

Design Solutions for Underused Lands:

A Human-Centered Approach to Create Inclusive and Vibrant Neighbourhoods





Design Solutions for Underused Lands: A Human-Centered Approach to Create Inclusive and Vibrant Neighbourhoods

By

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ABSTRACT

This thesis sought to propose new design solutions for public spaces that are not actively used during different times of the week and year, which would be beneficial for both residents and visitors.

Interviews, surveys, and focus groups helped me determine the needs of individuals living in the studied area, 103 St north of Whyte Avenue, as well as visitors. Combining primary research with additional secondary research, I designed a new layout of space to replace the existing one.

To do this, first I investigated the current situation of the land; second, identified expectations and needs of user groups; and third, proposed and employed strategies based on the potentials and strengths of the land. Through site observations and surveys conducted with people using the property, I tried to learn how these places are designed, perceived, and used, while also gaining insights into people's expectations of the land and its potentials.

This research attempted to answer the question of how the design of unused land can influence the inclusivity and vibrancy of an area.

Keywords: Design Principles, Engagement, Human-Centered Design, Public Space,

PREFACE

This thesis is an original work by Elnaz Aliasl Mamaghani. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, Project Name "Utilizing Public Spaces to Enhance Vibrancy and Inclusivity of Neighbourhood" No. Pro00086272, February 26, 2019.

To my daughter, ELAY.

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Chapter 1

INTRODUCTION

1.1 Background

Some neighbourhoods are compact, pedestrian-friendly, and mixed-use areas with many activities of daily life available within walking distance, as such, any new developments in a neighbourhood should help repair the existing neighbourhoods or create new ones and should not take the form of an isolated "project."

Different organizations and researchers have published toolkits for enhancing the value of public spaces as well as the urban development (opportunity to look at iconic places). Moreover, during the last decade, many cities have launched their own public spaces plans either for neighbourhoods or more generally for the municipalities.

Cities that improve the quality of life for their citizens experience higher levels of prosperity; they are also likely to find themselves more advanced in terms of sustainability. Such cities strive towards social equity by increasing access to the urban commons and public goods, preventing private appropriation and expanding the scope for improved quality of life for all.²

Studies over the years have shown that good urban design can affect the city in multiple ways. For example, contemporary urban space that contains desirable characteristics such as availability, mobility, suitable furniture, and lightning can enhance functionality and safety.

1.1.1 UN Habitat

The UN Habitat has published the "Global Public Space Toolkit, from global principles to local policies and practice." The organization states that the toolkit will be a practical reference for local governments to frame and implement principles, policy recommendations, and development

¹ Congress for the New Urbanism, "Principles for Inner City Neighborhood Design". A Collaboration of the Congress for the New Urbanism and the U.S. Department of Housing and Urban Development, San Francisco.

² Global Public Space Toolkit: From Global Principles to Local Policies and Practice, UN Habitat, February 2016

initiatives for public space.³ They list five core principles for sustainable urban neighbourhoods: 1. Adequate street space 2. High density 3. Mixed Land-Use 4. Social Mix 5. Limited Land-Use specialization. These five principles are supported by three key features: a vibrant street life, walkability, and affordability. In the final section, they aim to validate the universality of several principles. Therefore, they examine each principle in a different context.

1.1.2 Gehl: Making Cities for People

Studies have been conducted on enhancing the quality of public life, and they are mostly studying the whole city or proposing general strategies. The Gehl organization has conducted a lot of research on people and their environment to "make cities for people." Their space studies include both proposing strategies and guidelines for cities as well as developing design ideas to be implemented for particular locations. However, no matter what the type of final deliverable is, they focus on working with their clients to create mutually beneficial relationships between people's quality of life and their built environment.⁴

The approach of this study will be like the research done by this institute for "Kick-Starting San Francisco's Next Great Neighbourhood." The project concerns turning a public parking lot into a mixed-use development. The design for The Yard at Mission Rock is based on a light and flexible physical infrastructure capable of expanding and contracting as the site and programs change: a temporary village of shipping containers bringing some of the best elements of great neighbourhoods to the site. However, the mentioned project has massive scale and contains a greater neighbourhood. This proposal will follow a similar approach focusing on a smaller sized neighbourhood.

³ Ibid

⁴ Making Cities for People. Gehl. Accessed March 28, 2019. https://gehlpeople.com/.

⁵ Ibid

1.1.3 City of Edmonton: Downtown Public Spaces

The purpose of the City of Edmonton's Downtown Public Places Plan is to guide the development of a cohesive network of downtown public place that meets community needs and contributes to an increasingly vibrant, well-designed, accessible, and sustainable downtown. This plan is organized into five steps: 1. Strategic direction 2. Open Space Measures 3. Concept 4. Site Specific Recommendation 5. Strategies and Actions. The most central section that creates the foundation of this study are elements of strategic direction which includes eight items, and they have been listed regarding the context of the downtown neighbourhood as well as the outcomes of public engagement feedback.

1.2 Statement of Problem

Edmonton is a city that is spread over a vast area and it is not as congested as other big cities like Toronto or Vancouver. While it has some benefits, such as having a decent amount of green and open spaces; it causes some other problems. Some land can be used intensively over a specific period of time while being underused in other weekdays of seasons. This means that valuable land with the potential of engaging the public and contributing positively to the community are ignored at specific times of the week and year. An example of these lands is the Strathcona Farmer's market parking, which has the potential to offer different opportunities for engaging the public throughout the year. There may be various reasons for this matter and the cause can be different for any distinct land.

The challenge, as address in this thesis, is to find out the reason and the best solution that answers residents and visitors needs and expectations.

1.3 Statement of Purpose

This project focuses on how to utilize land in a way that increases the vibrancy of an area. Preserving the culture and history of a neighbourhood and creating the vitality and engagement of the public within an area are the primary goals of this project and is necessary for the further improvement of the quality of life in a city.

This proposal seeks to develop successful new design solutions for small-scaled public spaces within these settings. Designing vibrant, inclusive, mixed-use, achievable public spaces for unused spaces in Edmonton will consist of the following steps as is guided to select in "User Research: A Practical Guide to Designing Better Products and Services" by Stephanie Marsh.⁶

First: Finding optimal combination of design and research methods to study a site and the people who could/would or already engage with its people.

Second: Conduct a case study and imply the methodology.

Third: Develop a list of strategies and recommendations which results from an analysis of the challenges and the potential of the case study and data analysis.

Fourth: Propose a design solution upon the proposed principals.

This research aims to answer the question: "How we can redesign underused land to enhance the inclusivity and vibrancy of the neighbourhood?" Also, there are some subquestions that this research will answer, such as: "How different are the expectations differing of groups of people?", "What are the common features that attract people?", "How can stakeholders affect the direction of a design."

The primary objective of this research is to distinguish the ways that underused land can be changed in a way that is healthy for the community. So that, it does not cause a sense of detachment either in marginalized groups of people or the residents. Also, the proposed principles and conceptual design model will discuss how the redesigned area contribute to the values that promote a lively city.

1.4 Intended Output

The intended output will contain a list of principles and a conceptual design solutions which integrate the social infrastructure on the studied district and the improvement of

⁶ Marsh, Stephanie. *User Research: A Practical Guide to Designing Better Products and Services*. London: KoganPage, 2018.

the sense of place by utilizing the land. The extracted principles are one of the most important core elements of this research.

The understanding of community's situation is based on the results of observations, site analysis, and interviews which lead to principles. The design proposal should benefit the neighbourhood residents in the first place by enhancing the quality of public space, empowering the community, and offering further opportunities for residents to explore. This will be the suggestion of developed principles that results in an exemplary plan.

1.5 Research Questions

The problem statement in the previous section explained the problem context and how it can be shared in a wide range of cities and neighbourhood. In order to develop feasible solutions, the research questions will be narrowed down to a specific case study due to answer the following written questions within the limited scope of the project.

Main Research Question

"How can we utilize underused lands in a way that they enhance the liveability, vibrancy, and inclusivity of the neighbourhoods?"

Sub Research Questions

- 1. What is the design solution that can respond to the needs for businesses and communities while also responding to citizen's expectations?
- 2. How is the preservation of community and improvement of the vibrancy of neighbourhood possible?
- 3. Where are the other places that affect the population density of a location at different times of the year?

1.6 Significance of Problem

Despite the necessity for aesthetic and functional design of public areas in order to communicate an image of the community to both residents and visitors, and to demonstrate its unity, many small communities have no overall plan for future land use and zoning. Local ordinances tend to be inadequate for environmental concerns (such as

removal of abandoned automobiles), many narrow, shabby alleys, and back streets abound with deteriorated outbuildings and lack functional drainage; absentee landlords result in inadequate maintenance of houses⁷. Spaces will find a characteristic after a while of their use change. It is clear that having less users, single uses will deteriorate the quality of life of neighbourhood and decrease the safety of the vicinity.

Firstly, we should realize that space is produced by all of us. Secondly, it is not only the activities of shopping, walking, sitting and looking that make up public spaces.

Everything we do helps make the public realm, from commuting and driving to using our senses of touch, smell and hearing, to emotional experiences like talking, making music and falling in love. Thirdly, different people have different ways of using public space — the elderly may think about the public realm differently from those who are younger, or there may be a feeling that cultural spaces are at variance with different cultures.

1.7 Rational and Reading Guide

1.7.1 Public Spaces:

A public space refers to an area or place that is open and accessible to all people, regardless of gender, race, ethnicity, age, or socio-economic level. These are public gathering spaces such as plazas, squares, and parks. Connecting spaces, such as sidewalks and streets, are also public spaces. Public space occupies an important ideological position in democratic societies. The notion of urban public space can be traced back at least to the Greek agora and its function as: "the place of citizenship, an open space where public affairs and legal disputes were conducted". In this study, whenever we talk about public spaces, we mean the above definition; however, in the case study, the streets and sidewalks will not be included in the design work.

⁷ *Ineffective Utilization of Public Environment*, World Problems & Global Issues, The Encyclopedia of World Problems. Accessed June 28, 2019. http://encyclopedia.uia.org/en/problem/133300.

⁸ Inclusion Through Access to Public Space | United Nations Educational, Scientific and Cultural Organization. Accessed June 28, 2019. http://www.unesco.org/new/en/social-and-human-sciences/themes/urban-development/migrants-inclusion-in-cities/good-practices/inclusion-through-access-to-public-space/.

⁹ Mitchell, Don. "The End of Public Space? People's Park, Definitions of the Public, and Democracy." *Annals of the Association of American Geographers: Blackwell Publisher*, 49, no. 85(1) (1995): 108-133.

1.7.2 Open Space:

Open spaces are publicly accessible outdoor public lands used for recreation, nature preservation, passive outdoor enjoyment, and public gatherings. This includes not only public parks, gardens and nature reserves but also squares, plazas, cemeteries, and schoolyards. Some of these spaces might consist of facilities like community centers, arenas or sports fields, while others are co-located with popular attractions or civic buildings.¹⁰

1.7.3 Inclusivity:

The word inclusive is defined as "including all or many elements or aspects of something; comprehensive" in OED. ¹¹ Z. Muge Akkar ¹² defines "inclusive public spaces" as possessing four mutually supportive qualities of "access": physical access, social access, access to activities and discussions or intercommunications, and access to information.

At the city level, social inclusion provides an environment where individuals and social groups feel they belong to the larger whole, have access to 'commons' and are free to engage in collective affairs fully. ¹³ A mixed and diverse public space provides a place that is vibrant and busy and automatically reduces insecurity. ¹⁴

¹⁰ Edmonton's Green Network Context, "Breathe, Edmonton's Green Network Strategy", *The City of Edmonton*, July 2016.

¹¹ "Inclusive | Definition of Inclusive in English by Lexico Dictionaries." Lexico Dictionaries | English. Accessed June 28, 2019. https://www.lexico.com/en/definition/inclusive.

¹² Akkar, Z. Müge. "Questioning 'Inclusivity' of Public Spaces in Post-Industrial Cities: The Case of Haymarket Bus Station, Newcastle upon Tyne." *Orta Doğu Teknik Üniversitesi Mimarlık Fakültesi Dergisi* 22 (2): 2005.1-24.

¹³ Global Public Space Toolkit: From Global Principles to Local Policies and Practice, UN Habitat, February 2016

¹⁴ Ibid

1.7.4 Socially Sustainability

Social sustainability is best understood as an ongoing and evolving process, rather than a condition.¹⁵

As explained by the City of Vancouver's Social Development Plan¹⁶: "...a socially sustainable community must have the ability to maintain and build on its resources and have the resiliency to prevent and address problems in the future."

People have a right to be involved in deciding how their town or city develops. Real, sustainable change will not be achieved unless local input is included throughout the design process. Successful cities are founded on participative democracy.¹⁷ What we extract from this is that the basic needs of residents must be met in order to have a socially sustainable city. According to Barren et al¹⁸, specific aspects of a socially sustainable environment may include:

- Satisfying people's individual and social needs and providing opportunities for people to fulfill their potential.
- Creating supportive social environments and healthy, safe, livable physical environments.
- Developing and using the community's social resources in a sustainable way to build strong and resilient communities, capable of adapting to changing circumstances.

One of the most apparent outgrowths of neighbourhood-based social interaction is the development of a sense of community. Building a sense of community is often invoked as a critical element to community-

¹⁵ Heller, Allison, and Toby Adams. "Creating Healthy Cities through Socially Sustainable Placemaking." *Australian Planner* 46, no. 2 (2009): 18-21. doi:10.1080/07293682.2009.9995305.

¹⁶ City of Vancouver, 2005, online: http://vancouver.ca/comrnsvcs/social planning/initiatives/socdev/socs ustain.htm

 $^{^{17}}$ Department of Environment, Transport and the Regions, Our Towns and Cities—The future: Delivering an urban renaissance. 2000 <code>http://www.odpm.gov.uk</code>

¹⁸ Barren, L. & Gauntlett, E., Housing and Sustainable Communities Indicators Project Stage 1 Report—Model of Social Sustainability, WACOSS, April 2002, piv

building success because it represents essential attitudes and feelings that broadly define healthy communities.¹⁹

1.7.5 What is a neighbourhood?

Neighbourhoods are the spatial units in which face-to-face social interactions occur—the personal settings and situations where residents seek to realize common values, socialize youth, and maintain effective social control.²⁰ However, as time passes and technology affects the geography and commuting, interaction and lifestyle of people, the definition of neighbourhood changes. Moreover, physical neighbourhoods continue to exert a significant influence on individual and group behavior.²¹

The neighbourhood appears as the domain in which the space-time relationship is the most favorable for a dweller who moves from place to place on foot, starting from his or her home. Therefore, it is that piece of the city that a limit crosses distinguishing private from public space: it is the result of a walk, of a succession of steps on the road, conveyed little by little through the organic link to one's lodgings.²²

¹⁹ Schuck, Amie & Dennis Rosenbuam, "Promoting Safe and Healthy Neighborhoods: What Research Tells Us about Intervention." The Aspen Institute, 2006.

²⁰ Ibid

²¹ Ibid

²² Certeau, Michel De., Luce Giard, and Tom Conley. *Culture in the Plural*. Minneapolis: University of Minnesota Press, 2001.

Chapter 2

RESEARCH STRATEGY

2.1 Approach

Process is defined as "a continuous action, operation, or series of changes taking place in a definite manner" by dictionary.com.²³

According to Stephanie Marsh²⁴, user research is the study of people's (users') behavior, motivations and needs in a particular context, which affects how people understand and use things in their daily lives.

The methodology employed in this thesis is that of Human Centered Design (HCD). Human Centred Design is an approach to design that places the end users or recipients of design outcomes as a central focus in the design process.²⁵

This approach is defined by the interactive systems development that aims to make systems usable and useful by focusing on the users, their needs and requirements, and by applying human factors/ergonomics as well as usability knowledge and techniques.²⁶

²³ "Process." Dictionary.com. Accessed June 28, 2019. https://www.dictionary.com/browse/process.

²⁴ Marsh, Stephanie. *User Research: A Practical Guide to Designing Better Products and Services*. London: KoganPage, 2018.

²⁵ Cruickshank, Leon, and Nina Trivedi. "When Your Toaster Is a Client, How Do You Design? Going Beyond Human Centred Design." *The Design Journal* 20, no. Sup1 (2017). doi:10.1080/14606925.2017.1352914.

²⁶ ISO. Accessed June 28, 2019. https://www.iso.org/obp/ui/#iso:std:iso:9241:-210:ed-1:v1:en.

ISO 9241-210²⁷ specifically recommends six characteristics:

- The adoption of multidisciplinary skills and perspectives
- Explicit understanding of users, tasks, and environments
- User-centered evaluation driven/refined design
- Consideration of the whole user experience
- Involvement of users throughout the design and development
- Iterative process.

Considering the complicated relationship between the components of this research, applying these characteristics will facilitate a better understanding of component relationships and the issues inherent in the design problem which will in turn, lead to an integrated solution which synthesizes the designer's understanding and available research data.

Figure 6 shows the human-centered design pyramid, which consists of five classical questions in order to understand the layers of complexity. In my capacity as a design thinker, I applied this hierarchy to understand the complex design problem being studied in my case study.



Figure 1. The human centred design pyramid, Giacomin, Joseph. "What Is Human Centred Design?" The Design Journal17, no. 4 (2014): 606-23 doi:10.2752/175630614x14056185480186.

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²⁷ Ibid

2.2 Whose Problem Is It? Who Are the Potential Beneficiaries?

Addressing this problem will benefit a wide range of people either implicitly or explicitly. The immediate beneficiaries of this plan will be the neighbourhood residents. The proposed principle encourages values such as connectivity, accessibility, walkability, and vibrancy in winter city. These are core principles in creating vibrant neighbourhoods, facilitating an open space which accommodates these values will enhance the quality of life of the residents first and foremost.

Secondly, by increasing the vibrancy of the district and inviting more people to the vicinity, the surrounding shops, cafes, and business will benefit from the increased number of people who come to explore the area.

The proposed mixed-use spaces and performance areas allow artists and performers to show their talents to a broader range of people.

Another particular beneficiary of the project will be cyclists and joggers. The variation of an organic navigation system, as well as a straightforward lane, will give the commuter options to connect east-west and north-south and continue their journey.

2.3 Stakeholders

To place neighbourhood residents and affiliated people in the center of the design process and outcome, it is essential to understand the interest and influence level of each stakeholder. It is very beneficial to have many stakeholders in order to get feedback and gather diverse perspectives. This adds to the transdisciplinary approach of the project since the community network can observe the project's progress and become involved in different stages of the project.

Stakeholders have a wide range of power and interest, which helps in gathering different points of view toward this project. Considering the position, knowledge, and relation to the project and land, each stakeholder proposes different views and questions. This feedback process is an excellent context for understanding the various aspects of the project and how it might affect different user groups.

2.4 Research Methods

Human-Centered design tools can be classified based on their intended use.²⁸ The design methods that I intend to follow are:

Online Survey

Focus Group

• Semi-structured Interview

Iterate

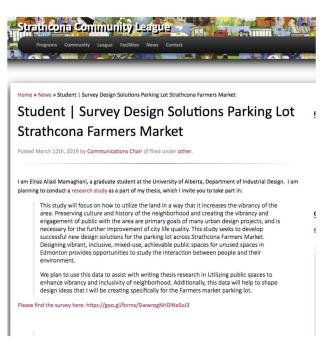
2.5.1 Online Survey

Online surveys were distributed to a wide range of people currently living in Edmonton. This survey consisted of three sections; the first section asked questions about the current use of the land; whether they use or visit the location during different times of the week or year, how long they spent time in each visit, with whom they visit the site, and so on. The second part consisted of questions about how people imagine the future of the land and what changes they would prefer to see in the future. Finally, there were questions gathering information on demographic use of the area.

Since we are looking for different types of information, the questions in each section were different from those in the others. For example, in the demographic use section, most of the questions were multiple choice so that people could choose the option that they felt closest to. However, in the section about the future use of the land, questions were both open-ended and multiple choice in that we are proposing some possible options to people but not limited to them.

²⁸ Giacomin, Joseph. "What Is Human Centred Design?" *The Design Journal* 17, no. 4 (2014): 606-23. doi:10.2752/175630614x14056185480186.

Figure 2. Call for participants Strathcona Community



for online survey, League Website



Figure 3. Call for participants for online survey, The Quad Website

2.4.2 Semi-Structured Interview

H.Russell Bernard²⁹ described four types of interviews regarding their structure and the data that the researcher is looking to get out of it. The most appropriate of these interview types for my research was that of the semi-structured interview, since we "won't get more than one chance to interview and it is based on the use of interview guide [the] interview guide is a written list of questions and topics that need to be covered in a particular order.³⁰

The interviews I conducted were semi-structured interviews with leaders in different organizations associated with the neighbourhood of Old Strathcona. Some of these people looked at the project from a resident's point of view, others from a business's perspective profit. Having such a combination of perspectives will help to ensure that all perspectives are considered in a design. Also, it will bold what and how these two groups can help each other, making a better

²⁹ Bernard, H. Russell. "Research Methods in Anthropology: Qualitative and Quantitative Approaches". Altamira press, 2nd ed, 1988.

³⁰ Ibid. 210

experience for the visitors and residents, improving the context for businesses in positive ways.

A total of four interviews were conducted in different phases of the project.

Generally, the interviewed people can be divided into two groups: a) stakeholders who represent the beneficiary and users groups b) professionals who have the knowledge of planning and designing such projects.

Group A stated the concerns and perspectives of residents of Old Strathcona, as well as the business owners of the area. Group B talked about the possible directions for the project and issues around having certain concepts.

The gathered information out of interviews reviewed carefully and sorted as a list by their importance and priority. Later, this list used for data analysis with other information gathered from observations, surveys, and focus groups.

2.4.3 Focus Group

For almost 100 years, researchers in both basic and applied behavioural science disciplines (both basic and applied) have relied on focus groups as a source of primary data.³¹ Unlike the online surveys that were targeted for large and diverse groups of people, focus group participants are a collective number of people on purpose. The participants include at least one representative of each stakeholder as well as experts in the fields of design and urban planning whose thoughts on the projects will help for better iterations.

According to Stephanie Marsh stakeholders react to each other bring up questions and issues that would never occur to you, whether they have similar or different roles. A focus group session is held in a one-hour session. The objective of this session is to establish a shared understanding of what certain things mean, generate ideas and identify risks and priorities. In this workshop, we gathered stakeholders' opinions on the design solutions, compared the design ideations,

³¹ .Stewart, David W., & Prem N Shamdasani. Focus Groups: Theory and Practice. Third edition.

and discussed how successful the design is in regard to responding to the themes extracted through the data analysis.



Figure 4. Focus group workshop

2.4.3.1 Workshop Structure

Introduction: This section included an introduction to who I am, the objective of the workshop, format, and introduction of participants.

Presentation: Through a short ten-minute presentation, we explained the current situation of the land, findings, data analysis results, issues, and design approach

Q & A: By asking questions as researcher-designer, I tried to warm up the participants. They engaged by sharing their thoughts and asking to follow up questions to have a clear understanding of the project so far.

Core Activity: Three posters were mounted on the wall (see fig. 5), and a summary of each of them was given. Next, participants had a look at posters, compared them, asked questions, and talked to each other about the working elements, considerations, and opportunities.

Stakeholders were supposed to write their positive comments on blue sticky notes, and any negative points on red notes, then stick it to the section of any poster that applies to. In the end, they chose the best design concept out of three options with a green sticky dot. The objective of this activity was to understand which initial ideas are better fits for the area.



Figure 5. Workshop posters mounted on the wall

2.4.3.2 Workshop Tools

In order to run the workshop, the following are a list of tools that I used: Post-its: in two colors of blue and red, paper, sticky dots, camera, audio recorder, consent form.

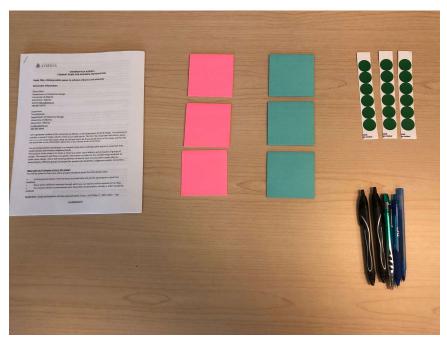


Figure 6. Workshop tools

2.4.4 Iterate

Iterative design is a method of rapidly prototyping an idea through the act of creating. Specifically, for space design, it means to begin to draft, sketch, and physically or digitally model aspects of a project to assess the strengths and weaknesses of one's proposal. The design researchers proceed through iterative cycles of design and implementation, using each implementation as an opportunity to collect data to inform subsequent design.³²

This iterative loop of design-evaluate-redesign is repeated until either all performance criteria and constraints are satisfied or there is no better design available than the current one.³³Figures 7 and 8 illustrate iterative process of this project as attempted to find a physical spatial organization that might help to integrate green landscape, community, and navigation to create a more vibrant and livelier neighbourhood setting.

³² Edelson, Daniel C. "Design Research: What We Learn When We Engage in Design." *Journal of the Learning Sciences* 11, no. 1 (2002): 105-21. doi:10.1207/s15327809jls1101 4.

³³ Ramachandran, Natarajan, Noshir A. Langrana, Louis I. Steinberg, and Vikram R. Jamalabad. "Initial Design Strategies for Iterative Design." *Research in Engineering Design*4, no. 3 (1992): 159-69. doi:10.1007/bf01607944.

The second phase of iterations took place after one-on-one interviews with some participants of the focus group as well as professionals who saw the design solution for the first time. These interviews and afterward iterations helped for finding a feasible solution. It was important to understand what people's feelings and opinions about the design are before implementing a framework to support it.



Figure 7. Concept layout for workshop



Figure 8. Concept Layout 3

2.5 Research Process

The mapping shows a more detail into research strategies of this project. The diagram illustrates how each step is related to the previous or ongoing steps, and how and when it's needed to go back to those steps.

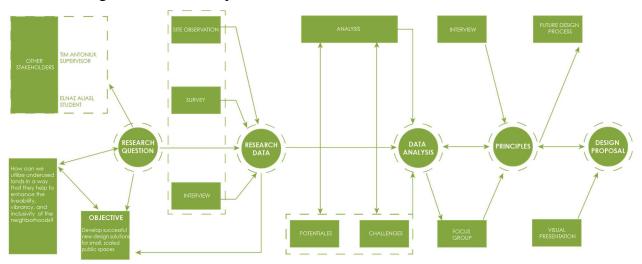


Figure 9. Research process

Chapter 3

ANALYSIS

3.1 Site

Site analysis for this project is focused on analyzing activities, connections, and facilities. Beside site analysis, we also need to analyze the demographics of the area, social spaces, temporary spaces, and many more aspects. This project is focused more on analyzing the existing elements and activities by applying a simple method of photographic analysis and site observations. From this analysis, it is expected to gain an initial look into the site. There are two main reasons for choosing this section as a case study. First, the City of Edmonton is working on a project named "Plan Whyte," which looks at the neighbourhood at a larger scale with broader visions. The mentioned project investigates potential impacts of additional development on heritage buildings and local are businesses and aims to ensure a high-quality design. Working on a smaller scope of such a project helps to have a framework and prospect goals of a real-life project.

Second, one of the objectives of this project is to create an inclusive public space. Since the selected neighbourhood is close to the university and Whyte Ave (one of busiest avenues in Edmonton), there is a wide range of people with different classes visiting or living in the neighbourhood, including Edmontonians, new immigrants, and students.

3.1.1 Context-History

The main focus of this study is the land defined by 82 Ave and Saskatchewan Drive between Gateway Boulevard and 102 street, which is located in the Strathcona neighbourhood. The Old Strathcona Provincial Historic Area is situated in the City of Edmonton on the south side of the North Saskatchewan River. Encompassing roughly five city blocks stretching from 85 Avenue south to 80 Avenue and from 102 Street west to 106 Street, the district is the historic center of Strathcona's commercial life.³⁴

³⁴ Alberta Register of Historic Places. Accessed June 28, 2019. https://hermis.alberta.ca/ARHP/Details.aspx?DeptID=1&ObjectID=4665-1350)S.

Strathcona is a product of railway development. In 1883 the Canadian Pacific Railway reached what would become Alberta along a southern route from Medicine Hat to Calgary. The heritage value of the Old Strathcona Provincial Historic Area lies in its representation of the pre-World War One commercial and social development of one of Alberta's most significant early communities. The district also possesses heritage value for the architectural richness and integrity of its historic buildings.³⁵

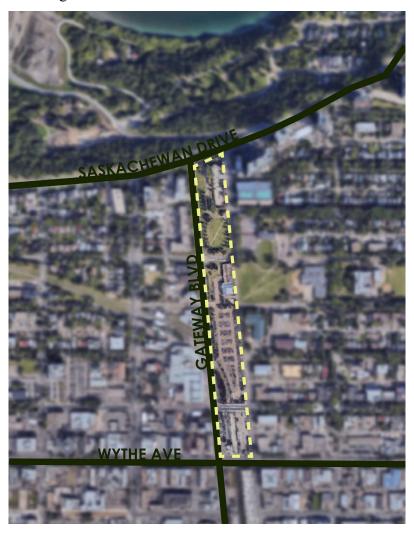


Figure 10. Case study site.

³⁵ "Strathcona Community." Strathcona Community | Edmonton Maps Heritage. Accessed June 28, 2019. http://www.edmontonmapsheritage.ca/location/strathcona-community/.

3.1.2 Current Situation

The project site is in a very historical area and the origin of the city center, therefore a lot of historical buildings, landmarks, and essential structures around the site. Besides the heritage or old buildings such as Strathcona Hotel, Orange Hall, Southside Post Office in the area there are also some new residential and commercial buildings.

The map below shows some of these historical elements as well as other facilities that can influence decision-making.

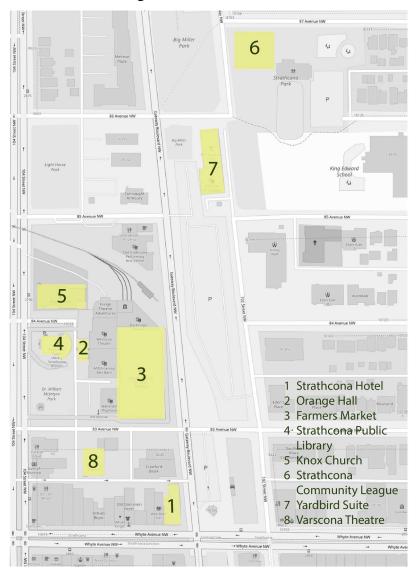


Figure 11. Historical elements of the site.

3.2 The Network

The list below created by Gehl institute elaborates on a set of quality criteria, stating some fundamental principles for achieving a good city network. The list facilitates network analysis in the following pages:

- Quality criteria for a good city network
- Connects destinations and places
- Ensure balance between road users
- Identifies a hierarchy of street and links
- Invites all ages from children to seniors
- Is eligible, accessible and safe from accidents
- Ensure a feeling of security day and night
- A good pedestrian network invites people to walk, appealing, comfortable,
 and uninterrupted links bring people from one end of the city to another.³⁶

Bicycling and walking are similar in a way that for both people need to be invited, and the context should be facilitated. According to the City of Edmonton Bylaw, the issue of people riding bikes on sidewalks does come down to safety. However, riding a bike on paths makes sidewalks unsafe for people riding bikes and people walking. It also increases the risk of collisions between people driving motor vehicles and people riding bikes. Apart from 83 Ave which is designated for bikers and facilitates east and west connection, biking toward Saskatchewan Dr is a challenge.

A unique and positive feature in the Strathcona neighbourhood is the availability of various types of public transportation. Currently, people can access the district through several bus stations, Streetcar (which runs from Farmer's market toward the north side of the river), and in the future by LRT and Gondola.

Three dominant traffic structures are pursuing the project land from South to North and East to West. While there is sufficient and well-working pedestrian and car nods on Saskatchewan Dr and Whyte Ave, navigation of people between the parking and

³⁶ Gehl. "Seattle – Public Space Public Life." Issuu. Accessed June 28, 2019. https://issuu.com/gehlarchitects/docs/565_seattle_pspl.

Farmer's market can be challenging, due to the high volume of cars and pedestrian on Saturdays.

The land lacks a pedestrian network and misses routes in some areas.

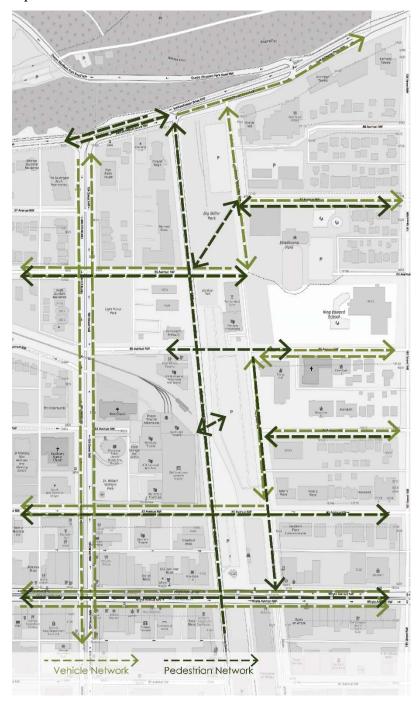


Figure 12. Vehicle and pedestrian network map.

3.3 The Culture

3.3.1 Major Destinations

Strathcona's destinations are scattered all over the neighbourhood. In comparison, Whyte Ave has a linear structure, and destinations are located beside each other. This pattern makes the need for a strong network between Whyte Ave and other destinations as well as a connection between Strathcona destinations. The land lacks a pedestrian network and misses routes in some areas. According to data gathered from surveys, some destinations (like Farmer's Market and Public Library) take priority over others. And people are eager to visit those often; therefore, the land may need some heart nods as well as smaller ones.

3.3.2 Functions

Old Strathcona neighbourhood is divided into different zones, each with a unique character or function.

Whyte Ave vicinity locates different purposes activities, which help to keep the corridor lively throughout the day and week. However, the problem with the study area at the moment is that it is dominated by single-purpose places or activities that are active in certain times and days, which keeps the area busy during those hours, but the rest of the time, especially on Sundays and evenings, it is dead. Surrounding areas are mostly residential. Dwellings have the positive effect of generating life at the times when other functions are closed.³⁷ Creating a cause for people to be in the area not only will create an active neighbourhood throughout the day and year but also will help to increase the safety of the city.

³⁷ Gehl. "Seattle – Public Space Public Life." Issuu. Accessed June 28, 2019. https://issuu.com/gehlarchitects/docs/565_seattle_pspl.

3.3.3 Cultural Activities

Edmonton, which is also locally known as "The Festival City," plays host to several large festivals each year. A considerable number of these festivals take place in Old Strathcona neighbourhood.

These various festivals invite many different user and age groups with different interests. The positive aspect is that the invited people will add to the life and vibrancy of the whole area.

3.4 People

The purpose of public life survey is to understand who the primary users of the space are, how people use this space, and what they want to see in the future. It provides information on what are the main reasons that attract people to this space, and what are the central values of this space for people.

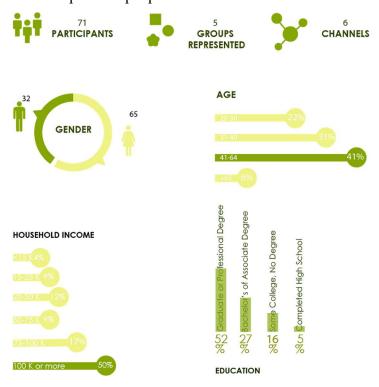


Figure 13. Demographic information of survey participants.

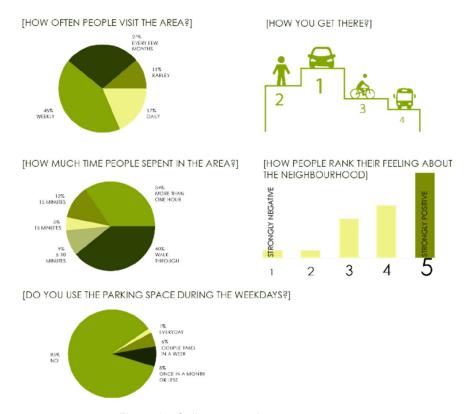


Figure 14. Online survey data.

Results of the survey can help to create a base for the future decisions, about which issues to emphasize in this stage, and what type of changes should be considered.

The study also gives information about the amount of time that people spend in the vicinity. This data is a good indicator of whether there are stationary activities that people can engage in or not.

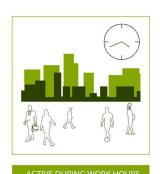
The Demographic survey was distributed as hard copies and digital format among participants of five different classes of people through six channels.

The channels that were used to propagate the survey include social media pages, Old Strathcona Community Website, Old Strathcona Residents newsletter, The Quad, Online University of Alberta Community, The Gateway (the official student magazine at the University of Alberta), U of A First Peoples' House Facebook, and so on.

The represented groups are Neighbourhood Residents, Neighbourhood Business Owners, Students/Immigrants, Planning Professionals, First Nations, and other city dwellers.

3.5 Potentials

Potential of the land refers to the current strength of the area that affects the quality of life of the residents and visitors positively. The sections below are extracted from site observations, interviews, and online surveys. The potentials list the existing strengths of the neighbourhood in terms of its potential to create a lively neighbourhood. Also, "Explore potential" states how this opportunity of land can be used for further developments.



Active During Work Hour and Saturdays

This Corridor is busy during work hours and Saturdays 9 to 3. Many people commute for work and shopping, which create activity.

Explore potential?

It's positive that there are lots of passengers. This can be explored to make it more inviting and make people stay longer.



Great Festive Culture

Edmonton has a significant festival culture. There is plenty of festivals year around happening in the vicinity. A lot of activities are taking place around and within the festivals; for instance, food trucks are common in most festivals to offer a variety of food choices for visitors.

Explore potential?

Festivals are mostly limited to McIntyre Park. However, they can be expanded to other areas to generate more public engagement and outdoor public life.

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Fantastic Setting

Old Strathcona has a magnificent setting. Strathcona is one of Edmonton's oldest communities, situated on the south side of the North Saskatchewan River. It also has a significant influence as a welcoming place for city visitors who come from the south of Calgary Trail.

Explore potential?

The magnificent setting is not explored to its fullest potential, and the connection of Whyte Ave to Saskatchewan Dr is still hidden.



Fine Base for Access

In General, Old Strathcona has good accessibility either by public transportation or individually. The neighbourhood, especially Whyte Ave, has broad and easily accessible sidewalks of good quality. There are bus stops on Whyte Ave as well as 104 St and Saskatchewan Drive. The bike lane on 83 Ave creates a safe commuting opportunity to cyclists. The streetcar is also running

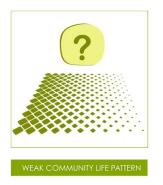
from 84 Ave and facilitates north and south of river connection

Explore potential?

It's a great advantage that the neighbourhood is accessible by different public transportation. This can be explored to invite more people to visit the area more often.

3.5 Challenges

Challenges of the land refer to the current problems that negatively affect the lives of the community or tackling those issues can enhance the liveability and vibrancy of the area. The sections below list the existing challenges of the neighbourhood and the consequences of those issues to the neighbourhood.



Weak Community Life

As of my observations and experiences as a Strathcona resident, Strathcona is one of the oldest neighbourhoods of Edmonton, but very few optional or recreational activities are taking place to expand and introduce this community. The Strathcona Community holds most of the events taking place, and it is usually in their building, not in open spaces to

encourage more people to be involved.

Consequences

There are lots of newcomers to the neighbourhood or students who usually are not aware of community events or know just a little about. The region is not thriving in engaging new residents of the area.

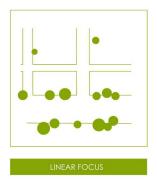


Unbalanced Visit Distribution

Farmer's Market is attracting lots of people to the location on Saturdays. However, this number decreases significantly on other days of the week

Consequences

The sparse distribution of visitors at different times of the week causes fragile user pattern. A robust public life culture demands a city with more invitation through the day, week, and year.



Linear Focus

Besides all the benefits that Whyte Ave brings to this area, it has created a narrow focus on this neighbourhood. And the streets and avenues around lack attractive and inviting public spaces.

Consequences

The Whyte Ave has a distinct character, but the other areas are less defined. There are plenty of essential destinations scattered in the area but are poorly connected to Whyte Ave.



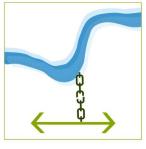
Fragile urban Culture

The area has a high shop/cafe culture. Only a few places invite people to spend time for optional recreational purposes or leisure. The neighbourhood needs more instantly appealing and inviting public spaces.

Consequences

The public spaces have been underutilized. Some locations invite people to the vicinity. However, there is no decent connection or developed public

spaces to extend these stays.



Disconnected to Saskatchewan Dr

Strathcona has a great location to be connected to the Sask Dr and river, but it does not take advantage of this.

Consequences

The Gateway Boulevard is poorly connected to the Sask Dr and Whyte Ave in terms of pedestrian link.



Chapter 4

DESIGN PROPOSAL

4.1 Principles

There are various principles established by different organizations for having vibrant cities, sustainable cities, and great cities. In addition to the general principles developed by organizations, each city has its framework developed by municipalities regarding the specific condition of the city. For this reason, I have reviewed and compared the principles of vibrant cities provided by Gehl Institute, Congress for The New Urbanism, and The City of Edmonton. As a result of this comparison and findings of research for the case study of the project, I have developed a list of principles that are applicable for the area of study in the framework of city guidelines and research design of the project.

4.1.1 Congress for the New Urbanism

Congress for the New Urbanism³⁸ suggests that to build a community, design should be considered along with the social and economic development. Projects that are beautifully designed, but do not integrate families of diverse income often become pockets for wealth- or of poverty. Also, it suggests that public agencies should integrate design and placemaking into their processor to make the neighbourhood a place where people want to live and can live safely. The Inner-City Task Force of the Congress has developed a set of design principles that have been tested in several projects. These principles are as follows:

- Citizen and Community Involvement
- Economic Opportunity
- Diversity
- Neighbourhood
- Infill Development
- Mixed Use
- City Wide and Regional Connection

³⁸ Congress For The New Urbanism, "Principles For Inner City Neighborhood Design". A Collaboration of The Congress for The New Urbanism and The U.S. Department of Housing and Urban Development, San Francisco.

- Streets
- Public Open Space
- Safety and Civic Engagement
- Dwelling as Mirror of Self
- Accessibility
- Local Architecture Character
- Design Code

4.1.2 Gehl- Making Cities for People

While CNU (Congress for the New Urbanism) has a holistic approach, the Gehl institute puts public life at the center of its planning, strengthened by an overall focus on liveliness, health, attractiveness, sustainability, and safety. They consider people as the most crucial and practical matter in successful public places, regardless of where the case study is. To Gehl, urban activity is a question of "number of persons" multiplied by "time spent," a space with few people walking slowly or spending long periods of time in space will be perceived as just as lively as space where a large number of people rush through. The principles provided by Gehl is as follows:

- Long Term stays
- A balance between road users
- A variation of places
- A strong pedestrian networks
- Many users group
- Planning optional activities

4.1.3 The City of Edmonton

The City of Edmonton has published a document called Urban Design Framework, the goal of this framework is to elevate the practice of urban design in Edmonton, and to fully leverage collaboration across all civic departments and among city-building partners to build great places.³⁹ The document emphasis on

 $^{^{39}}$ The City of Edmonton, "Urban Design Framework", 2015.

supporting bold design visions as well as beautiful, functional civic buildings, and walkable residential neighbourhoods. The purpose of this document and provided principles are listed as providing a systematic approach to strategic re-focusing of urban design in Edmonton, clarifying objectives, strengthen the design team, create urban design fundamentals, establish integrated planning and urban design best practices, and advance urban design advocacy and education. In continuing the strategic principles for building a great city provided by the City of Edmonton are listed as:

- Inspire a uniquely designed city that reflects Edmonton's geography, history, climate and culture
- Plan and design a functional and attractive street system seamlessly integrated with the public transit system and other linkages
- Plan and design diverse, adaptable and unique neighbourhoods
- Plan and design special and significant civic spaces
- Plan and design attractive built form in a variety of typologies and scales that reflect climate, geographic context, the spirit of our time, and actively connects with the surrounding urban context
- Enhance natural systems and enable seamless integration with neighbourhoods through sensitive and sustainable planning and design

4.1.4 The Project's Principles

Just like any other professional research/project, there are principles derived from the studies that are expressly provided and tested for this case study. Usually, the practices and design proposals are take-ups for granted regarding meeting the project's goal. To fill the gap between research and design, we are putting forward the following principles for creating vibrant neighbourhoods in Edmonton. These principles will help us to evaluate each idea individually as well as the space design as a unit to understand to what extent they are aligned with the objectives and meet the criteria provided.

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- Diversity and Mix: Resilient neighbourhoods need to embrace diversity, a mix of uses, users, and public spaces. Single-use spaces can remain underutilized during different times of the day and week and year. The spaces should be inviting for all ages, races, class, and income of people, so the place is sufficiently dense and accessible for the use of a wide range of people.
- Engaged Community: Enhancing vibrancy of neighbourhoods requires the active participation of community members, at all scales. Residents and stakeholders must be able to engage and state their desires and needs through planning and designing their cities and their communities. They must also be part of delivering a new vision: by choosing to walk, by engaging each other, by generating awareness, and by demanding higher standards.⁴⁰
- Road User Balance: The more people get the chance to meet in public places, the more it tends to have a public life. A right balance between the road users can often be achieved by inviting people to walk, cycle, or take public transport instead of the car. This requires that enough space is given to pedestrians for movement and socialization; that they are not corralled and kettled but trusted to move and navigate freely; and, to enable this, that traffic is slowed sufficiently on roads leading into and through public spaces.⁴¹
- The Experience and Feel Power: It is incredibly important to understand and consider all user groups and their priority so that you can design public spaces that answers their needs. However, creating an experience is meeting the needs and going beyond that. There are lots of parks that facilitate walking. The point is to instil the desire to come back next time. People need to feel powerful and considered; it will make them more cautious and involved with space. Even the smallest input of them can

⁴⁰ "Urban Design Principles." ResilientCity. Accessed June 28, 2019. https://www.resilientcity.org/index.cfm?id=11928.

⁴¹ Carmona, Matthew. "Principles for Public Space Design, Planning to Do Better." *URBAN DESIGN International*24, no. 1 (2018): 47-59. doi:10.1057/s41289-018-0070-3.

- result in impressive output regarding their sense of satisfaction of themselves, their spaces, and life in the neighbourhood. People love to see that they've made an impact.
- Complete Communities: Neighbourhoods should provide the needs of residents, within walking distance (a 500m radius). 42 Connectivity is central to making an area pedestrian oriented. Streets and pedestrian walkways must be enjoyable to walk, link key destinations, and operate at a fine scale. Communities must also be compact and concentrate a critical mass of people and activities to support walking and to support animated and vibrant place-making. 43 For example, in addition to the walkability of this space, residents of the community can also benefit from the community gardens designed close to the old Strathcona Community. However, this does not mean that each neighbourhood should have a community garden; the provided activity should be in the allegiance of the assets of the user to complete the community. For instance, a neighbourhood with a dense young population may benefit from skateboarding places.
- Long Term Stays: The activity level will rise remarkably when pedestrians or people indoors are tempted to spend time in inviting comfortable public spaces. The extent of staying activities has the largest impact on the activity level in a public space.⁴⁴
- Embrace Winter Weather: Considering the duration of winter in Edmonton, it is crucially important to consider this fact in our city design. Some of these considerations are making the most of opportunities to stay outdoors by capturing the sun's warmth, providing protection from the wind, and making the city more accessible, safe, and enjoyable year-

⁴² Pasaogullari, N. "Measuring Accessibility and Utilization of Public Spaces in Famagusta." *Cities*21, no. 3 (2004): 225–32. https://doi.org/10.1016/s0264-2751(04)00029-0.

⁴³ "Urban Design Principles." ResilientCity. Accessed June 28, 2019. https://www.resilientcity.org/index.cfm?id=11928.

⁴⁴ Gehl. "Seattle – Public Space Public Life." Issuu. Accessed June 28, 2019. https://issuu.com/gehlarchitects/docs/565_seattle_pspl.

round.⁴⁵ Features that can help to embrace a winter city include but are not limited to: color, light, wind, sunshine, winter sport.

4.2 Lay out Design Ideas

Three alternatives are designed for the workshop with stakeholders to get their feedback on each of them. The iterations contain the same elements generally. However, the percentage of the land that each part occupies and their location within the property is different.

All the concepts follow the proposed principles; however, their execution is different. For example, Concept 2 facilitates the navigation in the land through an organic navigation path; whereas Concept 3 meets the same goal with curvy lanes.

4.3 Final Design

After reviewing the stakeholders' votes for the alternatives, and notes of the audio record of the session, I end up combining the working parts of each concept to create a new layout which addresses the issues proposed in the focus group workshop.

The second phase of iteration took place after implying the changes and developing the final design. Through interviews with stakeholders who attended the workshop as well as other professionals who had not seen the project before, I gathered secondary comments on the design for two reasons:

First to make sure the implied changes have addressed the stakeholder's concerns. Second to gather insights of people who see the design for the first time and collect their first impressions and thoughts on the plan.

Feedback received was studied and compared to the extracted principles, and if they follow the principles, they are considered to be implemented.

4.4 Features

According to the survey, six features of green spaces, sitting spots, gathering spaces, community farms, performing spaces, and playground are voted the most. (see fig. 15.) In

⁴⁵ The City of Edmonton, "Winter Design Guidelines, Transforming Edmonton into a Great Winter City", Accessed June 28, 2019. https://www.edmonton.ca/wintercity

the final design, the mentioned elements have been considered as a part or element of the proposed design with thoughts and touches of a designer.

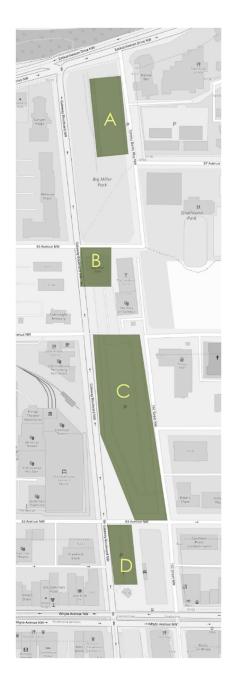
[WHAT DO PEOPLE WANT TO SEE ?]



Figure 15. Mostly demanded features for the area according to the survey responses.

4.4.1 Parking Lot

Almost two-thirds of the current land is devoted to parking. Parking A in fig. 15 is mainly responding to the residents and visitors of the locations around Saskatchewan Dr. Parking B in fig. 15 is used by the YardBird employees and visitors, due to ongoing events throughout the year this parking is used regularly. Parking C accommodates the highest number of cars. It is also a public parking lot with hourly rates; however, this parking is free on Saturdays from 9 am to 3 pm for the Farmer's Market visitors. For this reason, this spot is highly used on Saturdays for six hours; whereas the other days, the number of cars won't exceed the number of hand fingers. Parking D is mostly for people who are there to meet a person or place on Whyte Ave.



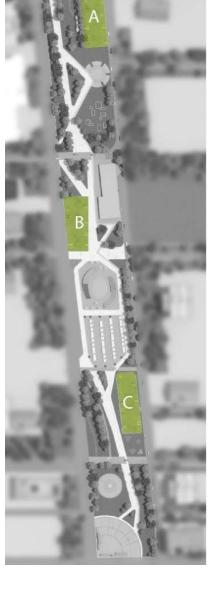


Figure 16 Current Parking Lots

Figure 17 Proposed Parking Lots

The proposed plan in fig. 16 contains three different parking lots each responding to a specific group of users. It is intended to make sure that there is enough number of lots to meet the minimum requirement of the neighbourhood while reducing the lots that are not necessary and can be replaced with more beneficiary spaces.

While parking A is kept in almost the same condition, parking B has a shift in place and has expanded to increase the number of available lots. This parking, which is considered as accessible parking, is one of two parking lots where Farmer's Market visitors can park. The location is designed as a multi-purpose area. In peak seasons of farmer's market and winters, it can be used as parking, while in summer and special occasions it can be a showcase for public art, art performances, and a venue for BirdYard.

Parking C in figure 16 is a lot closer to Whyte Ave to facilitate spots for park visitors, Farmer's market attendees, and a group of people who intend to visit Whyte Ave.



Figure 18 Overview Map of Proposed Design

4.4.2 Seating

According to the site observations, the number of seats required is one of the items that has been neglected in the current situation, while there is a high demand for this feature.

There are three types of seats in the final design; every kind of seat is for a particular purpose and addressing different needs. (See fig. 18)

Type A: These seats are propagated through the park. The idea of these seats is providing spots to seat in case people get tired of walking, or they like to take a moment and enjoy the view or have a chat with a friend.

Type B: Considering employees in the vicinity and families, having picnic tables where people can have their lunch in their break, or enjoy a snack while their children are playing is the goal.

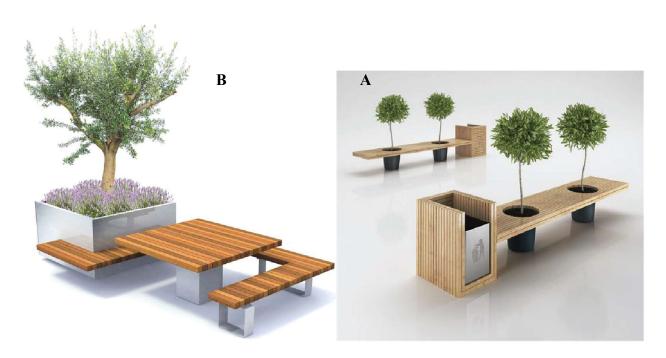


Figure 19 Types of seats used in the design. http://www.landezine.com/index.php/2018/03/solid-meetwork-system/http://www.designfetish.org/Ty

4.4.3 Performance Areas

As stated earlier, diversity and mix, engaged community, and long term stays are of the principles of creating vibrant cities as well as the proposed design solution for this case study. The proposed performance area is one of the spaces suggested

for the area to address this matter. This space is designed as a multi-purpose space. The central area can be used as a venue for street performers or a backup option for artists who perform in different festivals in the vicinity. The area is also a virtue for the community of old Strathcona; since they can hold part of their programs like yoga in this space. The benefit of this matter for the community would be that they will be introduced to a broader range of people and it expands the community members.



Figure 20 Performance area.

4.4.4 Community Garden

User group is one of the core elements that has been valued through the process of this project. So it is essential to make sure the proposed concept answers to the needs of them. Residents of the neighbourhood are a part of our targeted audience. Considering the location of neighbourhood community, a community garden is located toward the north side of the land. The community gardens are effective in creating an engaged community and experiences. (refer to section 4.1.4 for more details). According to the City of Edmonton community gardens promote local, organically grown food; healthy and active lifestyles; and safer, more vibrant and connected communities. Providing this facility will empower the community life of Strathcona and add to the vibrancy of the neighbourhood.



Figure 21 Community garden.

4.4.5 Outdoor Market

Outdoor markets are vendors for local community producers to sell their locally grown, hand-baked, handcrafted, as well as artisan work and local services, all in a fun social atmosphere. ⁴⁶ This outdoor market is a supplementary vendor for Farmer's Market which can be used in the summer days as an outdoor market, or it can be a place for food trucks especially during occasions such as Street Performance Festival, Fringe Festival, Ice on Whyte, Art Walk, and so on.

⁴⁶ Community Market | Wrangell Alaska - City of Wrangell, accessed March 19, 2019, https://www.wrangell.com/community/community-market-0



Figure 22 Outdoor market.

4.5 Engagement Elements

Sensual Experiences in an urban environment develops through emotional responses. These Experiences depend in large part upon the interaction of a subject with a context.⁴⁷ This Interaction involves physical activity as well as cultural mediation. Cities present complex contexts, filled with multiple publics of different values, interests, and futures.⁴⁸However, the vision has become the primary sense urban spaces accommodate perspectives and diagonal views are set to gratify a predetermined use of space reserving predetermined areas for some functions and isolating others.⁴⁹

Play in the city is highly justified, desirous and critical to a successful urban society...and Urban Play is tied to place, the context of the urban environment represented as an important integrated part of a city's culture and society.⁵⁰ Encouraging urban actors to engage with the strangeness of others⁵¹, can change the perspective of the user and turn

⁴⁷ C.J, Rawlinson & M. Guaralda, "Chaos and Creativity of Play: Designing Emotional Engagement in Public Spaces", *Proceedings of the 8th International Design and Emotion Conference*, (2016): 1-12

⁴⁸ Iveson. Publics and the City. Online Kindle. Accessed 14th May 2019 (2007)

⁴⁹ Theodore, D. Sense of the City: An Alternate Approach to Urbanism. 95. 2006

⁵⁰ C.J, Rawlinson & M. Guaralda, 1-12

⁵¹ Iveson. Publics and the City. Online Kindle. Accessed 14th May 2019 (2007)

them into cultural creators. This can add to the quality of life of users as well as the neighbourhood.

According to CABE⁵², truly public spaces should acknowledge four kinds of differences as follows: first is to accept people of different backgrounds, races, ages, classes, sexuality, and gender. Second is physical differences, and third is allowing for certain parts of the city to be used differently in various times of day, week, and year. Forth is the experiences we have of spaces.

The experimental and engaging elements designed for this space is meeting these four criteria. The Art by Walk (see fig. 22) is one of the aspects that is not restricted to a specific group of visitors. Any individual, no matter what their physical abilities, age, gender, and social class, can engage with this experimental activity. This activity is engaging the visual and sensory senses of the visitor.



Figure 23 Art by Walk engagement element.

Light Tunnel, Community Garden, and Rainbow Trail are other parts of the park that promote different senses. Not only these elements are beneficial for the people who take the time to get involved in the activity, but also these activities are useful for non-engager individuals as well, in a way that they've got something vibrant to look at, hear strange sounds and see various colors.

⁵² Cabe Space. What Are We Scared Of? The Value of Risk in Designing Public Space. London



Figure 24 Light tunnel.



Figure 25 Rainbow Trail.

Chapter 5

CONCLUSION

5.1 Study Limitation

Like any other qualitative research, there are several limitations to this study. First, although the number of participants is the sufficient quantity, I am concerned that the number of participants limits the generalizability of the findings. However, the goal in this study is generating design solutions which are specific and appropriate for this case study. Secondly, I acknowledge that since the majority of surveys are filled through online channels, it may include a majority of specific participants, for example seniors who are not comfortable with technology may have not been interested to participate as much as the younger generation.

Finally, the last design outcome is not provided to the public or all participants of survey to get their thoughts on the changes and to what extent they think it addressed their concerns.

5.2 Project Conclusion and Findings

The main objective of this research was to find ways to enhance vibrancy and inclusivity in neighbourhood scale and ensure that the provided spaces are responding to firstly residents needs and secondly the visitors.

As a result of this study, there are two main criteria to create lively neighbourhoods, first the design should address the needs and assets of its user group. This is the minimum requirement in order to have active neighbourhoods. There are sub-categories for this matter like walkability, safety, and variation of places which explained in principles section in further detail.

The second criteria that creates successful places is going beyond meeting the needs and taking risks.⁵³ Creating experiences in public spaces may include a level of risks, however considering what you might gain for the city or the neighbourhood worth those risks. Experiments that evoke different senses, groups of people and are usable in

⁵³ Cabe Space. What Are We Scared Of? The Value of Risk in Designing Public Space. London

different times of the day, week, and year, gives an opportunity for the public to create public spaces that suits their own. Politicians and city councillors can value my approach since it is expanding beyond park design and understanding the project's land and users in a better way.

In conclusion, what has been done for this project is a human-centered study that investigates current condition of site and compares it to the expectation of user groups to maximize the satisfaction of current users and increase the number of users.

5.3 Implications for Future Work

Considering our limitations, future studies may prove or challenge this research by expanding the number of participants and adding to the levels of iteration.

As the next steps for this study, I offer a public engagement session for a broad group of people that includes groups of people participated in the survey. The design proposal can be presented in this session to collect participant's thoughts, opinions about the potentials, and challenges of the design idea.

Next, a prototype of one of the elements can be made and installed in a location within the studied corridor. This experiment will help to study the residents and visitor's reaction and responses to the idea in real life.

REFERENCES

"Inclusive | Definition of Inclusive in English by Lexico Dictionaries." Lexico Dictionaries | English. Accessed June 28, 2019. https://www.lexico.com/en/definition/inclusive.

"Ineffective Utilization of Public Environment." Ineffective Utilization of Public Environment | World Problems & Global Issues | The Encyclopedia of World Problems. Accessed June 28, 2019. http://encyclopedia.uia.org/en/problem/133300.

"Making Cities for People." Gehl. Accessed March 28, 2019. https://gehlpeople.com/.

"Process." Dictionary.com. Accessed June 28, 2019. https://www.dictionary.com/browse/process.

"Strathcona Community." Strathcona Community | Edmonton Maps Heritage. Accessed June 28, 2019. http://www.edmontonmapsheritage.ca/location/strathcona-community/.

"Urban Design Principles." ResilientCity. Accessed June 28, 2019. https://www.resilientcity.org/index.cfm?id=11928.

"Global Public Space Toolkit: From Global Principles to Local Policies and Practice", UN Habitat, February 2016

Akkar, Z. Müge. 2005. "Questioning 'Inclusivity' of Public Spaces in Post-Industrial Cities: Alberta Register of Historic Places. Accessed June 28, 2019. https://hermis.alberta.ca/ARHP/Details.aspx?DeptID=1&ObjectID=4665-1350)S.

C.J, Rawlinson & M. Guaralda, "Chaos and Creativity of Play: Designing Emotional Engagement in Public Spaces", *Proceedings of the 8th International Design and Emotion Conference*, (2016): 1-12

Cabe Space. What Are We Scared Of? The Value of Risk in Designing Public Space. London Carmona, Matthew. "Principles for Public Space Design, Planning to Do Better." URBAN DESIGN International24, no. 1 (2018): 47-59. doi:10.1057/s41289-018-0070-3.

Certeau, Michel De., Luce Giard, and Tom Conley. *Culture in the Plural*. Minneapolis: University of Minnesota Press, 2001.

Community Market | Wrangell Alaska - City of Wrangell, accessed March 19, 2019, https://www.wrangell.com/community/community-market-0

Congress For The New Urbanism, "Principles For Inner City Neighbourhood Design". A Collaboration of The Congress for The New Urbanism and The U.S. Department of Housing and Urban Development, San Francisco.

Cruickshank, Leon, and Nina Trivedi. "When Your Toaster Is a Client, How Do You Design? Going Beyond Human Centred Design." *The Design Journal* 20, no. Sup1 (2017). doi:10.1080/14606925.2017.1352914.

Department of Environment, Transport and the Regions, Our Towns and Cities—The future: Delivering an urban renaissance. 2000 http://www.odpm.gov.uk

Edelson, Daniel C. "Design Research: What We Learn When We Engage in Design." *Journal of the Learning Sciences* 11, no. 1 (2002): 105-21. doi:10.1207/s15327809jls1101 4.

Edmonton's Green Network Context, "Breathe, Edmonton's Green Network Strategy", *The City of Edmonton*, July 2016.

Gehl. "Seattle – Public Space Public Life." Issuu. Accessed June 28, 2019. https://issuu.com/gehlarchitects/docs/565_seattle_pspl.

Gehl. "Seattle – Public Space Public Life." Issuu. Accessed June 28, 2019. https://issuu.com/gehlarchitects/docs/565_seattle_pspl.

Giacomin, Joseph. "What Is Human Centred Design?" *The Design Journal* 17, no. 4 (2014): 606-23. doi:10.2752/175630614x14056185480186.

Heller, Allison, and Toby Adams. "Creating Healthy Cities through Socially Sustainable Placemaking." *Australian Planner*46, no. 2, 2009: 18-21. doi:10.1080/07293682.2009.9995305.

Inclusion Through Access to Public Space. United Nations Educational, Scientific and Cultural Organization. Accessed June 28, 2019. http://www.unesco.org/new/en/social-and-human-sciences/themes/urban-development/migrants-inclusion-in-cities/good-practices/inclusion-through-access-to-public-space/.

ISO. Accessed June 28, 2019. https://www.iso.org/obp/ui/#iso:std:iso:9241:-210:ed-1:v1:en.

Iveson. Publics and the City. Online Kindle. Accessed 14th May 2019 (2007)

Marsh, Stephanie. *User Research: A Practical Guide to Designing Better Products and Services*. London: KoganPage, 2018.

Mitchell, Don. "People's Park Again: On the End and Ends of Public Space." *Environment and Planning A: Economy and Space*49, no. 3 (2016): 503-18. doi:10.1177/0308518x15611557.

Pasaogullari, N. "Measuring Accessibility and Utilization of Public Spaces in Famagusta." *Cities*21, no. 3 (2004): 225–32. https://doi.org/10.1016/s0264-2751(04)00029-0.

Ramachandran, Natarajan, Noshir A. Langrana, Louis I. Steinberg, and Vikram R. Jamalabad. "Initial Design Strategies for Iterative Design." *Research in Engineering Design*4, no. 3 (1992): 159-69. doi:10.1007/bf01607944.

Schuck, Amie & Dennis Rosenbuam, "Promoting Safe and Healthy Neighbourhoods: What Research Tells Us about Intervention." The Aspen Institute, 2006.

The Case of Haymarket Bus Station, Newcastle upon Tyne." *Orta Doğu Teknik Üniversitesi Mimarlık Fakültesi Dergisi* 22 (2): 1-24

The City of Edmonton, "Downtown Public Places Plan". Best Practices Research, 2018. The City of Edmonton, "Urban Design Framework", 2015.

The City of Edmonton, "Winter Design Guidelines, Transforming Edmonton into a Great Winter City", Accessed June 28, 2019. https://www.edmonton.ca/wintercity

Theodore, D. Sense of the City: An Alternate Approach to Urbanism. 95. 2006

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Appendix A: Ethics Application

10.01 Study Team: (co-investigators, supervising team, and other study team members) - People listed here cannot view or edit this application and do not receive email notifications.

Last First Organization Role/Area of Responsibility Phone Email

There are no items to display

1.5 Conflict of Interest		
1.0	* Are any of the investigators or their immediate family receiving any personal remuneration (including investigator payments and recruitment incentives but excluding trainee remuneration or graduate student stipends) from the funding of this study that is not accounted for in the study budget? Yes No	
2.0	* Do any of investigators or their immediate family have any proprietary interests in the product under study or the outcome of the research including patents, trademarks, copyrights, and licensing agreements? Yes No	
3.0	* Is there any compensation for this study that is affected by the study outcome? Yes No	
4.0	* Do any of the investigators or their immediate family have equity interest in the sponsoring company? (This does not include Mutual Funds) ○ Yes ■ No	
5.0	* Do any of the investigators or their immediate family receive payments of other sorts, from this sponsor (i.e. grants, compensation in the form of equipment or supplies, retainers for ongoing consultation and honoraria)? Or Yes No	
6.0	* Are any of the investigators or their immediate family, members of the sponsor's Board of Directors, Scientific Advisory Panel or comparable body? O Yes No	
7.0	* Do you have any other relationship, financial or non-financial, that, if not disclosed, could be construed as a conflict of interest? O Yes No	
	Please explain if the answer to any of the above questions is Yes:	

Important

If you answered YES to any of the questions above, you may be asked for more information.

1.6 Research Locations and Other Approvals

- 1.0 * List the locations of the proposed research, including recruitment activities. Provide name of institution, facility or organization, town, or province as applicable Edmonton
- * Indicate if the study will use or access facilities, programmes, resources, staff, students, specimens, patients or their records, at any of the sites affiliated with the following (select all that apply): Not applicable

List all health care research sites/locations:

- 3.0 Multi-Institution Review
 - * 3.1 Has this study already received approval from another REB?
 - O Yes No
- 4.0 If this application is closely linked to research previously approved by one of the University of Alberta REBs or has already received ethics approval from an external ethics review board(s), provide the study number, REB name or other identifying information. Attach any external REB application and approval letter in the Documentation Section – Other Documents.
- 2.1 Study Objectives and Design
 - 1.0 Provide planned start and end date of human participant research.

Start Date:

5/1/2019

End Date: 7/1/2019

2.0 * Provide a lay summary of your proposed research which would be understandable to general public

My proposed research seeks to propose new design solutions for public spaces that are not actively used during different times of the week and year. I intend to facilitate interviews, surveys and focus groups in order to determine the needs of individuals living in the studied area as well as people who go there to visit. Using this research in combination with additional secondary research, I will design a new layout of space to be replaced with the existing one. The case study for this research is a parking lot located on 104 street across the farmers market.

* Provide a full description of your research proposal outlining the following:

- Purpose
- Hypothesis
- Justification
- Objectives
- · Research Method/Procedures
- · Plan for Data Analysis

This project will focus on how to utilize the land in a way that it increases the vibrancy of the area. Preserving culture and history of the neighbourhood and creating the vibrancy and engagement of public with the area are primary goals of many urban design projects, and is necessary for the further improvement of city life quality. This proposal seeks to develop successful new design solutions for small scaled public spaces within these settings. Designing vibrant, inclusive, mixed-use, achievable public spaces for unused spaces in Edmonton provides opportunities to study the interaction between people and their environment.

Studies have been conducted on enhancing the quality of public life, and they are mostly studying the whole city or proposing general strategies. Gehl organization have conducted lots of research on people and their environment to "make cities for people," the approach of this study will be similar to the research done by this institute named "downtown Seattle, Public spaces, Public life." However, the mentioned project has large scale and contains a greater neighbourhood. This proposal will follow a similar approach on a smaller scale.

I will choose a specific location in the city of Edmonton (i.e., Parking lot across Strathcona Farmers Market) to design for which will provide me with a specific set of needs to address, and will allow me a site in which to test my design ideas. I will assist interviews with community leaders of the neighbourhood as well as surveys with the city dwellers to gain an understanding of what are the gaps in the surrounding available public spaces.

Different methods of research and design may be employed to understand the expectation of people and their needs. These methods will contain online surveys, interviews in the first phase and focus group sessions with stakeholders in second phase. The methods used in first phase will help to gather data on current situation of the neighbourhood and people responses to that. Also, interviews will provide additional data on how do public imagine the future of that neighbourhood. The focus group is chosen as the method in second phase because it facilitates cocreation; and we can benefit from the ideas of stakeholders rather than sticking to one designer's ideas.

The online surveys should generate between 100-200 responses. the survey will ask questions related to income, education, how often the visit the place, how they like the place, and how they imagine future of the place. I will interview 2 people, one from the farmers market community and the other from old Stratchona community. The focus group will have the same two people participated in the interview as well as my supervisor and a city planner.

I plan to use this data to assist with writing my thesis research in Utilizing public spaces to enhance vibrancy and inclusivity of neighbourhood. Additionally, this data will help to shape design ideas that I will be creating specifically for the Farmers market parking lot.

Date: Friday, June 21, 2019 2:44:37 PM

Print

1.1 Study Identification

All questions marked by a red asterisk * are required fields. However, because the mandatory fields have been kept to a minimum, answering only the required fields may not be sufficient for the REB to review your application.

Please answer all relevant questions that will reasonably help to describe your study or proposed research.

- 1.0 * Short Study Title (restricted to 250 characters): Utilizing public spaces to enhance vibrancy and inclusivity of neighbourhood
- 2.0 * Complete Study Title (can be exactly the same as short title):

Utilizing public spaces to enhance vibrancy and inclusivity of neighbourhood

- * Select the appropriate Research Ethics Board (Detailed descriptions are available at http://www.reo.ualberta.ca/Human-Research-Ethics/Research-Ethics-Boards.aspx): 3.0 Research Ethics Board 1
- 4.0 * Is the proposed research:

Unfunded

5.01 * Name of local Principal Investigator:

Elnaz Aliasl Mamaghani

6.0 * Type of research/study:

Graduate Student

7.0 Investigator's Supervisor (required for applications from undergraduate students, graduate students, post-doctoral fellows and medical residents to REBs 1 & 2. HREB does not accept applications from student PIs):

Timothy Antoniuk

8.01 Study Coordinators or Research Assistants: People listed here can edit this application and will receive all email notifications for the study:

> Name **Employer**

There are no items to display

9.01 Co-Investigators: People listed here can edit this application and will receive email notifications (Co-investigators who do not wish to receive email, should be added to the study email list team below instead of

> If your searched name does not come up when you type it in the box, the user does not have the Principal Investigator role in REMO. Click the following link for instructions on how to Request an Additional Role.

Employer

There are no items to display

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- 4.0 Describe procedures, treatment, or activities that are above or in addition to standard practices in this study area (eg. extra medical or health-related procedures, curriculum enhancements, extra follow-up, etc):
- 5.0 If the proposed research is above minimal risk and is not funded via a competitive peer review grant or industry-sponsored clinical trial, the REB will require evidence of scientific review. Provide information about the review process and its results if appropriate.
- 6.0 For clinical trials, describe any sub-studies associated with this Protocol.

2.2 Research Methods and Procedures

Some research methods prompt specific ethical issues. The methods listed below have additional questions associated with them in this application. If your research does not involve any of the methods listed below, ensure that your proposed research is adequately described in Section 2.1: Study Objectives and Design or attach documents in the Documentation Section if necessary.

1.0 * This study will involve the following(select all that apply) Interviews and/or Focus Groups Participant Observation Surveys and Questionnaires (including internet surveys)

NOTE 1: Select this ONLY if your application SOLELY involves a review of paper charts/electronic health records/administrative health data to answer the research question. If you are enrolling people into a study and need to collect data from their health records in addition to other interventions, then you SHOULD NOT select this box.

NOTE 2: Select this option if this research ONLY involves analysis of blood/tissue/specimens originally collected for another purpose but now being used to answer your research question. If you are enrolling people into the study to prospectively collect specimens to analyze you SHOULD NOT select this box.

2.5 Interview and/or Focus Groups

Will you conduct interviews, focus groups, or both? Provide detail. There will be interviews and focus groups. The interviews will be with the Strathcona community leaders and people associated with the farmers market, and generally who is in contact regularly with the location being studied.

Focus groups will take place with the stakeholders (city principle planners) and supervisor and leaders of the Farmers market and Strathcona community. This session will be for refinements on proposed design idea by the researcher.

2.0 How will participation take place (e.g. in-person, via phone, email, Skype)?

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The interviews will either take place in person or by the email. Surveys will be completed through email, in person, or online website.

3.0 How will the data be collected (e.g. audio recording, video recording, field notes)?

Since there are multiple methods in this research, there will be different ways of data collection.

The interviews will be collected as audio records. There will be observations and shadowing which will give the data in form of field notes. Also, data will be collected via online surveys/questionnaires. There will be audio recordings and notes for the focus group.

2.7 Participant Observation

1.0 Who will the observer be?

Elnaz Aliasl Mamaghani (Principal Investigator)

2.0 Who is being observed?

People who are engaged in a way with the studying land area by different stationary activities like, walking, standing, laying, playing, ...

3.0 Why are they being observed?

I will observe public life in the public space to understand how people move and use the space. This ethnographic method will help to record how and why people choose different locations to be, also will uncover use pattern among different user groups.

4.0 When and where will participants be observed (i.e. during class, during their workday)?

They will be observed on the site (parking lot across farmers market and neighborhood) and during the day.

5.0 Will others be present who are not being observed (i.e. non-participants)?

Yes O No

Provide details:

The location being studied is a public place, and open to all the citizens. There will be lots of people at the same time in the same place, however not necessarily all the people will be observed.

6.0 What data will be collected?

Photographs Field notes

2.9 Surveys and Questionnaires (including Online)

1.0 How will the survey/questionnaire data be collected (i.e. collected in person, or if collected online, what survey program/software will be used etc.)?

The data will be collected via an online survey tool, Survey Monkey.

2.0 Where will the data be stored once it's collected (i.e. will it be stored on the survey software provider servers, will it be downloaded to the

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PI's computer, other)?

The data will be downloaded to the principle investigator's computer

3.0 Who will have access to the data?

only principle investigator will have access to data

3.1 Risk Assessment

1.0 * Provide your assessment of the risks that may be associated with this research:

Minimal Risk - research in which the probability and magnitude of possible harms implied by participation is no greater than those encountered by participants in those aspects of their everyday life that relate to the research (TCPS2)

2.0 * Select all that might apply:

Description of Possible Physical Risks and Discomforts

- No Participants might feel physical fatigue, e.g. sleep deprivation
- No Participants might feel physical stress, e.g. cardiovascular stress tests
- No Participants might sustain injury, infection, and intervention side-effects or complications
- No The physical risks will be greater than those encountered by the participants in everyday life

Possible Psychological, Emotional, Social and Other Risks and Discomforts

- Participants might feel psychologically or emotionally stressed, demeaned, No embarrassed, worried, anxious, scared or distressed, e.g. description of painful or traumatic events
- No Participants might feel psychological or mental fatigue, e.g intense concentration required
- No Participants might experience cultural or social risk, e.g. loss of privacy or status or damage to reputation
- No Participants might be exposed to economic or legal risk, for instance non-anonymized workplace surveys
- No The risks will be greater than those encountered by the participants in everyday life

* Provide details of all the risks and discomforts associated with the research for which you indicated YES or POSSIBLY above. N/A

4.0 * Describe how you will manage and minimize risks and discomforts, as well as mitigate harm: N/A

5.0 Is there a possibility that your research procedures will lead to unexpected findings, adverse reactions, or similar results that may

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Print: Pro00086272 - Utilizing public spaces to enhance vibrancy and inclusivity of neighbourhood require follow-up (i.e. individuals disclose that they are upset or distressed during an interview/questionnaire, unanticipated findings on MRI, etc.)? O Yes No 6.0 If you are using any tests in this study diagnostically, indicate the member(s) of the study team who will administer the measures/instruments: Organization Administrator's Qualification Test Test Name Administrator There are no items to display 7.0 If any research related procedures/tests could be interpreted diagnostically, will these be reported back to the participants and if so, how and by whom? 3.2 Benefits Analysis * Describe any potential benefits of the proposed research to the 1.0 participants. If there are no benefits, state this explicitly: There would be no immediate benefit for participants. 2.0 * Describe the scientific and/or scholarly benefits of the proposed research: The proposed research will contribute to the body of research that exists regarding public life in the small-scale public spaces. Specific needs and criteria will be identified, which is necessary for the successful development of vibrant cities. A greater understanding of people's expectation for inclusive public spaces will be achieved. 3.0 If this research involves risk to participants explain how the benefits outweigh the risks. 4.1 Participant Information * Will you be recruiting human participants (i.e. enrolling people into 1.0 the study, sending people online surveys to complete)? Yes No 1.1 Will participants be recruited or their data be collected from Alberta Health Services or Covenant Health or data custodian as defined in the Alberta Health Information Act? O Yes No

1.0 Describe the participants that will be included in this study. Outline ALL participants (i.e. if you are enrolling healthy controls as well):

4.2 Additional Participant Information

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I will be consulting with participants who have lived in the area, visitors, or worked in any organization related to the Strathcona area.

2.0 * Describe and justify the inclusion criteria for participants (e.g. age range, health status, gender, etc.):

Participants will be 18 and more, of any race and any gender. Age 18 is the minimum age because I would like to gain perspective from individuals who can realize their needs realistically and precisely.

3.0 Describe and justify the exclusion criteria for participants:

4.0 Participants

- **4.1 How many participants do you hope to recruit** (including controls, if applicable?) 500
- **4.2** Of these, how many are controls, if applicable? n/a
- 4.3 If this is a multi-site study, how many participants do you anticipate will be enrolled in the entire study?

5.0 Justification for sample size:

This is the typical number of responses that The Quad (the U of A's official faculty and staff blog) receives when they send out surveys through their student newsletter

4.4 Recruitment of Participants (non-Health)

1.0 Recruitment

1.1 How will you identify potential participants? Outline all of the means you will use to identify who may be eligible to be in the study (i.e. response to advertising such as flyers, posters, ads in newspapers, websites, email, list serves, community organization referrals, etc.) Participants will be invited to complete a survey via The Quad (the U of A's official faculty and staff blog) website. This survey is accessible for everybody.

The focus group will be held with the project's stakeholder. Individuals working in the city, farmers market and Strathcona community League as well as my Supervisor.

1.2 Once you have identified a list of potentially eligible participants, indicate how the potential participants' names will be passed on to the researchers AND how will the potential participants be approached about the research.

The surveys are distributed as a link on The Quad website. Individuals can choose to participate by clicking the link and filling out the survey or not. There is no list of potential participants name for the researcher to choose from.

2.0 Pre-Existing Relationships

2.1 Will potential participants be recruited through pre-existing relationships with researchers (e.g. Will an instructor recruit students from his classes, or a physician recruit patients from her practice? Other examples may be employees, acquaintances, own children or family

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members, etc.)?

Yes No

3.0 Will your study involve any of the following? (select all that apply)
Reimbursement for any expenses incurred by the participants, e.g. parking costs, child care, lost wages, etc

4.5 Informed Consent Determination

- 1.0 Describe who will provide informed consent for this study(i.e. the participant, parent of child participant, substitute decision maker, no one will give consent requesting a waiver)
 The participant
 - 1.1 Waiver of Consent Requested If you are asking for a waiver of participant consent, please justify the waiver or alteration and explain how the study meets all of the criteria for the waiver. Refer to Article 3.7 of TCPS2 and provide justification for requesting a Waiver of Consent for ALL criteria (a-e)
 - 1.2 Waiver of Consent in Individual Medical Emergency If you are asking for a waiver or alteration of participant consent in individual medical emergencies, please justify the waiver or alteration and explain how the study meets ALL of the criteria outlined in Article 3.8 of TCPS2 (a-f).
- 2.0 How will consent be obtained/documented? Select all that apply Signed consent form Implied by overt action (i.e. completion of questionnaire)

If you are not using a signed consent form, explain how the study information will be provided to the participant and how consent will be obtained/documented. Provide details for EACH of the options selected above:

The survey is not mandatory. Participants have the option to participate in the questionnaire or not. The consent is implied by filling out the survey. There is a consent form to be signed for the participants of focus group

3.0 Will every participant have the capacity to give fully informed consent on his/her own behalf?

Yes O No

- 4.0 What assistance will be provided to participants or those consenting on their behalf, who may require additional assistance? (e.g. non-English speakers, visually impaired, etc.)
 If someone reaches out stating that they want to participate but need assistance, we will provide whatever assistance is needed.
- 5.0 * If at any time a PARTICIPANT wishes to withdraw from the study or from certain parts of the study, describe when and how this can be done.

Participants may withdraw at any time without consequence in any of the

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sessions including focus groups, interviews and surveys., but due to the nature of focus group it is not possible to withdraw data once the session has begun.

6.0 Describe the circumstances and limitations of DATA withdrawal from the study, including the last point at which participant DATA can be withdrawn (i.e. 2 weeks after transcription of interview notes)

Due to the nature of a focus group, it is not possible to withdraw data once the session has begun.

And due to the nature of surveys which are anonymous it is not possible to withdraw data once they have completed the survey. For the interviews, Data can be withdrawn up to 2 weeks after the interview session. This can be done through email request. Survey data can not be withdrawn as it is anonymous

7.0 Will this study involve any group(s) where non-participants are present? For example, classroom research might involve groups which include participants and non-participants.

_		122	
	Van		NI-
. ,	Yes		No

4.6 Expense Reimbursements and Incentives

1.0 Expense Reimbursements:

- 1.1 Describe in detail the expenses for which participants will be reimbursed, the value of the reimbursements per item as well as the total maximum reimbursement and the reimbursement process (e.g. participants will receive a cash reimbursement for parking at the rate of \$12.00 per visit for up to three visits for a total value of \$36.00) the participants will receive a cash reimbursement for parking at the rate of 12.00\$ per visit for up to three visits for a total value of 36.00\$
- 1.2 IF you will be collecting personal information to reimburse or pay participants, describe the information to be collected and how privacy will be maintained.
- 2.0 Incentives:
 - 2.1 Will participants receive any incentives for participating in this research (i.e. gift card, cash payment, prize draw)? If yes, provide details of the value, including the likelihood (odds) of winning for prize draws and lotteries.

https://www.ualberta.ca/research/support/ethics-office/human-research-ethics/use-of-incentives-in-research

- 2.2 What is the maximum value of the incentives offered to an individual throughout the research?
- 2.3 IF incentives are offered to participants, they should not be so large or attractive as to constitute coercion. Justify the value of the incentives you are offering relative to your study population.

5.1 Data Collection

1.0 * Will the researcher or study team be able to identify any of the participants at any stage of the study?

Yes O No

Primary/raw data collected will be (check all that apply): 2.0

Anonymous - the information NEVER had identifiers associated with it (eg anonymous surveys) and risk of identification of individuals is low or very low

Directly identifying information - the information identifies a specific individual through direct identifiers (e.g. name, social insurance number, personal health number, etc.)

Indirectly identifying information - the information can reasonably be expected to identify an individual through a combination of indirect identifers (eg date of birth, place of residence, photo or unique personal characteristics, etc)

- 3.0 If this study involves secondary use of data, list all original sources: Data collected from public by the city of Edmonton for the Plan Whyte Project will be used. The study is called "Whyte avenue commercial area, Land Use Study"
- In research where total anonymity and confidentiality is sought but 4.0 cannot be guaranteed (eg. where participants talk in a group) how will confidentiality be achieved?

5.2 Data Identifiers

1.0 * Personal Identifiers: will you be collecting - at any time during the study, including recruitment - any of the following (check all that apply): Surname and First Name **Email Address** Full Face Photograph or Other Recording

Age at time of data collection

- 2.0 Will you be collecting - at any time of the study, including recruitment of participants - any of the following (check all that apply):
 - There are no items to display
- * If you are collecting any of the above, provide a comprehensive 3.0 rationale to explain why it is necessary to collect this information:

Photographs of people may be collected during the site observation and shadowing. However faces will be blurred in a way that their identity is noticeable.

Name and email addresses is only needed for focus group members for contacting and arranging the meetings.

Age is asked at the time of filling out the surveys, in order to categorize the responses.

4.0 If identifying information will be removed at some point, when and how will this be done?

comments made in focus group will be written down, but not attributed to any particular participant. This will allow for the anonymity for the

https://remo.ualberta.ca/REMO/sd/ResourceAdministration/Project/PrintSmartForms?Project=com.webridge.entity.Entity%5BOID%5BB4D9108D2A9AF34A9E5... 12/16

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participants without having to use pseudonyms. All the personal information will be destroyed after 5 years. until that time the information will be kept

* Specify what <u>identifiable</u> information will be RETAINED once data collection is complete, and explain why retention is necessary. Include the retention of master lists that link participant identifiers with de-identified data:

Photographs will be the only identifiable information retained. Retention is necessary to understand how the space is used. I will not retain any other personal information. Digital files (including notes and photographs) will be kept on an encrypted external hard drive. Hard copies will be locked in a filing cabinet in my office at the University. After 5 years they will be destroyed

6.0 If applicable, describe your plans to link the data in this study with data associated with other studies (e.g within a data repository) or with data belonging to another organization:

5.3 Data Confidentiality and Privacy

* How will confidentiality of the data be maintained? Describe how the identity of participants will be protected both during and after research.

Photographs will not be shown with any other associated identity information(name, etc)Any identifying marks as well as the faces will be blurred in the photographs.

We will not collect any identifying information in online surveys. A pseudonym will be used to protect participants identity, unless they specifically request that they be identified by their true name. If results of this study are published or presented, individual names and other personally identifiable information will not be used unless they give explicit permission for this.

2.0 How will the principal investigator ensure that all study personnel are aware of their responsibilities concerning participants' privacy and the confidentiality of their information?

There is no study personnel

There is no study personi

3.0

External Data Access

* 3.1 Will identifiable data be transferred or made available to persons or agencies outside the research team?



5.4 Data Storage, Retention, and Disposal

* Describe how research data will be stored, e.g. digital files, hard copies, audio recordings, other. Specify the physical location and how it will be secured to protect confidentiality and privacy. (For example, study documents must be kept in a locked filing cabinet and computer files are encrypted, etc. Write N/A if not applicable to your research)

Digital files including (notes, photographs, audio recordings) will be kept

https://remo.ualberta.ca/REMO/sd/ResourceAdministration/Project/PrintSmartForms?Project=com.webridge.entity.Entity%5BOID%5BB4D9108D2A9AF34A9E5... 13/16

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on an encrypted external hard drive. Hard copies will be locked in a filing cabinet in my office at the University.

* University policy requires that you keep your data for a minimum of 5 years following completion of the study but there is no limit on data retention. Specify any plans for future use of the data. If the data will become part of a data repository or if this study involves the creation of a research database or registry for future research use, please provide details. (Write N/A if not applicable to your research)

There is no future use planned for data.

3.0

If you plan to destroy your data, describe when and how this will be done? Indicate your plans for the destruction of the identifiers at the earliest opportunity consistent with the conduct of the research and/or clinical needs:

I will retain digital files on an encrypted hard drive and hard copies in a locked filing cabinet at my place of residence following the completion of my studies at the University. After 5 years following the completion of my study, I will erase all digital data from hard drive, and shred all hard copies using a paper shredder in order to destroy the data

Documentation

Add documents in this section according to the headers. Use Item 11.0 "Other Documents" for any material not specifically mentioned below.

Sample templates are available in the REMO Home Page in the **Forms and Templates**, or by clicking HERE.

1.0 Recruitment Materials:

Document Name Version Date Description

There are no items to display

2.0 Letter of Initial Contact:

Document Name Version Date Description

There are no items to display

3.0

Informed Consent / Information Document(s):

- 3.1 What is the reading level of the Informed Consent Form(s):
- 3.2 Informed Consent Form(s)/Information Document(s):

	Document Name	Versio	n Date	Description
Ð	focus group Consent Form -	0.03	2/11/2019 9:41 AM	
Ð	online survey Consent Form	0.03	2/11/2019 9:39 AM	
Ð	interview-consent form	0.02	2/11/2019 9:44 AM	

https://remo.ualberta.ca/REMO/sd/ResourceAdministration/Project/PrintSmartForms?Project=com.webridge.entity.Entity%5B0ID%5B84D9108D2A9AF34A9E5... 14/16

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4.0 Assent Forms:

	Document Name	Version	Date	Description
E.	ignore	0.04	2/11/2019 9:44 AM	

5.0 Questionnaires, Cover Letters, Surveys, Tests, Interview Scripts, etc.:

	Document Name	Versi	on Date	Description
Ð	Focus group Questionnaire.pdf	0.01	12/14/2018 10:24 AM	
Ð	Questionnaire.pdf	0.01	12/14/2018 10:25 AM	
Ð	interview questions.pdf	0.01	2/4/2019 3:40 PM	

6.0 Protocol/Research Proposal:

Document Name Version Date Description
There are no items to display

7.0 Investigator Brochures/Product Monographs:

Document Name Version Date Description
There are no items to display

8.0 Health Canada No Objection Letter (NOL):

Document Name Version Date Description

There are no items to display

9.0 Confidentiality Agreement:

Document Name Version Date Description

There are no items to display

10.0 Conflict of Interest:

Document Name Version Date Description

There are no items to display

11.0 Other Documents:

For example, Study Budget, Course Outline, or other documents not mentioned above

Document Name Version Date Description

There are no items to display

Final Page

You have completed your ethics application! Click "Continue" to go to your study workspace.

This action will NOT SUBMIT the application for review.

https://remo.ualberta.ca/REMO/sd/ResourceAdministration/Project/PrintSmartForms?Project=com.webridge.entity.Entity%5BOID%5BB4D9108D2A9AF34A9E5... 15/16

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6/21/2019

Only the Study Investigator can submit an application to the REB by selecting the "SUBMIT STUDY" button in My Activities for this Study ID:Pro00086272.

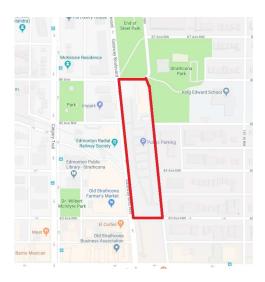
 $https://remo.ualberta.ca/REMO/sd/ResourceAdministration/Project/PrintSmartForms?Project=com.webridge.entity.Entity\%5BOID\%5BB4D9108D2A9AF34A9E5... \\ 16/16$



Appendix B: Questionnaires

Utilizing Parking Lot Across Strathcona Farmer's Market

- 1. How often do you visit this area?
 - a. Daily
 - b. Weekly
 - c. Every few months
 - d. Rarely
- 2. How much time do you typically spend here?
 - a. walk through
 - b. 5 min.
 - c. 10 min.
 - d. 15 min.
 - e. 30min.
 - f. 1 hour or more
- 3. How do you use this place?
 - a. Just passing through
 - b. Work nearby
 - c. Public transit
 - d. Meeting up with friends
 - e. Hanging out
 - f. Other
- 4. How do you feel about this neighbourhood?
 - a. Strongly Negative
 - b. Somewhat Negative/Unpleasant
 - c. Neutral
 - d. Somewhat Positive/Pleasant
 - e. Strongly Positive



- 5. How do you get there? (check all that apply)
 - a. Walk
 - b. Bike
 - c. Bus
 - d. Private Car
 - e. Taxi/Rideshare
 - f. Other
- 6. Do you use the parking space during the weekdays?
 - a. No
 - b. Yes, Once in a month or less
 - c. Yes, Couple times in a week
 - d. Yes, Every day
- 7. How much of the land should be devoted for public parking?
 - a. 100%
 - b. 75%
 - c. 50%
 - d. 25%
 - e. less than 10%

- 8. What do you want to have in the green area?(choose as many you want)
 - a. Community farms
 - b. playground
 - c. gathering spaces
 - d. green spaces
 - e. sitting spots
 - f. Performing spaces
 - g. Cafe
 - h. shops
 - i. Other (please specify)......
- Please value each of the following features on a scale of 1(least) to 5 (most)
 - a. Safe and Inclusive
 - b. Accessible and Connected
 - c. Vibrant and Liveable
 - d. Sense of Community
- 10. Which of the nearby facilities/locations do you visit more often?
- 11. With whom do you visit this neighbourhood usually?
 - a. Alone
 - b. Friends
 - c. With partner
 - d. Family with children
 - e. Other...

- 12. Do you identify as?
 - a. Female
 - b. Male
 - c. Other
- 13. What is your age?
 - a. 15-19
 - b. 20-30
 - c. 31-40
 - d. 41-64
 - e. 65+
- 14. What is the highest level of education you have completed?
 - a. Some high school or less than 9th grade
 - b. Completed high school
 - c. Some college, no degree
 - d. Bachelor's or Associate's degree
 - e. Graduate or Professional degree
- 15. What is the combined annual income of all working adults in your household?
 - a. less than 15 K
 - b. \$15-25 K
 - c. \$25-50 K
 - d. \$50-75 K
 - e. \$75-100K
 - f. more than 100

Appendix C: Consent Forms



UNIVERSITY OF ALBERTA

CONSENT FORM FOR RESEARCH PARTICIPATION

Study Title: Utilizing public spaces to enhance vibrancy and inclusivity

Researcher Information

Elnaz Aliasl
Department of Industrial Design
University of Alberta
Edmonton, Alberta
aliaslma@ualberta.ca
780 807 8075

Supervisor
Tim Antoniuk
Department of Industrial Design
University of Alberta
Edmonton, Alberta
tna@ualberta.ca
780 983 9844

I am a graduate student at the University of Alberta, in the Department of Art & Design. I am planning to conduct a research study, which I invite you to take part in. This form has important information about the reason for doing this study, what we will ask you to do if you decide to be in this study, and the way we would like to use information about you if you choose to be in the study.

You are being asked to participate in a research study about utilizing public spaces in a way that they create vibrant and inclusive neighbourhoods.

The purpose of the study is to create a mixed use public space which is welcoming for all groups of people. This research will help us to gather information on what are the suitable design methods for public space design. Also it will create guidelines on how to have inclusive public spaces that are welcoming for different groups of people like: people with disabilities, indigenous people, newcomers,

What will I do if I choose to be in this study?

You will be asked to share your ideas and give feedback about the initial design ideas.

- in focus group session I will introduce my initial idea and ask the participants to give their feedback
- there will be different methods through which you can express and be exposed to the ideas
- You may be asked to communicate your idea either by description, writing or other visualizing methods

Study time: Study participation will take approximately 1 hour, on Fri May 17, 2019 12pm - 1pm **Study location:** All study procedures will take place in Boardroom Councillors Office, Office of the Councillors, 2nd floor, City Hall

I would like to audio-record the focus group session to make sure that I remember accurately all the information you provide. I will keep the records on a hard drive in my office and they will only be used by the principal investigator, elnaz aliasl mamaghani. If you prefer not to be audio-recorded, I will take notes instead.

I may quote your remarks in presentations or articles resulting from this work. A pseudonym will be used to protect your identity, unless you specifically request that you be identified by your true name.

Your participation in this study does not involve any physical or emotional risk to you beyond that of everyday life.

As with all research, there is a chance that confidentiality of the information we collect from you could be breached – we will take steps to minimize this risk, as discussed in more detail below in this form.

What are the possible benefits for me or others?

There may be no direct benefits to participants in this study, but we may learn new things that will help others.

How will you protect the information you collect about me, and how will that information be shared? Results of this study may be used in publications and presentations. Your study data will be handled as confidentially as possible. If the results of this study are published or presented, individual names and other personally identifiable information will not be used unless you give explicit permission for this below.

We may share the data we collect from you for use in future research studies or with other researchers – if we share the data that we collect about you, we will remove any information that could identify you before we share it

If we think that you intend to harm yourself or others, we will notify the appropriate people with this information.

Data Retention

We will retain digital files on an encrypted hard drive and hard copies in a locked filing cabinet at my place of residence following the completion of my studies at the university. After 5 years following the completion of my study, I will erase all digital data from the hard drive, and shred all hard copies using a paper shredder in order to destroy data.

Financial Information

Participation in this study will involve no cost to you. You will not be paid for participating in this study. However the parking in the University of Alberta will be provided.

What are my rights as a research participant?

Participation in this study is voluntary. You do not have to answer any questions you do not want to answer. If you prefer not to participate in this study, please feel free to inform us before the start of the focus group, after the participation in session it is not possible to withdraw. If at any time you would like to stop participating, please tell me. We can take a break, stop and continue at a later date, or stop altogether.

Who can I contact if I have questions or concerns about this research study?

If you have questions, you are free to ask them now. If you have questions later, you may contact the researchers by email (aliaslma@ualberta.ca) or phone (780 807 8075), Elnaz Aliasl Mamaghani.

The plan for this study has been reviewed for its adherence to ethical guidelines by a REsearch Ethics Board at the University of Alberta. For questions regarding participant rights and ethical conduct research, contact the Research Ethics Office at (780) 492-2615.

Consent

I have read this form and the research study has been explained to me. I have been given the opportunity to ask questions and my questions have been answered. If I have additional questions, I have been told whom to contact. I agree to participate in the research study described above and will receive a copy of this consent form.

Participant's Name (printed)	
Participant's Signature	Date



UNIVERSITY OF ALBERTA
CONSENT FORM FOR INTERVIEW

Study Title: Utilizing public spaces to enhance vibrancy and inclusivity

Researcher Information

Elnaz Aliasl
Department of Industrial Design
University of Alberta
Edmonton, Alberta
aliaslma@ualberta.ca
780 807 8075

Supervisor
Tim Antoniuk
Department of Industrial Design
University of Alberta
Edmonton, Alberta
tna@ualberta.ca
780 983 9844

I am a graduate student at the University of Alberta, in the Department of Industrial Design. I am planning to conduct a research study, which I invite you to take part in. This form has important information about the reason for doing this study, what we will ask you to do if you decide to be in this study, and the way we would like to use information about you if you choose to be in the study.

You are being asked to participate in a research study about utilizing public spaces in a way that they create vibrant and inclusive neighbourhoods.

The purpose of the study is to create a mixed use public space which is welcoming for all groups of people. this research will help us to gather information on what are the suitable design methods for public space design. Also it will create guidelines on how to have inclusive public spaces that are welcoming for different groups of people like: people with disabilities, indigenous people, newcomers,

What will I do if I choose to be in this study?

You will be asked to share your thoughts and comments on the initial design idea.

• in the interview session I will introduce my project and ask the interviewees to give their feedback

Study time: Study participation will take approximately half an hour

Study location: All study procedures will take place in industrial design department. if different procedures will take place at different locations, participants will be informed in advance. I would like to audio-record the interview session to make sure that I remember accurately all the information you provide. I will keep the records on a hard drive in my office and they will only be used

by the principal investigator, elnaz aliasl mamaghani. If you prefer not to be audio-recorded, I will take notes instead.

I may quote your remarks in presentations or articles resulting from this work. A pseudonym will be used to protect your identity, unless you specifically request that you be identified by your true name.

Your participation in this study does not involve any physical or emotional risk to you beyond that of everyday life.

As with all research, there is a chance that confidentiality of the information we collect from you could be breached – we will take steps to minimize this risk, as discussed in more detail below in this form.

What are the possible benefits for me or others?

There may be no direct benefits to participants in this study, but we may learn new things that will help others.

How will you protect the information you collect about me, and how will that information be shared? Results of this study may be used in publications and presentations. Your study data will be handled as confidentially as possible. If the results of this study are published or presented, individual names and other personally identifiable information will not be used unless you give explicit permission for this below.

We may share the data we collect from you for use in future research studies or with other researchers – if we share the data that we collect about you, we will remove any information that could identify you before we share it

If we think that you intend to harm yourself or others, we will notify the appropriate people with this information.

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I have read this form and the research study has been explained to me. I have been given the opportunity to ask questions and my questions have been answered. If I have additional questions, I have been told whom to contact. I agree to participate in the research study described above and will receive a copy of this consent form.

Participant's Name (printed)	
Participant's Signature	Date