Co-Existing:

Exploring Commercial Laneways in Downtown Toronto
as a Network for Public Spaces

by
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A thesis
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thesis requirement for the degree of
Master of Architecture

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

This thesis explores the opportunities that commercial laneways offer for integrating new public spaces into Downtown Toronto, in order to increase the amount of public space in the city core and improve social interaction and community engagement. Public spaces are crucial elements of a city that contribute to the overall civic culture and create a better urban environment for people. Their main role is to support public life by providing a physical space outside of home or work for social interaction. Downtown Toronto is becoming increasingly saturated with high-density developments such as tall condominium and office towers, built to accommodate the influx of new residents, yet the city has neglected to adequately develop the network of public spaces. With a current lack of public space in Downtown Toronto, where can these necessary spaces be found within a city whose population density continues to increase, causing a shortage of available land in the downtown core?

There are currently around 750 public laneways in Downtown Toronto, with mixed-use and commercial laneways being the primary typologies in the city centre. Laneways serve important functions in the city; supporting services including garbage collection, loading, deliveries and parking for adjacent buildings. As these services only occur once a day or once a week, the laneways are neglected and unused for the majority of time but could be revitalized to provide more value for the city. In the downtown core, laneways can often be found clustered together, within each adjacent block, offering the opportunity to create a network of public spaces. By improving the spatial organization and efficiency of the existing laneways, they could become shared spaces that support both city services and new public spaces.

In a dense urban fabric like that of Downtown Toronto, the integration of public spaces must become a top priority, as they play a vital role in creating a more livable and humane city.

Acknowledgments

The individuals mentioned below have all been very impactful throughout the last year and in the development of this thesis.

Firstly, I want to thank my thesis supervisor Rick Andrighetti. His guidance and never-ending support made this past year enjoyable and relatively stress-free. He was always enthusiastic and encouraging regarding my work, which kept me motivated and excited, even throughout the pandemic. His approach was clear and concise as he helped lead me through the thesis process. I thoroughly enjoyed our bi-weekly meetings and am very grateful to have had a supportive and inspiring supervisor such as Rick.

As my Studio TRD1 professor, Marie-Paule MacDonald helped me immensely throughout the beginning stages of thesis development. Her support and encouragement was greatly appreciated as a master's student last fall; trying to navigate a new chapter in my life. In the first few months, she provided the guidance to explore thesis topics, and eventually helped me narrow down into this specific topic. She is open and understanding; willing to help work through problems or questions at any point in time.

Thank you to my parents, for creating a supportive and encouraging environment at home. I am grateful that home was always a place where I could go when school got stressful or challenging. Throughout my life, you have been role models; personally, academically and professionally. I attribute my ability to work hard, my determination, my curiosity and my creativity to you both.

Marie and John, thank you for being supportive this past year, even through the tough times that 2020 brought.

Antonia, my best friend since first year of undergrad and my ultimate cheerleader. Your positive attitude, enthusiasm and encouragement made a significant impact on my life the past 7 years. Whether we are discussing school or debating Greece vs Bulgaria, we have never had a dull moment together. There is no one else I would have rather shared my entire Waterloo Architecture experience with.

And finally, Pat. Thank you for being my rock for the past 9 years. You have always encouraged me when I felt down, pushed and challenged me when I knew I could do better, listened to me when I ranted, but most importantly, always made me laugh. Although you were not in architecture, you had a major influence on my experience. I'm not sure how, but after all this time, you somehow came out knowing more architectural precedents than I do.

Table of Contents

List of Figures

Unless otherwise noted, all illustrations/figures are by the author.

01 PREFACE

02 RESEARCH

03 METHODOLOGY

04 DESIGN

05 CONCLUSION

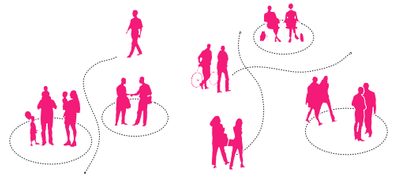
PREFACE

Thesis Question

What if the city does not provide public space to support public life? How can public space be integrated?

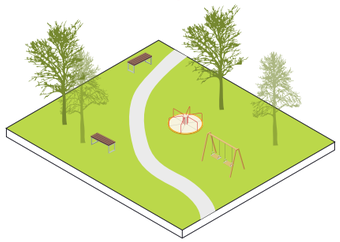
People/Community

Social Interaction



Public Life

Everyday life, activity and culture of a city outside of home or work



Public Space

The physical space that supports public life in the city, free and accessible to all

The City

The built environment

Fig. 1 - How Cities Support Communities and Social Interaction, diagram

Objectives

01

Explore the potential for integrating a network of public spaces within a site in Downtown Toronto

02

Ensure the design approach and elements of this thesis can be applied to any site or location in the city

03

Be legible and accessible to everyone, beyond the realm of academic architecture or urban design

There are three primary objectives that drove this thesis from beginning to end. The first being to explore the integration of a network of public spaces within a specific site in Downtown Toronto. This will be done through a methodological process; starting at the city scale, then selecting and analyzing a neighbourhood, and finally, narrowing down on a specific site at a more detailed scale for the future design process. The final product of this thesis will be a design intervention which will incorporate all my research and studies into a vibrant and innovative project.

The second objective of this thesis is to ensure that the main design elements and approaches of this project could be used or applied to other sites within the city. The lack of public space is an issue that Downtown Toronto faces generally, therefore the idea is that this thesis and its elements could be used as a precedent for other sites. The overall approach of finding opportunities to implement public spaces into an existing and dense urban fabric could be applied to other locations in Downtown Toronto, and, the design elements should be simple enough that they could also be used elsewhere. There will be some aspects of this design intervention that will be site specific, but the overall approach should be adaptable.

Lastly, the third objective focuses on inclusivity and accessibility. This thesis should be legible to everyone, beyond people who work or study in the fields of architecture and urban design. The writing, drawings and concept of this project should be clear and concise for the public to understand. This could create opportunities for residents to start their own community initiatives inspired by this thesis, perhaps on a smaller scale. This thesis must be accessible and open to all to explore and enjoy.

Scope

This thesis starts by exploring the area that is considered 'Downtown Toronto', which can be found between the boundaries of Bathurst Street and the Don Valley River, and from the Waterfront up to Dupont Street. This area consists of 16 core neighbourhoods, each with their own distinct character and identity. The majority of these neighbourhoods are mixed-use communities, but the density varies from low to high density. In the heart of the city centre, there are distinctly more high-density office and residential towers. Directly in these denser areas, it is rare to find a park or public space in walking distance. As you travel further towards the outer boundaries of the site, the neighbourhoods become more suburban. It is common to see single-family homes in communities centered around schools or parks and there are less commercial and office buildings.

This thesis is focused in Downtown Toronto specifically, rather than the overall City of Toronto due to the increased population density that has occurred within the core. This density is projected to continue to increase in the future and has already created numerous challenges within the city that spurred my interest for this thesis. The city continues to accommodate space for office and residential tower buildings but neglects to build spaces for community engagement.

As my methodology developed and the exploration became more in-depth, the site for this project narrowed. Methodology step 1 looked at the larger boundaries of Downtown Toronto, as mentioned above. By methodology step 3, I narrow the site down to a 3 block by 3 block area, which was studied and analyzed for a future design intervention.

Throughout the project, I have chosen to keep the context ambiguous, in terms of the detail, material and character of adjacent buildings. My laneway design interventions consider and adapt to the surrounding building features and elements on ground level but are not governed by anything above. While program of the surrounding buildings was considered, other above ground features of those buildings do not impact my design or objectives. My intention was to keep the emphasis of this thesis on the ground plane, in order to focus on improving the public realm in Downtown Toronto.

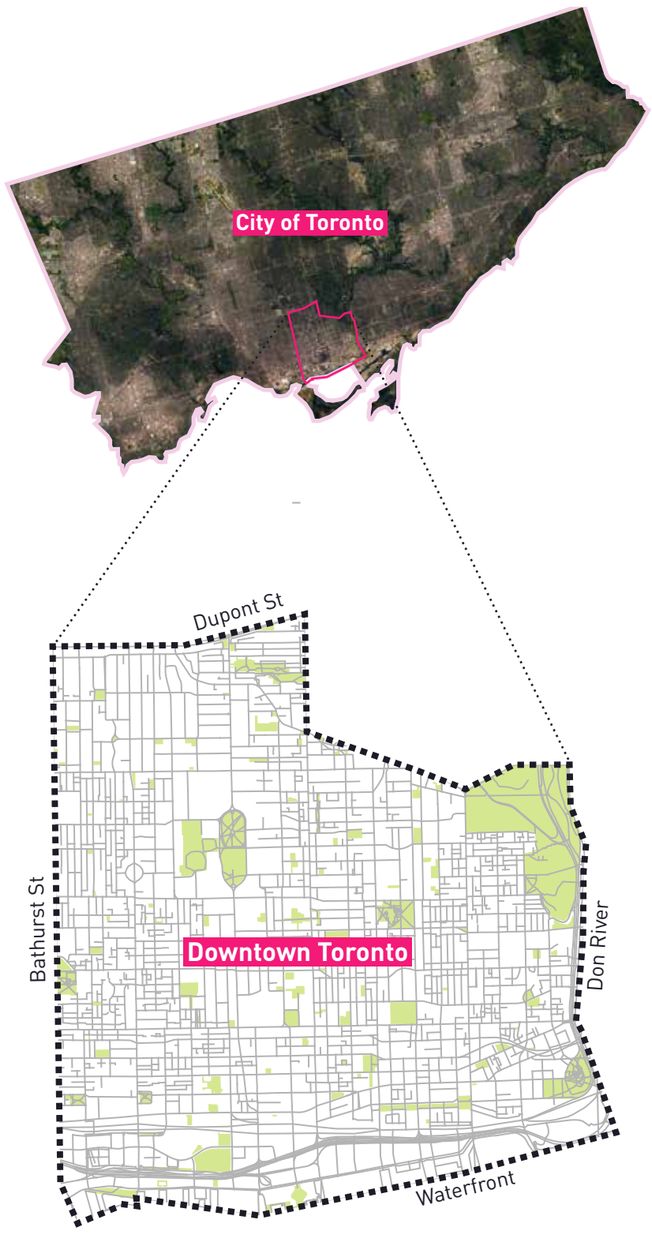


Fig. 2 - Scope of Thesis Project, diagram

Introduction

Social Interaction and Public Life

Social interaction is very important for human beings and is a prime factor of public life; which is comprised of every activity or engagement that happens between buildings in a city. The main components of public life being people, place and culture, it is the result of a community coming together outside their home or place of work. "There is an engaging and sustaining public life to supplement and complement home and work routines. For those on tight budgets who live in some degree of austerity, it compensates for the lack of things owned privately. For the affluent, it offers much that money can't buy."[1] Residents in cities which have a vibrant public life will typically be happier and healthier. Maintaining social relationships with friends, family and community members or neighbours can play a vital role in the life of a human being. When cities lack spaces for public life to thrive, residents tend to spend more time at home, and it can increase the chances of depression and anxiety caused by isolation.[2] Social relationships and community engagement improve our overall mental and physical health. They also improve civic culture by increasing economic benefits and decreasing crime in neighbourhoods. In order for public life to occur, it requires a physical space, which could be found anywhere in a city between buildings and is referred to as public space.

Public Spaces in Cities

Public space is the physical space that supports public life and is an essential element to prioritize when designing a city. When designed well, it supports the community's collective life and becomes a representation of the city's culture. In order for a public space to be successful, there are many factors that need to be considered during the design phase. The space should be welcoming and inclusive; it should be accessible for all people and connected to the city through all modes of transportation. As well, public space should be clean, safe and comfortable. Lastly, it should be dynamic and engaging; there should be a variety of activities and uses available. The specific program in each public space should vary to fulfill specific needs and wants of the surrounding community. This data can be discovered through observation and community engagement. Public space is critical throughout all areas in a city, but especially in neighbourhoods which are high-density. In order for residents to have a well-balanced life, they require the physical space to support that.

Density and Public Spaces in Downtown Toronto

Downtown Toronto has rapidly increased in population density in recent years and will continue to increase in the future. In the downtown core, empty lots are seizing to exist, and older, smaller buildings are constantly being demolished for new developments. City blocks are being filled to their capacity with office and condominium buildings with the focus on accommodating the influx of new residents moving into the city to live and work. Little attention has been placed on integrating community program like public space. "It is widely believed that the lively city needs high building density and large concentrations of dwellings and workplaces. But what the lively city really needs is a combination of good inviting city space and a certain critical mass of people who want to use it."[3] The public realm has been neglected; the streets are primarily dominated by vehicles and the sidewalks used merely as a means of travel to and from destinations. The volume of high-density developments in the city centre has already caused strain on the existing street traffic congestion and will only worsen with every new high-density development. With issues regarding lack of available land and a lacklustre public realm, we face major challenges regarding the well-being of our residents by not prioritizing the integration of public spaces. By finding solutions for introducing public spaces into Downtown Toronto, public life will improve and as a result, social interaction and community engagement will increase, creating a better urban environment for the residents.

Laneways as Public Spaces

Laneways have been a staple in city structure around the world for centuries. They function as secondary streets; providing space between buildings in city blocks for utilitarian services. They have typically always prioritized vehicles and neglected pedestrians. Due to the fact that they are in between buildings, are not fully visible from the street and do not have people walking through regularly, they tend to have a negative association. For the few pedestrians and cyclists that use these lanes, they are primarily back passageways and shortcuts to navigate the city but may not necessarily be the most enjoyable or safest route to endure. Currently, public laneways are used for city services like garbage, loading, deliveries and parking. These laneways relieve the main streets from having to support these services; hiding the utilitarian functions from the public. Laneways play an important role in Downtown Toronto's city fabric by supporting vital services but have the potential to provide more both culturally and socially. With the lack of public space and challenges of land availability, laneways could be explored as an opportunity for revitalization. City services typically occur once a day or once a week, therefore leaving the laneways unused for majority of the time. By improving the spatial organization and efficiency of the current laneways, they could become shared spaces that support both the existing services and new public spaces.

1 Ray Oldenburg, The Great Good Place (New York: Paragon House, 1989) 11.
2 Harvard Women's Health Watch, "The Health Benefits of Strong Relationships," December, 2010, .

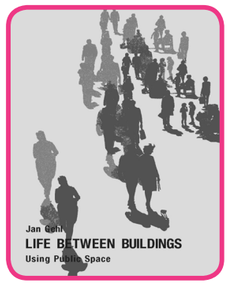
3 Jan Gehl, Cities for People (Washington, D.C.; Washington, DC: Island Press, 2010) 68.

RESEARCH

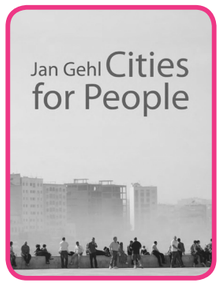
Background Information

Inspirational People and Readings

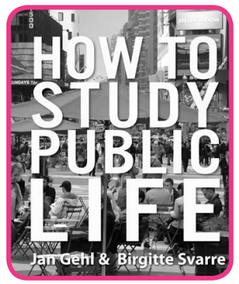
Jan Gehl



Life Between Buildings (1971)

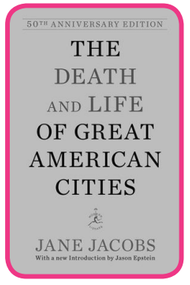


Cities for People (2010)



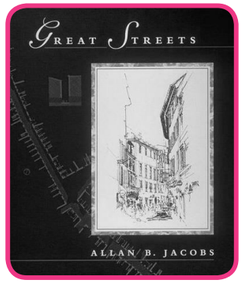
How to Study Public Life (2013)

Jane Jacobs



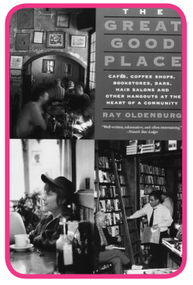
The Death and Life of Great American Cities (1961)

Allan Jacobs



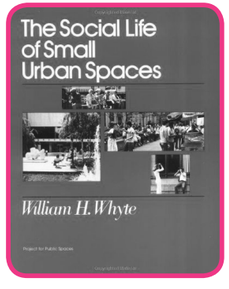
Great Streets (1995)

Ray Oldenburg



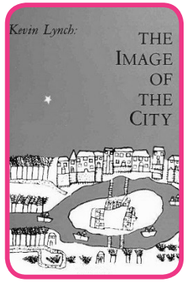
The Great Good Place (1989)

William H. Whyte



The Social Life of Small Urban Spaces (1980)

Kevin Lynch



The Image of the City (1960)

Fig. 3 - Readings and Publications, diagram

Inspirational People and Readings

Jan Gehl

Jan Gehl has been an icon and well-known figure in the urban design discipline for decades; he has written various publications and founded an architecture and urban design consulting firm.
He has led his career by advocating that cities should be designed for people. He believes in creating safe and enjoyable communities for pedestrians and cyclists and that public life is the heart of a city.

Fig. 4 - Jan Gehl, photo

Observation as a Method for Data Collection

His projects typically begin with detailed observations and data collection, being a strong believer that in order to design for people you must understand how they use the space first. "Once we begin observing city life and its interaction with physical surroundings, even the most ordinary street corner can provide interesting knowledge about the interplay of city life and form – anywhere in the world."[1]

Necessary, Optional and Social Activities

Gehl frequently refers to the 'three types of activities' that take place in a public space and how the physical surroundings influence them. Necessary activities take place throughout the entire year, independent of the environment conditions. Optional activities are only participated in when people feel like it and are heavily influenced by the physical environment. The last category, social activities only occur when others are around. They are typically spontaneous and are a direct result of people moving about. Both optional and social activities are voluntary, therefore the surrounding environment conditions must be ideal for them to occur. Jan Gehl believes that cities that have successfully designed spaces for people will have optional and social activities occurring all year round.

Fig. 5 - Types of Activities, diagram

The Human Scale

After the rise of modernism and the automobile in the 1960s, cities all over the world prioritized vehicles. They were being filled with tall towers, wide streets and highways, and large parks that spanned kilometers, all designs too large for the human scale. "The natural starting point for the work of designing cities for people is the human mobility and the human sense because they provide the biological basis for activities, behavior and communication in city space."[2] Jan Gehl believes cities should be built based off the dimensions of a human; our eye level, our walking speed, etc. The average walking speed of a person is 5km/h, whereas the average speed of a car is around 60km/h. A city built for the experience as a human will be very different than that of driving in a car. The buildings, streets, sidewalks, parks, squares and/or public spaces should all reflect a scale that makes human beings feel comfortable. If the experience of walking through a city

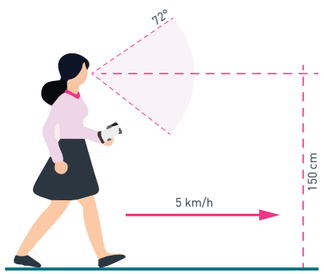


Fig. 6 - The Human Scale, diagram

1 Jan Gehl, How to Study Public Life, ed. Birgitte Svarre (Washington, DC: Island Press, 2013) 11.
2 Gehl, Cities for People 33

Fig. 7 - Public Life, diagram

isn't comfortable or pleasurable for residents, the public realm will be vacant.

Public Life

Throughout his career, Jan Gehl has believed that public life is the heart of a city. As architects, designers and planners we must lead projects with the strategy of life first, then space, and lastly buildings. By designing for people, the needs and wants of residents take priority, and it will be a space that people seek to visit regularly. When a community of people voluntarily come together outside of their home or place of work to meet and be social, a city has successfully supported their public life. "It is equally urgent to strengthen the social function of city space as a meeting place that contributes towards the aims of social sustainability and an open and democratic society."[3] The character and culture of a city depend on the public life, therefore cities which don't have a public life are typically dull and lack an identity.

3 Gehl, Cities for People 6

Inspirational People and Readings

Jane Jacobs

Jacobs is an urban activist who has made a significant impact on city planning, via *The Death and Life of Great American Cities*. The book is a critique of urban planning in American cities in the 1950s. Much of the book discusses the significance of sidewalks and streets in a city. "A city sidewalk by itself is nothing. It is an abstraction. It means something only in conjunction with the buildings and other uses that border it, or border other sidewalks very near it. The same might be said of streets, in the sense that they serve other purposes besides carrying wheeled traffic in their middles. Streets and their sidewalks, the main public places of a city, are its most vital organs."[1] She also tackles topics regarding city safety and how design can change the relationship between people. Jacobs has always advocated that designers must learn from the mistakes and errors made in real life city planning, instead of being guided by the fictional idea of idealistic cities.

Fig. 8 - Jane Jacobs, photo

Eyes on the Street

Eyes on the Street is one of the most well-known concepts from Jane Jacobs. Jacobs believed that if a neighbourhood is constantly busy with people walking around on the streets and sidewalks, people looking down below from their windows and people stopping in and out of shops, there will always be people watching. Communities will get to know each other's daily habits and routines. This strategy relies on neighbours looking out for each other and contributing to the overall safety and social cohesion of their community. She advocated for mixed-use communities because it was important to have a variety of activities occurring at all times; which brings more users onto the streets for more consistent surveillance.

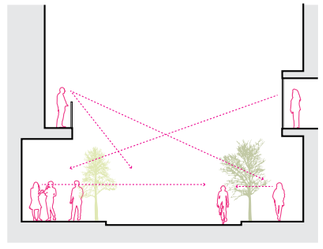


Fig. 9 - Eyes on the Street, diagram

People Attract People

The second concept that Jacobs was a big advocate for was the idea that people attract people. Human beings are fascinated by each other, we enjoy watching and being around one another. "Activity generated by people on errands, or people aiming for food or drink, is itself an attraction to still other people."[2] This concept is very simple, yet Jacobs believes that designers still have a hard time understanding and implementing it. It is common to find people in public spaces observing and watching the habits and interactions of others; 'people-watching' is a very well-known and loved activity. A lively street will have both people walking on it but also people sitting on benches and watching those walking.

1 Jane Jacobs, The Death and Life of Great American Cities (New York: Modern Library, 2011) 37.
2 Jacobs, The Death and Life of Great American Cities 47

Fig. 10 - Allan Jacobs, photo

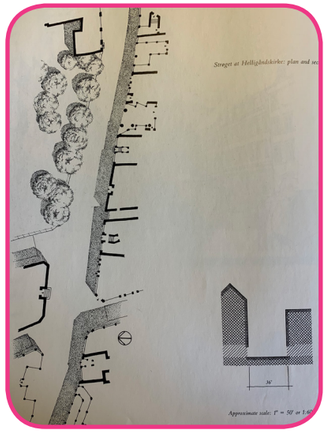


Fig. 11 - Street Analysis, image

Fig. 12 - Street Analysis, image

Allan Jacobs

Allan Jacobs is an influential urban designer who has written various publications. He has had experience studying a variety of streets all throughout the world; leading to the creation of his book *Great Streets*. In this book, he analyzes buildings, facades, landscaping and planting, intersections and sidewalks. He discusses how each element listed above plays a vital role in the configuration of successful streets.

Shared Streets

Jacobs career in urban design began around the time that cars were becoming more popular in cities, yet his approach to city planning was quite the opposite. He believed that creating a shared system of various modes of transportation on the streets would increase safety and community liveliness. Combining the vehicle and pedestrian experience was something most designers were shying away from at the time. He promoted the creation of boulevards or multiway roads because of the opportunity they provided to bring pedestrians and cars together. He believed that when all modes of transportation can share the road, they will learn to respect each other. "Streets more than anything else are what make the public realm. They are the property of the public and are under direct public control. The opportunity to design them in ways that meet public objectives, including the making of community itself, is as exciting as it is challenging. If we do right by our streets we can in large measure do right by the city as a whole – and, therefore and most importantly, by its inhabitants."[3]

Requirements for Great Streets

Streets must allow for people to walk leisurely, separated from vehicles. Vehicles do not provide the same intimate experience with the urban environment as walking does. People must feel safe and comfortable in the public realm, without feeling crowded or bullied by cars. Curbs, trees and sidewalks are vital elements in proper street design; they provide both physical and visual barriers to separate people and cars. Comfort and safety are two factors that will be instrumental in enticing people to use a street. Sunlight and greenery are important to help keep the urban environment comfortable for people; with sunlight providing warmth when cool weather is present and trees providing shade and protection from wind.

3 Allan B. Jacobs, Great Streets (Cambridge, Mass.: MIT Press, 1993) 314.

Inspirational People and Readings

Ray Oldenburg

As an urban sociologist, Ray Oldenburg is known for his writings about informal gathering spaces in cities, what he refers to as third places.

Third Places

A third place is any informal gathering space outside of a person's home or workplace where one relaxes, is sociable and meets others. He believes that third places play a vital role in communities and civic society. In his book *The Great Good Place* he writes about the major impact that third places have on people's everyday lives, and the difference they make in community engagement and interaction. They are meant to be familiar places, in which people visit frequently and voluntarily, a common and egalitarian space within the community for people to come together and leave their stresses behind. Without third places, there would not be a common location in a city for communities to build relationships. Examples consist of parks, beer gardens, main streets, pubs, cafes, coffeehouses, post offices, etc. Third places exist all over the world, in all different cities and in different forms. "The eternal sameness of the third place overshadows the variations in its outward appearance and seems unaffected by the wide differences in cultural attitudes toward the typical gathering places of informal public life."[1] Beyond their physical attributes, their spirit has a common familiarity that is derived from the characteristics that unite them. Oldenburg categorizes the main characteristics that contribute to their environment as neutral ground, leveling, conversation, accessibility and accommodation, the regulars, low profile, playful mood and home away from home.

Fig. 13 - Ray Oldenburg, photo

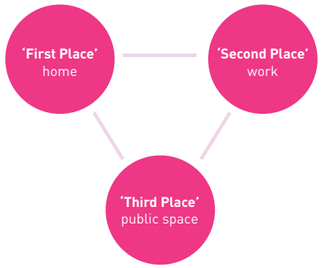
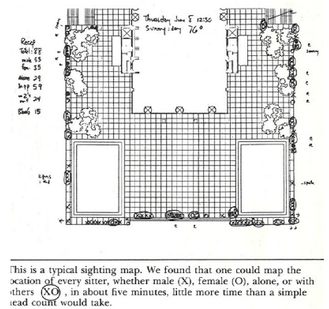


Fig. 14 - Third Places, diagram

1 Oldenburg, The Great Good Place 20

Fig. 15 - William H. Whyte, photo

Fig. 16 - Urban Plaza, photo



This is a typical sighting map. We found that one could map the location of every sitter, whether male (X), female (O), alone, or with others (XO), in about five minutes, little more time than a simple head count would take.

Fig. 17 - Observation Sketch, image

William H. Whyte

William Whyte was an urbanist based in New York City and wrote the book *The Social Life of Small Urban Spaces*. His approaches to urbanism were similar to those of Jan Gehl and Jane Jacobs. His strategies were inspired by placemaking and he encouraged designers to take a moral responsibility for planning public spaces that promote civic culture and community engagement.

Small Public Spaces

Whyte believed that public spaces were the most important aspects of a city, specifically small public spaces, like plazas, squares, streets, etc. He worked with the New York City Planning Commission in 1969 and quickly realized that he did not agree with the planning process. He was disappointed to discover that there was no follow up with newly designed or planned projects to know how effective or problematic they were. Like Jane Jacobs, Whyte believed that the most successful way to design was to learn from the past. Later in his career, he started the Street Life Project, where he studied pedestrian behaviours and city activities.

Observation as a Method for Data Collection

His approach, similar to Jan Gehl, focused on observing the way people occupy a space in order to obtain the knowledge to create the most functional and efficient space. He focused his work in *The Social Life of Small Urban Spaces* on plazas in New York City. He would observe plazas for hours, watching and recoding people as they used the space. This can be seen in Figure 17; an example of one of his many sketches from his book. This is one of his typical sighting maps; which displays the location of where every person was sitting, their gender and whether they were alone or with others.

Inspirational People and Readings

Kevin Lynch

Kevin Lynch wrote the book *The Image of the City* after completing a 5-year study of cities such as Boston, Jersey City and Los Angeles.

Mental Maps of Cities

This book is a comprehensive breakdown of the cities and their surroundings, with collected data compiled into his own typology of mental maps. In this book he discusses that every person that experiences a city or its surroundings creates their own set of corresponding mental images.

Public Life

He also believes that the people and activities that occur in a city are as important as the built environment, as both are a part of the experience walking through. "Moving elements in a city, and in particular the people and their activities, are as important as the stationary physical parts. We are not simply observers of this spectacle, but are ourselves a part of it, on the stage with the other participants."[1]

5 Elements of the City

Lynch discusses that cities consist of five basic elements that contribute to those mental images; paths, edges, districts, nodes and landmarks. Paths are the movements of people, in any form of transportation; streets, sidewalks, trails or railroads. Edges are the boundaries of the city, both physical and imaginary; walls, buildings, shorelines, overpasses, etc. Districts are similar to neighbourhoods; they vary in size from medium to large and each have their own recognizable identity. Nodes are larger than districts and have a focal point for orientation. Landmarks are recognizable features of a city that represent symbols within the urban fabric. They include buildings, bridges, public art, sculptures, churches, etc.

Fig. 18 - Kevin Lynch, photo

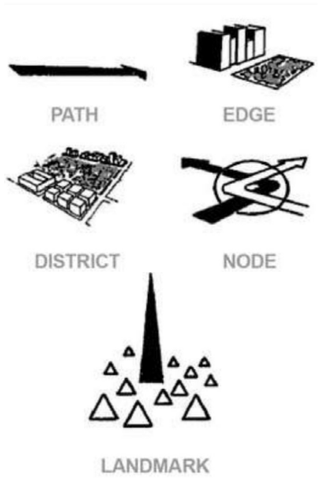


Fig. 19 - 5 Elements of a City, image

1 Kevin Lynch, The Image of the City (Cambridge, Mass.: The MIT Press, 1960) 2.

Successful Public Spaces

After researching the urbanists and designers above, I was able to recognize key patterns or reoccurrences in their texts and create a list of qualities that create successful public spaces in a city. This inspired me to create the 8 elements below, which I believe are the most important qualities to create a successful public space.

The four elements in larger bubbles with bolded text are the ones in which I believe are the most impactful. These four main elements deal with how the space is used by people and whether the environment feels comfortable and safe for people. The other four elements are not quite as important as the first four but are still relevant. They involve the aesthetics of the space and the program that the space provides. They are still imperative features of public spaces but are not as important as safety and use. All these elements contribute their own character and quality to a space and when united, create an extraordinary space for people.

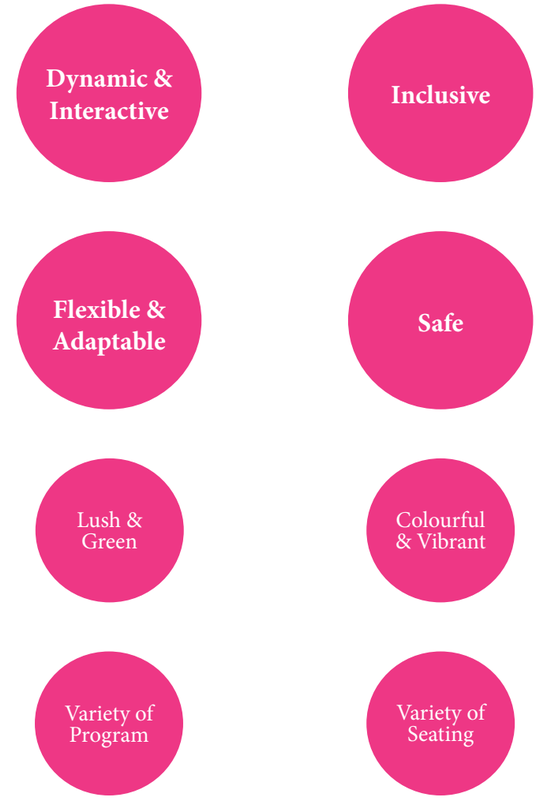


Fig. 20 - 8 Variables of Successful Public Spaces, diagram

Density Growth

History of Density Growth

Early Development, 1890-1940

Towards the end of the 1800s and moving into the 1900s, Toronto was experiencing a booming economy, which brought an influx of residents to the city. It was considered a low-rise city at the time, with the tallest points of the skyline being church steeples. The majority of housing was single detached dwellings, where multiple families typically inhabited, or the house was separated into multiple units. The population density was relatively high, likely due to multiple families occupying single dwellings. Toronto was becoming over-populated and more families started to move outside of the city center, into neighbourhoods such as Etobicoke, Scarborough and North York, which spurred the beginning of mass construction in those areas.

Fig. 21 - Toronto Skyline; 1930, photo

Density in Post-War Toronto, 1940-1960

The Official Plan was first published by the City of Toronto in 1943 and proposed a system of multiple highways and rapid transit, as well as the redevelopment of deteriorated neighbourhoods in the city. The next Official Plan that was released in 1960 incorporated the suburban typology in neighbourhoods throughout the city; with communities of single-detached houses centered around schools, employment and shopping malls. The intention of this typology was to provide a better quality of life for its residents and with that, a substantial amount of parkland was planned to be implemented in each neighbourhood. Post-war saw an increase of people looking to move into the city, into more affordable units. Younger populations were interested in moving out of their family homes and low-income families wanted to separate from the multi-family households. This created a market demand for smaller, more affordable units in the city center. With that demand, the city began building what is now a unique characteristic of Toronto; the high-rise apartment neighbourhoods.

Fig. 22 - Toronto Skyline; 1957, photo

When Density Began to go Awry, 1960-2000

After the city had built high-rise buildings to accommodate for the demand that was needed, it was quickly realized that there was a major issue deriving from this high-density housing typology. The government was attempting to entice developers to build in the city through incentives, warranting over-development of sites or adding high-density into areas which were dedicated to another zoning category. These deals were not adhering to the policies developed in the Official Plan. Infrastructure upgrades were not being made to accommodate the new high-density areas in the city, because those high-density developments were meant to fund the infrastructure. As a result, developments were being constructed without the necessary

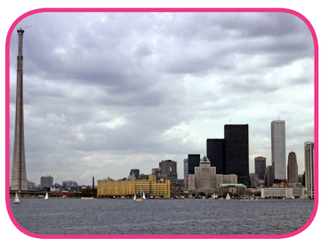


Fig. 23 - Toronto Skyline; 1974, photo

Fig. 24 - Toronto Skyline; 1990,

Fig. 25 - Toronto Skyline; 2019, photo

infrastructure to support them; creating isolated neighbourhoods all throughout the city. Unfortunately, the report with these findings was published at the end of the development boom and had little effect on the situation. Jane Jacobs became a massive influence in the city in the 1970s and her approach of a more inclusive consultation process was adopted, helping to ease up the pace of developments post-war. Policies encouraging mid-rise and mixed-use projects were being introduced into the city and around the same time, baby boomers were moving to the suburbs to raise their families in residential neighbourhoods.

A Second Boom, 2000-present

Young professionals seeking affordable, mixed-use housing options were interested in moving into the city in the late 2000s, leading to an upswing in population density in Downtown Toronto. This rising demand mimicked the same occurrence that happened post-war, inducing a building boom of high-rise developments again, although this time being condominium towers. The city was focused on creating mixed-use, walkable and live-work neighbourhoods in an effort to attract these young adults. The condominium towers were being built by developers, who were making deals with the municipality to build taller and denser than allowed, due to the rising cost of land values, tough real estate market and the increased population and employment in the city. Most families live outside of the downtown core, due to the cost of living and the lack of unit space in condominium towers. The city has focused on building a single typology of housing and has neglected to accommodate a diverse demographic of people or program.

Density Growth

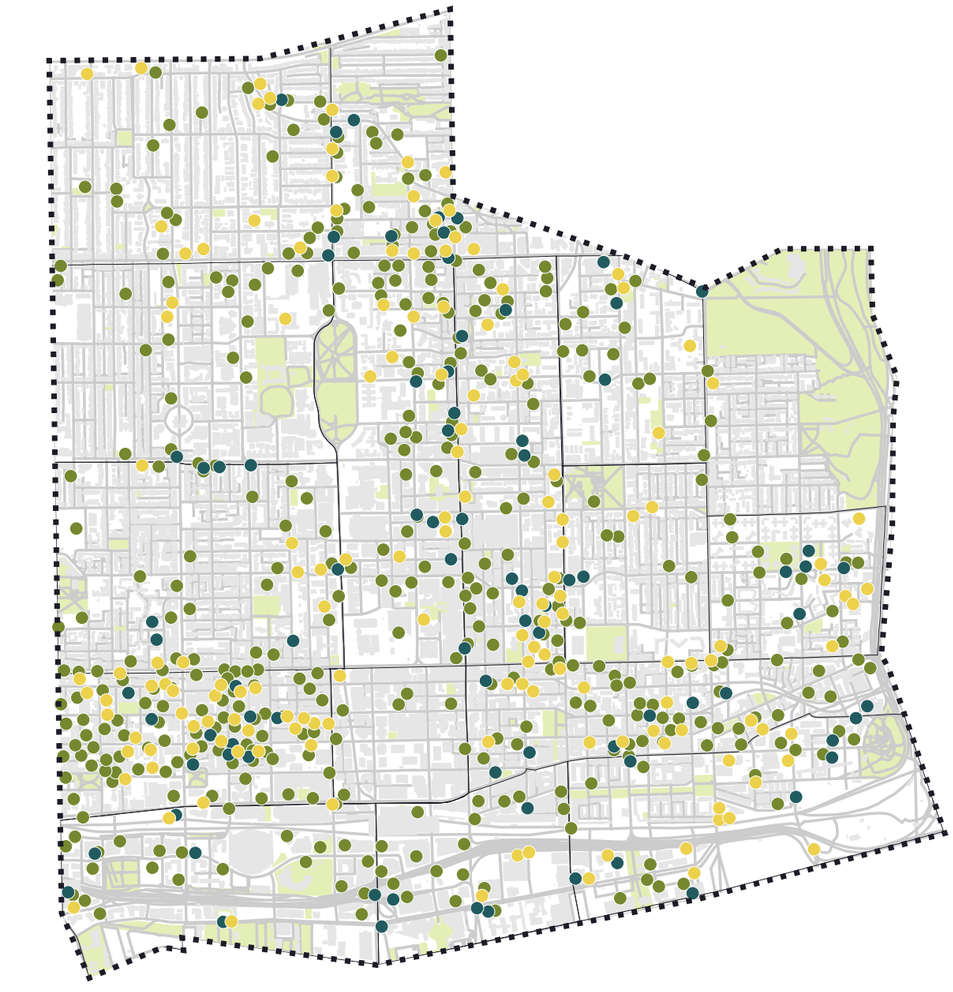


Fig. 26 - Building Developments by Phase; 2006-2019, map

1:30,000

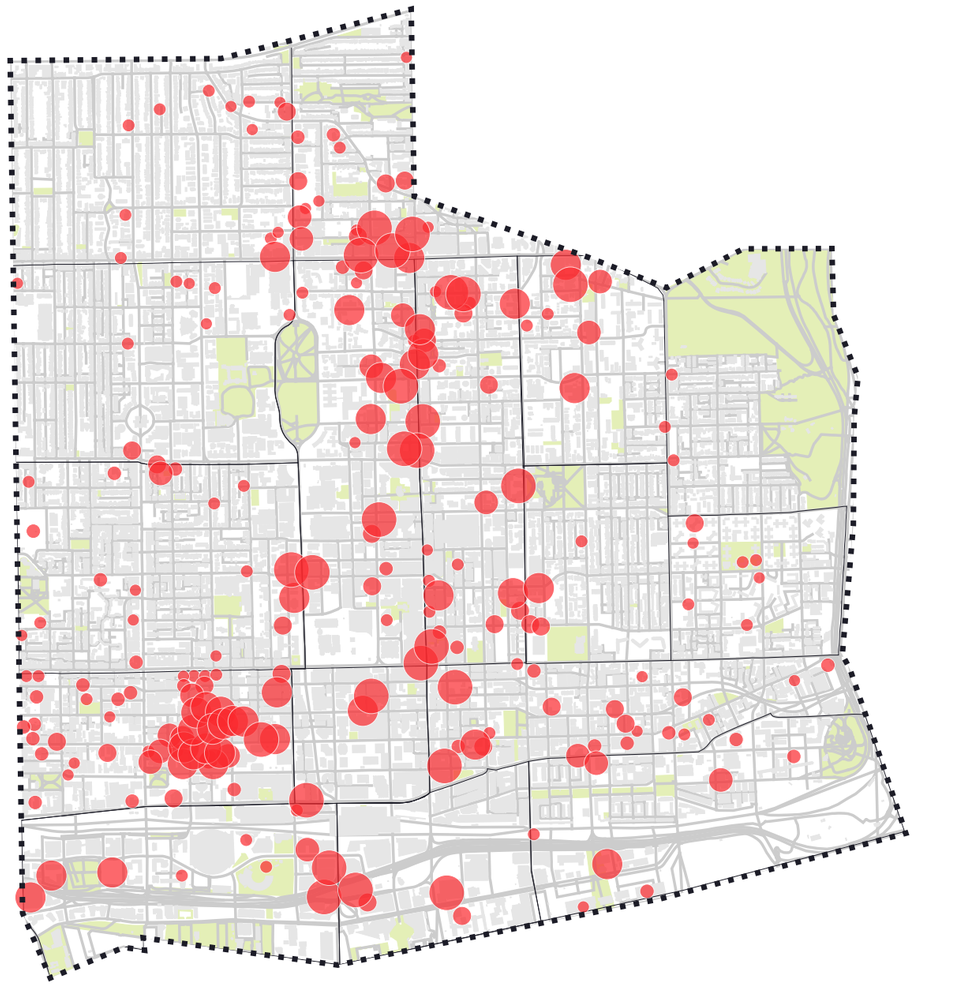


Fig. 27 - Building Developments by Height in Storeys; 2008-2013, map

1:30,000

Public Parks and Squares

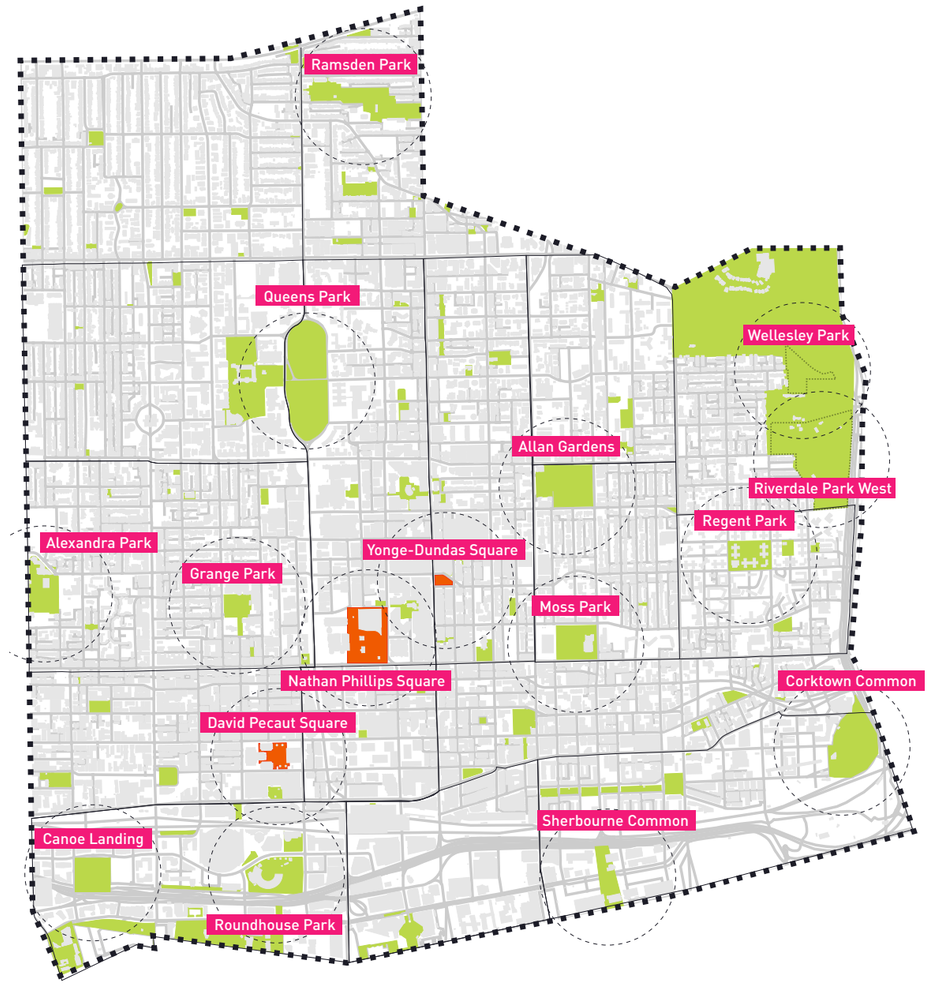


Fig. 28 - Public Parks and Squares, map

1:30,000

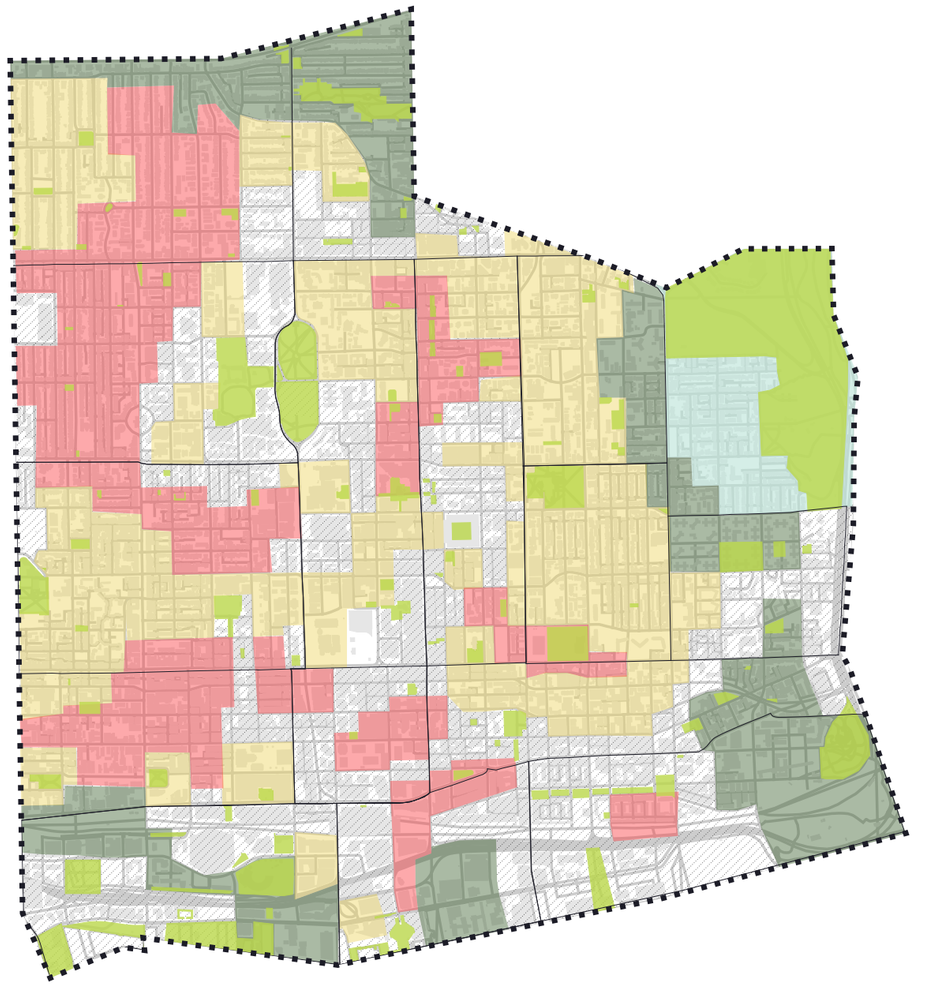


Fig. 29 - Total Park Area per Person (m^2), map

1:30,000

Public Parks and Squares

Public Parks

District Park
> 50,000 m² and ≤ 150,000 m²

Community Park
> 30,000 m² and ≤ 50,000 m²

Local Park
> 5,000 m² and ≤ 30,000 m²

Squares

Fig. 30 - Public Park and Square Size Analysis, diagram

Laneways

History of Laneways

Laneways in the Late 1800s and Early 1900s

Downtown Toronto is known as a city of neighbourhoods, and its history is embedded in the laneways that run through them. Throughout the later 1800s, the laneways were first built to divide residential properties in the city and were being used for coal delivery and cinder removal. In the early 1900s, they were being used for a wider range of activities, such as stables, dairies and even blacksmiths. Historically, the laneways have always been mixed-use, but during the Great Depression they served a new purpose; slums. Slum housing developed in a multitude of laneways specifically off of Yonge Street. After WWII, there was no longer a need for back alley slums as the demand for affordable housing was being met by the city and a variety of new developments were being constructed.

Fig. 31 - Residential Laneway; 1950s, photo

Laneways in the Late 1900s-present day

As technology improved and cities became more modern, the original uses of laneways became irrelevant. Laneways were and are still considered valued aspects of the city. They now serve as a physical space for city services to occur, such as garbage, loading, deliveries and parking. Laneways are important because they support essential services that keep the city functioning. They keep the utilitarian services off the main streets in an effort to leave the public realm to pedestrians. There are currently around 750 public laneways in Downtown Toronto, consisting of typologies such as, residential, mixed-use low rise, mixed-use mid-to-high rise, commercial and open space. Each type has its own set of characteristics that forms a unique environment. Laneways can be found all throughout the downtown core and are typically only occupied by city services and large vehicles for a brief period of time once a day or once a week. Starting in the 1990s, cities around the world were beginning to transform their laneways into spaces for people. Cities like Melbourne and Vancouver became well-known in the industry for being trailblazers for laneway revitalization projects. In the 2000s, studies had been conducted in Toronto on the potential for laneway housing to accommodate for the upswing in population density. Guidelines and by-laws are still being discussed to consider the opportunity for laneway housing in the city. In the past few years, there have also been various community-organized revitalization projects led by not-for-profit organizations in the city.

Fig. 32 - Residential Laneway; 2019, photo

Fig. 33 - Mixed-Use/Commercial Laneway; 2019, photo

Existing Laneway Typologies

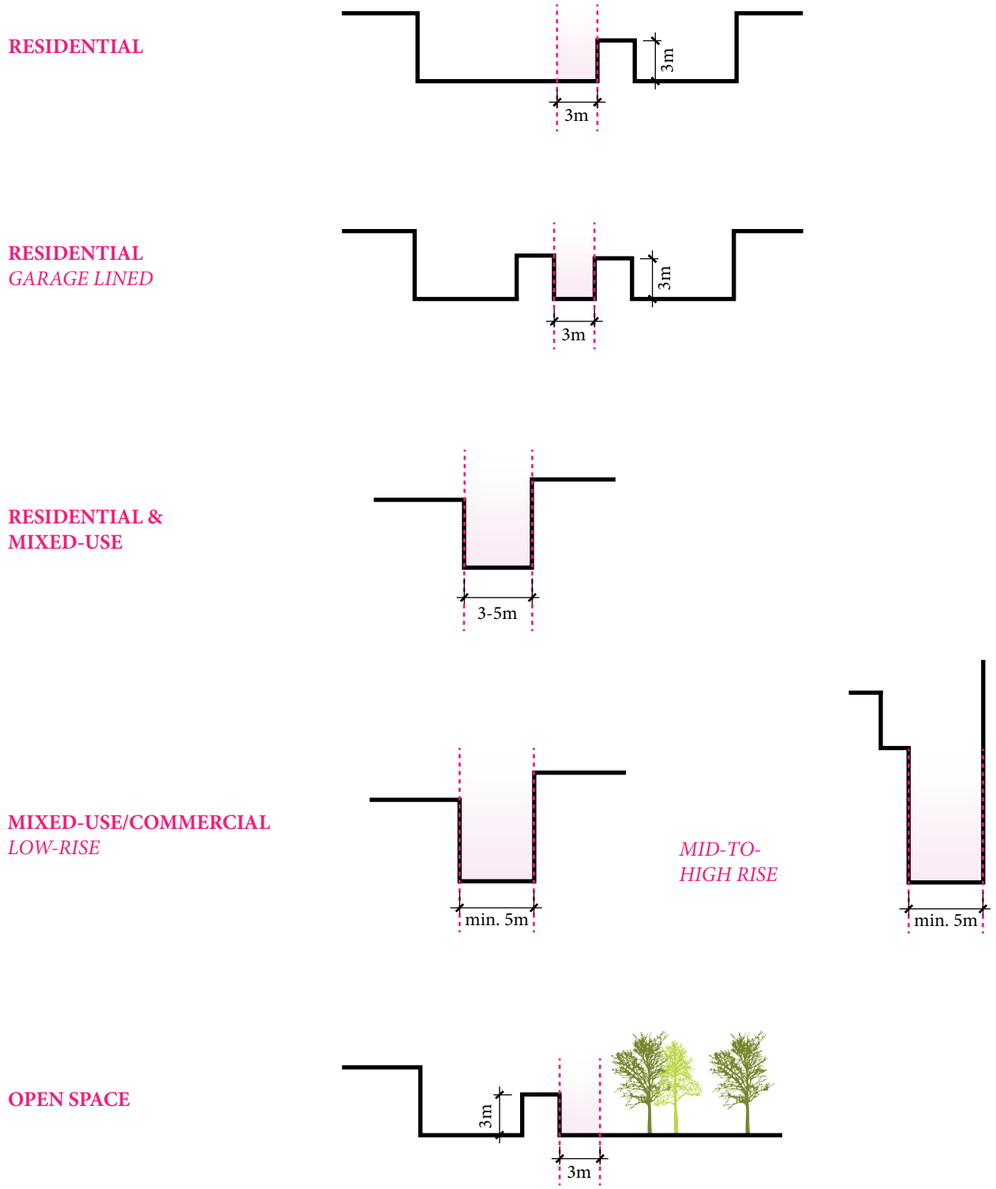
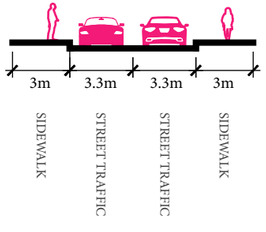


Fig. 34 - Existing Laneway Sections by Typology, diagram

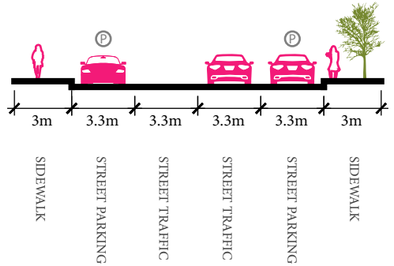
Streets

Existing Street Typologies

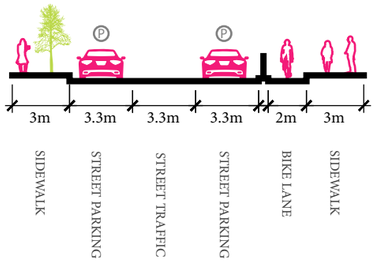
MINOR STREET
MIXED-USE 1



MINOR STREET
MIXED-USE 2



MINOR STREET
ONE WAY



RESIDENTIAL

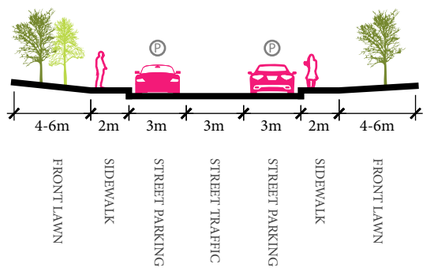
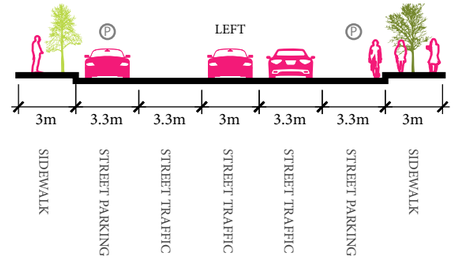
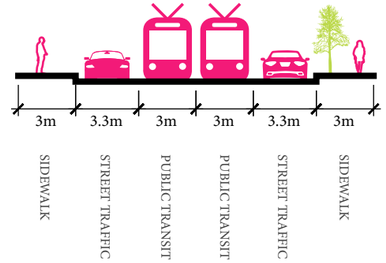


Fig. 35 - Existing Street Sections by Typology, diagram

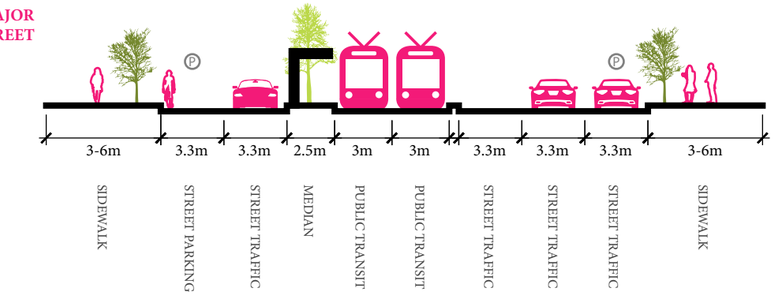
MAJOR STREET
MIXED-USE 1



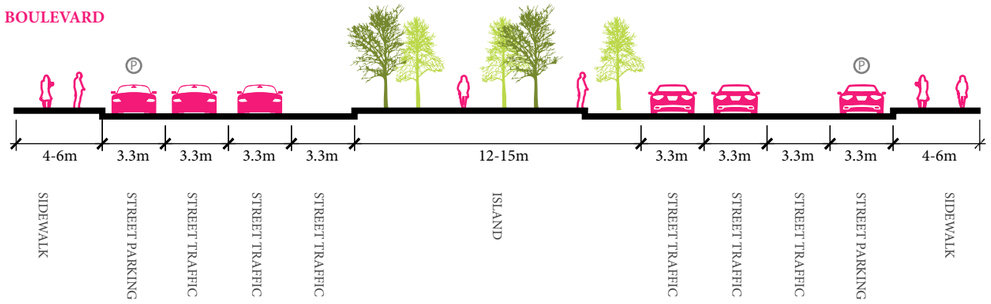
MAJOR STREET
MIXED-USE 2



AVENUE / MAJOR TRANSIT STREET



BOULEVARD



Active Transportation

A Brief History and Current Conditions

Starting in the late 1890s, there was a major cycling boom throughout both Canada and the United States caused by the development of the modern bicycle. Bikes were sharing the roads with pedestrians, horse-drawn carriages and electric streetcars. Around 1920, cars became increasingly popular, therefore the use of bikes shifted towards recreational activities. It wasn't until the 1960s when cities were becoming more concerned with energy use and air pollution that a bike revival occurred. In 1975, the Toronto City Cycling Committee was created and began to encourage the importance of biking in cities as a means of transportation, but also created safety guidelines for sharing the roads. They recognized the benefits that a cycle-friendly city had on people. The first bike lane was built on Poplar Plains Road in old Toronto in 1979. There were many cycling studies done in the city, but majority of the bike lanes were being built as recreational trails to keep cyclists away from vehicle traffic as the city was hesitant to fully integrate cycling onto the city streets. The Shifting Gears plan was approved by city council in 1998; an aggressive bike plan that integrated cycling culture into more suburban areas by adding bike lanes to major roads. It was meant to decrease the dependence on automobiles and increase the use of public transit. The plan was delayed twice, then only half implemented, as it was not well-received by the public. They were not ready to accept cycling as a means of transportation in the city. Bike Share Toronto, a bike sharing program, launched stations throughout the city in 2012 and onwards, but the downtown core still has a major lack of bike infrastructure.

The priority in street design has always been placed on cars, therefore even with the increase in demand for biking in the city, cyclists don't feel safe. There is a clear interest and want for active transportation to become a priority in the city. The number of collisions involving bikes and vehicles has risen in the past couple years with the increase of cyclists but lack of bike lanes and absence of respect for cyclists. The city has prioritized cars and has not emphasized the importance of sharing the roads. Attempts to create safer bike lanes for cyclists on major streets have been implemented, like the Bloor Street Pilot Project, which was installed permanently. Investments need to be made by the city to create safer and better-quality bike lanes within the downtown core. It is essential that the public shift their mindset to understand the benefits of sharing the public realm.

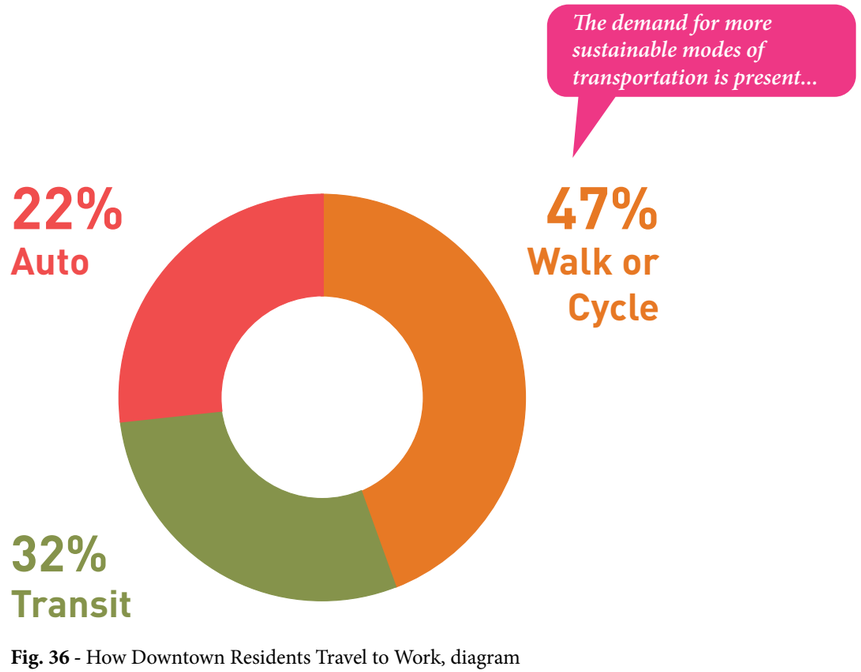


Fig. 36 - How Downtown Residents Travel to Work, diagram

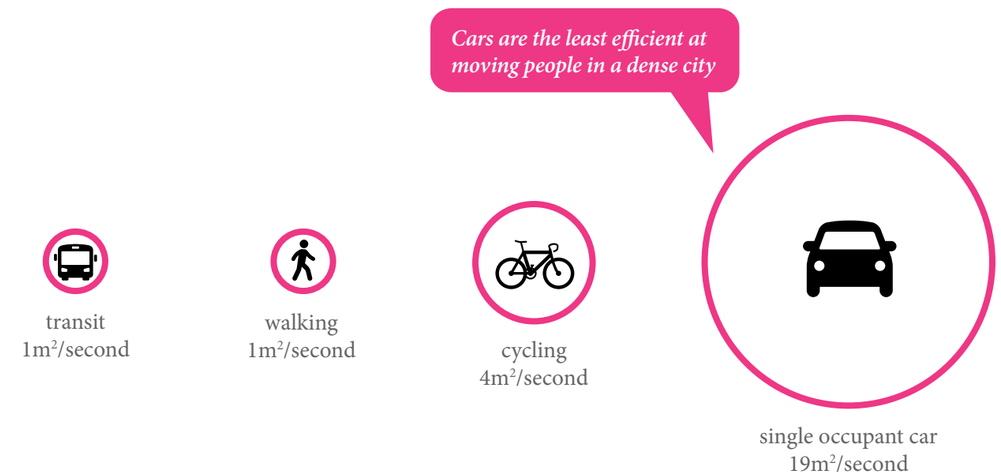


Fig. 37 - Space Efficiency (m^2/sec) for Modes of Transportation in Downtown Toronto, diagram

Active Transportation

Benefits of Active Transportation

Active transportation, walking or cycling, is beneficial for the culture and environment of the city, as well as for the lives of people. Being active outdoors for 20 to 30 minutes a day, which is around the average commute in Downtown Toronto, makes a huge impact on the mental and physical health of a human being. Going for a walk or bike ride can improve one's mood, clear one's mind and help decrease any stress or anxiety[1]. As well, daily exercise increases the body's energy and decreases fatigue. Chronic illness or disease is the leading cause of death and disability in Toronto, and active transportation plays an important role in reducing that risk. Physical activity has been shown to reduce the mortality rate of chronic diseases[2]. Choosing to walk or bike rather than drive for your commute can make a big difference in one's life. The overall lifestyle of people who live in cities which promote active transportation is of higher quality and more well-balanced. These modes of transportation can also have effects on the environmental, economic and urban aspects of the city. Active transportation is both clean and energy efficient, effectively reducing pollution in the air. More than ever, it is essential that cities think about ways to contribute to the fight against climate change. Cutting down on car emissions is an easy way to make a small contribution that will be beneficial for the health of the residents, city and world. With biking and walking being at a slower pace than a car, there is more opportunity to stop and go into a local store or restaurant. These modes of transportation encourage people to interact with local shops and engage with their community. Also, walking and cycling are both affordable alternatives to other modes of transportation like owning or leasing a car and taking public transit. Lastly, active transportation is efficient, accessible and reduces the overall noise and traffic congestion in the city. Vehicle traffic has become a major challenge in Downtown Toronto as the city continues to build high-density developments.

The city needs to encourage drivers to have respect and become more aware of pedestrians and cyclists. Integrating traffic control for cars in the downtown core and creating safer bike lanes will ensure that the streets are shared comfortably. Slowing down the speed of cars directly impacts the reaction time of drivers, therefore decreasing the risk of serious injury or death of pedestrians and cyclists[3]. In order to continue improving the pedestrian and cyclist culture, the city needs to prioritize creating safe and comfortable streets for all. "Better conditions for bicyclists invite more people to ride bikes, but by improving the conditions for pedestrians, we not only strengthen pedestrian traffic, we also – and most importantly – strengthen city life."[4]

1 Toronto Public Health, Road to Health: Improving Walking and Cycling in Toronto (2012).
2 TOCore, Downtown Mobility Strategy
3 TOCore, Downtown Mobility Strategy
4 Gehl, Cities for People 19

Benefits

01 Health
- → Mental impact
- → Daily physical activity

02 Environment
- → Reduces pollution
- → Clean and energy efficient

03 Economic
- → Affordable
- → Increases activity for adjacent businesses

04 Urban
- → Efficient
- → Accessible
- → Reduces noise and traffic congestion

COVID-19 Impact

Issues and Challenges

In 2020 a global pandemic occurred, initiating a multitude of challenges for both cities and individuals. Within the urban planning context, cities all throughout the world were confronted with the consequences of prioritizing vehicles rather than people in the past. In the early stages of the pandemic, social and physical interaction were limited under government protocol. This only further emphasized the need for interaction in people's lives.

In Canada, residents were confined to their homes for the first few months when the outbreak began, but as the situation became manageable, cities slowly re-opened. People were desperate for a mental and physical break from months of indoor isolation. The government has continued to advise people to social distance; keeping 2 metres away from others to help prevent spread. If a city has been designed properly, the public realm will comfortably support the higher volume of people retreating outdoors, without putting each other in danger by being in close priority to others. In cities where vehicles have been prioritized, major challenges have occurred regarding over-crowding, improper social distancing and unsafe conditions.

In particular, Downtown Toronto is facing issues during this tough time, as there is not enough public or park space for their residents to enjoy. Residents who live in the downtown core and are currently isolating in their small and limiting apartment units are wanting to enjoy the summer weather but struggle to find a local park or public space nearby. They must venture out to a larger park because their neighbourhood, more specifically the downtown core in general, lacks public space. The concept of designing cities for people has been prevalent for many decades. Those cities, where the design implements this strategy, are able to support a more sustainable and enjoyable lifestyle for their residents, both during this pandemic and regularly.

Due to the fact that Downtown Toronto lacks public space, it has long relied on consumerism to support public life in the city. This problem has been amplified during the lockdown phase of this pandemic, where restaurants, bars, and other recreational stores have been shut down. Residents are desperately looking for spaces to support their relaxation and interaction. As discussed in *The Great Good Place* Ray Oldenburg believes a city will be successful if they have public spaces that do not have to rely on consumerism as a means for social interaction. We need to find opportunities to integrate public spaces into our core, as it has been proven that in circumstances where people are reliant on social interaction, consumerism cannot replace public space.

Issues and Challenges

"To our considerable misfortune, the pleasures of the city have been largely reduced to consumerism. We don't much enjoy our cities because they're not very enjoyable."[1]

"In the absence of informal public life, living becomes more expensive. Where the means and facilities for relaxation and leisure are not publicly shared, they become the objects of private ownership and consumption."[2]

"There is an engaging and sustaining public life to supplement and complement home and work routines. For those on tight budgets who live in some degree of austerity, it compensates for the lack of things owned privately. For the affluent, it offers much that money can't buy."[3]

A phenomenon has occurred in Downtown Toronto where the volume of cars on the streets has decreased immensely. When people are driving less, spaces open up in cities and we realize that our problem is not that we don't have enough space, but that the space we do have is not utilized well. Around 25% of the land area in cities is dedicated to streets, which specifically in Downtown Toronto, is designed for vehicles. In cities with high population densities, cars are incredibly inefficient for moving mass groups of people. Public transit, walking and biking are more efficient modes of transportation, therefore should be prioritized over vehicles. At this point, when we are desperate for more space to walk or bike, streets are not optimal or useful for pedestrians or cyclists, making it difficult for people to obey the social distancing rules. The majority of the sidewalks are around 2.1 metres to 3 metres wide, which does not allow for 2 people to walk past each other while maintaining the 2-metre radius of social distancing. Enjoying a peaceful and relaxing walk or bike ride down the street does not exist if the city you live in does not provide the infrastructure and design to support that. Even though we refer to our bike infrastructure as a 'network', it is not. A network entails a continuous system, but in Downtown Toronto it is rare to find continuous bike routes to get from point A to point B. In the past, we have dismissed the importance of the public realm on the lives of human beings. With the pandemic came multiple challenges that highlighted various negative aspects regarding city planning in Downtown Toronto. As the pandemic continues to be a relevant and regular part of our everyday lives, city planners and designers need to rethink the priorities of Downtown Toronto, and the significant impact designing for people could have on resident lives.

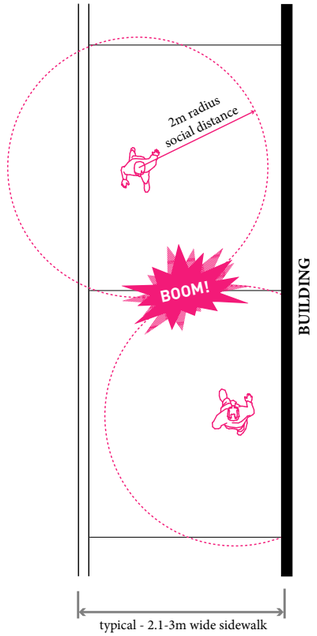


Fig. 38 - Social Distancing on Sidewalks in Downtown Toronto, diagram

Fig. 39 - Trinity Bellwoods Park; Toronto, photo

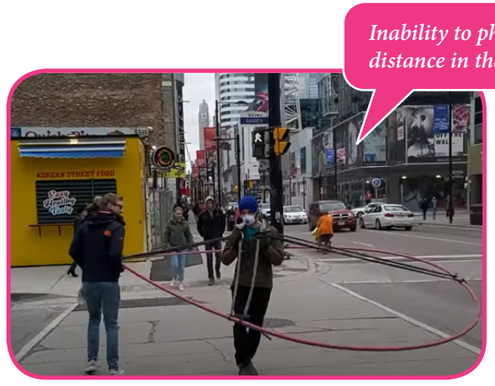


Fig. 40 - 'Social Distancing Machine'; Toronto, photo

Fig. 41 - Lack of Bike Lanes; Toronto, photo

1 Ray Oldenburg, *The Great Good Place* (New York: Paragon House, 1989)10.
2 Oldenburg, *The Great Good Place* 11
3 Oldenburg, *The Great Good Place* 11

Precedents - Globally

Cities that have become precedents for positive and effective solutions to issues due to COVID-19:

Portland, Minneapolis, Calgary, Boston, Oakland, Bogotá, Mexico City, Milan...

Cities all over the world are trying to find solutions to give more outdoor freedom to residents during this pandemic. North American cities like Portland, Minneapolis, Calgary, Boston and Oakland have all pushed the boundaries in some way, becoming precedents for other cities. Car traffic has significantly decreased meanwhile pedestrian and cyclist traffic has increased. With this increase and demand, solutions like temporarily restricting vehicle access on streets to allow for pedestrians and bikers to roam freely have been adopted. In Oakland, around 10 percent of the city's streets, which is equivalent to over 74 miles, are being closed down to all through car traffic. In Boston, 3 segments of large parkways have been shut down within the city center, and the extension of sidewalks along major streets to allow for more efficient social distancing is occurring in the suburbs. This has been done by closing off the on-street parking lanes so that they can be used by pedestrians. Bogotá, Mexico City and Milan have all expanded their cycling networks within the city to reduce crowding and use of public transit, as well as reduce the use of vehicles in the city. With the continuation of the pandemic, more cities are setting precedent for adapting to the need for a better public realm by setting pedestrians and cyclists first.

Oakland

Around 10 percent of the city's streets, which is equivalent to over 74 miles, are being closed down to all through car traffic during the pandemic. Some of these streets will remain permanently closed to traffic and become pedestrian streets for the future.

Fig. 42 - 'Slow Streets'; Oakland, photo

Fig. 44 - 'Slow Streets'; Oakland, map

Mexico City

For the past few years, Mexico City has been focusing on transforming the city into a more bike friendly environment; implementing 98 kilometres of bike lanes with a goal to add 70 kilometres more this year. When COVID-19 hit, they added 54 kilometres of temporary bike lanes along major streets.

Fig. 43 - Bike Network; Mexico City, map

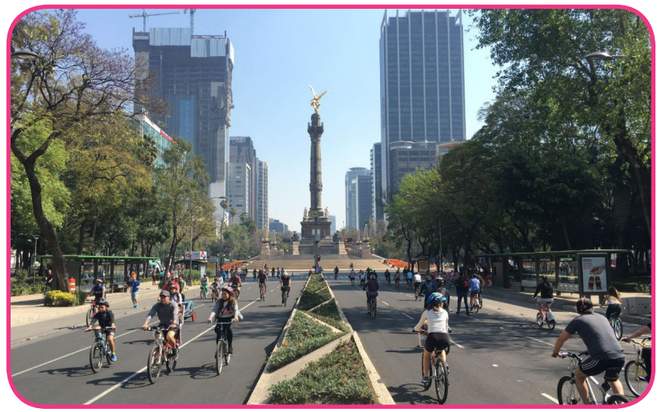


Fig. 45 - Bike Boulevard; Mexico City, photo

Downtown Toronto - ActiveTO

Downtown Toronto is facing major challenges related to over-crowding and safety regarding proximity to others within the public realm. The city has never prioritized people when designing and it has shown in the issues that have arisen throughout this pandemic. As stated above, there are cities that have stepped up to set precedent and improve their conditions for residents during this time. Simple approaches that have been taken include using parking lanes to widen the sidewalks for pedestrians, closing streets temporarily at certain times during the week to be used freely by pedestrians and cyclists and closing residential streets or portions of residential streets to allow for activities within neighbourhoods for children. These strategies are simple to apply at this time as car traffic has decreased significantly. By implementing these strategies, we can show the public how prioritizing people can be beneficial to both our mental and physical well-being. Our streets have the opportunity to be explored for a different use; focusing more on providing public space for residents to enjoy. Walking, biking, socializing with neighbours and growing as a community are a few examples.

The City of Toronto has started to implement strategies to make the public realm and outdoor experience better for residents. They have launched a program called ActiveTO which focuses on 3 specific strategies. The first being called 'Quiet Streets', it focuses on transforming portions of smaller, more local streets in neighbourhoods into shared space for pedestrians to enjoy without worrying about safety. Temporary signage and barriers are installed accordingly, including barricades to limit the speed of vehicles and local traffic only. These spaces are not for encouraging gatherings of any sort, but to allow communities to enjoy their surroundings without worrying about breaking the rules of social distancing. There have already been 50 kilometers of streets that have been added to this strategy, and as the pandemic continues, the list will grow. The second section of ActiveTO focuses on the temporary closure of major streets within the city. This strategy restricts all vehicle access on the weekends, allowing for pedestrians and cyclists to enjoy the city freely, while safely maintaining distance. Some examples of streets are Lakeshore Boulevard and Bayview Avenue. Lastly, the final section of ActiveTO is dedicated towards expanding the current cycling network. The city has added 25 kilometers of new bike lanes and includes popular transit routes such as Bloor Street East, University Avenue and Dundas Street East. These new bicycle lanes have been added throughout the entire City of Toronto and is the largest one-year expansion of on-street bike lanes to date. Their goal was to better connect cyclists in the city while travelling to local destinations and emulate transit routes as an alternative for taking public transit.

Fig. 46 - Quiet Streets; Kensington Market, photo

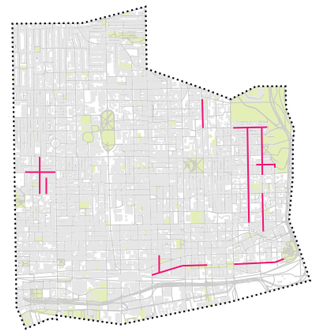


Fig. 47 - Quiet Streets; Downtown Toronto, map

Fig. 48 - Major Road Closure; Lakeshore Boulevard, photo

3 Strategies

01 Quiet Streets

- → Shared streets
- → Slower vehicle traffic
- → Local traffic only

02 Closing Major Roads

- → Temporary closure to all vehicles
- → On weekends
- → Pedestrian and bike friendly

03 Expanding the Bike Network

- → 40 kilometres of new lanes within the City of Toronto
- → Public transit corridors such as Bloor St E, University Ave and Dundas St E prioritized

Precedent Analysis

Analysis Categories

01 Laneway Revitalizations - Globally

02 Public Spaces - Globally

03 Toronto Revitalizations

04 Bicycle Cities

Laneway Revitalizations - Globally

More Awesome Now Laneways

Vancouver, BC
Completed: 2015-ongoing

The downtown core of Vancouver consists of over 200+ blocks that are bisected by laneways. The city of Vancouver has been planning to make changes that will create a more pedestrian-friendly and lively environment for its residents. More Awesome Now Laneways is a group that focuses on taking existing and underutilized laneways in Downtown Vancouver and transforming them into playful and exciting spaces for the public. Similar to Downtown Toronto, the public laneways offer a unique opportunity to integrate public spaces into the city core. Currently, the laneways in Downtown Vancouver serve important functions for the city and adjacent buildings but are unused for the majority of the day. The main goal in revitalizing these laneways is to create fun, vibrant and accessible spaces for the community to come together.

Each revitalized laneway project that has been completed has its own unique identity, which stems from the program. For example, Alley Oop, which can be seen in Figure 49, is all about recreational sports and activities. Being in the business district of Downtown Vancouver, this design was intended to bring more life, play and socialization into the area, in order to relieve employee stress post-workday. Ackery's Alley, found in Figure 50, was inspired by the artistic community and is situated beside the Orpheum Theatre. It features public art installations as well as music and dance events.

These laneway revitalization projects are similar to my thesis in that they focus on exploring the opportunities that existing laneways have for public spaces in a dense city. The Vancouver laneways currently serve existing city functions as well, therefore the revitalizations integrate vehicles, services and pedestrians into one space. This was really important in my thesis project because laneways are vital in supporting city functions. There is an opportunity that these spaces can be shared and used for both services as well as recreational uses.

Even though each laneway project is unique, they do seem to have similar guidelines for design. The laneways are all bright and colourful, standing out between the buildings. They all feature informal and movable street furniture or objects, to keep the space dynamic and let the occupants choose how they use it. Lastly, they all have the opportunity for kiosk or pop-up food and drink stands. The informality and excitement of these designs is really appealing to local residents. The laneways stand out as intriguing spaces as one walks by on the sidewalk. More Awesome Now Laneways has created many successful laneway revitalizations; giving the community the opportunity to unwind and enjoy life outside of the office. These spaces are a juxtaposition against the rigid and formal buildings that enclose them.

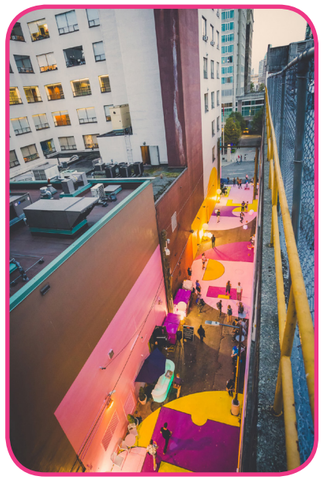


Fig. 49 - Alley Oop Lane; Vancouver, photo

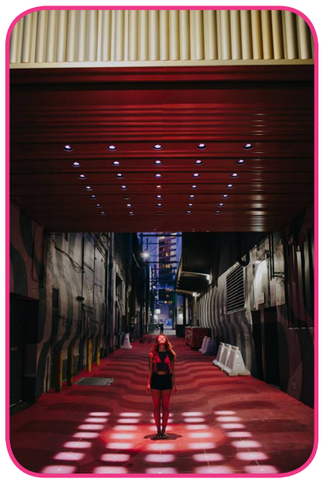


Fig. 50 - Ackerys Lane; Vancouver, photo

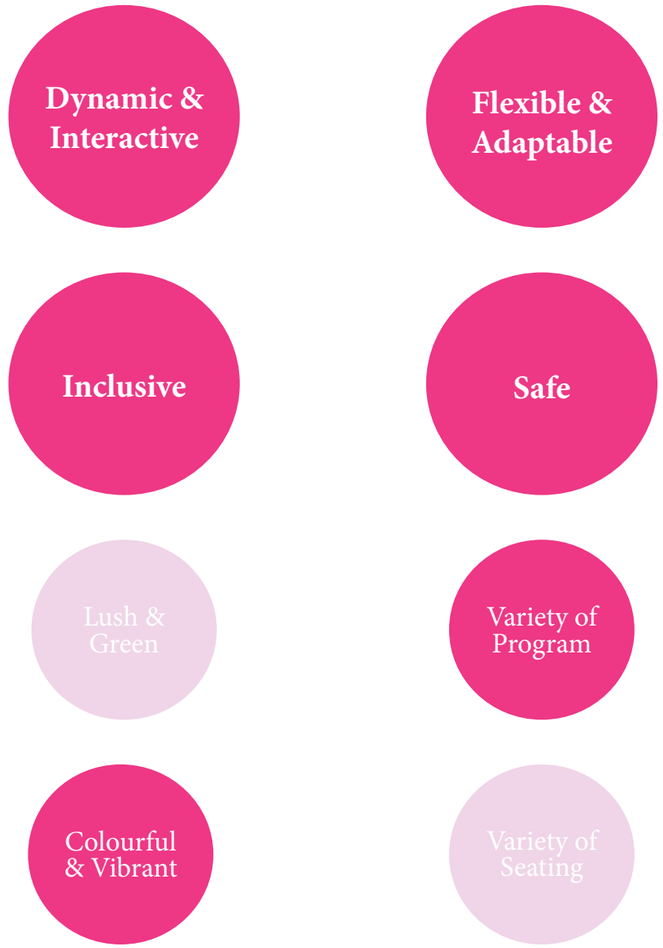


Fig. 51 - 8 Variables of Successful Public Spaces, diagram

Laneway Revitalizations - Globally

Love Your Laneway

Melbourne, AUS
Completed: 1990s-ongoing

Melbourne's downtown core started to decline in population during the 1970s due to residents and retail moving outwards into the suburbs. Without people staying past working hours, the city core was losing its vibrancy. The city decided to put focus on re-activating the downtown core with the help of state leaders, developers, designers and businesses. The City's Grids and Greenery strategy was created in 1987 in an effort to improve the public realm in Melbourne and increase the population in the city center, with an emphasis on the potential that the underutilized laneways provided. It focused on improving the overall pedestrian experience by looking at widths of sidewalks, street plantings, green spaces and lighting. A large effort was put into revitalizing the laneways in order to increase the walkability and attractions for pedestrian life, therefore focusing on their goal of attracting more people into the city center.

The city of Melbourne is a great example of the impact that an innovative and people-oriented government can have on city planning. Melbourne is a city built with laneways within majority of the blocks. Starting with a few laneways in the early 1980s, Melbourne paved the way in laneway revitalization as one of the first cities to do so. In an effort to increase the economy in the city and bring more pedestrian activity onto the laneways, many businesses and retailers open directly onto the lanes. This is very different than Downtown Toronto, whose storefronts only face the street front, leaving the laneways for services. This strategy is what kick-started the opportunity for pedestrian-only laneways in Downtown Melbourne. Residents were really happy with the end result of these revitalized laneways and the cultural, social and aesthetic improvements that they made on the city. The next steps for the city are to focus on adding more greenery and street furniture to the public realm, with the laneways being the drivers for this next project.

With the restriction of vehicles comes more freedom in design for activities; allowing for more permanent uses throughout. Restaurant patios, street art exhibitions and pedestrian routes are the main focuses these revitalizations. Each laneway is unique even though the program does not vary much. The businesses within each lane are different, creating a new atmosphere for each laneway. The maintenance, supervision and way-finding have also been a priority, which is as important as design. In any laneway revitalization project, maintenance must be prioritized. Laneways have a certain connotation in all cities; with people associating them with being dirty and unsafe. Maintaining a clean and well-managed appearance is key in changing people's mindset on laneways and their environment.

Fig. 52 - Hosier Lane; Melbourne, photo

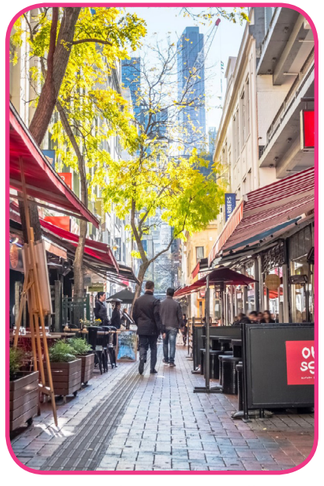


Fig. 53 - Hardware Lane; Melbourne, photo

This project focuses on creating better connectivity within the city, which is an important element in my thesis as well. Most laneways are pedestrian-only spaces, which is where the design differs. Creating a functional and safe shared environment for vehicles and pedestrians is one of the toughest challenges that my design faces.

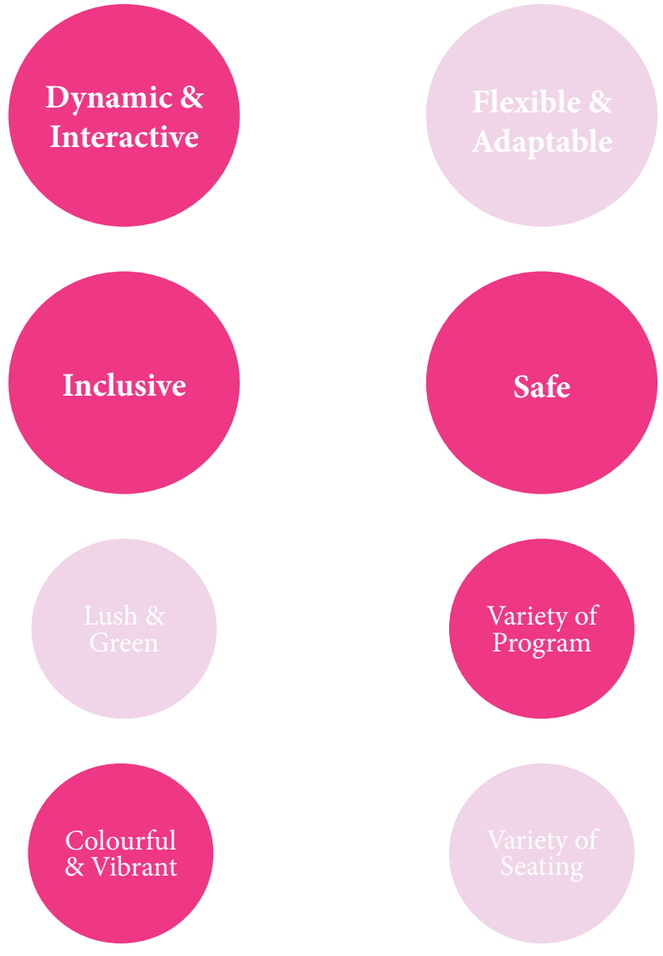


Fig. 54 - 8 Variables of Successful Public Spaces, diagram

Public Spaces - Globally

Superkilen

Copenhagen, DK
Completed: 2012

At around a kilometer long, this urban park is one of the most unique spaces in the city. It stretches through the Norrebro neighbourhood of Copenhagen; the most ethnically diverse and socially challenging neighbourhood in the city. This public space was designed with the intentions to combine a variety of cultures and ethnics into one space, where the community felt comfortable and welcome to come together. It emulates the depth and importance of a truly diverse neighbourhood in a homogeneous country like Denmark. It was intended as a meeting place for the local residents and hosts objects and furniture from over 60 countries. It combines the history of Copenhagen and its cycling culture with the diverse ethnicities of the local community, creating a unique space that represents equality and inclusivity.

This public space project is well-known for its playful environment, being an exciting addition to the diverse neighbourhood in Copenhagen. The original design proposal was based on creating an urban living room for the local residents. Although this project is not a laneway, it has a similar nature of weaving through the city fabric as a lane does. Other than the difference in size and scale of this project to a laneway, another difference is that this space is completely dedicated to pedestrians. The design restricts vehicles and therefore does not have to consider the challenges that occur when vehicles and pedestrians share a space.

The most interesting aspect of this public space is its program; the dynamic and interactive environment is created through the variation of program that it supports. Throughout this space, you can find a walking and cycling path; running through the public space and connecting it to its surroundings. As well, it features exercise and play equipment to encourage outdoor physical activity for all ages. There are many other interactive areas with a variety of seating options, games and activities to keep the users entertained.

As stated above, this project focuses on bringing the surrounding community together in a space that celebrates diversity. The colourful and vibrant aesthetic creates an exciting environment and gives it a uniqueness that separates it from other public spaces in the city. I enjoy the playful atmosphere that this space has created and find it successful in encouraging a culturally diverse and inclusive space. It is known that residents of Denmark enjoy spending time being social outdoors and this project creates plenty of opportunities to do so. This is a concept I hope to emulate in my thesis, by creating public spaces that encourage social interaction through similar characteristics as Superkilen.

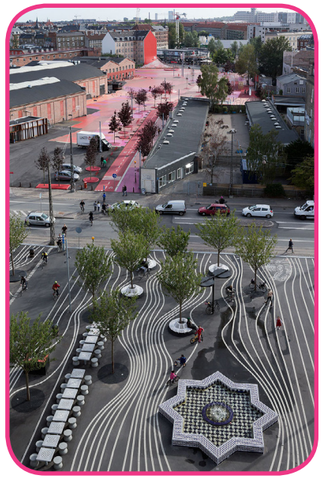


Fig. 55 - Aerial View; Superkilen, photo

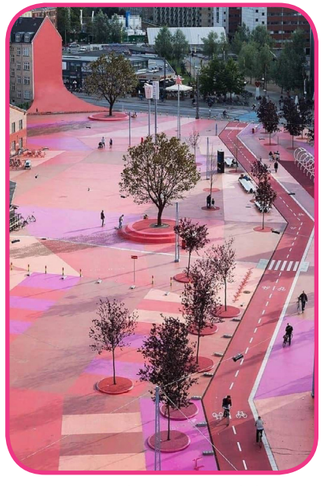


Fig. 56 - Aerial View; Superkilen, photo

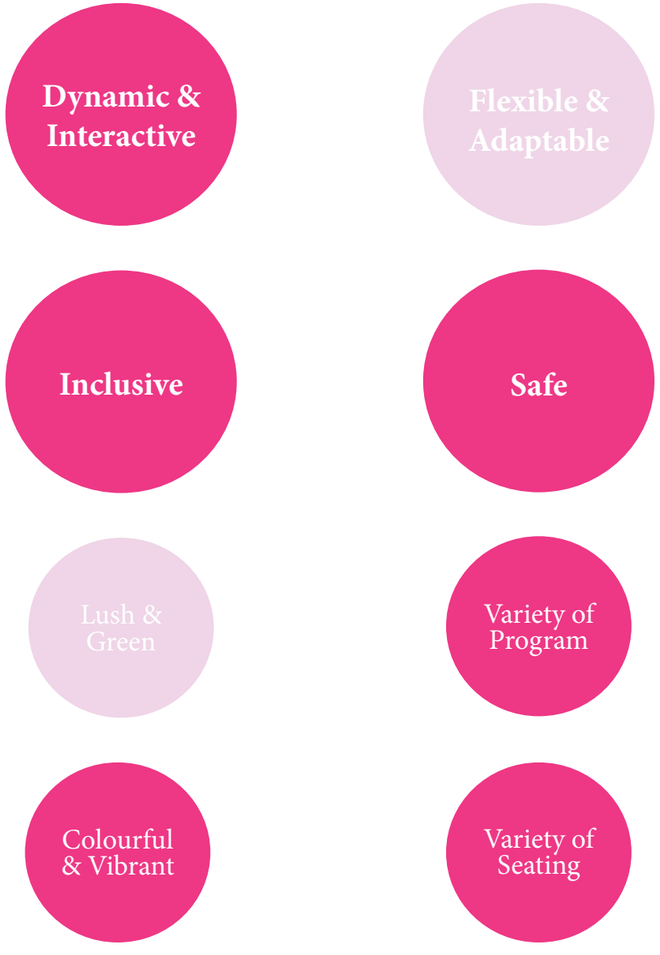


Fig. 57 - 8 Variables of Successful Public Spaces, diagram

Public Spaces - Globally

Paley Park

New York City, NY
Completed: 1967

Paley Park has been a very popular reference for privately-owned public spaces in both New York and beyond. Funded by William Paley, former Chairman of CBS, it was meant to become a prototype for a new typology of privately-owned public spaces. Its design focused around the park becoming a quiet escape from the busy city life in Midtown Manhattan. Elements were chosen for the space based on how well they helped prevent sound. With greenery along the walls and a fountain towards the back to help drown out the street noise. The park is also elevated off the street by a few steps to create a physical and visual barrier. It was designed to be functional and dynamic, with furniture that could be moved very easily, to provide flexibility and optimal comfort for the visitors. This public space is used daily, in all seasons throughout the year, as a quiet and peaceful oasis in the midst of a busy and noisy city.

Paley Park is a small and quiet oasis tucked away from the busy street life of Manhattan. This public space has many aspects as my thesis, including its size and scale, its informality and overall atmosphere. Paley Park is surrounded on three sides by buildings; which makes it similar to a laneway, which is typically enclosed by buildings on both sides. This precedent shows that successful public spaces can be created in the small spaces between buildings in a dense city. The program within this space is simple; it hosts tables and chairs that can be moved around freely, allowing visitors to make the space their own. Adaptability plays a key role in creating a successful public space and is a characteristic I intend on applying to my thesis design. In the laneways, as free space is limited, it is essential to be functional and efficient when it comes to program. The program should be fluid and adaptable similar to Paley Park, in order for visitors to enjoy the space and feel comfortable. The park is surrounded and filled with greenery, with a water feature located at the back, to create a true oasis.

From the street, the park looks inviting and enjoyable, with people occupying the space in their own ways, which is exactly the atmosphere I intend on creating for my thesis. One main difference between Paley Park and my thesis project would be the ownership. This park is a privately-owned public space, which means that unlike the public laneways in Downtown Toronto, it is funded by a private owner, not the city.

Fig. 58 - Entrance View; Paley Park, photo

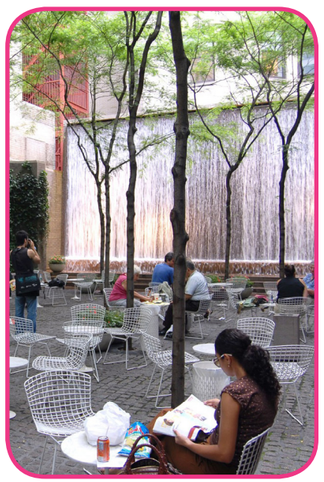


Fig. 59 - Seating; Paley Park, photo

Fig. 60 - 8 Variables of Successful Public Spaces, diagram

Public Spaces - Globally

The High Line

New York City, NY
Completed: 2009-2014

The High Line is a restoration project that connects the Meatpacking District to Chelsea and spans around 1.45 miles in length. It is one of the most innovative green spaces in New York City as it was an old elevated railway that was transformed into a lively and vibrant public space. It offers a variety of program along the entire project, such as markets and public art exhibitions, but is most often used as a path to stroll along. The railway was originally abandoned after trucks displaced trains as a means of shipping and delivery in the city throughout the 1960s, and it was left empty during the 80s and 90s. The railway had begun to be overgrown by plants and grasses and the city was desperately trying to figure out its future.

For a few decades, the High Line was abandoned and was an underutilized space in the city. It was unknown what the future would hold for this unique space and how it would be integrated back into the city fabric. This is the same way I view the laneways in Downtown Toronto; being an important aspect in city function but underutilized and have the potential to provide more value in the heart of the city. Both the High Line and the public laneways in Downtown Toronto have an important history with their respective cities, and in this project the design incorporated and celebrated that history. This aspect is really important to emulate in my thesis; embracing the historical function and value that the laneways provide in the city rather than ignoring them.

The High Line stretches through many blocks and neighbourhoods, with a variety of program along. Markets, public art exhibitions and a walking path are some of the main uses that attract visitors. The main concept behind this project was 'agri-tecture', which the designers deemed as being a space that combined the characteristics of a park, pathways and gathering spaces. The greenery and plantings are what stands out the most on the High Line project, contrasting with the aesthetic of the surrounding Manhattan buildings.

Clearly, the High Line project differs from my thesis in a few ways. The first being the size and scale, this project is much larger than what I intend on designing. Secondly, the fact that the High Line is elevated from the street is a key difference. The High Line faced challenges regarding attracting people to walk up and visit the public space, whereas the laneways can be found directly off of the sidewalks. Lastly, due to its elevation, the High Line has the opportunity for views of the city and sunlight throughout the day. These features can help a public space succeed but unfortunately are less likely to be found working within a laneway.

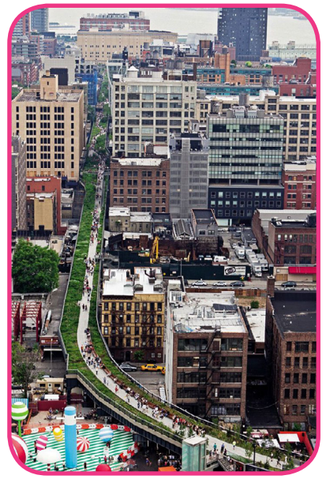


Fig. 61 - Aerial View; The High Line, photo

Fig. 62 - Railway View; The High Line, photo

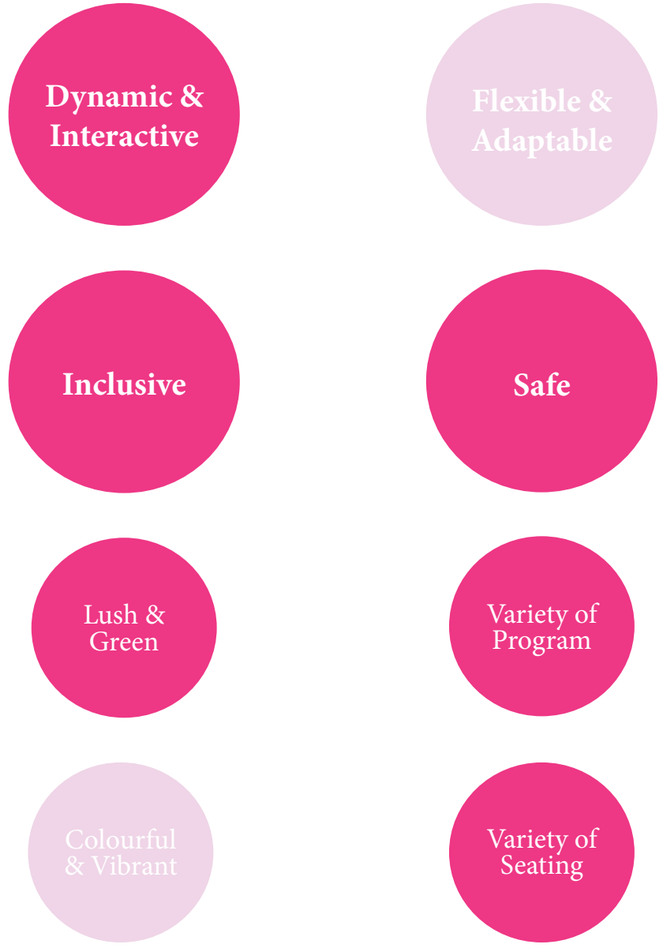


Fig. 63 - 8 Variables of Successful Public Spaces, diagram

Toronto Revitalizations

King Street West - Pilot Project

Toronto, ON
Piloted: 2017 Made Permanent: 2019

The King Street Pilot Project was created to give priority to public transit on King Street W, from Bathurst Street to Jarvis Street. Currently, this route is one of the busiest public transit routes in the downtown core. With the increase of population density in the past couple of years, the volume of commuters has increased significantly, causing issues with overcrowding. The main goal of this project was to reduce car traffic along King Street W, to allow for faster and more reliable transit. The streetcars take priority in this project, with taxis being the only cars allowed to travel through intersections. All other cars must turn as they approach intersections, but those turns are decided on a block by block basis. The travel time for cars in the area has not been affected by the reduction of vehicle traffic along King Street, and this pilot project has proven that when given the opportunity, public transit is the most reliable, fastest and most efficient option.

There were many complaints from nearby business owners in the area, questioning whether this pilot project would have a positive or negative impact on their businesses. While retailers were expected to lose business from vehicle traffic, it was projected that there would be more pedestrians traffic, making up for that loss. After the pilot project was in place for about a year, it seemed that both residents and businesses supported the changes. City council voted and an overwhelming amount of them agreed to make this transit project permanent.

In addition to the transit changes in the area, in 2019 a Design Build competition was launched called King Street Parklets. This competition focuses on improving the public spaces along King Street and expanding opportunities for businesses in the area. There are two types of parklets that can be built; the first being temporary public space installations for people to gather and sit, and the second being more permanent and durable spaces with accessible seating and greenery, placed along the curb in a lane. A total of 12 public space installations were chosen and will be or have been implemented along the King Street corridor.

The transit pilot project and the parklet competition are both great steps forward for Downtown Toronto in that the city is finally prioritizing the public realm and other modes of transportation other than cars. Downtown Toronto has focused for many decades on designing streets for vehicles and has neglected pedestrians. It would be great to see pop-ups and other projects similar to these on other major streets or corridors in the city center. The pilot project focuses on

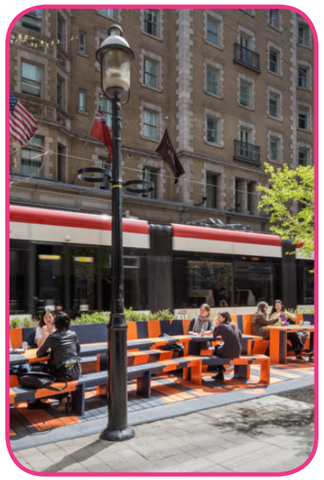


Fig. 64 - Parklet; King St W, photo

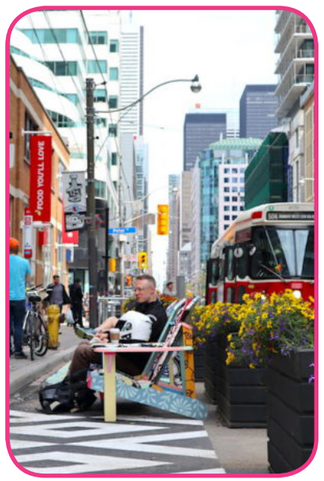


Fig. 65 - Seating; King St W, photo

improving transit along King Street by reducing the volume of vehicles and the parklet competition encourages pedestrians to visit and stay. I would be interested to see how more pilot projects focused on cycling could be implemented into the city core, and which streets have opportunities for better bike infrastructure. This is something I plan on exploring in my thesis as I am looking to expand both the pedestrian and bike network.

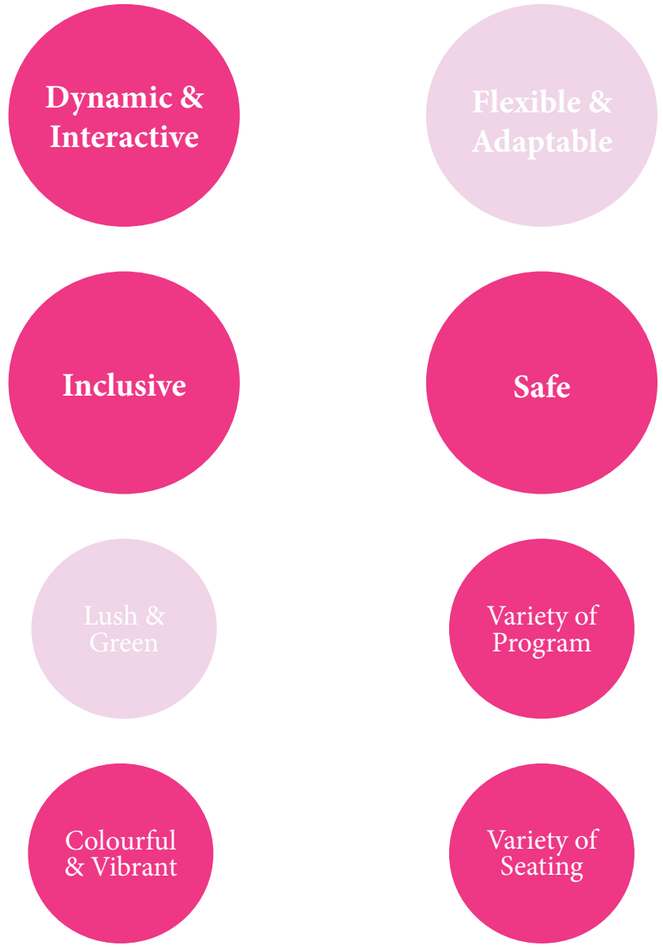


Fig. 66 - 8 Variables of Successful Public Spaces, diagram

Toronto Revitalizations

Village of Yorkville Park

Toronto, ON
Completed: 1994

Village of Yorkville Park is a compact yet successful public space in the city. It is situated in the upscale neighbourhood of Yorkville, between boutiques and shops along its North side, and high-rise residential and office buildings along its South side. Originally, the space was a parking lot, built above the subway. Within the 1970s, the city decided to replace the existing parking lot with a park, and an international design competition was launched. It has been recognized as one of the downtown core's most successful public spaces and has won awards from the American Society of Landscape Architects.

The park structure is divided into 11 different sections, each representing a Canadian landscape. Examples of the 11 sections are upland forests, marshes, groves, prairies, orchards and rock. The dividing lines between each section also mark the historic lot lines where the now demolished Victorian houses once sat, being torn down to make space for the new subway line in the 1950s. This park features a variation of informal seating options for relaxing, observing and enjoying food and drink from local spots. The public space feels dynamic and exciting because of its variation, which draws people to want to visit. Due to its unique characteristics and popularity, there are always pedestrians walking throughout the park or visitors sitting and watching others. This occurrence supports Jane Jacob's principle of 'Eyes on the Street', where there are always people around, therefore the environment feels safe and resident's look out for one another.

The main concept for the design of this space was not just to add greenery into the space but to create landscapes that resemble art installations. This requires more thought and innovation than adding trees and bushes to a public space. The 11 sections and their dividing lines draw a connection from both the site and the Canadian landscape, ensuring that this public space is unique, unlike any other space in the city. Aside from the landscape, another engaging characteristic is the shops and retail along the North side of the park. These facades are busy with pedestrians walking in and out, keeping themselves entertained as well as providing entertainment for the observers in the park.

The informality, variation and thoughtful design intention are all aspects that I aim to emulate in my thesis. Visitors enjoy having plenty of seating and relaxing options, allowing them to feel comfortable in the space and use it how they wish. As well, the careful design and intention of the concept, including the greenery and overall planning of each section is really important. This park has been successful in creating a public space that people enjoy visiting or walking by, fulfilling the wants and needs of local Toronto residents, as is shown through its steady volume of visitors.

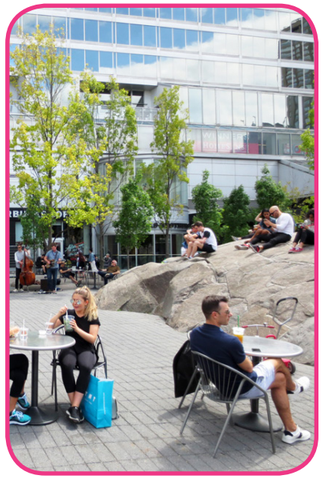


Fig. 67 - Seating; Yorkville Park, photo

Fig. 68 - Walkway; Yorkville Park, photo

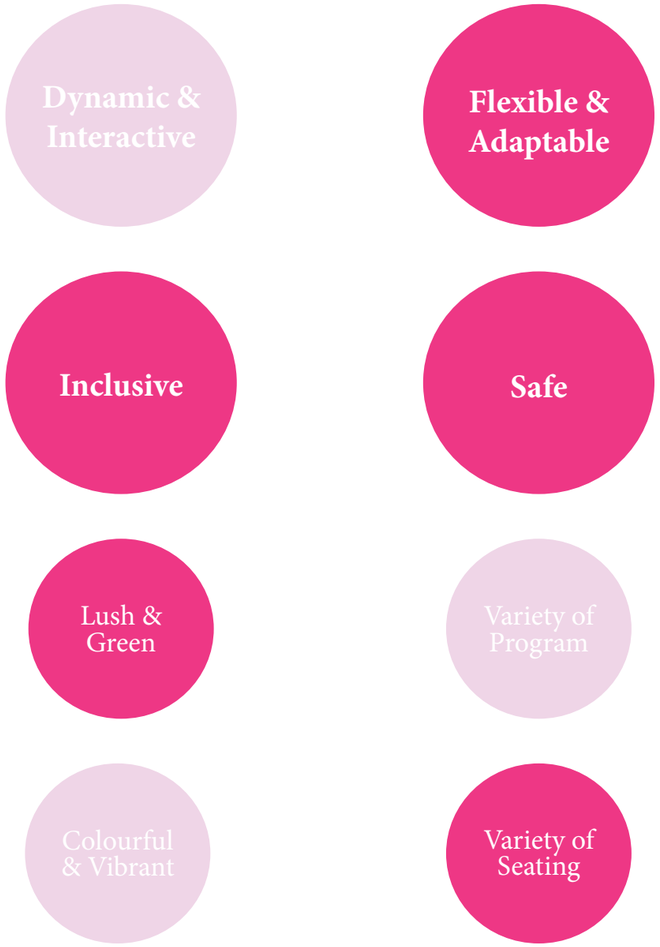


Fig. 69 - 8 Variables of Successful Public Spaces, diagram

Toronto Revitalizations

The Bentway

Toronto, ON
Completed: 2018

The Bentway is a public space that spans almost 2 kilometers underneath Toronto's Gardiner Expressway. This project was an attempt to revitalize a neglected area and highlight the potential that the land underneath the highway could provide. Downtown Toronto has rapidly increased in population density and will continue to increase, creating challenges regarding the integration of new public spaces in the downtown core. It is rare to come across any available land or open space in the city center, but the Bentway provides an innovative solution. They are taking advantage of empty space underneath a roadway that has the potential to add more value to the city. Due to its length, the project spans through multiple neighbourhoods, which makes it accessible for a lot of residents in the city. The project supports cultural, artistic and recreational program of all types, emphasizing the unique and expansive civic culture that the residents of Toronto represent.

The Bentway design offers large, open spaces that are used for various program; it is a functional and adaptable project. The space can be used or occupied however the visitors wish, which is important for people to feel comfortable in a space. It has been designed as a true Canadian park; offering year-round activities and uses, even in the cold winter months. It hosts gardens, a skating trail, public art and exhibitions, festivals, theatre and musical performances, and local community events. In that sense, I find it similar to Superkilen in Copenhagen, as it is clear that one of its main design principles was to be inclusive. I intend to design my thesis with a similar approach; creating welcoming and inclusive spaces. It sets precedent for public spaces in Downtown Toronto as its variation of program creates a vibrant and dynamic environment, appealing to people of all backgrounds and interests.

One major issue with this project that is similar to a challenge I face within the laneways is access to natural light. For the Bentway, the Gardiner Expressway, a major highway into the city, is located directly over top of the entire project, restricting the access to sunlight during the day. Within the laneways, the adjacent buildings can be incredibly tall and therefore block daylight as well. What can be shown throughout this project is that even with less light than a regular park or public space, the project can still be successful if designed well. Even though the Bentway may be shaded for majority of the day, people are still drawn to the space and enjoy it for its other unique qualities.

As this project is around 2 kilometers in total length, similar

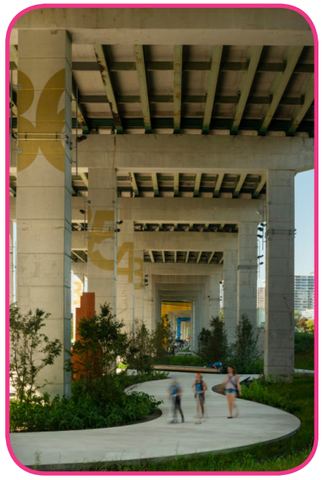


Fig. 70 - Walkway; The Bentway, photo

Fig. 71 - Community Event; The Bentway, photo

to the High Line, it is much larger in size than the laneways I will be designing. There are qualities in this project that cannot be found in many other public spaces.

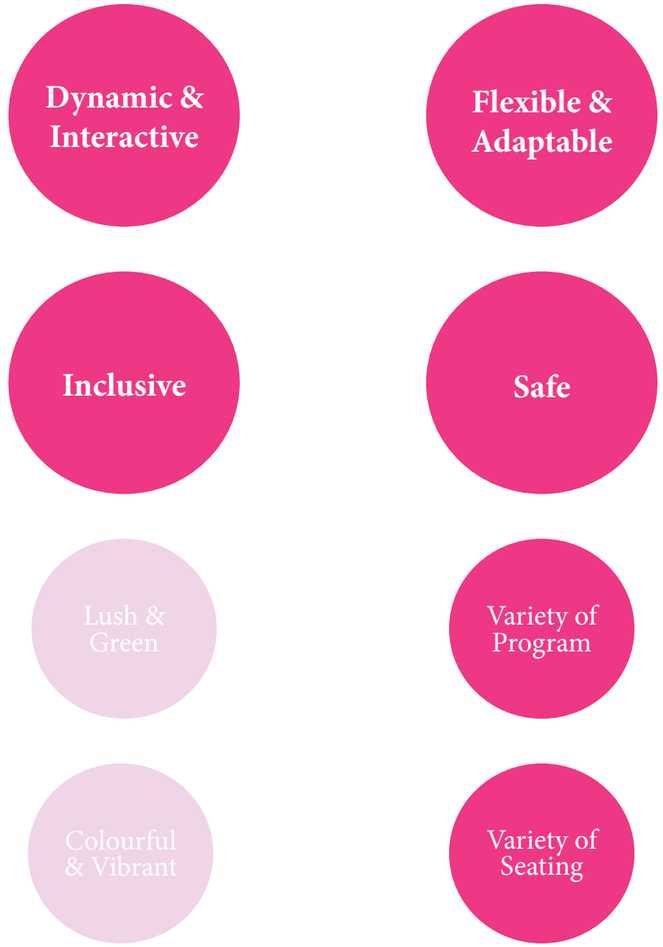


Fig. 72 - 8 Variables of Successful Public Spaces, diagram

Bicycle Cities

Copenhagen, Denmark

As one of the first cycling cities in the world, Copenhagen paved the way for civic bicycle culture. To this day, the city still hosts the world's most advanced and thorough bike network and infrastructure system. It has become one of the strongest characteristics in the civic culture and is used every day by both commuters and visitors. Children learn how to ride bikes at a very young age, and spend their years exploring the expanse network of bike lanes throughout the entire city. Majority of the residents do not own cars, as the bike network is so well developed, it is typically faster and more efficient to travel by bike than car. When it snows in the winter, it is typical that the bike lanes get plowed before the car lanes, to accommodate the immense number of daily cyclists.

Copenhagen was once a city filled with cars and parking lots. Similar to other cities around the world, Danish urban planners believed during the 1960s that automobiles were a major factor for city design in the future. But with the oil crisis in the early 1970s, Denmark began introducing and encouraging other modes of transportation for residents. Car Free Sundays were introduced and eventually, residents became enthusiastic about walking and biking around the city. Streets began closing to vehicles and becoming pedestrian only. With time, both the government and residents became more invested in sustainability. This derived from concerns about air pollution and the future of climate change. The government put a hefty tax on automobiles and gas, attempting to discourage people from buying them. Lastly, it is important in the Danish culture to be outside and immersed in social interaction. Residents enjoy being active by cycling and taking advantage of their public spaces and parks.

Cycling has been a big factor in the culture of Copenhagen, and residents truly enjoy biking around the city as their mode of transportation. The city implemented bike lanes on all major streets, with majority of those lanes being physically separated by a curb or level change from the vehicle lanes. One of the biggest factors in improving the number of cyclists in a city is ensuring that the infrastructure is safe. Copenhagen has prioritized biking as the main means of transportation for decades, ensuring cars understand and respect that cyclists are the priority. This creates a safe environment for cyclists; where they feel comfortable sharing the streets with vehicles.

For my thesis, the most important aspect I can learn from Copenhagen is to create a continuous network of safe bike infrastructure. In Downtown Toronto, many residents are deterred from cycling because of the lack of infrastructure or network and the fact that vehicles do not respect cyclists. By implementing new, safe lanes and crossings, it will make people feel more comfortable with biking as a means of transportation around the city. Existing streets can be re-organized to replace car or parking lanes with bike lanes. By prioritizing the cycling culture in the city, vehicles will learn to share the roads and respect another means of transportation.

Fig. 73 - Intersection Crossing; Copenhagen, photo

Fig. 74 - Bike Lane in Winter; Copenhagen, photo

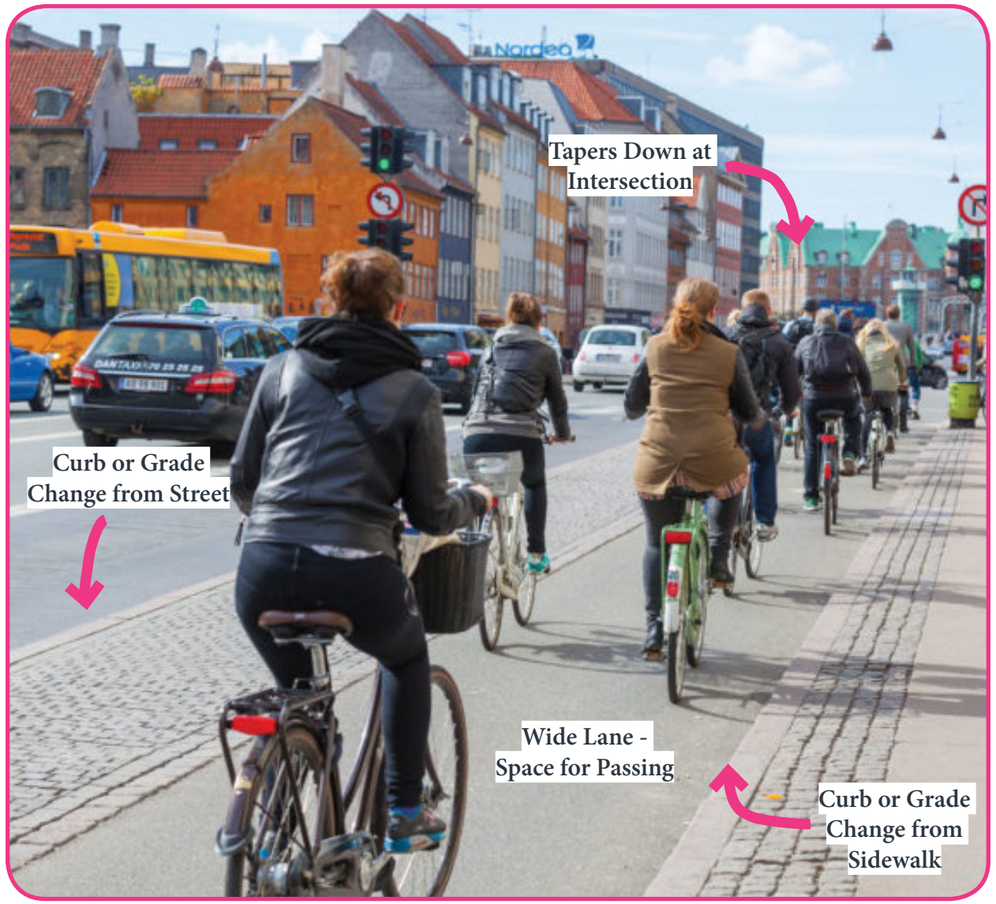


Fig. 75 - Typical Bike Lane; Copenhagen, diagram

Bicycle Cities

Vancouver, Canada

Currently, Vancouver has around 450 kilometres of bike lanes in the city. Cycling is becoming the city's fastest growing mode of transportation. The Canadian city has had a long history with bike culture, starting with the 'bicycle craze' hitting in the 1890s and early 1900s, before motorized vehicles dominated the streets. With streetcars not quite ready to hit the streets, the high cost of buggies and the large sprawl of city neighbourhoods, families found bikes to be the most effective mode of transportation at the time. Cycling was seen as a 'class-less' mode of transportation; equality for all when riding. Around 1905, with the development of the first gasoline cars and implementation of the city's first gas station, bikes began to slowly fade out. Throughout the 1900s, cars served as the main mode of transportation in Vancouver.

In the past few years, Vancouver has set climate change goals that involve transforming the main means of transportation in the city. They have committed to making two-thirds of their daily travels completed by public transit, biking, or walking[1]. The city is focused on supporting more sustainable and healthy lifestyles for their residents. With setting these goals, they had to start implementing biking infrastructure to prioritize cyclists. Not only are they determined to add more lanes, but the city studied and researched the best ways to create safer and more comfortable lanes, both new and existing. They understand that bike lanes should be wide enough to allow for easy passing as well as cargo bikes for groceries or children. The city is also prioritizing creating physically separated lanes as these lanes are the safest options to keep cyclists away from the zooming car traffic. Focusing on filling in the existing gaps that lack in their current bicycle network, their goal is that the bike infrastructure can support the daily needs of their residents through safe and efficient routes.

Implementing a bike network will take many years but the city of Vancouver has been diligent about studying precedents, doing studies within the city and creating standards to better their infrastructure. They have pushed the cycling culture within the city with residents and encouraged drivers to understand the benefits of shared streets. The city has also tried to implement festivals and events with their bicycle network to further encourage the mode of transportation. Examples include regular events like Bike to Work Week, Vancouver Critical Mass and Bike the Blossoms[2]. They have daily pub-crawls done by bike and community rides as well. The intention is that riders will continue to commit to a more sustainable way of commuting or traveling through the city.

The city of Vancouver has a bike share system called Mobi which launched in summer 2016. Since then, Mobi has grown immensely with the implementation of over 1,500 bicycles and 150 stations all over the city[3]. Cycling in Vancouver is still a new cultural shift that they are learning to accept and enjoy. What can be learned from this precedent is the effort and initiative that Vancouver has put into expanding its bike network and culture. The city is focused on encouraging a better and more sustainable mode of transportation for its residents. They have committed time, effort and money into researching, learning and implementing, and will continue for the coming years, as they understand the impact cycling will have on both the city and its residents in the future.

Fig. 76 - Intersection Crossing; Vancouver, photo

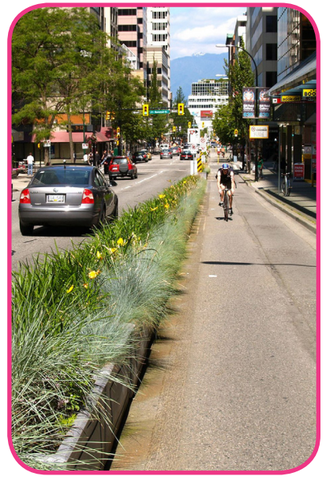


Fig. 77 - Separated Bike Lane; Vancouver, photo

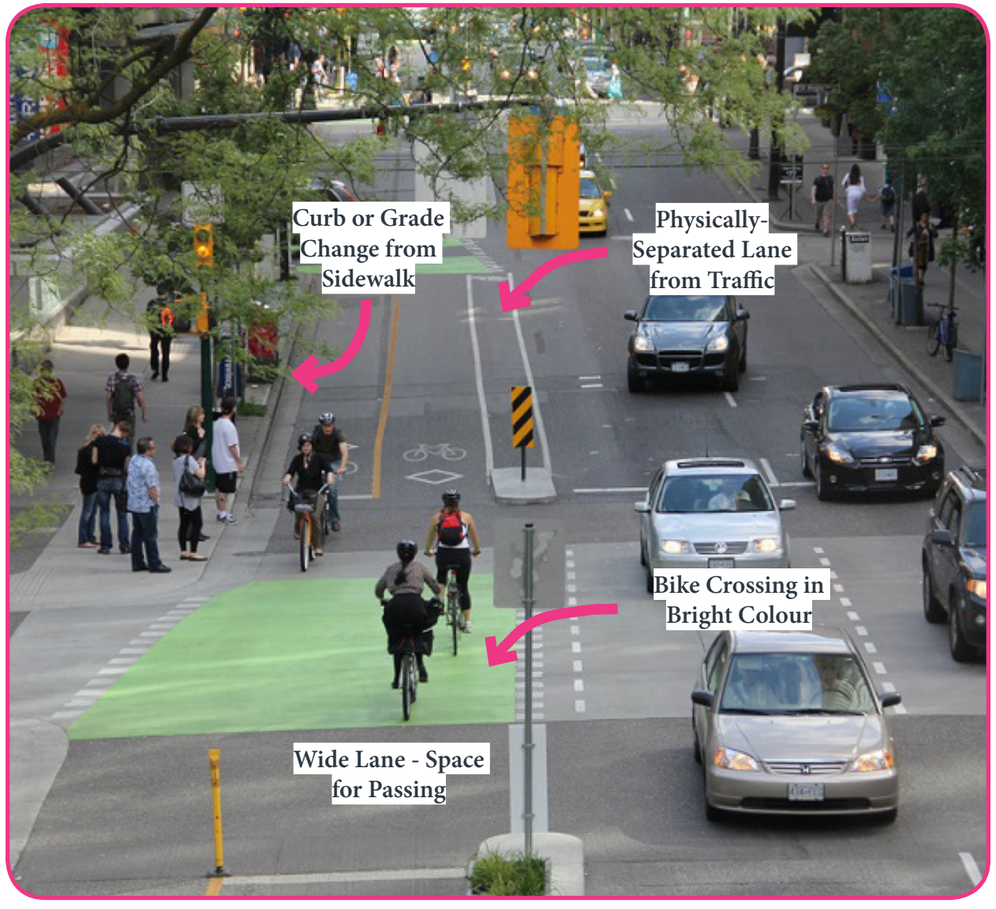


Fig. 78 - Typical Bike Lane; Vancouver, diagram

1 Aaron Short, "Vancouver Builds a Better Bike Lane," Streets Blog USA, June 10, 2019.
2 "Vancouver's Bicycle Culture," https://www.tourismvancouver.com/activities/cycling-mountain-biking/bicycle-culture/.
3 "Mobi, our Public Bike Share System," https://vancouver.ca/streets-transportation/public-bike-share-system.aspx.

METHODOLOGY

Analyze the City

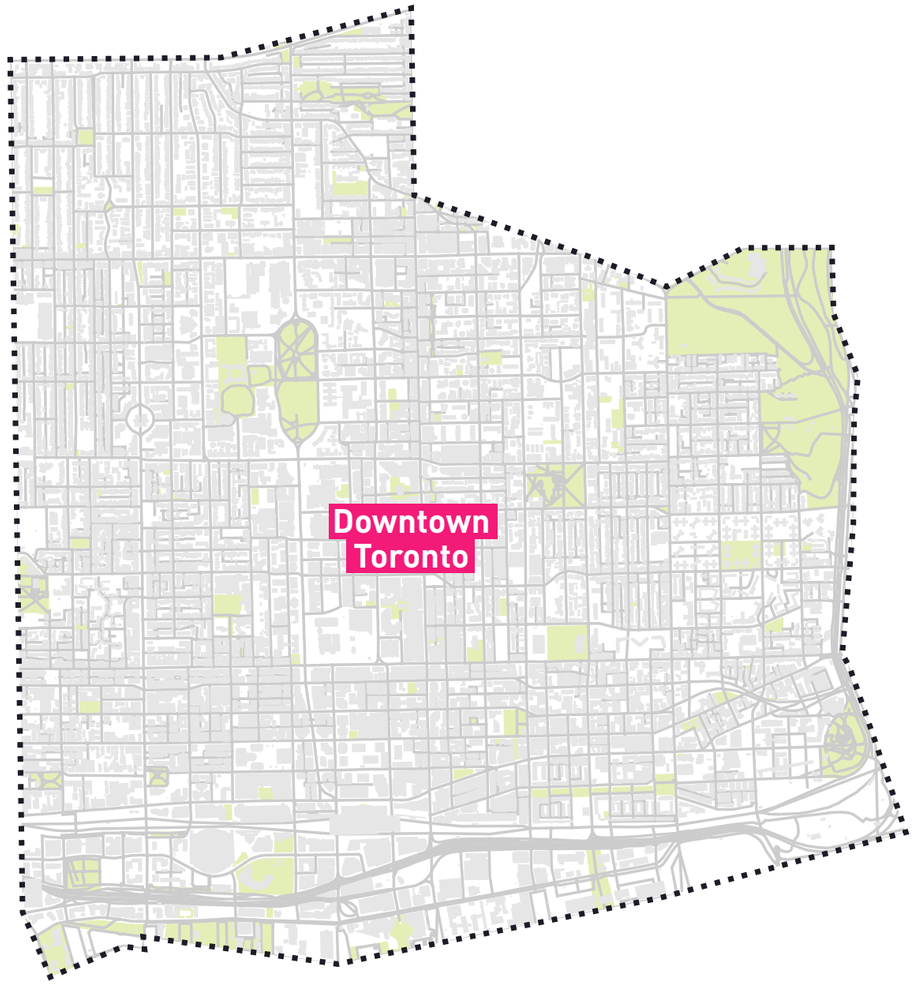


Fig. 79 - Analyze the City Boundaries, diagram

Downtown Toronto

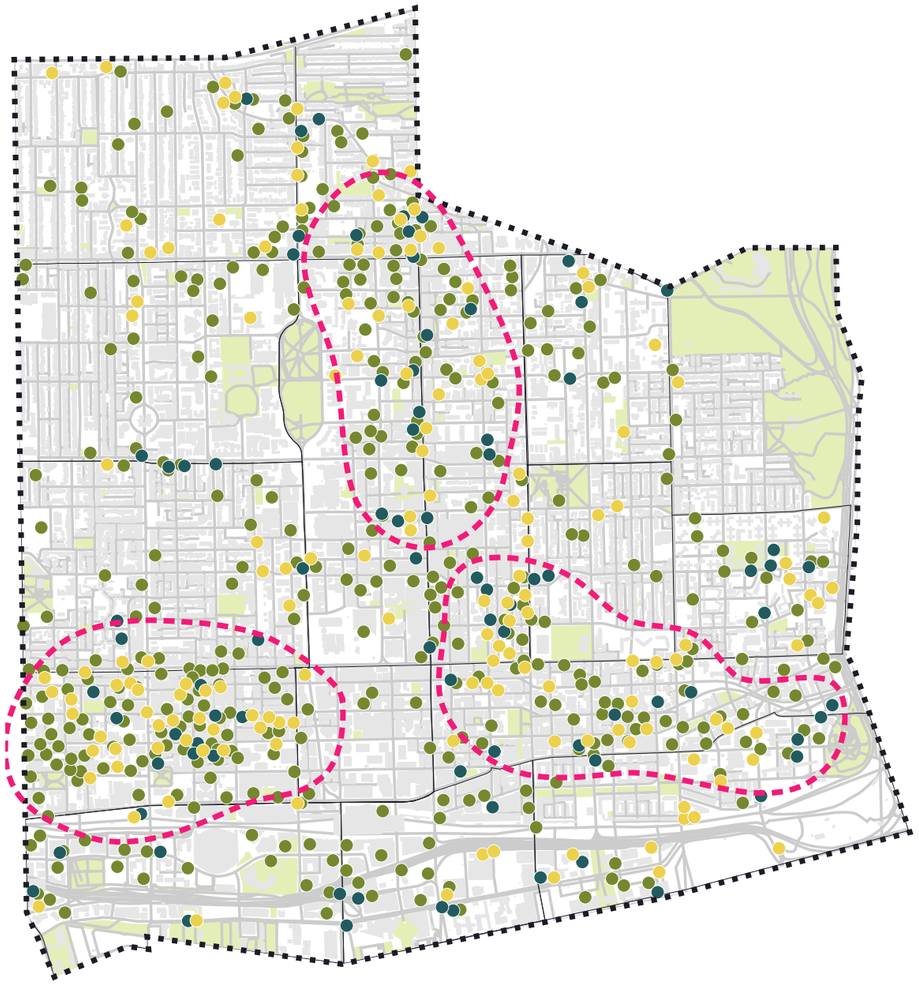


Fig. 80 - Building Developments by Phase; 2006-2019, map

1:30,000

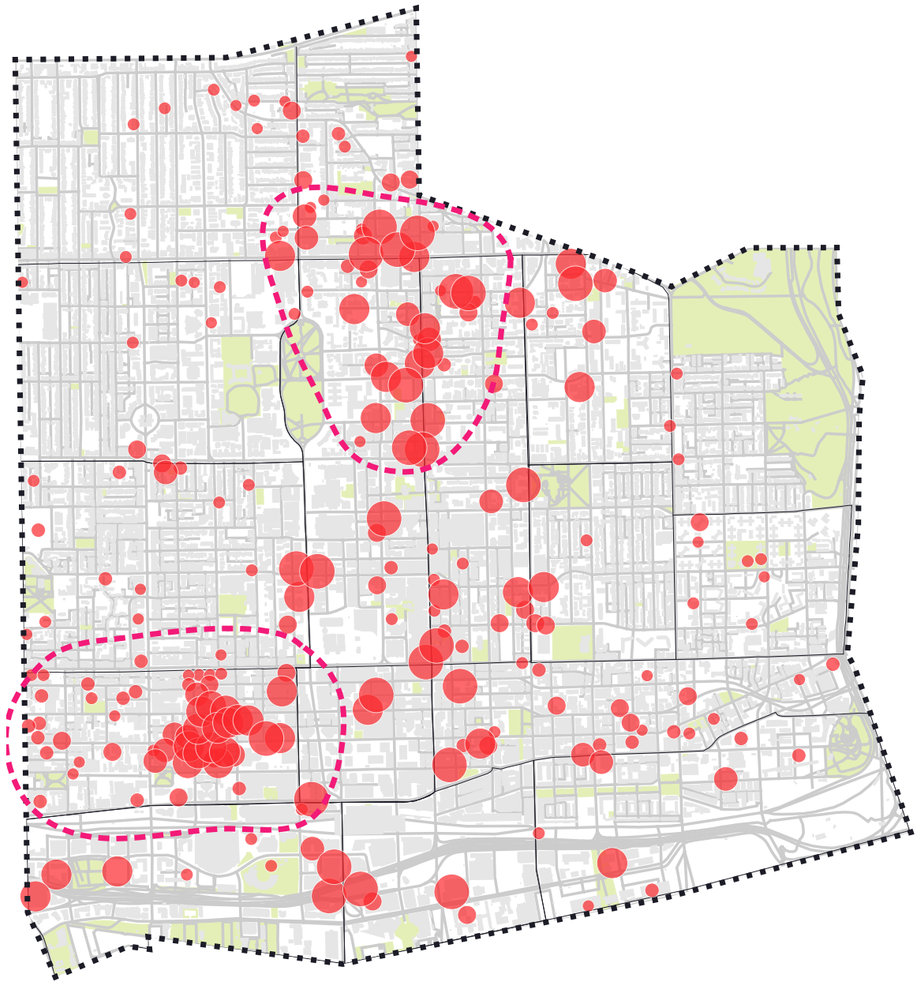


Fig. 81 - Building Developments by Height in Storeys; 2008-2013, map

1:30,000

Downtown Toronto

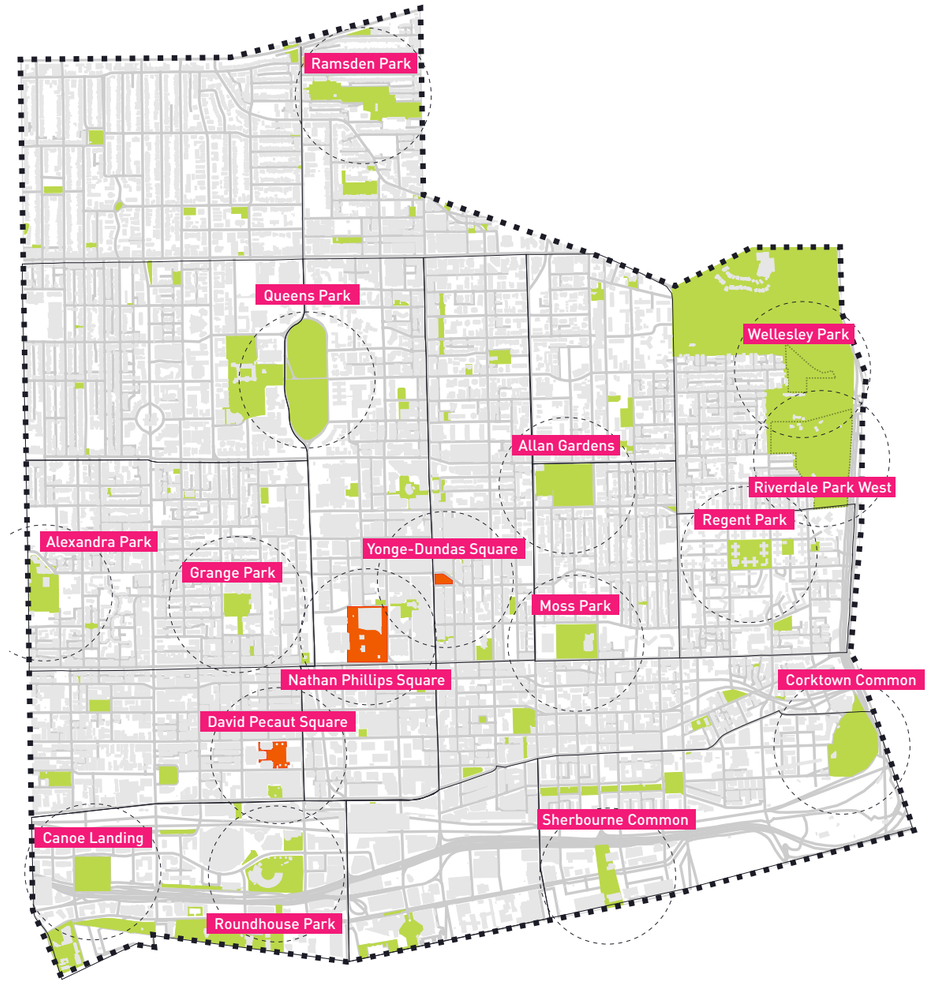


Fig. 82 - Public Parks and Squares, map

1:30,000

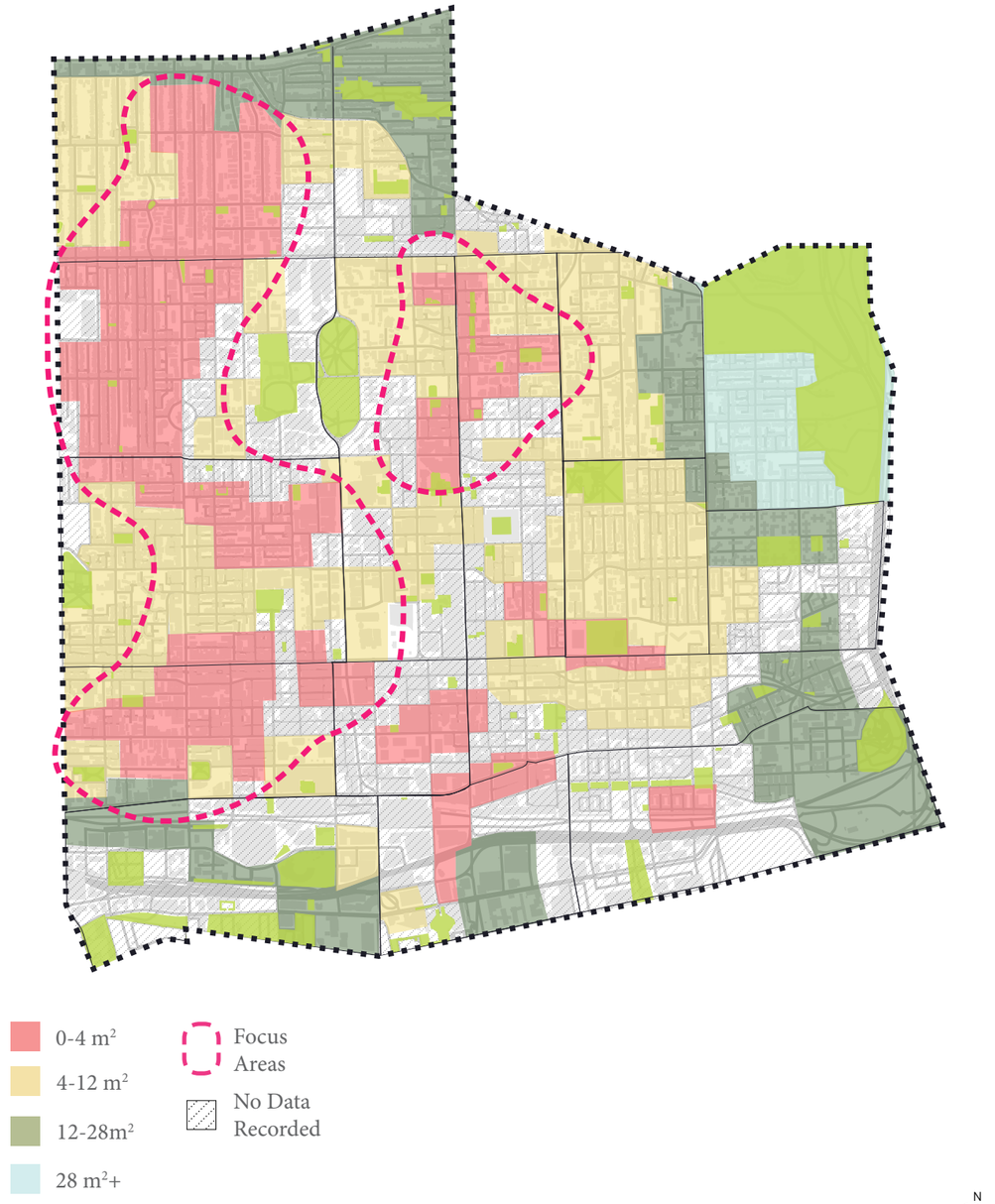


Fig. 83 - Total Park Area per Person (m²), map

1:30,000

Downtown Toronto

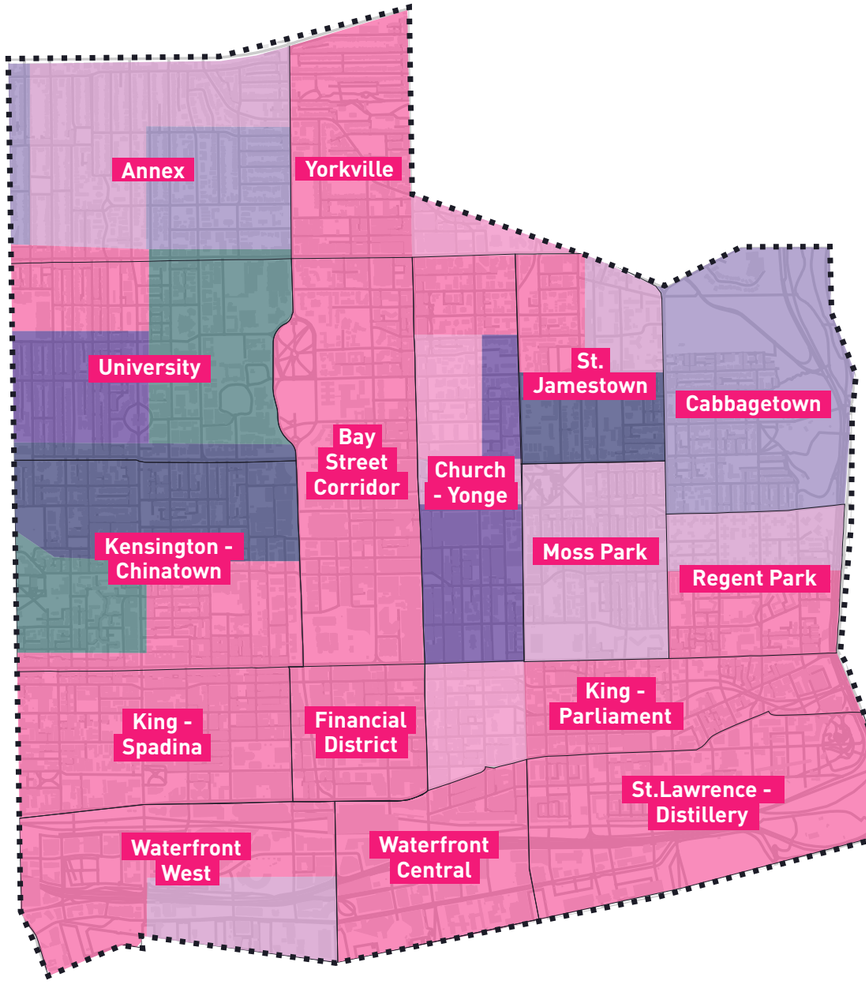


Fig. 84 - Population Density Change by Neighbourhood, 2011-2016, map

1:30,000

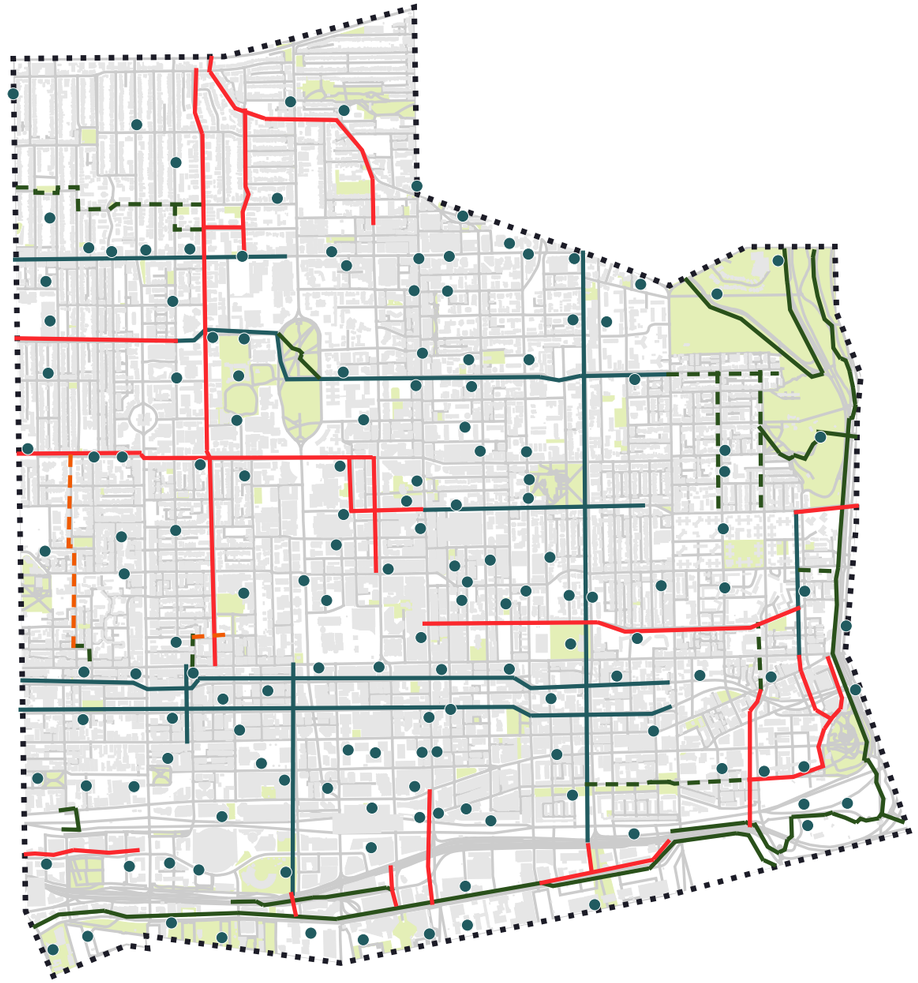
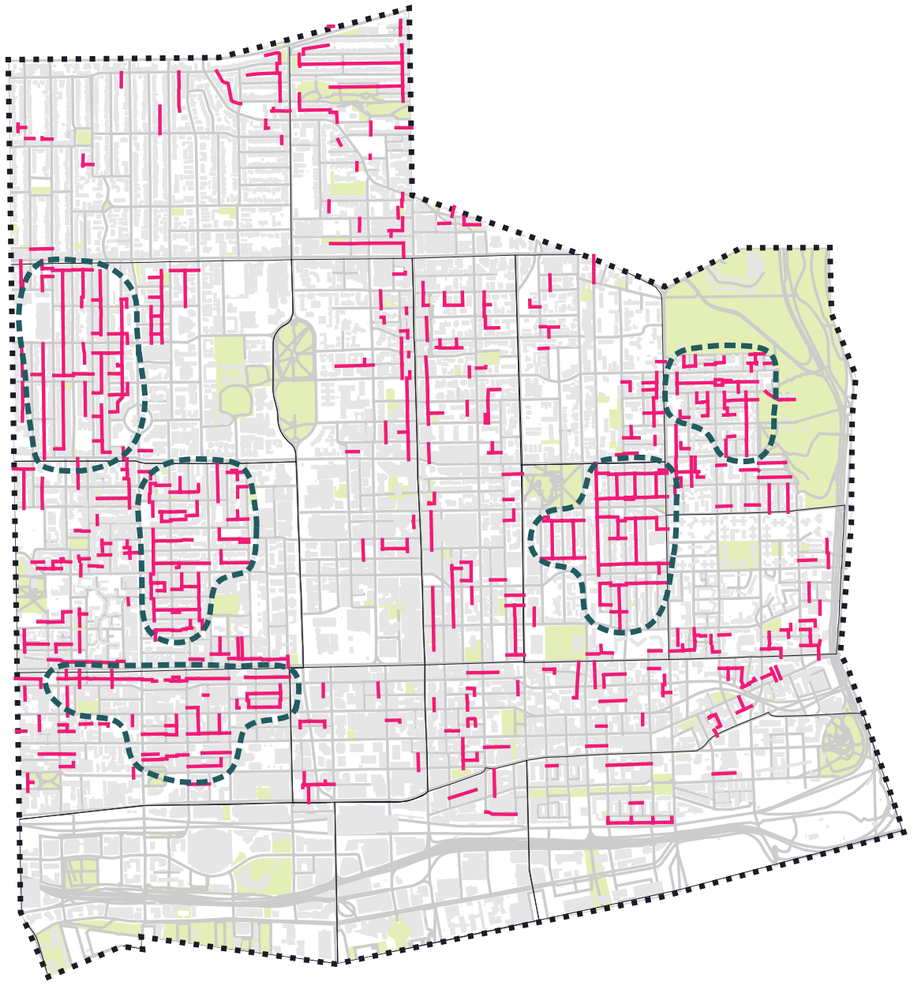


Fig. 85 - Bicycle Lanes and Infrastructure, map

1:30,000

Downtown Toronto



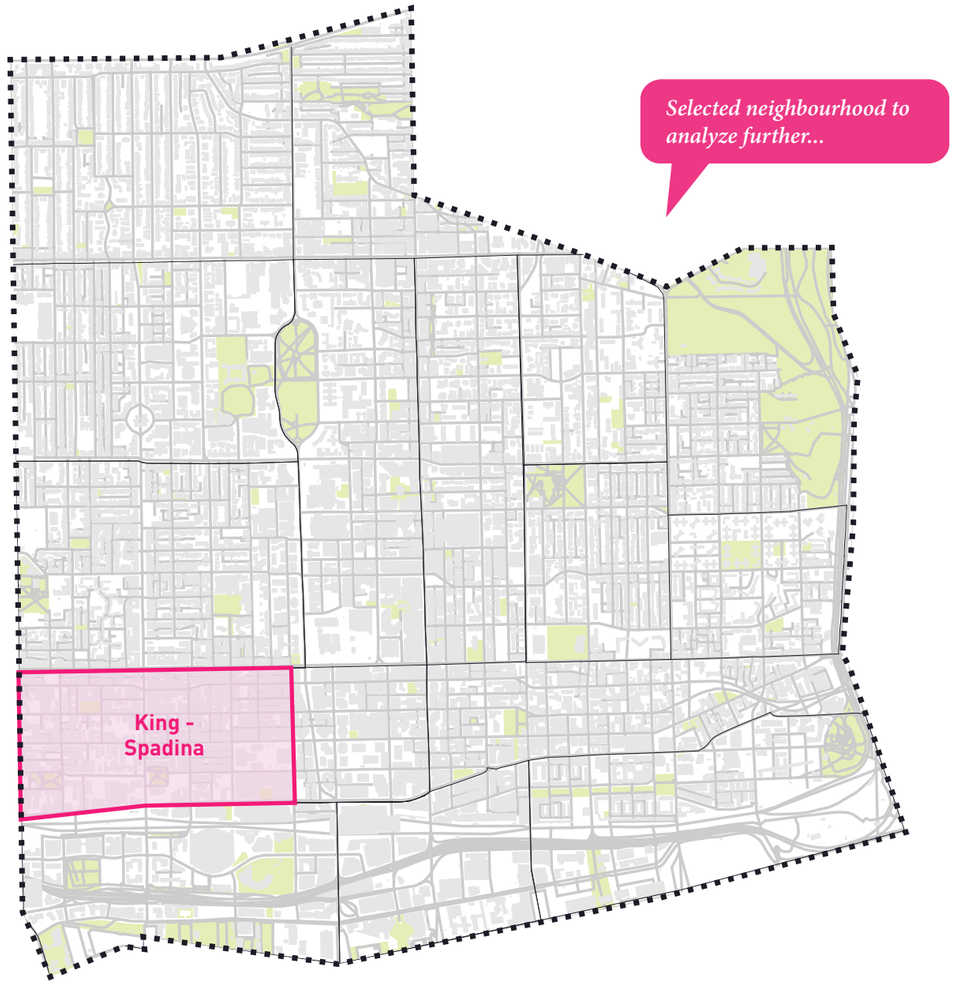
Public Laneway

Informal Laneway
Network or Cluster

N

1:30,000

Fig. 86 - Public Laneways, map



N

1:30,000

Fig. 87 - Neighbourhood Selection, diagram

Analyze the Neighbourhood

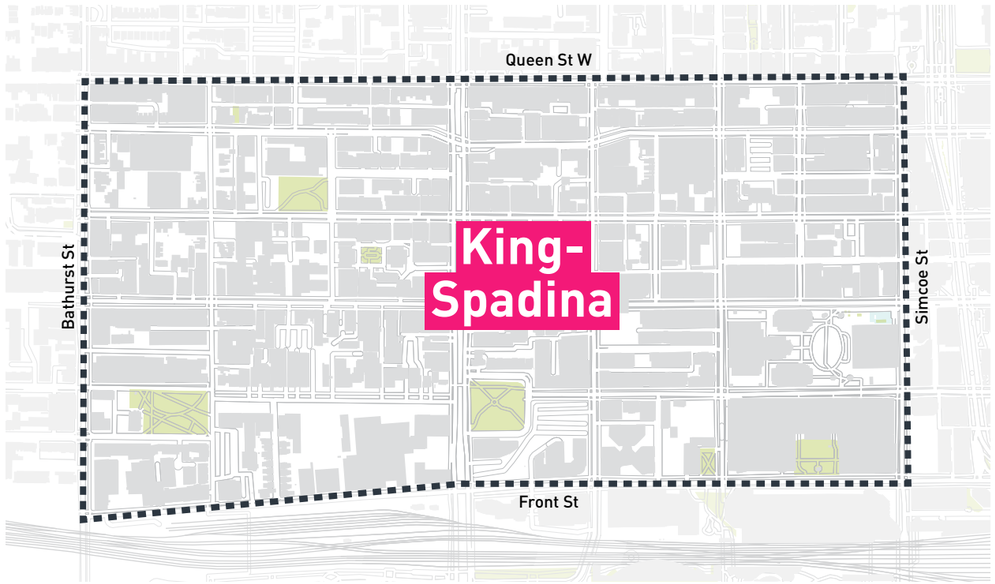


Fig. 88 - Analyze the Neighbourhood Boundaries, diagram

King-Spadina

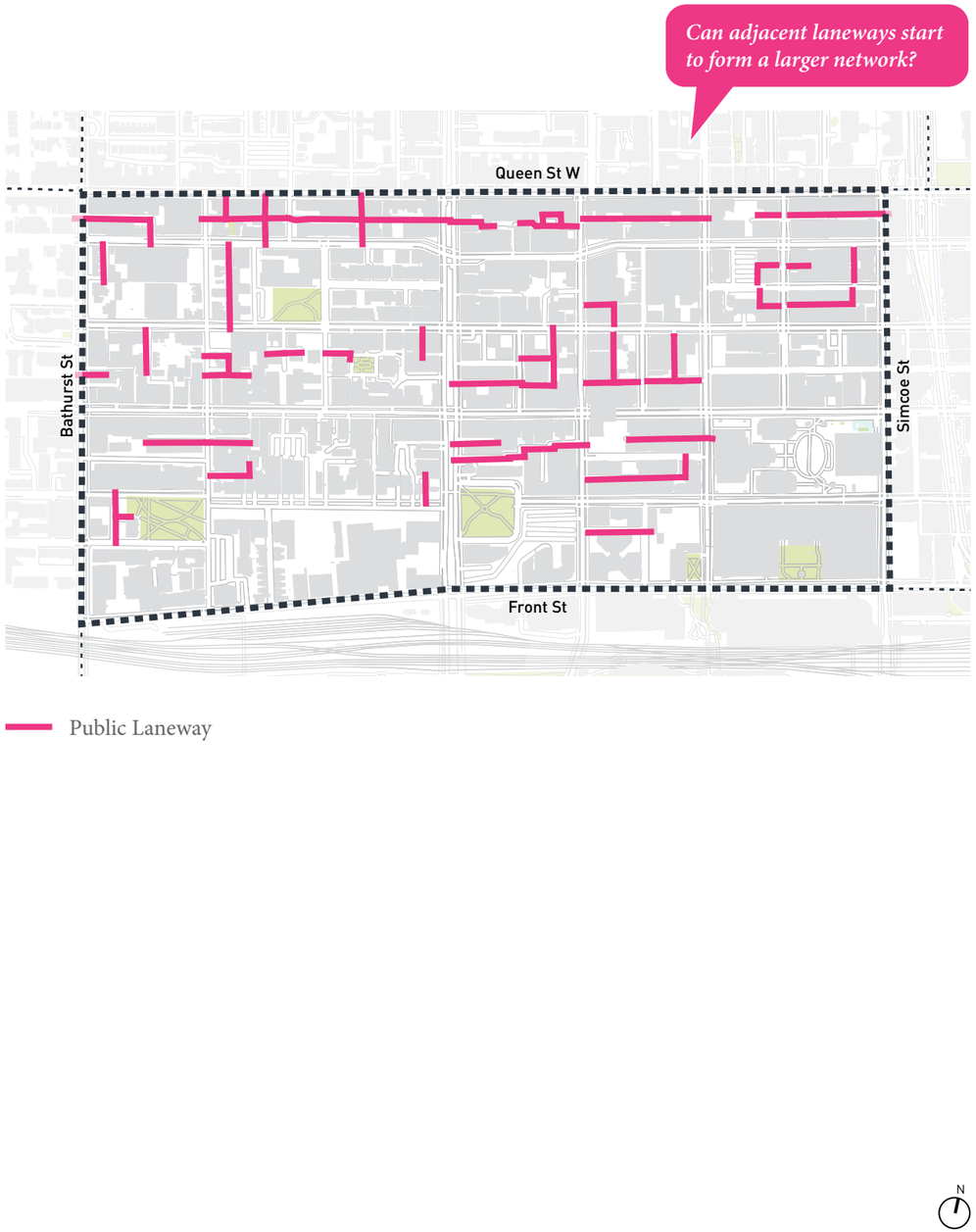


Fig. 89 - Public Laneways, map

1:10,000

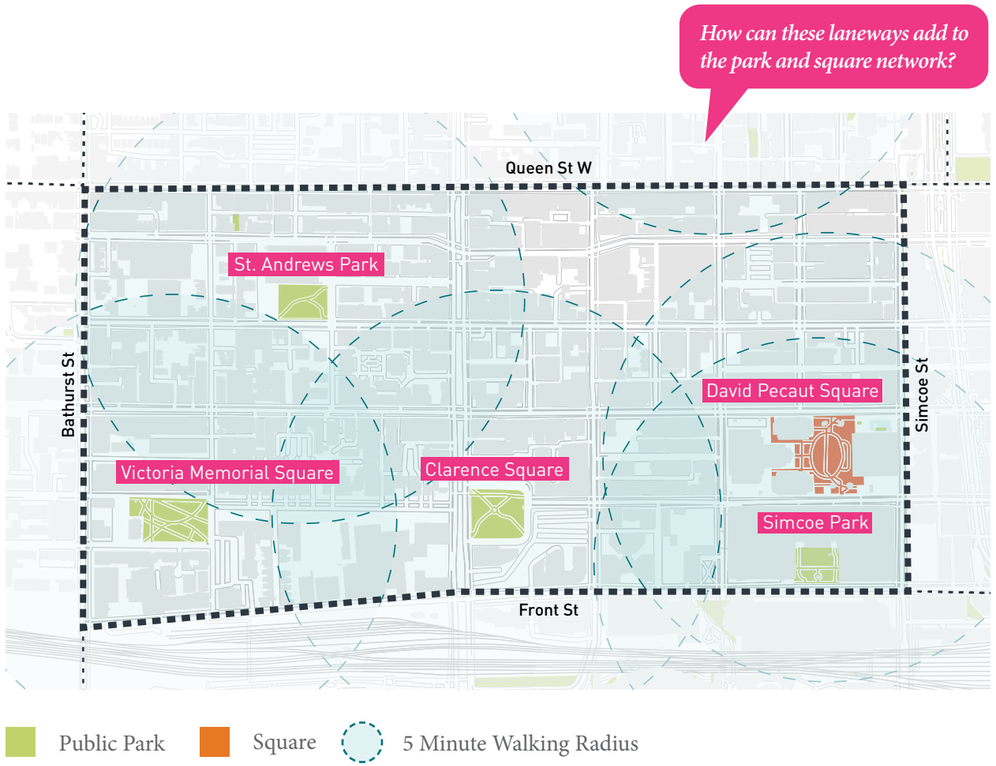


Fig. 90 - Public Parks and Squares, map

1:10,000

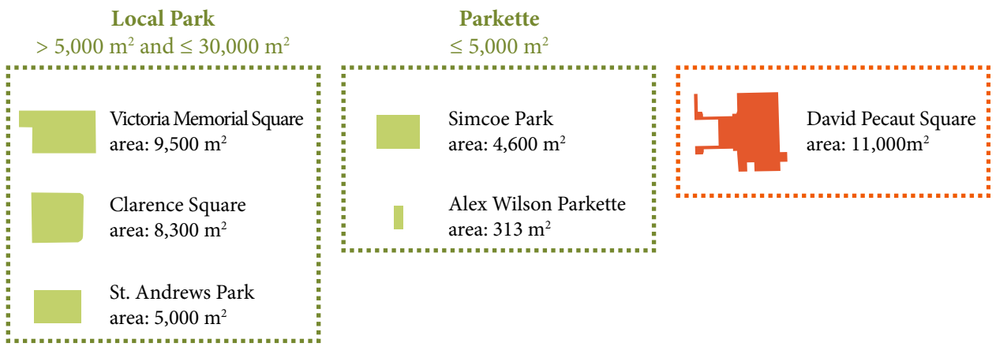


Fig. 91 - Public Park and Square Analysis, diagram

King-Spadina

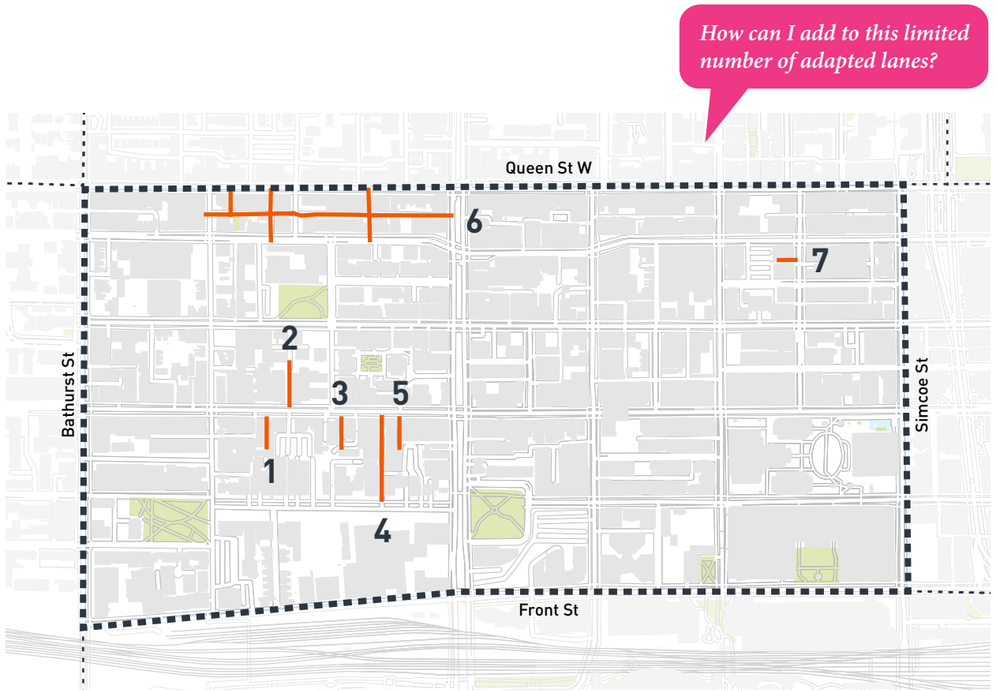


Fig. 92 - Adapted Laneways, map

Fig. 93 - Adapted Lane 1, photo

Fig. 95 - Adapted Lane 2, photo

Fig. 97 - Adapted Lane 3, photo

Fig. 96 - Adapted Lane 4, photo

Fig. 98 - Adapted Lane 5, photo

Fig. 94 - Adapted Lane 6; Graffiti Alley, photo

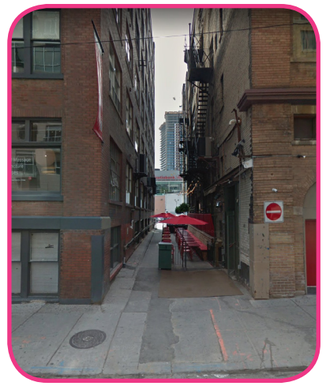
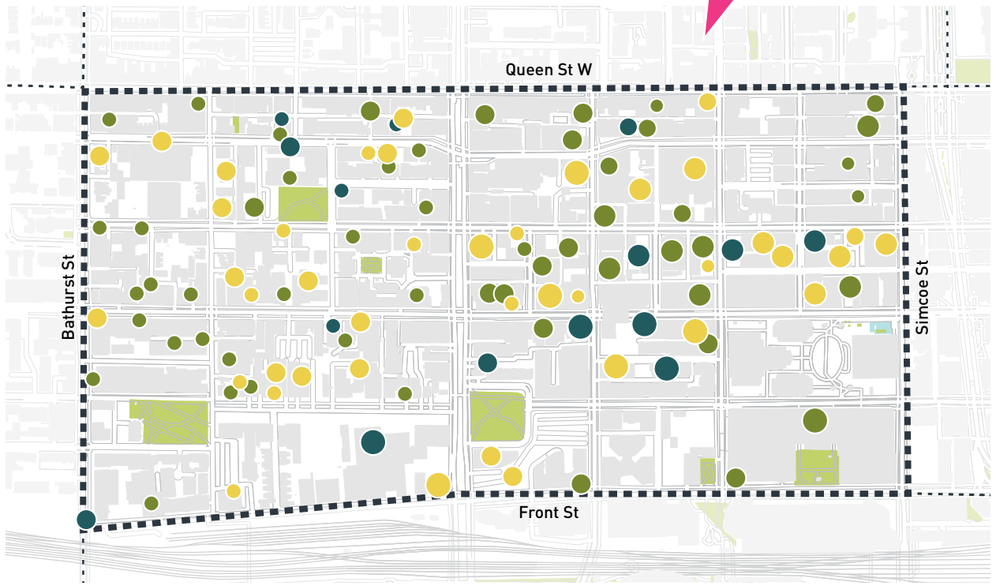


Fig. 99 - Adapted Lane 7, photo

King-Spadina

How will these developments and density affect the laneways?



Phase
- Pre-Construction
- Under Construction
- Completed

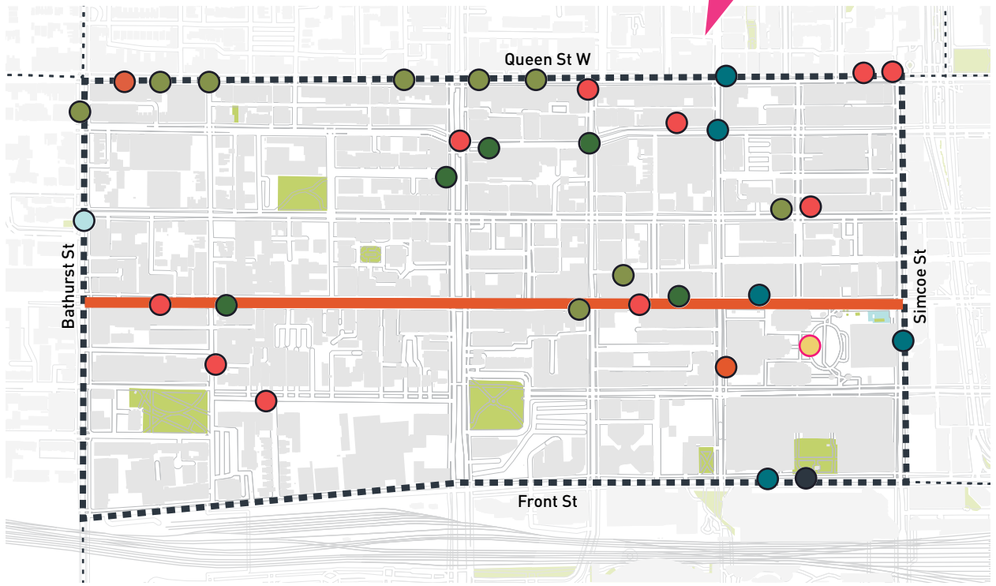
Height
- 41+ Storeys
- 21-40 Storeys
- 1-20 Storeys

N

1:10,000

Fig. 100 - Building Developments by Phase and Height; 2006-2019, map

What can this project add to the city culture?



Type
- Farmers Market
- Music
- Architectural
- Art
- Film/Video Awards
- Theatre
- Culinary
- Automobile
- King Street Pilot Project (outdoor seating, cafes, parkettes, etc)

Time
- Daily or Weekly
- Seasonal

N

1:10,000

Fig. 101 - Temporary Events, Festivals, Celebrations, map

King-Spadina

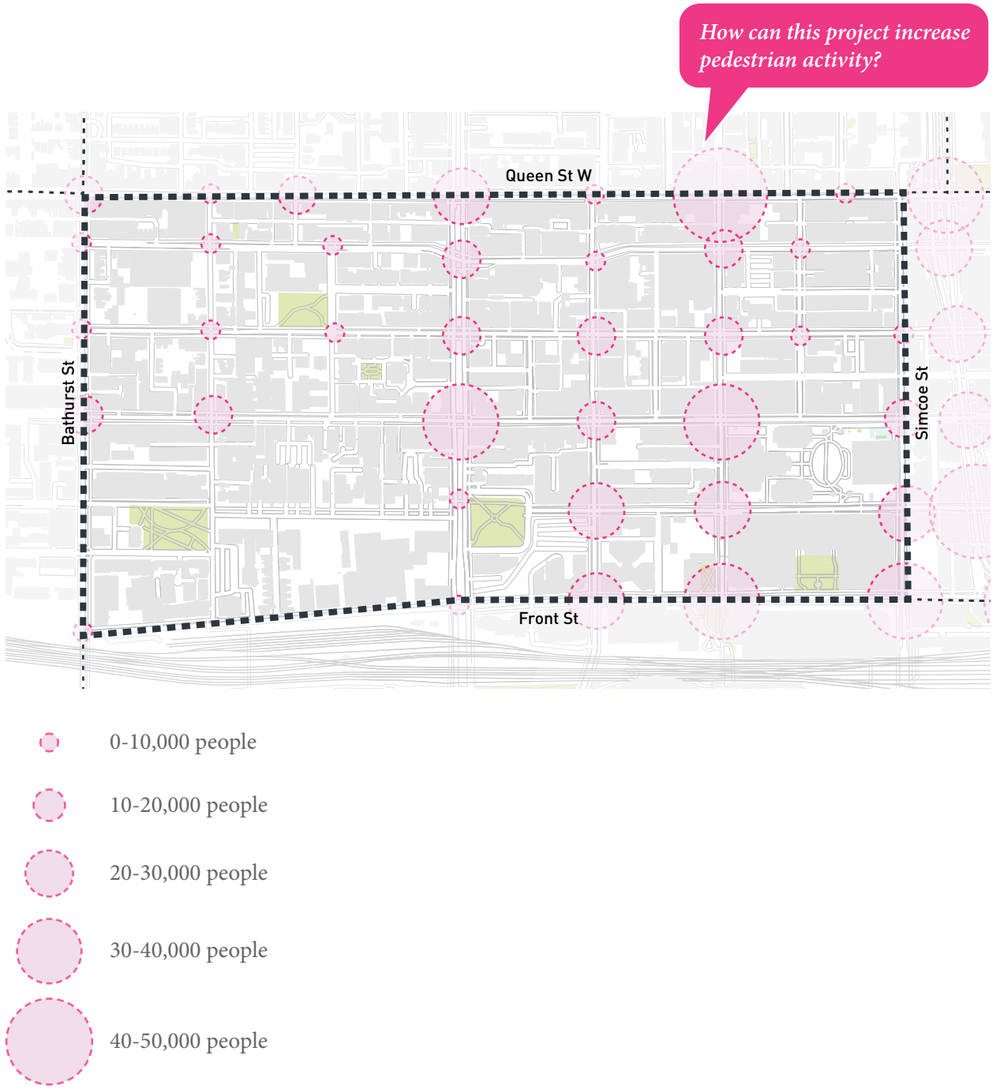


Fig. 102 - Pedestrian Activity Count in 24 Hours, map

1:10,000

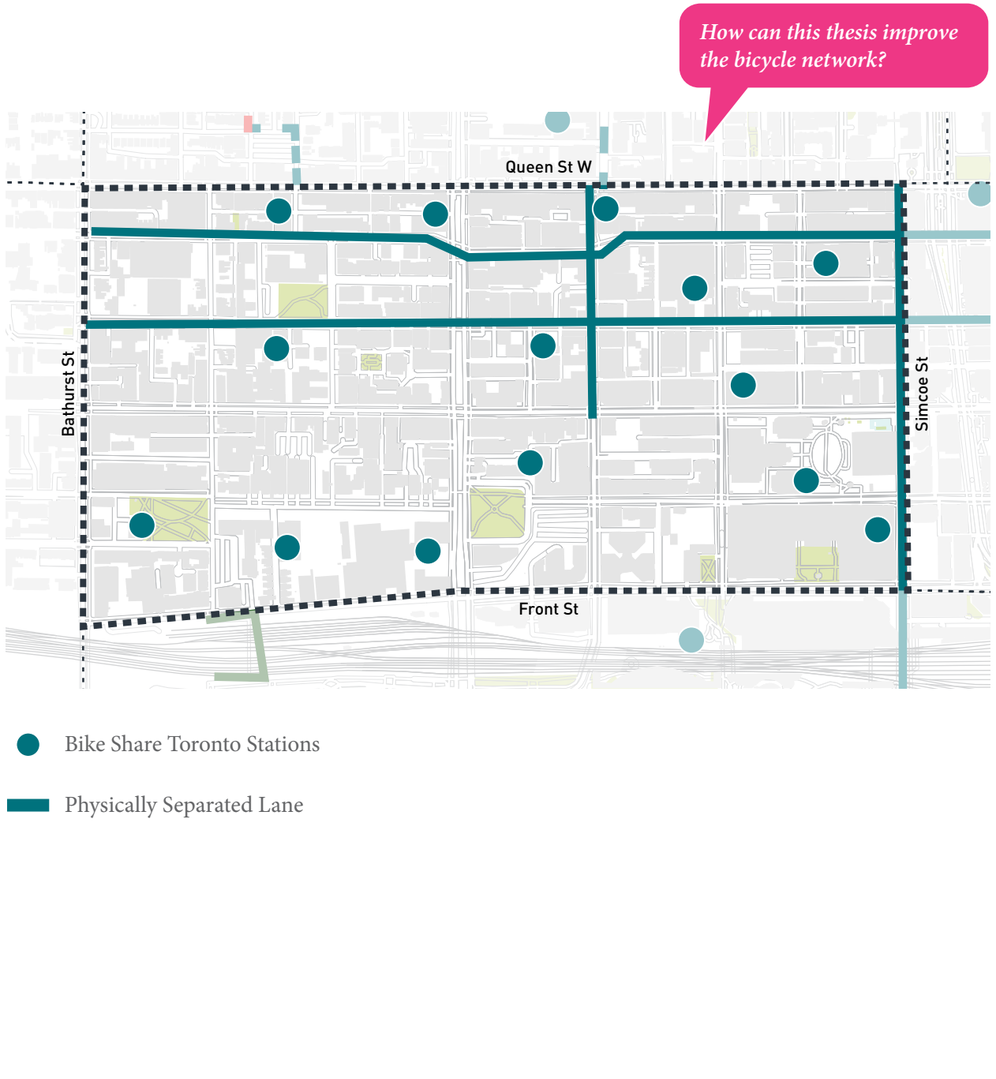


Fig. 103 - Bicycle Lanes and Infrastructure, map

1:10,000

Analyze the Site

Scope

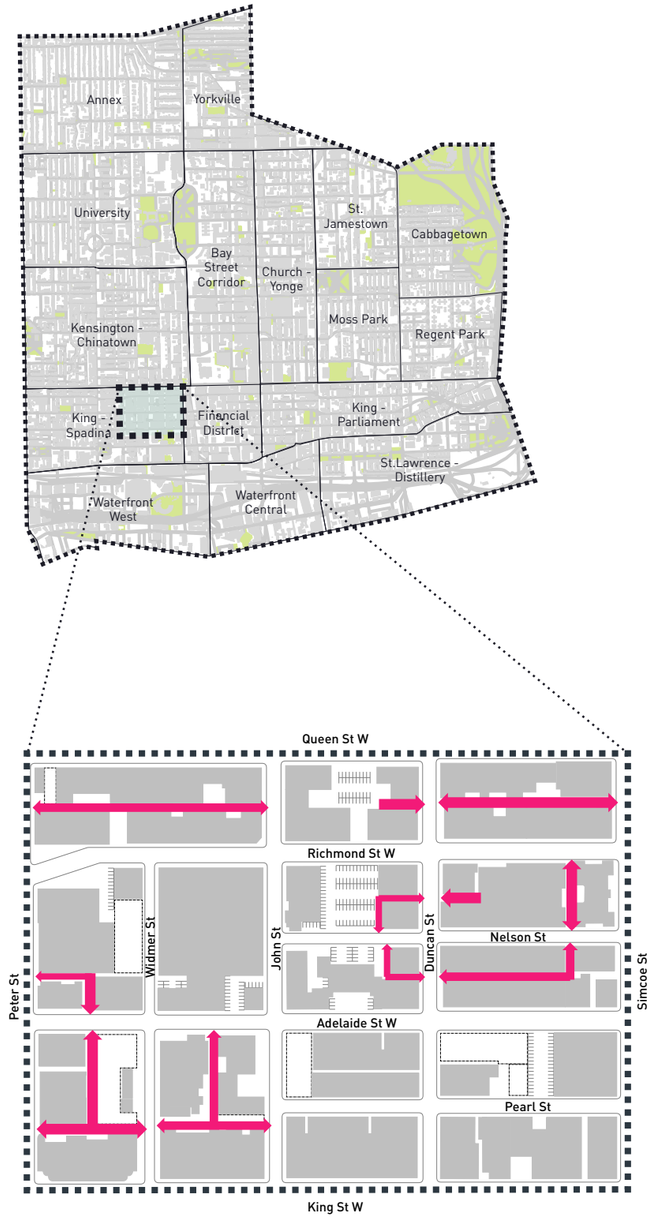


Fig. 104 - Scope of Site Boundaries, diagram

Scope

Laneway Numbering Reference Map

Fig. 105 - Laneway Numbering Reference, plan

Scope

Existing Laneway Images

Fig. 106 - Laneway 1.2, photo

Fig. 109 - Laneway 2.1, photo

Fig. 112 - Laneway 3.2, photo

Fig. 107 - Laneway 4, photo

Fig. 110 - Laneway 5, photo

Fig. 108 - Laneway 6, photo

Fig. 111 - Laneway 7, photo

Categories

01 Density

02 Program

03 Mobility/Network

04 Services

Density

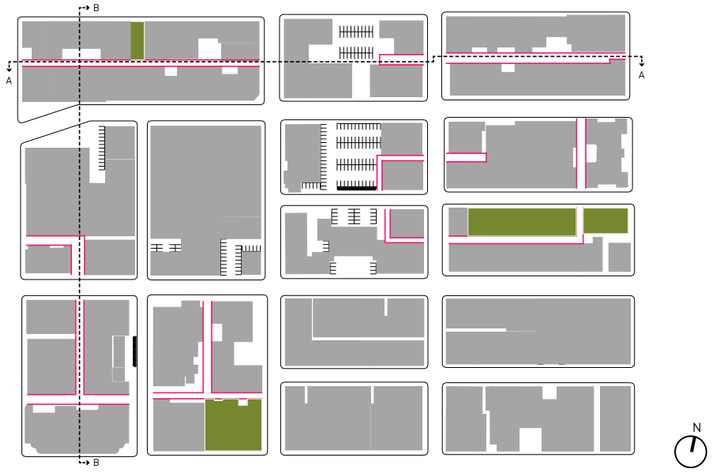


Fig. 113 - Building Developments by Phase; 2006-2013, map 1:4,500

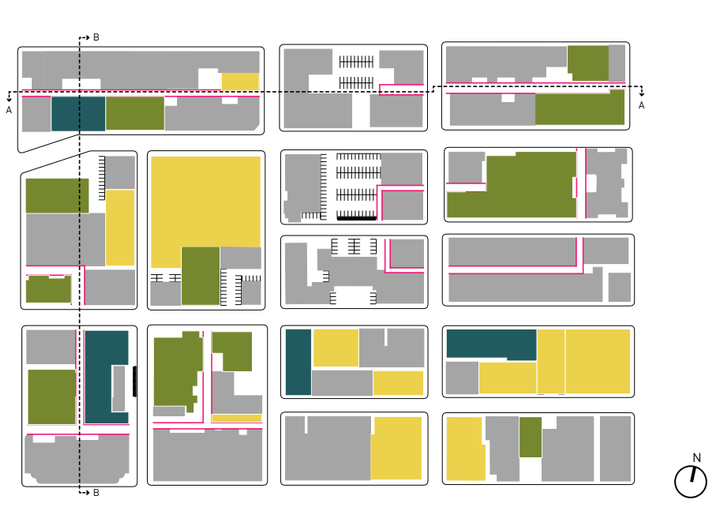


Fig. 114 - Building Developments by Phase; 2014-, map 1:4,500

Pre-Construction

Under Construction

Completed

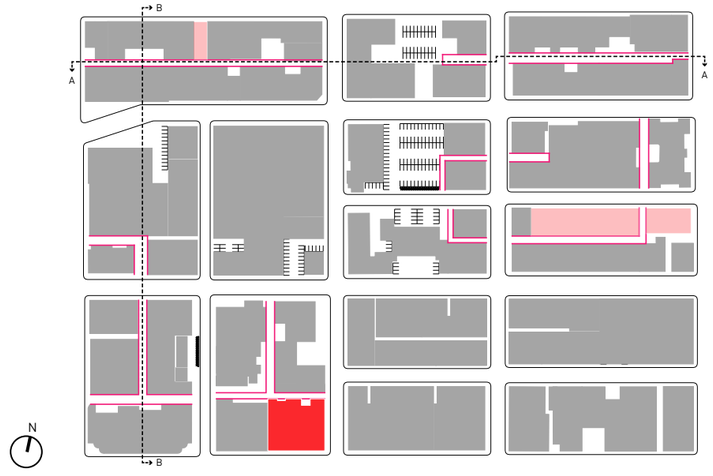


Fig. 115 - Building Developments by Height in Storeys; 2006-2013, map 1:4,500

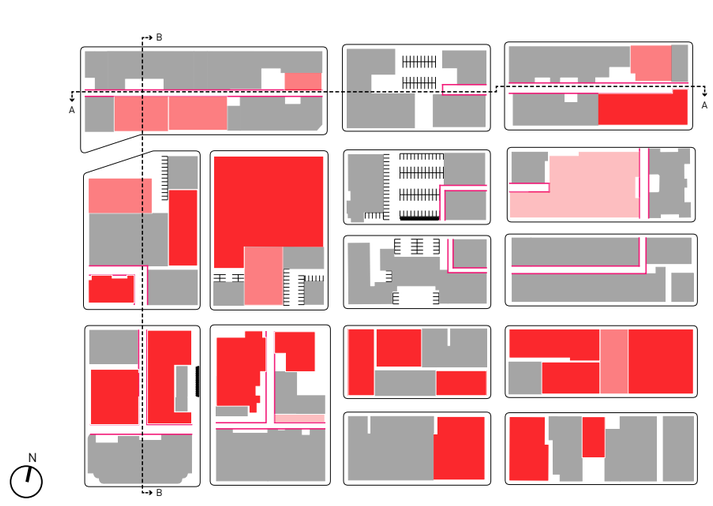


Fig. 116 - Building Developments by Height in Storeys; 2014-, map 1:4,500

1-20 Storeys

21-40 Storeys

41+ Storeys

Density

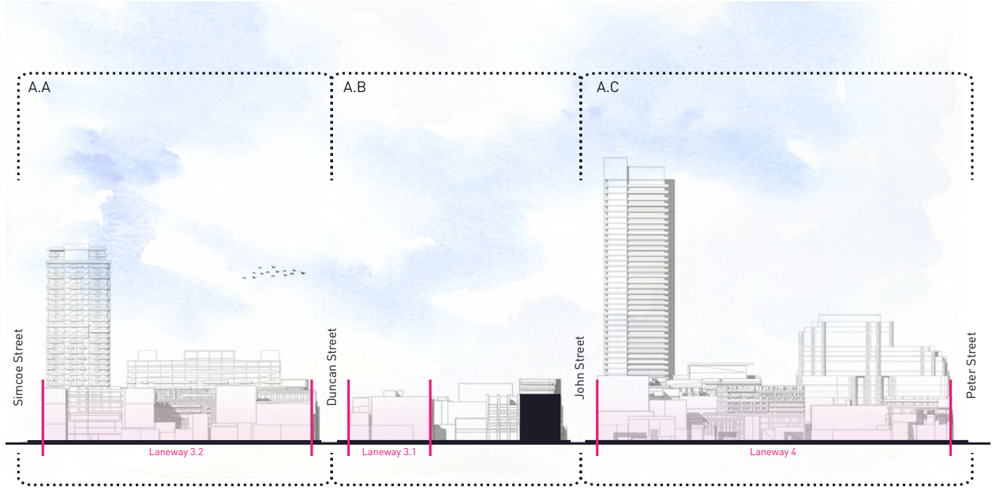


Fig. 117 - Site Section A; 2006-2013, section 1:3,200

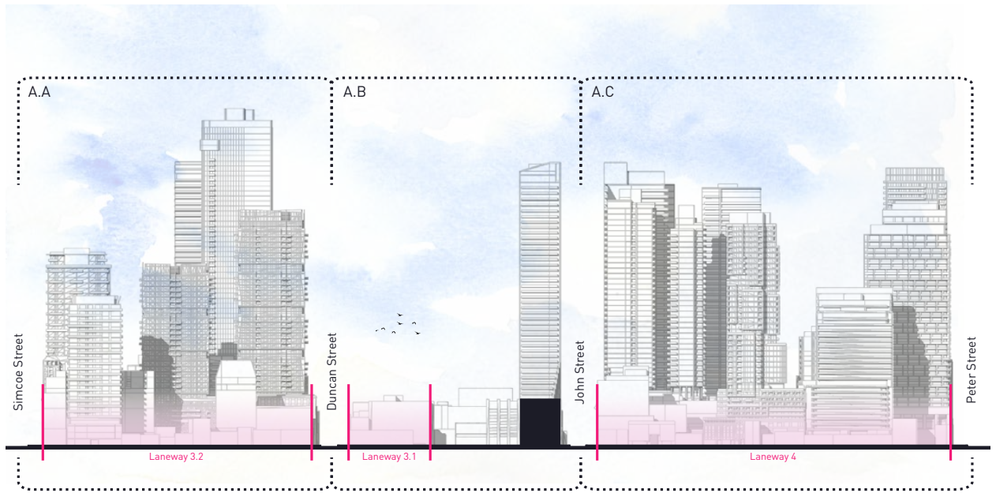


Fig. 118 - Site Section A; 2014-, section 1:3,200

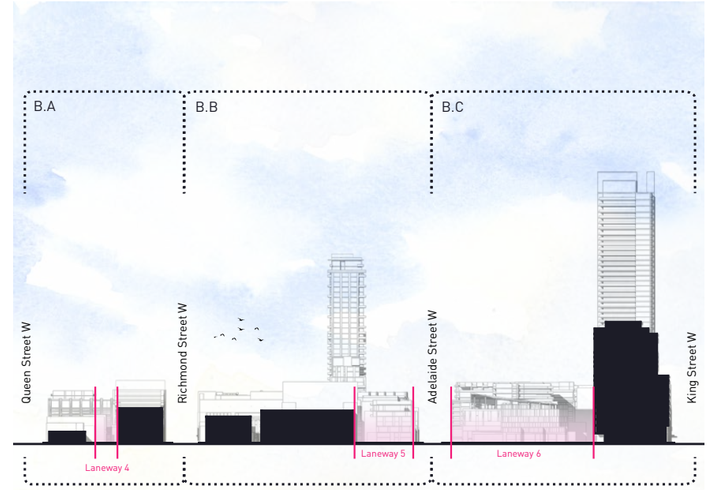


Fig. 119 - Site Section B; 2006-2013, section 1:3,200

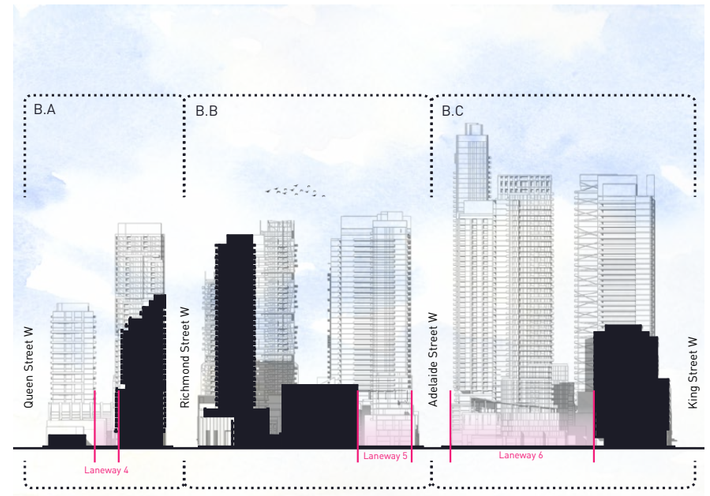


Fig. 120 - Site Section B; 2014-, section 1:3,200

Density

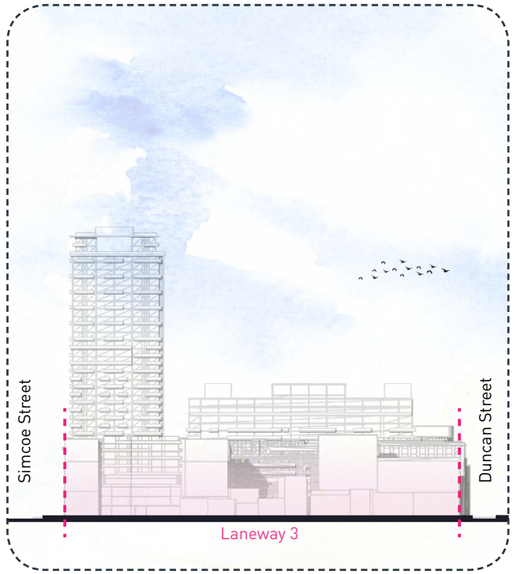


Fig. 121 - Enlarged Site Section A.A; 2006-2013, section 1:1,800

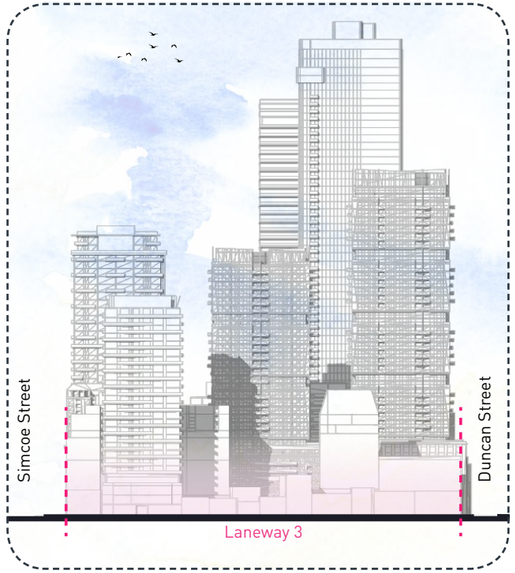


Fig. 122 - Enlarged Site Section A.A; 2014-, section 1:1,800

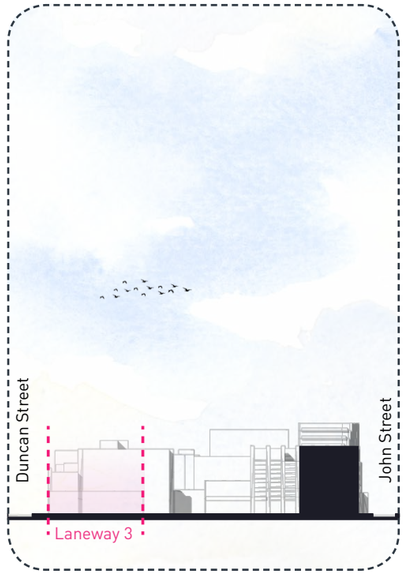


Fig. 123 - Enlarged Site Section A.B; 2006-2013, section 1:1,800

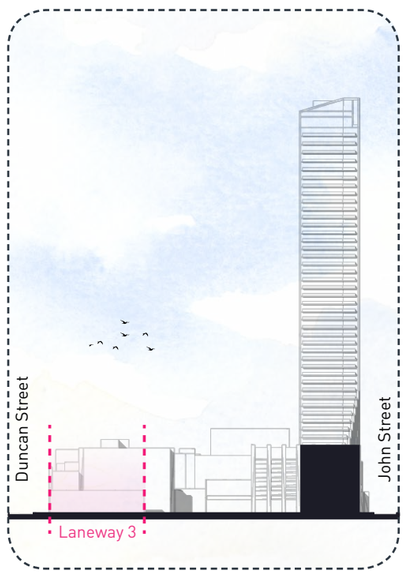


Fig. 124 - Enlarged Site Section A.B; 2014-, section 1:1,800

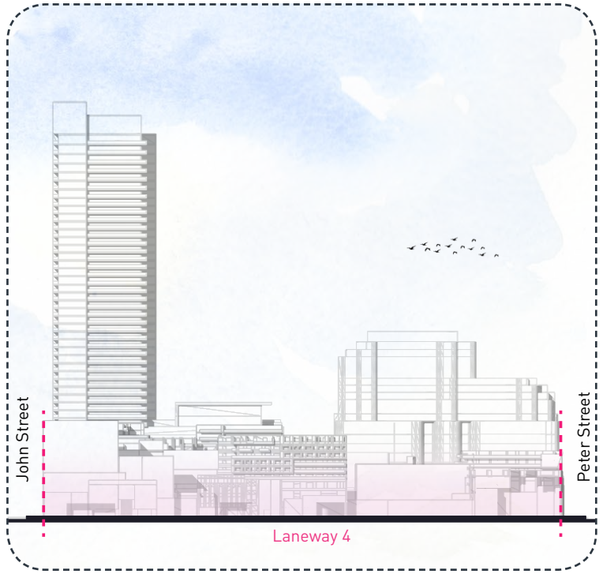


Fig. 125 - Enlarged Site Section A.C; 2006-2013, section 1:1,800

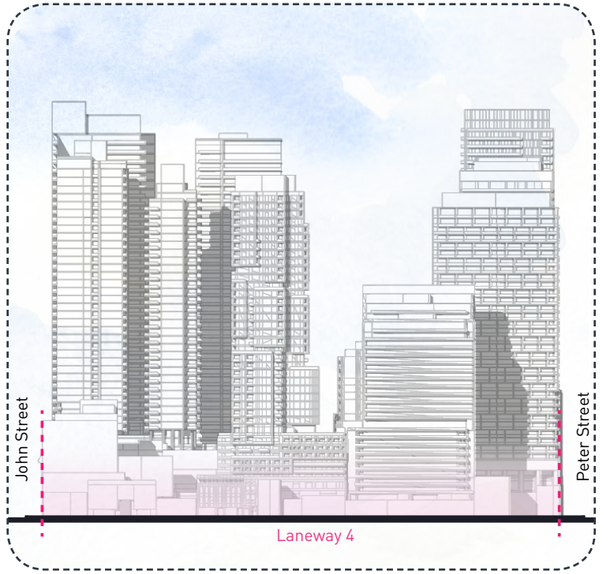


Fig. 126 - Enlarged Site Section A.C; 2014-, section 1:1,800

Density

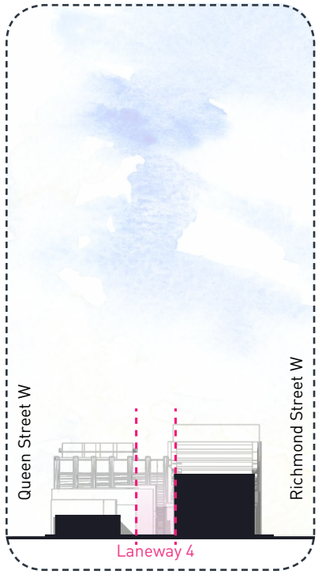


Fig. 127 - Enlarged Site Section B.A; 1:1,800
2006-2013, section

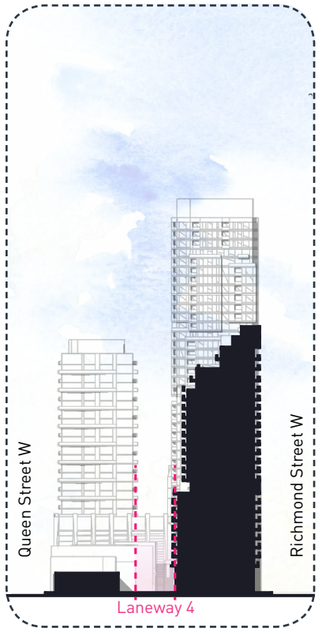


Fig. 128 - Enlarged Site Section B.A; 1:1,800
2014-, section

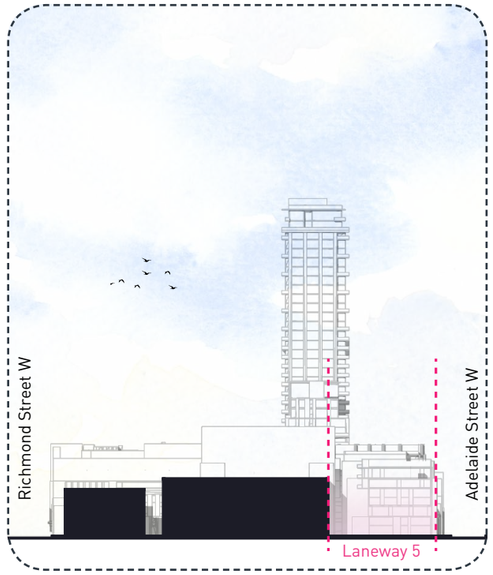


Fig. 129 - Enlarged Site Section B.B; 1:1,800
2006-2013, section

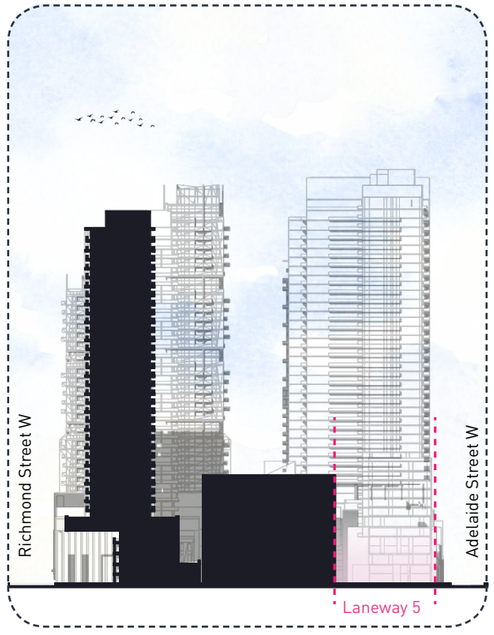


Fig. 130 - Enlarged Site Section B.B; 1:1,800
2014-, section

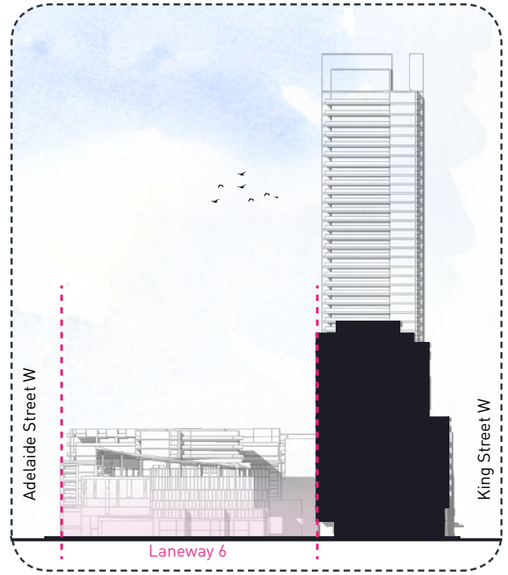


Fig. 131 - Enlarged Site Section B.C; 1:1,800
2006-2013, section

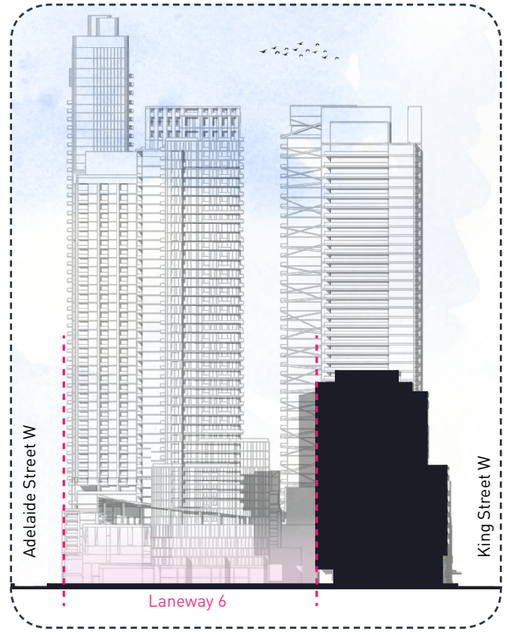
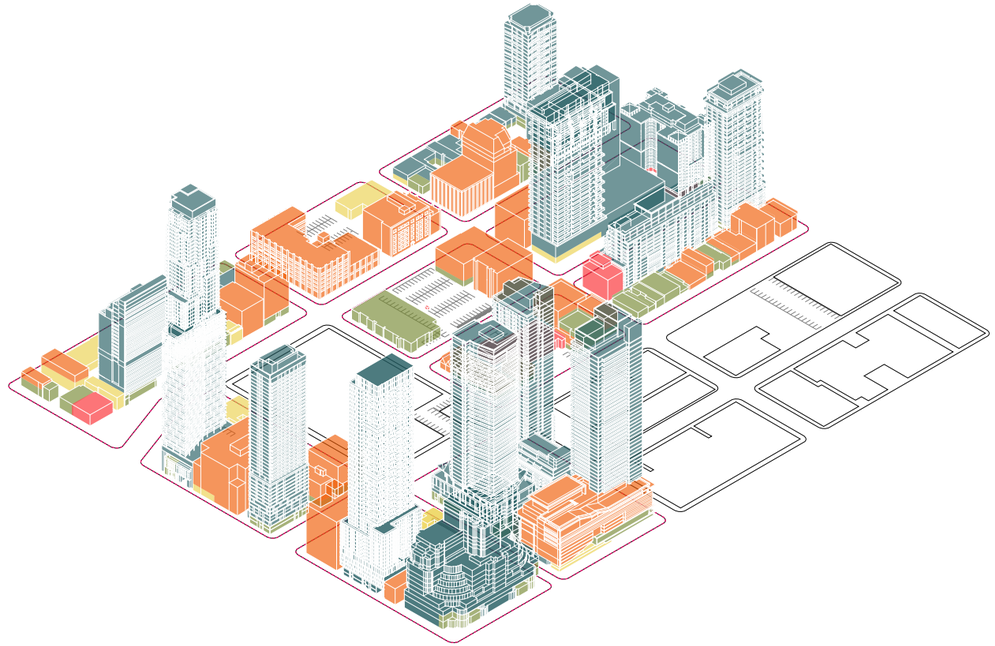


Fig. 132 - Enlarged Site Section B.C; 1:1,800
2014-, section

Program

Existing Site



Services/Utilities

Office

Retail/Commercial

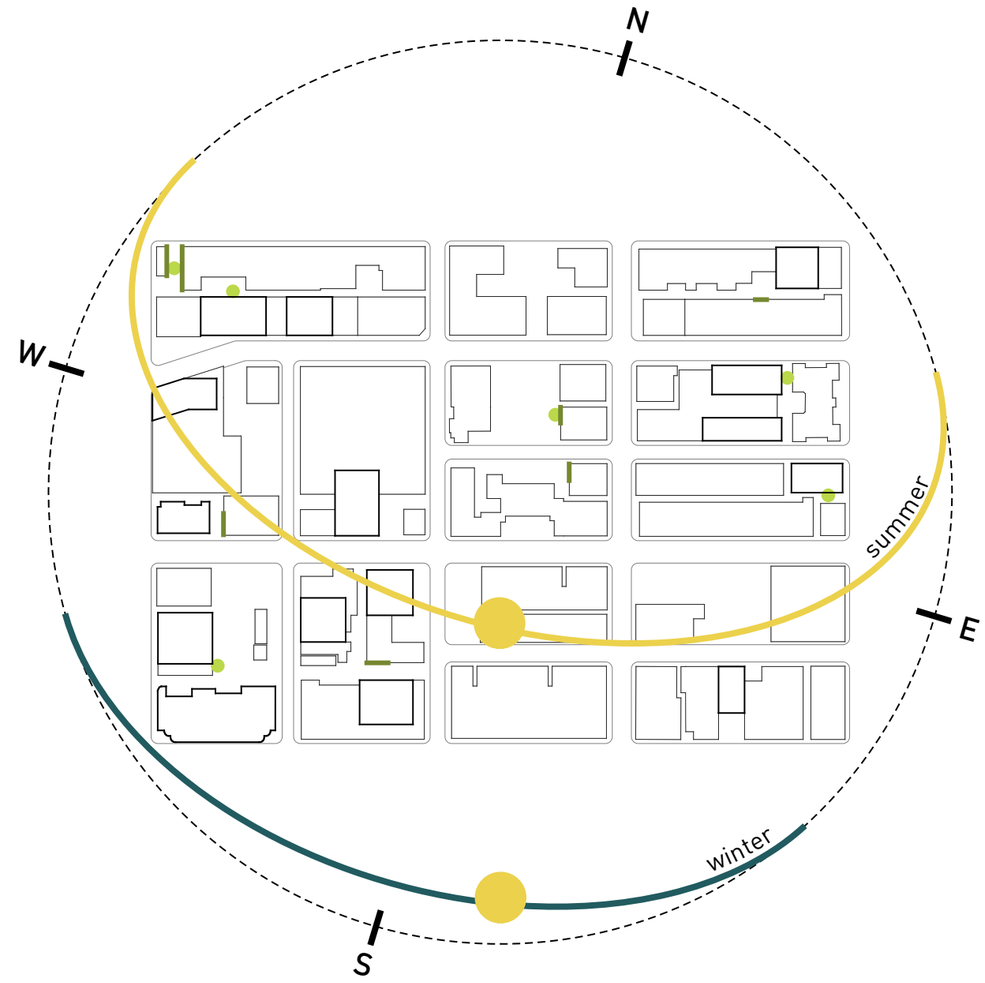
Food/Drinks/
Entertainment

Residential

Fig. 133 - Program Diagram, axonometric

Sunlight and Greenery

Sun Path Diagram



Ivy Wall or Green Wall

Greenery - Program

Fig. 134 - Sun Path Diagram, diagram

Lack of sunlight is a re-occurring issue that any laneway design will struggle with. I have utilized areas where the laneways expand in width, or have open spaces or parking lots adjacent, for placement of both ivy walls and greenery program. These locations had to be selected strategically.

Program

Program Design Ideas

Annual

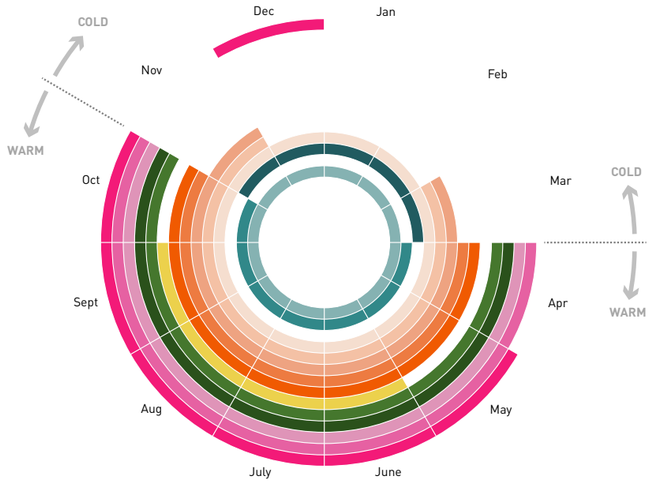


Fig. 135 - Temporal Program Chart; Annual, diagram

Legend

Community
- Celebrations/Festivals
- Markets (Food, Flea)
- Neighbourhood Events

Food/Beverage
- Restaurant/Bar/Patio
- Cafe/Coffee Shop/Kiosks

Art/Culture
- Art Installation

Recreation/Leisure
- Social
- Kid's Play
- Walking/Running/Biking
- Sports/Workout
- Commute to Work (Bike, Walk)

Maintenance
- Snow Plow/Clearing
- Landscaping
- General Maintenance/ Services

Weekday - Warm Season (April - October)

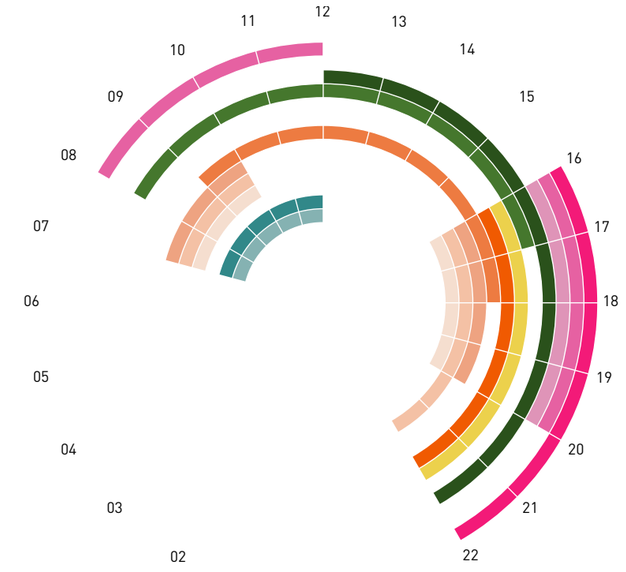


Fig. 136 - Temporal Program Chart; Weekday - Warm Season, diagram

Weekday - Cold Season (March - November)

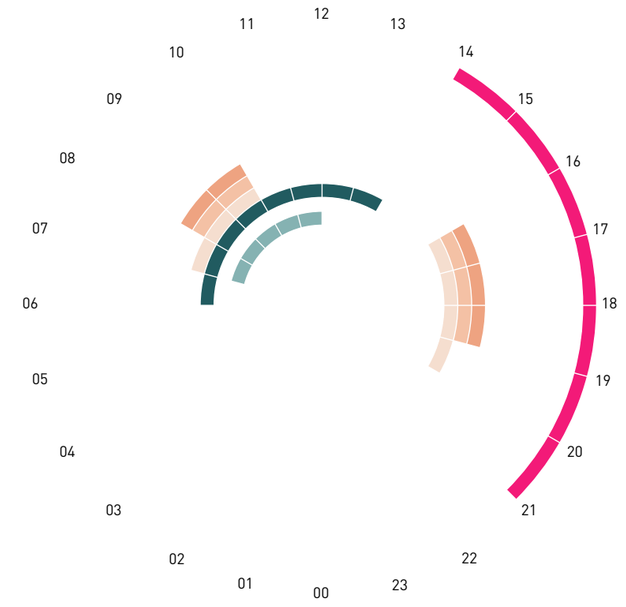


Fig. 137 - Temporal Program Chart; Weekday - Cold Season, diagram

Program

Weekend - Warm Season (April - October)

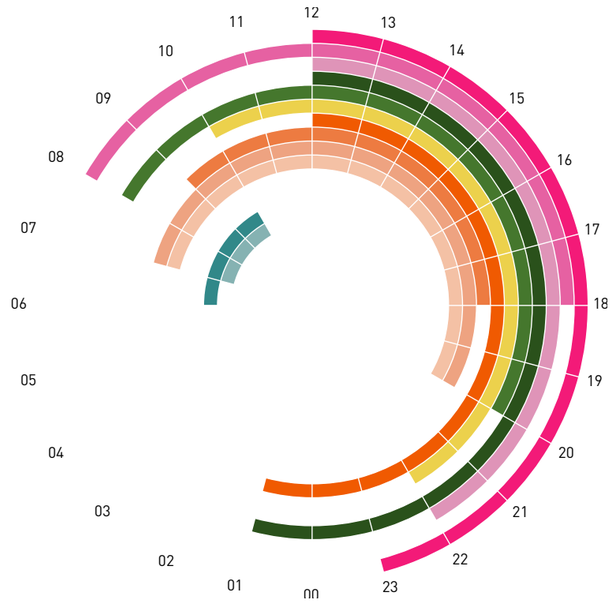


Fig. 138 - Temporal Program Chart; Weekend - Warm Season, diagram

Weekend - Cold Season (March - November)

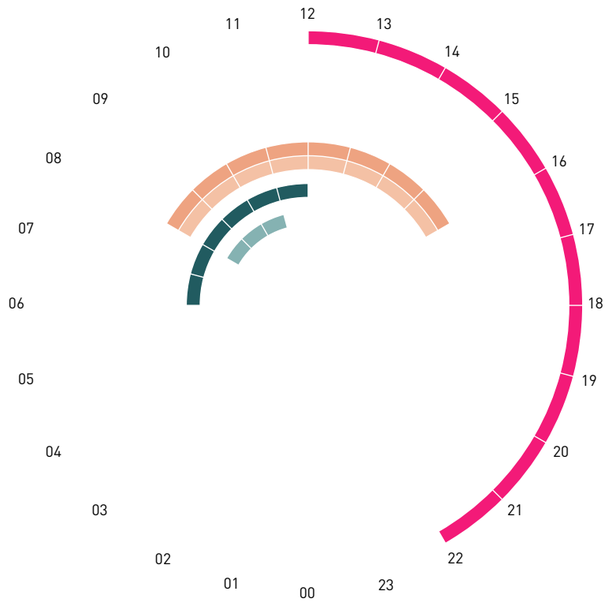
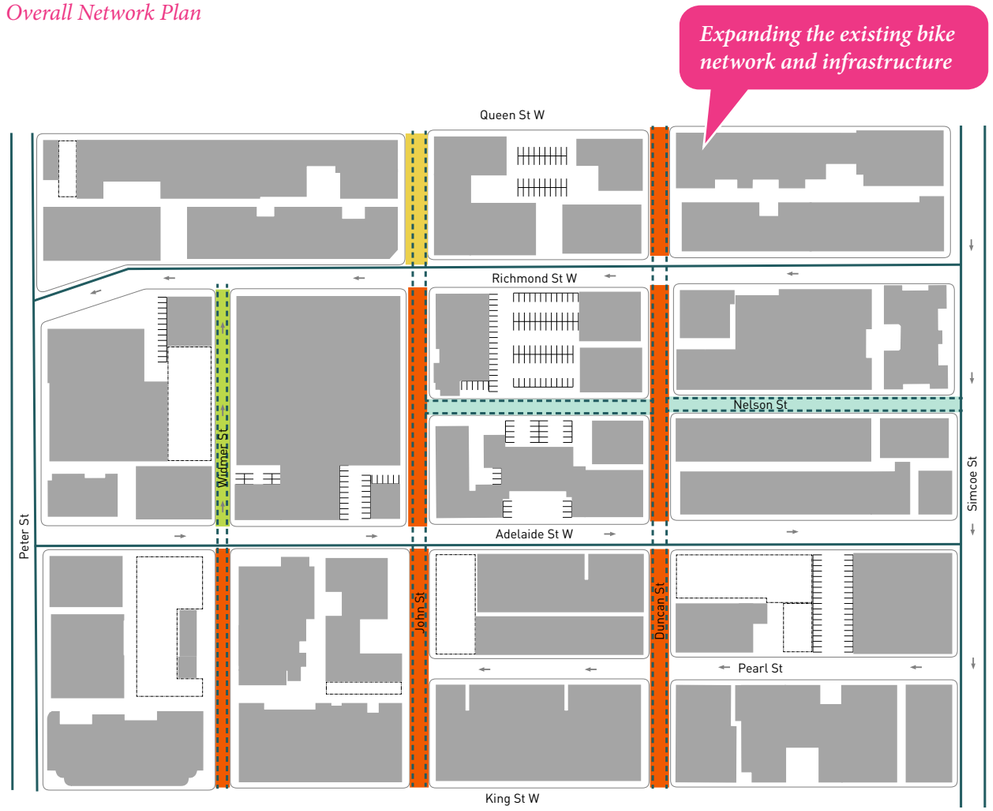


Fig. 139 - Temporal Program Chart; Weekend - Cold Season, diagram

Mobility/Network

Mobility

Overall Network Plan



Existing Bike Lane

New Bike Lane

Street Type 1

Street Type 2

Street Type 3

Street Type 4

Fig. 140 - Bike Network and Street Types, diagram

Mobility/Network

Street Type 1

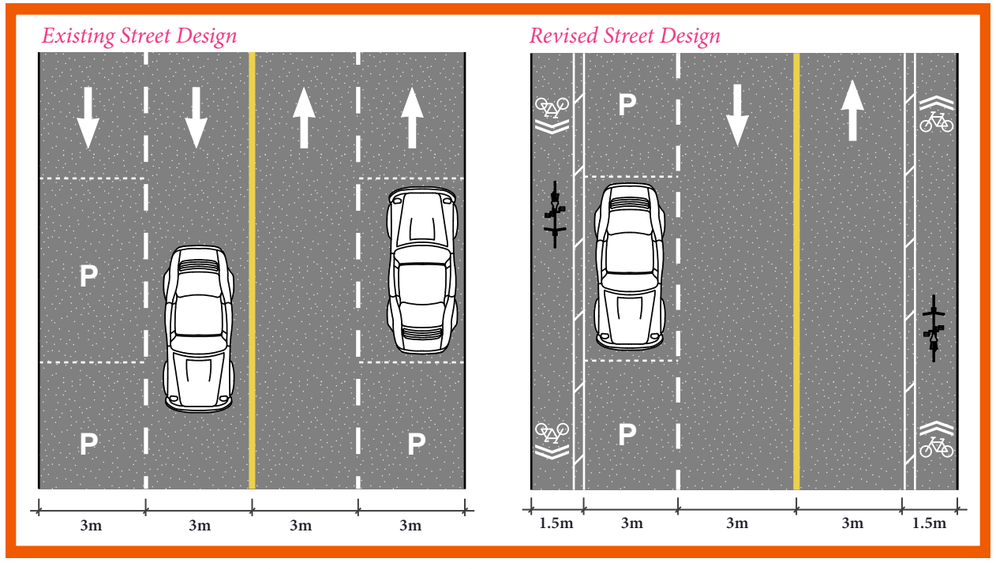


Fig. 141 - Street Design Revitalization; Street Type 1, plan

Street Type 2

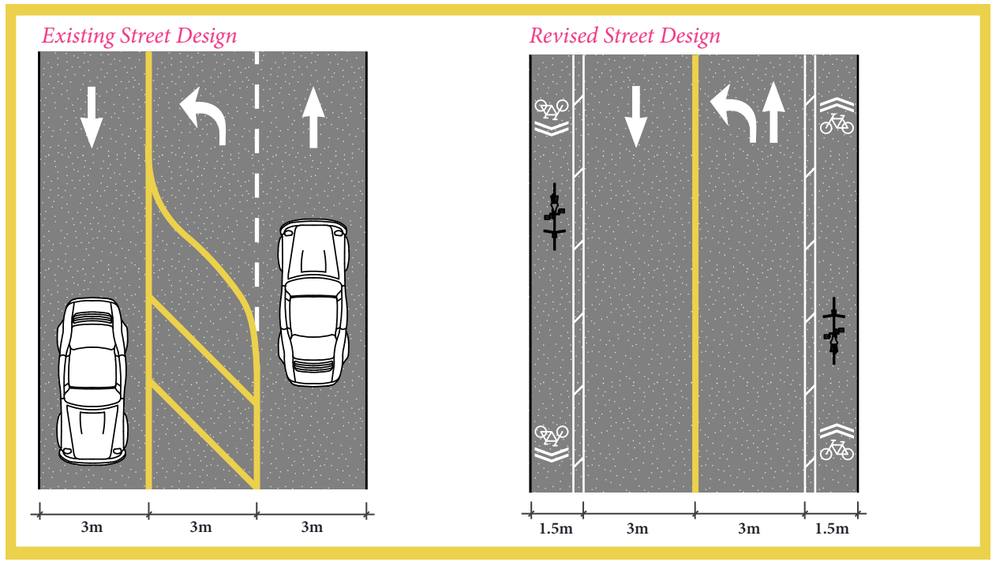


Fig. 142 - Street Design Revitalization; Street Type 2, plan

Street Type 3

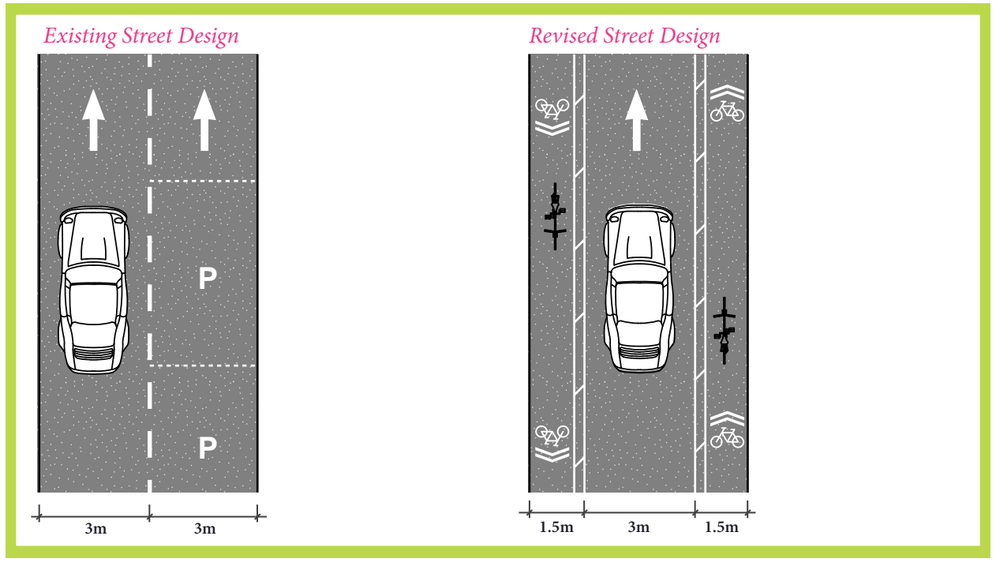


Fig. 143 - Street Design Revitalization; Street Type 3, plan

Street Type 4

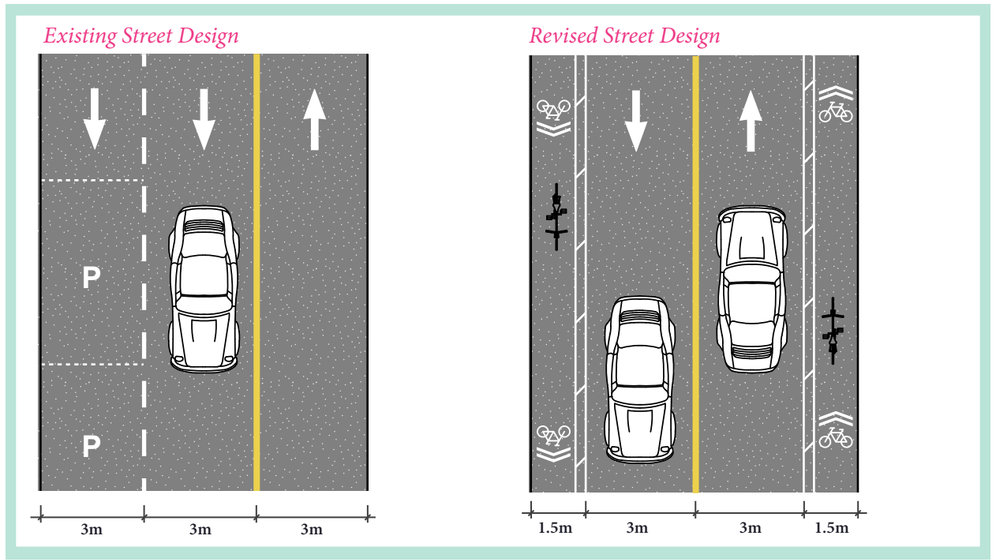


Fig. 144 - Street Design Revitalization; Street Type 4, plan

Mobility/Network

Mobility

Fig. 145 - Bike and Pedestrian Mobility Network, plan

Mobility/Network

Private Voids

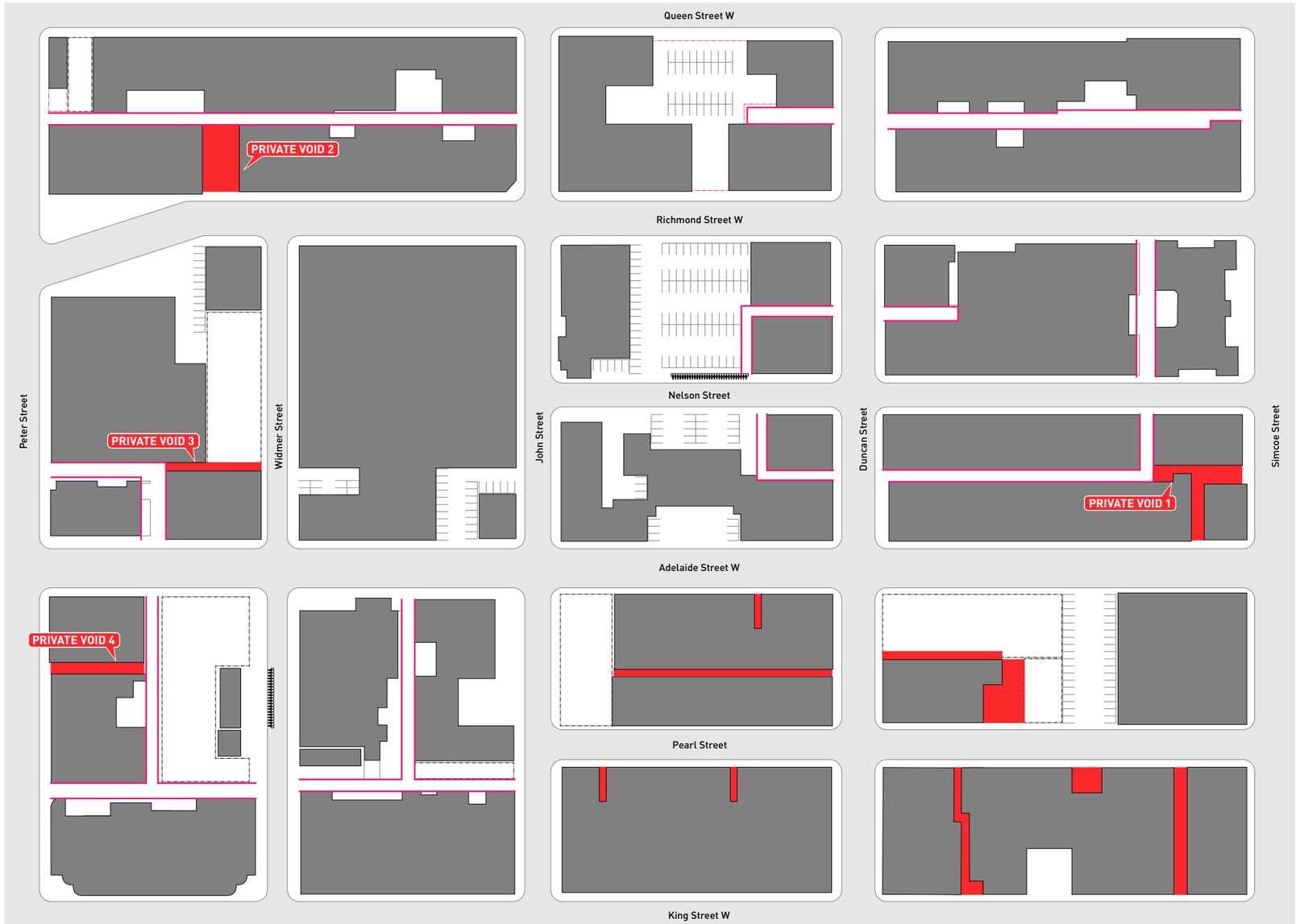


Fig. 146 - Private Voids Network, plan

Mobility/Network

Private Voids

Private Void 1

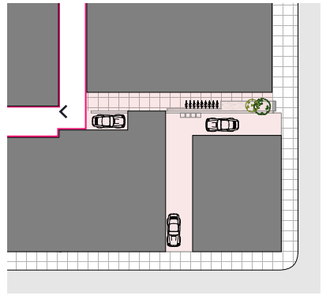


Fig. 147 - Private Void 1; Existing, plan 1:1,200

Fig. 148 - Private Void 1; Experimental View, 3d sketch

Private Void 2

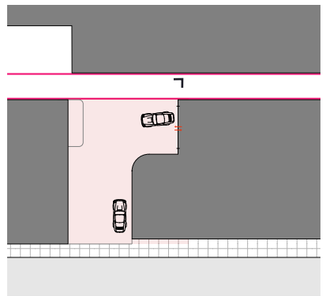


Fig. 149 - Private Void 2; Existing, plan 1:1,200

Fig. 150 - Private Void 2; Experimental View, 3d sketch

Private Void 3

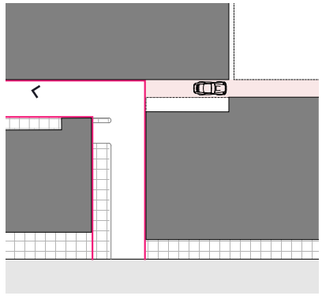


Fig. 151 - Private Void 3; Existing, plan 1:1,200

Fig. 152 - Private Void 3; Experimental View, 3d sketch

Private Void 4

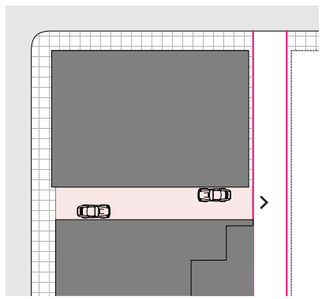


Fig. 153 - Private Void 4; Existing, plan 1:1,200

Fig. 154 - Private Void 4; Experimental View, 3d sketch

Services

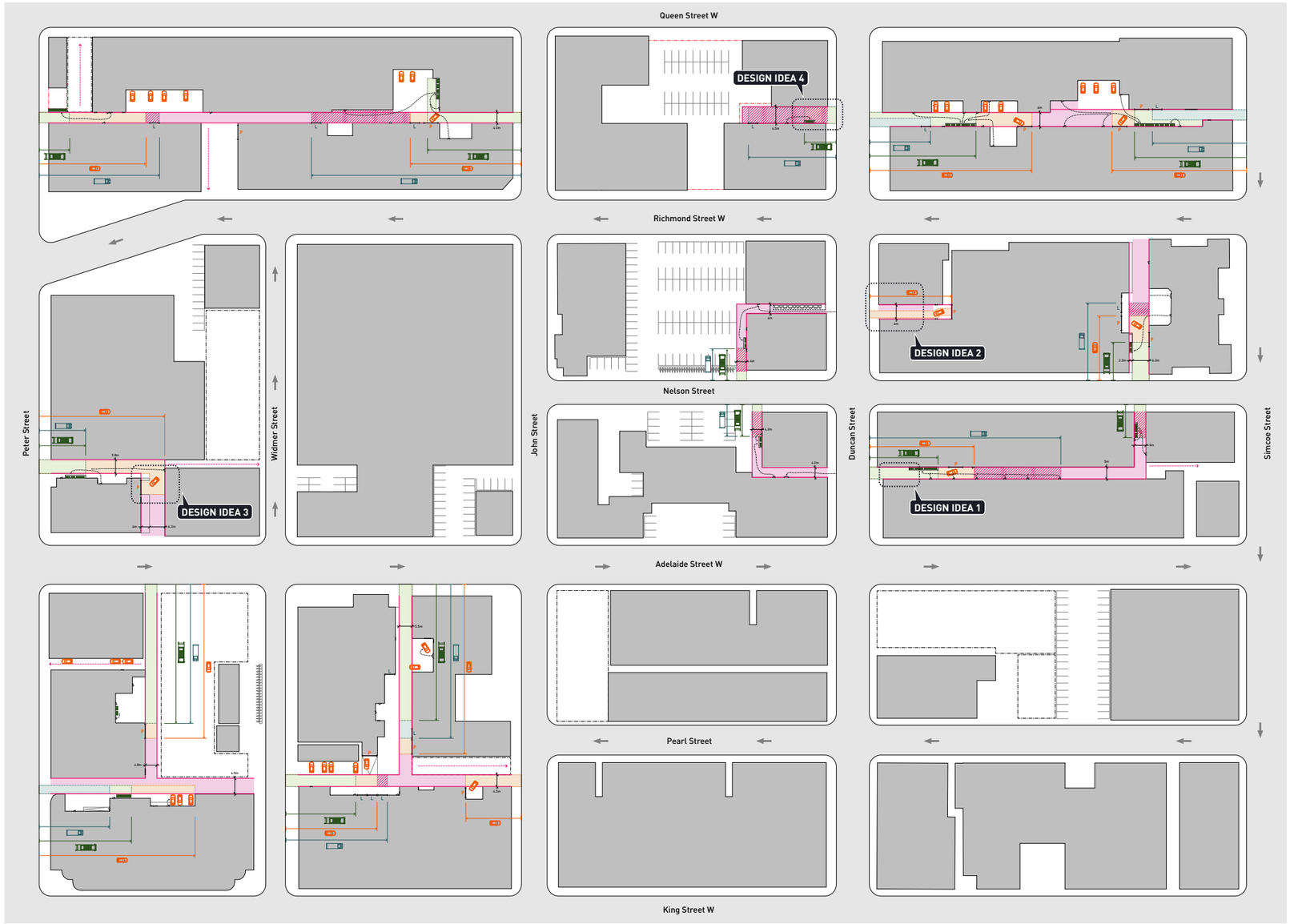
Existing Conditions

Car
Garbage Truck
Delivery/Loading Truck
3m Car Lane
3.5m Garbage Truck Lane
3.5m Delivery/Loading Truck Lane
P Garage Door - Parking
L Garage Door - Loading
Service Door
Fire Exit Door
Building Entrance
Dumpster
Existing Patio Railing
Existing Patio Furniture
Human Actions
Pass-Through to Street -opportunity for expansion
Laneway Outlines

Fig. 155 - Existing Service Conditions; Overall Network, plan

Services

Revised Conditions



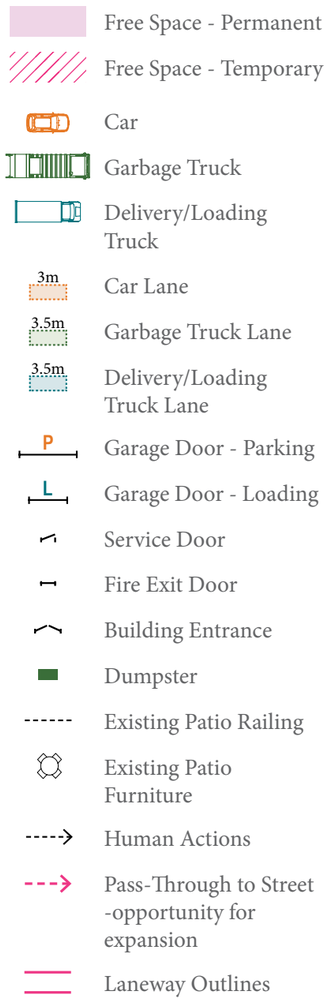


Fig. 156 - Revised Service Conditions; Overall Network, plan

Services

Typical Enlarged Service Conditions

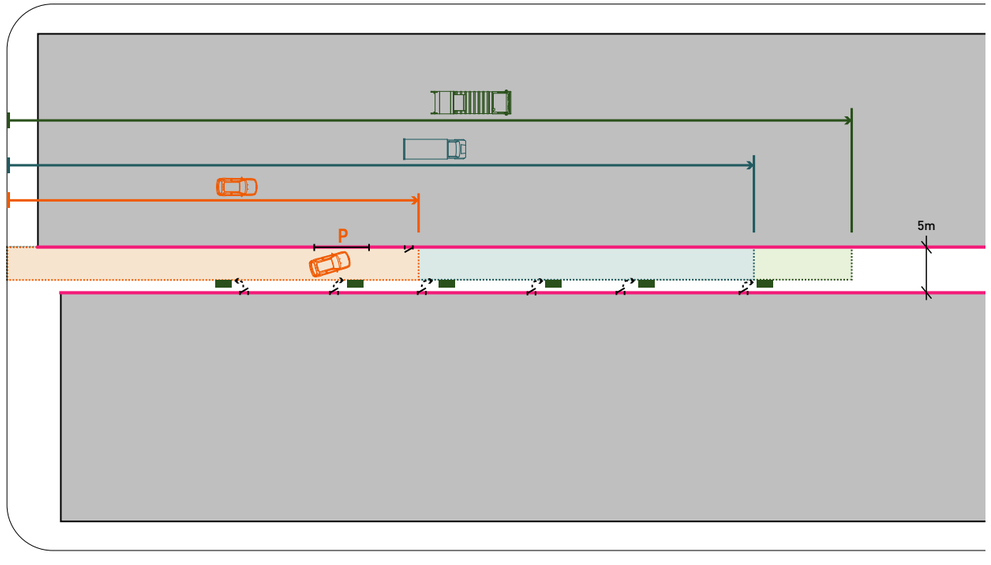


Fig. 157 - Typical Enlarged Conditions; Existing Laneway 1.2, plan 1:650

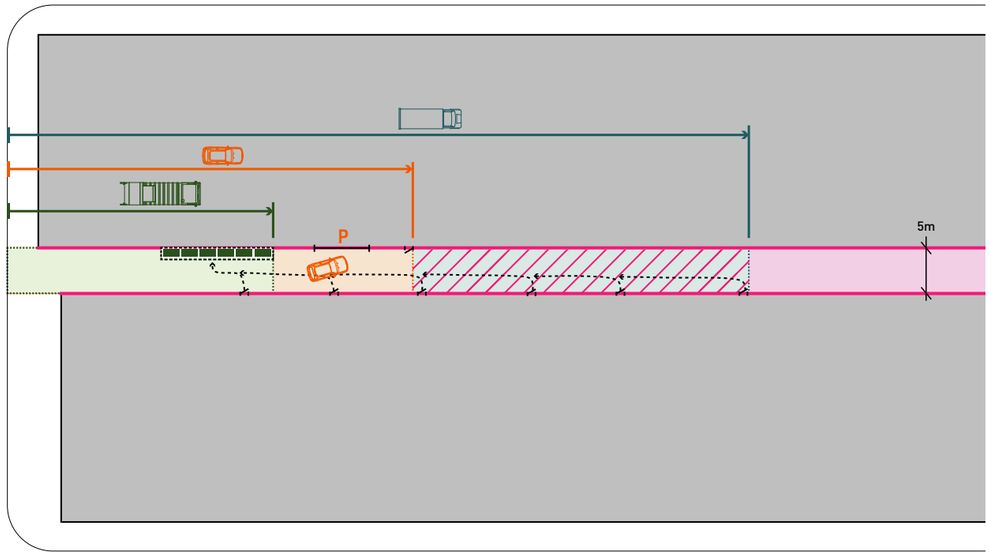


Fig. 158 - Typical Enlarged Conditions; Revised Laneway 1.2, plan 1:650

Free Space - Permanent

Free Space - Temporary

Car

Garbage Truck

Delivery/Loading Truck

3m Car Lane

3.5m Garbage Truck Lane

3.5m Delivery/Loading Truck Lane

P Garage Door - Parking

L Garage Door - Loading

Service Door

Fire Exit Door

Building Entrance

Dumpster

Existing Patio Railing

Existing Patio Furniture

Human Actions

Pass-Through to Street -opportunity for expansion

Laneway Outlines

Services

Revised Conditions - Design Ideas

Design Idea 1

Fig. 159 - Design Idea 1; Experimental Section, 3d sketch

Design Idea 2

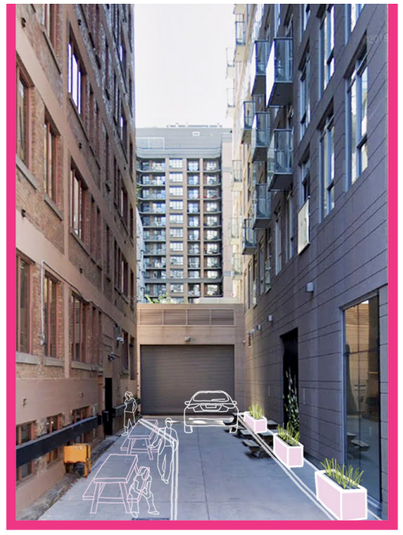


Fig. 160 - Design Idea 2; Experimental Section, 3d sketch

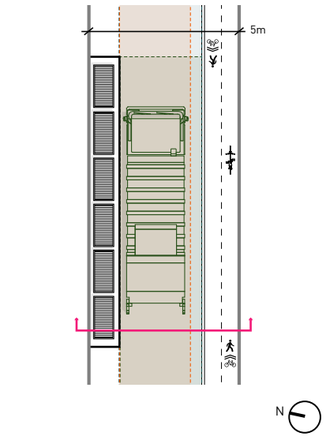


Fig. 161 - Design Idea 1; Enlarged Plan, plan 1:250

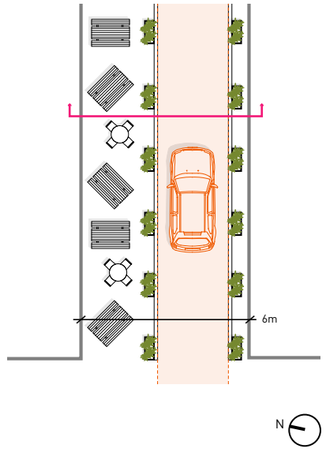


Fig. 162 - Design Idea 2; Enlarged Plan, plan 1:250

Design Idea 3

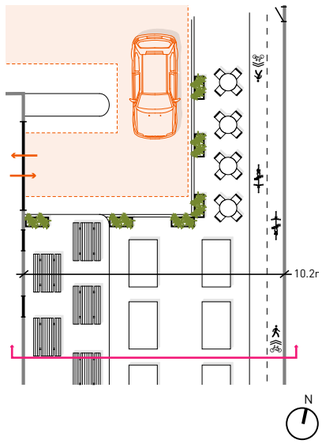


Fig. 163 - Design Idea 3; Enlarged Plan, plan 1:250

Fig. 165 - Design Idea 3; Experimental Section, 3d sketch

Design Idea 4

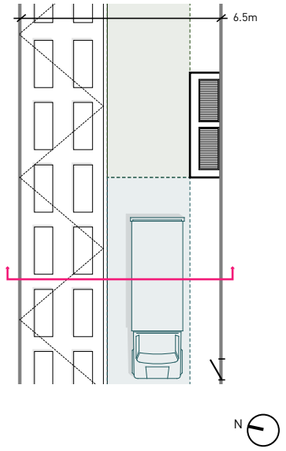


Fig. 164 - Design Idea 4; Enlarged Plan, plan 1:250

Fig. 166 - Design Idea 4; Experimental Section, 3d sketch

DESIGN

Design Manual

Categories

Key Goals

Laneways have increasingly become more relevant in city planning in recent years. This is due to the fact that cities are becoming more densely populated and laneways are an underutilized aspect of the public realm. Typically of utilitarian uses, they serve important service functions in cities but are left unused for majority of the time. Commercial laneways can be explored as opportunities to bring life, activity and social interaction into the city centre. Creating shared systems within the laneways, serving both recreational and service functions, the efficiency and value of these public laneways can be maximized. Laneway revitalization projects and research started in the 1990s, focusing mainly on the transformation of one laneway from a service and vehicular space into a pedestrian-only public space. I am interested in expanding upon the current research that has been done on laneway revitalizations by exploring how adjacent laneways can work together to create a larger network within the city.

Currently, there are around 750 public laneways in Downtown Toronto. There are many opportunities throughout the city centre to find clusters or networks of laneways that could come together to play a larger role in the urban environment. A network makes a bigger impact in a community and has the opportunity to reach into adjacent communities or neighbourhoods, uniting more people together.

Social interaction is a vital aspect of a well-balanced human life. It is important that in all cities, but especially in dense cities, that physical spaces are provided to support and encourage social interaction. In *The Great Good Place,* Ray Oldenburg discusses that the lack of public spaces in a city results in residents turning to consumerism for social interaction. This can be seen in Downtown Toronto, where public space currently lacks, therefore social interaction relies heavily on private businesses such as bars, restaurants, patios, etc. Laneways have the opportunity to integrate public spaces into the downtown core to encourage social interaction, separate from consumerism.

01 Encourage Social Interaction

The intention behind revitalizing these laneways is to remove the current negative association with laneways in cities. People typically associate laneways with being dark, sketchy and dangerous areas in the city. Public laneways are incredibly important in supporting vital city functions and have the potential to be safe, clean and comfortable spaces. Applying design improvements like greenery, lighting and way-finding can drastically change the experience of being in a space. This goal focuses on creating a safe and comfortable environment for the community. A public space where activities can take place all throughout the day, and into the evening, without visitors feeling uncomfortable is a safe place for the community to gather.

02 Safe and Comfortable

03 People-Oriented Space

One of the most important elements in city planning or design is prioritizing people. Majority of the urban design in Downtown Toronto has always focused on vehicles. The scale of buildings and streets is designed for cars, not people. Revitalizing public laneways in the city can give space back to the residents. Even though the laneways will be designed as shared spaces, pedestrians and cyclists will be prioritized. The program in these laneways can be tailored to encourage social interaction, outdoor gatherings and communal activities; such as markets, pedestrian and bike pathways and informal seating areas.

04 Vibrant and Dynamic

It is crucial that these laneway revitalizations are vibrant and dynamic in order to attract visitors. The aesthetic of the laneways is important because it is what attracts people at first glance. If the space is colourful and playful, people will be intrigued as they walk by. It will bring colour and life into a typically grey and cold city. One of the toughest challenges when designing public spaces is ensuring that visitors will want to return. A dynamic environment requires a space to be busy with people coming in and out at all times of the day and a variety of activities taking place. By creating a space that is interactive, the atmosphere will be exciting and dynamic, and people will choose to return voluntarily.

05 Inclusive and Welcoming

When creating a successful public space project, inclusivity must be highly-prioritized. We must design spaces that bring communities together; uniting them regardless of what their background is. Everyone should feel comfortable and welcome in public spaces. Making spaces accessible and eliminating any physical barriers that could cause issues or challenges for community members. These public spaces should encourage sharing, gathering and learning between communities. Downtown Toronto has a variety of cultures and ethnicities, and it is very important to ensure that these public spaces celebrate the diversity of the city.

06 Connectivity/ Mobility

In order to create a successful network of public spaces, they must be connected to the neighbourhoods surrounding them. Integrating bike and pedestrian paths throughout the laneways, adding new bike lanes to the existing streets in the area and creating new intersections and crossings that prioritize pedestrians and cyclists will improve the existing mobility network. Enhancing mobility would encourage residents to use active modes of transportation and ensure that pedestrians and cyclists feel safe from vehicles. Connectivity and mobility relies on a safe and continuous network for pedestrians and cyclists to both travel within the site as well as expand outwards into the rest of the city.

Laneway Typology

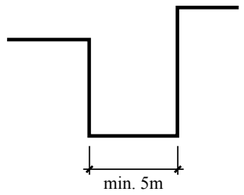
Zone Category

Mixed-Use and/or Commercial Program

Fig. 167 - Laneway Typology Program, diagram

Laneway Widths

Low-to-Mid Rise



Mid-to-High Rise

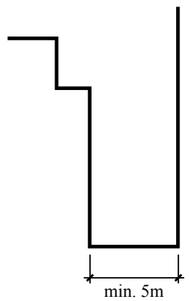


Fig. 169 - Laneway Typology Widths, diagram

Building Heights

Fig. 168 - Laneway Typology Building Heights, diagram

Successful Public Spaces

Fig. 170 - 8 Variables of Successful Public Spaces, diagram

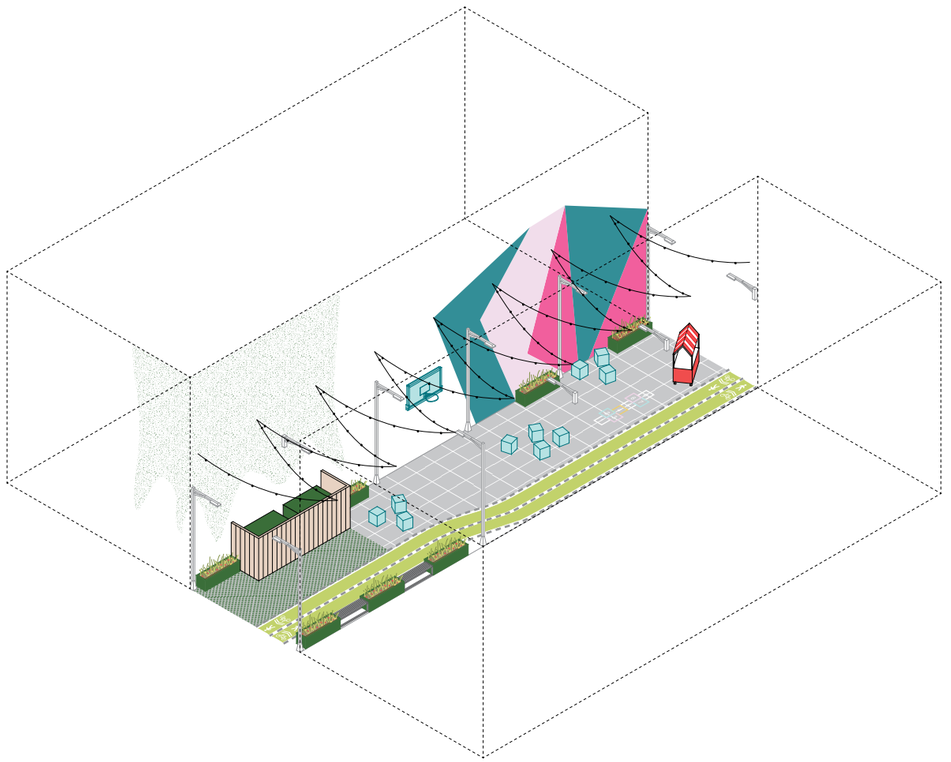


Fig. 171 - Public Space Example, diagram

Considerations

Downtown Toronto's public laneways are owned and maintained by the City of Toronto. Permits must be obtained in order to implement any type of project in these laneways. This ownership means that the city functions that currently take place in these laneways should be maintained, but creating a shared space can be explored.

In order for waste to be managed more efficiently and effectively, all dumpsters will be placed together within an enclosure towards the street. This way, the dumpsters are hidden, unobtrusive, and garbage trucks don't need to drive too far up the laneways. There will also be a timely schedule to enforce the efficient removal of waste.

Expanding and improving both the pedestrian and bike network in the area is crucial to connect this project to the surrounding streets and communities. It must be easily accessible to attract others and bring more people together. As well, the bike and pedestrian path within each laneway connects to all adjacent lanes, creating an alternative route than the city streets. Way-finding and signage will be used for safety and better accessibility.

The main users of the project is intended to be the people who live in this neighbourhood. As it is one of the most dense areas in Downtown Toronto, these residents need public spaces close by. The intention is to have an inclusive and diverse group of users, all ages and cultures.

The City is responsible for the financial aspect, the maintenance and servicing of any public project. There will be plenty of opportunities for the community to be involved in the variety of program after the project is implemented. This could include hosting or participating in events like markets, movie nights or tournaments, and would be strictly voluntary.

To create a successful network of public spaces designed for people, traffic control must be considered in the area. Speed bumps and smaller and more frequent intersections and crossings have been added to help control the speed and volume of vehicles. This is really important to make the network comfortable for pedestrians and cyclists.

Currently, laneways are not well-maintained by the city because they are mainly used by service vehicles. Seasonal and weekly maintenance should be implemented to keep these spaces clean and safe. Both types of maintenance should be on a strict and regular schedule, to ensure the long-term upkeep of these spaces. The local community can be involved with voluntary clean-ups organized through the local councilors office.

These laneways have always served important city functions, and those services should not be neglected. Although, they can become more spatially efficient to allow for a shared space. The space must be analyzed to create a more efficient layout or organization for all uses. Vehicle and service conditions have been analyzed in the following chart.

Considerations

Vehicles/Services

	Size Requirements	Laneway Types	Existing Conditions	Revised Conditions
Delivery & Loading	*Vehicle Width* - 2.4-2.8m[2] *Lane Width* - min 3.5m[2] *Turning Radii* - min 8.6m inside min 13.3m outside[2]	Through-way	- Truck goes through entire laneway	- A scheduled drop-off or pick-up time arranged - Truck drives into laneway and backs out - Some buildings have loading zones for deliveries
		Corner or Dead End	- Truck goes into laneway and backs out	
Garbage	*Vehicle Width* - 3.0m[1] *Lane Width* - min 3.5m[1] *Turning Radii* - min 9.5m inside min 14m outside[1]	Through-way	- Truck goes through entire laneway	- All dumpsters re-located into unobtrusive enclosure near street - A scheduled weekly pick-up time arranged - Truck drives into laneway and backs out - Some buildings have garbage rooms off laneway
		Corner or Dead End	- Truck goes into laneway and backs out	
Cars & Parking	*Vehicle Width* - 1.8m[3] *Lane Width* - min 3.0m[3] *Turning Radii* - min 2.5m inside min 6m outside[3]	Through-way	- Car goes through entire laneway - No parking in laneway	- Cars do not need to drive through entire laneway - Car access allowed only to drive into or exit parking off of laneway or building
		Corner or Dead End	- Car goes through entire laneway - turning radius is typically sufficient - No parking in laneway	
Emergency Access - Fire	*Lane Width* - min 6.0m clear[1]	All Laneway Types	- Laneways are typically too narrow to accommodate these vehicles	- No changes to this service
Maintenance & Services	*Vehicle Width* - 3.0m[1] *Lane Width* - min 3.5m[1] *Turning Radii* - min 9.5m inside min 14m outside[1]	All Laneway Types	- Truck goes into laneway and backs out - No regular cleaning or maintenance schedule - periodically performed by Transportation Services	- Truck drives into laneway and backs out - Regularly scheduled cleaning and maintenance - similar to the approach for streets

[1] Toronto Laneway Manual - The Laneway Project
[2] Urban Street Design Guide - NACTO
[3] Vehicle Turning Paths Dimensions - Dimensions.com

Design Improvements

Fig. 172 - Concrete Planters, photo

Fig. 173 - Ivy Green Walls, photo

Fig. 174 - Street Furniture, photo

Fig. 175 - Play Infrastructure, photo

Greenery

Planting beds or planter boxes can easily be integrated into the design to add to both the program and aesthetic of the space. They could be used solely for appearance or for community gardens for local residents. Adding greenery to these laneways will create a welcoming and vibrant environment. Ivy along building facades is an effective way to add greenery without occupying ground space. It is able to survive the colder months and could be maintained year round. Similar to wall murals or graffiti, green walls are a great way to add colour and contrast to an otherwise grey and cold city facade.

Recreational Infrastructure

Adding street furniture and recreational activities is a great way to get people to stay in these spaces. They are important design elements because they support the program of the laneway and make it dynamic. Both these elements are simple but effective ways to make a laneway fun and functional. It establishes the laneway as a destination space that people will want to visit. Street furniture can be both permanent or temporary. If it is temporary, it can be moved around and adjusted per the user. Recreational infrastructure could include chairs, tables, benches, loungers, basketball hoops, outdoor ping pong tables or jungle gym objects.

Design Improvements

Way-finding

Way-finding is an important element when designing public spaces in order for the spaces to be easily accessible to all. There are opportunities to have fun with graphics and types of way-finding, by implementing wall and floor graphics. These could be done by local artists and could be used to create vibrant and colourful signage. This signage could include marking the entrances of laneways from the sidewalk to attract visitors, the bike and pedestrian paths, waiting or crossing zones, and even the allocated areas for cars and other service vehicles within the laneways.

Fig. 176 - Murals/Graffiti Art, photo

Fig. 177 - Ground Graphics, photo

Lighting

Adding proper lighting to the laneways will transform the space in many positive ways. It creates a safer environment for pedestrians and bikers and can help extend the hours that a laneway can be used. Different types of lighting can create various atmospheres. Overall lighting such as pole or wall-mounted lights should be provided similarly to how they are on streets. These lights would be used purely for function and ensure that the laneways are always fully lit for safety. These could be solar powered in an effort to be more sustainable and cost-effective in the future. In each laneway, it is also important to have decorative lights, such as fairy lights or string lights. This lighting type would bring fun and whimsy to a typically utilitarian space.

Fig. 178 - Decorative Lights, photo

Fig. 179 - Overall Lighting, photo

Fig. 180 - Bike/Pedestrian Path, photo

Fig. 181 - Permeable Paving, photo

Paving

Paving is an integral aspect of laneway revitalizations to transform them into pedestrian-friendly and accessible spaces. Permeable paving should be used to manage stormwater runoff and could be implemented in the form of the bike and pedestrian paths. Adding a variation of paving throughout the laneways can create both aesthetic interest and functionality. Paving can be utilized as way-finding; visually and physically separating the laneways and indicating where vehicle and pedestrian boundaries occur within the shared space. Durable paving like asphalt or concrete can be added for the service lanes and pavers for the pedestrians spaces.

Fig. 182 - Garbage Enclosure, photo

Fig. 183 - Garbage Enclosure, photo

Waste

Managing the waste within these laneways will be crucial in the transformation from service space to shared space. The most important aspect for managing the waste is consolidating all the existing dumpsters into an unobtrusive garbage enclosure. These enclosures can be placed near the entrance of the laneway to ensure that the garbage truck does not need to drive too far into the laneway. A scheduled pick-up time can be arranged. This strategy allows the laneway to be less cluttered and have more free space for recreational uses. Laneways can still function as service routes for city functions, but in a more efficient and organized manner.

Mobility Network

Bike and Pedestrian Network

Overall Network Plan

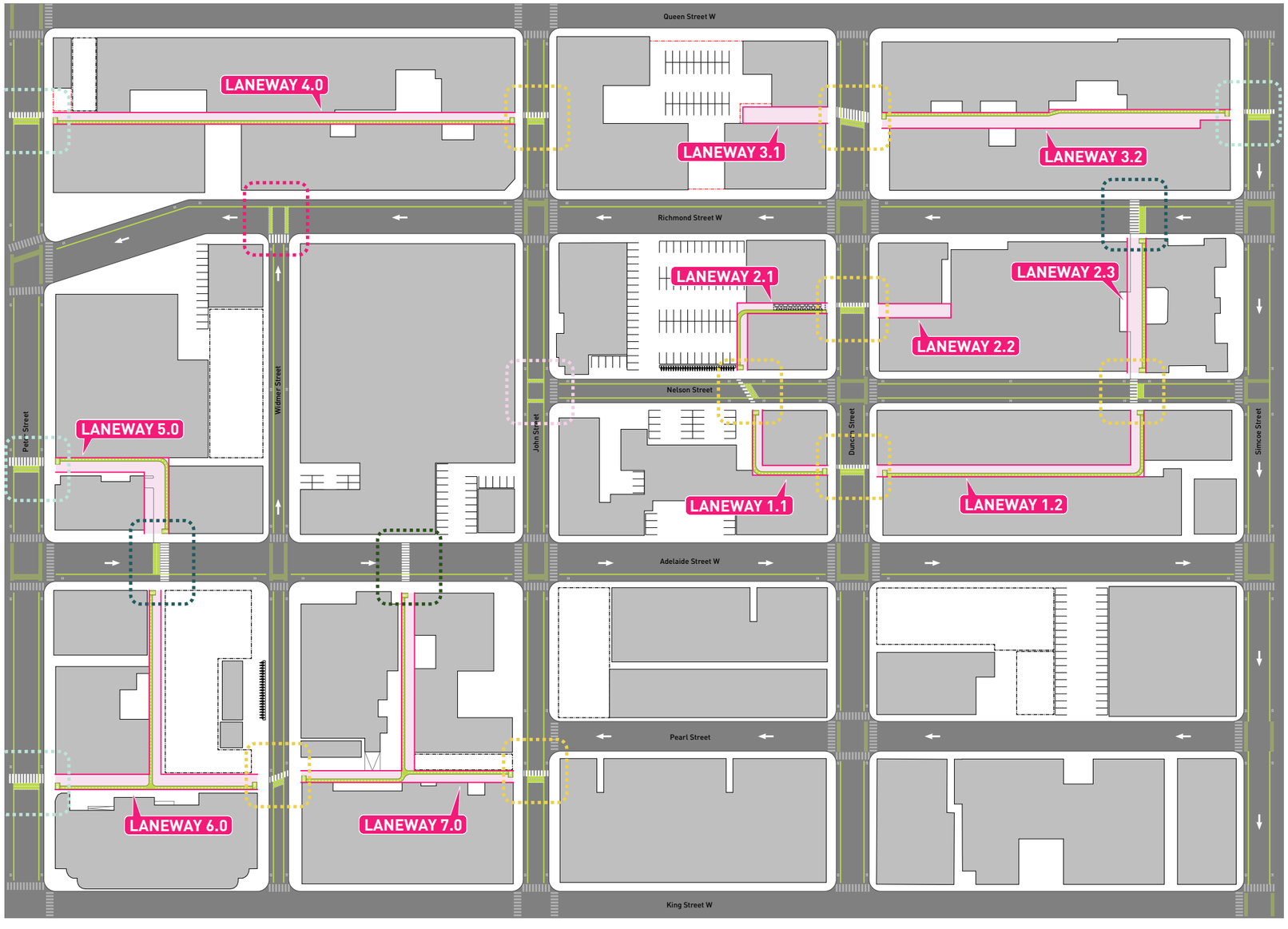


Fig. 184 - Bike and Pedestrian Network, plan

Bike and Pedestrian Network

Typical Condition 1

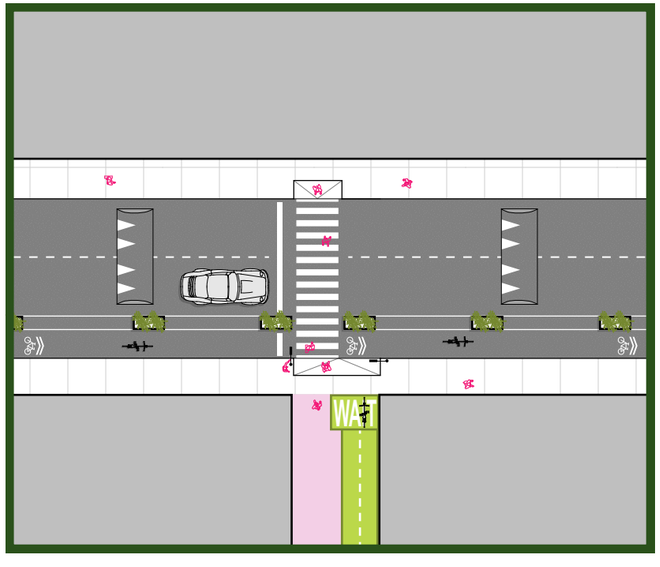


Fig. 186 - Typical Condition 1, plan

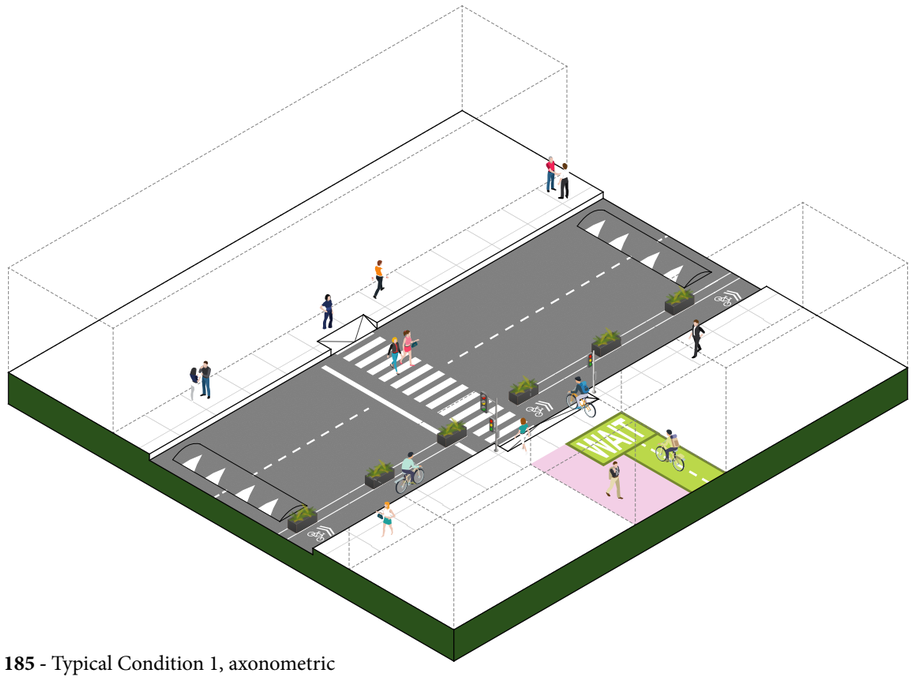


Fig. 185 - Typical Condition 1, axonometric

Typical Condition 2

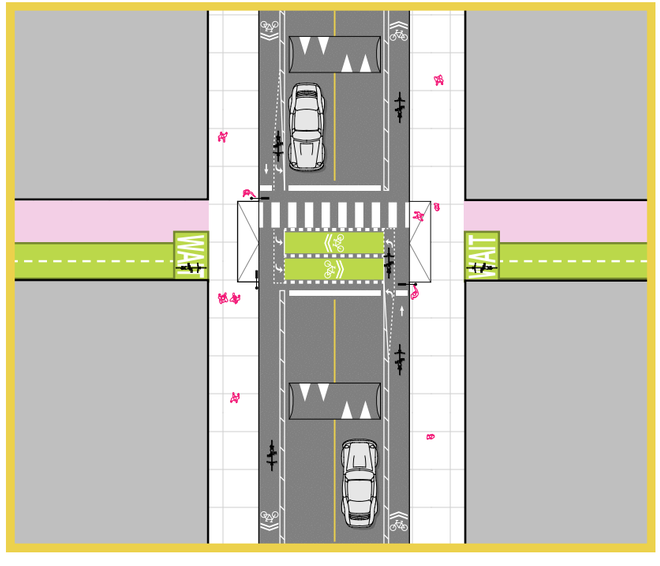


Fig. 187 - Typical Condition 2, plan

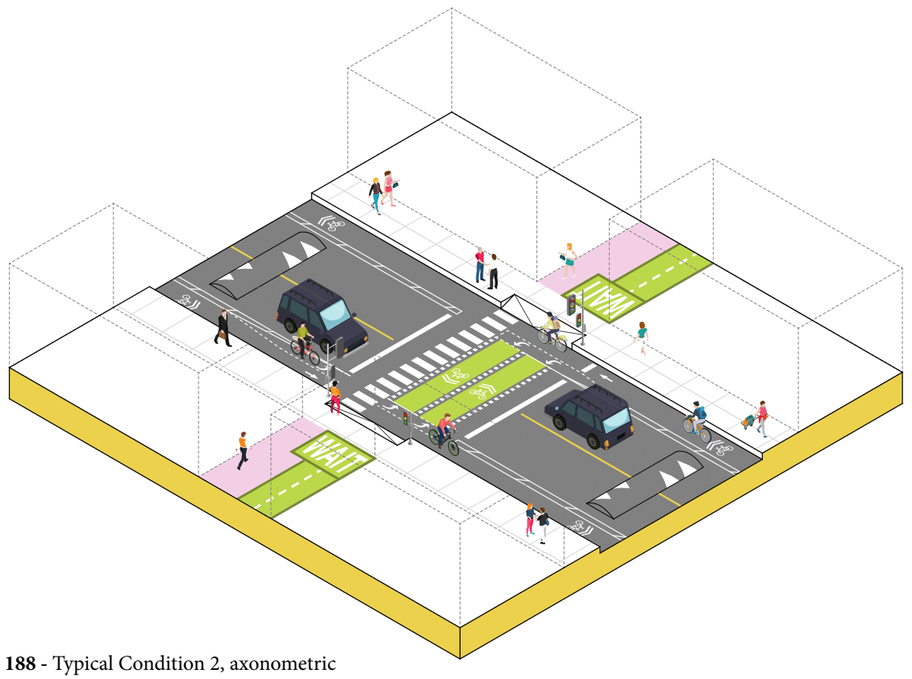


Fig. 188 - Typical Condition 2, axonometric

Bike and Pedestrian Network

Typical Condition 3.1

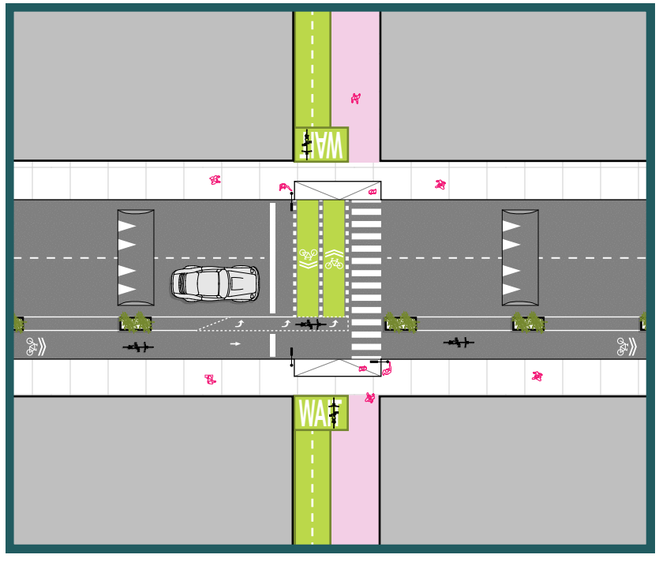


Fig. 190 - Typical Condition 3.1, plan

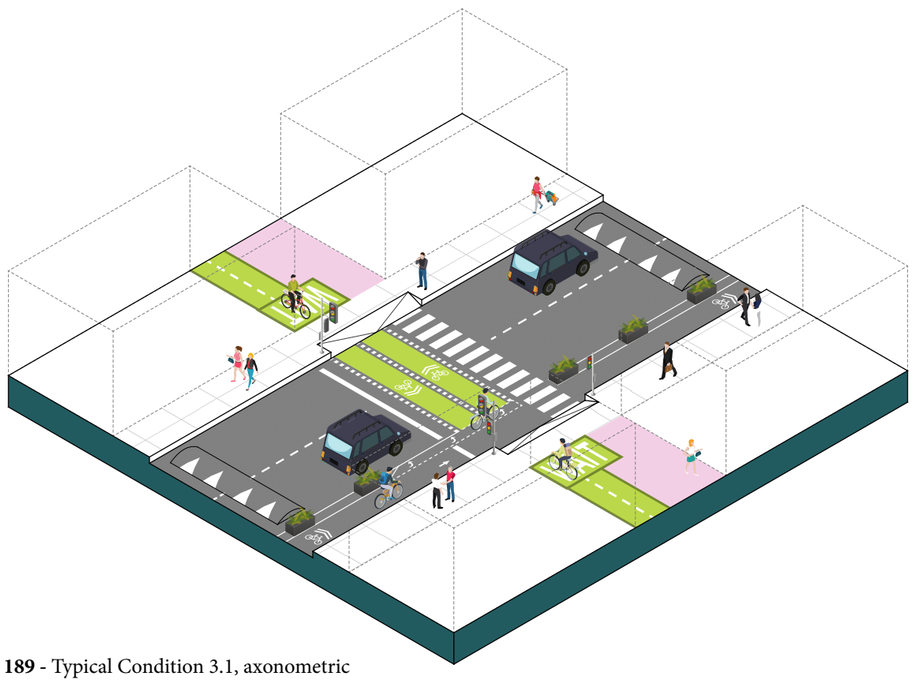


Fig. 189 - Typical Condition 3.1, axonometric

Typical Condition 3.2

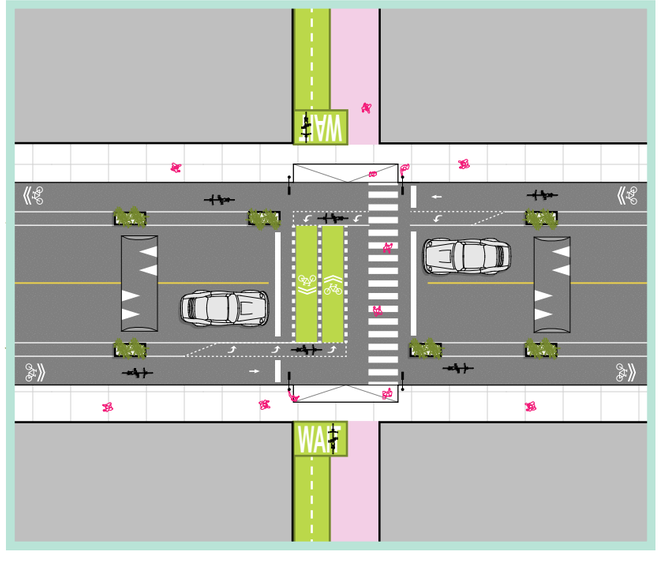


Fig. 191 - Typical Condition 3.2, plan

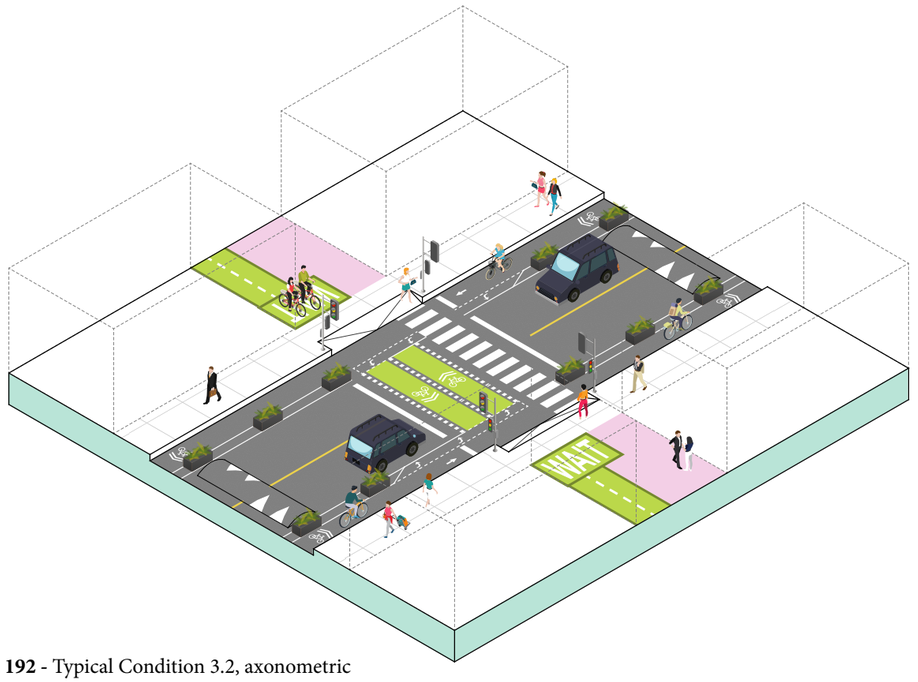


Fig. 192 - Typical Condition 3.2, axonometric

Bike and Pedestrian Network

Typical Condition 4.1

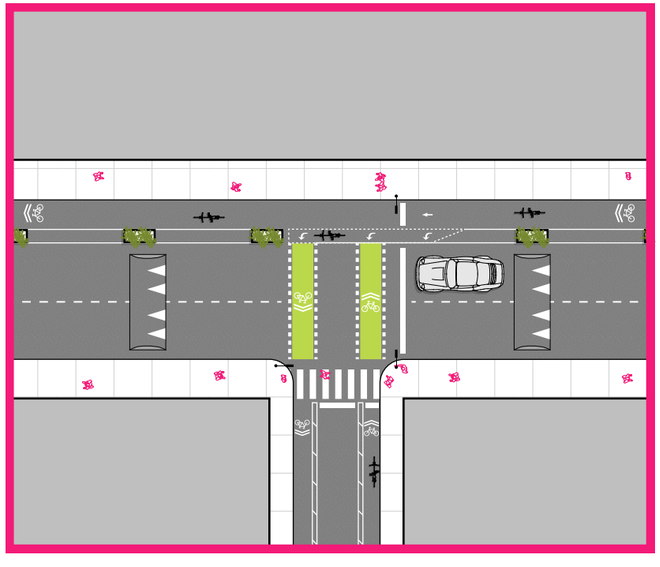


Fig. 194 - Typical Condition 4.1, plan

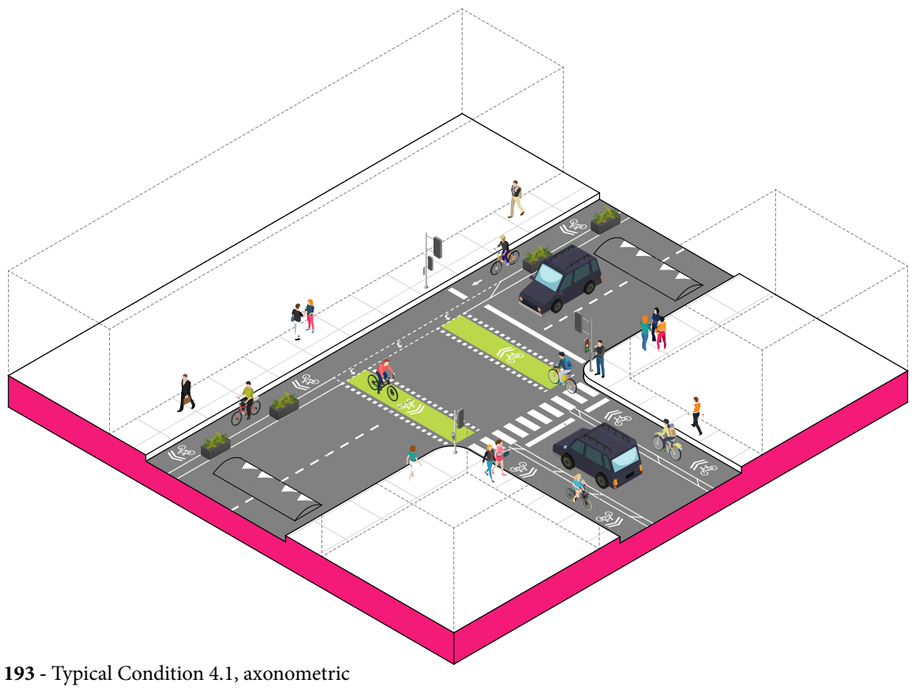


Fig. 193 - Typical Condition 4.1, axonometric

Typical Condition 4.2

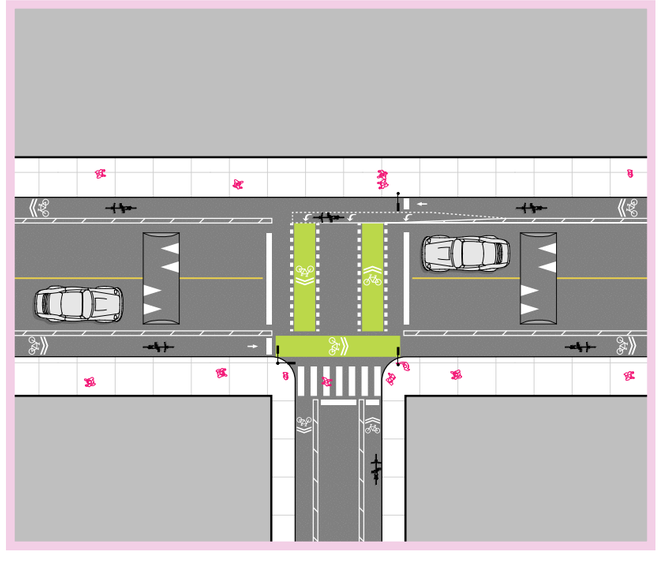


Fig. 195 - Typical Condition 4.2, plan

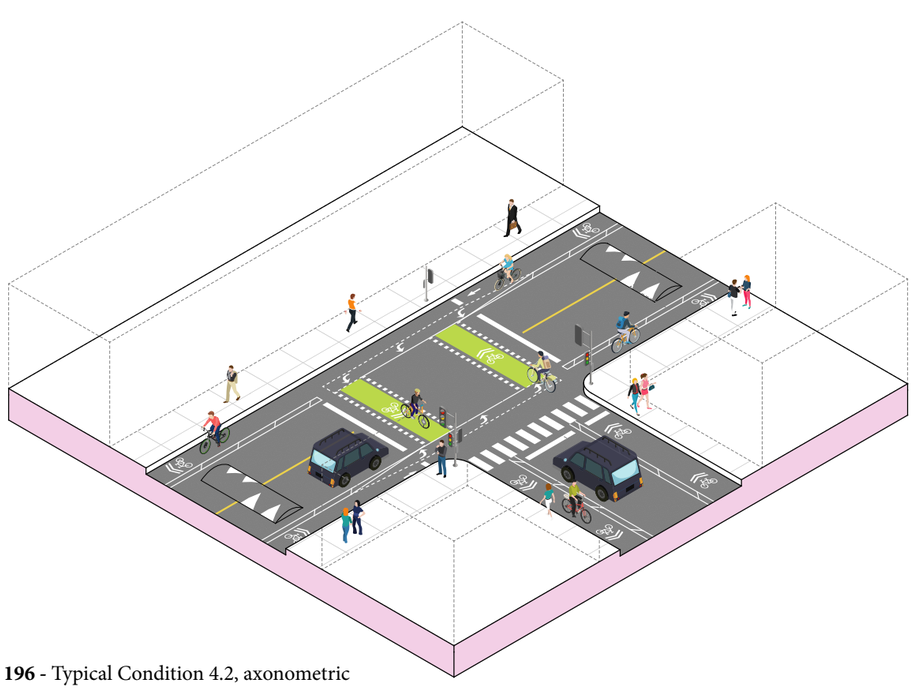


Fig. 196 - Typical Condition 4.2, axonometric

Social Network

Updated Site Sections

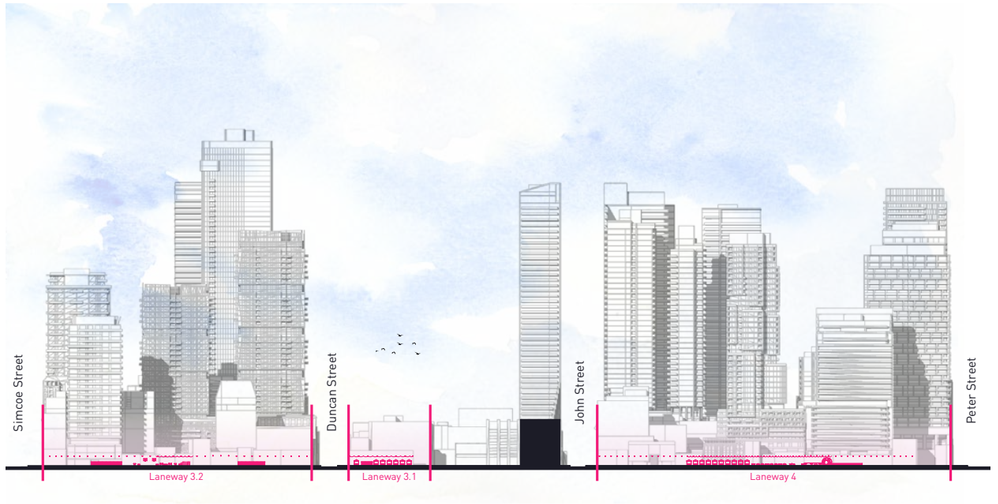


Fig. 197 - Site Section A; with Design Interventions, section 1:3,200

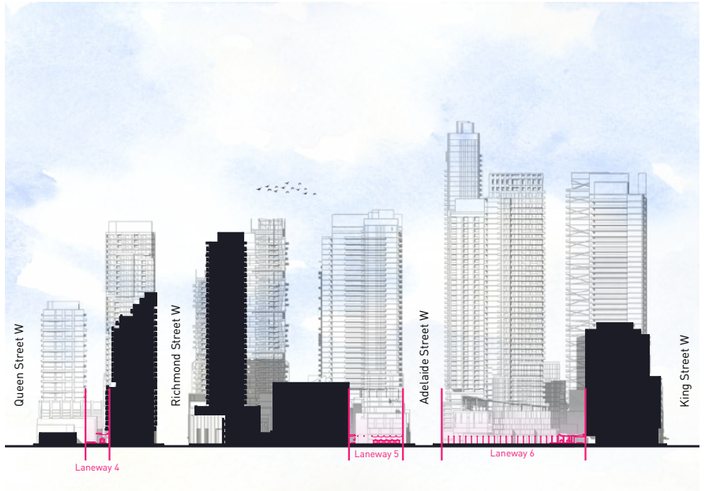


Fig. 198 - Site Section B; with Design Interventions, section 1:3,200

Design Strategies

Strategy 1: The 5 Minute Community

Typical Program Requirements

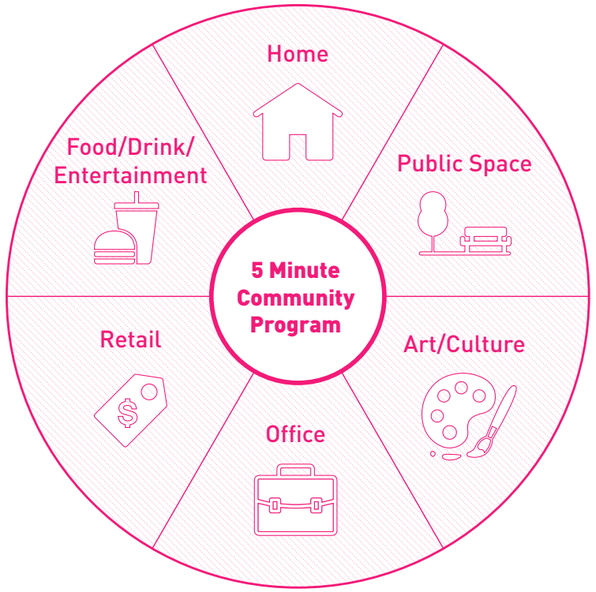


Fig. 199 - The 5 Minute Community; Typical Program, diagram

Applied to Thesis Site

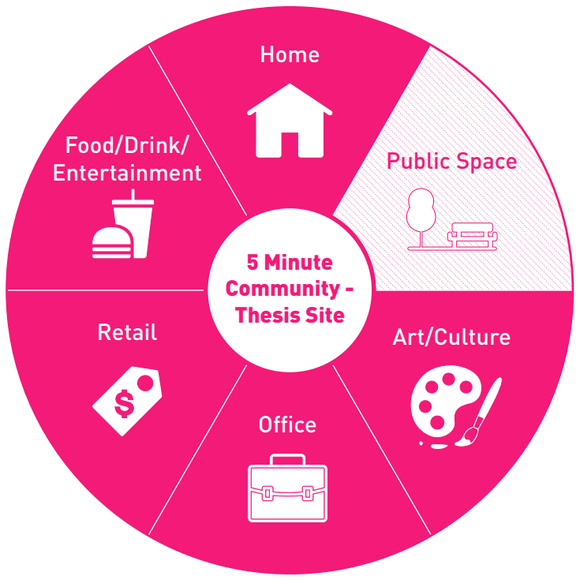


Fig. 200 - The 5 Minute Community; Thesis Site, diagram

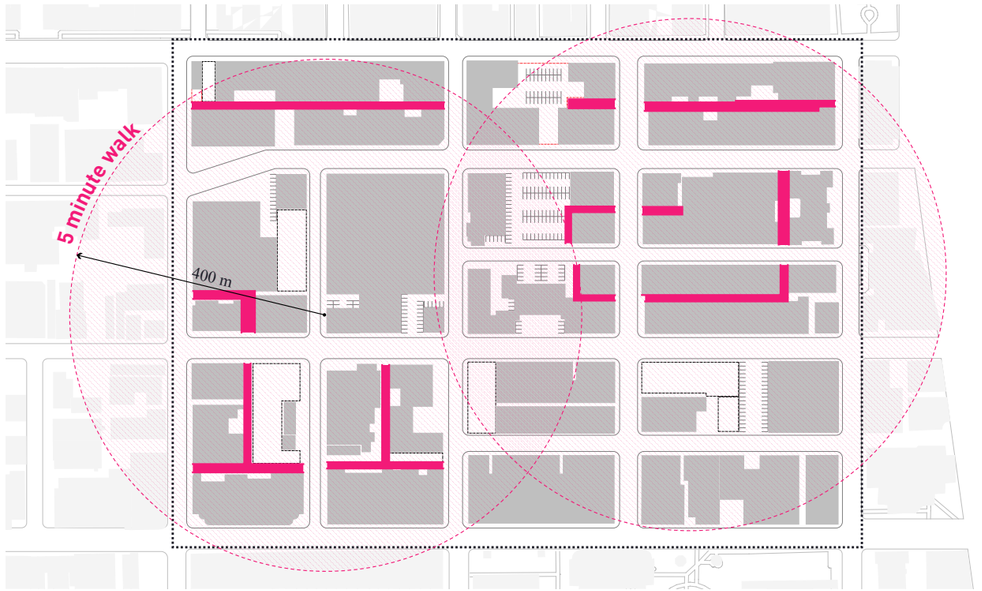


Fig. 201 - 5 Minute Community; Overlay on Thesis Site, diagram

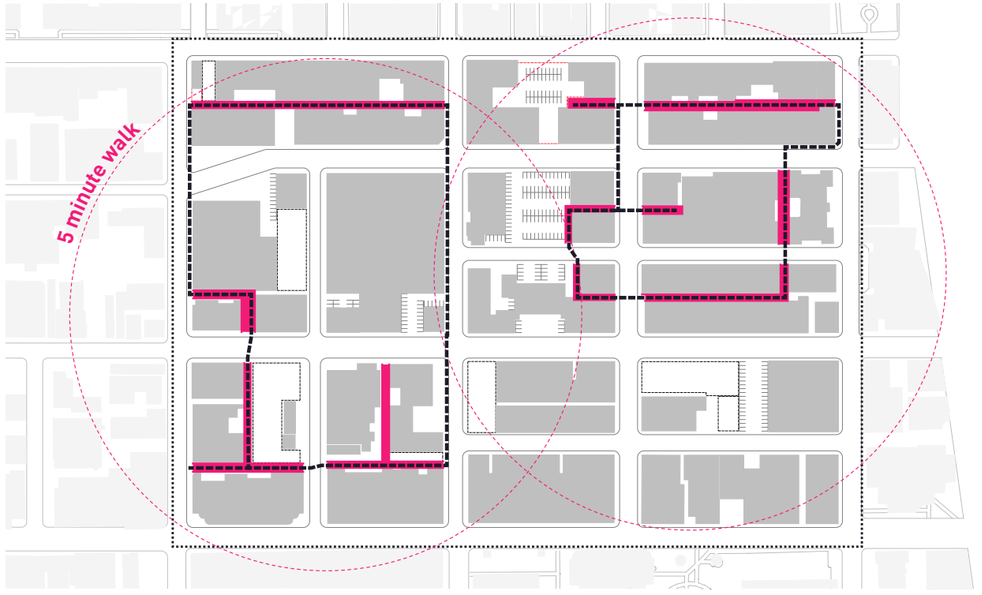


Fig. 202 - 5 Minute Community; Laneway Sequences, diagram

Design Strategies

Strategy 2: **Laneway Sequences**

Paths

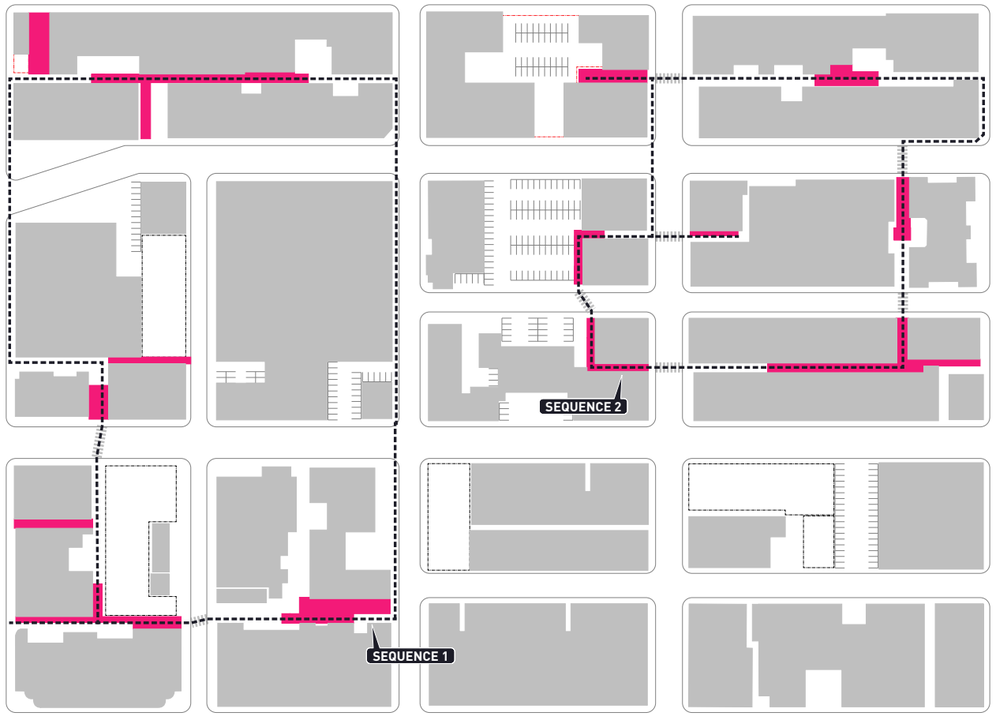


Fig. 203 - Laneway Sequences; Paths, diagram

Paths and Thresholds

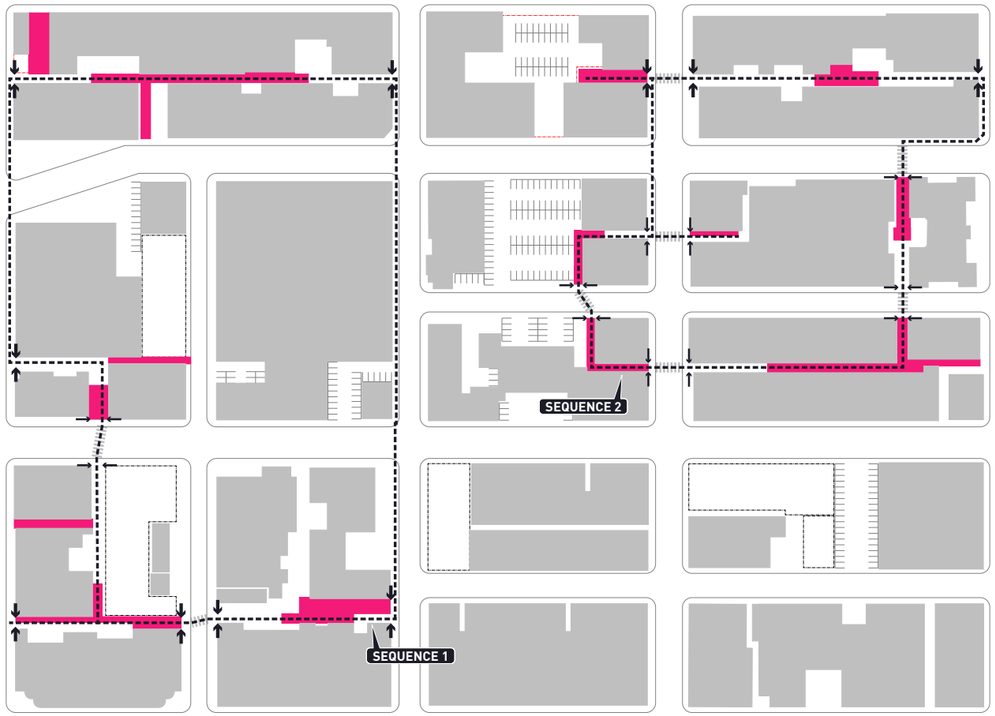


Fig. 204 - Laneway Sequences; Paths and Thresholds, diagram

Space and Program

Space

Permanent Space

Drawing Representation

Description

-Only permanent program allowed
-Dedicated to pedestrians
-No services or vehicles in this space
-Excludes bike and pedestrian path

Temporary Space

Drawing Representation

Description

-Only temporary program allowed - shared space with services
-Overlaps with service lanes (delivery, loading and garbage) as they only occur once a week or once a day
-Parking occurs more often throughout the day therefore car lanes are not included in the temporary space
-A schedule will be used to keep the services and program organized

Bike and Pedestrian Path

Drawing Representation

Description

-Pathway that runs through all the laneways with waiting zones where the laneway and sidewalk meet
-Can coincide with vehicle lanes - various paving styles will indicate the pathway vs service lanes
-Shared path for pedestrians and cyclists with occasional interruptions from services

Service Space/Lanes

Drawing Representation

Description

-Lanes dedicated for use by laneway services - cars/parking, garbage, loading and delivery
-Extents of lanes will be indicated with graphics and paving
-Length and location of service lanes varies depending on the laneway
-Can coincide with bike and pedestrian path
-Shared space

Fig. 205 - Space Typologies, legend

Program

Permanent Program

Patio

outdoor patio, used into the winter season

Art Installation

local artists, changed seasonally or monthly

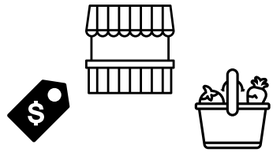
Social

informal seating area

Recreation

outdoor activities and games

Market (Flea or Food)

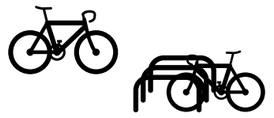


vendors, stalls - permanent locations that occur daily

Greenery

planters, trees, ivy - bring life to the space

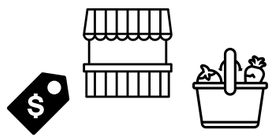
Bike



covered bike parking, with bike air pumps

Temporary Program

Market (Flea or Food)

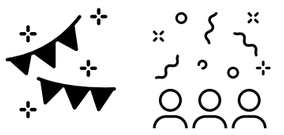


vendors, stalls - termporary locations running on a weekly or monthy basis

Kiosks

smaller vendors - easy to transport in and out for a scheduled time on a daily basis

Festivals/Events



community run events that are scheduled ahead of time - can take place in any temporary space area

Fig. 206 - Program Typologies, legend

Space and Program

Space

Fig. 207 - Space Usage Diagram, plan

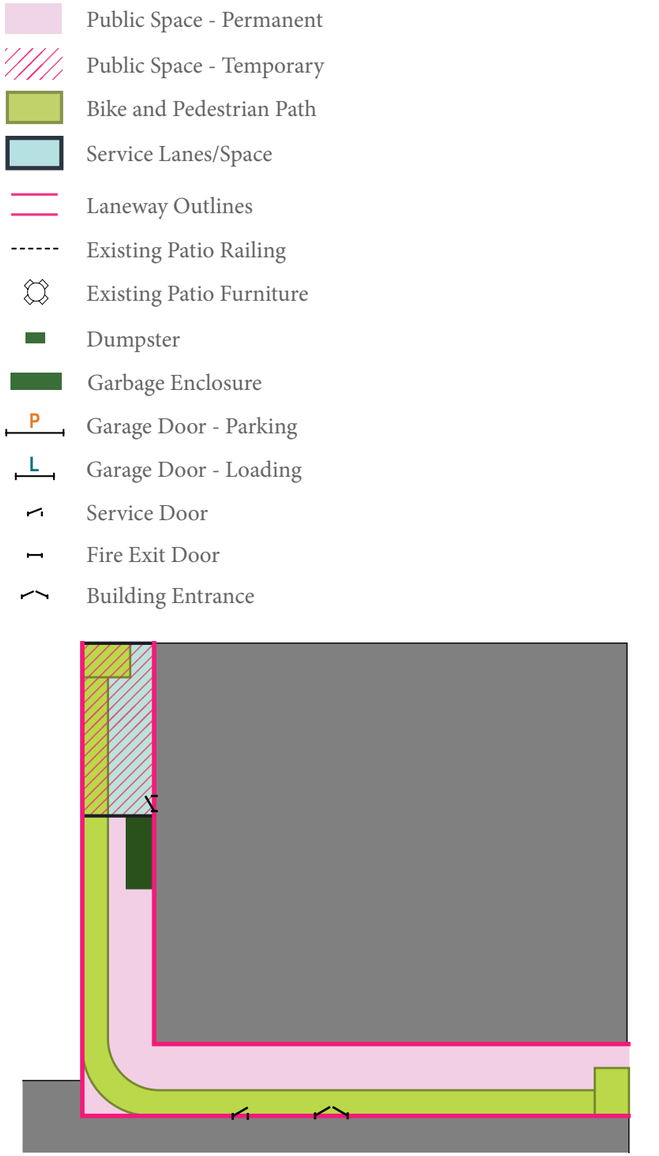


Fig. 208 - Typical Space Usage Diagram; Laneway 1.1, plan

Space and Program

Program

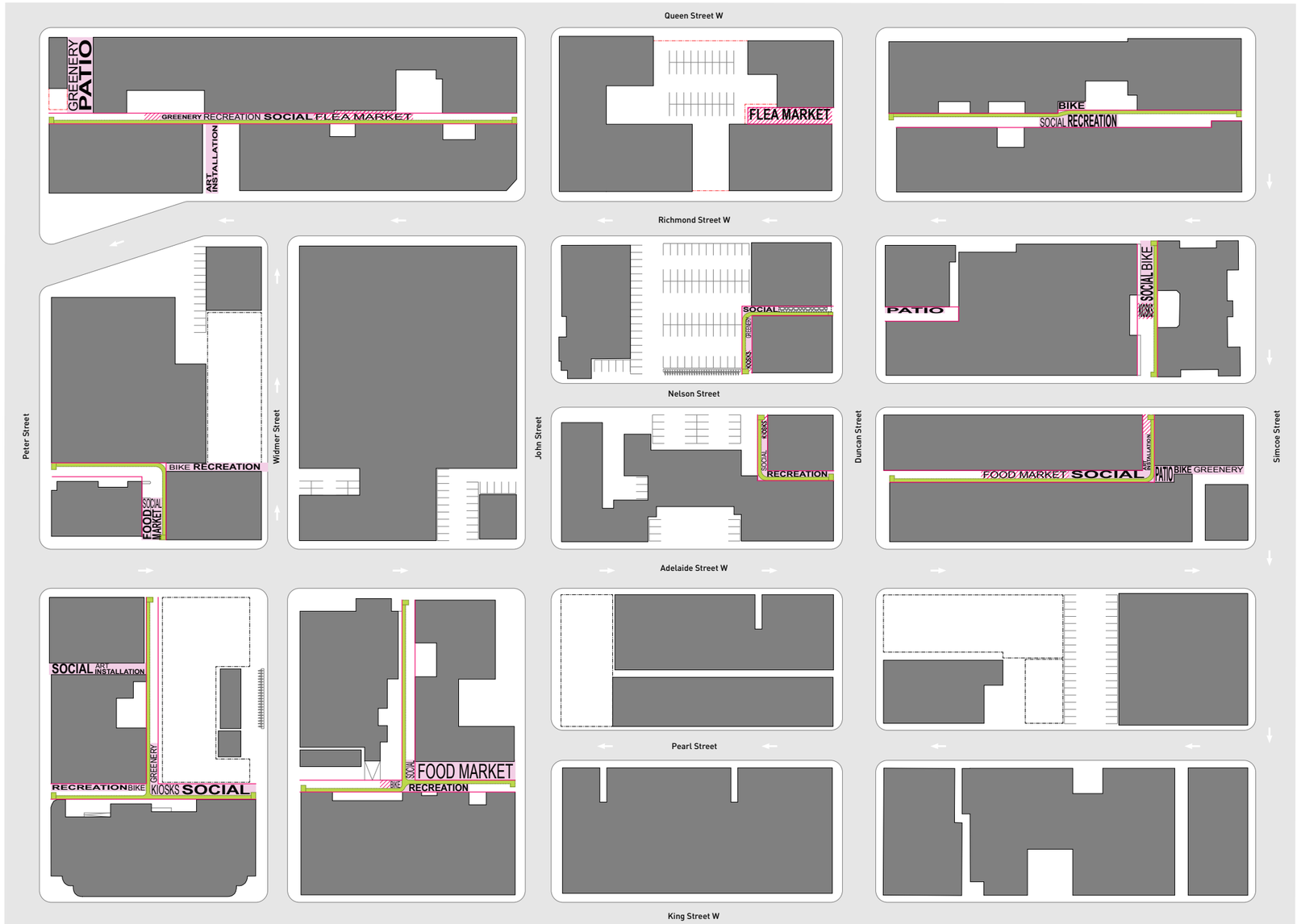


Fig. 209 - Program Keyword Diagram, plan

Space and Program

Program

Laneway Sequences

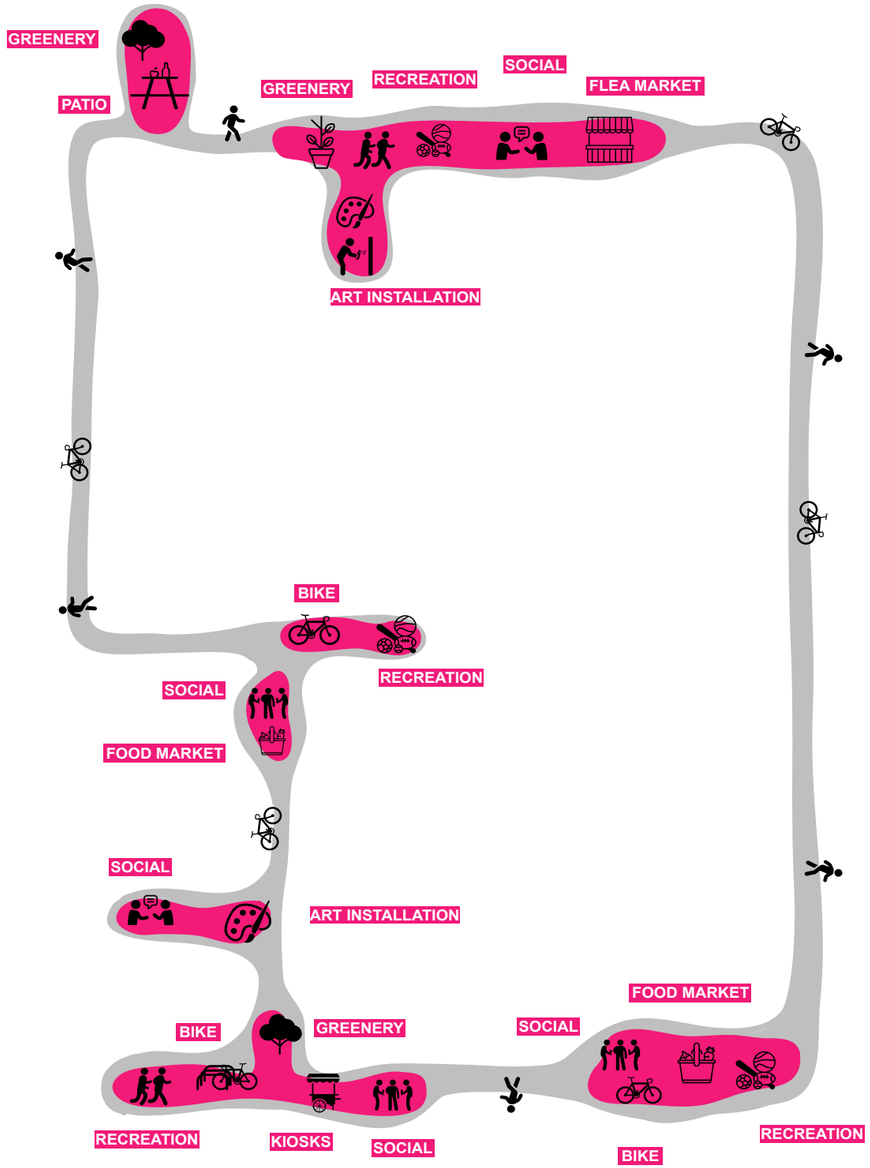


Fig. 210 - Program; Laneway Sequence 1, diagram

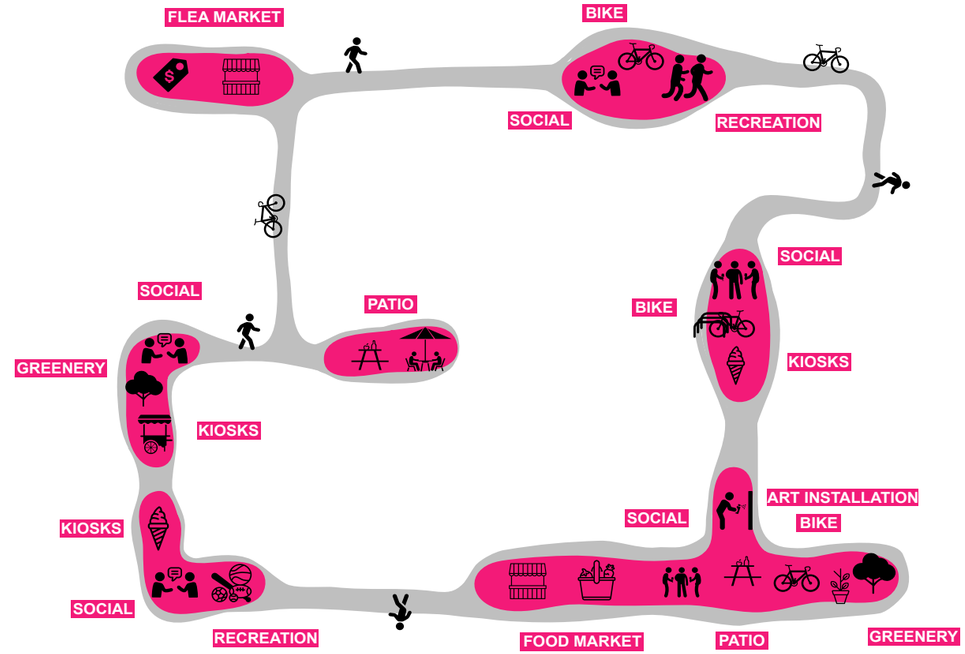


Fig. 211 - Program; Laneway Sequence 2, diagram

Fig. 212 - Program; Laneway Sequences Aerial View, diagram

Laneway Design

Overall Network Plan

Fig. 213 - Laneway Network Plan, plan

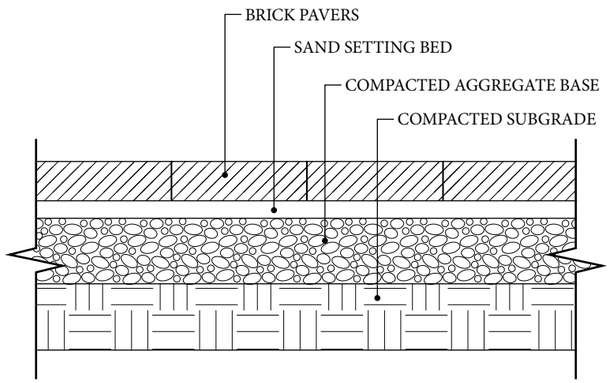
1:2,000

Laneway Design

Paving

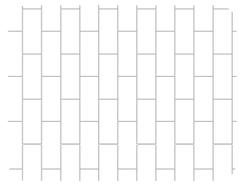
Pedestrian Paving

Large Interlock Paving Stones
-They are durable, clean-lined, aestheically pleasing and allow for water drainage



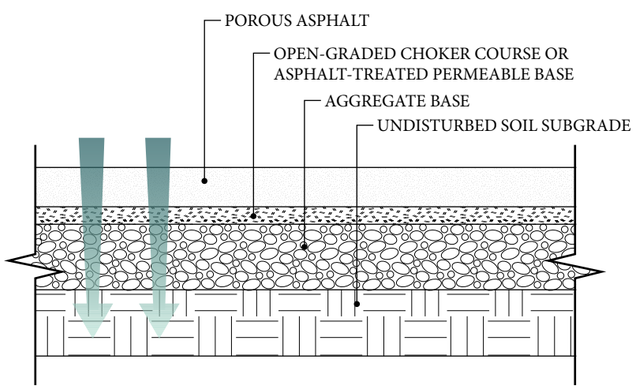
Precedent

Drawing Representation



Permeable Paving

Porous Asphalt Paving
-It is durable, comfortable for walking and biking and supports proper drainage
-Can also be customized by colour



Precedent

Drawing Representation

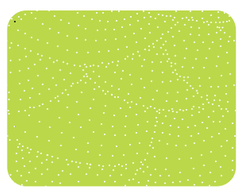
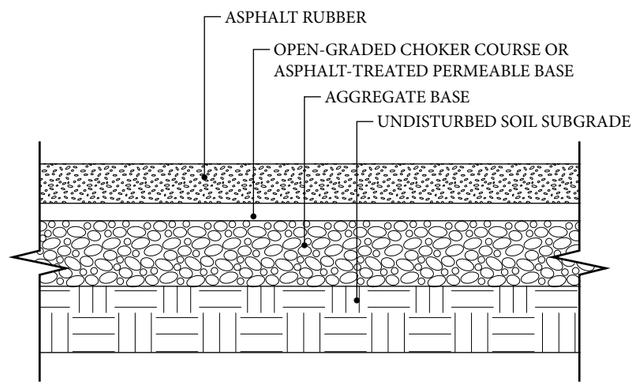


Fig. 214 - Paving Typologies, legend

Services Paving

Asphalt Rubber
-It is noise reducing, durable, weather-resistant, environmentally friendly and cost-effective



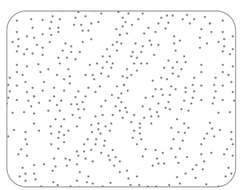
Precedent

Drawing Representation

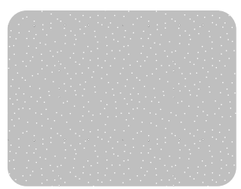
Existing Paving

-These are the drawing styles representing the existing paving found on this site or near each laneway
-The sidewalk is typical concrete and the street is asphalt

Sidewalk



Street

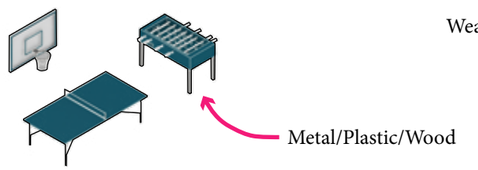


Laneway Design

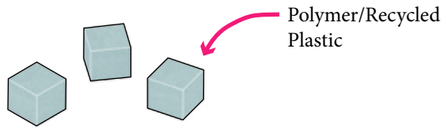
Design Elements

Recreation

Outdoor Activities

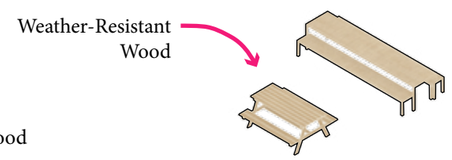


Movable Seating

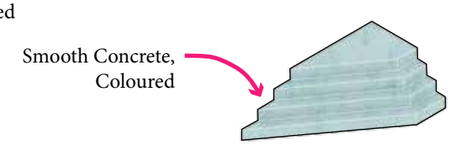


Social

Picnic Tables

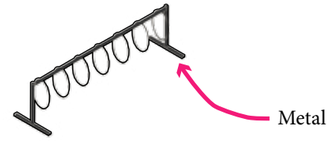


Staircase Seating

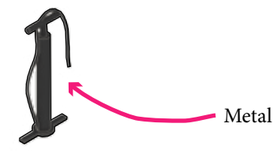


Bike

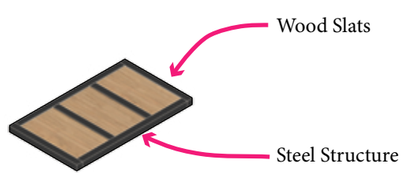
Parking



Air Pump

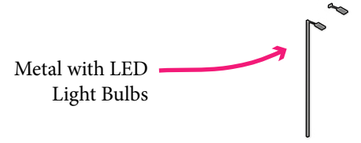


Roof



Lighting

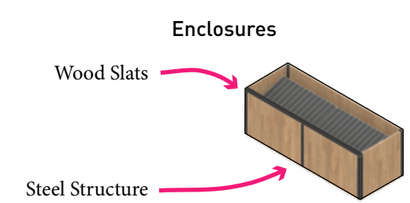
Overall Street Lighting



String Lights

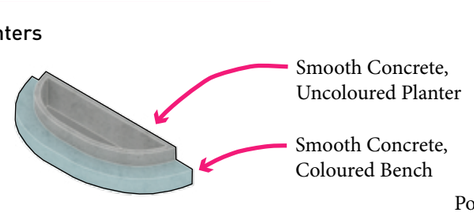
Garbage

Enclosures



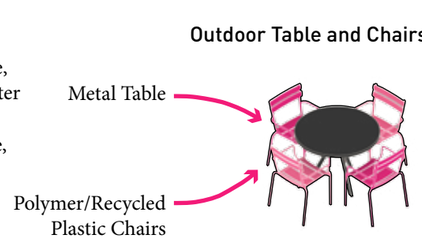
Greenery

Planters



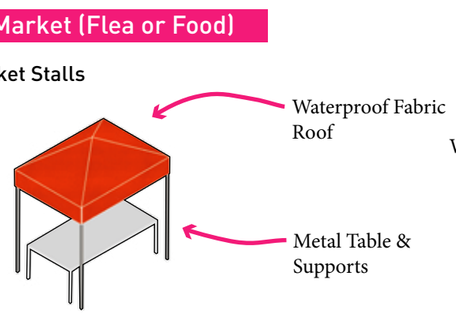
Patio

Outdoor Table and Chairs



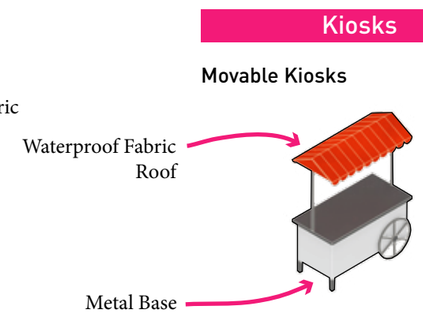
Market (Flea or Food)

Market Stalls



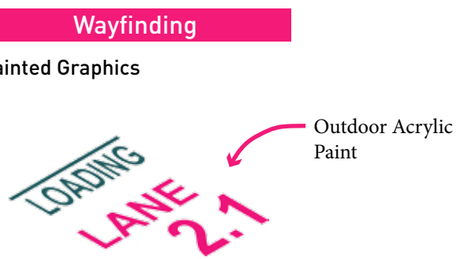
Kiosks

Movable Kiosks



Wayfinding

Painted Graphics



Wall Murals

Wall Art/Graffiti

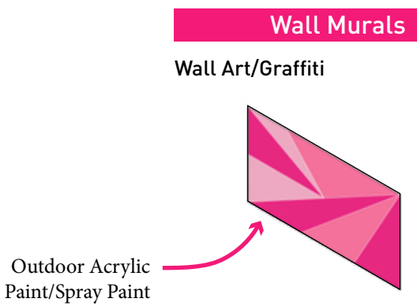
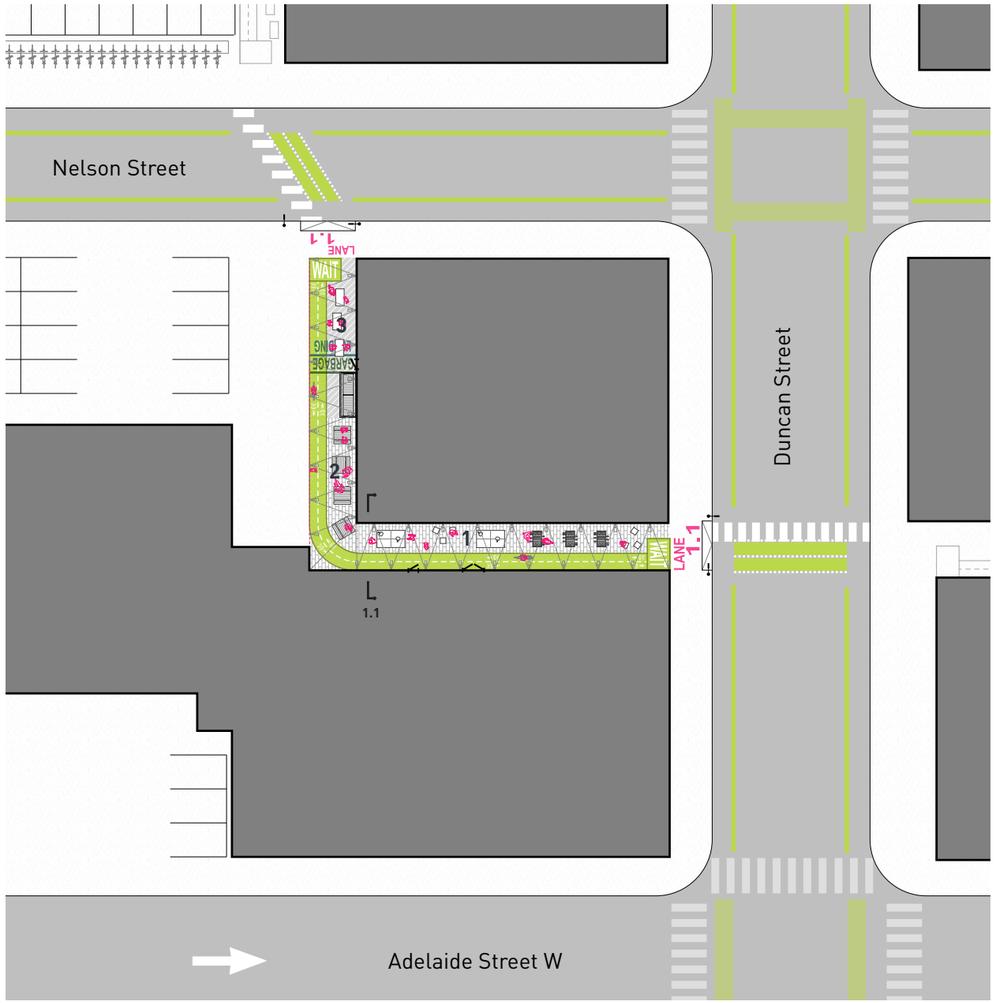


Fig. 215 - Design Elements, legend

Laneway Design

Laneway 1.1



1 Recreation
2 Social
3 Kiosks

1:500

Fig. 216 - Laneway 1.1 Design, plan

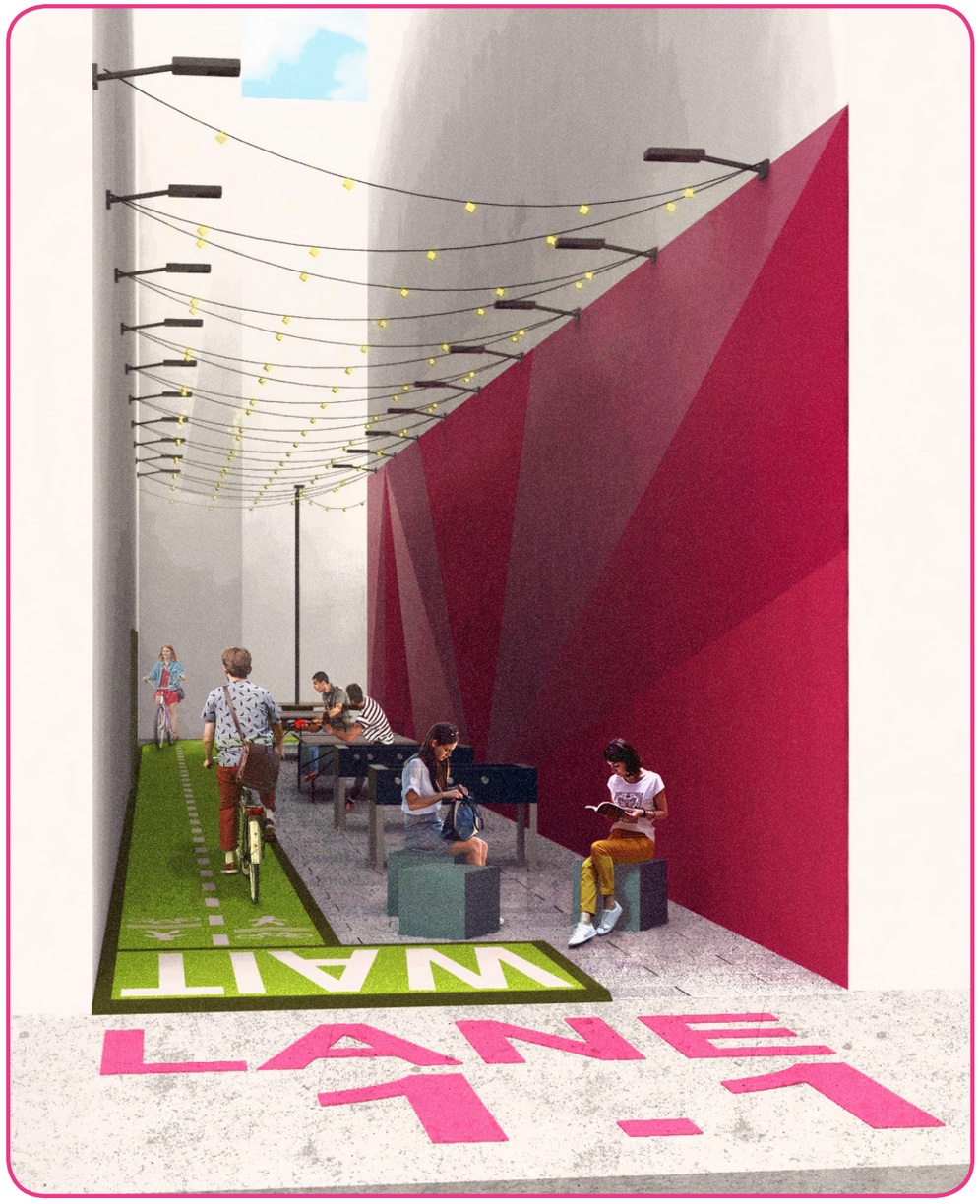


Fig. 217 - Laneway 1.1 Design, 3d view

Laneway Design

Laneway 1.1

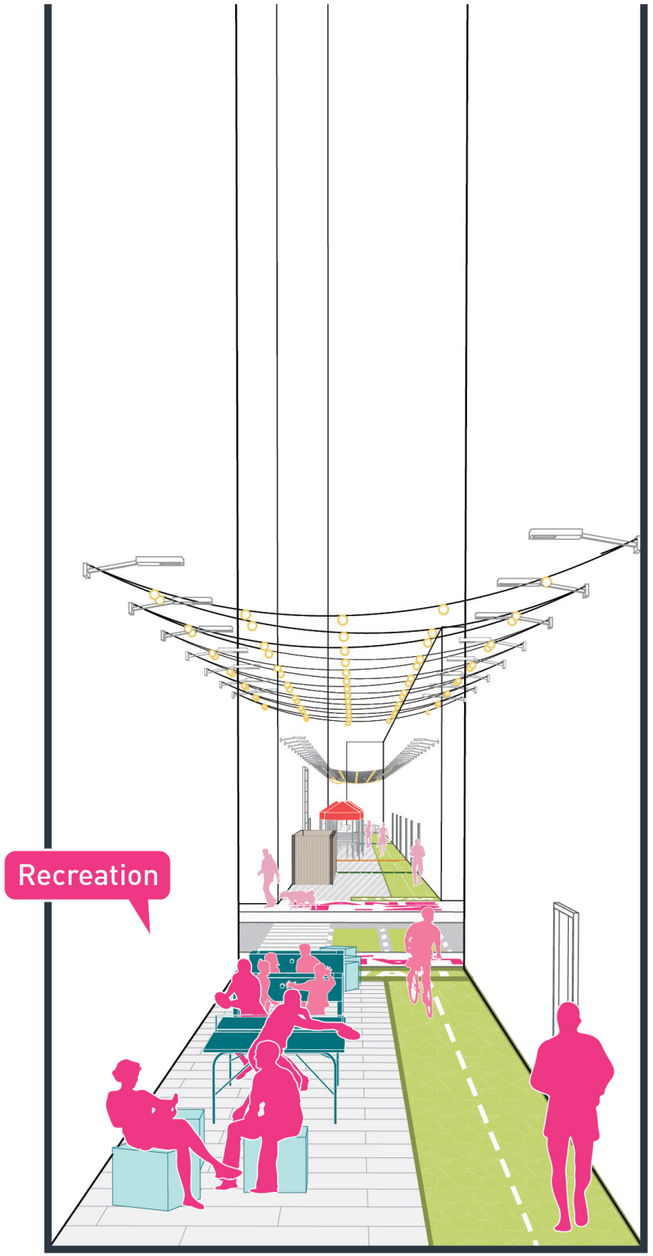
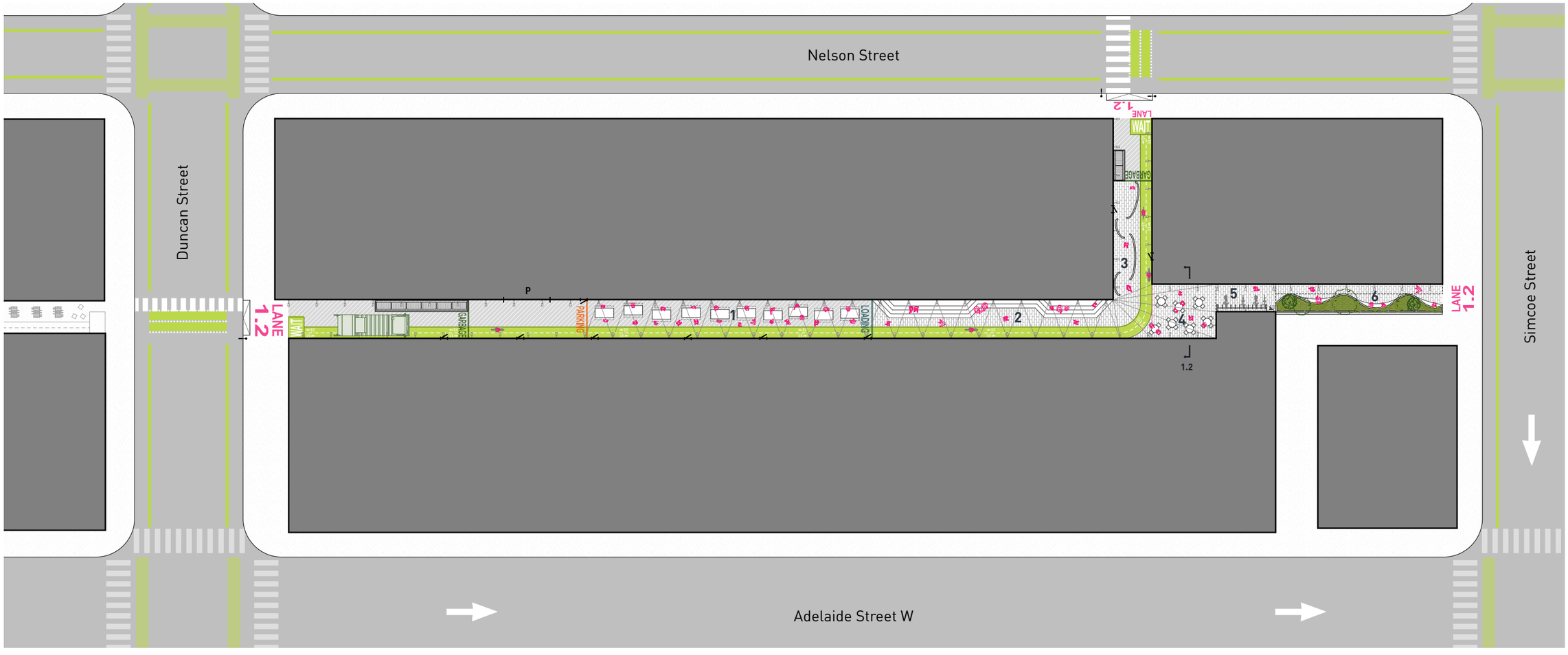


Fig. 218 - Laneway 1.1 Design, perspective section

Laneway Design

Laneway 1.2



1 Food Market
2 Social
3 Art Installation
4 Patio
5 Bike Parking
6 Greenery

Fig. 219 - Laneway 1.2 Design, plan

N

1:500

Laneway Design

Laneway 1.2

Fig. 220 - Laneway 1.2 Design, 3d view

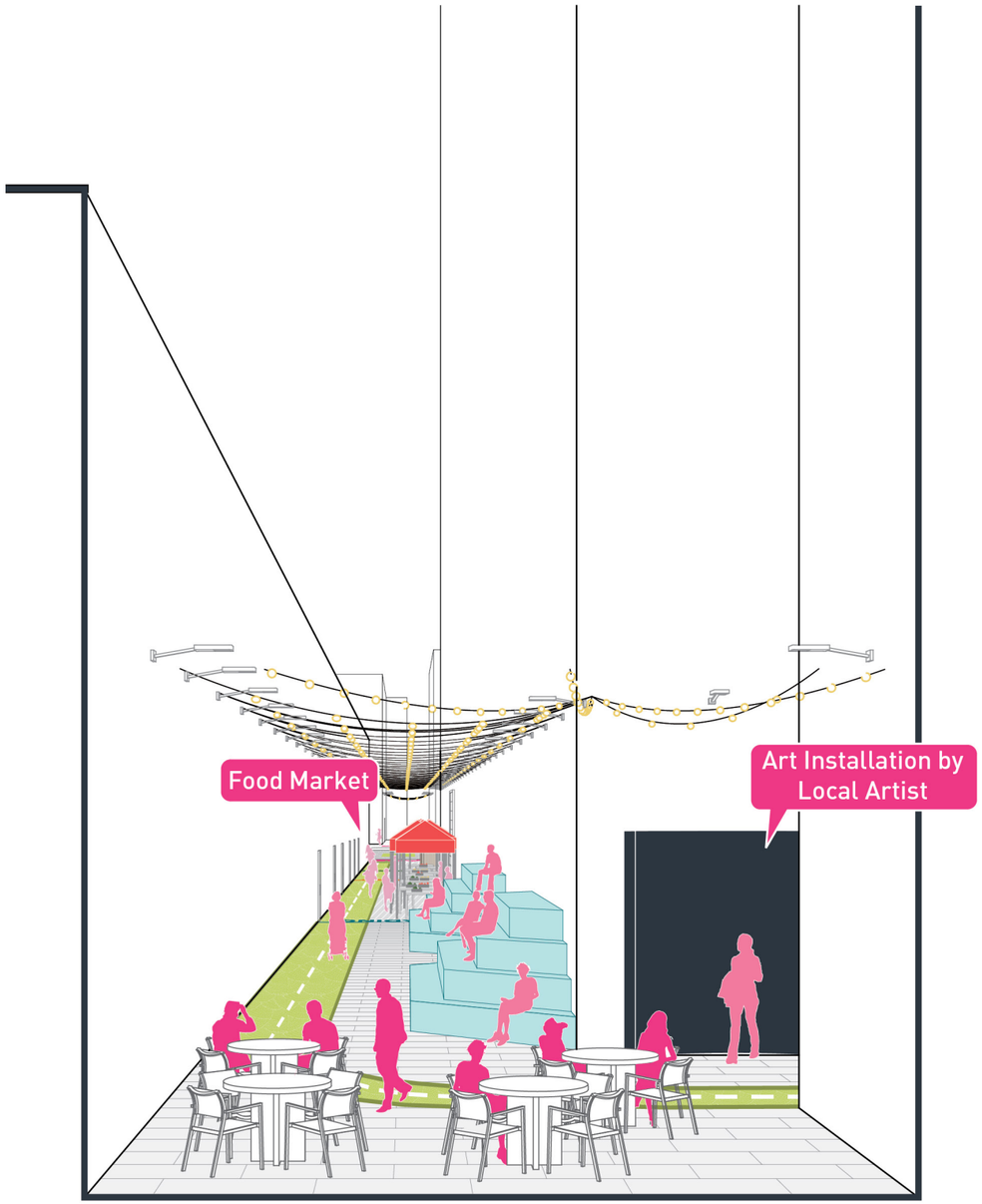
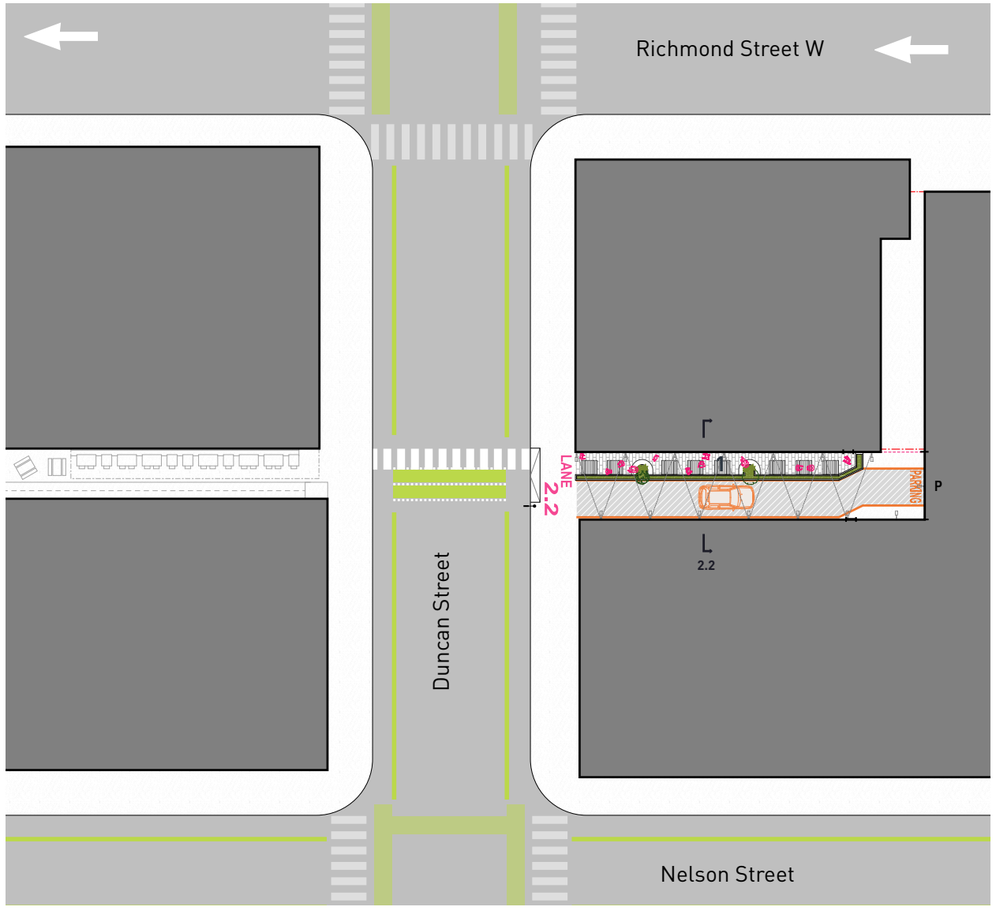


Fig. 221 - Laneway 1.2 Design, perspective section

Laneway Design

Laneway 2.2



1 Patio

1:500

Fig. 222 - Laneway 2.2 Design, plan

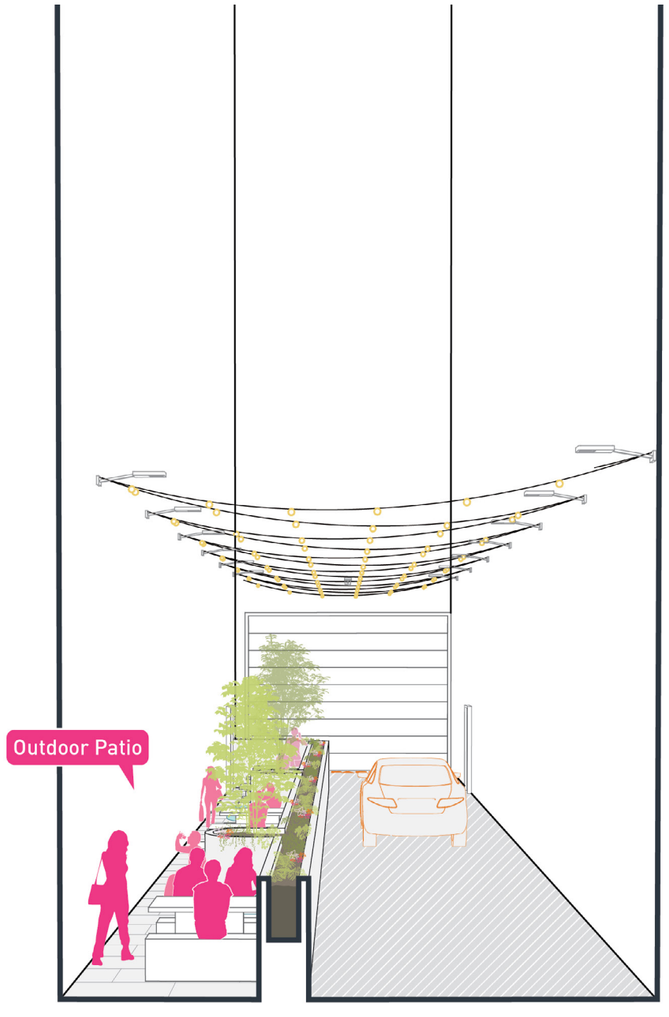
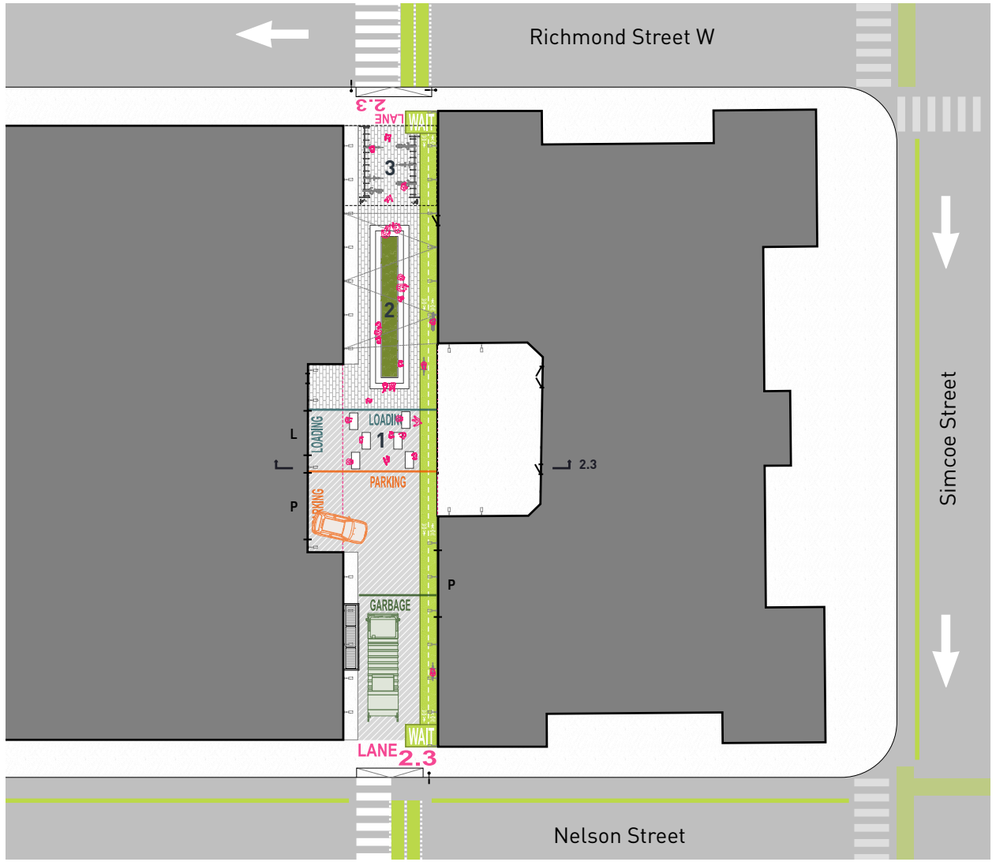


Fig. 223 - Laneway 2.2 Design, perspective section

Laneway Design

Laneway 2.3



1 Kiosks
2 Social
3 Bike Parking

1:500

Fig. 224 - Laneway 2.3 Design, plan

Fig. 225 - Laneway 2.3 Design, 3d view

Laneway Design

Laneway 2.3

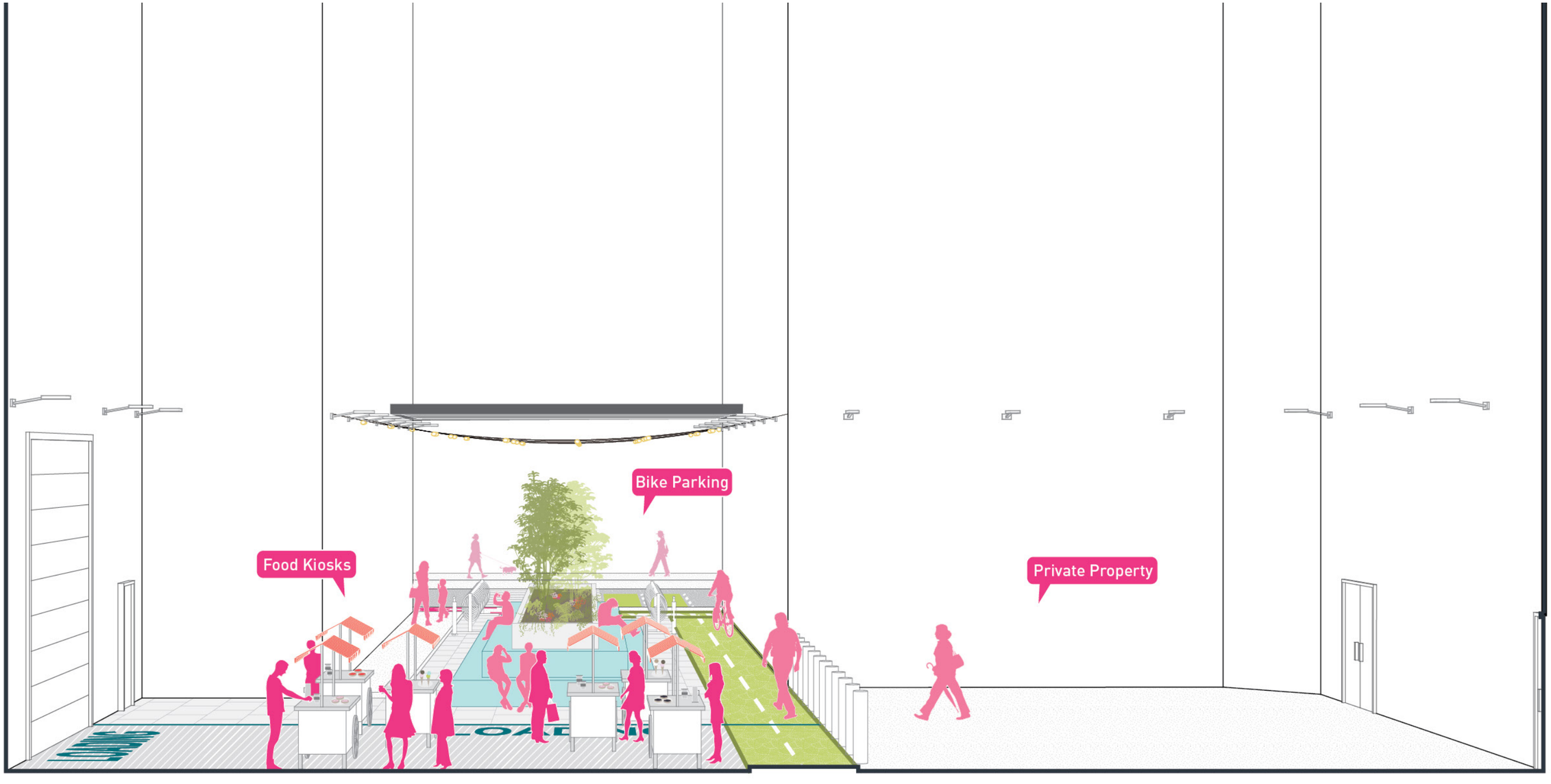
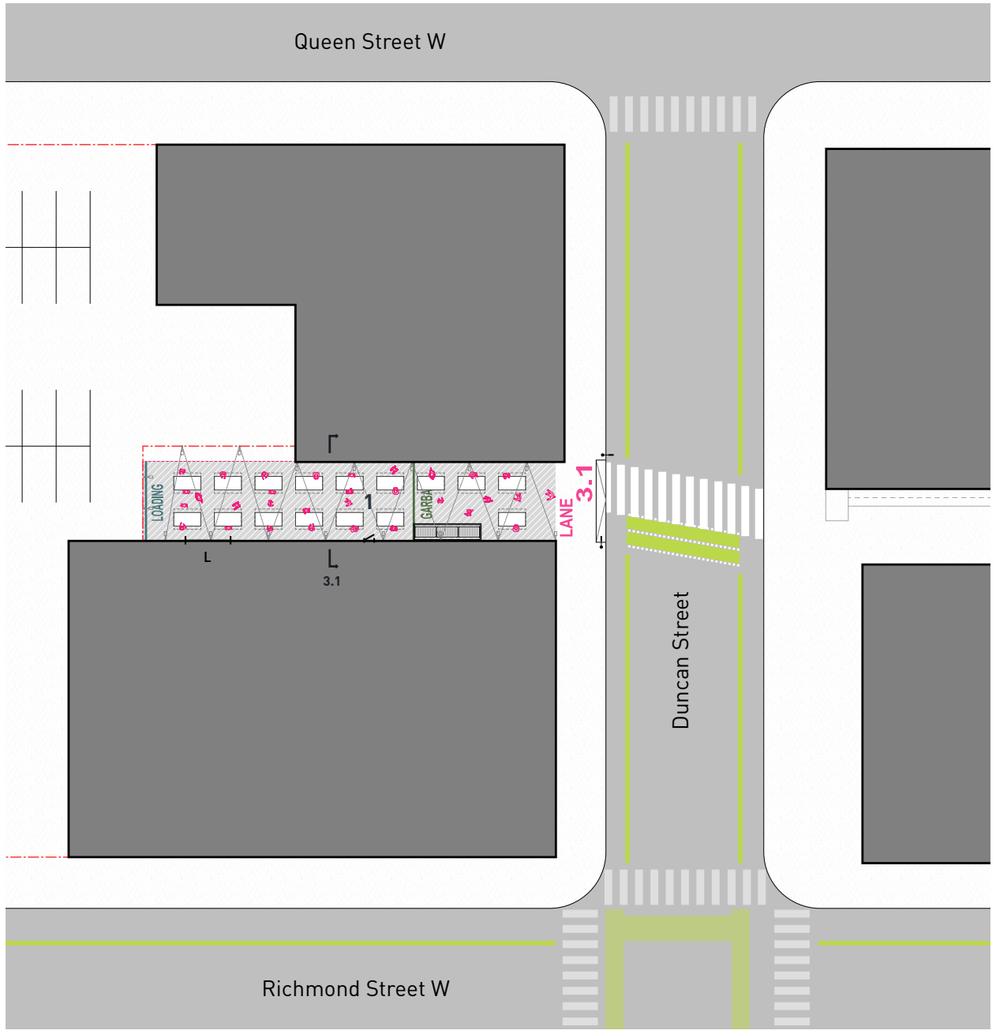


Fig. 226 - Laneway 2.3 Design, perspective section

Laneway Design

Laneway 3.1



1 Flea Market

1:500

Fig. 227 - Laneway 3.1 Design, plan

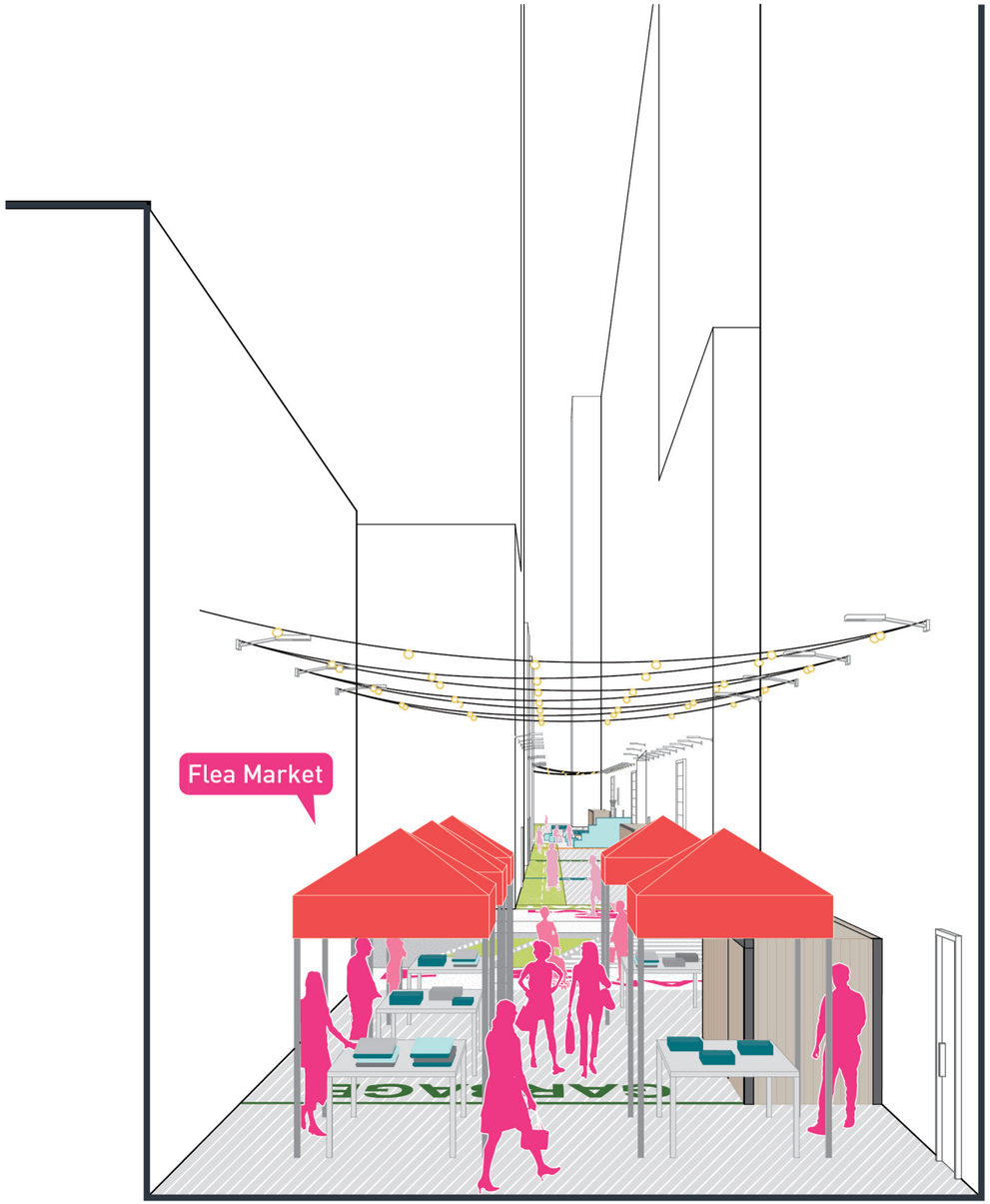
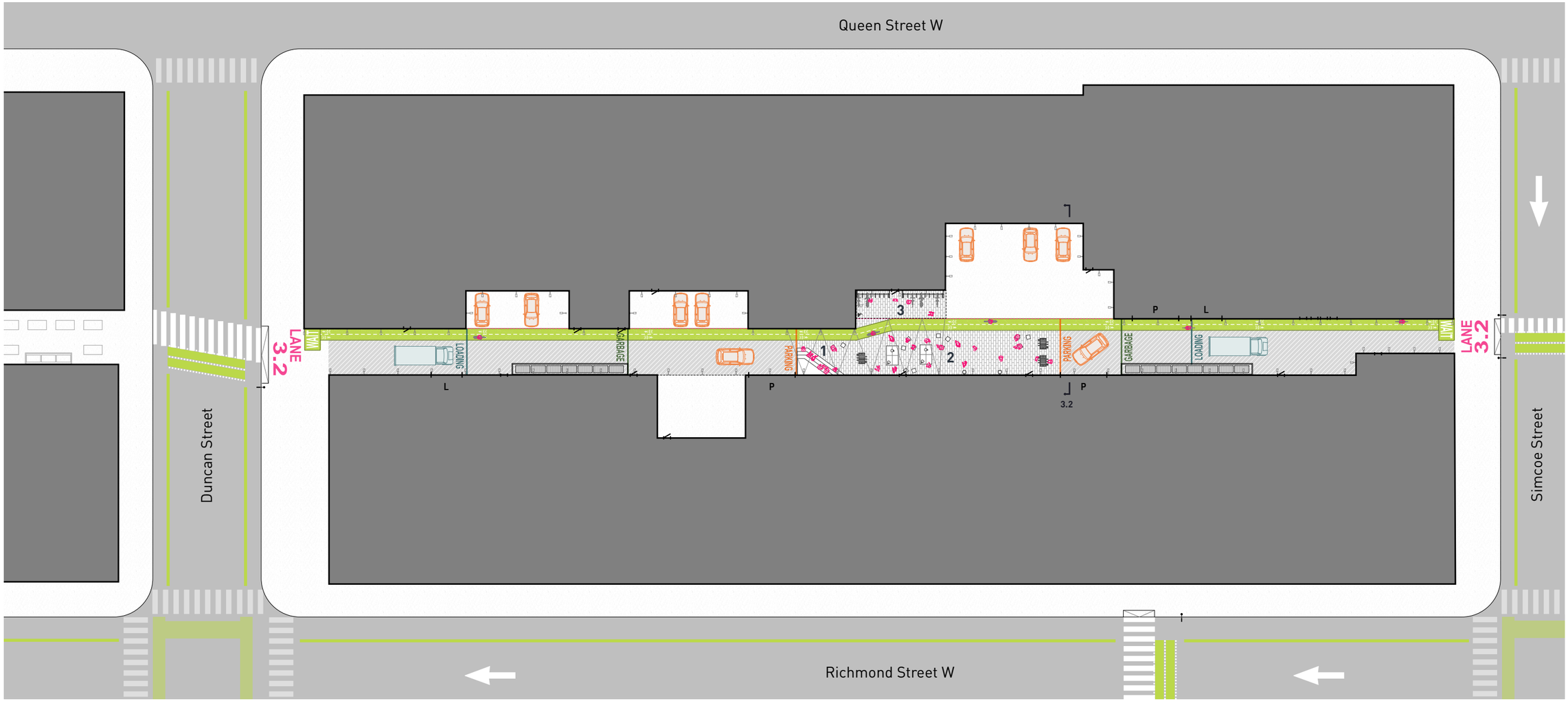


Fig. 228 - Laneway 3.1 Design, perspective section

Laneway Design

Laneway 3.2



1 Social
2 Recreation
3 Bike Parking

Fig. 229 - Laneway 3.2 Design, plan

1:500

Laneway Design

Laneway 3.2

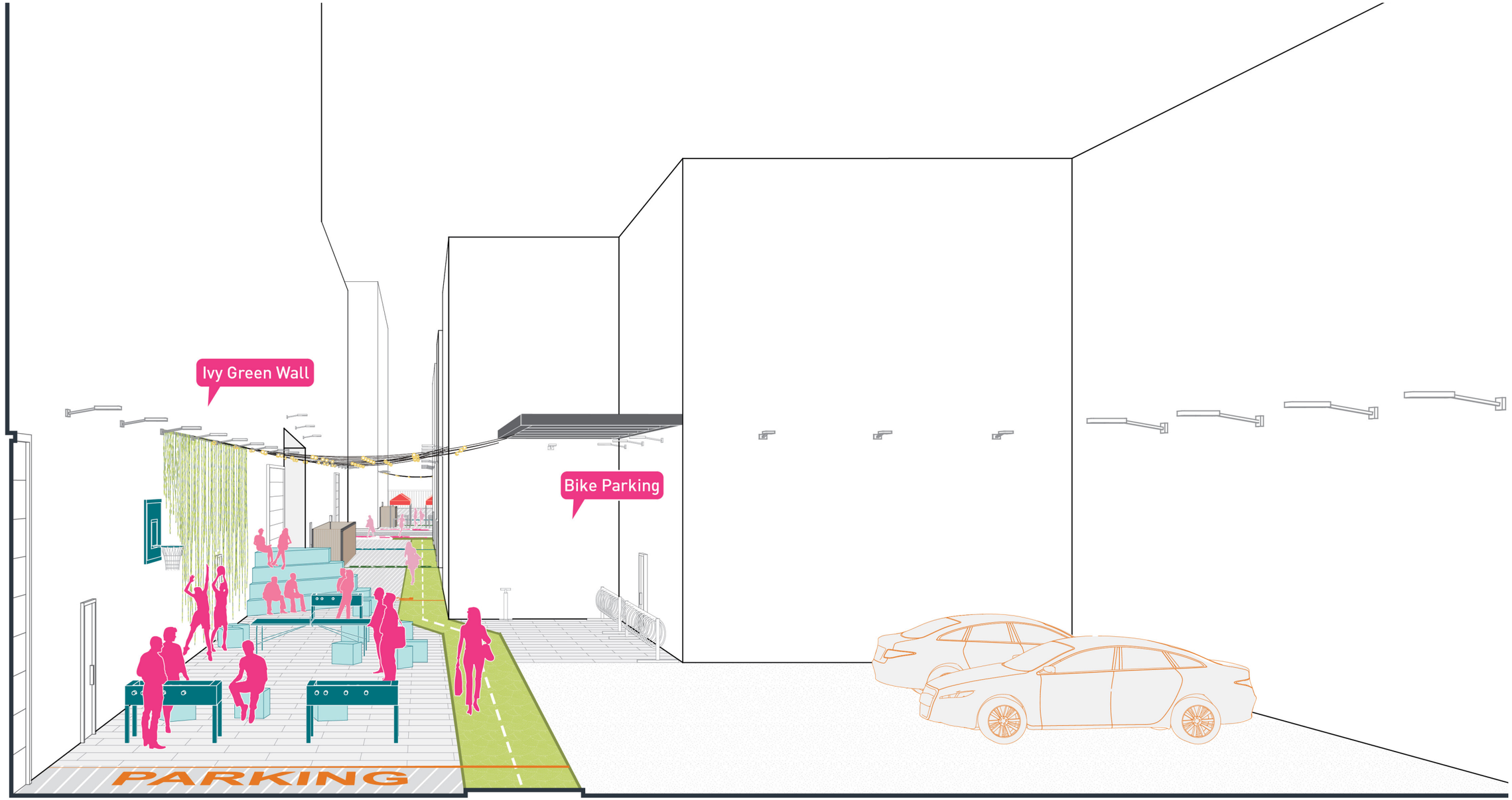


Fig. 230 - Laneway 3.2 Design, perspective section

Laneway Design

Laneway 3.2

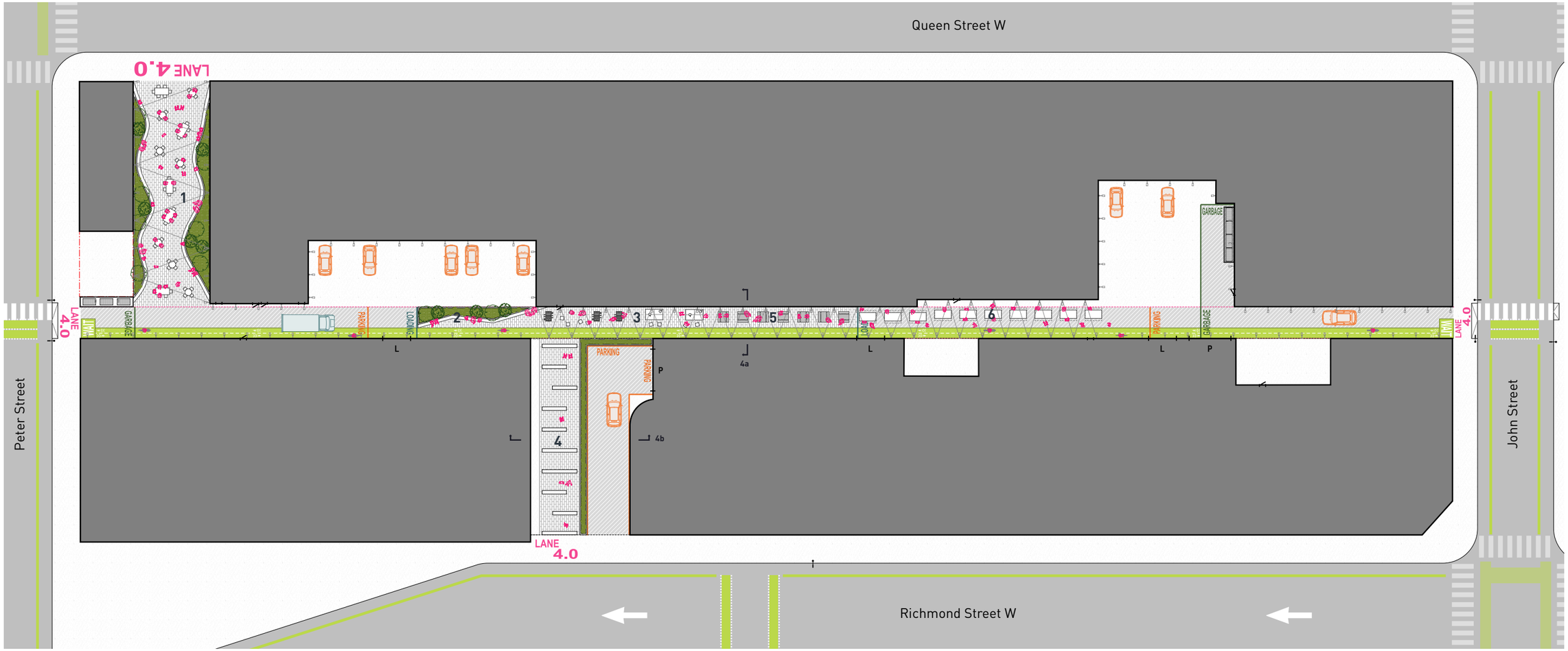
Fig. 231 - Laneway 3.2 Design, 3d view

Laneway 4

Fig. 232 - Laneway 4 Design; Render 1, 3d view

Laneway Design

Laneway 4



1 Patio
2 Greenery
3 Recreation
4 Art Installation
5 Social
6 Food Market

N

1:500

Fig. 233 - Laneway 4 Design, plan

Laneway Design

Laneway 4

Fig. 234 - Laneway 4 Design; Render 2 - Weekend Morning, 3d view

Fig. 235 - Laneway 4 Design; Render 2 - Weekday Evening, 3d view

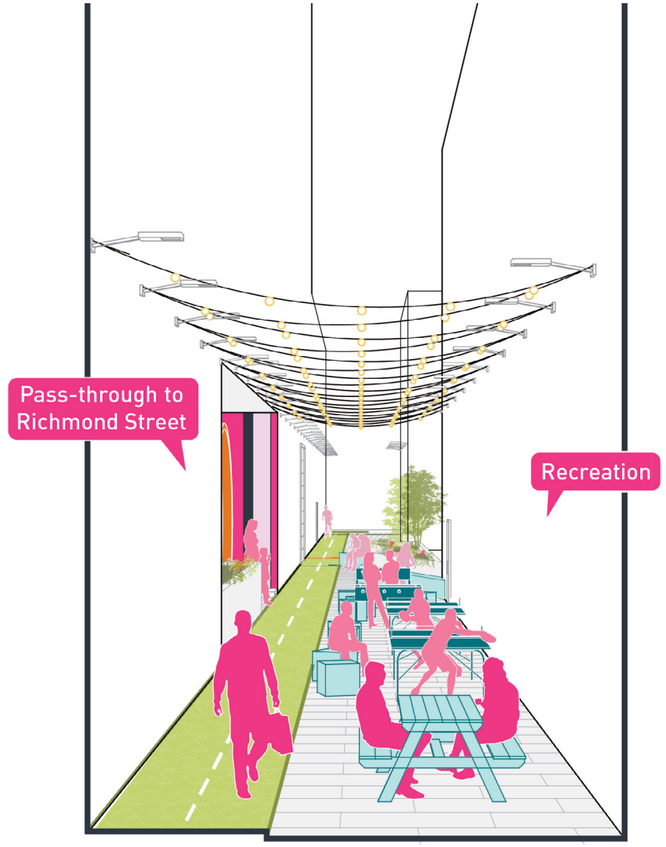


Fig. 237 - Laneway 4 Design; Section 4a, perspective section

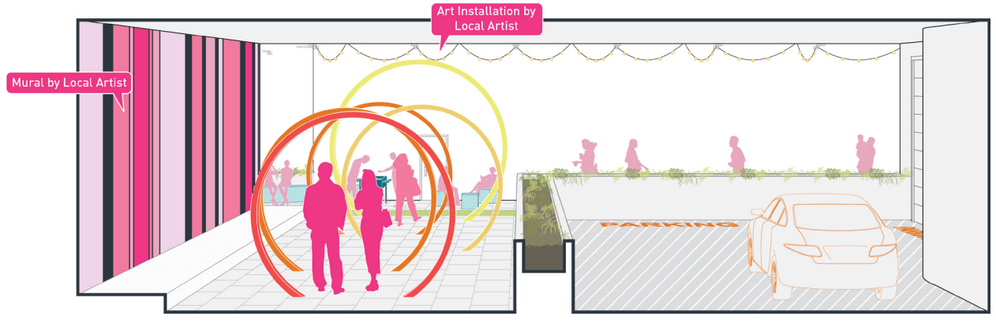
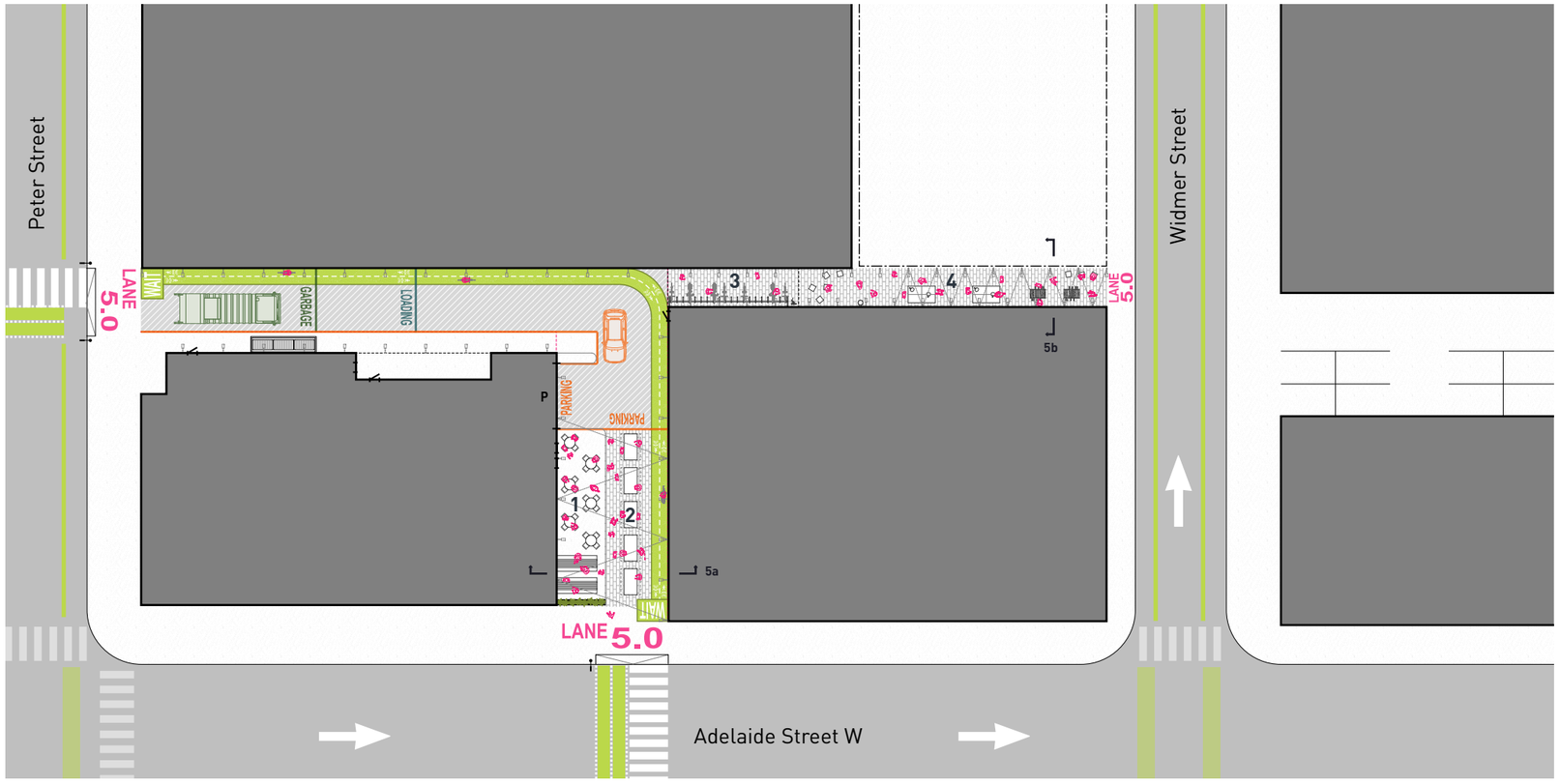


Fig. 236 - Laneway 4 Design; Section 4b, perspective section

Laneway Design

Laneway 5



1 Social
2 Food Market
3 Bike Parking
4 Recreation

Fig. 238 - Laneway 5 Design, plan

N
1:500

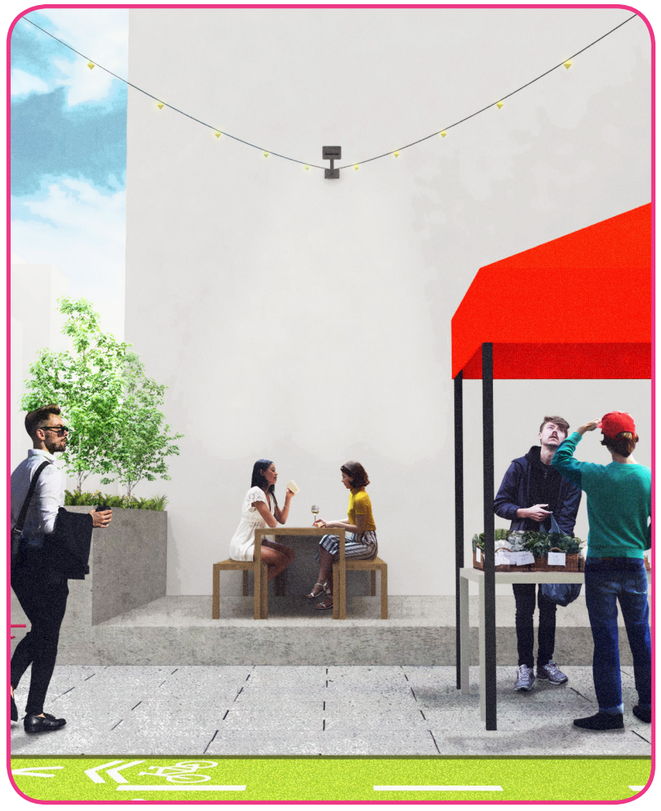


Fig. 239 - Laneway 5 Design, 3d view

Laneway Design

Laneway 5

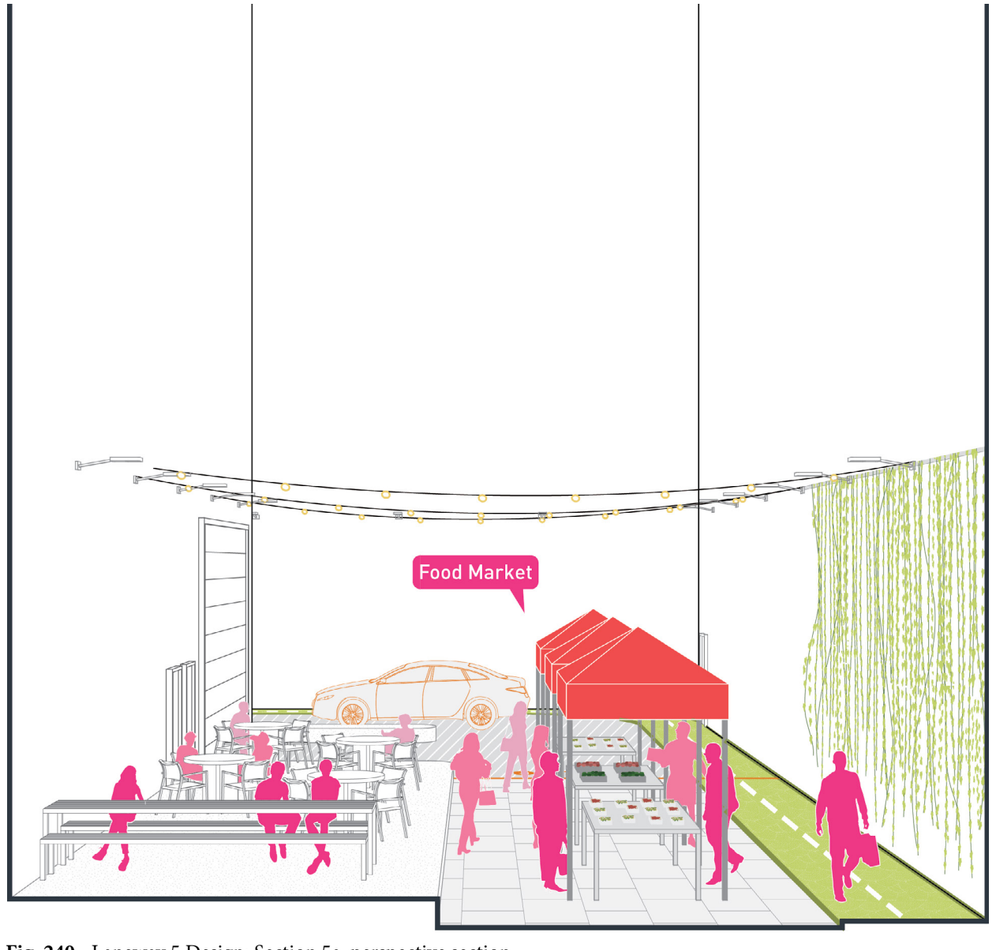


Fig. 240 - Laneway 5 Design; Section 5a, perspective section

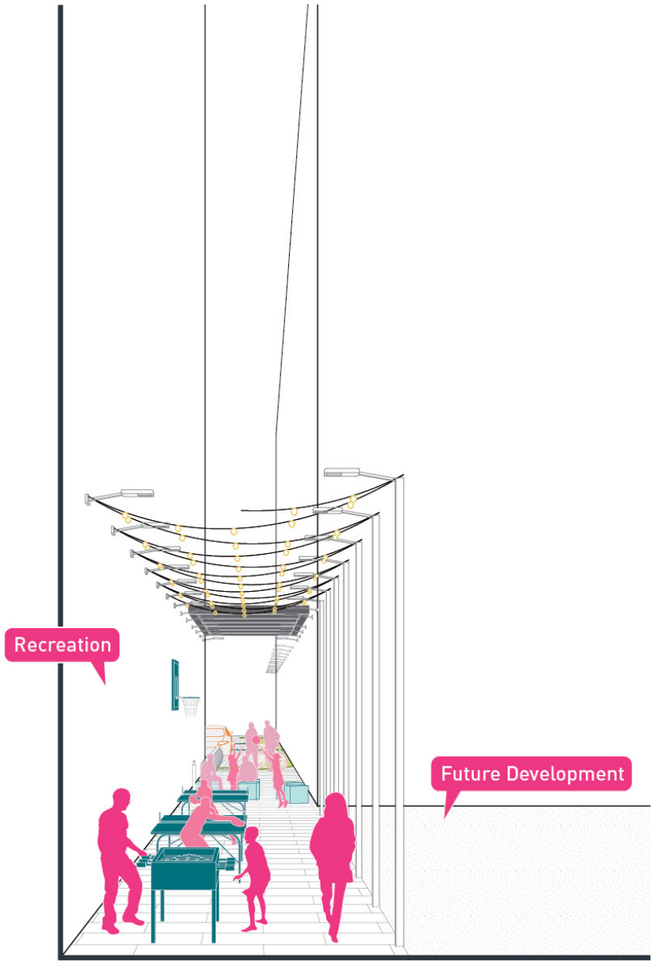


Fig. 241 - Laneway 5 Design; Section 5b, perspective section

Laneway Design

Laneway 6

Fig. 242 - Laneway 6 Design, plan

Fig. 243 - Laneway 6 Design, 3d view

1 Social
2 Art Installation
3 Greenery
4 Recreation
5 Bike Parking
6 Kiosks
7 Social

N

1:500

Laneway Design

Laneway 6

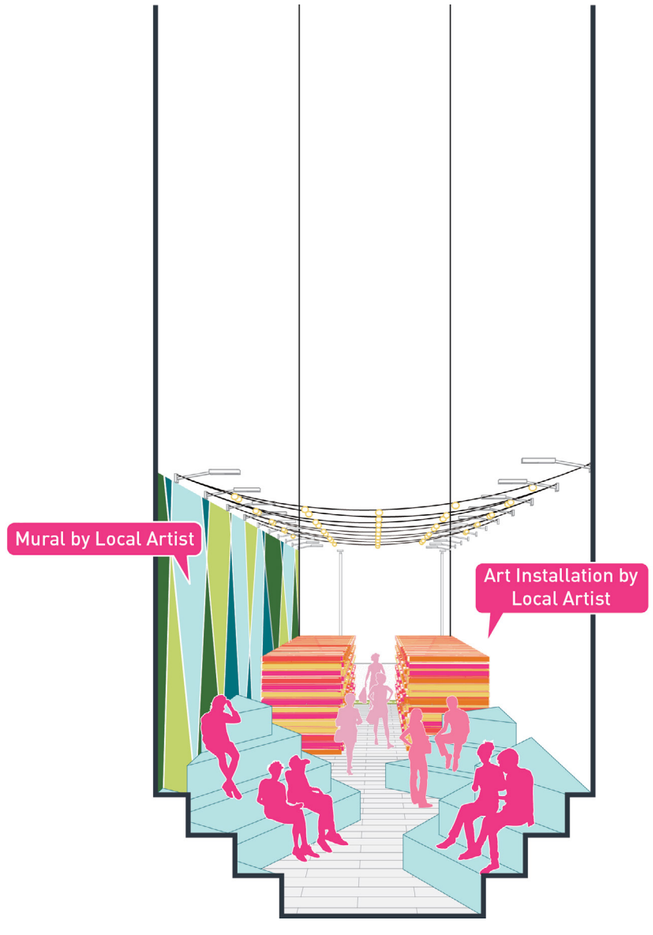


Fig. 244 - Laneway 6 Design; Section 6a, perspective section

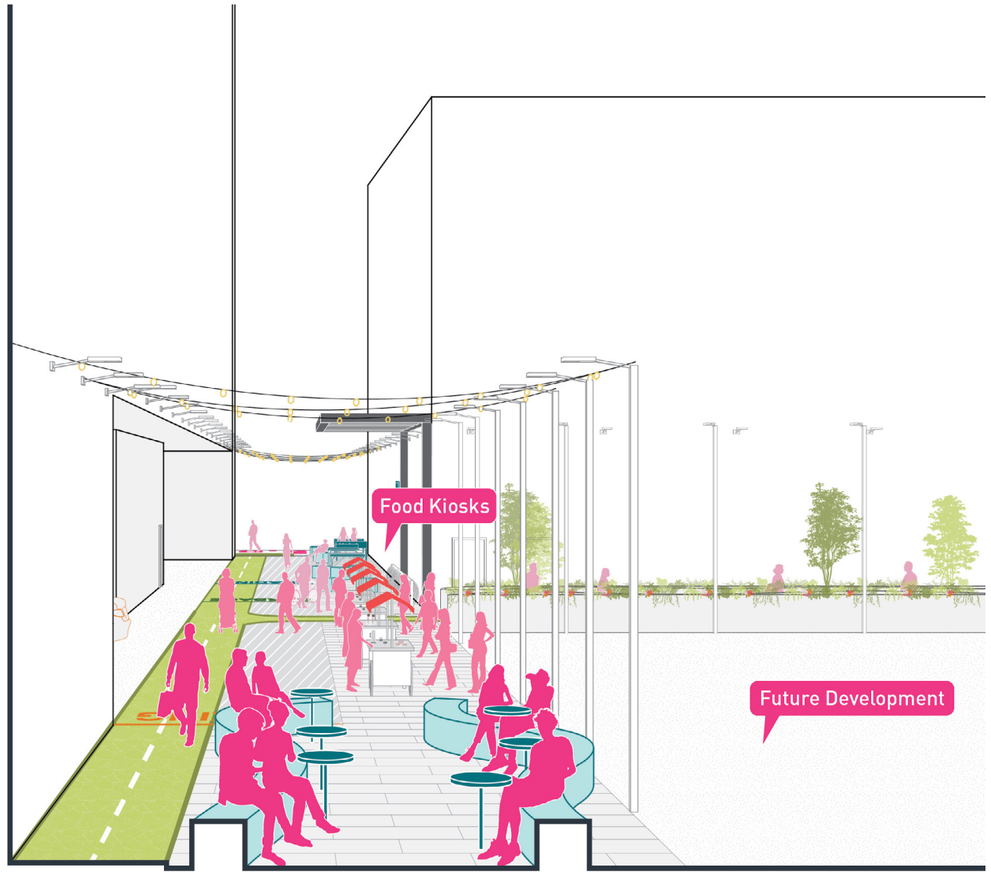


Fig. 245 - Laneway 6 Design; Section 6b. perspective section

Laneway Design

Laneway 7

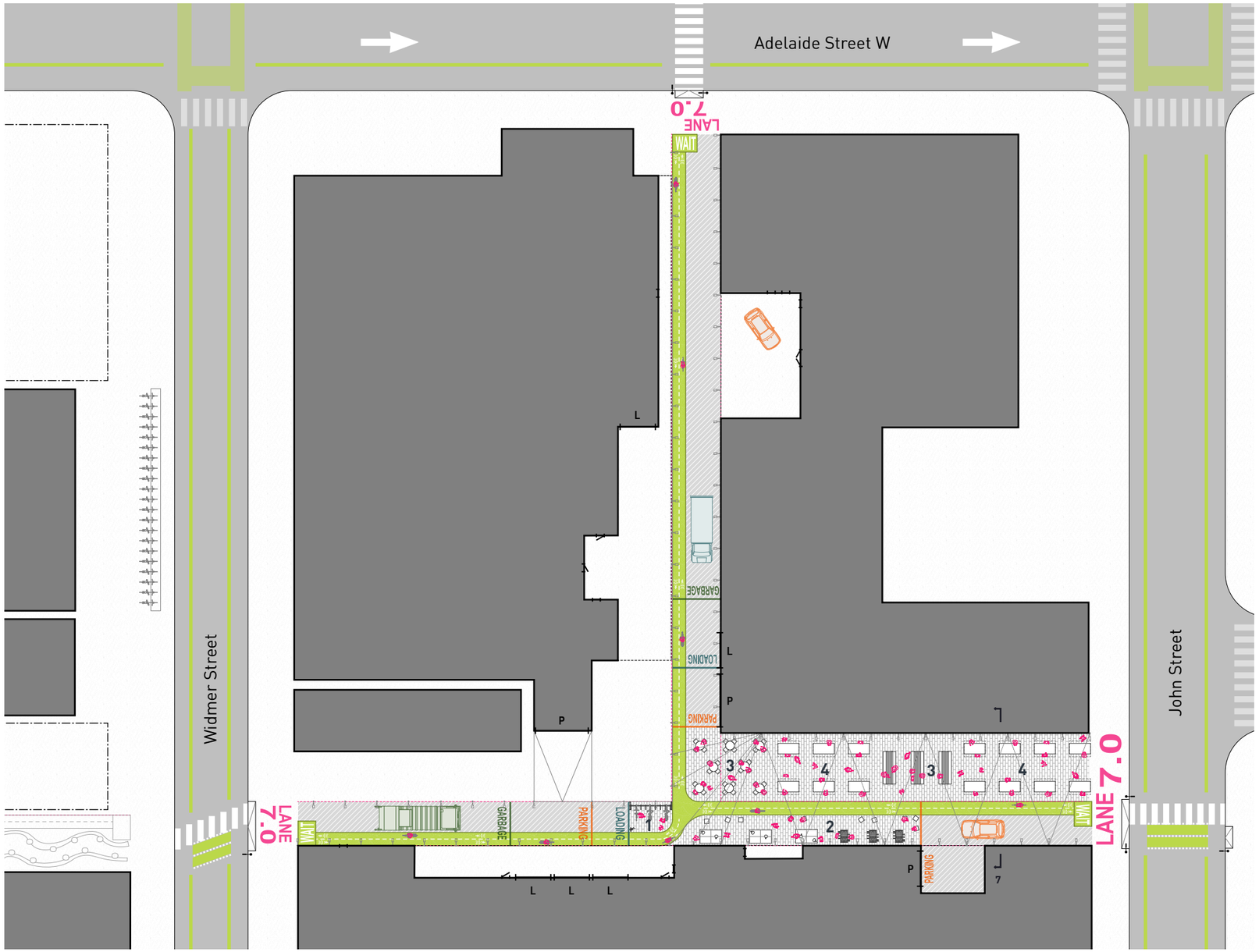


Fig. 246 - Laneway 7 Design, plan

1:500

Laneway Design

Laneway 7

Fig. 247 - Laneway 7 Design, 3d view

Laneway Design

Laneway 7

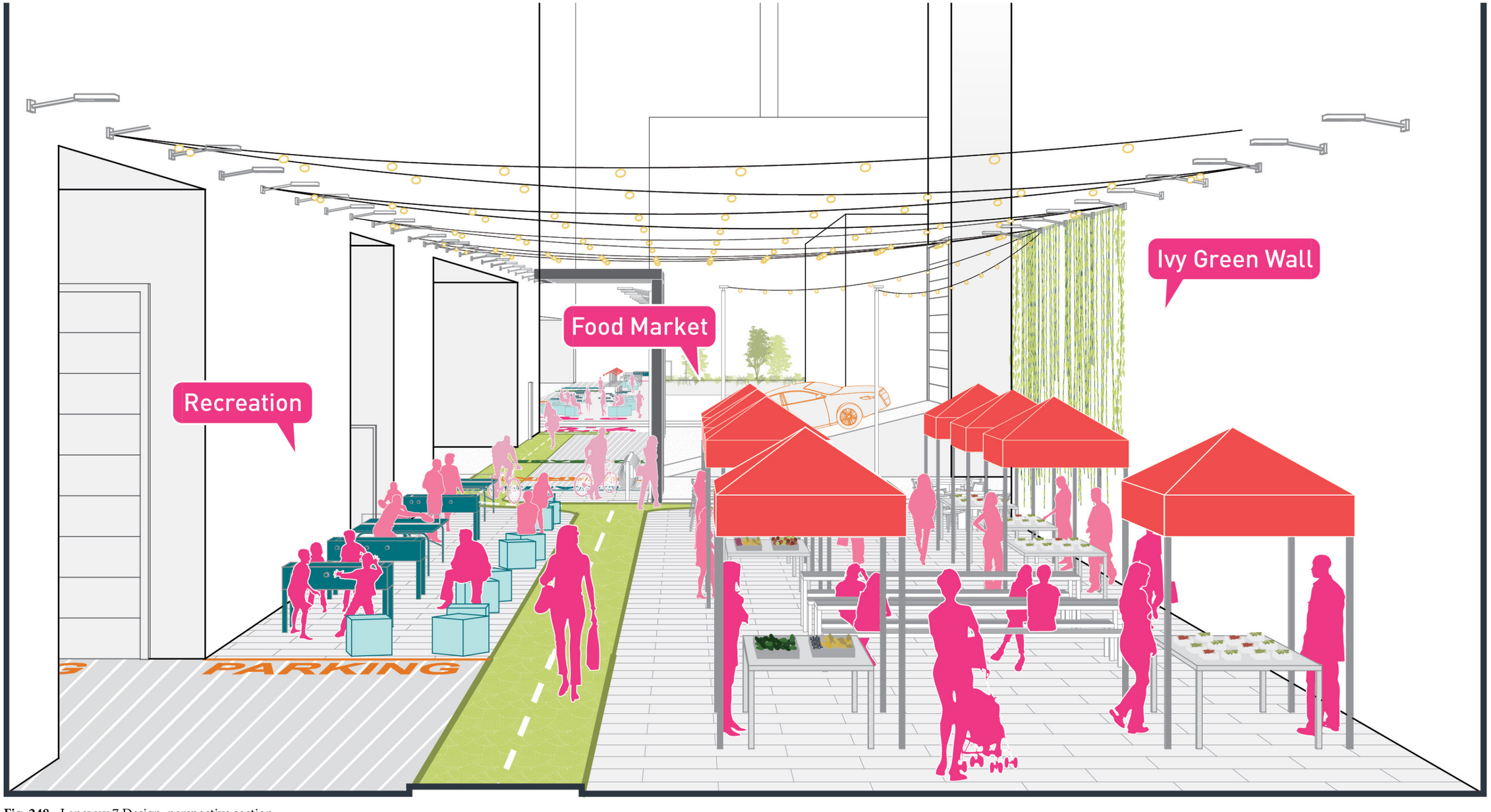


Fig. 248 - Laneway 7 Design, perspective section

CONCLUSION

Post-COVID-19

What can we learn?

COVID-19 first impacted the world in early 2020, however my observations and research on this pandemic were completed in June 2020. Although the pandemic will be present for the foreseeable future, cities have slowly re-opened and government protocol has gradually become less strict. The challenges that I refer to in this thesis were highlighted during the first few months of the pandemic yet will remain relevant issues that cities should continue to prioritize in the coming months.

ActiveTO was implemented by the City of Toronto in June 2020 as a response to issues evolving from COVID-19. Quiet Streets, Closing Major Roads and Expanding the Bike Network are great ideas, yet should be employed more frequently and more focused in areas such as the downtown core, considering the size and scale of the City of Toronto, the high-density of the city centre and the prevalent demand for public space. City streets could be better utilized; during the first few months of the pandemic, the number of vehicles being driven in the downtown core decreased significantly, yet the streets are not being used as spaces for people. As well, considering how large the City of Toronto truly is, the bike network expansion of 40 kilometres seems inadequate. The number of new bike lanes should be higher and the location of said lanes should be focused in the city center, where people typically do not travel locally by car.

The biggest issues that have evolved thus far during this pandemic revolve around the lack of public space in the city center, as well as the prioritization of cars in our street design. Solutions need to be developed to implement smaller and more frequent public spaces in every community, especially in areas of higher density. Our street design in Downtown Toronto has always focused on prioritizing cars, but it is apparent now more than ever that we should be focusing on other modes of transportation. By allocating less space to cars and adding wider sidewalks with more greenery and seating, it can support informal gathering spaces and social interaction; enticing people to linger, rather than use the sidewalks solely as a means of travel. Expanding the bike network in the city by implementing more continuous and separated bike lanes and encouraging a shift in mindset for drivers regarding shared streets will make an impact on our bike culture.

Going forward, it is critical for designers, urbanists and planners to face the challenges that have occurred up to this point in the pandemic. In Downtown Toronto, over-crowding, lack of public space and a poor active transportation network have been highlighted as major issues. Typically, the city has focused on planning for vehicles rather than people, but as the pandemic continues and the city increases in population density, these issues will only get worse. The urban environment should prioritize people; by having a public realm that encourages healthier and more sustainable lifestyles.

The 8 Variables

Are these successful public spaces?

As discussed throughout this thesis various times, these 8 variables are critical in measuring or understanding what a successful public space requires. These variables were created from the research and findings of influential designers and theorists that have studied public space and social interaction for the entirety of their careers. My intention was always to end this thesis by reflecting on the final result and analyzing it through these same 8 variables.

I believe that my thesis has achieved all 8 of these variables through the design interventions. The first 4 variables, which have larger circles and bolded text, are achieved throughout the entire network and focus on creating a safe and welcoming environment for people. The smaller 4 circle variables emphasize aesthetics and program and vary from laneway to laneway. In the end, as a network, all 8 variables are achieved, therefore this project can be deemed a successful public space for people.

Fig. 249 - 8 Variables of Successful Public Spaces, diagram

Reflection

Mobility

This thesis was intended to be an exploration for introducing successful public spaces into the dense core of Downtown Toronto. The process revolved around taking research and findings from precedents and creating public spaces that incorporate all of those features. It was an opportunity to be optimistic and illustrate the potential that these spaces could provide. After implementing all the ideas from my research into the design, I can now look back and reflect. In effect, I am doing a similar analysis as I did with the precedents in Section 2. What works in this project? What wasn't as successful as I'd hoped? Is there a possibility for a simplified version of this design that would be more successful?

One aspect that I don't think was as successful as I had imagined is the bike and pedestrian path within the laneways. There are a few reasons as to why I believe that the design interventions could be better without these pathways. The first reason being that the laneway widths leave very minimal space for the bike and pedestrian paths. I was only able to incorporate a 2-metre-wide path for circulation, which gives 1-metre width for each direction. In terms of bike and pedestrian circulation, 1 metre is not ideal for the intensity that these laneways will potentially support. Secondly, since this project was working within existing conditions within the lanes, there are doors and openings directly along the laneways where the path would be. This causes issues regarding the possibility that someone could potentially open a door into the lane and hit a pedestrian or cyclist.

After completing this thesis, I thought it would be beneficial to look back on the final result and reflect on whether all aspects were successful or not. I believe that the bike and pedestrian paths throughout the laneways are the one feature that are not what I had envisioned in the space. Originally, the concept for these paths was to create a safe space dedicated to pedestrians and cyclists to travel within the laneway network. New bike lanes have been added on majority of the streets within the site, as well as new intersections and crossings have been designed to encourage traffic control. These improvements are enough to enhance the existing bike and pedestrian mobility network on the site by improving the safety for cyclists and pedestrians and ensuring that active transportation is prioritized over vehicles. Even though the bike and pedestrian paths were not successful, I think it was important to incorporate them into my design to highlight the potential and opportunity that these laneways could provide for the city.

I have included two revised drawings on the next pages that display what the network would look like without the bike and pedestrian paths.

Mobility

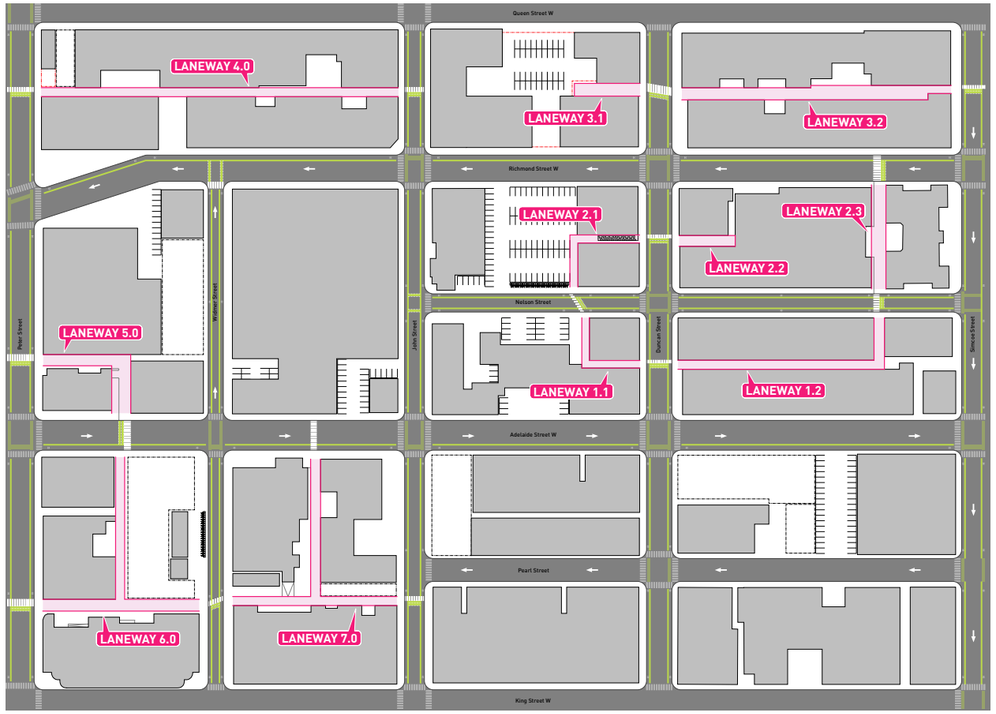
Public Space - Permanent
Public Space - Temporary
Service Lanes/Space
Laneway Outlines
Existing Patio Railing
Existing Patio Furniture

Garage Door - Parking
Garage Door - Loading
Service Door
Fire Exit Door
Building Entrance
Dumpster
Garbage Enclosure

N

1:3,250

Fig. 250 - Updated Space Usage Diagram, plan



Laneway
Bike Lane

N

1:3,250

Fig. 251 - Updated Mobility Network, plan

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