

ROGERS PLAZA SITE CONTEXT

ACCOMMODATING MOVEMENT AND GATHERING

Ignatius But, Sarah Marshall, Cail Smith, and Anna Zhuo

Contents

INTRODUCTION	3
SITE SIGNIFICANCE Bike Routes & Skytrain Station	4
SITE SIGNIFICANCE Connecting Neighbourhoods	5
SITE CONSTRAINTS	5
CYCLING	3
WALKING & GATHERING	9
WALKING & BIKING CONFLICTS	D
RECOMMENDATION	1
CONCLUSION & NEXT STEPS	2

This booklet was created as part of the Master's of Community & Regional Planning Studio (PLAN 526) at the School of Community & Regional Planning (SCARP) at the University of British Columbia.

Great thanks is owed to Holly Sovdi, Catarina Gomes, and the entire City of Vancouver's Northeast False Creek team. We would also like to thank the PLAN 526 professors, Maged Senbel, Jordi Honey-Rosés, Nathan Edelson, and Erick Villagomez, as well as our classmates for their support. Additionally, thanks for the questions posed and advice given from community members and organization representatives.

The Studio Team assumes responsibility for all errors within this document.

Dedicated to Danny. He was a good boy.

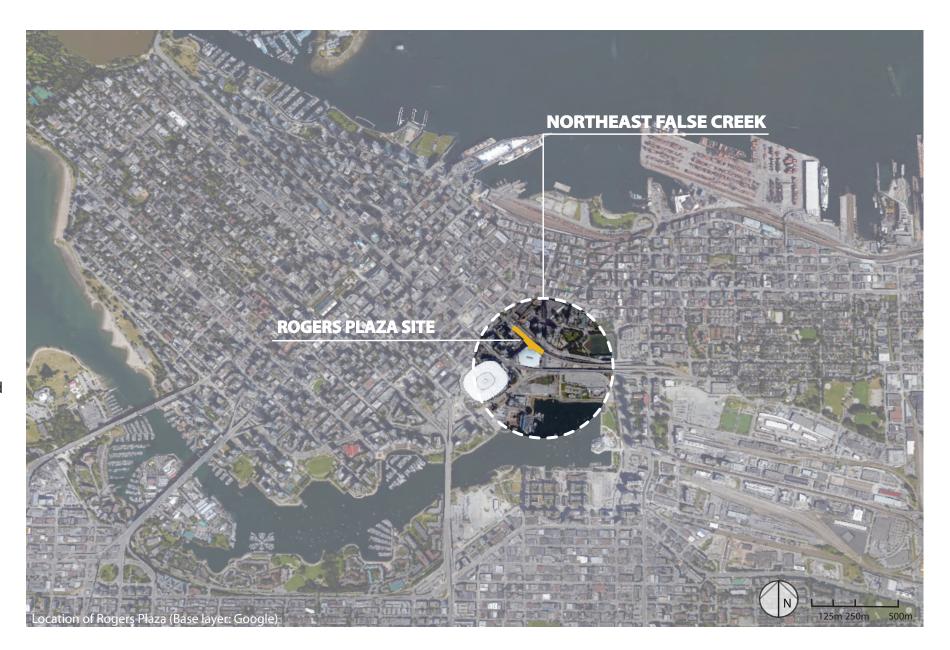
INTRODUCTION

Changes around the Northeast False Creek area including the dismantling of the eastern section of the Dunsmuir Viaduct will create the opportunity to build a plaza outside Rogers Arena on Dunsmuir Street.

The Rogers Plaza site is a public space in the making. As part of the Northeast False Creek (NEFC) Area Plan, the Dunsmuir Viaduct will be partially removed and closed to traffic. This will not only allow for a new walking and cycling corridor, but also leave room to convert the street outside Rogers Arena to a new public plaza.

This report first discusses the importance of Rogers Plaza within the neighbourhood and regional context then analyses how the existing structures can accommodate people cycling, walking and gathering there.

So, how can Rogers Plaza accommodate both movement and gathering?



SITE SIGNIFICANCE | Nearby Networks

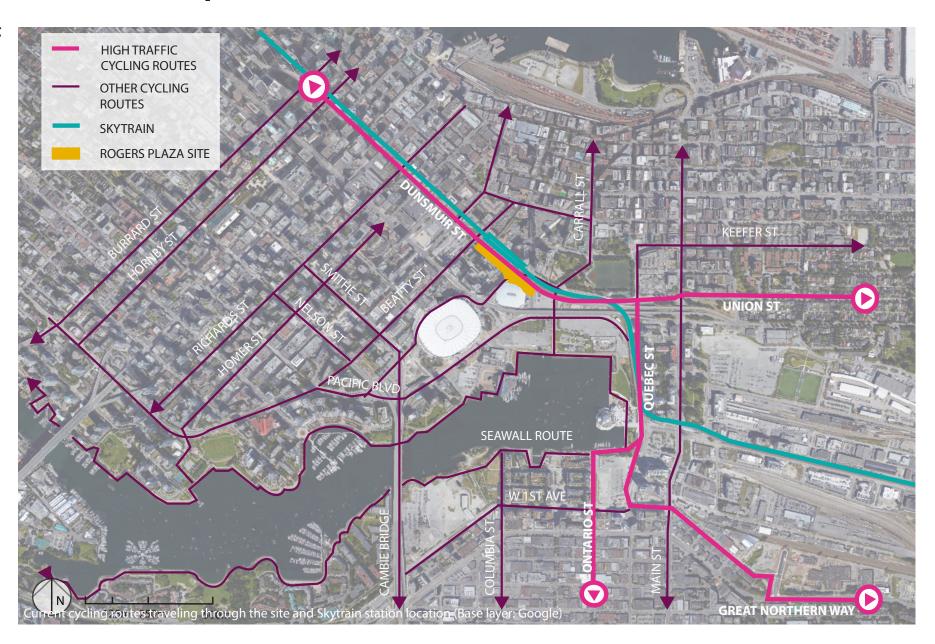
The site is well connected. It could be a great place to stop en-route because of:

- the regional bike paths travelling through it;
- its central downtown location; and
- the nearby Skytrain station.

Three of Vancouver's high-traffic cycling routes funneling bicycles into and out of the Downtown pass through the plaza:

- The Union-Adanac Corridor, which extends into Burnaby via the Frances Union Greenway;
- The Central Valley Greenway, which connects to New Westminster through Burnaby; and,
- The Ontario Bikeway, which links the south of Vancouver and Richmond.

According to estimates by Parsons, thousands of people will bike through the site each day once the new North East False Creek road network is completed.

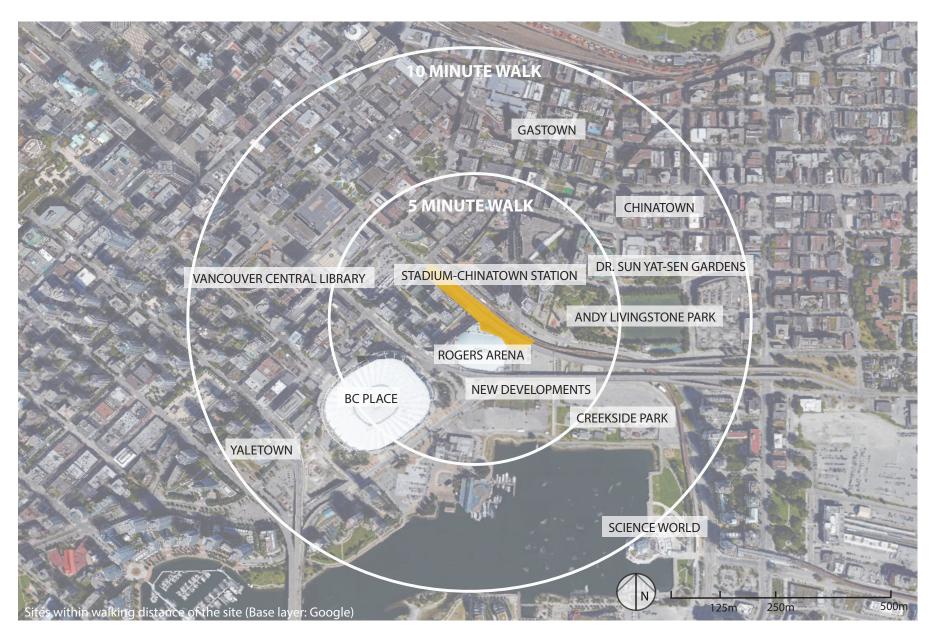


SITE SIGNIFICANCE | Nearby Places

The site is surrounded by great public spaces, residential communities, and attractions that can generate high volumes of foot traffic.

The future development of Northeast False Creek will generate new demand for a connected walking network and unique spaces that bring the area to life. The plaza will become a critical link for residents and visitors moving east and west between the Stadium-Chinatown Skytrain station, Northeast False Creek and the rest of downtown.

The plaza could provide an easily accessible public space for residents of the future developments bordering the plaza. It could serve as a unique place, enlivened by the events at Rogers Arena, offering a different experience than that of the future Creekside Park.



SITE CONSTRAINTS

Rogers Plaza is physically constrained by its edges. These edges are fixed or costly to alter, making it more difficult to resolve conflicts between cyclists and pedestrians.

Adjacent Residential: Entrances to ground-oriented residential units frame the southern edge. Currently, trees and landscaping features work to minimize the visual and noise impacts of the street on the residents. Future designs must keep and add to these buffers even though it may reduce the space the plaza space.

Stadium-Chinatown Skytrain Station:

The current orientation of the station platform and tracks restrict the potential width of the site on the northern edge. Due to high costs, the location of the station and tracks are highly unlikely to change.





Rogers Arena: Two stadium entrances and a set of stairs frame the edge connected to the arena. The space in front of the entrance the great potential to be a quality gathering place, particularly when events are happening. However, elevation differences between the entrance and rest of the site pose challenges for the design of one continuous public space.

Elevation Drop: A 15m drop on either side of the site requires safety measures to be taken for both edges. On the side that borders the Skytrain, there is quite a lot of noise generated by the train as it moves along the tracks, which could be improved with a green wall or sound barrier wall, but this may take away from the elevated feel of the site.







BICYCLING

At the Dunsmuir Viaduct's existing width, is there enough room to accommodate future cycling & walking volumes and have enough places for people to gather?

The route which currently brings cyclists across the viaduct is expected to see thousands of bikes each day upon the completion of the new road network. Due to the physical constraints on the Plaza's edges, it is likely that the width of the cycling path structure will remain at its current 15m (45ft).

Is this wide enough to create a lane that can accommodate projected cycling volumes safely and provide a comfortable about of space to walk and gather?

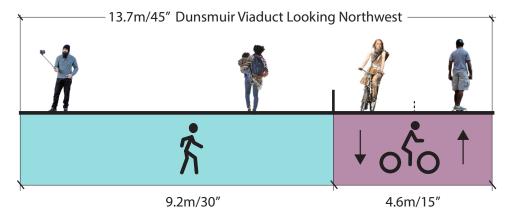
Based on the estimated bike volumes and using a level of service calculator from the US Federal Highway Administration (FHWA), a safe and comfortable two-way cycling path will require 7.5m (25ft).

This will leave approximately 6 meters (20 feet) of room for people to walk, sit and gather.

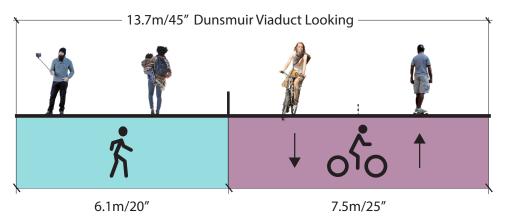
These diagrams show two different standards for cycling lane width. This report used the US Department of Transportation's standard, because it is able to take predicted numbers of cyclists into account.

It is possible to plan the space in such a way that the width for cycling paths could vary within the plaza area based on cycling speeds, adjacent uses, and where those walking cross the cycling path.

City of Vancouver shared use path width standard



US Department of Transportation Shared Use Calculator suggested widths for predicted cycling volumes



WALKING & GATHERING

Is there enough room remaining for gathering in Rogers Plaza?

This depends on the type of activities that will occur in the space. While community consultation is needed for the actual design and programming of the space, this report reasons that the site would likely be used in three ways: as a neighbourhood park, a destination route, and an event space.

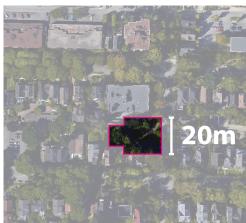


By comparing the size and features of other successful public spaces in Vancouver that serve each of these three uses, Rogers Plaza can borrow design ideas that are working for these places, and improve upon any challenges that they are experiencing.

NEIGHBOURHOOD PARK

Major Matthews Park, Mt. Pleasant





- Character: Open grassy lawns, trees, comfortable seating and children's play spaces.
- Activities: Sitting, strolling, and picnicking.
- Users: Local.
- Width: 20 metres.

DESTINATION ROUTE

Stanley Park Seawall





- **Character:** Paved waterfront pathways partially separating walkers, cyclists, rollerbladers, and skateboarders.
- Activities: Exercising, strolling, and enjoying the view.
- **Users:** Local and non-local.
- Width: 6.5 metres.

EVENT SPACE

Robson Square





- **Character:** Flat, flexible space downtown.
- Activities: Often hosts events and pop-ups that are catered by food trucks and stands.
- Users: Local and non-local.
- Width: 20 metres.

WALKING & BICYCLING CONFLICTS

Based on current cycling and walking volumes, adjacent land uses, and existing site constraints, conflicts may occur between those who cycle and those who walk and stay in Rogers Plaza.

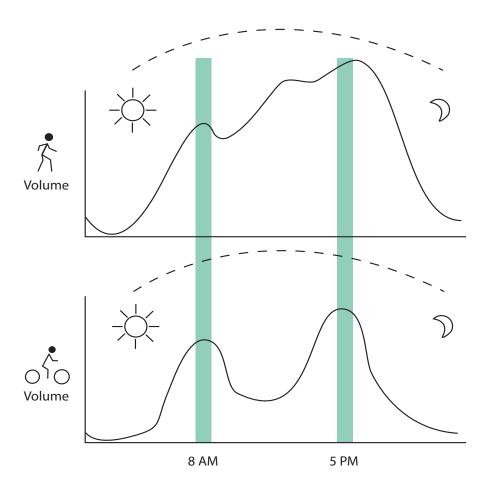
People bicycling have specific spatial needs. Those who cycle, especially commuters who will be taking this route, want to ride quickly and be able to pass people easily and safely. They would prefer a straight pathway where they are able to move freely.

Those who walk tend to be slower and would sometimes stop altogether. They would prefer a path with places to sit and interesting things to look at. People with mobility challenges that require additional space to move in must also be considered.

Designing pathways and spaces for both modes will require careful consideration of their unique needs. On an average weekday, walking and cycling volumes will peak twice, during morning and evening commutes. With more residents and visitors coming through the area, there will be greater walking and cycling volumes and higher chances for conflict between users at peak times.

Crowds before and after hockey games and other events may also spill over into the bike lane for short periods. User conflicts are highly likely at these times.

Given the differences in user volume and behaviour, these two different use scenarios will need different types of solutions to reduce user conflicts. Average weekday walking and biking volumes.*

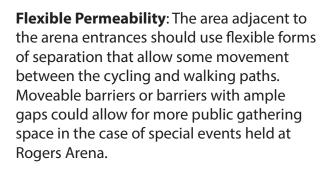


^{*}City of Vancouver. (2015). 2013 Pedestrian Volume & Opinion Survey Gallop, C., Tse, C., & Zhao, J. (2011). A seasonal autoregressive model of Vancouver bicycle traffic using weather variables.

RECOMMENDATION | Varied Permeability

With a wide range of potential activities and possible walking/cycling volumes, the path will require differing levels of separation between pedestrians and cyclists.

Low Permeability: The area between the Stadium-Chinatown Station and the nearby residential buildings should be highly separated to reduce conflicts between station users and people cycling. Signs and materials such as planters and concrete blocks can separate transportation modes.



High Permeability: The path adjacent to the new residential developments between Abbott Street and Carrall Street should be highly permeable, allowing residents to leave and enter the bike path with ease. Separation here should use paving material or a slightly raised path to separate pedestrians and cyclists.









CONCLUSIONS & NEXT STEPS

The Rogers Plaza site has great potential to be a successful and unique public space, if it is designed well. It is already a significant transportation gateway, collecting bicycle and Skytrain routes and channeling them into and out of downtown. In the future, it can also act as a central hub that supports public realm activities. These activities should be tailored to the space so that they complement future changes to North East False Creek and capitalize on the presence of Rogers Arena.

Part of the unique character of the space comes from the idea that it can be used by moving bicycles and stationary crowds of people, large and small, at the same time. We have determined that there is ample room to accommodate both of these modes comfortably and safely, as long as there are measures taken to enforce strong separation at particular areas of the plaza where there is potential for conflict.

Moving forward, the key considerations and conclusions from this document can be used to inform the initial design of the plaza. The *Rogers Plaza 'Design It Yourself' Booklet* has been offered as a next step, to help engage people in the design process and imagine possibilities for the space.







CONTENTS

INTRODUCTION

ABOUT ROGERS PLAZA

DESIGNING PUBLIC SPACES

PUBLIC SPACE ELEMENTS

DESIGN-IT-YOURSELF!

Jan Gehl Cities for People

RESOURCES













HOW TO USE THIS BOOK

Public spaces often start as just a sketch. Our sketch of what Rogers Plaza could be is on the previous page. Now, we want to see your ideas.

We hope that whether you're 8 or 80, this booklet will help you think about what you want to see and do at the Plaza in the future. At the end of the book, you can put your own ideas on paper.

Let's get started!

All photos sourced from flickr under Creative Commons licenses.

ABOUT ROGERS PLAZA

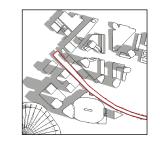
In 2015, City Council voted to replace the Viaducts with a new street network. This means that the Dunsmuir Viaduct will be closed off to car traffic and could become a public place for people to enjoy. Within this area, Rogers Plaza would occupy the space between Rogers Arena and the Stadium-Chinatown Skytrain station.

Designing a plaza here has some challenges. First, the plaza is close to many tall buildings that cast shadows on it throughout the day. Since people enjoy sitting in the sun, the design of the plaza should consider how these shadows will affect the space. Secondly, the site has unique borders and edges which include the Skytrain, nearby residences, Rogers Arena, and a 15 metre drop on either side of the plaza.

Lastly, the Plaza's location is an important connection for Vancouver's cycling and public space networks. Thousands of people are expected to cycle the route that would go through the Plaza each day. More people will also walk through the area as it is the connection that will link the new Creekside Park to the Downtown.

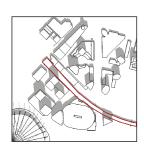


SUMMER MONTHS

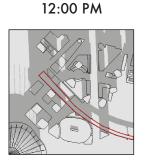


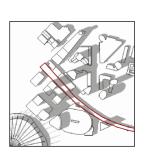


9:00 AM



VANCOUVER CENTRAL LIBRARY

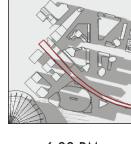


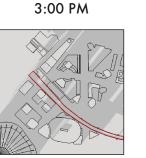


STADIUM-CHINATOWN STATION

NEW DEVELOPMENTS

CREEKSIDE PARK







WINTER MONTHS

WHAT WILL MAKE ROGERS PLAZA GREAT?

Amazing public spaces have many things in common. To make Rogers Plaza an enjoyable place to be, we must take a few key things into consideration.

A good public space will:

- 1. Draw people in;
- 2. Be comfortable all day and all year;
- 3. Have a mix of different places to sit and things to do;
- 4. Feel fun and safe for users of different genders, ages, backgrounds, and abilities;
- 5. Encourage people to meet and talk; and
- 6. Be unique!

Keep these in mind as you go through this book and when you think about your design.





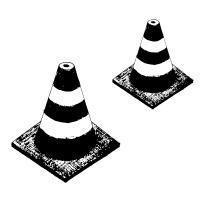
THE "ELEMENTS" OF GOOD PUBLIC SPACE

When designing a good public space, there are many pieces or "elements" that contribute to how it feels and functions. The selection and arrangement of these elements in Rogers Plaza will determine whether people will want to stay and spend time here.

To help you think about what your design could look like, we want to give you some inspiration. The next section will show you some of the best examples of fun and effective elements, as well as some ideas about where and how you might use them.

- 1. Barriers
- 2. Surface & Plants
- 3. Street Furniture
- 4. Lighting
- 5. Amenities
- 6. Attractions & Activities

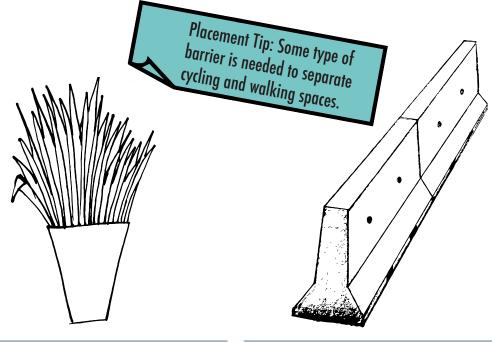
ELEMENTS BARRIFRS







Flexible barriers may not always be nice to look at, but they are a great temporary option. Although they may not be as durable as other types of barriers, they can be easily moved for different events, like a tailgate party or festival. They can come in all kinds of shapes and sizes.



PLANTERS



Planters immediately make a space feel greener without taking up more room. They can function as both barriers and landscaping. In Vancouver, they are popular as barriers between bike lanes and cars. However, they do require a lot of maintenance and upkeep.

SLOCKS

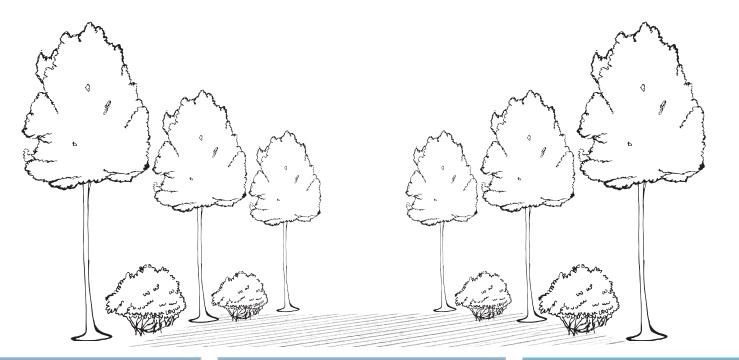


Plain or painted blocks are a durable and low-maintenance option. Because they are hard to move, they can create a solid and safe barrier between cycling and walking paths, even during busy times. For the same reason, they also tend to be more permanent structures.

ROAD GRAPHICS



Using paint or images on the ground can guide people through the plaza while creating a fun and vibrant space. Keep in mind that using road graphics alone may not be enough to keep people out of bike paths. Consider combining this element with others to increase safety for all users.



SURFACE + PLANTS

GROUND TEXTURE







The ground could be grass, boardwalk, asphalt or any number of materials. They all make the plaza feel different, and need different types of maintenance. Ground texture can also tell people where the path goes. Some surfaces absorb rainwater better than others.

BUSHES & VINES

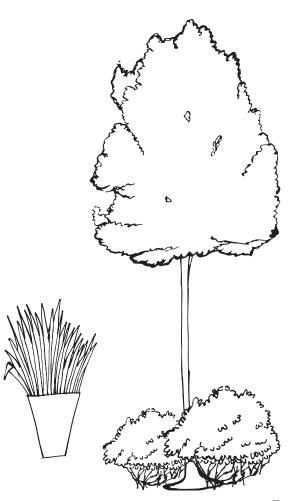


Bushy plants can divide up different spaces and create a more natural atmosphere. Hanging plants attached to lamp posts and other structures to liven up the space without getting in the way. Plants make hard surfaces and grey spaces feel warmer and and more vibrant.

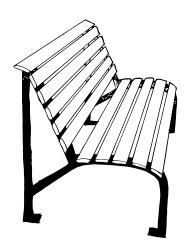
ANOPY

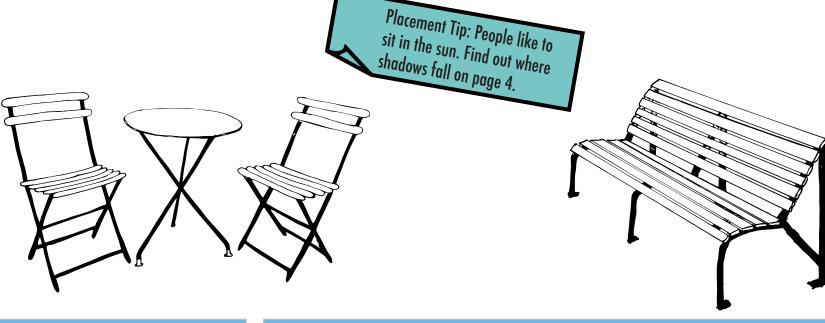


Canopies and trellises serve as natural forms of shelter against sun and rain. They can also separate different areas and clearly define pathways. Trees and trellisses provide opportunities as structures to hang lights from. In shady areas, canopies are less appropriate.



STREET FURNITURE





SEATING



Everybody needs a seat sometimes, especially kids and seniors. Fixed benches might be good for watching the sunset while movable chairs might be better for friendly conversations. In Vancouver, covered seating is great for rainy days.



The arrangement and types of benches and chairs will give the plaza its own character. A variety of seating options encourage and welcome both individuals and larger groups to enjoy the space at their own pace.

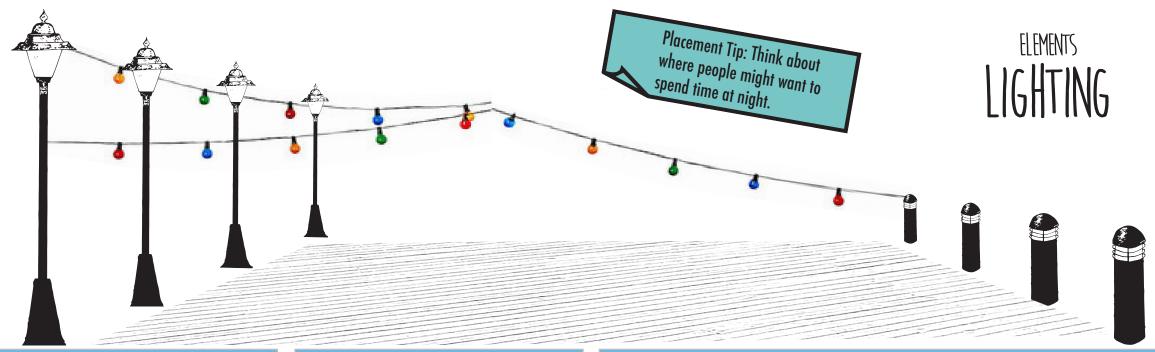
TABLES



Whether it's to sit and eat lunch, to play cards, or to enjoy a meal with a group of family and friends, tables encourage people to stay in a space for a longer period of time. Consider the types of activities you would like to do in the plaza.



A tailgate party might benefit from big tables, while square tables are needed for games like mahjong. Movable chairs can help to accommodate people using wheelchairs, while permanent furniture can keep the space more organized.



LIGHT POSTS



Lamp posts are everywhere, but they don't have to be boring. At night, the placement of light posts determine swhere people feel safe and welcome. Near residential areas, lamps should project light downward to minimize light pollution.

PATHWAY LIGHTS



Pathway lights help people find their way through the area at night by letting them know where path edges are. They are closer to the ground, and provide more focused light compared to lamp posts. Bollards can be both lights and barriers.

FUN & INTERACTIVE LIGHTING

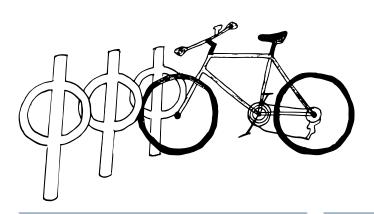


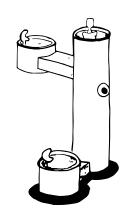
Interactive light installations make public spaces fun and engaging destinations for both locals and tourists. Lighting can be part of any structure as a decorative or functional use, or be an independent display of public art. Time to get creative!





ELEMENTS AMENITIES







BIKE PARKING



People ride bikes around the city every day. Providing secure parking options in convenient areas will encourage more people to stop, walk around, and enjoy the area without cluttering the space. Bike racks can also be a form of public art!

WATER FOUNTAIN



A water fountain or water spout can make or break a hot summer day for both people and pets. Putting a public water fountain somewhere easy to see and access addresses practical needs and makes the experience much more enjoyable.

WAYFINDING

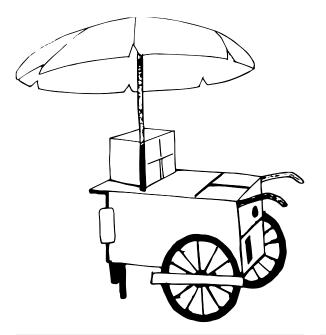


Maps and signs help visitors find their way.

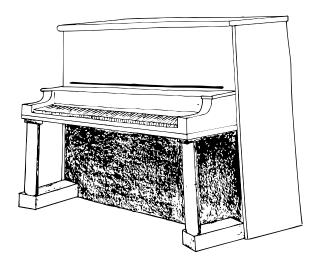
RAIN & SUN COVER



Nothing's worse than being stuck outside in the rain. Providing covered areas can increase the number of days in a year the plaza can be used. On a hot summer day, sun cover can also give people a nice shady area to rest and cool off.







ACTIVITIES & ATTRACTIONS

FOOD



Food vendors attract people to the plaza, especially around lunchtime and at night. Food trucks, carts, and pop-up cafes are all great options for a public plaza. On game nights, fans can arrive early or stay late to enjoy a bite and some good company.

OTHER ACTIVITIES



The plaza can be designed and used for almost anything. There could be early morning exercise sessions, public art installations, areas for games and pick-up sports, small concerts...the options are endless. What do you want to see?









NOW IT'S YOUR TURN!



Show us what you want to see in Rogers Plaza by drawing it above. You can cut and paste from the sticker sheets we've provided, sketch from photos, or design something brand new!