (in green, all 60 spaces studied within the six campus subdivisions) LINK: <u>https://www.google.com/maps/d/edit?mid=zvTjKY03jYEc.kH2CItRW5fhU</u>

Appendix H: Demographic profile of all 55 survey respondents

What is your affiliation with UBC? Undergraduate student 90.9% 50 Graduate student 0 0% Faculty member/staff 1.8% 1 Visitor 1 1.6% Neighbourhood resident (not student or staff) 0 0% Other 3 5.5%

Student

Which faculty are you currently enrolled in?



| Continuing Studies | 0 | 0% |
|--|----|-----|
| College of Health Disciplines | 0 | 0% |
| Faculty of Dentistry | 0 | 0% |
| Faculty of Land and Food Systems | 1 | 2% |
| Faculty of Arts | 29 | 58% |
| Faculty of Science | 7 | 14% |
| Faculty of Forestry | 2 | 4% |
| Faculty of Applied Science | 4 | 8% |
| Faculty of Pharmaceutical Sciences | 0 | 0% |
| Faculty of Medicine | 0 | 0% |
| Faculty of Education | 0 | 0% |
| Graduate and Postdoctoral Studies | 0 | 0% |
| Peter A. Allard School of Law | 1 | 2% |
| Sauder School of Business | 3 | 6% |
| School of Nursing | 0 | 0% |
| School of Kinesiology | 1 | 2% |
| School of Social Work | 0 | 0% |
| School of Music | 1 | 2% |
| School of Journalism | 0 | 0% |
| School of Environmental Health | 0 | 0% |
| School of Audiology and Speech Sciences | 0 | 0% |
| School of Architecture and Landscape Architecture | 0 | 0% |
| School of Community and Regional Planning | 0 | 0% |
| School of Population and Public Health | 0 | 0% |
| School of Library, Archival, and Information Studies | 0 | 0% |
| UBC Vantage College | 0 | 0% |
| Vancouver School of Economics | 0 | 0% |

What is your current year of study?



School



Appendix I: Social Mapping Project Matrix (1/9) LINK: <u>https://docs.google.com/spreadsheets/d/</u> <u>127IRz2BCZBAU6zKLrCkvxeg-25q0aMT6b7QOdzq85a8/edit#gid=0&vpid=A1</u>

| Caragenty Carayest Located near to be ensitive to the Carayest tuting | Standard Grant Locado Gran Standard (1900-1900) Standard (1900-1900) Fault Vid Balland Fault Vid Balland | (V. Roger Voyane, Page Roger Voy | Granne (* 1942). Granne (* 1940) Granne (* 1940) | Kerina Prae Tauz Boureastor V. Vovrenity Boureastor av A Nan Naf | Loadin |
|--|---|---|--|---|---|
| Smult 16m x 38m | | Largo: 28m x 33m | Large Kön 12 Sen | Læge: 30m x 37m, 1332m | Space Index |
| | | | | 0 | Audi |
| | | | | 0 | Dilipo |
| Semi-accurate type and semi-accurate type and ty | Conventionally designed particles beams in course of a low sector and the particles of a low sector and the | Characteristic for ansistence of the contract | Service Lay Yes Notes 11 Service Lay Yes Notes 11 Service Lay | Elevery at each regit rearrows of control of the control of the control development of the control of the control development of the control of the control development of the control of the control of the control development of the control of the | Attibutes Physical |
| oge in marky used by grown is balants and baufy proven is caused for all works proven is caused for all works and cause and the international an used and the and the and an used and the and the and and and the and the and the and and and the and the and the and and and the and the and the and by students (1771). | represe tyrusoffer instancion represe tyrusoffer i data rouge tropper the back over rouge tropper the back over the tropper tropper to the tropper tropper present at 6.20pm upper to very over at 6.20pm | v por pas a discreti to the many for caracterization and control for caracterization and discretization and the caracterization of the caracterization and the caracterization and pass of the cooper- and pass of the cooper- tant of the coopertant of the coopertant of the cooper- tant of the coopertant of the coopertant of the cooper- tant of the coopertant of the coopertant of the cooper- tant of the coopertant of the coopertant of the cooper- tant of the coopertant of the coopertant of the coopertant of the cooper- tant of the coopertant of the coopertant of the coopertant of the cooper- tant of the coopertant of t | g pintegi und pitte autoritation provide autorit | set inne frugtour alle all part inne frugtour in a commun- e function in a commun- e function in a commun- rading cursts and visitors a second i 2000m und before and commun- and alle alle all and all parts on the second radio of the second radio of the second radio of the second radio reads auto a the inport Be parts and the second radio of the second all to be overably and ma. | Social |
| ood weet tee. ood weet tee. | Construction of the second sec | The parazit survively social purposes in ro- cools have peakings, a large which even (b having an explored and the having the plane having and using the plane having and using the plane having and using the plane having and the social sectors and the social sectors and using the plane having and the social using the plane having and the social sectors and using the plane having and the social sectors and using the plane having and the social sectors and using the plane having and the social sectors and the using the plane having and the social sectors and the using the plane having the social sectors and the social sectors and the using the plane having the social sectors and the social sectors and the using the plane having the social sectors and the social sectors and the using the social sectors and the social sectors and the social sectors and the using the social sectors and the | Temperative and evention (Fig.4 a) in the Constant (Fig.4 a) the Constant (Fig.4 a) th | - And to the supportingial (Cline Support Hard) of the first the support Hard) of the first the support of the support that the support of the support that the support support - Tourises (L = 1 and Support Support - Support - L = Support Support - Support - Support Cline - Support - Support - Support Support - Support Support Support - Support Support Support - Support Sup | Environmental (e.g., natural qualites) |
| | | | | | Solar Effects at the Equinox |
| | | | | | Solu Effects at the Equinox @12.00pm |
| | | | | | Solar Effects at the Equinox @200pm |
| | | World of Opposuntly Campaign | | | Historical & Cultural Significance |
| The vegetate picts which the many social the users are the picts, its veg that had been and allow the the the the the tables works with the the tables works. | State parton has a conversion and the according to the second second result of the second second result of the second second second second second testimar to the one work and a first difference of the second second test of the second second second second concrete til the second second second concrete balancey. | A Alangya ayi ang kongwa ranawa kutaku ba ang kana | A Characteriander Constanting Star Barry Anton Star Star Samper Mark Star Star Star Samper Mark Star Star Star Star Star Star Star Star Star Star Star Star Star Star Star Star Star Star Star Heid Star Star Heid Star Star Heid Star Star Heid Star Star Heid Star Star Heid Star Star Star Heid Star | - contrast used (soci tradi- sublicitory) is the used of provide used (social tradi- tion) is the used of the used of the used of the used of the used of the used of the used of the used of the used of the used of the used of the used of the used of the used of the used of the used of the used of the us | Programming Recommendations |
| A CONTRACTOR | | | | | Lengense Lenger, verbe Food e Craen Food Katonse Red Antietes = propt Antietes = Propt Antietes = Propt Antietes Studient Services & Clubs Down = Seating |

Appendix I: Completed matrix (2/9)

| Buchavan A.G.Curdovict C.Buchavan McGurdovict C.Buchavan Neucosa | Fiar Marins Longhouse o Nazi Longho Grov Was Anazi Longho Grov Was Geography Luding | Conversion States 4.6C Conversion Strategies 4.6C Conversion Pactore et al. Una mitual States et al. | Suuden Treb 0's Restaurant Treba Cucand cutation Treba Os. adgacen to Henry Argus Building | Kinck Courtyard Localed Suiteder Somerd S. Minor Suiteng |
|---|--|--|---|---|
| Larger 162 m x 28 m | Smatt: 20m x 20m | Soud: Son + 17m | Modum: 70 m x 22m | Medium: 20 m x 38m |
| | | | | R |
| | | | | A |
| Benergia an majoritaria di la superioritaria di la superindia di la superioritaria di la superioritaria di la supe | oden centrajece oden centrajece nicke hisposion. Dia staticate leid i blanc inclea hisposion. Dia staticate leid i blanc inclea hisposion. Si the only shadw so the only shadw the only shadw in terches are location. | Chromen (1) a tody and Densen (1) a tody and Starter | Concrete plaza o diskét a restanserékod o du la keje finuntier of babes available al finuntier of babes available al focundaries dominicated by Par Tride O.S. Kenny Aug Jabes harve & concrete ledge. | Conni contrajerda anava fi tomi in grani kunka i kacalegatar gras la grani kunka i kacalegatar gras la kunka i kunka i kunka i kunka kunka i kunka kunka i kunka i kunka Bila anaka kunka i kunka i kunka Bila anaka kunka i kunka i Bila anaka kunka i kunka i Bila anaka kunka i kunka i bila anaka kunka i kunka i kunka i kunka i kunka i bila anaka kunka kunka i bila anaka kunka i bila anaka kunka kunka i bila anaka |
| e spocale havely used to an exercise and the spot of t | pe pilzai is no the endy use y port during the day, pertugat the second second second second pre-second second second second term main carbo parallel form main carbo parallel for the second sec | Subjects water prima subjects water prima and construction of the subjects of the subjects of the subject of the subject subjects of the subject of the subj | he site is heavily used all roughout the day, as many students and Sackity make use free food coart (paintculary) in Hocknes & Tribe 200, and neap differentiation on weakings. to stip proptie use the plaza for studion and nuilsional upposes. | Confront in suffy, used as a in Confront in suffy, used as a starting with classes in the starting with classes in the sufficient classification in the sufficient sufficiency and classification of the classification of the sufficiency of the sufficie |
| The history business and the control of the functional in the control of the control of the functional in the control of the function appears in the control of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the func- tion of the function of the function of the function of the func- tion of the function of the func- tion of the function | a Machine of Parking Work (Marking Mark) a Machine on Parking Work (Mark) coming from (Special assisting) of Third restance form (Special assisting) of Third restance (Mark) (Mark) and Resonance (Mark) | V) Bock data (v) datady match te processing and the typical data (v) data of the typical data (v) data (v) data of the typical data (v) data (v) data (v) data of the typical data (v) data (v) data (v) data of the typical data (v) data | Stating is only a waith the in verm water. In convert me status is still structed turing the raining earlier the through the and and and the buy food in one of the restaurants. | terroovensed, ansky used in nakry or cold sectors. Noor daan tage on the gases pertities. |
| | | | | |
| | | | | |
| | | | | |
| | Except from the UBC Litrary mesour law second second and the litrary of the Final County of Common team of the My 23, d County of Common team of the My 23, d County of Common team of the County of Common team of the County of County of the County of the county of the County of the advorging receiver, and programm, county of the programm. | | | |
| Clear additional series or ad- permittenet (houd to addite the permittenet) (houd to addite addite (houd to addite house) (hour Addite hour Addit hour Addite hour Addit hour Addite hour | Viduus Fry Nuterin Service and Accounting Residence and Beeter counsering residence Beeter counsering for the Beeter couns | Validity-validity is grantly more on the grantly and off forecares, basing and off grant to the state and off and all off the state and the state students. Intern the state of the students. | Le multi in or near the state would unversion foress landing in brug inses to get food from the nearby realsurate's Some addisional seating under rain test would state onthib use to befor spuper use. | Drainga could is inproved of tho cause mubby roads and publis. Food these kircolle shafters bodd disc altyped to the could disc altyped the time is could be altyped to mither though of and Tim Hortons near Sauder. |
| | | | | A |

Appendix I: Completed matrix (3/9)

| University Bankwart Socking of University Booking On Debeen Workstrook Nati | Gre Esque: Tree San of the between Cdt SLB and hving_Librery | Gage Complex Public Agence 75 Class partially famole 75 Class a Usani 1 housing complex. | Sonod of Economiss Lawr South Iann In Yoot of Iona Building | Law Lawr. Field in front of Law School | Uhivesko Signare. Uhivesko Componio a na ARS Nesi, and Aumri Oenter e. and Aumri | CH3C Lin Biuling Study Pisa: Num E Ear studen t Uhon Building | Lange schwar (20) drwei je Skore Lung drwei je Skore Lung |
|--|--|---|--|---|---|---|--|
| Lange: 30m x 300m 9000m² | Medum: "150m x 48m, 7200m" | Mødum: 35m x 46m, 1575m² | Medum: 36m x 88m, 3168m² | Medum: 42m x 70m, 2940m ^s | Large: 104 m x 44 m, 4576m* | Medum: 29m x 68m, 1624m² | Large Son e têm |
| and the second se | | | | | | | |
| | The second | | | | | | |
| Trans, but now, -many watering waters in code proceeding of the constraints of particle of a constraints of particle of the constraints of contraints of the constraints of the constraints on restine and of page requirements on restine and the constraints of the constraints of | កែស៊ាំម ទទួវទំនាំង១ - ភេ ពួងតាំមេត្រូវ កែល តាំមានក្នុង - នៅខេ ថ្នៃពីហ៊ាន ឆាំ កព្វាដ - ben ប៉ានេ ទំពេលព្វាសរ ខេនង កព្វាដ - ben ប៉ានេ ទំពេលព្វាសរ ខេនង | primatik concette space - scone buit in seating - bicycte racks | manicured grein space aurocondil the Vancoure school en decinoral reason of wangement decinoral reason outline provide seleting - concrete access on north side access on north side | mrozička saking - concrete patiknys surcurcing livin sesting but inin concrete metalic quotes but within concrete | - Large concrete and word based publicature - seeing setter instalisation - Dopiede ande - uncovered uncovered | - concrete square - unpowered - unarbefood form ranks - provides number of bits racks - provides access to AMS bits Nothern | The Library Darks is the work by the term of t |
| Hybrikels of bat, atambia, and postation atambia, and postation and post of the state and post of the state accurate in walking areas and accurate in walking areas and accurate in walking areas and accurate in walking areas and accurate and accurate and accurate | - He arviv trafficient in terkneem - Lie Bruzer - chreater verliefer of the programmed and - programmed a | no dense podesir ja rušij. hravji v jusi o bis nožeki lise socialization or addivšes occurrang within space even h lobel weather | ite podestina taffa, quiet neee even or surve (arrent scealarg) occurrent urren luurch tour, face (optes automobiles, and extestians throughtout day | use as meeting door- use as the earing area-movated tables and "balls used for socialization - no automotike or locycle usage - used for informs games of fisible e and hasky sack. | restricted automotient reffic - creative automotient refield - subdens at all house - combine provide popular setting area by ceaning readers automotient restrict readers automotient restrict rescuence - and for coastion of flood truck - and car sharestering relicion car share and participant all not car share and participant all not car share and participant all not car share all uses of square | or carls - Kryt degree of traffic - Location of traffic - Location of unversity, the ANS, and University, | Status, a Linacia, I and Tulia Status, Santa J, |
| really accurate for entropy control of the set of the s | Alternyk stradowad zinas sur takow. Utte otner kninz od konduner stradowad stranski kninz na stradinisti stradowad stranski na stradowad stradowad stradowad na stradowad stradowad na stradowad stradowad na stradowad stradowad na stradow | han jir ubsched - some cone from ran - liege rogelasion - some from eregrøen teles - garden alle in south erd - | mixer of vogeling type i bidding free, garders and lange - few shadows finoughout day | tree lined gass suidan - cicea proximity to other green spaces - limted automobile access | manchurad lawar o'n hi with a can is treat (rea cruci) 4 annot 10 vorogen large reas-away (are robusta within Ruite's annog aray vanchar social social annog aray vanchar social social annog aray vanchar social social social social annog aray vanchar social social social annog aray vanchar social social social social social annog aray vanchar social social social social social annog aray vanchar social social social social social social annog aray vanchar social social social social social social social annog aray vanchar social social social social social social social annog aray vanchar social social social social social social social annog aray vanchar social social social social social social social social annog aray vanchar social social social social social social social social annog aray vanchar social social social social social social social social annog aray vanchar social social annog aray vanchar social soc | - Tille vogelskin - dose pozimity to green spaces - poor d'almage | Print, Saler Cores Nan Groen Print Bornessen, San Saler Songer, San Saler Bornessen, Saler Saler Songer, Saler Core Saler Songer, Saler Saler Bornessen, Saler Saler, Saler Saler Bornessen, Saler Saler, Saler Bornessen, Saler Saler Bornessen, Sale |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | The former Vancauve School of Ja Theodog constatutes now additors for the University of Britishin Columbia after the purchase by franc Vancouver School of economics | The building and surrounding spaces are named after Poter Aland, gradulite and benefactor of the University | As all of Life, is located on the uncoded sensors of the space could not the powers is to unrel the nonlicensis culture of this group the nonlicensis culture of this group | | |
| The heavily feedback space expresses a location with programming one four trades as or optimizing one four trades as programming out to boothe could liver space | Area is nor in major need of additoral programming as it artesty in heavy set by droese more lighting to increase served of safety | Area would be good canddae for setting up states terrice information bords - Food tud could also be professioned and aptibility work in movement and use of area | i Area could benefit from both increased existing in addition to the more rain cover | Area should remain open to facilitate the contransit used of gaode as a pionic and casual porting area | The onreal bonismod University Square meter tan University Square meter tan University Square meter ben squarement, Alexen years on the squarement, Alexen years on the square square tangent or the University Foreign Programmer includes programmer | This area could serve in a similar capacity as the set funceshit. Square . Creation of a food truck least and in this area would be popular | Tool head in the ear and the constraint of the second head in the second head of thead of the second head of the second head of |
| | | | | | | | |

| Average of America Consumers Registrations of Characteristics Status | Harry Vitree Prett In Cauter of Hord Boureard (Thurstended Boureard (Thurstende Pack) | Yinger Friedt, in culture Bedick or tri Friederber Beulever d'Thursterber Palle) | (Vortigen Field (Vortig Graft - In custom of Netdo Douleaverd (Thursbertund Paste) Paste) | Cros Spericer Fei/1 Custor of textor Thanditical Soutoord (Thandietae Paul) | Antorus cardinates Characteria de Cardon (Thanacteria de Cardonates) (Thanacteria de Vel) | Fans Gue Ted'h Charle O d' Tharactara Baueard (Tharactara Pae) | GARS Meet South Way: GARS Meet |
|--|--|--|--|--|--|--|---|
| t Lenger 120m x 78m | Læge: 110m x 7 fmm | Løge: 100m x 60m | Large: 240m x 138m | Læge: 110m x 60m | Lego: 120m x 68m | Læge: 120m x 88m | da Small: 18m x 27m .486m* |
| | 0 | | | | | | |
| | | | | | | | |
| andreja i urd ances i i suved för jørere at rögt | Addalut araboe. Ris used socce: I contains bil lighting br playing at right | Artifalai, Ware Zaeed Yir Suchaa. Ris u sea da cr sécht nodar, nghit: Ai lighting far playing at nghit: | Skaulod with Thunderbring gaik. surcurufung the obrain febds. Bey are two large grass Rugby Fields. | Stander viehn Thruckeberd paik, suronundig teo Betraffast Iti a a læge gass Ruggy Field | Skaled vikih Thurdebird pak, surourdung teo Berleids. It is a læge gass Ruge/ Field | Skaled višihi Thundebird paki, surouoning iteo Öter füng læge grass Rugpy Field | - covered concrete area - bull in isoaneg |
| The field are used by regress practices: to constrain the area games. They are also used by the second second second second second speculations of the values upper the speculations of the values upper the second | All feicible are used by versity teams and local clubs for prantices. Thing are also used by fains, parents, and other specializers of the validous sports | All fields are used by versity teams and local duties for parties. They are also used by special and other special and other of the validus sports | All Bolds are used by versity learns and local dutes for partices. Universities and games. They are also used by fans, parents, and other specialities of the various sports | All facts en usadi yv sreity Name and clocal disk for processes, kurvansens, and general en usadi se actionate one specializes of the various sports | All facids are used by varially teams and local dubts for processes, burrawners, and other fars, prevents, and other specialture of the various sports | Al fields are used by versity teams and local duits for practices, tournaments, and game as events, and abase and specializes of the various sports specializes of the various sports | Inter used space degrat baing control of carpus - the should complex as soon as complexican successful parties at right (separately on parties at right (separately on twennedity during PR Nights a ge PR Pub |
| Disconte de casa de la margia de ser Terramente de constitución de la margia de la margia forma aurigar é las elevy en contocordi, forma aurigar é las elevy en contocordi, | Thundericid gais is modify open. vicio-veed gabas: The dedise vicio-veed gabas in the dedise from subligit (a t two y are outdoore). | Wingt Field 5 uncovered, finoreer, these area - apped parts of the same field for Sections and not convert and are the Sections and not convert and are indirect surright. | Thundebrichtaik is modily open. Uncovered space. The fields Bremsteves dond have protection from surlight (as they are outdoors). | Transeberd park is mayby open urconvexed park. The fact score transmission of the score of the score from surfiget due they are oxideored, from surfiget due they are oxideored. | Thandberd park is mostly open, urcovered park. The field of the meaves of on of these problems from suring it to a key per outboards. | Thandbeid san is mayby open second pare, The reads second second second second second from surfigit (as they are coldored). | litter vege haron - well its - seally chose powrite, vo thure public field |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Home to the UBC Vasily Societ | Home to the UBC Varsily Soccer Pogram: | Wight Fracture many alley favor. Francesco Strategie Str | Watton Field vas created in 1980. Through a grant from the UK Praying Fields Association and BC Playing Fields Association. | Home to the UBC Vasily Rugby Program. | Frank back and Amur Los Madel were records (upgated A of 10 Koverne 2 (15) The failed are said for any said of the said of the said of the said saining 2016; unail roopen (5 radio saining 201 | Frank back and Amur Long factor were recordly Lupp data A can be mad by an and a long back and a be mad by and with incorpor for Party Spring 2016. | |
| C pagaming) to program to the program rouge counting the count of the program to the page load by page load by | P Regamining we would be represented in an Arabic canary or productions and be breaked by the second back breaked by the second back by the second back back back back by the second back back back back back back back back back back back back back | Programming here would be deparate in the Arkelick for an expression of the Arkelick can be be a set of the arkelick of the beneficial for the arkelick of the beneficial for the arkelick of the arkelick beneficial for the arkelick of the arkelick beneficial for the arkelick of the arkelick of the beneficial for the arkelick of the arkelick of the arkelick beneficial for the arkelick of the arkelick of the arkelick of the beneficial for the arkelick of the arkelick of the arkelick of the beneficial for the arkelick of the arkelick of the arkelick of the beneficial for the arkelick of the arkelick of the arkelick of the beneficial for the arkelick of the arkelick of the arkelick of the beneficial for the arkelick of the arkelick of the arkelick of the beneficial for the arkelick of the arkelick of the arkelick of the beneficial for the arkelick of the arkelick of the arkelick of the beneficial for the arkelick of the arkelick of the arkelick of the beneficial for the arkelick of the arkelick of the arkelick of the beneficial for the arkelick of the arkelick of the arkelick of the beneficial for the arkelick of the arkelick of the arkelick of the arkelick of the beneficial for the arkelick of the arkelick | Velifican Frideric and competition. Perspension of the executed the Velifican Provide Avancement of Segment encounters from the Section of Segment encounters and the section of Segment encounters and the section of Segment encounters and the section of Section o | Programming here would be observations on an Angel care of the second second be beneficial. | (d) Porgamming here would be suf departed in the Andread Bargare resultances are to be applied and the and the applied by beneficial. These outdout particles after Nets is an indear particular particular feed, as its in not applied as well. | de Pogaminich tere would be all depotent on the Article participant of the Article and an article and an article and article and article and article president. | Le organization (b) the a world for the convent of the space could be used as coolers to evaluate available on compute the available on compute thy setting up displays. |
| | | | - | | | | |

Appendix I: Completed matrix (4/9)

Large: 115m 400m track Large: 152 14630.8m² Large: RF -LF - 102M arge: 118.13m x 3112.4m² 102M, C 111 • 150 Artificia tur baseball field. Consists of a Field Turf surface. Consists of a Field Turf surface. Consists of a Field Turf surface. Second Strategies and St winess of an 8 lane, 400m traci 300 seat grandstand, long jump pit, shot put area & steeplechase area. Large stadium with bleachers o the east side and grass sealing the west side Stuated within Thunderbird park, surrounding the other fields, they are two large grass Rugby Fields Small entrance with 4 benches and an archway to Thunderbird Park tdar tree 1100 The primary use of this space is considered and leave, park is for waiking and chickly bile. If waiking and chickly bile and the primary use of the state and the state of the state of the park on clear bays. Life to no users after form due to no users after form due to no users after form due to no users after form of the pulliphts All fields are used by varisfy teams and local clubs for practices, tournaments, and games. They are also used by fams, parents, and other speciators of the various sports The primary use of this space is non-section and based this space is located within student and present present sets. Interesting freeds, along and enroying the pask anonapher enroying the pask anonapher on order, sumvy part, there is no roles, sumvy part, the on order, sumvy part, the on order, sumvy part, the on order part of the part of the part determont the part was people gained. It is space in the elements in not created the part of the part is not created the the weather is not created. onvarsity games or concerts. The stadum has a large capacity for spectators. c. All fields are used by varsity y teams and local clubs for ts practices, tournaments, and games. They are also used by fams, parents, and other speciators of the various sports Though the entrance has multiple benches for sealing this space is seldom used. The track is used by varsity The track, oral, grandslands and offer atteites (with scheduled times) areas are uncovered. The field inside locals, and students to keep fit the oral strass and the track test is all-weather. Con The is in beneficians consisting of the Expected and stress that is a stress of the Expected stress of the stress of the Expected Stress of the Constrainty Expected Stress in Stress of the Stress of the Constrainty Expected Stress in Stress of the Stress of the Constrainty Expected Stress in Stress of the Stress of Consists of order and if trees, very tall in height. The close promiting of the ark leves along with the height block out ark leves along with the height block out in and the trees loaded within the park and the talls loaded within the park and connect to one and here Thunderbird park is mostly open, uncovered spaze. The fields themselves do not have protection from surlight (as they are outdoors). The balling cage is covered. Thunderbird park is mostly open, uncovered space. The fields themselves do not have protection from sunlight (as they are outdoors) Multiple trees around the space provide cover from the sun and wind. The field itself is uncovered, surround by trees on the west side. The seated areas on the east side are under shelter. Upper Naka unsette Estuporo d' 16 Cardena Construit est Estuporo Cardena Construit est Estuporo Upper National State State State Upper National State State State Upper National State Sta The Park has undergone recent upgrades, to better the existing fields and involuce new Field fur fields. It is home to many UBC Varsity Teams. Home of the UBC Program Finished in 2009. The first artific turf baseball diamond in British Columbia. Speerd in 1967. The cables that he not is supported from 12 connaries success that each near the supported from 12 unnear that each near the support of the support number of the Thandbetted Football. Vauity and Score Nears, and valid and Score Nears. amory of Rashpal Dhillon. Area, Interactive Art with Seating, Displays of Native Art Works Area, lamplights throughout the woods and along paths, picnic table all rogamming nere would be dependent on the Athletic Program requirements. Food carts for speciators could be beneficial. The food cart could be placed easi of the diamond in order to serve the most lans easily. dependenting dependent on Program requi-carts for spect beneficial. Live community pro-suggested by ning here would be it on the Althetic requirements. Food spectators could be Luve music and by programs were also by students at this ting here would be ton the Athletic equirements. Food pectators could be Live music and Live music and by students at this

Appendix I: Completed matrix (5/9)

Appendix I: Completed matrix (6/9)

| Kanthan Pika Carta | .umes Tøjer Pak | Ahoda Community, Gada | Courts Courts | 7 dem Fuid | Main Mai Ceessay |
|--|--|--|--|---|---|
| 7820 ani | 2805 Sm ³ Sm x41 41m, | (Songi 4, 33 m x 208 m, Bort 3am | Modum 5563m x 3666m, 2405 Sm* | 44760.8m ⁷ 7n x 103 52m | Lugge: 427 m x 6m, 2 180m |
| | | and the second sec | | | |
| | J. | | | | |
| Concetto Tife Waleway | sw | Sk word pbiltrow | Symhelic material covering concrete | Conside of Togen Field studys. (Unest by set Togen Field studys). Strates, and the set of the set | Concete The Viblavay |
| commencements of the second se | Cosid annotative in this paid branch (Aprilandian, con Application and on his two periodicity traffic. Primary via at inverse season is to community within or date existential and residentials are community residentials. | Community pages upon any El Service and any Electronic and any Electronic and the angle and any Electronic and any Electronic and angle and any any Electronic and Interface and a service and a service and a service and Interface and a service and a service and a service and Interface and a service and a service and a service and Interface and a service and a service and a service and Interface and a service and a service and a service and Interface and a service and a service and a service and Interface and a service and a service and a service and Interface and a service and a service and a service and Interface and a service and a service and a service and Interface and a service and a service and a service and Interface and a service and a service and a service and Interface and a service and a service and a service and Interface and a service and a service and a service and Interface and a service and a service and a service and Interface and a service and a service and a service and a service and Interface and a service and a service and a service and a service and Interface and a | Paok times of use is based on good weather conditions and time of year. Itele to no peodestran static during winter recentation. | Under by use factors and subjects for sevents and the subject of subjects and subjects and subjects and profession subjects and profession subjects and profession subjects and subjects profession subjects and subjects profession subjects and subjects profession subjects and subjects and profession subjects an | The concentration and contracting the second |
| Control Instance and According Conductor These Studies and According Conductor Research Activity (Service) (Service) (Service) (Service) (Service) (Service) (Service) (Service) (Service) (Service) (Service) (Service) (Service) (Service) (Service) (Service) (Service) (Service) (Service) | A service of length and an analysis of length and an analysis of length an analysis of length analysis of length and an analysis of length and an analysis of length an analysis of length an analysis of length analysis of length an analysis of length an analysis of length an analysis of length analysis of length analysis of length analysis of length an analysis of length ana | Electrica and calculations are considered and | Outore avers court is located patel, for avers, source of located in Toten Field, A level at every average of the court avers performed on the neutron part or and read of the totes as an every of the form is courts are averned for located out to does an the afternoor. I ken is courts are while this space. | sequence refat manify gates, some revell avord and stard taken. Fra persone involutions a space in der taken in space fraktion fores and and a space fraktion fores and and a space fraktion forest and and a space fraktion and anternoon. Namy a space fraktion and anternoon. Namy a space fraktion and anternoon. Namy fraktion autor involution and anternoon. Name | Call a wait to be only condition. An environment was a set of the condition of the State of the set of the set of State of the State of the set of State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the S |
| | | | | | |
| | | | | | |
| | | | | | |
| Contraction to the second seco | The park park is obtained to control to the term of term o | UES bage hearing for a grant and a grant a | | Uncernited is dereficied with high and the concernition of the concernition of the exercised and the concernition of the concernition of the dereficied constraints and concernition of the analysis of the concernition of the concernition of the concernition of the concernition of the analysis of the concernition of the concer | The Main Margore Exposer and David Thole Park, Taylor USC, Early Till Staget Law and USC, Early Till Staget Law and Association, way traversion Association, way traversion |
| ne provinske state Societiske state Soci | Addro Cale Saning Some Intelles with mathematical and cale and cale and cale and dat Phones Park of viola. | to commediator for this proc. Structure large the structure of the structu | Transform 1 kenis court ino bedri vidinjeta, povde ciné syle sesting arcund the courts to specators, tigony inselect to specators, tigony motion protude a drinking water sourban as well | ruporanning Jamesukan to Tom Ked (1 Kelan to Bound to 1 Vetomine to bound in Vetomine to bound in Tabler of purpose, 1 I subject of purpose, 1 | Corrana by Leader, Farrers Market, Cordo Labas, Farrers anineng water Duratan d |
| 5 | | | and the second | NA NA | |

| Light), vested sealing are a between 12 Maching Bulding and Woodward | Greensare With D H Or-Of Bibling and Woodward | Patient Park | Gerenzaer wirh Beny Browers): Generat In Aquais: Ecosystems Lab | fawihan Pince Paik E ast | Hawfrom Flace Conidor East | Hawthom Place Park B | Y Bandham Pitace Pank A |
|--|--|--|--|---|--|---|---|
| Medum: 66m x 65m, 3575 m² | Medum: 46m x 46m, 2025m | Medum: 08m x 47m, 3 102 m² | Lange: 55 m x 43m, 2408m² | Medum: 20 30m x 49 80m, 1463 8m ⁴ | Large: 137.66m x 1.46m, 200.9m ⁴ | Medum: 39, 33m x 30,5m, 1199.6m ⁹ | Nadum 40m x 31m, 1 400m |
| | A A | | | | | | |
| | | | | | | | |
| The cover setting and the terms of the set of the terms of | Charrely unde constancion reguese alleval involution departs and involution and departs and and and and and second in yeards and and second in second by buildings, given it is anappe. | Attinucus berches are bables contex en inning ancipacity area - Normani ancipacity area - Normani ancipacity area - Normani ancipacity coments states, no copare coments state | Larged, stagpered steps on the side of the AdJust Econystems but plantiat or brane South au bid the south and the Neter au bid the south and the Neter au Bid the Stage Stage South and and the Stage Stage South and within the Stage Stage South and Muscure - confror can enter (from brough which one can enter (from both sides). | Graas, Occiar Tereer, Concrete The Walkway | Long Scencele Tfe Walkway, Cedar Trees, grass | Long Conrote Walkway, Sand, Cedar Trees, gatas | Grans and Odd a tent. Cercreth Tile walking |
| (intrans), used is in collision in others or restrict yours due to control, to Viccoward to Viccoward or control, to Viccoward to Viccoward en con services, is the nonplat- en con services, is the nonplate mod services and the nonplate mod services and the nonplate mod services and the nonplate set control services and the not con | Currently undergring encodoros, leito y adventing exposition y adventing i velocar- encedor franse, inno adventing to adventing a secondario adventing secondes (traces inno pass prough the area | rimaniji risajuminist by opstalj jošenis, invoji soliti v Paljani Palji - Antole use seliti palji - Antole use seliti palji palji palji use seliti palji palji palji selito a nof demographic of selitos for this area | Perinariki, Rejuented Iby, visit and statig of the museum are used by students - the dataon of classicarons makes it is pla reatively updet as it is not area through which students tequently cross | Shrany Lues are restores of auroundry condo combines many <u>Amilies and children</u> . Spece of lease. | Primary use is for commaining strough the space. Mainly used on the seidents and dreat phe area. | Many families using the gazon S Chickers using the gazon S Conteres al year around. Community residence meeting gazon. Space & primality used b for leaute. | Alternary una anticida anticitati de Lancoucida con const constante una programa de la constante contrate una programa de la constante anticidade una programa de la constante contrate una programa de la constante contrate una programa de la constante contrate de la constante de la constante contrate de la constante d |
| Envirue and the encourt creates Brands for the search creates Brands fo | Search areas must be performed of the convergence and the performance of branded at the centre of committed well-ways the centre of committed well-ways the centre of committed the centre of c | Seiter Fare, a entropoid by seit and Concerning the seith of the seither of the Concerning the seither of the seither Concerning the seither of the seither Concerning the seither of the Concerning the Concerning the seither of the Concerning the Conce | a) The glace is very 'similarid' though by install demns is very been forgiged on the lateralistic and the second second second contracting attrictorize and graces are provided attrictorize and the second second attribute for implicity and attrictorize purposes | 3. Cananiae grass park consistent of service, Yong with an order cancer, Yong with an order accounty permanent and an order accounty permanent and an order accounty permanent and an order accounty permanent and account accounty permanent and account accounty permanent and account accounty permanent and account accounty permanent and account account and account and account account an alternory of a bit account account in alternory of a bit account account in alternory of a bit account account in alternory of a bit account acco | Uttle corridor lighting and benches for sitting. Corridor is connected to nearby residences. | Sparo consiste of children agentas and sand bor. Tal conditions the exercise grave permitter: viewas exercise pathe graves is supply devarated making before space is supply devarated making before space for monthing supply. Income space for monthing supply and out to supply devarated making before space for monthing supply. The output space for monthing supply and out to supply the supply of the space. | Concerns to every an end concerns of the end |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | (reidertia) area was completed in 2007. | In the (2005) UBC began to build jA aussistmebie Korn Lard tease proceeds contribute to many defense randowners on uso compute. Funds support uso example: Funds support uso example: Funds support uso and cannot be sold. It is leased for 99 years and property of uso: | residential area was completed in 2007. | 2007 ordin unan was completed in |
| - Pacing Valkes as coposed to benches may create an one social environment, encourage unit-build and produces gazes. This may be viewed forounably by solucies who forounably by solucies have because the Woodward bury and would lake to study outloas instead. | 4 Ancessed sating anout the couring of amphasizing the symmaby of the space. Tables any many of the space that any of the space that any of the could be not of this outboar space. | Stage for Instrumenta and accession music, controlling the calm antitence of the space | Mareks and bodins along the main parkway that is an operating or Main Mat. This is an operating areas for an averagement and areas for advantagement and areas for advantagement and operatively areas within the space sealing areas within the space sealing areas within the space | Comunity, Kave Maha, Gazeto, Sudoro Comunity Ultray Shikhing Unit forshaning boole within the community | J Akong tiks conridor is spacicus grass areas that are scarer. A mini got course would get the community using the space and interacting while also providing there are strength to the pregistromout Akree Ligh ting is a dear recommended. | Red Climbra Well for Chidren, Weer Park | Add Fibras Dex Ann Mif Based Bar Court Communy Carbenhy Ava Communy Carbenhy Ava |
| | | | | | | | |

Appendix I: Completed matrix (7/9)

Appendix I: Completed matrix (8/9)

| Education Read Configure | Ling hard Courses | Alar Ma Son The south Measure (Tenny) Factor 11 Martine Apper Factor 11 Martine Apper | Akrang & Raymond M.C. Lee Square (Linext) Boulevard & EastMail Intersection: containers un Intersection: containers and Native Phone Places) Native Phone Places) | West of Thunderbid Parkade | Paran in ford i de Paranes Kod Sciences Budday |
|--|--|--|---|--|---|
| Smit Sun X Sin, 600 m | Large: Birn v Gon, 5100m* | Large: 27th x 28h, 7880m | Large: 180n x 22m, 4500 m² | Modum: 40m x 23m, 920m² | Medum 50m x 30m, 1600m² |
| | | | MAR AND A | | |
| | | | | | |
| dama encreacionada y el encrete esta en una como como de la como parte en ocuento de encrete el encrete en encrete en encrete encrete encrete en encrete enc | Subjects and strategy is subject to a subject of a strategy and a subject of a subject of a strategy and a subject of a strategy and a subject of a subject of a strategy and a subject of a | Land by developing an overvite the structure of the struc | Laga, expansive bourkmarts half the indext Sona of process, pror on and and the bookacon nine on the sona of the sona of the sonary rearrows. There is the sonary rearrows. The sonary while the pro- tingent of the sonary sonary rears of the sonary sonary rears of the sonary sonary rears of the sonary the s | Concrete skaltepark features | Simplex, and ballion and provide and and provide and ballion and b |
| the product of cost of the cos | And a service of body and and a service of b | Compare a later to a compare to a compare to a compare a compare a compare to | the intersection of University outward and East Mails as east frigh tastic, making & ghip desirable Sc theorem and the section of the theorem and the section of the result social activity (e.g., resting a titlend for codies a resting a titlend for codies and rebooks.com buying setting rebooks.com buying setting | The sizedpark is the first of the kind on a university campus in Note America. It is used proversity by call becaugers and the size of the size of the during my altern on visit. | himathy used for socializing course is not trained as a course is not trained as a course is not trained as a mous amenties (e.g., aspura mickate, dates, aspura mickate, dates, |
| Allocation average and an any setting fraction as provide to cover or setting the cover by code of a cover as a transition of the cover as a transition of the space of the settermined of the space of the space of the settermined of the space of the space of the space of the settermined of the space | C can be supplied anythic frequency of the supplied anythic supplied to can card anythic supplied to card anythic supplied anythic supplied to the supplied to the supplied anythic supplied to the supplied to the eventual anythic supplied to the supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the supplied to the supplied to the anythic supplied to the supplied to the supplied to the supplied to the anyt | Conse Nanc Born Kannin Kalan Saran Kannin Kalan Saran Kannin Kalan Saran Kalan | Livinesity busies of the set of the part of the part of the the set of the set of the set of the set of the socrates may reach the set of socrates may reach the set of socrates may reach the set of socrates the set of the set of the socrates the set of the set of the set of the socrates the set of the set of the socrates the set of the set of the set of the socrates the set of the set of the set of the socrates the set of the set of the set of the socrates the set of the set of the set of the socrates the set of the set of the set of the socrates the set of the set of the set of the set of the socrates the set of the socrates the set of t | Fine sampark is word of "hundehold in particular list surrurouted by tens on all sizes, however, these do not provide much steak concerning and provide much steak concerning and bablow, and multiple rails and plump for sidedboarders, indextakets, and BMX bikers to use on campus. | A anal para consert hi endi opposite for Privincedore Sciences Und Var- weights are wegetor efferts way be naturative connected andress |
| | | | | | |
| | | | | | |
| | | | | | |
| Particular Concentration of the concentration of th | | | The square was named fellowing a \$252000 denator from UBC aumin Reprotor Lee and his wile, Morey Lee. | | |
| Subde indipatient and in- Subde indipatient and in- Events - Subde indipatient and in- Events - Subde indipatient and in- Events - Subde indipatient and Events - Subde indindipatient and Events - Subde indipatient and Events - S | a adupo or reading to the province of the prov | Advorgent productive for the operation of the operation o | Juncesk stations along Luncek Bachward Lo bake sate, bool trucks, community- zenka agrubuite (250)- zenka agrubuite (250)- the outfield by Montowice H Repmond M C. Lee Square | A food huck or permanent concession stand or the grass between the standpark and the basedball field, about or the phane of the standpark and for commentary of a source even for commentary of a source even for commentary of a source even for the phane of the source or the phane of the source of the source of the source of the phane of the source of the source of the source of the source of the source of the source of the source of the source of the source of the source of the source of the source of the source of the source of | Saturove Stage Levels barches Stage Levels forminate and bar the forminate and bar the building. This demonstrates the second water the star second water |
| | | al pr | | | |

Appendix I: Completed matrix (9/9)

| | Mah Mai Yang te sanih Manana de Sang Censori / Tal-Verseker Censori / Tal-Verseker | St John's College | or on the second in the second of the second | Urnivesty Bouk and S West Mall intercentor Continues up University Boukward unti Aatma Piper Plaza) | Thuridethird Oveccent | Store Road Countysed | Carper |
|---|---|---|--|--|--|--|--|
| | Large: 30m x 3m, 1423on' | Abelum: 74 (m x 38m, 2815 8m) | (arge: Rhn + An, Stein- | Medum: 162m x33m, Sa46m* | Medum: 94 m x 78m, 6384m² | Medum 81m s 34m, 2784m* | Larger 100m a 80m, 807 or |
| | R | | | | Ó | | |
| | C | | | | | | |
| | Construction (Constructions) | Median notatiyo of gains are unavailed to gains and construction to gain and construction of the statistical construction of the statistical end of the statisti | A Diget A transmission of the second seco | Involvegenzesanges of gass in -In- tre motide of Unward and Involvegenzesanges of gass and motide of works concerning parts and and the motion of the second parts and and the second parts and and conserved works of the second parts conserved works of the second parts to work the second parts and and the second parts and the second parts to work the second parts and the conserved works of the second parts to works the second parts and the conserved parts and the second parts to works the second parts and the | a up oper ungeren upper upper upper any operating and any operating and any operating and any operating and any operating any operating and upper any operating any operating upper | The start of the s | Service A servic |
| _ | (b) Cost traffic area outing to call the style of the style of the style of the style of the style of the style of the style of the style of the style of the style of the style of the style of the style of the style of the style of the style of the | The function of and Suby- own of Carlos area for company in straid scate company in straid scate constraints of contract- constraints of contract- long-table of the gradiest of lengthal of the gradiest | (a) Halfs, and ko popula Davids, and the second the the second call and the the second call and the second call and the second call the second call and the second call and the second call and the second call and the second call and the second call and the the second call and the second call and the second call and the the second call and the second call and the second call and the the second call and the second call and the second call and the the second call and the second call and the second call and the second call and the the second call and the second call and | (y) traffic area - grass area s used for social activites (using lying down and using lying down and using the social programarily talen up with a room for recreational system | suders weikt kincuph here en along ites part on the deschortes provide a rice costo sit on warm and surry ys | an toe infanse weked on an apple e infanse weked in out one weken e not used b burg of an out of an assington used not of an assington of an assington note of an assington and an out of | A la constante a la c |
| _ | Induces average (first at basic on the propose research and the deparation process and therein the process of the process of the the process of the process of the process of the process of the the process of the process of the process of the process of the the process of the process of the process of the process of the the process of the process of the process of the process of the process of the the process of the proces of the process of the process of the proces of the process | proping provides some analysis from the proping many based of the proping end (proping many based of the proping many based of the proping many based of the end (proping many based of the proping many based of the proping many based of the end (proping many based of the proping many based of th | 4 Mon Markan Col, Randon Law, Mang Mang, Law, Kang Mang, Kang Mang | are used for social activities in day are used for social activities in day used by a social activities in day used by a social social activities of the day in the social activities of the space in a major way space in a major way | - The paths nor the custake of the grass revel is used at all threads the point fraid- rest of the second at a thread thread the point area for all the area at a fits an open area affect the area as ifs an open area | 1 Und Constant, promping a many 1 Und Constant, provide constant, provide constant, pro- to Market Constant, provide Constant, pro- to Market Constant, pro- d A servering Jouro, COSE Judding A 2 | Markan Laboration, Marekan Laboratio, Markan Laboration, Markan Laboration, Markan La |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | A tribus (spage decreted to Julius Jusics - a thick departs to critics - fictorial streams (critics - fictorial streams) butterrodes - A parts of the through the streams butterrode - A parts of the streams of the streams of the streams of the Macrimian Bood of Linked Macrimian Bood of Linked | | |
| - | Termine in manager along the star work Course on the tabulance are work | - more benothes as seen in the beam course plaqued into corrers Coste an in veloc-coste error in the above the tops and benothes there in the models of the gase in example | Aldrag open yn Addrag ar ar wear. Yn | - Frod Tidu at the base of the grassy area on West Mathematical Bendross at the base of the grassy area on West Math | Outdoor connets or used for the subsect and the subsect for the subsect and the connection of the creation of the connection of the creation will be of the subsect of the creation will be of the subsect of the subsect of community events such as the community events such as the mest markets. | A face scored becars a king and the series and the series of the coccupied on sumy days | score the second by neuronal second the second by the second second by the second second second second second second second second second second second second second second second second seco |
| | | | | | Ø | Sec. | |

Appendix J: Programming Map

LINK: https://www.google.com/maps/d/edit?mid=zvTjKY03jYEc.k7czxADojF90

