



# Stanley Park Cycling Plan

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Prepared for:



In  
association  
with:



Prepared by:





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# TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....2

1. INTRODUCTION.....4

1.1 Context and Reason for Study ..... 4

2. VISION, GOALS AND GUIDING PRINCIPLES.....5

2.2 Goals ..... 5

2.3 Guiding Principles..... 5

3. BACKGROUND DATA.....7

3.1 Methodology ..... 7

3.2 Relationship to Other Plans and Policies ..... 7

3.3 Current State Review ..... 8

3.4 Consultation Highlights..... 10

4. THE PROPOSED NETWORK.....13

4.1 A Series of Routes, Connections and Nodes..... 13

5. ISSUES AND RECOMMENDATIONS BY THEME.....19

THEME: CHALLENGE OF THE ONE-WAY SYSTEM ..... 20

THEME: FACILITY CONSTRAINTS..... 30

THEME: CONFLICTS BETWEEN USER GROUPS ..... 34

THEME: ECOLOGICAL CONCERNS ..... 48

THEME: LACK OF CONNECTIVITY..... 50

THEME: INEFFECTIVE SIGNAGE/WAYFINDING..... 61

6. PLAN IMPLEMENTATION.....67

6.1 Prioritization and Phasing..... 67

6.2 Implementation Steps..... 67

6.3 Cost Estimates ..... 67

7. CONCLUSION.....70

8. GLOSSARY.....71

9. REFERENCES.....72

APPENDIX A: METHODOLOGY.....73

APPENDIX B: BICYCLE COUNTS.....74

APPENDIX C: CONSULTATION SUMMARY.....(under separate cover)

List of Figures

Figure 1. Map of issues in Stanley Park ..... 9

Figure 2. Top Destinations ..... 12

Figure 3. Proposed Stanley Park Cycling Network Concept ..... 14

Figure 4. Existing Cycling Network..... 15

Figure 5. Proposed Additions to the Cycling Network ..... 15

Figure 6. Routes - Loops ..... 16

Figure 7. Routes - Cross-cuts..... 17

Figure 8. Routes - Roads ..... 17

Figure 9. Connections into the park..... 18

Figure 10. Nodes ..... 18

Figure 11. Summary Map of Recommendations in Stanley Park ..... 66

Figure 12. Average Daily Bicycle Counts - Seawall..... 74

Figure 13. Daily Bicycle Counts - Lions Gate Bridge..... 74

Figure 14. Average Bicycle Counts - Beaver Lake ..... 74

Table of Contents

Table 1. Summary of Recommendations in Stanley Park ..... 65

Table 2. Schedule of Quantities and Prices..... 67

Table 3. Prioritization Table..... 68



# 1. INTRODUCTION

## 1.1 Context and Reason for Study

Stanley Park is renowned as one of the great parks of the world. With 400 hectares (1,000 acres) of greenspace adjacent to Vancouver’s downtown core, the park provides a wide variety of experiences to its many visitors.

Attractions such as the Vancouver Aquarium, Miniature Train, Totem Poles, picnic sites and playgrounds bring international travelers and local residents into the park. The park includes the 8.8 km (5.5 mi.) Seawall which can draw thousands of pedestrians and cyclists a day. The Stanley Park Causeway provides commuting motorists and cyclists with a route from downtown to the North Shore, via the Lions Gate Bridge.

The popularity of Stanley Park has resulted in issues on the Seawall (Seaside) loop, at entrances to the park, and environmental impacts on trails within the interior of the park. The Vancouver Park Board has greatly improved facilities for cycling in the park over the last ten years, however, there is now a need for a comprehensive Cycling Plan to guide further improvements.

The Stanley Park Cycling Plan sets out a vision for the future that ensures improvements are based on a balance between functional recreational cycling access, safety, ecological integrity and overall park user experience. As such, the Plan is positioned to become a foundation for future “active transportation” planning in the park.

The planning process included an inventory and analysis, public and stakeholder consultation, and implementation planning. This work resulted in a comprehensive set of recommendations and cost estimates for improvements that can be implemented over time as capital budgets permit. Recommendations will require further development at the detail design or policy development stage.

The plan is underpinned by a commitment to maximize the cycling experience in a way that improves the overall park experience for all users including cyclists, pedestrians, skaters and other visitors. Proposed solutions are intended to enhance the cycling experience while respecting the identity and “sense of place” that is so valued in Stanley Park.



- Stanley Park at a glance:**
- Area: 400 hectares (1,000 acres)
  - Seawall: 8.8 km (5.5 miles)
  - Annual Visitors: 8 million
  - Average daily cyclists on the Seawall in summer: 3,000
  - Average daily cyclists on the Lions Gate Bridge in summer: 1,000



# 2. VISION, GOALS AND GUIDING PRINCIPLES

## 2.1 Vision – how should cyclists be better integrated into the Stanley Park experience?

The vision for the Cycling Plan is to create a safe, comfortable, and convenient cycling network that is both unobtrusive and sensitive to the existing qualities of the park.

Central to this vision is the enhancement of the cycling experience in such a way that it improves the overall park experience for all users while ensuring the preservation of the identity and “sense of place” that is so valued in Stanley Park. As such, the Cycling Plan reflects the Park Board’s Mission to, “provide, preserve and advocate for parks and recreation services to benefit people, communities and the environment.”

## 2.2 Goals

The goals of the Stanley Park Cycling Plan are to:

- 1. Enhance the PARK EXPERIENCE for all users;
- 2. Make cycling in the park MORE COMFORTABLE AND CONVENIENT;
- 3. Increase BICYCLE ACCESS to the park;
- 4. Improve SAFETY AND MAINTAIN A SAFE ENVIRONMENT for all users;
- 5. Improve OVERALL CONNECTIVITY within the park;
- 6. Improve the ECOLOGICAL INTEGRITY of the park;
- 7. Resolve BICYCLE ACCESS to and from important destinations in the park;
- 8. PROPOSE RESOLUTIONS for identified issues of cycling in the park; and
- 9. Create a LIST OF RECOMMENDATIONS for the Park Board to improve cycling in Stanley Park.

## 2.3 Guiding Principles

To implement our Vision and Goals, planning and design recommendations have been guided by the following principles:

### 1. Enhance the Park Experience

Recommendations in the Cycling Plan must not impact the integrity of the Stanley Park experience. This means that the plan must (1) Positively support the park’s ecological health and biodiversity, and (2) Respect the experiences of its many users including pedestrians, cyclists, skaters, persons with disabilities and others. People are drawn to Stanley Park to enjoy nature, recreate, visit attractions and attend events. As one of the city’s main tourist attractions it draws both locals and visitors from around the world.

To this end, the plan strives to address the needs of the “occasional” or “one-time” visitor – by default it then addresses the needs of all other users who are already familiar with Stanley Park. “Occasional” visitors may include both “tourists” and “recreational users,” as many locals may visit the park for the day every now and again, but never become as fully familiar with the park as frequent users.

The experience of the occasional visitor may inadvertently be at the root of many of the conflicts experienced by regular users, who develop a level of expectation based on their familiarity, and forget that they too were once first time visitors to the park. While one may assume that everyone else ‘knows’ the park etiquette, the occasional visitor may be unaware – they are just on a day’s outing to enjoy the park and its offerings.

Respecting the experience of all users includes motorists – the recommendations within this plan attempt to not unduly restrict vehicle access or remove parking without consideration of compensation elsewhere in the park. It is recognized that motor vehicles are, and will remain, a primary means of access for visitors coming from beyond the City of Vancouver, for many families with children and persons incapable of walking long distances. However, smaller interventions such as traffic calming measures, reducing short sections of roads to one lane, and improvements to shared use roads are recommended.

### 2. The Park is a Shared Space

The Seawall, roads, paths and other circulation facilities within Stanley Park are shared by a wide range of park users, including pedestrians, persons with disabilities, cyclists (recreational, commuter and exercise), skaters, vehicles, and dog walkers. Therefore, circulation routes – whether or not physically separated between user types – need to be planned and designed as shared facilities. Where users meet at crossings or conflict points, there should be coherent hierarchies designating how each should use the space and give way to each other.

In terms of hierarchy, this plan supports a “pedestrians first” policy, reflecting the City of Vancouver’s transportation priority of pedestrians first, followed by cyclists, transit, movement of goods and then private automobiles. In addition to safety, putting pedestrians first requires a high level of respect for the pedestrian’s enjoyment of the park. Walking is the primary mode of getting around in the park, and for many users, such as seniors and children it may be the preferred mode of travel. The park is also often used by joggers. Recommendations for improved cycling are intended to not only reduce negative impacts for the pedestrian, but are intended to improve conditions by reducing potential sources of common conflicts, improving wayfinding and improving the design of shared spaces.

### 3. Comprehensive and Clear Wayfinding

A comprehensive and clear wayfinding system will enhance the park experience for all users, and eliminate or reduce the severity of many issues related to circulation. For the purposes of planning and design it is assumed that a wayfinding system will be implemented throughout Stanley Park, particularly at park entrances, key destinations and decision points in the circulation system.

### 4. Improve Access

One-way travel is an important feature of the circulation system within the park, and is not likely to change on the Seawall due to physical constraints. The challenge is to create routes and “loops” that allow park users to visit only a portion of the park with a shorter return route, rather than forcing users to circulate around the entire perimeter of the park. This is particularly important in the eastern portion of the park, where there is a concentration of family-oriented attractions and no easily identifiable return loop to





downtown. Occasional users should be informed of these loop options before they begin their visit.

### 5. Improve Cycling as Recreation

Along with conservation, Stanley Park is best known as a location for recreation. Most users are drawn to Stanley Park because it allows safe cycling without interference from vehicular traffic, on trails and paths that are not too steep for small children or novice cyclists. In addition, for children or others not able or interested in walking or running the 8.8 km Seawall loop, cycling provides an alternative means in which to experience the entire Seawall. Recreational facilities should be comfortable for all ages and abilities.

Cycling for recreation includes both the casual recreation user, as well as “exercise cyclists”, although these are users with different motivations and parameters. While exercising is more enjoyable in a scenic location, exercise or training cyclists are usually more focused on distance covered than on reaching a destination, or casually enjoying the ride. Exercise cyclists often wish to travel at higher speeds. Both recreational sightseeing and exercising are appropriate activities in a park, however, conflicts arise when users try to share narrow spaces such as the Seawall, especially during peak use times.

### 6. Improve Cycling as Transportation

The one-way system on the Stanley Park Seawall works exceptionally well for recreation, but less so for transportation to a set destination within the park. For example, a family who rents bikes to visit the Kids Water Park must presently circumnavigate the whole park to return to downtown and return their bikes. Similarly, a visitor trying to access Third Beach will struggle to find a signed alternative other than the 8.8 km Seawall. Due to distances between park facilities and the limited transit within Stanley Park, cycling is an important way for users to get to and from destinations within the park.

For some users, cycling through Stanley Park forms a portion of their commute to work or school. This tends to occur at specific times of day, and often involves the use of the Causeway in order to access the Lions Gate Bridge. While commuter cyclists primarily use roads within the

park, some trails and portions of the Seawall nearest to downtown are also sometimes used. Often highly familiar with the route, and traveling at higher speeds, an overlap of space between recreational and commuter cyclists can result in conflicts. Improvement to both transportation and commuter routes within the park will support City transportation and Greenest City priorities to increase sustainable travel modes within the City of Vancouver.

### 7. Accommodate Peak Use

At the busiest times of the year, the Seawall is nearing user capacity. It is at these times that conflicts become most apparent, and in some cases, increase the risk of injury to park users. Due to physical constraints there are limited opportunities to increase capacity. Measures to do so, such as widening bike paths, could aggravate the issues by, for example, enabling inappropriately high speeds for some users in shared spaces.

### 8. User Separation Where Appropriate

Physical separation helps users share space, and is beneficial in many locations in the park. At other locations it has contributed to safety issues, such as lack of adequate space for a given facility, or instances where pedestrians must cross a vertically separated bike path. For the purposes of planning and design, separation will be considered where the resulting separated facilities are of adequate width and design. Where it is not possible to create adequate separated facilities, or existing separation cannot be modified to better serve all users, the approach will be to design shared facilities that best allow users of all types to share the facility.

### 9. Respect the Ecology of the Park

Cycling improvements must respect the ecological integrity of the park – including reducing habitat fragmentation, and mitigating the impact of trails near sensitive water bodies.





# 3. BACKGROUND DATA

## 3.1 Methodology

The development of the Stanley Park Cycling Plan was based on an eight phase process that included extensive engagement with the Vancouver Park Board and City staff in each phase. As well, two stakeholder and general public consultation phases were held. For a detailed description of the project methodology please see Appendix A.

## 3.2 Relationship to Other Plans and Policies

Several existing plans and policies provide a base from which to move forward. This section summarizes previous plans that have influenced the Stanley Park Cycling Plan.

### Greenest City Action Plan (2009)

The Greenest City Action Plan outlines a series of goals to make Vancouver the greenest city in the world by 2020. The Stanley Park Cycling Plan is consistent with Vancouver's Greenest City Goal to "Make walking, cycling, and public transit preferred transportation options."

### Climate Change Action Plan (2005)

Climate leadership is one of the goals associated with the City's vision "to be the greenest city in the world by 2020." The Stanley Park Cycling Plan supports, "active and public transportation," one of seven priority climate change action areas approved by Council in March 2005.

### City of Vancouver Bicycle Plan (1999)

The City's Bicycle Plan lays out a framework of bicycle routes throughout the City of Vancouver. The Stanley Park Cycling Plan addresses ways in which to better connect Stanley Park with existing and proposed bicycle routes identified in the City's Bicycle Plan. This is critical to promoting cycling as a mode of transportation within and to and from Stanley Park.

### City of Vancouver Transportation Plan (1997), and Downtown Transportation Plan (2002)

The City's Transportation Plans promote a Council-adopted vision for the design of transportation facilities that puts pedestrians first, followed by bicycles, transit, movement of goods and vehicular traffic. The Stanley Park Cycling Plan supports this priority. The City of Vancouver Transportation Plan will be updated in the summer of 2012.

### Stanley Park Transportation & Recreation Report (1996)

This document reported on the status of transportation in Stanley Park. The report provided short-term actions and a framework for long-term Park Board policies related to transportation. The Stanley Park Cycling Plan builds on trends and recommendations outlined in the 1996 transportation report.

### City of Vancouver Greenways Plan (1995)

The Vancouver Greenways Plan was approved by Council in July 1995. It identifies several conceptual corridors through the downtown. Since 1995, a number of specific greenways have been approved for implementation. The Stanley Park Cycling Plan proposes a linkage to the proposed Comox-Helmcken Greenway which will connect False Creek, through Stanley Park, to the North Shore.

The Stanley Park Cycling Plan reflects the Park Board's Mission to:

"Provide, preserve and advocate for parks and recreation services to benefit people, communities and the environment."

and

Vancouver's Greenest City Goal, to "make walking, cycling, and public transit preferred transportation options."





### 3.3 Current State Review

This study included an inventory and analysis of existing cycling conditions in Stanley Park, connections to the Causeway and Lions Gate Bridge, and the interface with the adjacent West End neighbourhood. Staff initially identified a list of 13 issues to be addressed in the plan. Another seven significant issues emerged through the course of inventory, analysis and community consultations (see Figure 1).

The twenty issues are grouped under the following themes:

- Theme 1: Challenge of the one-way system
- Theme 2: Facility constraints
- Theme 3: Conflicts between users
- Theme 4: Ecological concerns
- Theme 5: Lack of connectivity
- Theme 6: Ineffective signage/wayfinding.

Recommendations responding to each of these issues are presented in Chapter 5. A prioritization of the recommendations and an implementation strategy follow in Chapters 6 and 7.



THEME 1: CHALLENGE OF THE ONE-WAY SYSTEM



THEME 2: FACILITY CONSTRAINTS



THEME 3: CONFLICTS BETWEEN USERS



THEME 4: ECOLOGICAL CONCERNS



THEME 5: LACK OF CONNECTIVITY



THEME 6: INEFFECTIVE SIGNAGE/WAYFINDING



Figure 1. Map of issues in Stanley Park

Issue #	Description
Theme: Challenge of one-way system	
1	One way system constrains return to downtown from attractions along the Seawall and in the park.
2	Wrong-way cycling on the Seawall especially from Brockton Point to Devonian, and from Second Beach to Third Beach.
Theme: Facility constraints	
3	Insufficient bike parking at major park attractions.
4	Pinch points at several locations on the Seawall.
5	Physical separation (curb) on portions of the Seawall can be a tripping hazard.
Theme: Conflicts between user groups	
6	Pedestrian and cyclist conflicts at: Brockton Point, Totem Poles, Hallelujah Point Intersection, and pedestrian crossings of the bike path.
7	Congestion and conflict with pedestrians at dismount areas.
8	Conflict caused when users are exiting the Causeway.
9	Pedestrian and cyclist conflicts at Ceperley Playground and Underpass.
10	Unclear hierarchy and separation on pedestrian and bike path from Second Beach to English Bay.
Theme: Ecological concerns	
11	Impact of cycling on Stanley Park ecology from activities such as cycling on trails near water bodies.
Theme: Lack of connectivity	
12	Unclear connections between the Causeway, the Seawall Entrance and Coal Harbour.
13	Unclear connections from the Causeway to Second Beach.
14	Unclear connections from Second Beach back to downtown, Coal Harbour and Seawall Entrance.
15	Connection between the Seawall and Prospect Point is not obvious or easy.
16	Difficult connection to the pedestrian overpass from the east and west sides of the Causeway.
17	Need for improved bike access from the West End neighbourhood, including the Alberni bicycle route, the planned Haro Street Bikeway and planned Comox-Helmcken Greenway.
18	Lack of connections for north and southbound cyclists to and from the Lions Gate Bridge to the trails.
Theme: Ineffective signage/wayfinding	
19	Regulations and advisories affecting cyclists are confusing.
20	Wayfinding can be difficult for all park users through the forest trails and to attractions in the park.





3.4 Consultation Highlights

Actively involving members of the public, affected Park Board and City staff, stakeholder groups and advisory committees was one of the primary tenets in the development of the Stanley Park Cycling Plan. A project Technical Staff Team was established and other stakeholders, such as the Park Rangers and Stanley Park Ecology Society, were identified and consulted during key phases of the study. Engagement included:

- Six meetings with the Staff Technical Team;
- Social Media postings via the Park Board website, Facebook, and Twitter;
- On-site Public Open House (118 completed Questionnaires);
- On-line Questionnaire (434 responses);
- Three Rideabouts (with Staff Team, Park Rangers and the Stanley Park Ecology Society);
- Stakeholder input and review of DRAFT Plan, and
- Letter/Email Feedback.

The substantial input received was reviewed and taken into consideration as the plan was developed. This chapter highlights key findings from the public consultation, including feedback from pedestrians, cyclists and other park users. Please refer to Appendix C for a full summary of the public consultations.

A sampling of comments:

*"(There is) Congestion in the summer months. Cyclists compete with runners, walkers, tourists, roller-bladers, dogs for turf even though there are dedicated lanes for each."*

*"If I'm at Brockton Oval, I have to go all the way around the park."*

*"I enjoy the seawall in winter or in-between seasons when it is not so busy..."*

*"We need a better way to separate pedestrian and cycling lanes."*

*"...Encourage respect and cooperation between cyclists, pedestrians, bladers."*

*"... Please improve signs and pavement markings!!"*

User Conflict: While moving through the park I have had a conflict with....

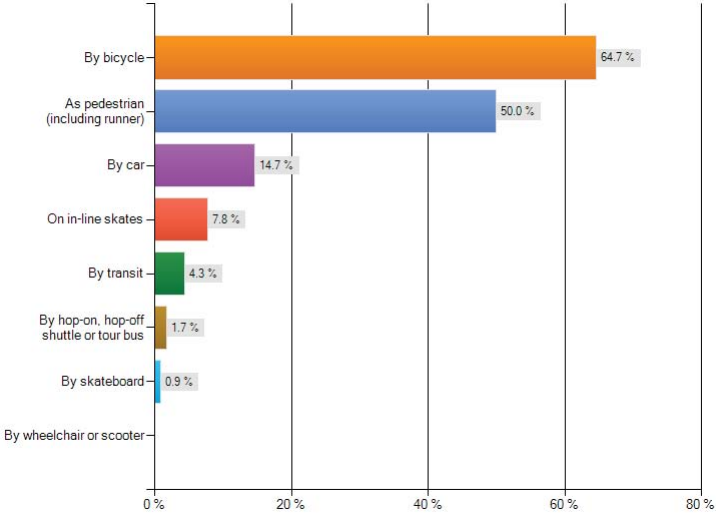
Pedestrians	Never		SOMETIMES		Always
	21%		29%	17.4%	5.2%
Cyclists	Never	Rarely	SOMETIMES		Always
	18.7%	27.5%	33.5%	12.3%	4.0%
In-line skaters	Never	Rarely	Frequently		Always
	27.8%	31.4%	8.1%	1.5%	
Vehicles	NEVER	Sometimes		Frequently	Always
	40.9%	20%	6.6%	1.9%	

Those who self-identified as “pedestrians” reported that most of their conflicts were with cyclists (36%), while those who self-identified as “cyclists” reported most of their conflicts were with pedestrians (33%). The apparent low number of vehicle conflicts is due to the predominance of cyclists and pedestrians in areas not used by vehicles, such as the Seawall and internal trails. Feedback from even some exercise cyclists is that they avoid Stanley Park Drive as they feel it is “unsafe.” Several complaints at the Open House regarded the attitude and speed of exercise cyclists using the recreational pathways. This highlights the need to address the different types of users to provide a safe and comfortable experience for all.



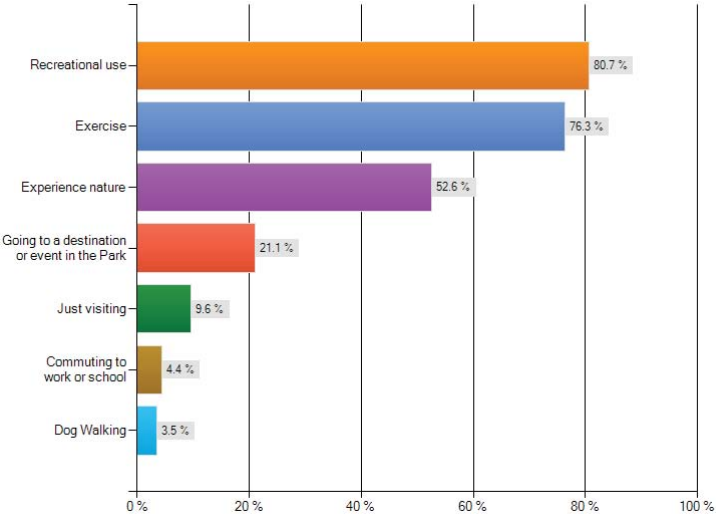


Modal split: How do you usually get to Stanley Park?



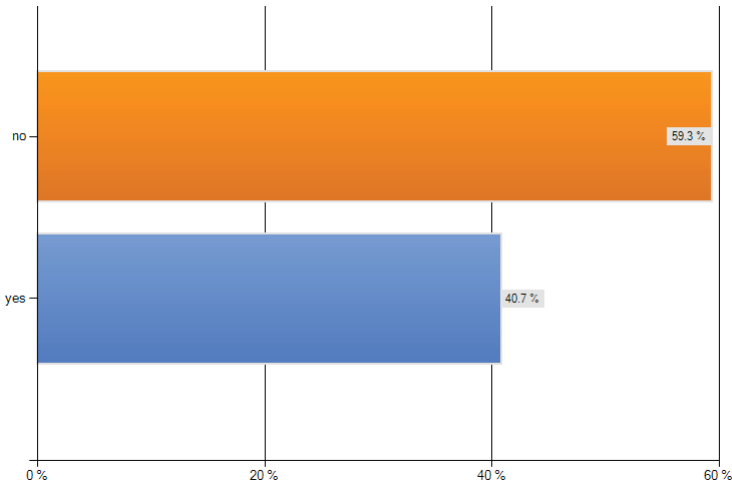
The majority of respondents arrive at the park by bicycle or on foot.

Motivation for visiting the park: Why are you usually in the park?



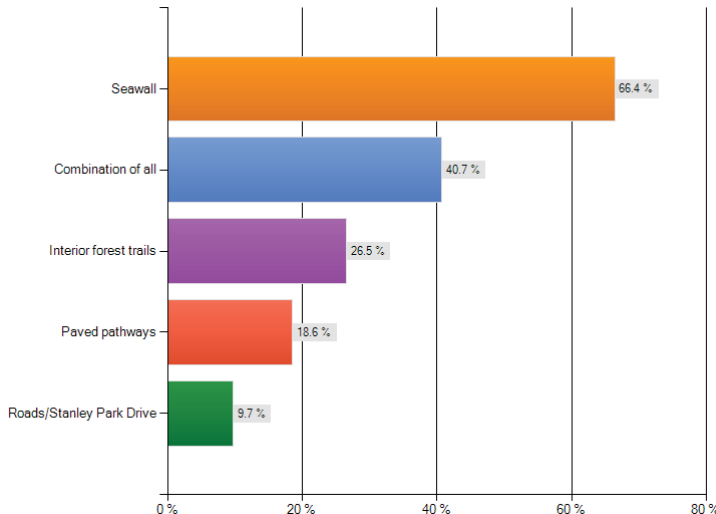
The majority of respondents visit the park for recreation, exercise, or to experience nature.

Use of forest trails: Do you use the interior forest trails as a shortcut to your destination?



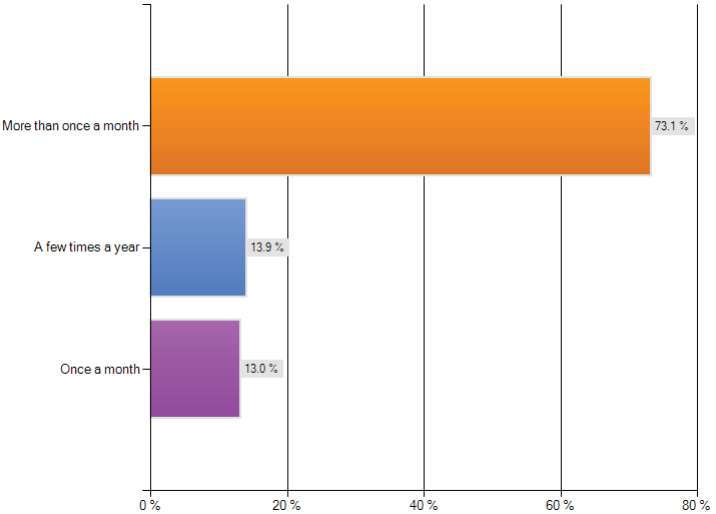
40% of respondents use the forest trails as a shortcut.

Route preference: When travelling within Stanley Park, which of the following do you prefer to use?



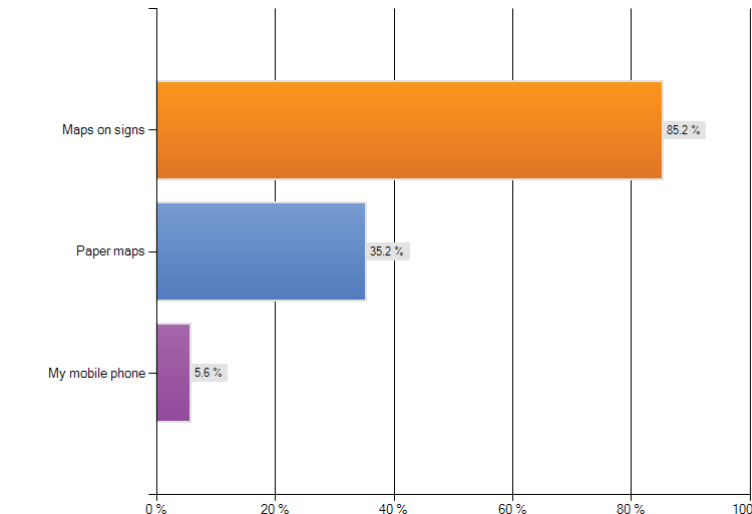
The majority of respondents use the Seawall to travel around the park.

Visit frequency: On average, how often do you visit Stanley Park?



The majority of respondents visit the park more than once a month.

Type of map used:



6% of respondents use maps on their mobile phone while in the park.

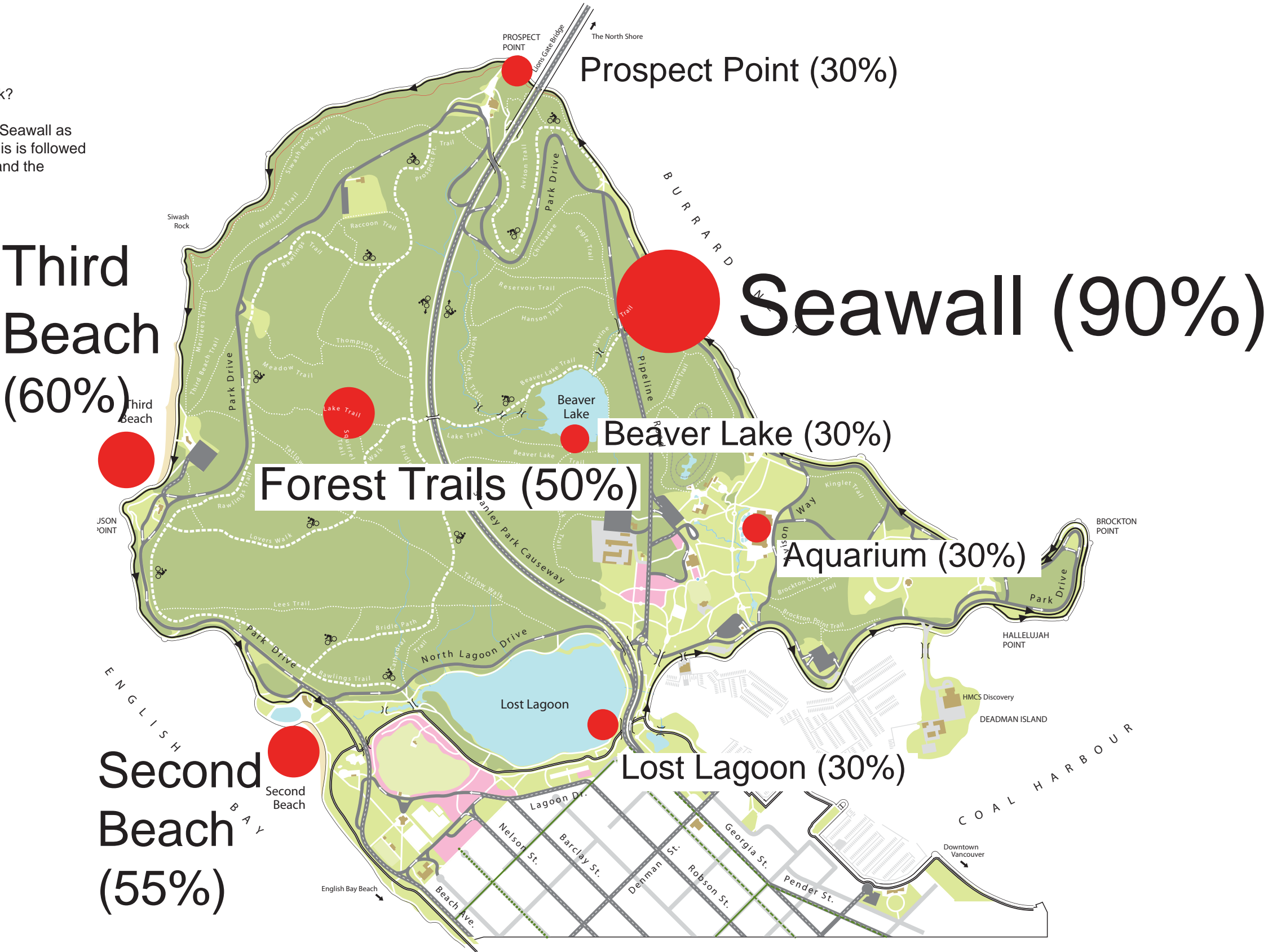
Source SPCP Questionnaire, 2011



Figure 2. Top Destinations

Top destinations:  
Which destinations do you visit in Stanley Park?

Overwhelmingly, most respondents name the Seawall as their top destination in Stanley Park (90%). This is followed by Third Beach (66%), Second Beach (55%) and the Forest Trails (50%).





# 4. THE PROPOSED NETWORK

## 4.1 A Series of Routes, Connections and Nodes

The proposed cycling network (Figure 3) is based on a vision of loop routes, cross-cuts and nodes. The creation of a series of return options to downtown, and improved access to and from key destinations in the park are primary drivers of this vision. Several loop routes are proposed to complement the 8.8 km Seawall loop, which in itself is the main attraction in Stanley Park.

The network is intended to serve the following types of cyclists, while adhering to a “Pedestrians First” policy:

- Recreational cyclists – including locals and tourists;
- Transportation cyclists making trips to and from destinations in the park (e.g., aquarium, sports facilities, restaurants, etc.);
- Exercise cyclists training in the park, and
- Commuter cyclists travelling through the park.

The proposed network includes the addition of approximately 5.6 km of new cycling facilities and 1.6 km of new pedestrian facilities.

Proposed Facility	Type	Linear Meters	Total LM
Redesignation of existing route to allow cycling*	Gravel Path	1,550	
	Paved Path	1,050	
	On Existing Road	2,200	
			4,800
New Shared Use Path	Gravel	150	
	Paved	700	
			850
New Cycling Path	Paved		110
New Walking Path	Paved, previously grass		750
Decommissioned Paths**	Revegetated		500
Total additional bike facilities			5,760
Total additional pedestrian accessible facilities			1,600
Net new hardscape			1,210

\*Redesignated facilities may need to be widened to accommodate cycling. \*\*See recommendations 1b, 2a, 7c, 16c.

The proposed network consists of the following elements:

**Routes:**  
Two types of routes are integrated into the plan: loops and cross-cuts. These may be shared or separated paths.

**Loops:**  
Loops are scenic pathways, primarily intended for recreational users (Figure 6) including pedestrians, cyclists and other active transportation modes.

**Cross-cuts:**  
Cross-cuts are interior trails, primarily for pedestrians and cyclists (Figure 7). They provide access:

- Between key destinations in the park (i.e., from Beaver Lake to Third Beach);
- Between the loops and other cycling facilities (e.g., Park Drive, other roads, and trails);
- Across barriers – including natural (steep slopes, water) and man-made (Causeway), and
- To and from the Lions Gate Bridge.

**Roads:**  
Roadways in the cycling network are characterized by shared vehicle and bike access (Figure 8). They are intended primarily for exercise and transportation cyclists who are comfortable riding in and adjacent to vehicle traffic.

**Connections:**  
Connections provide cycling access for all users to and from Stanley Park (Figure 9).

**Nodes:**  
A series of Nodes are identified as key visitor destinations also acting as circulation “hubs” in the park for all users (Figure 10). Multiple routes converge at these locations. Nodes should be easily accessible to all transportation modes, with clear wayfinding signage to other park destinations.





Figure 3. Proposed Stanley Park Cycling Network Concept





Figure 4. Existing Cycling Network



Figure 5. Proposed additions to the Cycling Network

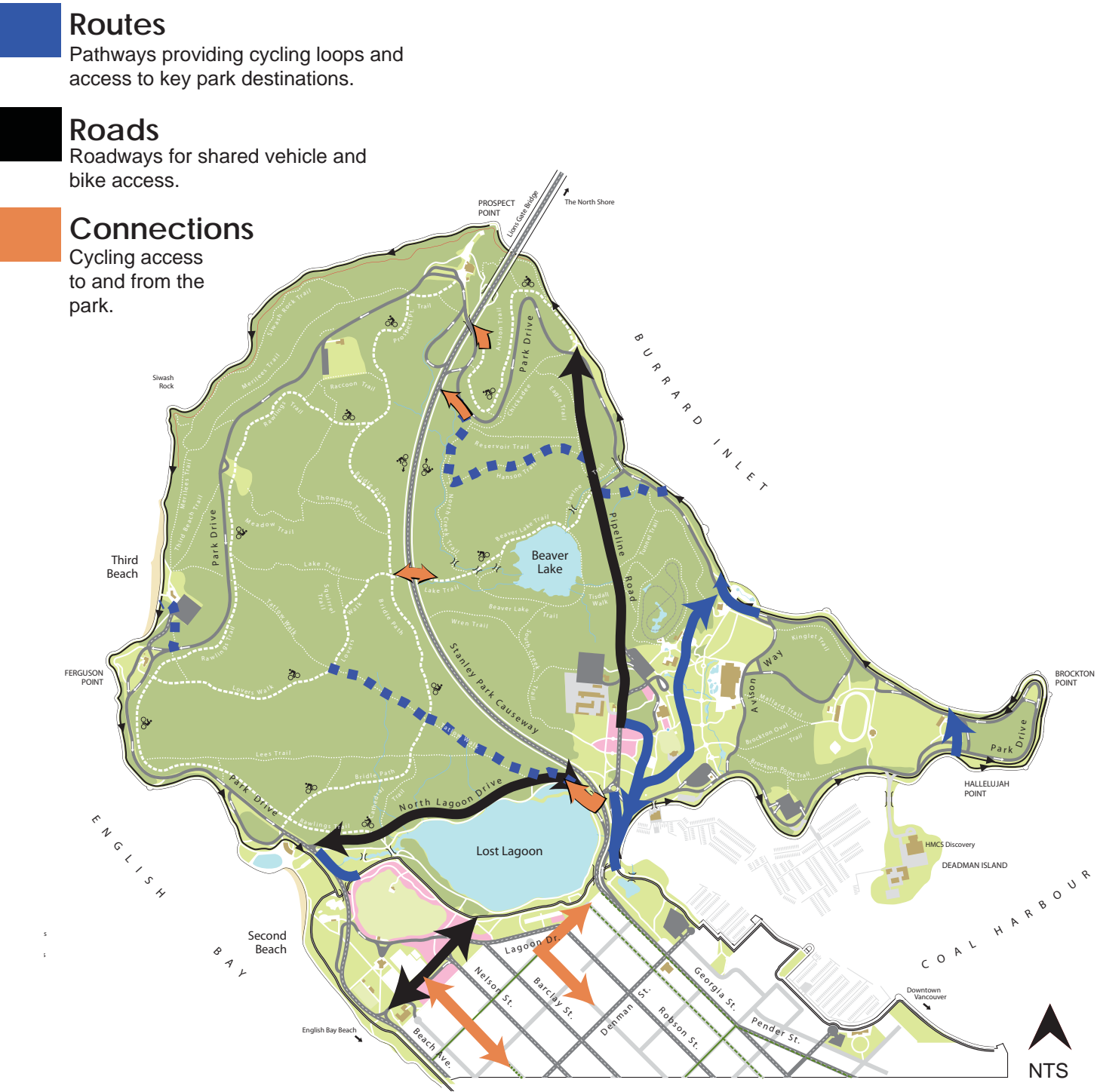




Figure 6. Routes - Loops

Loops

Loops are scenic pathways, primarily intended for recreational users.

- Seawall Loop (10 km)
- Forest Loop (8 km)
- Pipeline Return (6 km)
- Lumbermen's Return (4 km)

\*All travel is two-way except the Seawall, which remains one-way.

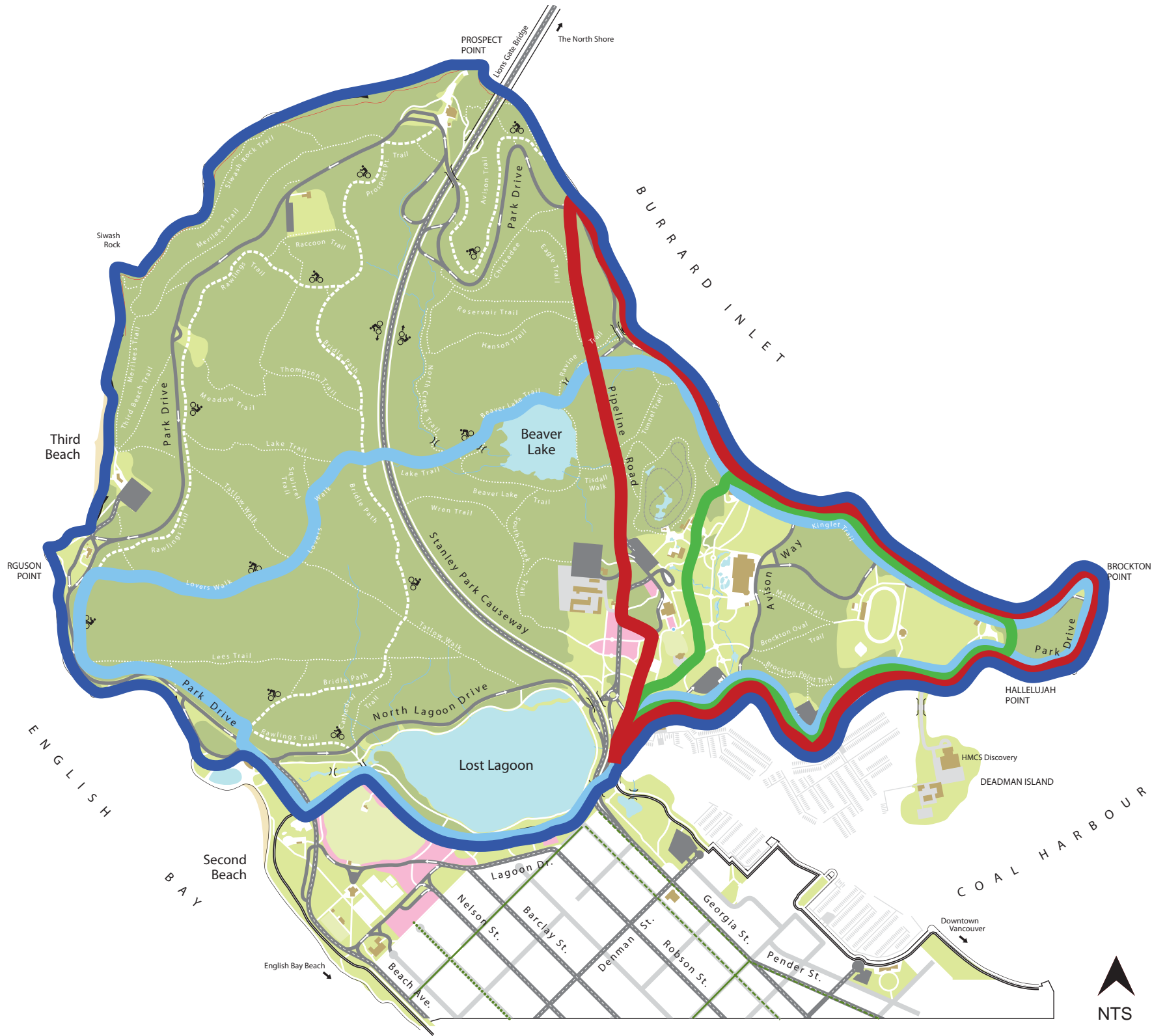




Figure 7. Routes - Cross-cuts

Cross-cuts

Interior trails that provide access between key destinations in the park, and between the loops and other cycling facilities, such as the Lions Gate Bridge.

- Proposed
- Existing

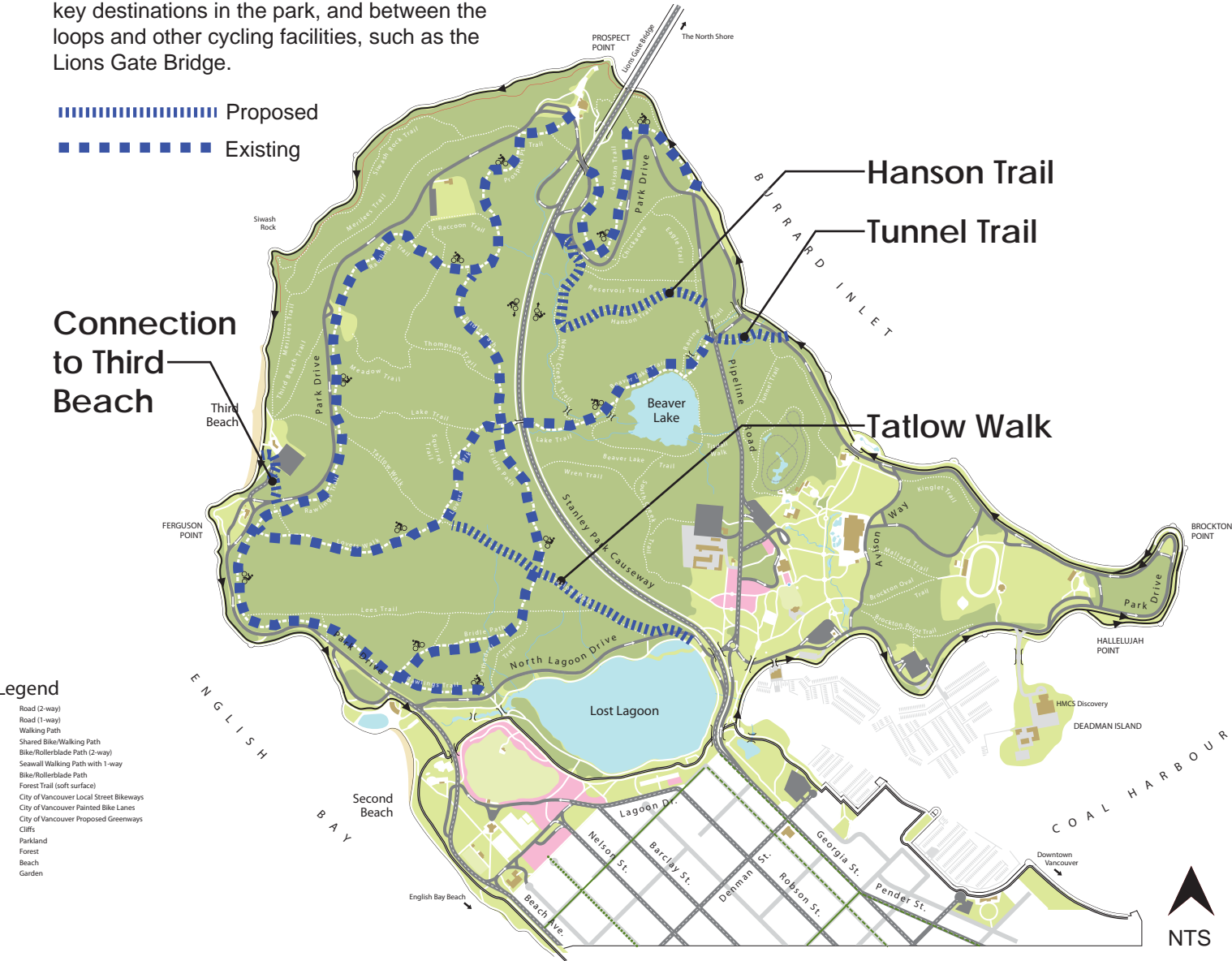


Figure 8. Routes - Roads

Roads

Roadways for shared vehicle and bike access.

- On Road
- On Sidewalk

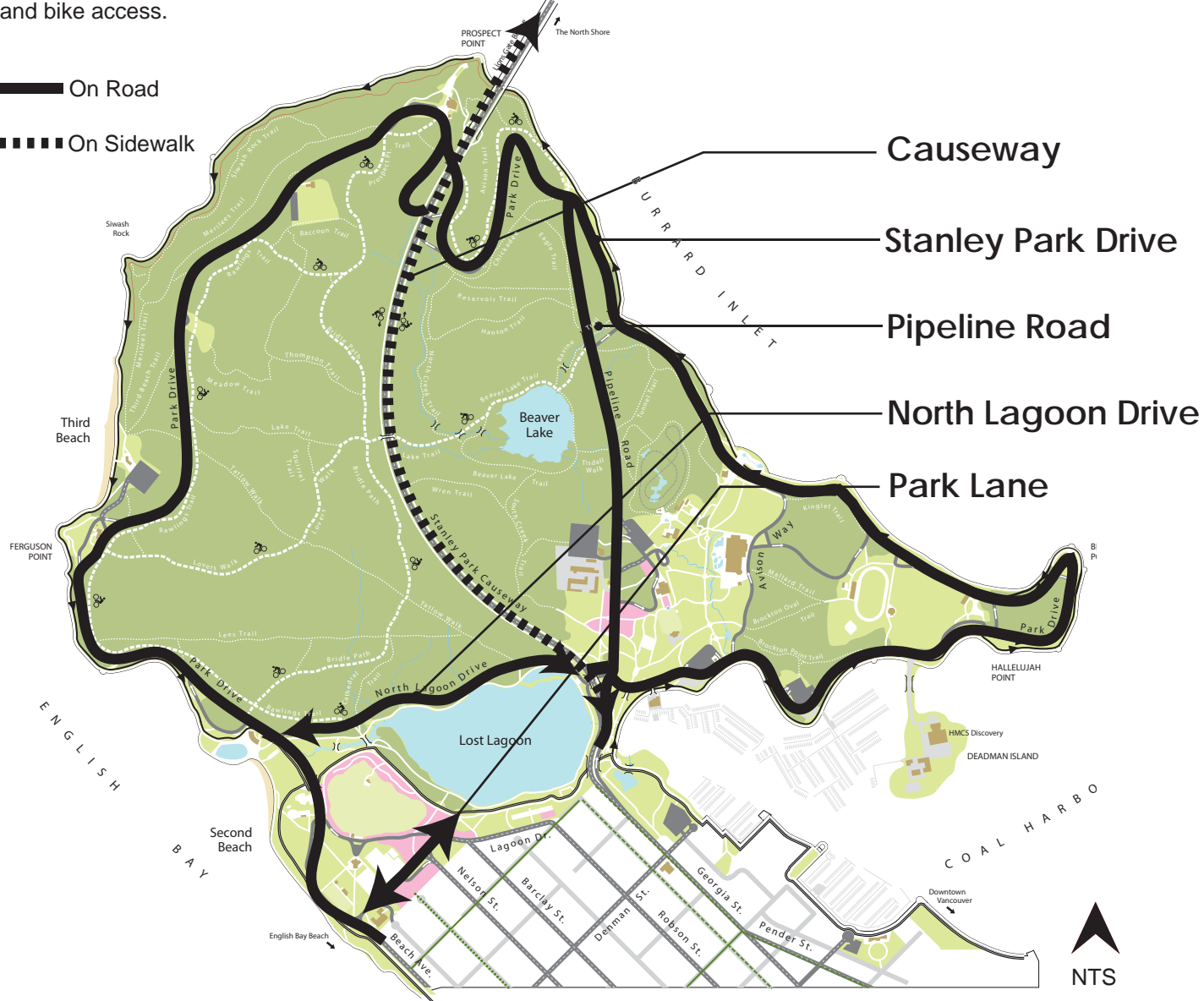




Figure 9. Connections into the park

Connections

Cycling access to and from the park.

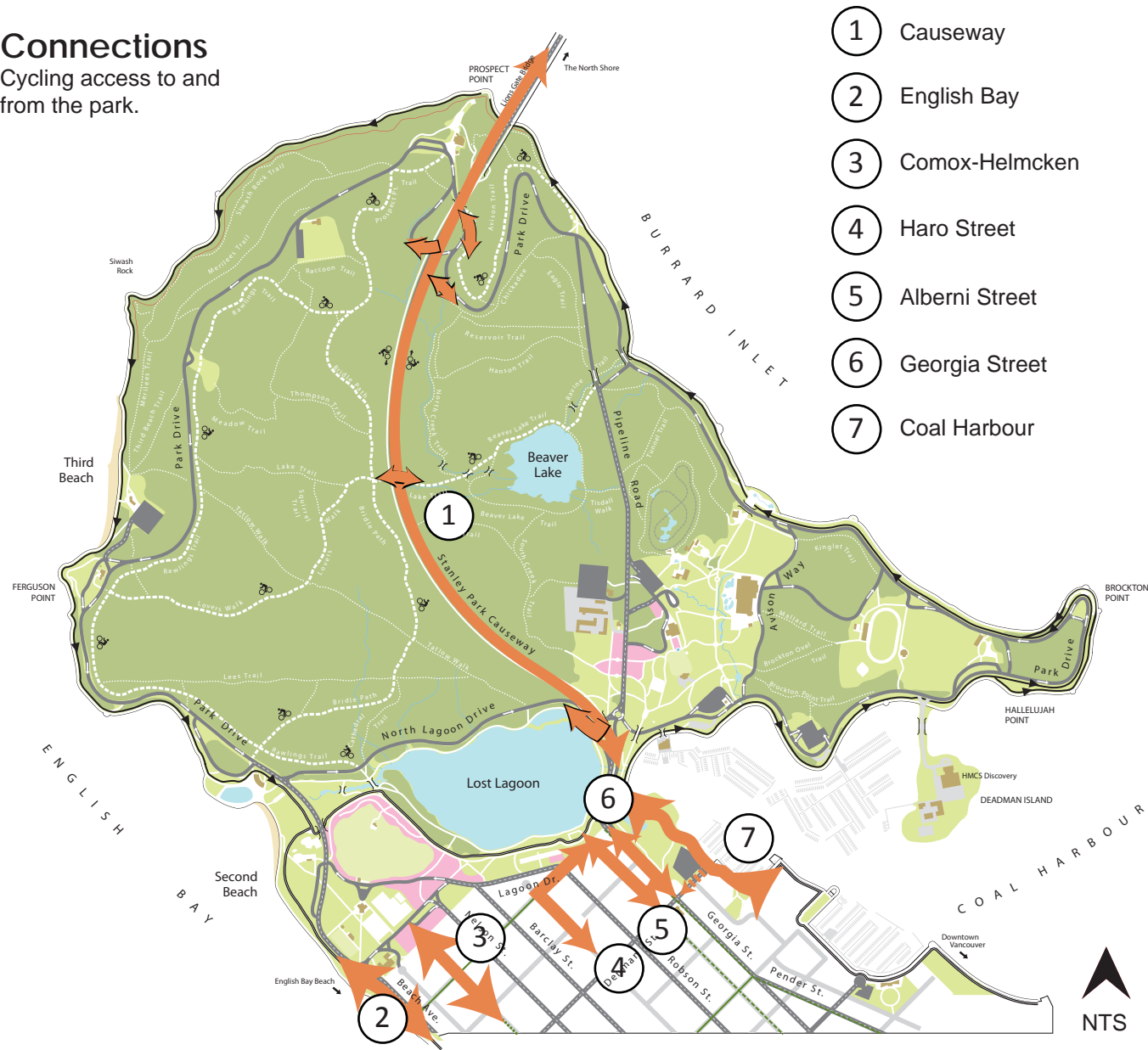
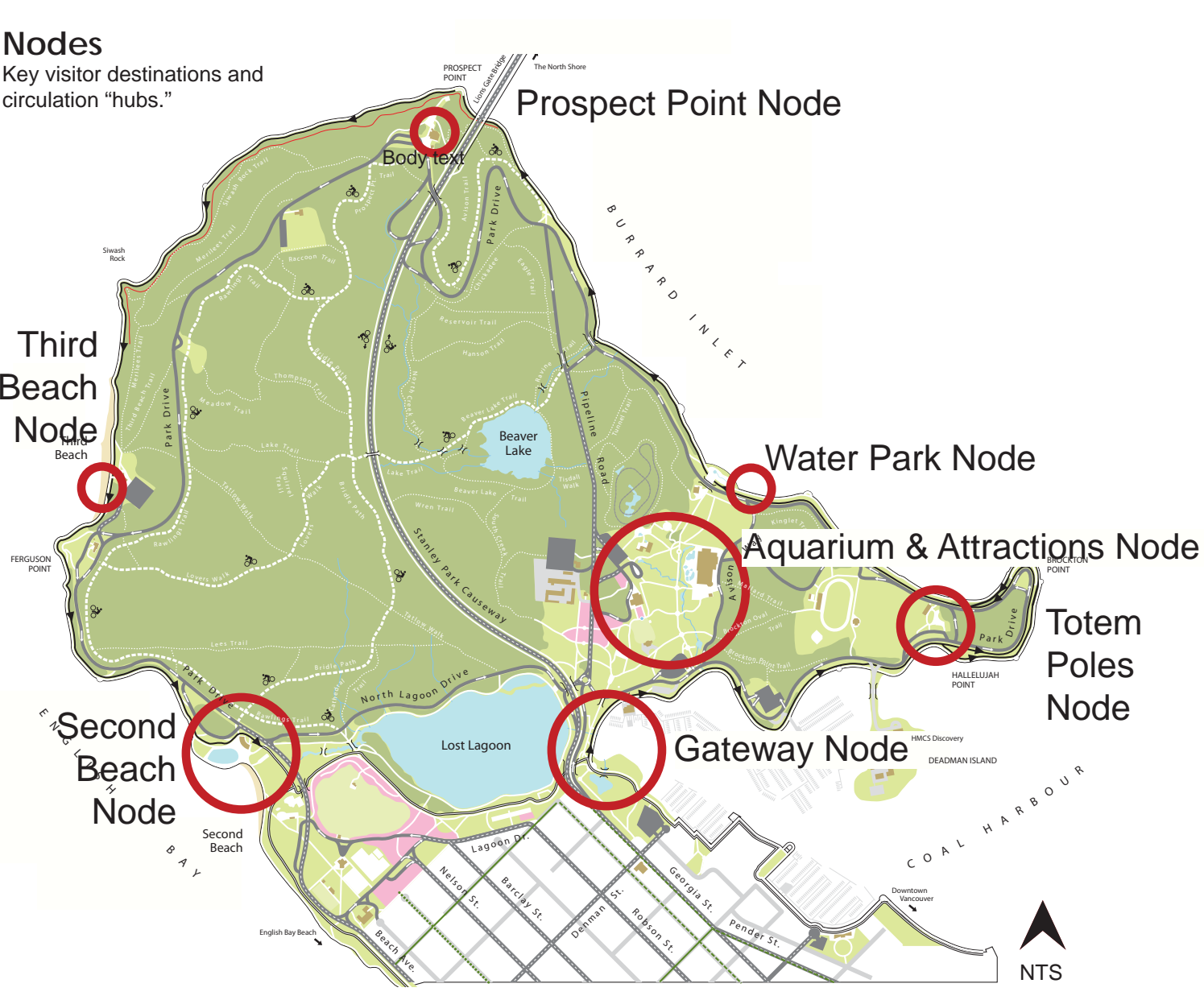


Figure 10. Nodes

Nodes

Key visitor destinations and circulation “hubs.”





# 5. ISSUES AND RECOMMENDATIONS BY THEME

## 5.1 System-wide recommendations

The following recommendations are park-wide strategies to improve cycling in Stanley Park. These recommendations are intended to create an enhanced park experience for pedestrians, cyclists, and other active transportation modes.

### Routes, Connections and Nodes

- Create a series of easily identifiable Routes, Connections and Nodes that link key destinations within the park.

### Park Signage and Wayfinding

- Implement a park wide wayfinding system that reflects a hierarchy of routes, uses and signage.
- Identify cycling routes by name, distance and key loops by colour.
- Install larger and more frequent signs on the Causeway sidewalk letting users know it is one-way and that cyclists should yield to pedestrians.

### Vehicular Circulation

- Reduce Stanley Park Drive to one vehicle lane where needed to accommodate through-cyclists.
- Make Stanley Park Drive safer for training and exercise cyclists, to reduce Seawall congestion and conflicts.
- Conduct a transportation study to examine the possibility of having two-way cycle paths on vehicular roads, or convert one-way roads to two-way where it may better facilitate cycling in the park.

### User Space Identifiers

- Separate only where acceptable safe separated facilities can be created for all users.
- Indicate separation through materials and design, in addition to signage, pavement markings and surface quality. A consistent language of materials and crossing types should be applied throughout the system. Several options are presented in the glossary (Chapter 9) of this report.
- Interior forest trails that allow cycling should be identified through increased signage. Consider use of a different surface material on these trails, such as crushed limestone or gravel with a subtle colour differentiation, in order to increase wayfinding and better support wheelchairs, mobility scooters and inexperienced cyclists.

### Crossings

- A menu of crossing options for active transportation modes is presented in the glossary (Chapter 9) of this report. It is important that consistent use of crossing types and materials are applied throughout the park.

## 5.2 Recommendations by theme

Detailed solutions that address specific issues are presented in this chapter under the following themes:

- Theme 1: Challenge of the one-way system
- Theme 2: Facility constraints
- Theme 3: Conflicts between users
- Theme 4: Ecological concerns
- Theme 5: Lack of connectivity
- Theme 6: Ineffective signage/wayfinding.

Note that some recommendations include alternative options. In these instances, further study or consultation is required by the Park Board prior to selecting a preferred solution. Refer to Table 1 at the end of this chapter for a summary of all issues and recommendations.

The following legend is used on all recommendations maps in this report:

LEGEND FOR RECOMMENDATION MAPS

Existing Facilities

Road (2-way)

Road (1-way)

Walking Path

Shared Bike/Walking Path

Bike/Rollerblade Path (2-way)

Seawall (1-way Bike Path)

Forest Trail (Walking only)

Proposed Facilities

Proposed Walking Path

Proposed Shared Bike/Walking Path

Proposed Bike/Rollerblade Path

Proposed Decommissioned Path

Proposed large format Park Map

Proposed Raised Crossing

Key maps provided in the top right corner of every page show the location of each recommendation.





## THEME: CHALLENGE OF THE ONE-WAY SYSTEM

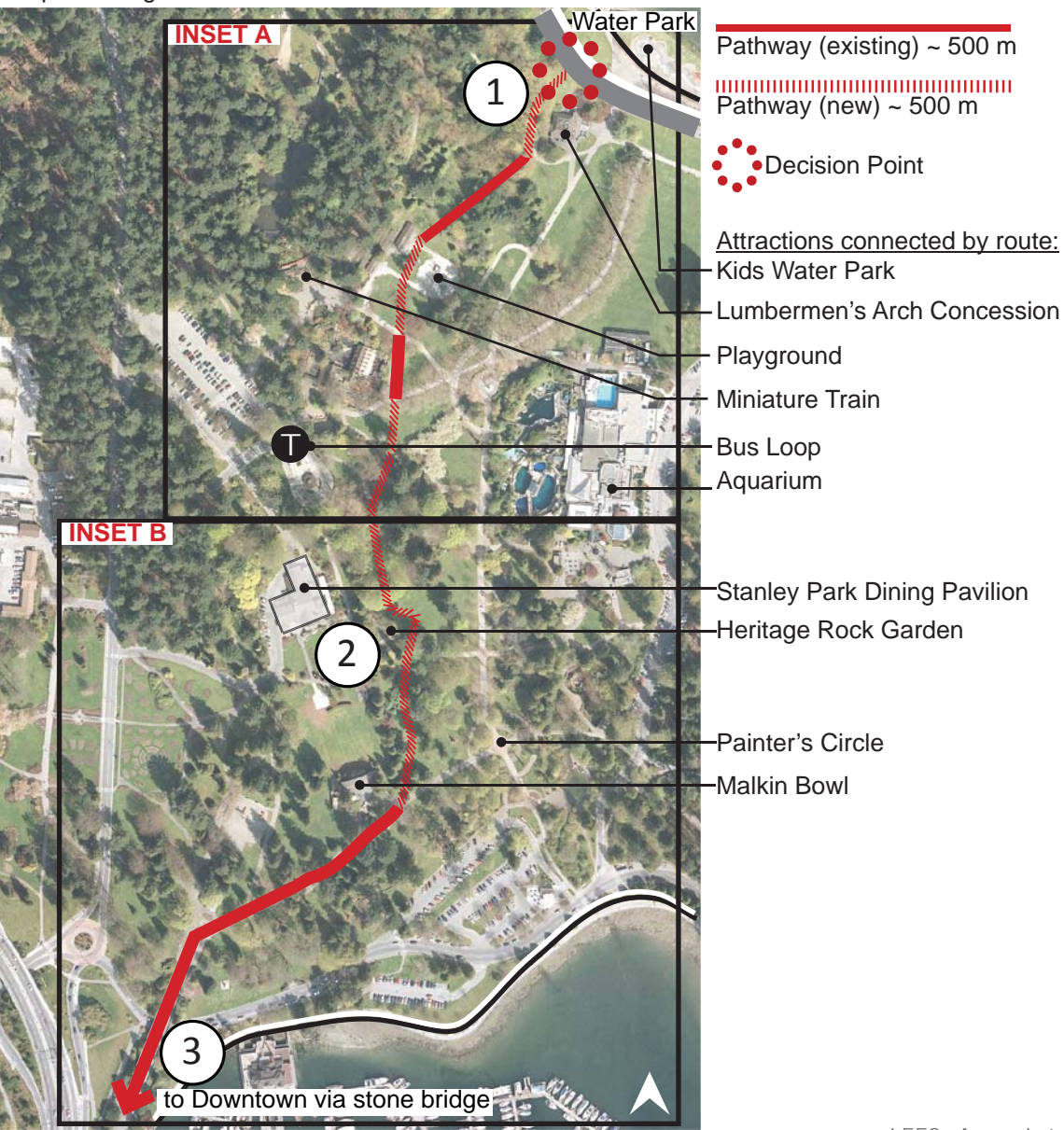




ISSUE #1: One-way system constrains return to downtown from attractions along the Seawall and in the park

Recommendation 1a: Implement "Loop 1" Lumbermen's Return Route				
Description	Pros	Cons	Considerations	
<p>Create a new two-way shared path to provide a return route from Lumbermen's Arch and access between numerous park attractions and downtown (VPB staff identified option).</p> <p>Exploration of a route suitable for cyclists between the bus loop and the Aquarium should also be explored, prior to completion of the Aquarium Expansion.</p>	<p>Avoids conflict with existing high traffic pedestrian and tour bus routes and high activity areas while being located close to major attractions and the bus loop. Creates new access to the Heritage Rock Garden for cyclists, pedestrians, and possibly wheelchair users. Uses sections of existing paths where appropriate.</p>	<p>Approximately 500 linear metres of new paved or gravel surface will be required. Creates ecological fragmentation and an increase in impermeable area. Proximity to significant trees and landscape features.</p>	<p>Will require a new stream crossing and a tree assessment along route. Habitat improvements should be incorporated into the new path design as compensation. Note: Lumbermen's Return is highest priority return route for implementation.</p>	

Proposed Alignment:



Description:

- Pathway (existing) ~ 500 m
- Pathway (new) ~ 500 m
- Decision Point
- Attractions connected by route:
- Kids Water Park
  - Lumbermen's Arch Concession
  - Playground
  - Miniature Train
  - Bus Loop
  - Aquarium



The Return Route begins at the Lumbermen's Arch Concession.



The route creates new access to the Stanley Park Heritage Rock Garden.



The historic stone bridge over Stanley Park Drive provides access back to Downtown.



Location:

Totem poles, Brockton Point, Lumbermen's Arch, Vancouver Aquarium, Rowing and Yacht Clubs, the Miniature Train, and Third Beach.

Description of problem:

- Limited return from attractions in the park such as the Totem poles, Brockton Point, Lumbermen's Arch, Vancouver Aquarium, Rowing and Yacht Clubs, and the Miniature Train.
- Cyclists unfamiliar with Stanley Park often ride the wrong way on the Seawall because it is the only obvious route back.
- Wrong-way cyclists often ride at high speed because they need to get back before their bicycle rental time is up.
- Poor pedestrian and cycling access to the Aquarium from Avison Way.
- Limited signage exists to indicate how one can exit the Seawall.

Modes affected:

Pedestrians, cyclists, other active transportation modes.

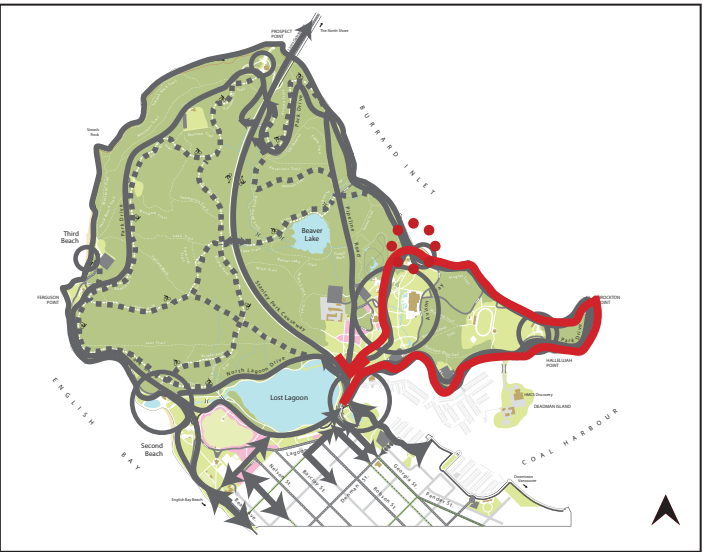
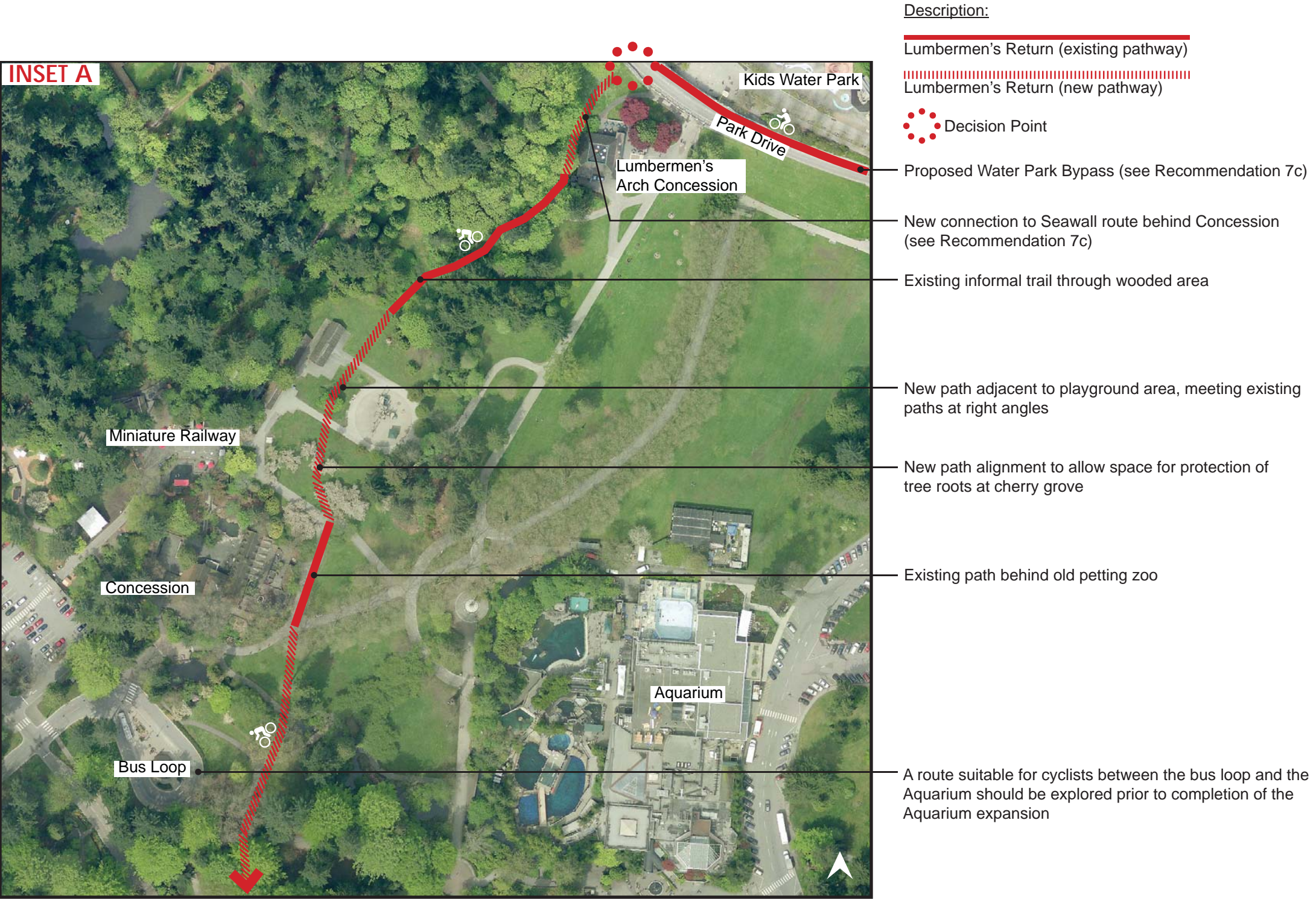
Relevant data:

Rangers encounter an average of 73 wrong way travel incidents per week during summer months (Ranger Patrol Reports 2011).



ISSUE #1: One-way system constrains return to downtown from attractions along the Seawall and in the park

Recommendation 1a: Implement "Loop 1" Lumbermen's Return Route (cont'd)





## ISSUE #1: One-way system constrains return to downtown from attractions along the Seawall and in the park

### Recommendation 1a: Implement "Loop 1" Lumbermen's Return Route (cont'd)



Description:

Lumbermen's Return (existing pathway)

Lumbermen's Return (new pathway)

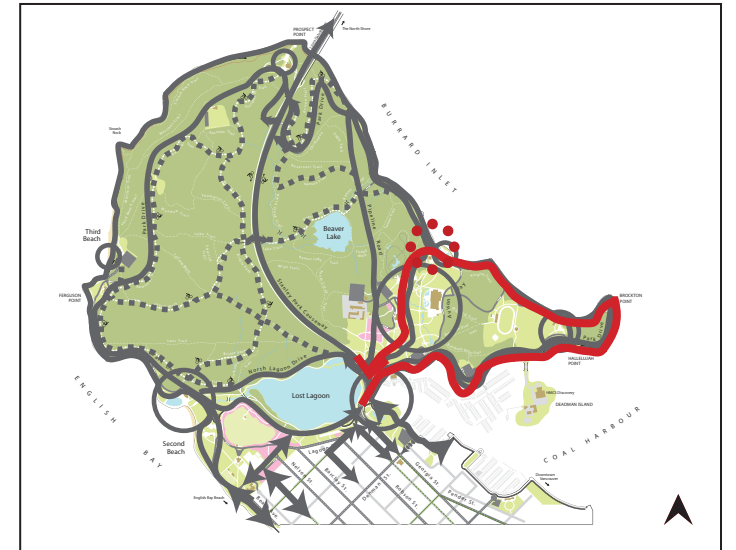
Pipeline Return Route (see Recommendation 1b)

- New path to wrap east of the Heritage Rock Garden

- Connection to existing asphalt pathway

- Existing Lord Stanley Statue

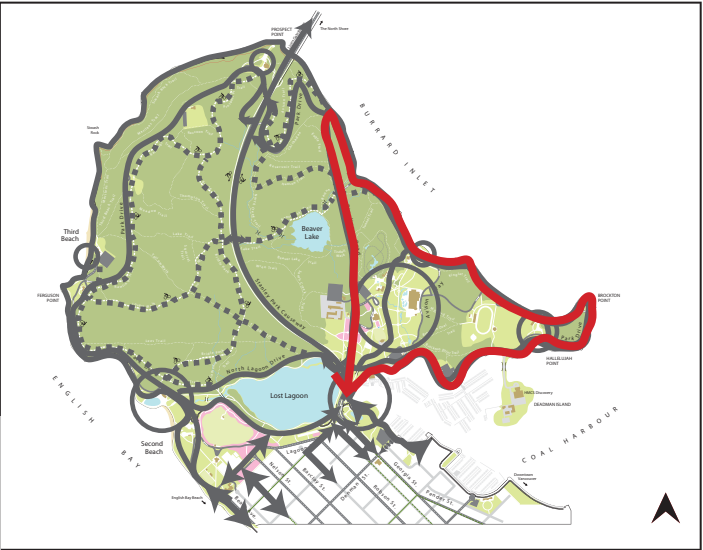
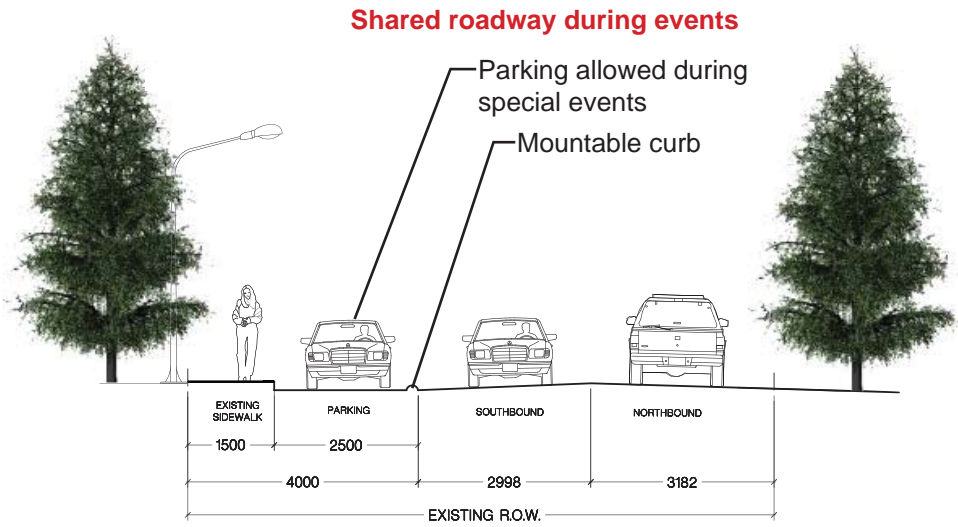
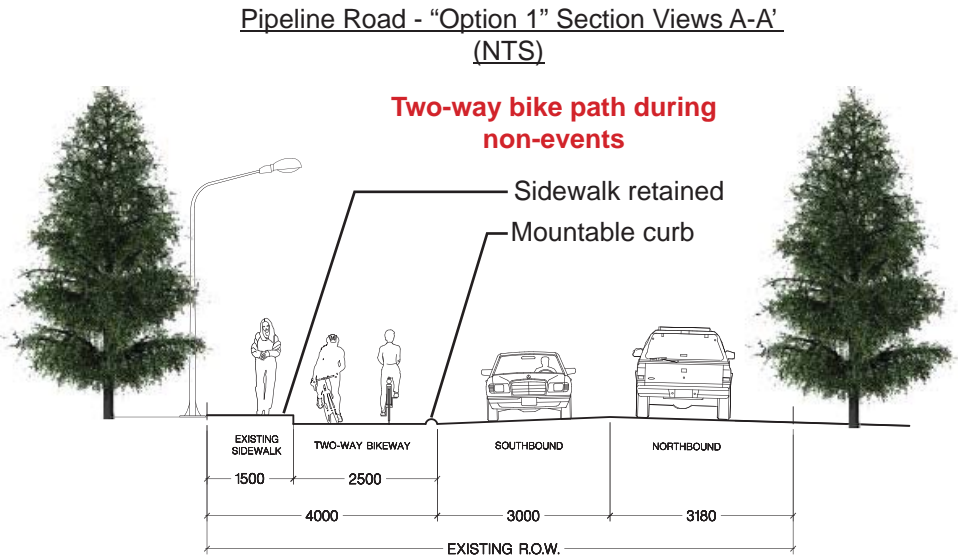
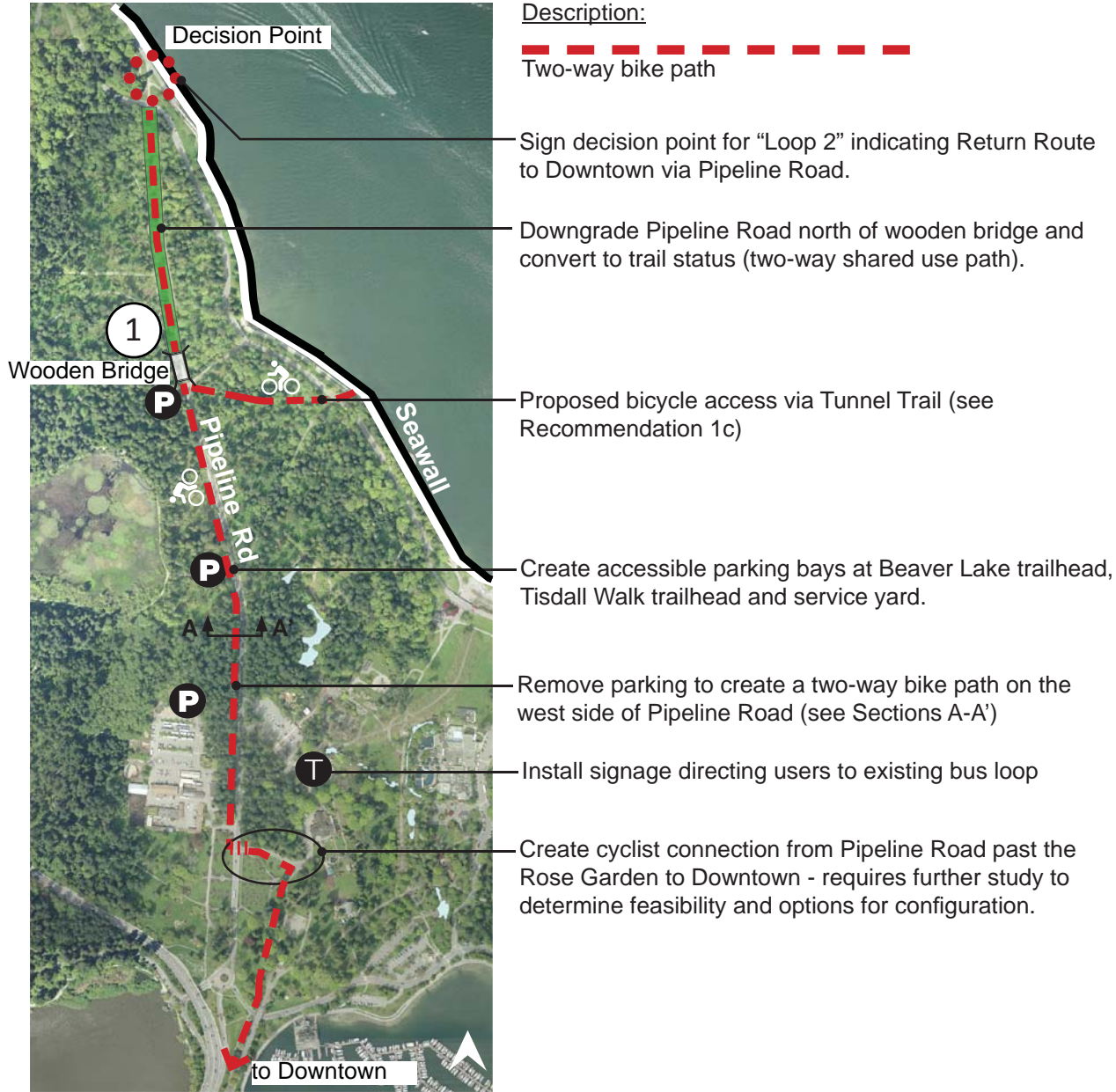
- Existing stone bridge over Stanley Park Drive





ISSUE #1: One-way system constrains return to downtown from attractions along the Seawall and in the park

Recommendation 1b: Implement 'Loop 2' Pipeline Return Route				
Option	Description	Pros	Cons	Considerations
1	Remove parking to create a two-way bike path on the west side of Pipeline Road separated with a mountable curb. Vehicle traffic remains two-way. Consider closing bike path and permitting parking during special events, with accessible parking bays at key locations (i.e., Beaver Lake trailhead).	Provides a facility for all ages and abilities in both directions in one of the lowest revenue-generating parking areas in the park.	Need strong case for changes to existing parking regime.	Subject to Traffic Study to determine wider network impacts, including feasibility of bicycle connection from Pipeline Road past the Rose Garden. Note: This is a long term recommendation that should be re-evaluated in the future. Lumbermen's Return is a higher priority return route for implementation.



Downgrading North Pipeline to trail status north of the wooden bridge would allow for reclaimed greenspace and increased active transportation connections.



ISSUE #1: One-way system constrains return to downtown from attractions along the Seawall and in the park

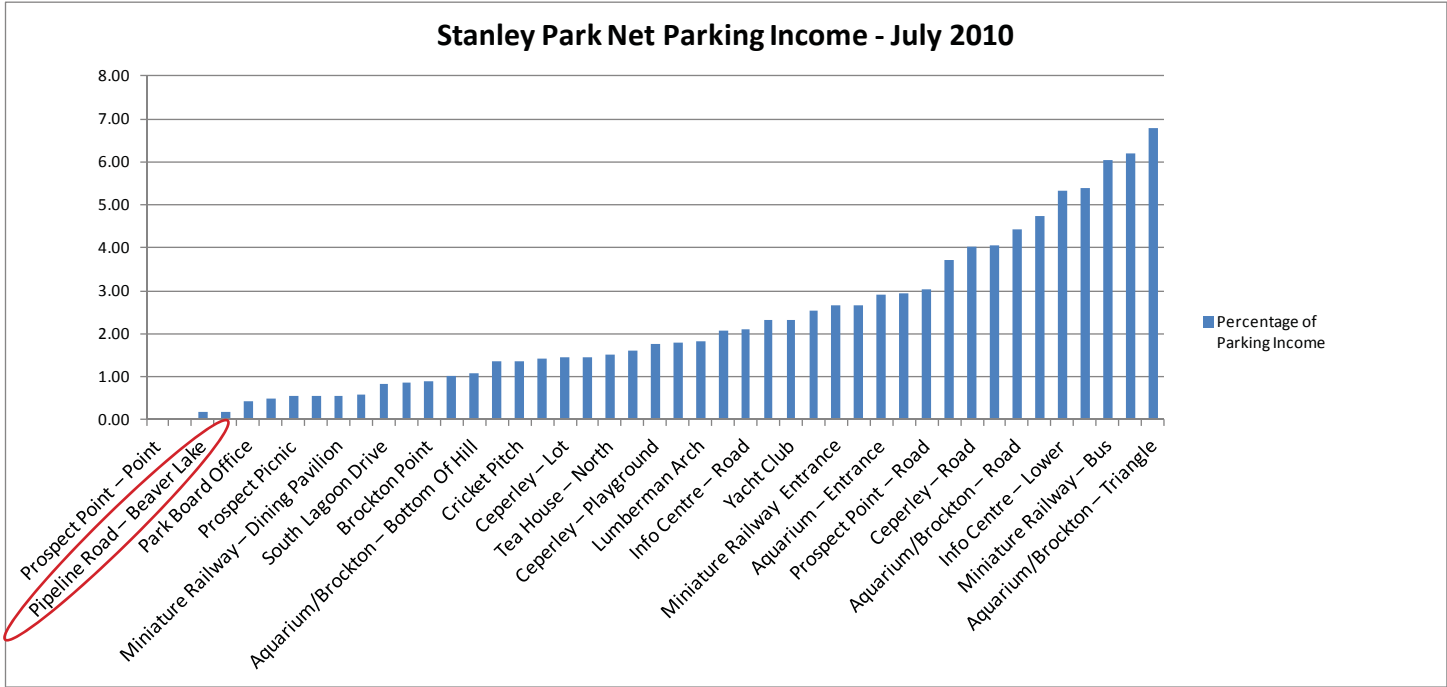
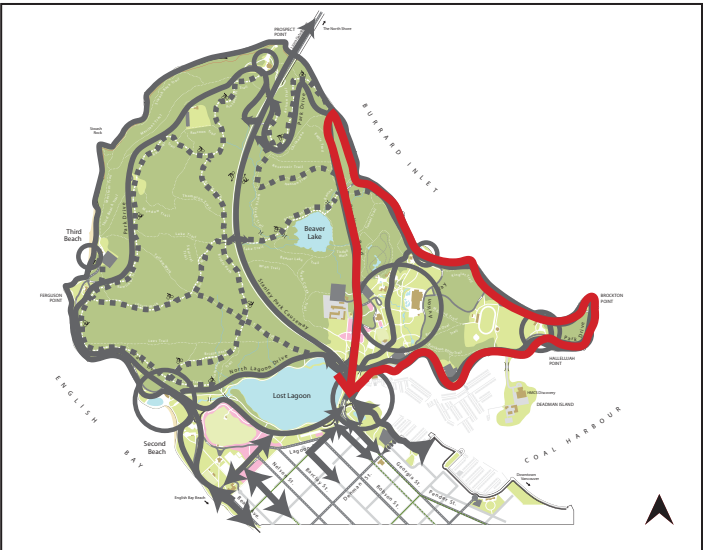
Recommendation 1b: Implement 'Loop 2' Pipeline Return Route				
Option	Description	Pros	Cons	Considerations
2	Enhance existing on road cycling on Pipeline Road with signage and traffic calming measures.	Maintains existing parking. Reduced cost.	Would be suitable for more confident riders only.	Consider removal of existing parking to facilitate use of sharrows or bike lanes. Option 2 could be a short term solution prior to the implementation of Option 1.



- Description:**
- Two-way shared use path
  - On-road cycling enhanced with signage and traffic calming
  - Sign decision point for "Loop 2" indicating Return Route to Downtown.
  - Downgrade Pipeline Road north of wooden bridge and convert to trail status (two-way shared use path).
  - Proposed bicycle access via Tunnel Trail (see Recommendation 1c)
  - Enhance on-road cycling on Pipeline Road with signage and traffic calming measures.
  - Install signage directing users to existing bus loop
  - Create connection from Pipeline Road past the Rose Garden - requires further study to determine feasibility and options for configuration.



Vehicle parking stalls on Pipeline Road are among the least occupied of all parking locations in the park.

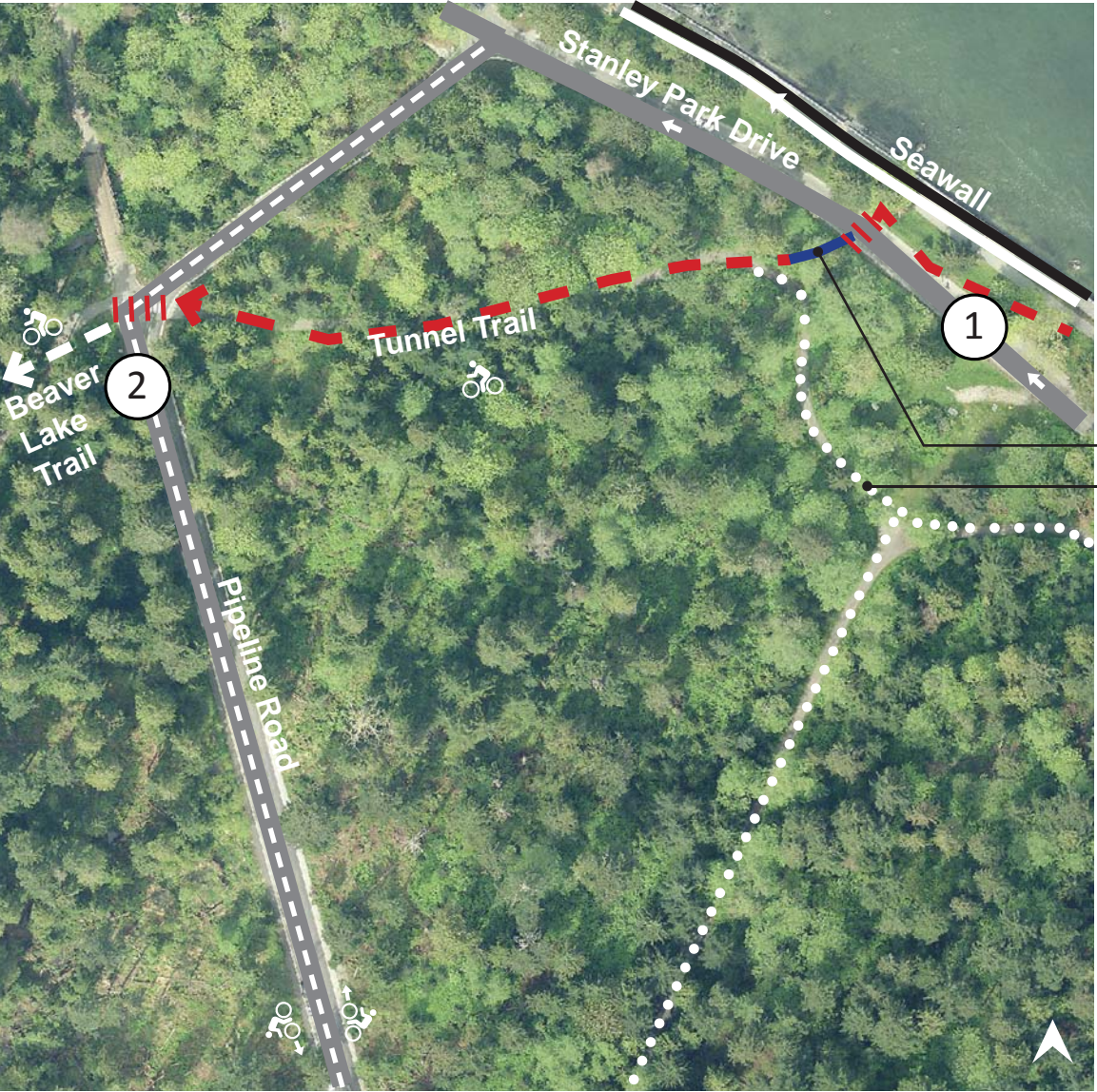
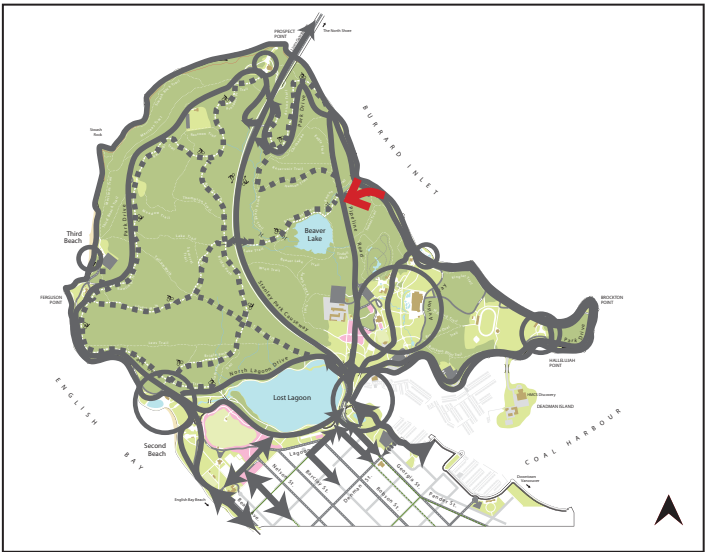


Source: VINCI Parking, 2010

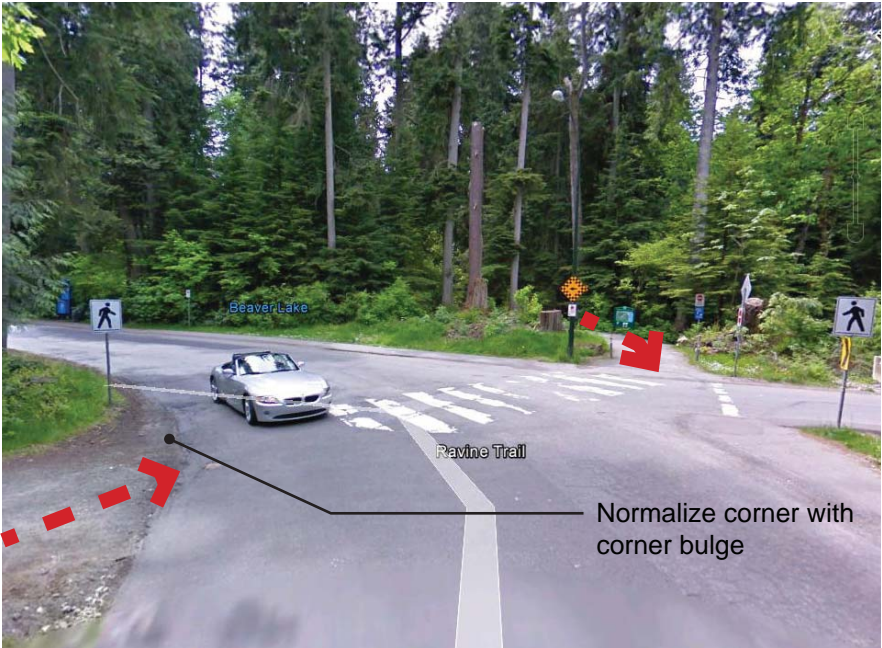


ISSUE #1: One-way system constrains return to downtown from attractions along the Seawall and in the park.

Recommendation 1c: Create a connection from Seawall to Tunnel Trail and Beaver Lake Trail			
Description	Pros	Cons	Considerations
New Bike/Walking path connection from the Seawall to Tunnel Trail and Beaver Lake Trail.	Provides connection for pedestrians and cyclists from the Seawall to Beaver Lake Trail and Pipeline Road. Reduces ecological impact caused by unsanctioned paths.	May require removal of one young 2.5 cm caliper tree.	Consider boardwalk connection between Park Drive and Tunnel Trail to reduce impact to tree roots. Consider enhancing crossing through a raised crossing or elephant's feet.



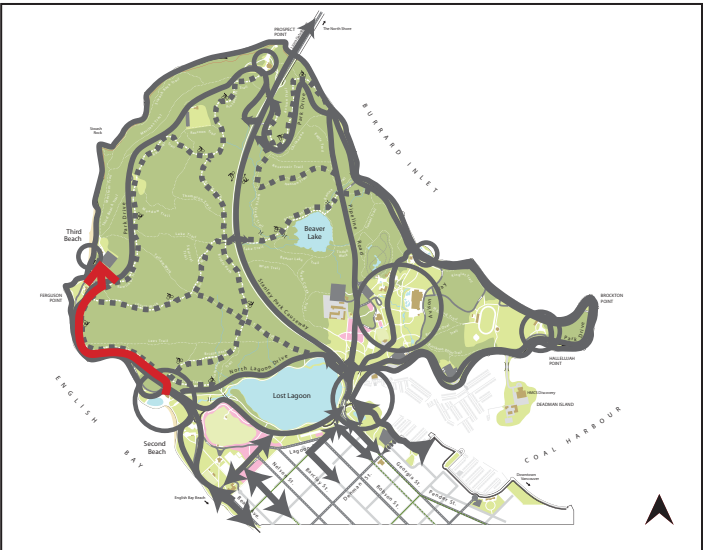
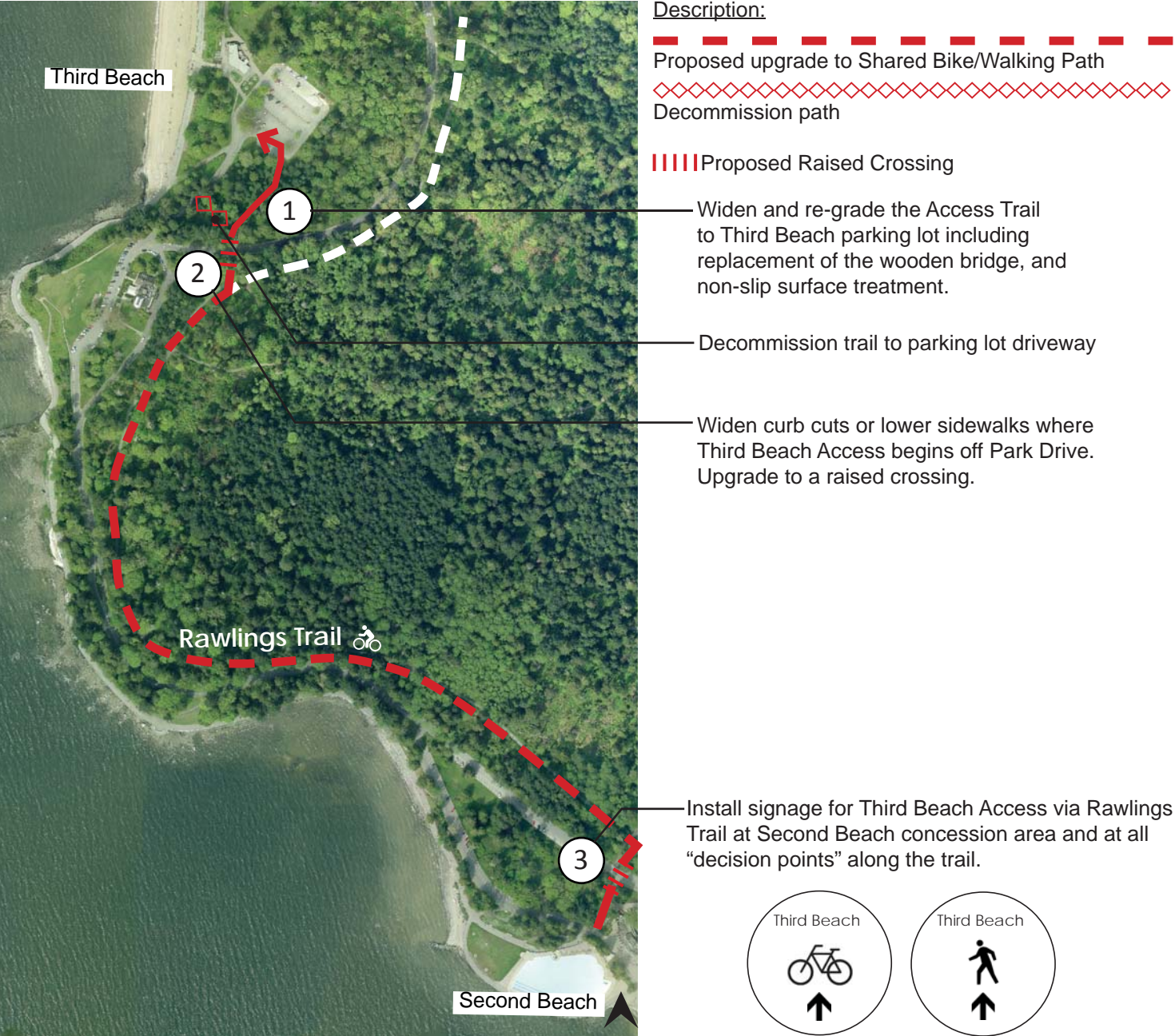
- Description:
- Proposed Tunnel Trail and Beaver Lake Trail connection from Seawall. Designate this section of Tunnel Trail as shared Bike/Walking Path.
- Raised crossing
- Consider boardwalk for this section to reduce current impact to tree roots
- Existing walking path
- 1 Proposed pathway up slope at 6.6% to Stanley Park Drive.
- 2 Consider enhancing the existing crossing on Pipeline Road between Tunnel Trail and Beaver Lake Trail with a raised crossing or elephant's feet.





ISSUE #2: Wrong-way cycling on the Seawall, especially from Brockton Point to Devonian, and from Second to Third Beach

Recommendation 2a: Improve Rawlings Trail cycling access to Third Beach Concession			
Description	Pros	Cons	Considerations
Rawlings Trail is already designated as a shared Bike/Walking Path but requires upgrades approaching Third Beach. Signage is required at decision points and intersections with other trails along trail length.	Will reduce wrong-way cycling on the Seawall to access Third Beach.		Decommissioning of trail to parking lot driveway will reduce ecological fragmentation and compensate for new pathway construction. Consider accessibility upgrades in conjunction with trail reconstruction.

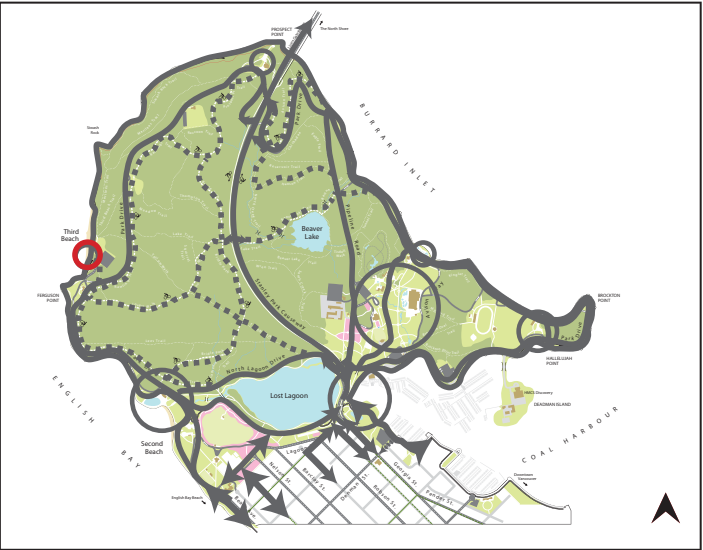


Location:
Brockton Point to Devonian, Second to Third Beach.
Description of problem:
Brockton Point and Third Beach are popular destinations that are accessed by the Seawall. The one-way system on the Seawall limits direct access to and from these locations. As a result users will often ride the wrong way on the Seawall because there is no other obvious route.
Modes affected:
Pedestrians, cyclists, other active transportation modes.
Relevant data:
Rangers issue an average of 73 wrong way travel warnings per week in peak months of June - August. This is one of their most frequent cycling related issues (Ranger Incident Reports 2011).
Consultation Feedback:
"Difficult to get to Third Beach by bike without going all the way around the Seawall (unless you know which trails to take)"
"To access Third Beach by bike from the West End, one must circumnavigate the whole park via Seawall."
"I use the Rawlings Trail to get to Third Beach from Second Beach which is where I enter the park."
Source: Stanley Park Cycling Questionnaire (2011)



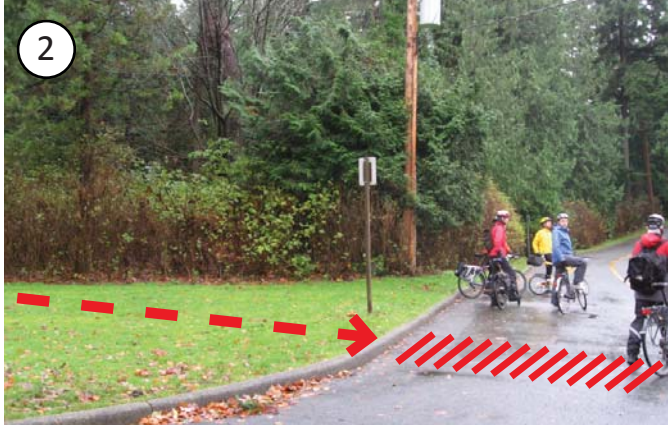
ISSUE #2: Wrong-way cycling on the Seawall, especially from Brockton Point to Devonian, and from Second Beach to Third Beach

Recommendation 2b: Create cycling access from Third Beach Concession to Seawall				
Option	Description	Pros	Cons	Considerations
1	Create “switchback” path to Seawall, maintenance access to remain on existing path.	Creates universal access from beach and Seawall to washrooms and concession stand above. Channels cyclists to less congested area than Option 2. Removing the service road affords some green space balance. Option to park bikes on the top of the “hill” relieves the pressure of bicycle parking congestion at Third Beach.	Construction cost.	New shared use path would provide an alternative for young or inexperienced cyclists. Consider removing the south service road for ecological compensation.
2	Route cyclists across parking lot entrance and to concession stand.	Confident cyclists can use existing service roads. Option to park bikes on the top of the “hill” relieves the pressure of bicycle parking congestion at Third Beach.	The north service road directs cyclists to an already congested area. No accommodation for those with limited mobility.	Add signage identifying steep slope of service road.

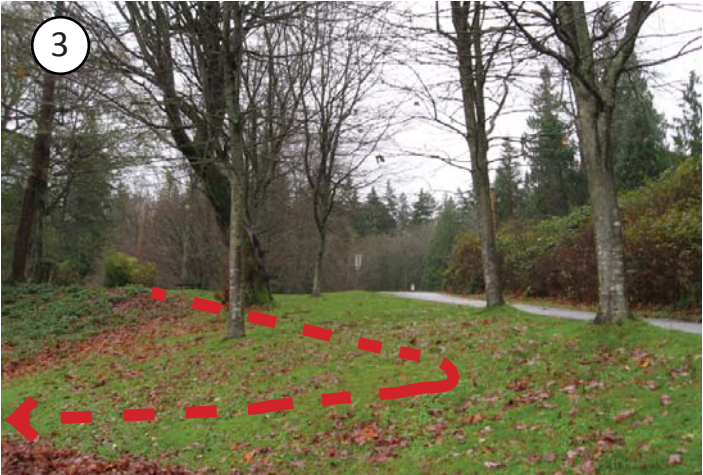


Description:  
Option “1”  
Option “2”

North service road  
Option 2: route cyclists across parking lot entrance and to bike racks at concession stand.  
Option 1: create “switchback” path to Seawall; maintenance access to remain on existing path. Install additional bike racks at top of hill.  
South service road  
to Rawlings Trail



Options 1 and 2  
New pathway along forest with a raised crossing at parking lot entrance.



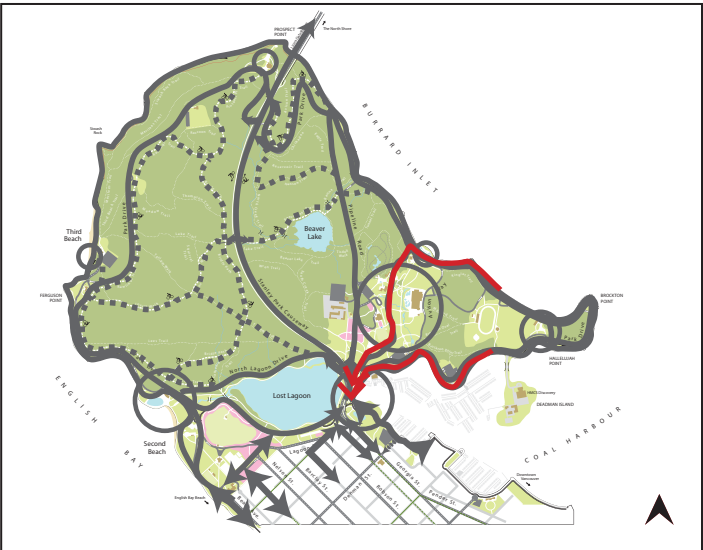
Option 1  
Cyclists gain access to Third Beach via a new “switchback” pathway. Bike racks can be provided at the top of the slope, or cyclists can lock their bikes at the bottom of the slope on existing racks. Additional bike racks may be required adjacent to the existing bike racks.

Recommended Option: Both options would improve access for pedestrians and cyclists. Option 1 could allow for universal access between the beach and concession stand. In both options, cyclists should be encouraged to park on the top of the “hill” by the parking lot to relieve the pressure of bicycle parking congestion at Third Beach.



ISSUE #2: Wrong-way cycling on the Seawall, especially from Brockton Point to Devonian, and from Second Beach to Third Beach

Recommendation 2c: Direct cyclists returning to downtown from Brockton Point via Lumbermen's Return Route (1a)				
	Description	Pros	Cons	Considerations
	Wrong way cycling on the Seawall may be mitigated by directing cyclists to use Lumbermen's Return Route (1a). This new return route will offer cyclists an option to return to downtown without cycling the entire length of the Seawall.	Path skirts intensively used open spaces with few conflict points. Provides access to all users along Heritage Rock Garden and provides a convenient connection to transit.	Adds more hard surfacing in park.	Signage required at the bus stop to direct cyclists to designated paths, and on the Seawall to direct users.
Recommendation 2d: Close one lane of Park Drive for returning cyclists following special events				
	Consider temporary closure of one lane of Park Drive for use by cyclists to return to downtown following large scale events at Brockton Point.	Provides return route from Brockton Point following large scale events - particularly evening events such as "Summer Live," as this section of Park Drive (as far as Avison Way) is lit.	Recurring cost of traffic control personnel to establish and enforce route.	Transportation Study required. Coordination and temporary signage may be the responsibility of the event organizers.



Description:

Direct cyclists via Lumbermen's Return Route

Temporary event counterflow lane on Park Drive



## THEME: FACILITY CONSTRAINTS





ISSUE #3: Insufficient bike parking at major attractions

Recommendation 3a: Monitor bike usage on existing racks on an on-going basis and add or relocate racks as necessary to meet demand

Description	Pros	Cons	Considerations
Record usage of all racks two or three times a year, particularly in summer.	Ensure sufficient bike parking at attractions throughout the park.		Explore bike parking at Brockton Point and the Miniature Train. Engage operators of attractions for input into rack locations.

Recommendation 3b: Create a bike valet policy for special events held in Stanley Park

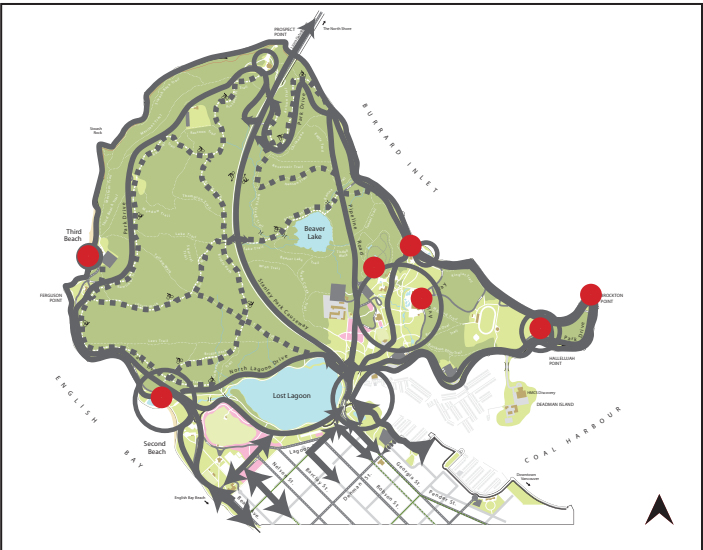
Create a policy requiring bicycle valet parking service at large scale public events held in Stanley Park.	Will encourage cycling to event locations where bike and car parking are in short supply.		A bike valet program was used during the Summer Live music event in Stanley Park.
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Recommendation 3c: Use temporary bike racks during special events

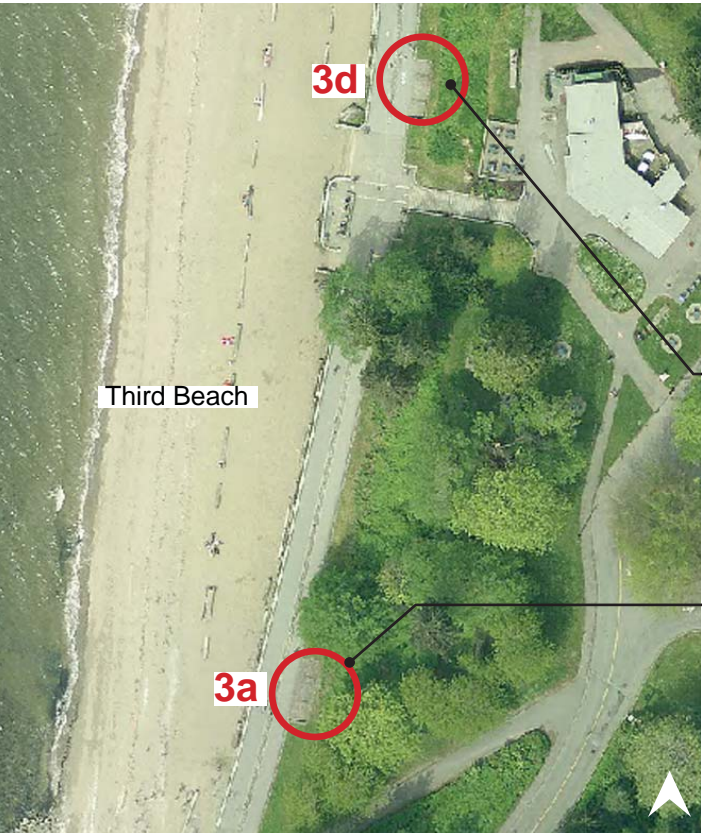
Use temporary bike racks at popular destinations during peak visitor months, or special events.	Draws people to park knowing they have a safe place to lock their bikes.	Cost might be better invested in establishing permanent racks.	The City of Vancouver has some temporary bike racks available for short term or special events.
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Recommendation 3d: Enlarge bike rack area at north end of Third Beach

Install additional permanent racks at the north end of Third Beach where demand is high.	Provides secure parking for visitors to Third Beach.	A small amount of greenspace loss.	
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Location:
Attractions, activity areas, restaurants and points of interest.
Description of problem:
Popular destinations are often lacking sufficient bike parking space especially in summer months.
Modes affected:
Cyclists and other users who may be impacted by bikes overflowing onto pathways.
Relevant data:
Potential Bike Rack Locations in Stanley Park (Vancouver Park Board, August 2010)
Consultation Feedback:
“Often for larger events (like the movie nights) there isn’t enough bike parking and ppl are left locking their bikes to swing sets, slides, fences and anything else they can lock to.”
Source: Stanley Park Cycling Questionnaire (2011)



Enlarge rack area at north end of Third Beach.

Monitor racks at south end. They are currently seldom used but increased demand could result if Recommendation 2b (switchback path) is implemented.

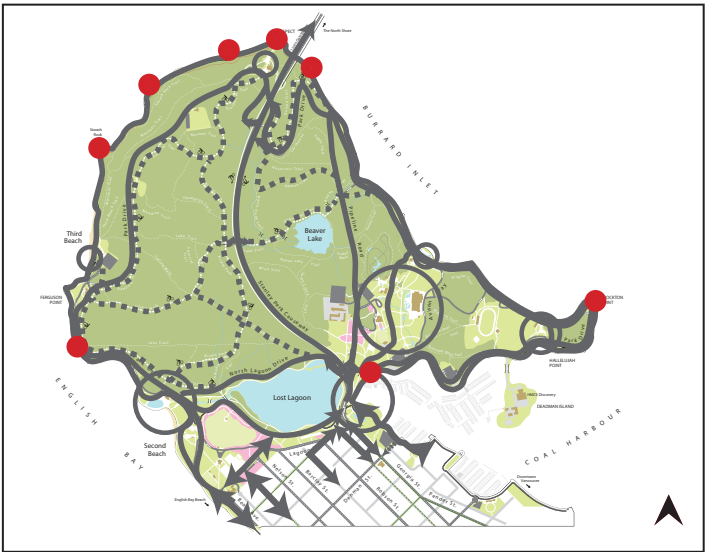


Bike parking demand is high at popular destinations such as Third Beach (Mother’s Day 2009).



ISSUE #4: Pinch Points at several locations along the Seawall

Recommendation 4a: Install advance warning signage and remove site furniture at Seawall pinch points				
	Description	Pros	Cons	Considerations
4a	<div>Install advance warning signage including:<ul style="list-style-type: none"><li>Continuous reminders along Seawall that the cycling pathway is for recreational cyclist use, and that pedestrians have priority.</li><li>Signage directing fast cyclists onto Stanley Park Drive.</li><li>Warning signs in advance of pinch points and changing conditions.</li></ul>Remove site furniture at pinch points including:<ul style="list-style-type: none"><li>Trash cans and benches in vicinity of pinch points.</li><li>Remove and replace post and rail fences at pinch points with more handle-bar friendly barriers, or retrofit with a rub rail.</li></ul></div>	Signals to users to slow down in advance of pinch points.		
Recommendation 4b: Widen the Seawall at pinch points (through Seawall extension or cantilever)				
4b	Widen the Seawall at all pinch points (through Seawall extension or cantilever) as reconstruction may be undertaken in the future. Priority should be given to the Lighthouse and Siwash Rock which are pinch point locations, but also viewpoints.	Extensions or cantilevers at these locations would increase public amenity space as well as reduce conflict and safety concerns resulting from pinch points.	May be cost prohibitive. Detailed design is required.	Contingent on future ecological evaluation and discussion with fisheries.



Location:
Majority of pinch points are between the Lighthouse and Siwash Rock. Pinch points also exist between Second Beach and Third Beach, east of the Lions Gate Bridge, at the Rowing Club, and at Brockton Point where parked cars overhang the bicycle path.
Description of problem:
Cyclists attempt to unsafely pass rollerbladers and slower riders. Lack of sight distance around corners is a safety issue. Safety issues associated with pinch points are compounded by drainage channels on left side (inside) of seawall, concrete structures at edge of bicycle path (no warning markings), railing (at Siwash Rock), and debris accumulated on path.
Modes affected:
Cyclists, pedestrians, other active transportation modes.
Consultation Feedback:
“The seawall bike path has pinch points and can be slow-going for cyclists at peak periods during the short recreational cycling season. Slow cycling speeds during busy times are a very good thing because they make the path much safer for families with little kids wobbling and weaving all over the path.”
Source: Stanley Park Cycling Questionnaire (2011)



Typical pinch point.



Pinch point with no vertical separation.



A blind corner with a pinch point at Siwash Rock. The existing post and rail fence should be replaced as it can “snag” handlebars.



Cantilevered trail example (Penticton, BC).



ISSUE #5: Physical separation (curb) on portions of the Seawall can be a tripping hazard

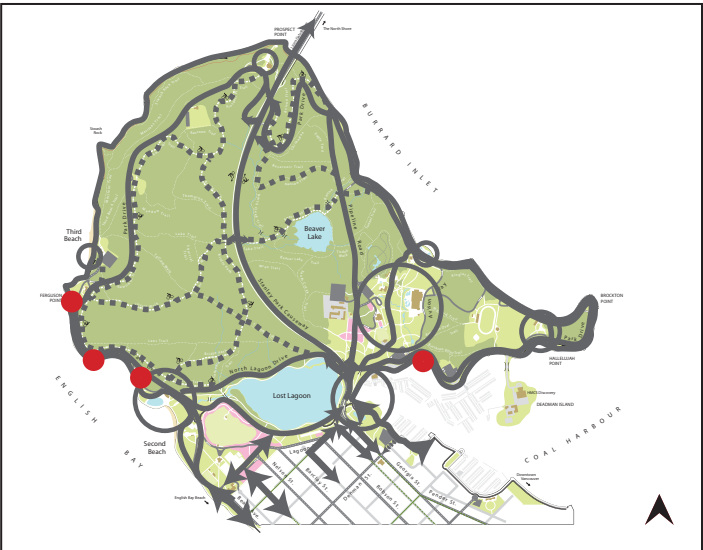
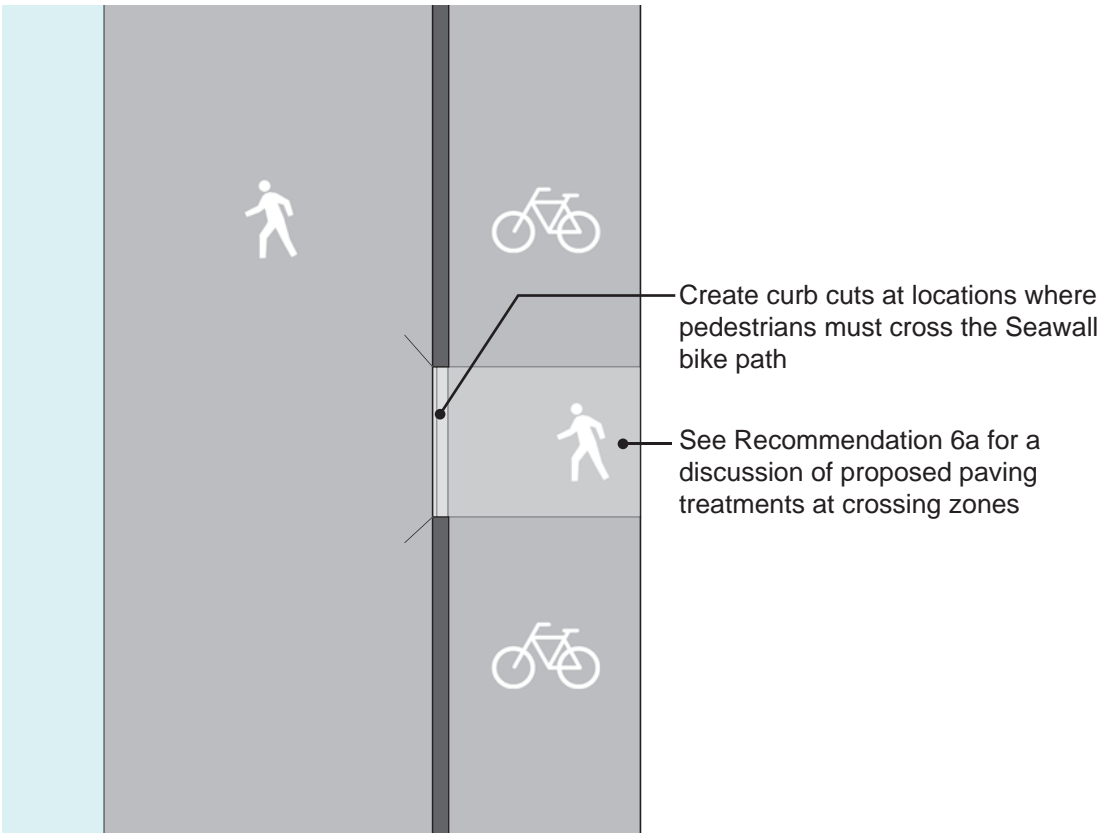
Recommendation 5a: Create curb cuts where pedestrians must cross the Seawall bike path			
Description	Pros	Cons	Considerations
Create drop or curb cuts at locations where pedestrians and wheelchair users must cross the Seawall.	Eliminates trip hazard at crossing locations.		<p>Curb cuts are required at many locations on the Seawall where the bike path is vertically separated with a curb. The adjacent map indicates several of these locations.</p> <p>Routes where pedestrians cross the Seawall should be further defined with crossing treatments (see Recommendation 6a).</p>



The Seawall has several locations where pedestrian paths cross the bike/rollerblade path, however the pedestrian path is not clearly delineated.



Example of an existing curb cut in place at a pedestrian crossing.



Location:
Where pedestrians must cross the Seawall. Includes locations where the bike path is vertically separated with a curb, such as the first 500 m of the Seawall, at the Teahouse, and near Ferguson Point.
Description of problem:
<p>Pedestrians walking across the Seawall often do not see the curb between the pedestrian and bike path and trip on it or off it. The curb is not painted in Coal Harbour section, while elsewhere a red line is used to mark the edge of the physically separated bicycle path.</p> <p>In some locations, benches are on the far side of the cyclist portion of the Seawall requiring pedestrians to cross the bike path in order to sit down.</p>
Modes affected:
Cyclists, pedestrians, other modes of active transportation.
Consultation Feedback:
"The curb between the pedestrian side of the path and the cyclist side is dangerous."
Source: Stanley Park Cycling Questionnaire (2011)



## THEME: CONFLICTS BETWEEN USER GROUPS

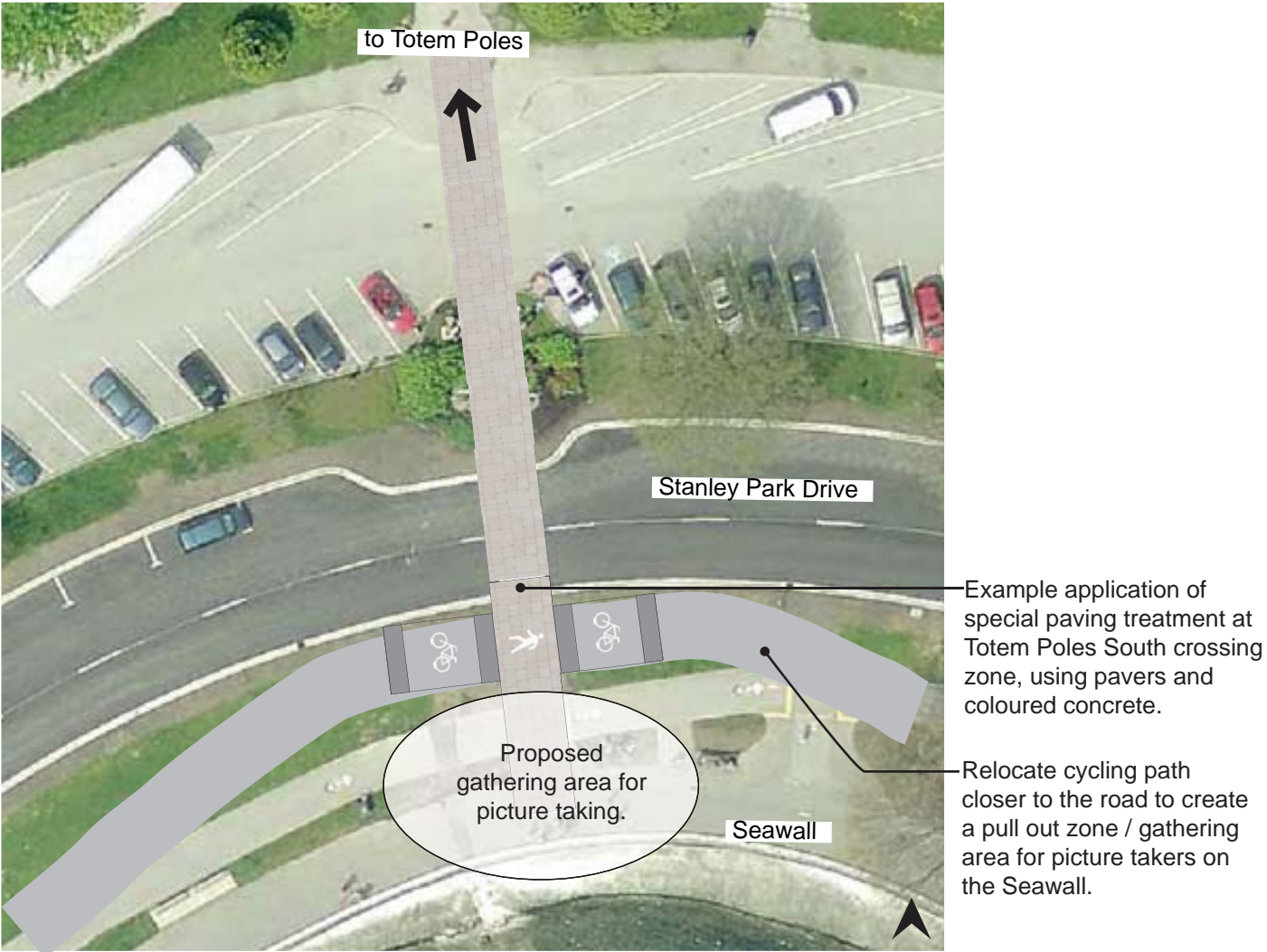




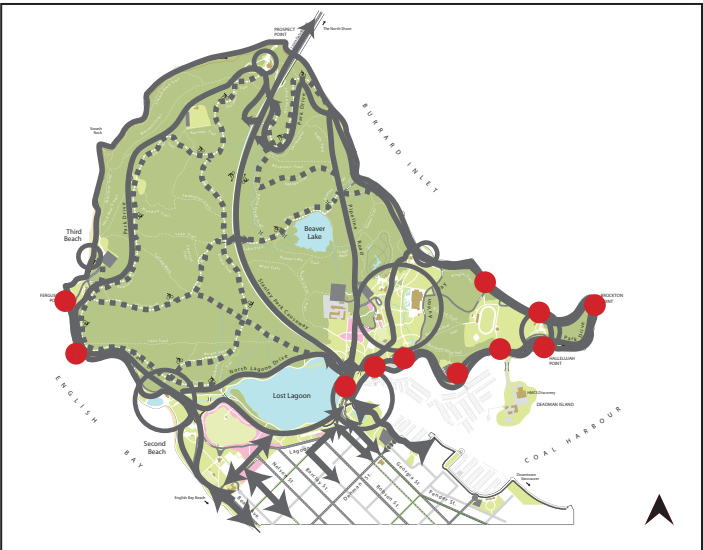
ISSUE #6: Pedestrian and cyclist conflicts at: Brockton Point, Totem Poles, Hallelujah Point Intersection, and pedestrian crossings of the bike path

Recommendation 6a: Use consistent treatments at crossing/conflict zones			
Description	Pros	Cons	Considerations
Use consistent language and materials at crossing/conflict zones that send the message “pedestrians first” and “slow down ahead” - refer to Crossing Toolbox below for proposed options. Create pull out zones for park maps so pedestrians do not spill onto the Bike/Rollerblade path. Relocate the bike path south of the Totem Poles to allow for a gathering area between the bike and pedestrian paths. Reconfigure the Belevedere north of Totems to reduce conflicts with pedestrians accessing the viewpoint and Seawall.	Does not rely solely on signage or enforcement. Message is reinforced when used consistently throughout the park.		The south side of the Totem Poles is a good location to “test” a new crossing application. A pilot project could be implemented in conjunction with accessibility upgrades at the Belevedere north of the Totem Poles. It is important that a consistent language of crossing types and materials be applied across the park.

Totem Poles South crossing zone



Crossing Toolbox	
A - Special Paving	
Use of a different surface material such as pavers, concrete, coloured concrete or similar material in the crossing channel.	
B - Raised Crossing	
Crossing maintains a consistent raised elevation.	
C - Zebra Crossing	
A type of pedestrian crossing distinguished by alternating dark and light stripes on the paving surface.	



Location:
Brockton Point, Brockton Oval, Totem Poles (north and south), Hallelujah Point intersection, Info Centre and pedestrian crossings of bike path.
Description of problem:
Conflicts arise due to lack of clarity as to who has the right-of-way (pedestrians). Non-standard signs and pavement markings e.g., yellow “stop bars” on the bike path are not universally recognized.  At the Totem Poles (south side), a large number of pedestrians on the Seawall spill onto the bicycle path. In peak season, a ranger is here expressly to alleviate this pressure. At the Totem poles (north side) pedestrians climbing the Belevedere stairs from the Seawall are not visible to approaching cyclists (and vice versa) due to the railing and people on the viewing platform.  At Brockton Point pedestrians frequently walk along the bicycle path to and from parked cars.
Modes affected:
Cyclists, pedestrians, other active transportation modes.
Consultation Feedback:
“There are often tourists standing on the cycling path where the buses stop outside of the totem poles.”
Source: Stanley Park Cycling Questionnaire (2011)



ISSUE #6: Pedestrian and cyclist conflicts at: Brockton Point, Totem Poles, Hallelujah Point Intersection, and pedestrian crossings of the bike path

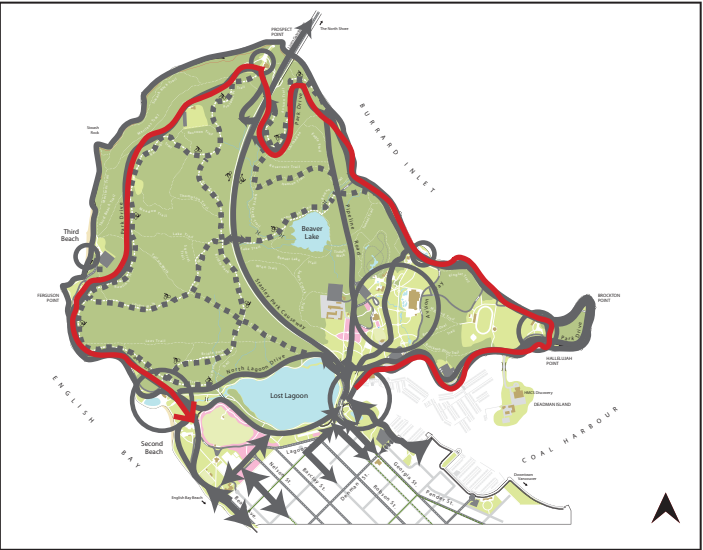
Recommendation 6b: Make Park Drive safer for training cyclists to reduce Seawall congestion and conflicts				
	Description	Pros	Cons	Considerations
i	Speed enforcement (vehicle)	Efforts to make Stanley Park Drive safer for exercise cyclists are expected to result in significant benefits for all users.		
ii	Traffic calming on Stanley Park Drive, such as: <ul style="list-style-type: none"><li>Curb extensions (especially at cross walks where there is a parking lane) with provision for cyclists to not have to enter the travel lane;</li><li>Speed tables, and speed cushions to discourage excessive speed, and</li><li>Raised pedestrian crosswalks, and/or “special crosswalks” (with pedestrian-actuated solar-powered flashing amber lights) at high volume crossings.</li></ul>	Efforts to make Stanley Park Drive safer for exercise cyclists are expected to result in significant benefits for all users.		Consider removing a motor vehicle lane to provide a bike lane at key locations, including the hill up to Prospect Point.
iii	“Share the Road Signs” and sharrows should be installed on Park Drive at locations where the travel lane is in excess of 4.3m wide. Motorists should be directed to pass cyclists in sections of Park Drive that are too narrow for lane sharing.	Efforts to make Stanley Park Drive safer for exercise cyclists are expected to result in significant benefits for all users.		Where there is sufficient space, re-mark to provide bike lanes, or re-mark the lanes to provide right hand vehicle lanes wide enough for lane sharing.
iv	Add signage announcing opportunities to join Park Drive from the Seawall (e.g., Lumbermen’s Arch, Prospect Node, Tunnel Trail).	Takes advantage of spare capacity on the roadway and reduces demand and conflicts on the Seawall.		
v	“Fun” signs on the Seawall telling exercisers to use Stanley Park Drive (examples below).	Takes advantage of spare capacity on the roadway and reduces demand and conflicts on the Seawall.		Note: humorous messaging should not be used on regulatory or warning signs.

“Fun” signage ideas to encourage exercise cyclists to use the road:

“*Real* exercisers use the road - go try it!”

“Let off a head of steam - try the road!”

“Hey exercisers, take a challenge - ride the road!”

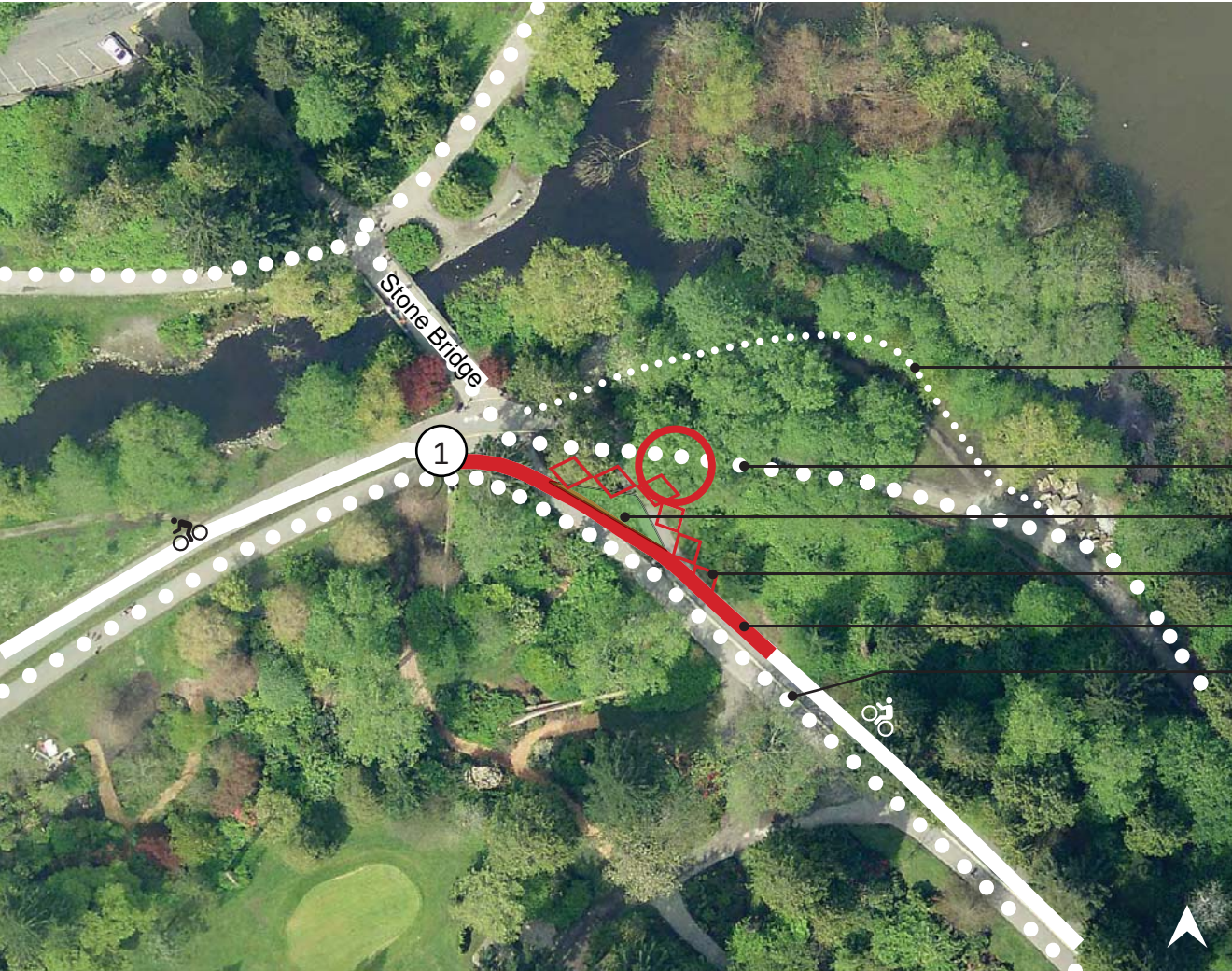


Location:
Seawall
Description of problem:
There is congestion on the Seawall especially in summer months. Conflicts arise when users try to share narrow spaces, especially during peak use times. Recreational cyclists travelling at a leisurely pace may impede exercise cyclists wanting to travel at higher speeds, resulting in conflicts. Pedestrians have also reported conflicts with cyclists travelling at high speeds and using the pedestrian path to pass slower users on the Bike/ Rollerblade path.
Modes affected:
Cyclists, pedestrians, motorists and other active transportation modes.
Relevant data:
Totem Poles are the busiest pedestrian tourist destination in park (Rangers).





ISSUE #6: Pedestrian and cyclist conflicts at: Brockton Point, Totem Poles, Hallelujah Point Intersection, and pedestrian crossings of the bike path


Recommendation 6c: Re-route the bike/rollerblade path at Lost Lagoon stone bridge south of planted island				
	Description	Pros	Cons	Considerations
	Re-route Bike/Rollerblade Path to the south side of planted island.	Eliminates unclear intersection where cyclists mistakenly take gravel pedestrian only path adjacent to Lost Lagoon. Improves sightlines and simplifies movement.		Decommission and re-vegetate bike path north of the planted island.



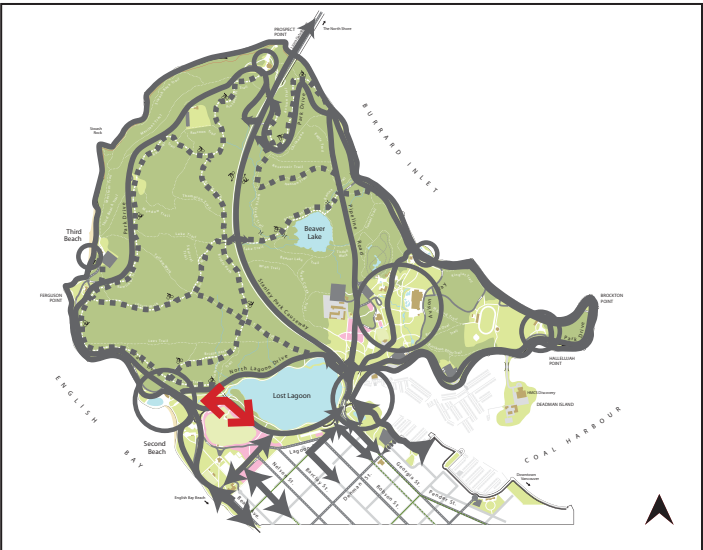
Description:

Re-routing of Bike/Rollerblade Path 

 Conflict Point Eliminated

 Decommission and revegetate path

- Informal walking trail
- Existing walking path
- Planted island
- Decommission and revegetate bike path north of the island
- Re-route Bike/Rollerblade Path to south side of the planted island
- Existing walking path

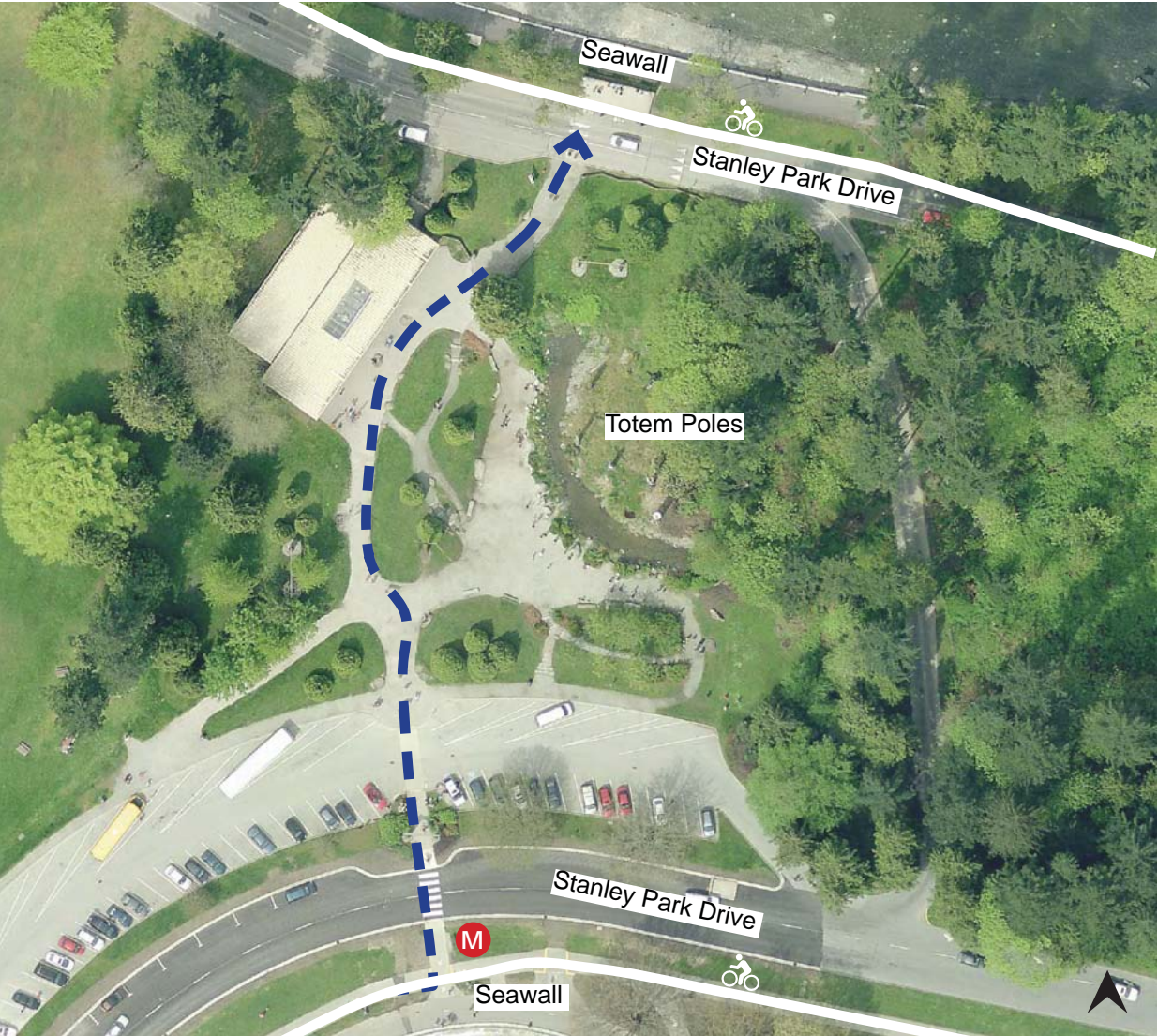
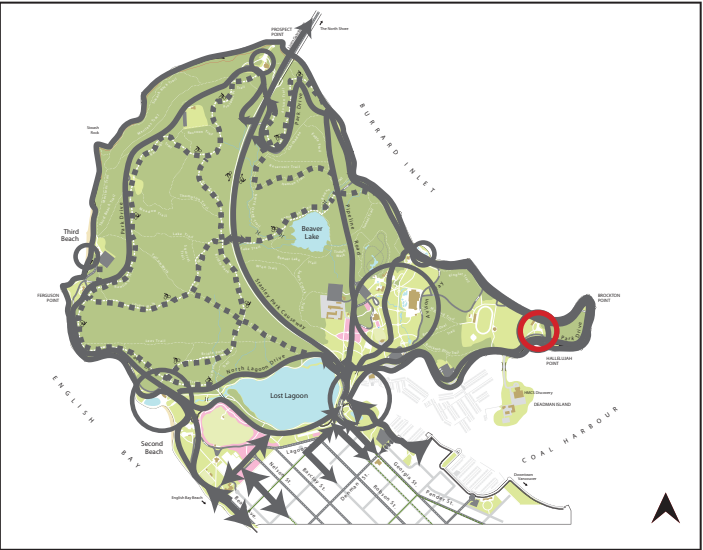


Location:
Stone bridge at west end of Lost Lagoon.
Description of problem:
A merging of multiple paths at the stone bridge confuses separation between cyclists and pedestrians.
Many cyclists miss the sharp right turn of the bike path after the planted island and inadvertently continue onto a gravel path reserved for pedestrian use.
Modes affected:
Cyclists, pedestrians and other active transportation modes.
Consultation Feedback:
"There needs to be something done about the intersection at the stone bridge (at lost lagoon). Cyclists don't go on the right path and it's very hard as a pedestrian to get to the path for walkers without getting on the cyclist path."
Source: Stanley Park Cycling Questionnaire (2011)



ISSUE #6: Pedestrian and cyclist conflicts at: Brockton Point, Totem Poles, Hallelujah Point Intersection, and pedestrian crossings of the bike path

Recommendation 6d: Improve cyclist wayfinding to and from the Totem Poles				
	Description	Pros	Cons	Considerations
	Enhance signage directing cyclists dismounting at the Totems south side to push their bikes through to rejoin the Seawall on the north side.	Improves wayfinding in a busy area. Allows cyclists visiting the Totems to bypass Brockton Point and return to the Seawall on the north side.	May further congest the Totem Pole area.	Consider enhancing with raised crossing.



Description:  
Enhanced wayfinding signage along route to direct cyclists

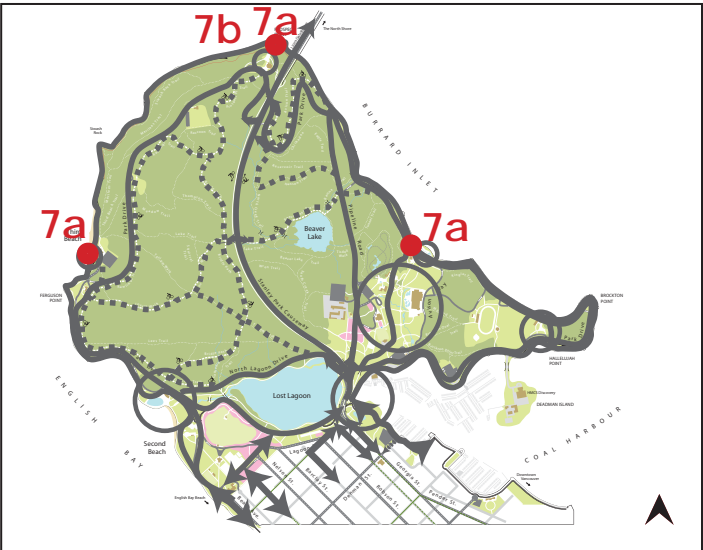
M Large format park map

Location:
Totem Poles
Description of problem:
Cyclists who dismount and visit the totems are unaware of the opportunity to bypass Brockton Point and return to the Seawall directly north of the Totems.
Modes affected:
Cyclists, pedestrians, motorists and other active transportation modes.
Consultation Feedback:
“Pedestrian/tourist traffic jams are common in some locations, i.e., the totem poles.”
“The crosswalk near the Totem Poles is often too busy, other road users have to wait a very long time for a clear spot.”
Source: Stanley Park Cycling Questionnaire (2011)



ISSUE #7: Congestion and conflict with pedestrians at dismount areas

Recommendation 7a: Use a textured paving strip and advance warning signage at beginning and end of dismount areas				
	Description	Pros	Cons	Considerations
	Use a change in paving material (textured strip) and consistent advance warning signage to indicate beginning and end of dismount areas.	Clearly defines extent of dismount area.		
Recommendation 7b: Widen Seawall (through Seawall extension or cantilever) to eliminate need for dismount area at Lighthouse				
	Widen the Seawall through seawall extension or cantilever as reconstruction may be undertaken in the future (see pinch point recommendation #4b).	Would increase public amenity space as well as reduce conflict and safety concerns.	Construction cost.	Contingent on future ecological evaluation and discussion with fisheries.



Description:

Widen Seawall through Seawall extension or cantilever (long-term)



Cyclists frequently do not dismount at the Lighthouse leading to conflicts with other users in this often congested area.



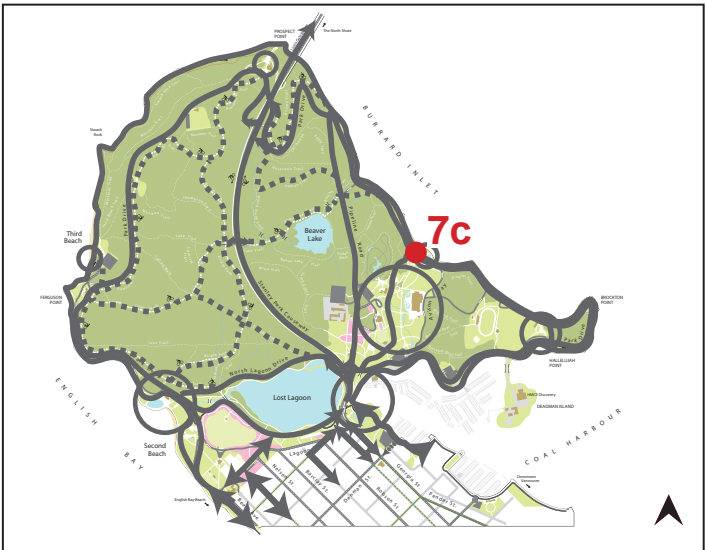
Install a textured paving strip to define dismount and remount locations.

Location:
Kids Water Park, Prospect Point Lighthouse, Third Beach.
Description of problem:
Dismount areas create severe congestion and line-ups for cyclists. Cyclists frequently do not dismount in these zones. Many cyclists do not dismount at the Lighthouse (blind corner), and many ride on the pedestrian path to avoid dismount baffles. The extent of dismount areas is often unclear.
At the Kids Water Park - tree roots are buckling the pathway leading up to the baffles – especially hard for novice cyclists and rollerbladers. Cyclists familiar with the area often ride onto the Seawall in advance of the Water Park to avoid dismount baffles and ride through Water Park.
Modes affected:
Cyclists, pedestrians, other active transportation modes.
Relevant data:
Rangers issue an average of 200 dismount requests per week in peak months of June - August. This is their most frequent cycling related issue (Ranger Incident Reports 2011).

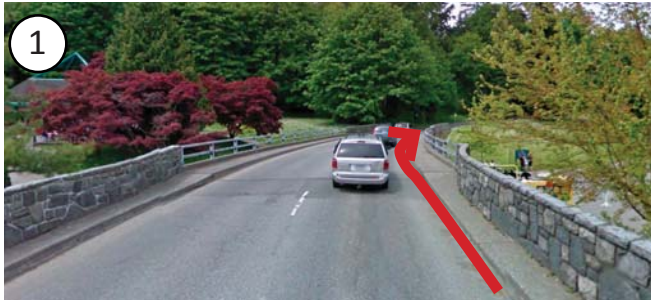


ISSUE #7: Congestion and conflict with pedestrians at dismount areas

Recommendation 7c: Implement a bike/rollerblade bypass route at the Kids Water Park				
	Description	Pros	Cons	Considerations
STAGE 1	Remove one vehicle lane at bridge and direct cyclists over bridge to enable an easy and safe bypass of the Water Park.	Makes use of existing infrastructure to separate user types. Eliminates major conflict zone and the need to dismount. Facilitates improved wheelchair access from the parking lot to the Water Park. Asphalt dismount channel can be removed to be revegetated.	New path required across slope, west of Water Park. Single vehicle lane could contribute to motor vehicle congestion at Avison Way exit.	Consider elimination of service vehicle access north of water park when new bypass path is constructed (subject to review with Park Operations). Requires further traffic study and detail design. Stage 1 access to Lumbermen's Return could be provided via the Kids Water Park.
STAGE 2	Create an additional crossing and "decision point" west of the bridge. Returning cyclists cross Park Drive behind concession to the Lumbermen's Return Route.	Returning cyclists are not required to dismount. Reduces congestion and conflicts at the Kids Water Park and connects to Lumbermen's Return (Recommendation 1a).	Small portion of bridge wall will be removed. Additional crossing may create confusion between bypass and returning cyclists.	Implement Stage 2 after monitoring reduction in dismount zone conflicts. Consider "storage" of turning cyclists/bladers at decision point to avoid conflict with bypass users.



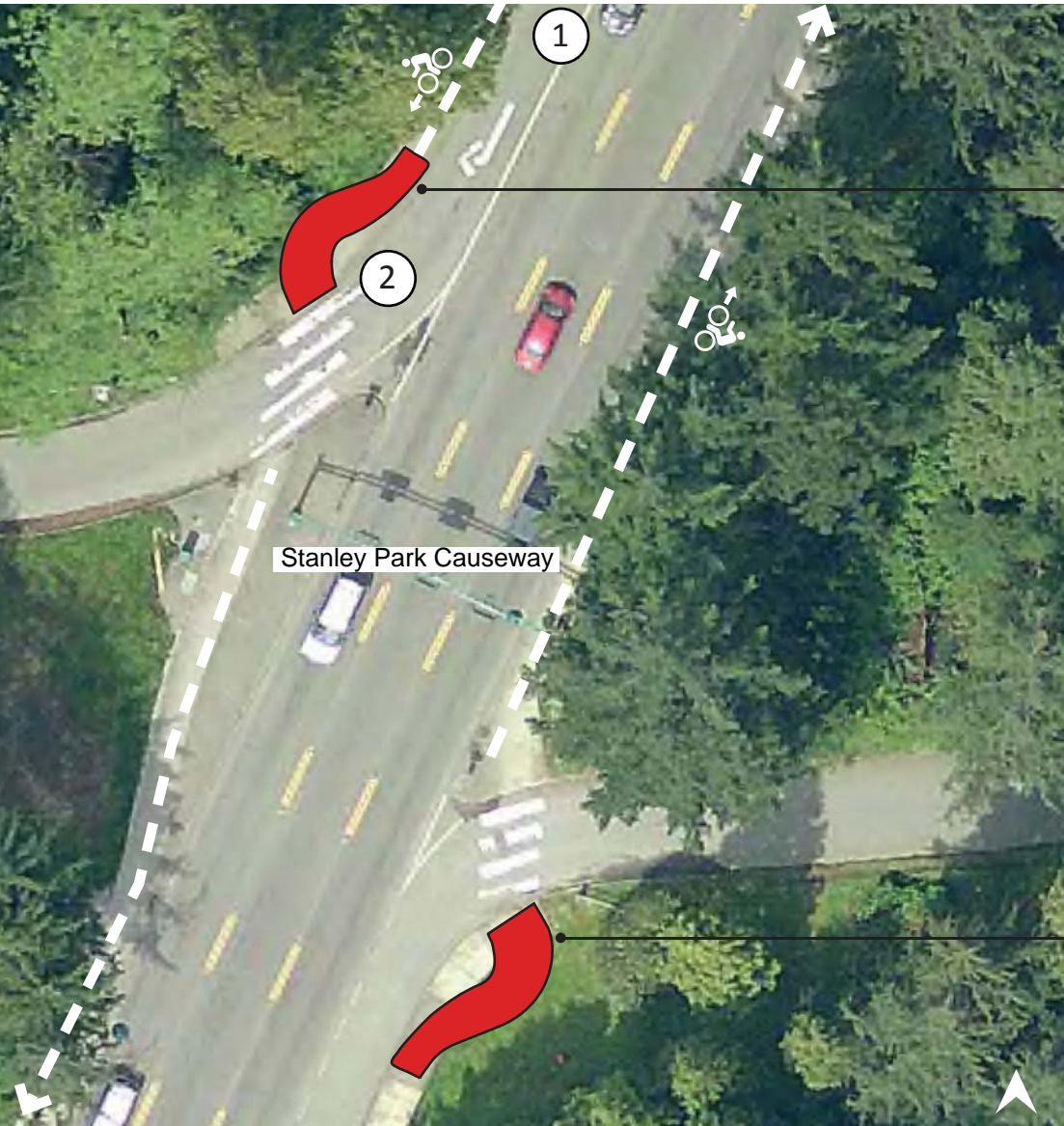
- Description:
- Stage 1: Proposed Bike/Rollerblade Bypass
  - Stage 2: "Loop 1" Return Route Access
  - ||||| New crossing from accessible Parking
  - Decision Points
  - M Large format park map
  - Consider decommissioning service vehicle access when new path is constructed.
  - Create a raised crossing and "Decision Point" with a park map to aid in decision making.
  - Eliminate dismount channel and revegetate.
  - Decision Point for bypass or Water Park access.
  - Reduce Park Drive to one lane for extent of cyclist/rollerblade bypass route.
  - Monitor for potential congestion at Avison Way exit.





ISSUE #8: Conflict caused when users are exiting the Causeway

Recommendation 8a: Create a “jug handle” at the Causeway exit just south of the Lions Gate Bridge				
	Description	Pros	Cons	Considerations
	The “jug handle” places cyclists and pedestrians at an appropriate angle to traffic flow when crossing the traffic lane.	The “jug handle” helps eliminate uncertainty for drivers and improves sightlines for cyclists.		Signage and rumble strips in the deceleration zone should be considered.  A similar condition, though less severe, exists on the northbound sidewalk and could receive a similar treatment.

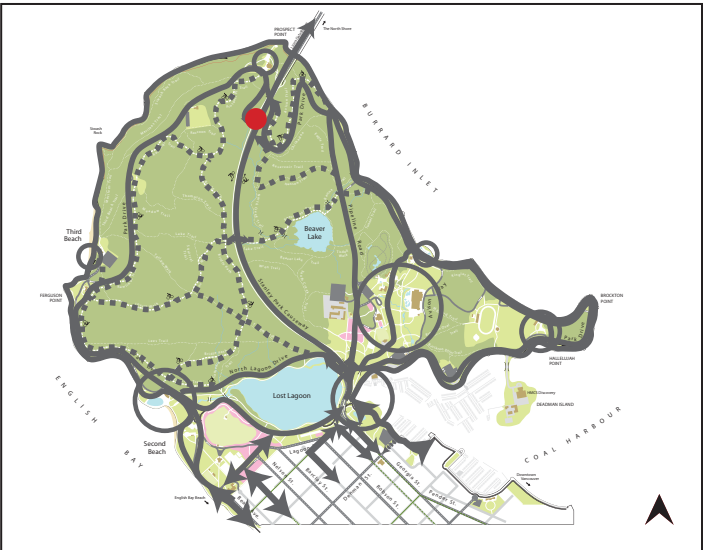


Description:

Jug handle

Construct a “jug handle” on the southbound sidewalk to place cyclists and pedestrians at an appropriate angle to traffic flow when crossing the traffic lane.

A similar condition, though less severe, exists on the northbound sidewalk and could receive a similar treatment.



Location:
Marked crosswalk on exit ramp from Causeway, south of Lions Gate Bridge. A similar condition exists on the northbound sidewalk.
Description of problem:
Conflicts occur when cyclists on southbound sidewalk cross the off-ramp to Stanley Park Drive. Cyclists about to enter the crossing are not able to see approaching motor vehicles exiting the Causeway. Note that the primary cause of the problem is lack of visibility.
Modes affected:
Cyclists, pedestrians, motorists, other active transportation modes.
Relevant data:
Numbers of southbound cyclists on bridge (avg. 566/day, peak 915/day) (CoV Bicycle Counts, 2011). While the potential outcome of a collision between a motorist and a cyclist is severe, the number of vehicles exiting here and the number of cyclists on the Causeway is low relative to numbers elsewhere in the park.



ISSUE #8: Conflict caused when users are exiting the Causeway

Recommendation 8b/13a: Create a pathway connection for cyclists exiting the Causeway southbound onto North Lagoon Drive

Description	Pros	Cons	Considerations
Create a connection for cyclists exiting the Causeway southbound onto North Lagoon Drive	Eliminates conflict with pedestrians on existing walking path.		Pedestrian signage is also required. Consider interim closure of one lane of North Lagoon Drive to Tatlow Walk. Ties in with two-way North Lagoon Road Plan (Recommendation #14b).

Recommendation 8c: Paint bike crossing in green and install speed table where Park Drive exits the park

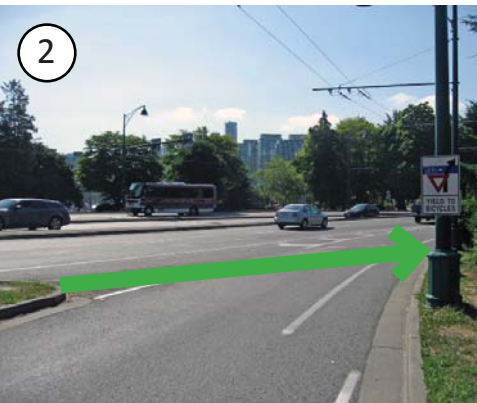
Paint the bike crossing in green in combination with a speed table and rumble strips.	Increases safety of cyclists merging with vehicular traffic exiting Stanley Park.		Consider installing a stop sign where vehicles exit the park onto Georgia Street.
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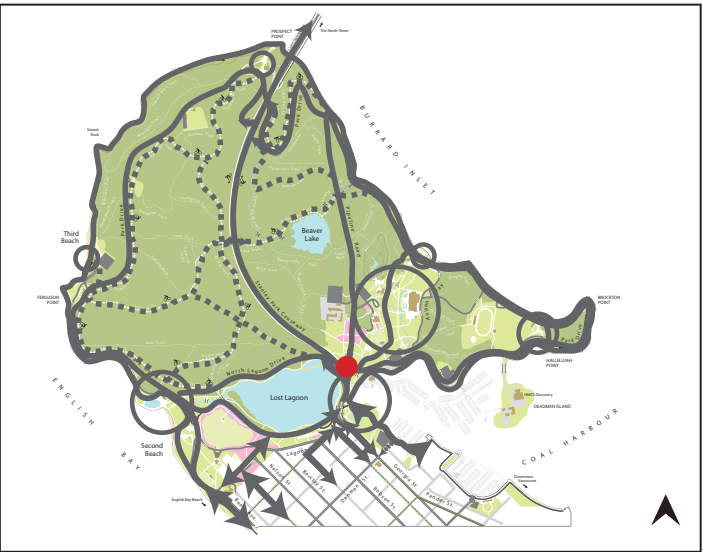
- Description:**
- Proposed one-way bike path (asphalt)
  - New bike path from Causeway sidewalk that "T's" with North Lagoon Drive. Signage should direct cyclists onto North Lagoon Drive.
  - Existing pedestrian route
  - Existing bike box
  - Clarify cyclist and pedestrian directional signage
  - Paint bike crossing in green in combination with a speed table and rumble strips to slow vehicles.



Existing signage on the Causeway southbound sidewalk.



Southbound cyclists on Georgia Street have a difficult shoulder check where they cross vehicles on Stanley Park Drive exiting Stanley Park.



Location:
Connections to and from North Lagoon Drive and two-directional South Lagoon pathway.
Description of problem:
There is a difficult connection for southbound cyclists on the Causeway who exit onto North Lagoon Drive. The sidewalk exiting the Causeway into the park becomes too narrow to be shared with pedestrians, and there is no clear directional signage for pedestrians.
The southbound bike lane on Georgia Street is a problem due to a difficult shoulder check where cyclists must merge with the vehicle lane exiting the park (as reported by Rangers).
Modes affected:
Cyclists, pedestrians, other active transportation modes.



## ISSUE #9: Pedestrian and cyclist conflict at Ceperley Playground and Underpass

**Recommendation 9a: Allow pedestrians to utilize tunnel at Ceperley Underpass, while providing other options to cyclists**

Option	Description	Pros	Cons	Considerations
1	Create a new bike/rollerblade path on east side of Park Drive (around Ceperley Meadow). Turn tunnel over to pedestrians.	Reduces conflict at Ceperley Tunnel where sightlines are poor. Improves streamlining of users and wayfinding back to downtown. Bike path along foot of slope minimizes user conflicts (no crossings).	Additional paved surface. Westbound cyclists may still be tempted to use tunnel.	Construction of new path should include drainage and habitat improvements at Ceperley Meadow as ecological compensation.
2	Widen Ceperley tunnel in the long term to accommodate cyclists/rollerbladers and pedestrians.	Eliminates conflict point and provides greatest connectivity for all users.	Cost of tunnel widening.	Corner radius of bike path should be increased at Adult Fitness Area.



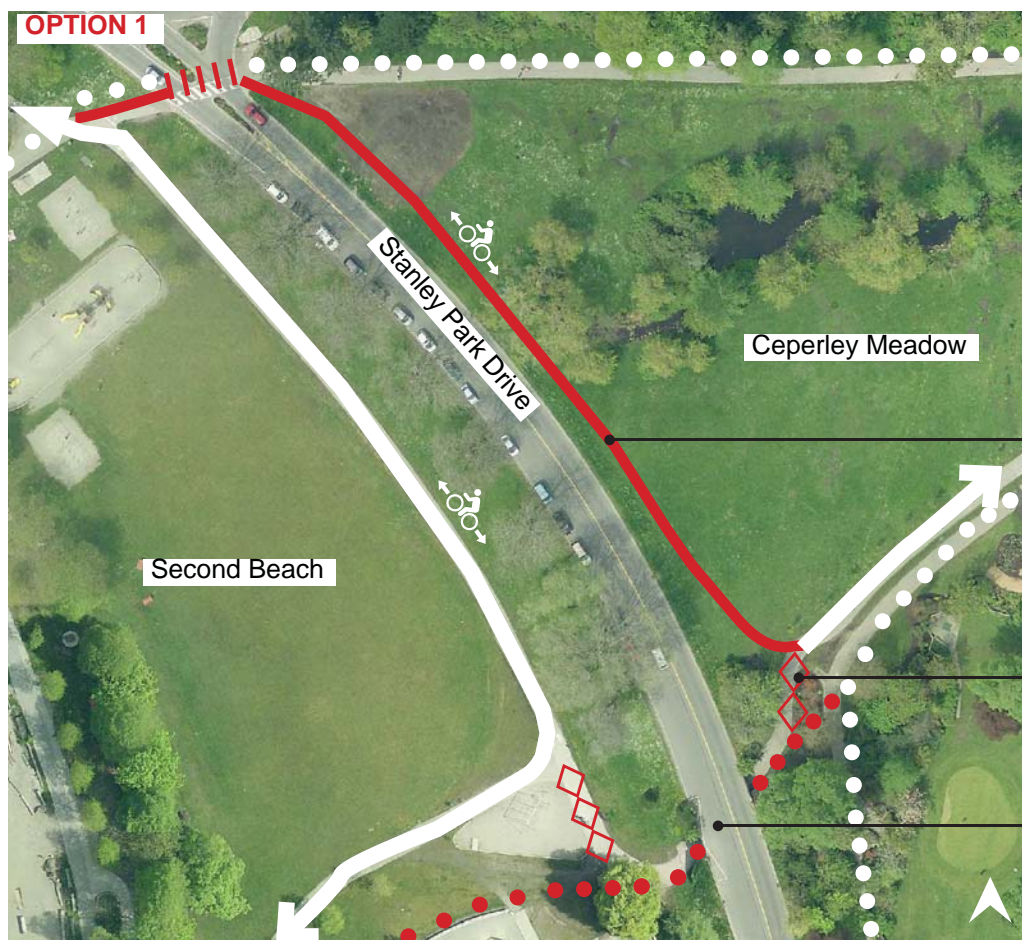
Description:

Option 1: New two-way bike/rollerblade path

|||| Raised crossing

Remove asphalt path

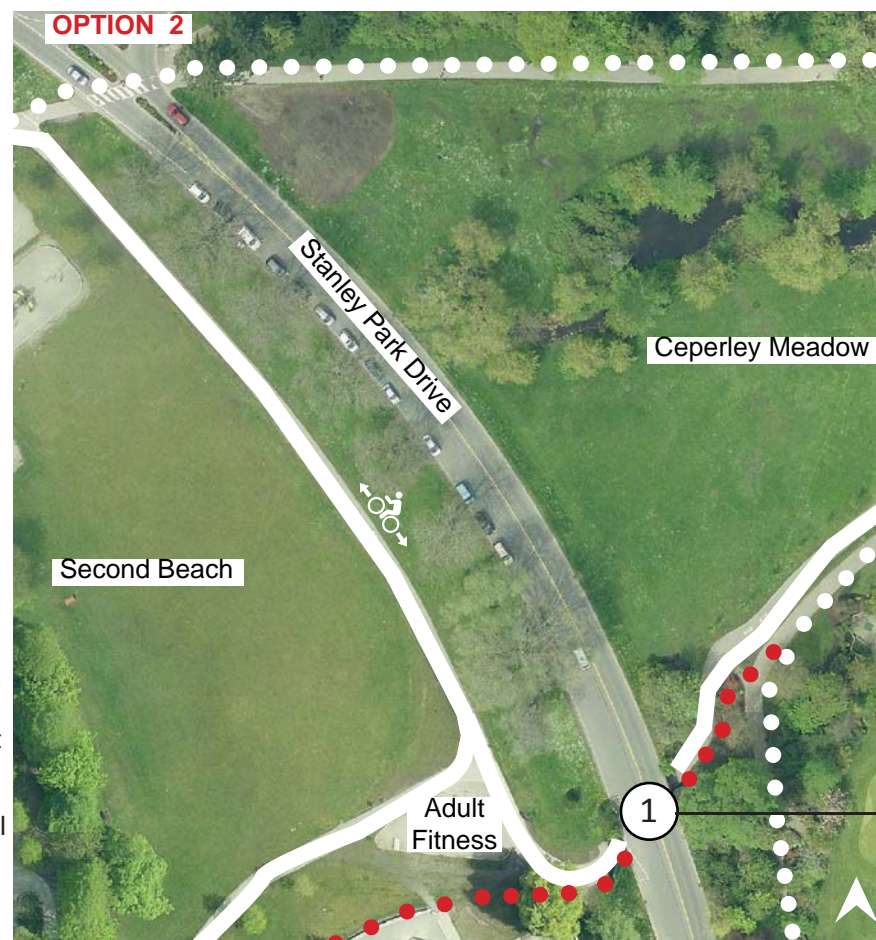
### New walking path



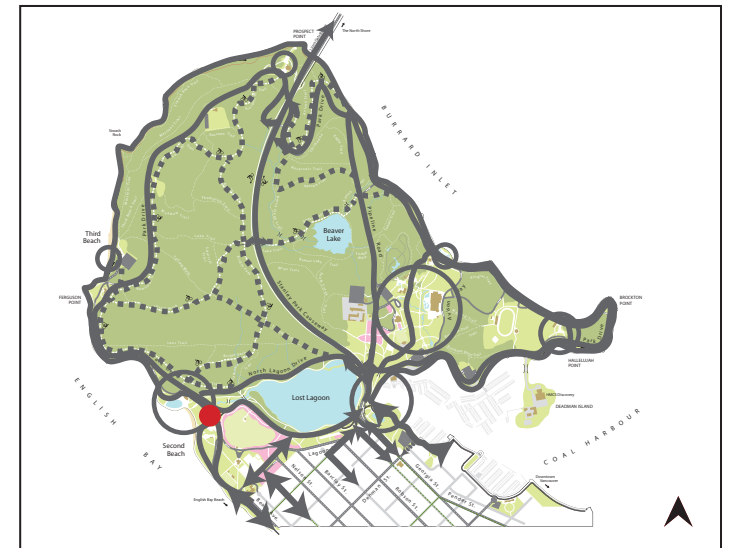
- Create new bike/rollerblade path on east side of Park Drive

- Remove asphalt path to deter cyclist use of tunnel

- Allocate tunnel to pedestrians only



- Widen tunnel to accommodate pedestrians and cyclists



## Location:

Ceperley Tunnel (Stanley Park Drive Underpass north of Ceperley Playground)

## Description of problem:

Though allocated to cyclists only, pedestrians often use Ceperley Tunnel because of a lack of other clearly marked opportunities to cross Stanley Park Drive. This causes conflicts between users due to the narrow width of tunnel and poor sightlines entering and exiting the tunnel.

**Modes affected:**

Pedestrians, cyclists, other active transportation modes.

**Consultation Feedback:**

"Heading from second beach through the tunnel towards lost lagoon is always terrifying! Blind corners with skaters and cyclists zipping through. I'm pretty sure it's not meant for pedestrians but it seems like the other options are a ways out of the way when you're walking."

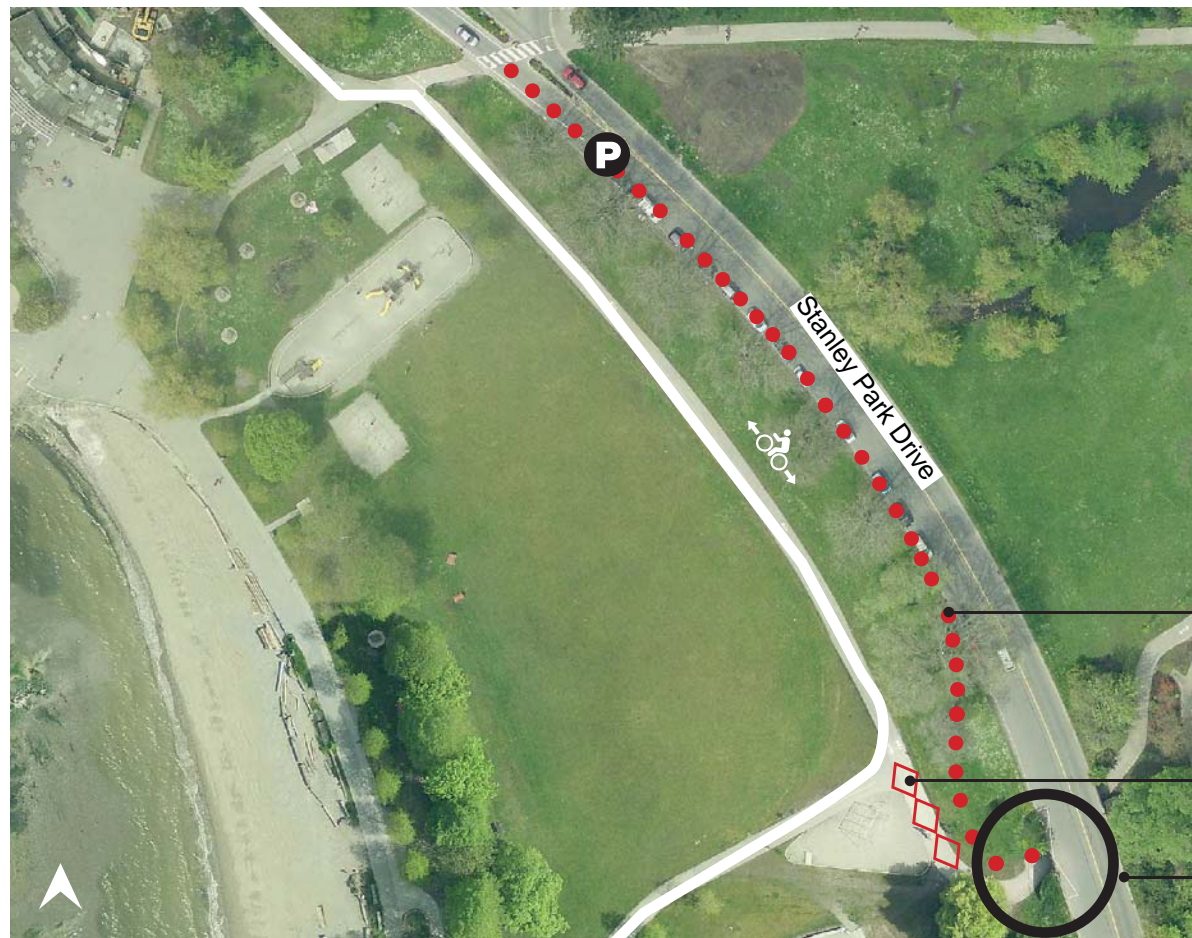
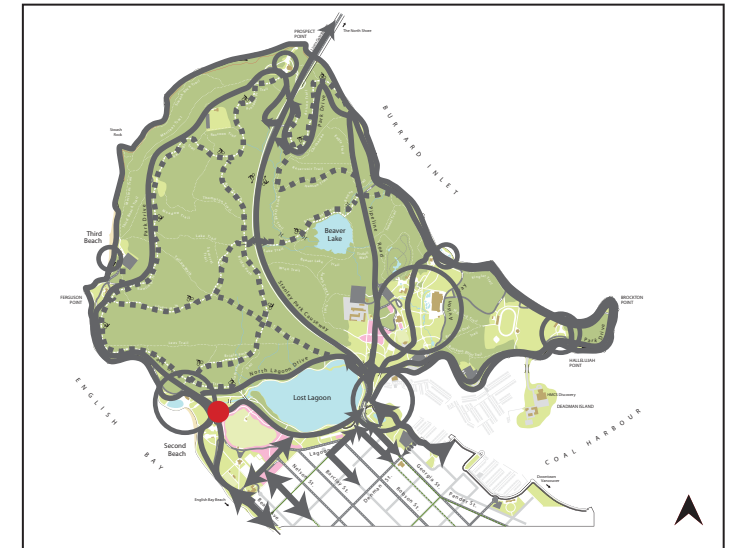
Source: Stanley Park Cycling Questionnaire (2011)



## ISSUE #9: Pedestrian and cyclist conflict at Ceperley Playground and Underpass

**Recommendation 9b: Create new pedestrian sidewalk along Stanley Park Drive at Second Beach**

	Description	Pros	Cons	Considerations
	New pedestrian sidewalk along Stanley Park Drive between Second Beach Pool and Ceperley Playground.	Provides pedestrian access to Pay Station and heavily used parking along Stanley Park Drive. Reduces conflicts caused by pedestrians walking on bike path. Provides clearly defined access to tunnel.	Additional paved surface.	The Second Beach area should be monitored as a site for additional pedestrian improvements based on observed pedestrian patterns once Recommendation 9a is implemented.



Description:

New pedestrian sidewalk (concrete)



Remove asphalt path

**P** Paystation

- Create pedestrian sidewalk along current desire line where current condition forces people to stand on road to use paystation.

- Remove asphalt path to tunnel encourage preferred pedestrian pathway.

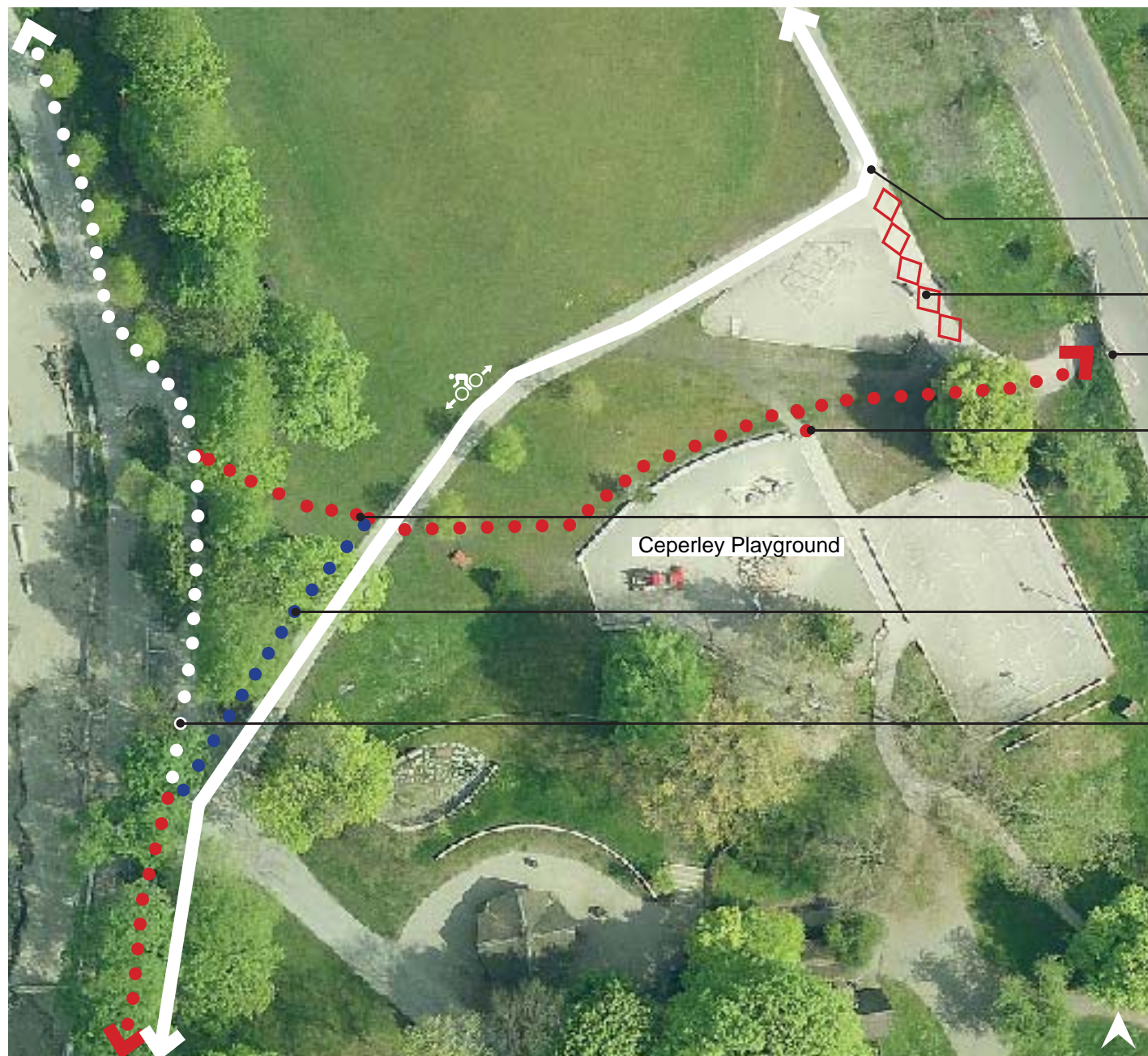
— Ceperley Tunnel Options: See Recommendation 9a, previous page



## ISSUE #9: Pedestrian and cyclist conflict at Ceperley Playground and Underpass

### Recommendation 9c: Create new walking paths at Ceperley Playground

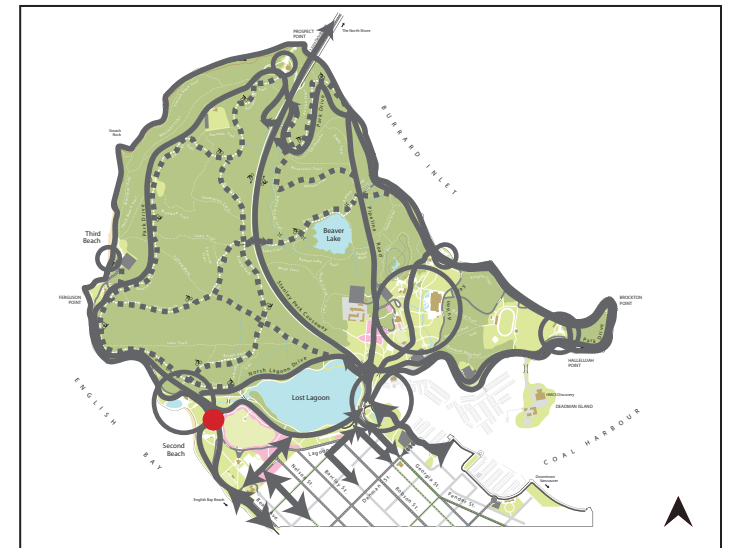
	Description	Pros	Cons	Considerations
	New Walking Paths at Ceperley Playground	Formalizes walking access along current desire lines and reduces conflicts at Bike/Rollerblade Path. Separated walking paths will “tell” pedestrians where to cross the bike path, versus randomly crossing the path with bicycles coming from behind.	Additional paved surface.	Contingent on Recommendation 9a.



Description:

- 
- New walking paths formalized along current desire lines
- Optional new walking path
- Decommission pathway

- Increase corner radius of pathway for cyclists to properly direct them.
- As per Recommendations 9a and 9b.
- Pedestrian-only tunnel. Cyclists rerouted. Contingent on Recommendation 9a.
- Create connection to playground and parking lot to the south.
- Create new walking path along existing desire line.
- (Optional) Create new walking path, separated from the bike/rollerblade path to better channelize pedestrians to the playground.
- Existing walking path





ISSUE #10: Unclear hierarchy and separation on pedestrian and bike path from Second Beach to English Bay

Recommendation 10a: Construct a separate pedestrian sidewalk between Second Beach and English Bay				
	Description	Pros	Cons	Considerations
	Construct a concrete pedestrian path clearly separated from the bike/rollerblade path with a vegetated and/or textured strip.	Eliminates conflict on the existing path and increases clarity for all users.	Increased cost and paved surface.	

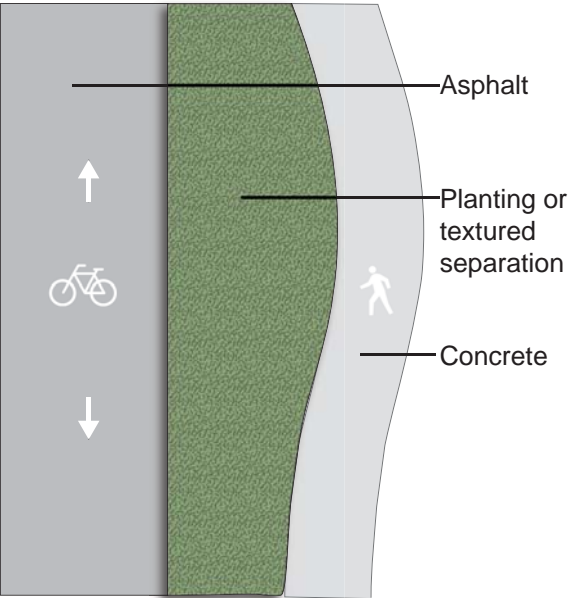


Description:  
.....  
New separated walking path (concrete)

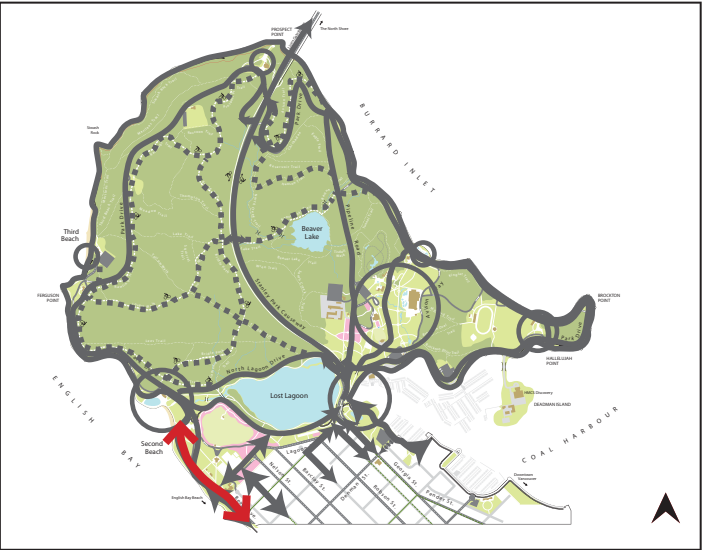
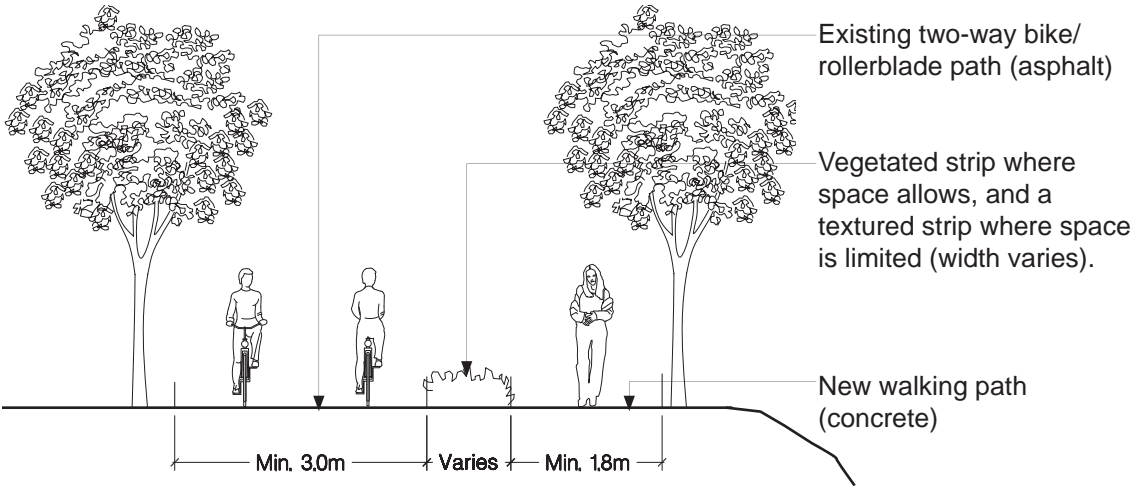


Create a new separate concrete walking path on the water side with a vegetated strip in between.

New Walking Path - Typical Plan View  
Scale: NTS



New Walking Path - Typical Section View  
Scale: NTS



Location:
Seawall pathway between Second Beach and English Bay.
Description of problem:
Confusion is created by inconsistent use and maintenance of the painted yellow line — in some locations it separates directions of travel, while at Second Beach it is separating modes. In addition, the pedestrian/ bike paths switch sides at the entrance to Stanley Park on Beach Avenue, with an inadequately narrow space allocated to pedestrians.
Pavement markings are infrequent and have not been repainted.
Steep hill towards Ceperley Playground is difficult for novice rollerbladers to negotiate.
Modes affected:
Cyclists, pedestrians, and other active transportation modes.
Consultation Feedback:
“Delineating the pathway in areas like English Bay and Second Beach would make life better for most.”
“Along English Bay, pedestrians walk into the bike path. The two paths really really should be separated.”
Source: Stanley Park Cycling Questionnaire (2011)



## ISSUE #10: Unclear hierarchy and separation on pedestrian and bike path from Second Beach to English Bay

**Recommendation 10b: Install signage directing pedestrians to the Seawall at English Bay**

	Description	Pros	Cons	Considerations
	Use of additional signage and a relocation of the pedestrian path along English Bay should be applied to provide a clearer separation of pedestrians and cyclists. Modifications to the traffic island and intersection should be studied in tandem with modifications to Park Lane (17b).	Reduces conflict at a congested area. Some greenspace can be reclaimed with design of a new T intersection at intersection of Park Lane and Beach Ave.	Additional paved surface.	Consider a grand staircase at the foot of Park Lane leading to the Seawall to further improve the pedestrian environment, reduce congestion adjacent to the bike path and create a public amenity at the park entrance.



Description:



New walking path (concrete)



Reallocate to bike/rollerblade path

**M** Large format park map

 Proposed Grand Staircase to Seawall

- ✱ Reconfigure to T intersection

- New separated walking path (see Recommendation 10a).

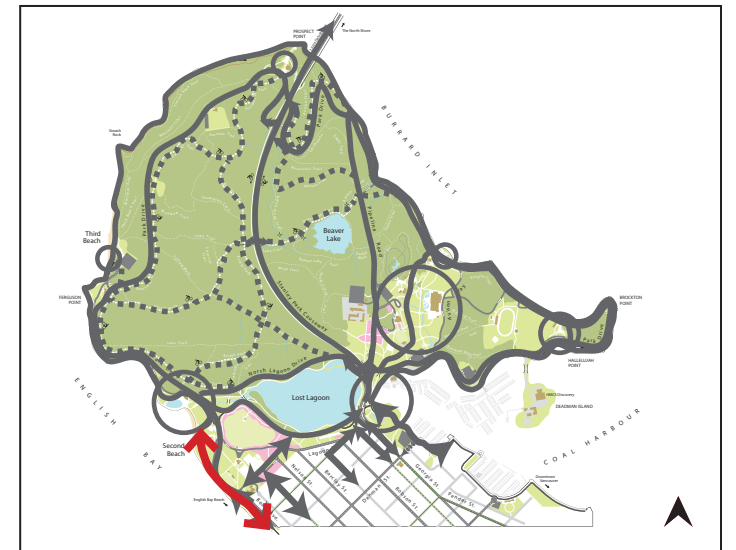
- Reconfigure to a T intersection to improve sightlines and non-motorized movements (see Recommendation 17b).

- Create a grand staircase to serve as a public amenity at the park entrance and direct pedestrians to Seawall.

- Improve wayfinding to existing stairs, and universal access via existing adjacent ramp.

- Extend sidewalk from park entrance along Beach Avenue to establish separate paths for cyclists and pedestrians, and eliminate conflict at entrance to park.

- Remove walking path designation and reallocate to Bike/Rollerblade path.





## THEME: ECOLOGICAL CONCERNS



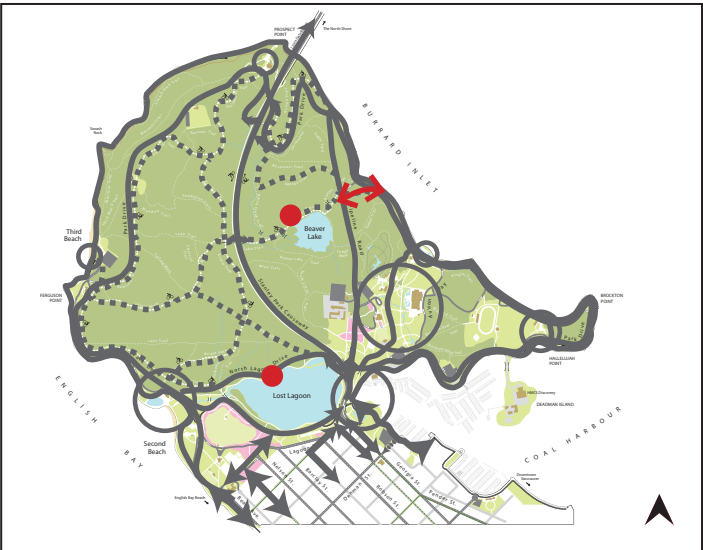


ISSUE #11: Impact of cycling on Stanley Park ecology from activities such as cycling on trails near water bodies

Recommendation 11a: Discourage cycling on non-designated trails				
	Description	Pros	Cons	Considerations
	Discourage cycling on non-designated trails such as Lost Lagoon Trail and North Creek Trail using a combination of: <ul style="list-style-type: none"><li>Trailhead barriers, and</li><li>Larger and more frequent signage indicating restricted and designated routes.</li></ul>	Prevents inappropriate use of trails by cyclists.		Public education about negative impacts on wildlife caused by cycling on un-designated trails.
Recommendation 11b: Upgrade surface of path around Beaver Lake to prevent gravel sloughing into lake				
	Upgrade surface of path around Beaver Lake	Prevents sloughing and dust into water.	Cost.	Consider boardwalk or other surface treatments to reduce ecological impacts.
Recommendation 11c: Create clear single path where multiple unsanctioned paths exist				
	Make clear single path where multiple unsanctioned paths exist.	Reduces trail braiding and erosion due to unsanctioned demand lines.		E.g., Recommendation 9c - construction of new paths at Ceperley Playground
Recommendation 11d: Remove redundant paving wherever possible				
	Remove redundant paving.	Improves ecological integrity.		E.g., Recommendation 1a - downgrade North Pipeline Road to trail status.



Gravel paths adjacent to Beaver Lake are sloughing into the Lake.



Location:
Lost Lagoon, interior forest and near Beaver Lake.
Description of problem:
Cycling occurs on restricted ecologically sensitive trails, particularly at Lost Lagoon, along creeks and near Beaver Lake.  Bicycle use on unsanctioned trails poses a threat to habitat connectivity and forest health, including increased soil compaction and vegetation trampling. At Lost Lagoon birds and other wildlife are negatively impacted by cyclists using restricted trails.  The “no cycling” signs around Lost Lagoon are small and easily missed.
Modes affected:
Cyclists, pedestrians, other active transportation modes.
Consultation Feedback:
“Cyclists are often found around Lost Lagoon, where cycling is prohibited. Also, cyclists often ignore the prohibition on riding on the sensitive trail leading from the seawall to Beaver Lake (Ravine trail).  Source: Stanley Park Cycling Questionnaire (2011)



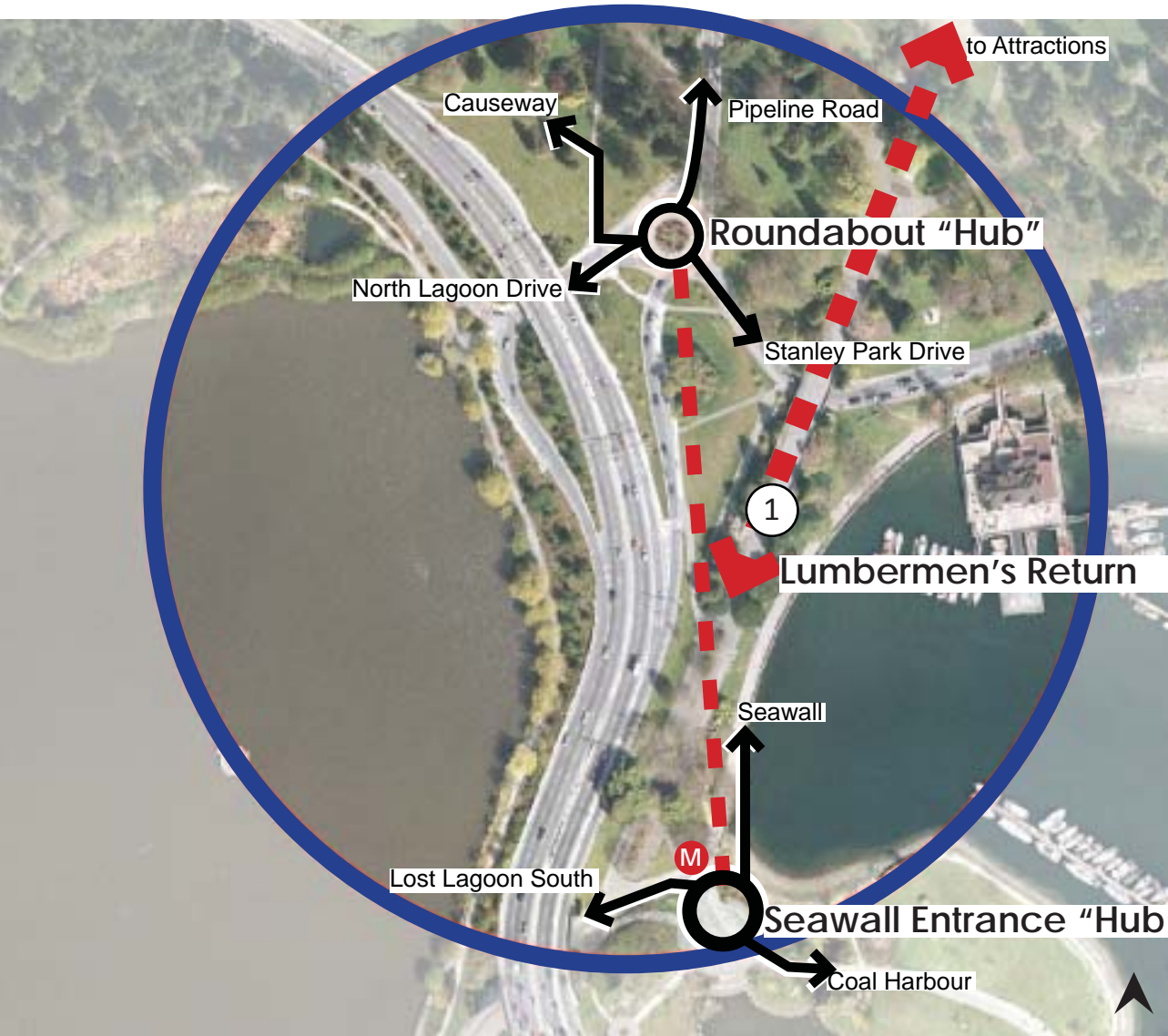
## THEME: LACK OF CONNECTIVITY





ISSUE #12: Unclear connections between the Causeway, the Seawall Entrance and Coal Harbour

Recommendation 12a: Implement the Gateway Node				
	Description	Pros	Cons	Considerations
	<p>Improve wayfinding and connectivity for all modes within the Gateway Node, by creating clear decision points or "Hubs" where users can choose their desired route.</p> <p>Create a new bike/rollerblade path between the two Hubs to facilitate cycling movement between Coal Harbour, North Lagoon Drive, the Causeway, and Pipeline Road.</p>	<p>Improves wayfinding for all users as they enter the park.</p>		<p>The recommendations in this plan rely on the Gateway Node as a key to overall park circulation. Better cycling connectivity and wayfinding signage is required between the terminus of Lumbermen's Return, the Seawall Entrance and the Roundabout Hub. Implementation of the recommendations in this plan, particularly the Pipeline and Lumbermen's return routes (Issue #1) will funnel users through the Gateway Node. The Lumbermen's Return Route will reactivate the historic pedestrian bridge as a key non-motorized connection in and out of the park.</p>



Description:

- Gateway Node
- Cycling "Hubs" require clear directional signs to improve wayfinding and circulation flow

New Two-Way Bike/Rollerblade path

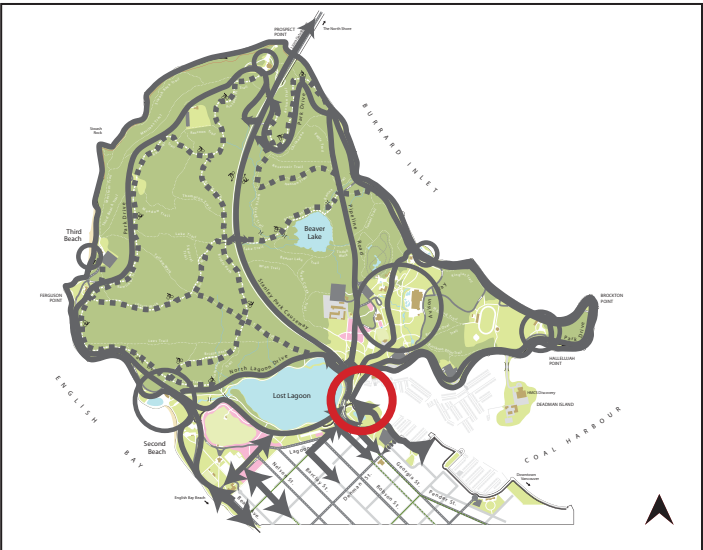
Large format park map



Looking south on pedestrian bridge, 2011



Looking north from Georgia Street into the main entrance of the park, 1920s



Location:
Park entrance (north of Georgia Street).
Description of problem:
<p>The Seawall Entrance and Roundabout act as circulation hubs in the park, however there is no clear cycling access between them.</p> <p>Lack of signage makes it difficult to know how to access key destinations.</p>
Modes affected:
Cyclists, pedestrians, motorists, and other active transportation modes.
Consultation Feedback:
<p>"More signs at trail intersections giving directions."</p> <p>"Signs/maps directing people back to Denman/Georgia or Coal Harbour area would be helpful."</p> <p>Source: Stanley Park Cycling Questionnaire (2011)</p>



ISSUE #13: Unclear connections from the Causeway to Second Beach

Recommendation 13a: Create a pathway connection for cyclists exiting the Causeway southbound onto North Lagoon Drive				
	Description	Pros	Cons	Considerations
13a/8b	Create a connection for cyclists exiting the Causeway southbound onto North Lagoon Drive.	Eliminates conflict with pedestrians on existing walking path.		Pedestrian signage is also required. Could tie in with Ties in with two-way North Lagoon Road Plan (Recommendation #14b). Consider interim closure of one lane of North Lagoon Drive to Tatlow Walk.



Description:

Proposed one-way bike path

Optional counterflow lane

New bike path from Causeway sidewalk that “T’s” with North Lagoon Drive. Signage should direct cyclists onto N. Lagoon Dr.

(Optional) closure of one lane of North Lagoon Drive to Tatlow Walk to provide cycling access to trails and slow traffic as it approaches the underpass.

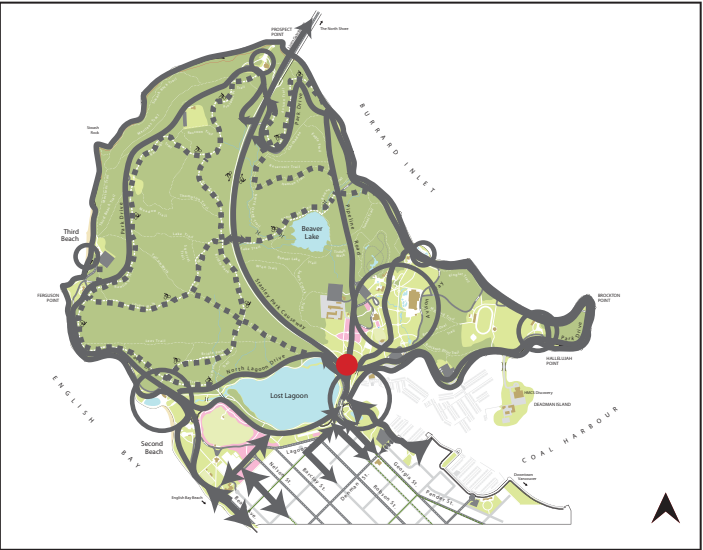
Existing pedestrian route



Cyclists heading southbound on the Causeway currently have a difficult connection to access North Lagoon Drive.



Interim closure of one lane of North Lagoon Drive could be considered to Tatlow Walk.

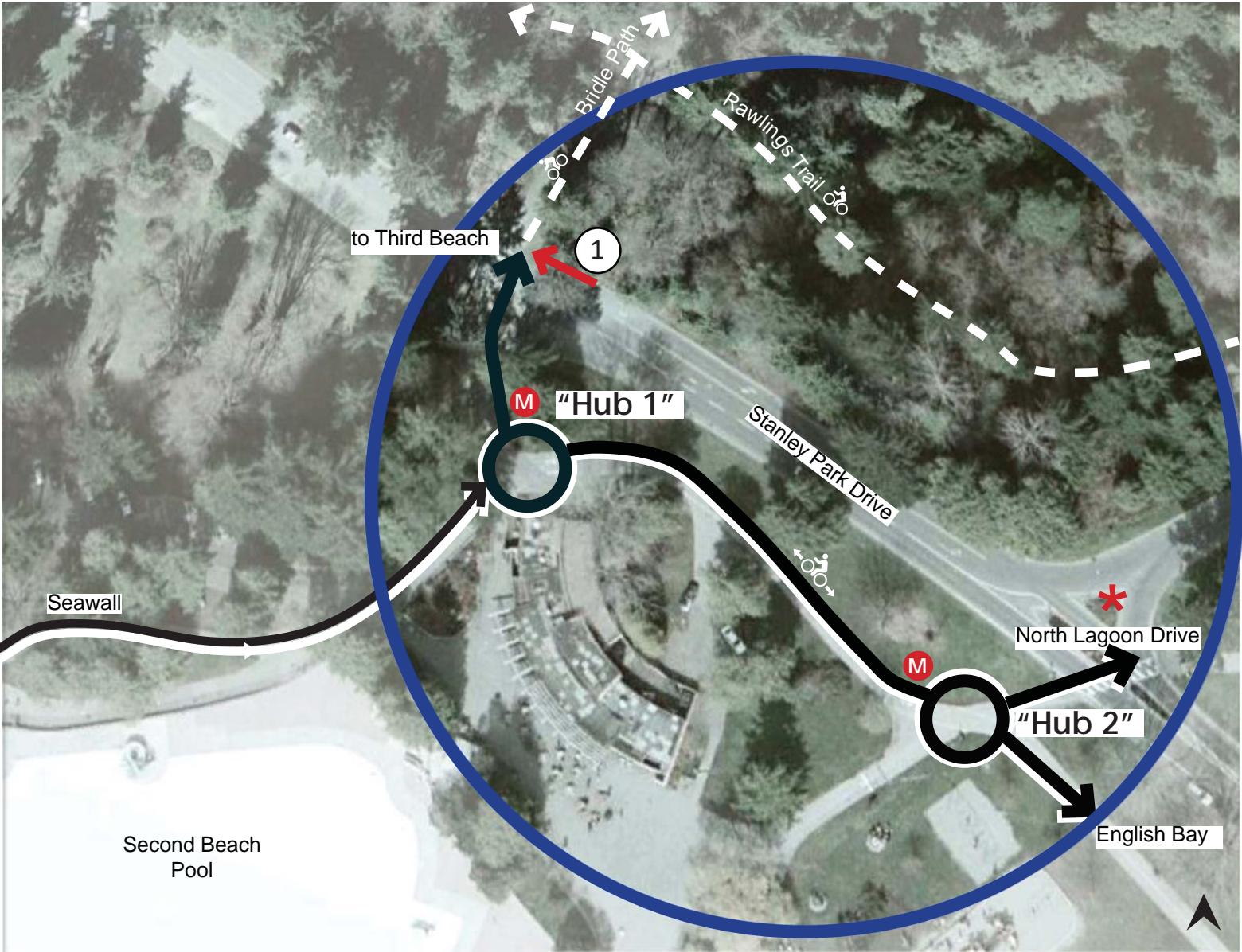


Location:
Connections to and from North Lagoon Drive and two-directional South Lagoon pathway.
Description of problem:
There is a difficult connection for southbound cyclists on the Causeway who exit onto North Lagoon Drive. The sidewalk exiting the Causeway into the park becomes too narrow to be shared with pedestrians, and there is no clear directional signage to guide pedestrians.
Modes affected:
Cyclists, pedestrians, other active transportation modes.



ISSUE #14: Unclear connections from Second Beach back to downtown, Coal Harbour and Seawall Entrance

Recommendation 14a: Implement wayfinding and signage interventions at Second Beach Node				
	Description	Pros	Cons	Considerations
	Improved wayfinding and connectivity for all modes by creating clear decision points or "Hubs" where users can choose their desired route. "Hub 1" is a decision point for access to the forest trails, including access to Third Beach. "Hub 2" is a decision point for return to downtown, or continuation to English Bay and the West End.	Improved wayfinding for all users. Tightening up the road intersection adjacent to "Hub 2" may allow for additional greenspace.		"Stop for pedestrians," "yield" signs and wayfinding signs with destinations and distances could be integrated at the Hubs.  "Hub 2" improvements are contingent on implementation of North Lagoon Drive Bikeway (Recommendation #14b) and the Ceperley Tunnel bypass (#9a).

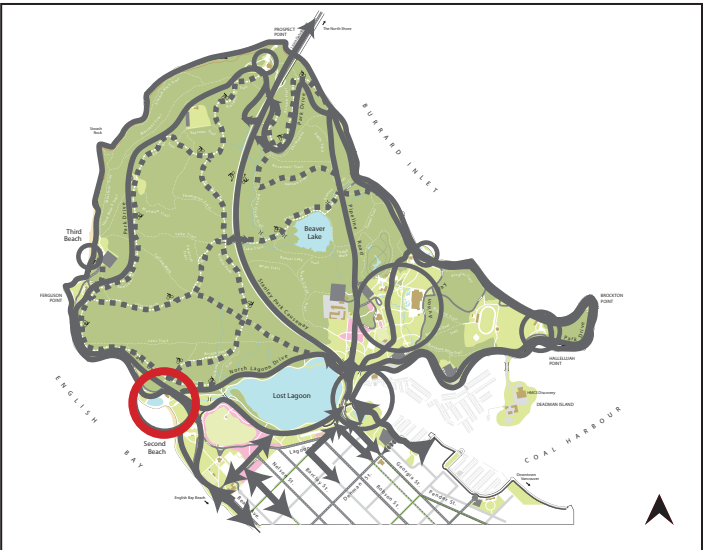


Description:

- Second Beach Node
- Cycling "Hubs" require clear directional signs to improve wayfinding and circulation flow
- ➔ New bike path connection and curb cut to connect on-road cyclists to the trails
- \* Reconfigure to T intersection
- M Large format park map



Proposed bike path connection and curb cut to access Bridle Trail from the end of the westbound lane on Stanley Park Drive. An informal path here is well worn.



Location:
Adjacent to Second Beach Pool (at the end of the two-way bike path).
Description of problem:
The two-way bike path effectively dead-ends here leaving users with nowhere to go except Bridle or Rawlings Trail, which are not clearly marked as a bike routes. Road cyclists also find themselves at a dead end as two-way vehicle traffic ends at Second Beach.  There is confusion at this point about what is the "Seawall." Cyclists who have been following the Seawall, assume that they continue along the path that follows the water — it is not apparent that they need to go through the underpass to return to Devonian Park and bicycle rental stores.
Modes affected:
Cyclists, pedestrians and other active transportation modes.
Consultation Feedback:
"Need signs to guide people back to the Denman/ Georgia St where the bikes are rented from."
Source: Stanley Park Cycling Questionnaire (2011)



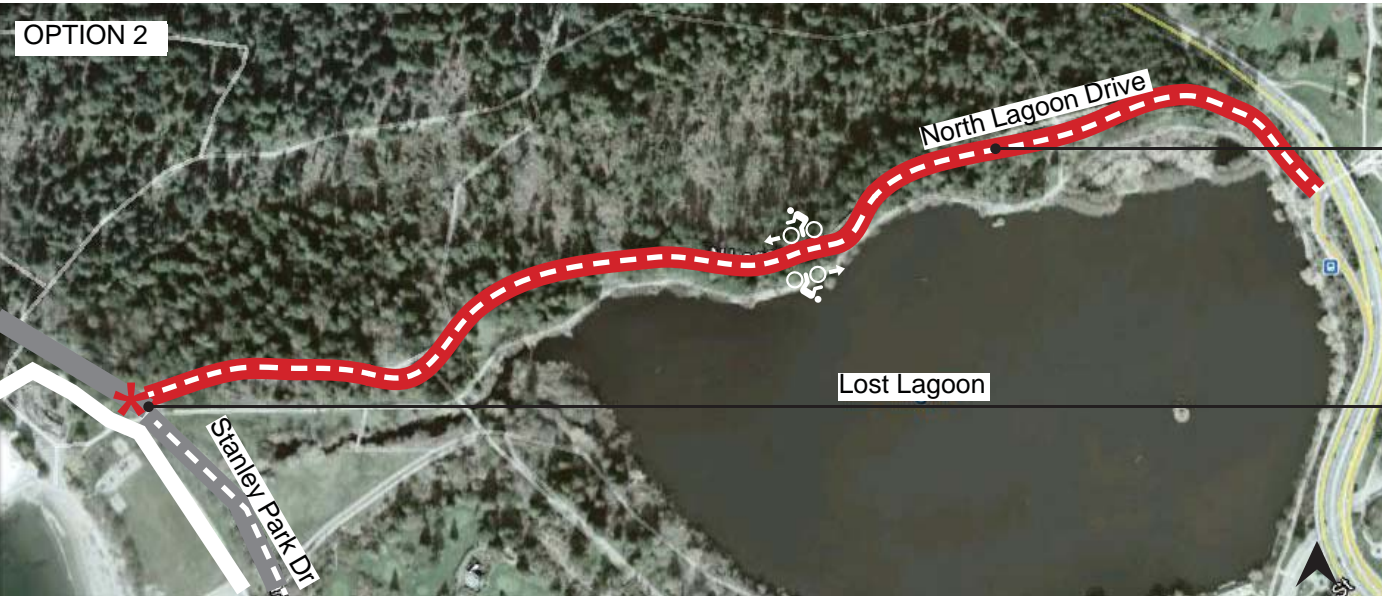
ISSUE #14: Unclear connections from Second Beach back to downtown, Coal Harbour and Seawall Entrance

Recommendation 14b: Create two-way bike access on North Lagoon Drive				
Option	Description	Pros	Cons	Considerations
1	Create new two-way separated bike path. Reduce North Lagoon Drive to one vehicle lane in some locations.	Best option for cyclists of all ages and abilities. Will reduce cycling volumes on the south side of Lost Lagoon.	May limit vehicle passing of horse-drawn carriages.	Traffic Study required to determine feasibility and network impacts.
2	Change North Lagoon Drive to two-way for vehicles with on-road cycling in both directions.	Enables motorists to avoid the “big loop” around the park when they want to access Second Beach.	May require parallel parking instead of angled. Some parking may be lost. Lanes would likely need to be widened. On-road cycling option would not appeal to all ages and abilities.	Traffic Study required to determine feasibility and network impacts.



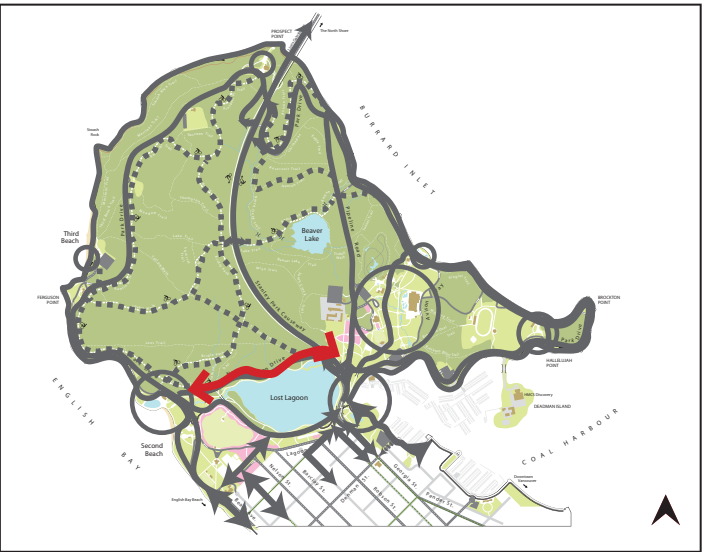
\* Reconfigure to T intersection

(Option 1) Proposed new separated two-way Bike Path on North Lagoon Drive



(Option 2) North Lagoon Drive is changed to two-way vehicle traffic with on-road cycling in both directions

Reconfigure to T intersection

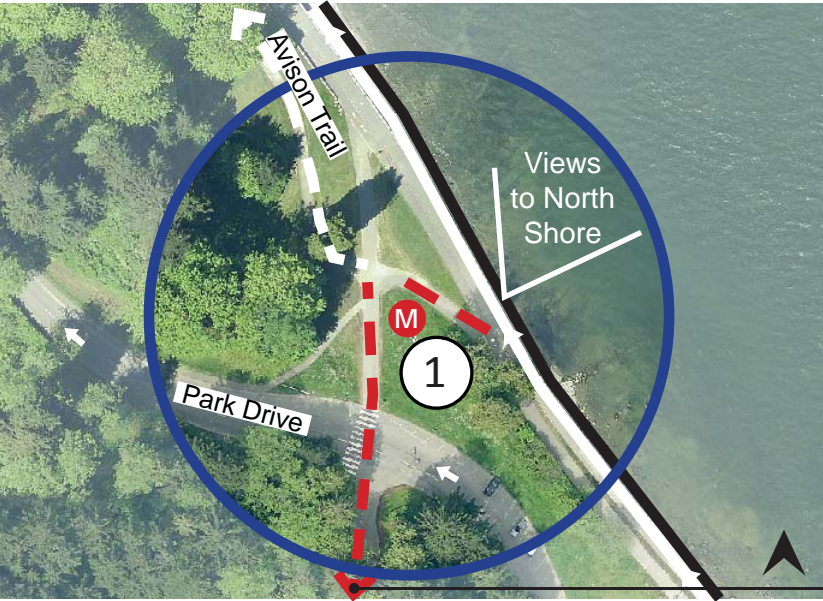


Location:
North Lagoon Drive
Description of problem:
North Lagoon Drive is currently two-lane for most of its length, with angled parking. Low volumes of use on this road make it a good candidate to enhance bike connections between Second Beach, downtown, Coal Harbour and the Seawall Entrance.
Modes affected:
Cyclists, pedestrians, motorists and other active transportation modes.
Consultation Feedback:
“It would be an enhancement to be able to connect these points with a two directional bikelane along Lost Lagoon Road.”
Source: VACC Stanley Park Presentation 2007



ISSUE #15: Connection between the Seawall and Prospect Point is not obvious or easy

Recommendation 15a: Implement the Prospect Point Access Node			
Description	Pros	Cons	Considerations
Design Prospect Point node as a staging area and decision point to access Prospect Point, or return to downtown including: <ul style="list-style-type: none"><li>• Clear “last return” signage to downtown via Pipeline Return Route.</li><li>• Signs to Prospect Point via Stanley Park Drive, Avison Trail or Hanson Trail (Recommendation 18e).</li><li>• Bike racks to provide a “park and walk” option to Prospect Point.</li></ul>	Will provide clear direction for users to return to downtown via “Loop 2” Pipeline Return Route, continue on the Seawall, or access Prospect Point. Creates an amenity area with scenic views to the North Shore, and improves wheelchair accessibility. Highlights this historic site where the park was first dedicated in 1888.		Consider wheelchair accessibility on shared path to Pipeline Return Route.

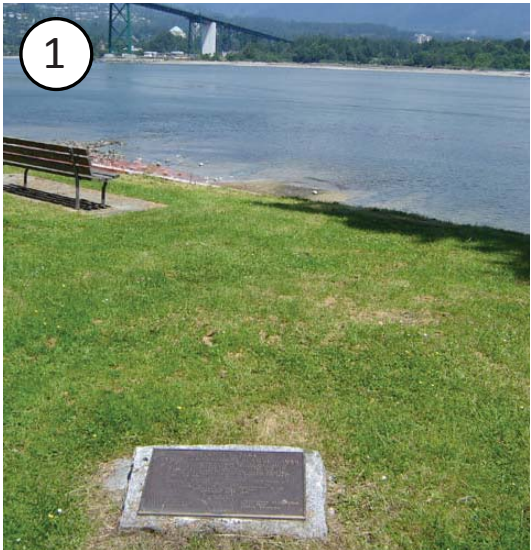


**Description:**

Shared bike and walking path to Pipeline Return Route (Recommendation 1b)

Proposed Prospect Point Node

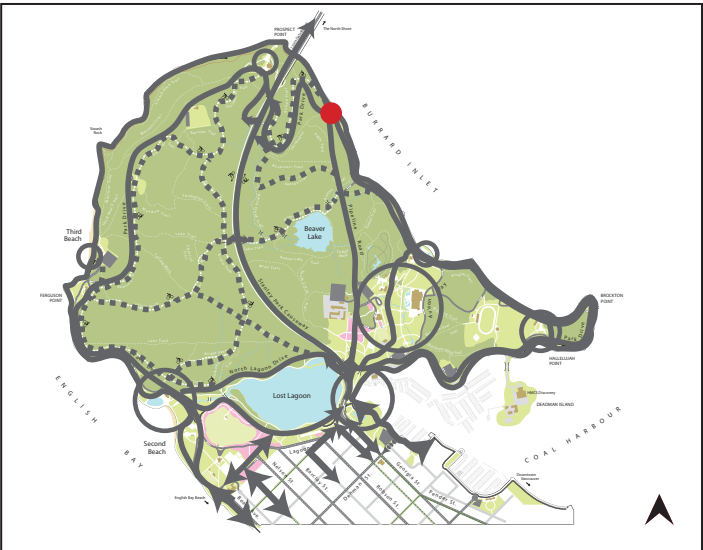
Large format park map



The Centennial Plaque marks the spot where Stanley Park was first declared open in 1888.



Scenic views towards the North Shore.

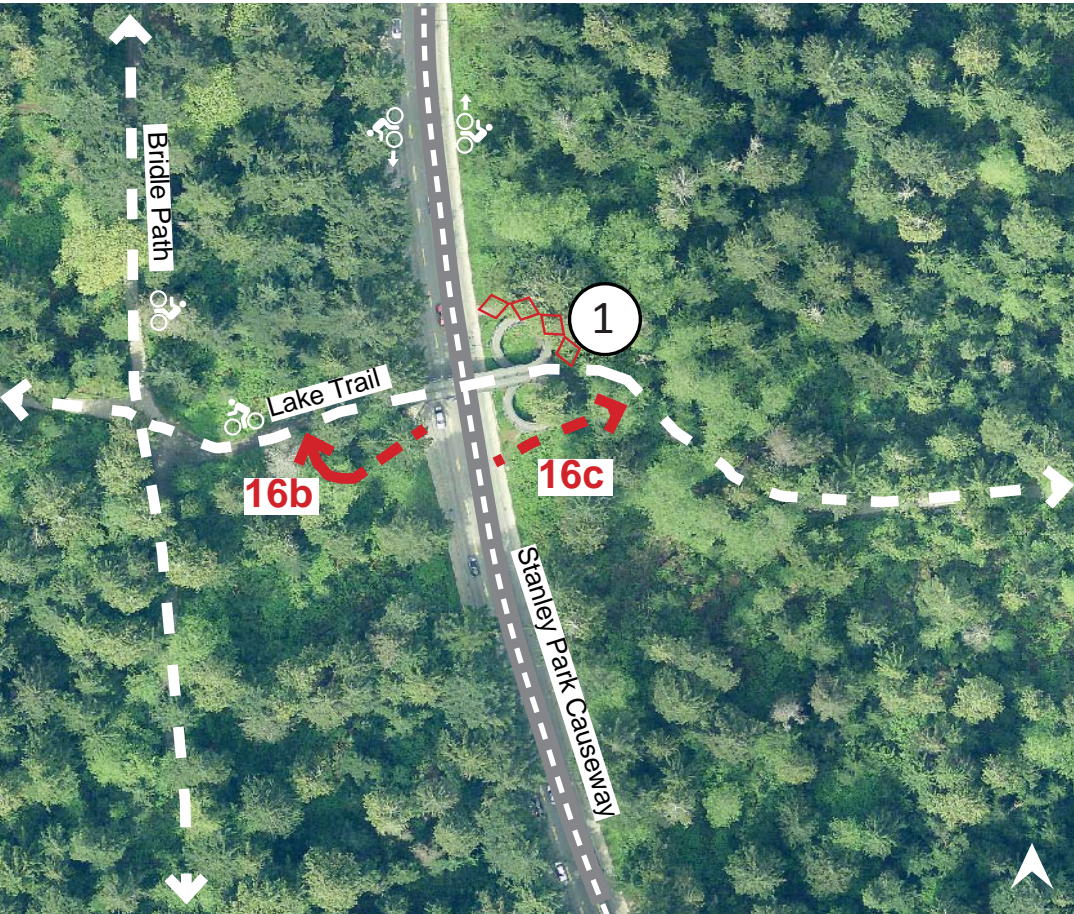
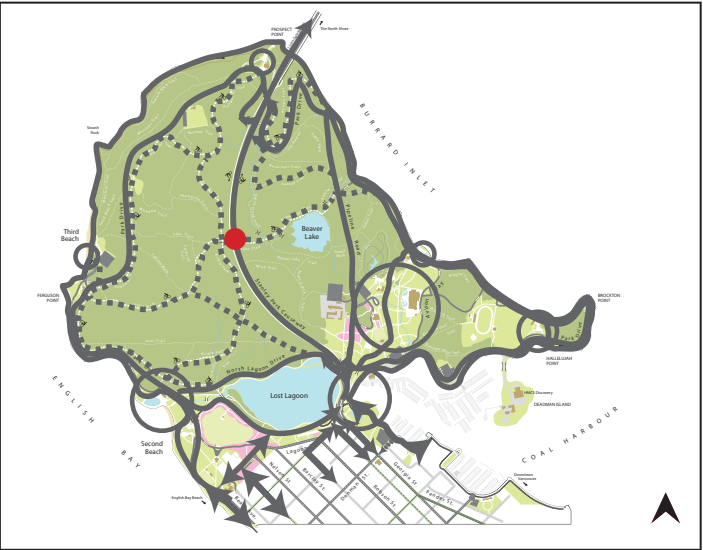


Location:
Intersection of Seawall and Avison Trailhead.
Description of problem:
Decision points to leave Seawall and access Prospect Point and Pipeline Road are not signed. Steep gradient and difficulty of routes to Prospect Point are not noted.
Modes affected:
Cyclists, pedestrians, other active transportation modes.
Consultation Feedback:
“Add signs to Pipeline Road as a return option for cyclists.”
“Often run into tourists that have lost their way in the prospect point area, looking for way back to Coal Harbour.”
Source: Stanley Park Cycling Questionnaire (2011)



ISSUE #16: Difficult connection to the pedestrian overpass from the east and west sides of the Causeway

Recommendation 16a: Remove centre railing and overhead signs on Causeway Equestrian/Pedestrian overpass				
	Description	Pros	Cons	Considerations
	Remove “Equestrian/Pedestrian” signs and centre railing from overpass.	Makes overpass more accessible to all users; clarifies that cyclists may use it.		
Recommendation 16b/18b: Create new shared pathway connection from southbound Causeway sidewalk to Lake Trail/Bridle Path				
	Create new shared gravel surfaced pathway.	Provides access from Causeway to trails and attractions on the east and west sides of the park. Will eliminate multiple unsanctioned paths.	Fragmentation of greenspace.	Unsanctioned paths are already well worn. A stream to the north of Lake Trail makes a connection on the south side preferable.
Recommendation 16c/18c: Formalize shared path connection from northbound Causeway sidewalk to the south side of the Overpass. Decommission pathway on north side				
	Create new shared pathway connection between the east Causeway sidewalk and Lake Trail. Decommission pathway on north side.	Formalizes an existing desire line. Eliminates a hazard created by low overhead clearance.		Consider using a combination of asphalt and boardwalk to protect existing tree roots.



Description:

Proposed new shared bike/walking path connection

Decommission pathway



Low overhead clearance on the pathway north of the overpass creates a hazard.

Decommission pathway and revegetate.

Location:
Overpass at mid-point of Causeway.
Description of problem:
No designations exist at Causeway overpass for cyclist or rollerblade use. A physical barrier between the "pedestrian" and "equestrian" lanes results in minimal widths between railings.
There is no connection to the overpass for cyclists heading southbound on the Causeway sidewalk.
The existing pathway from the northbound Causeway sidewalk to the overpass creates a hazard for pedestrians and cyclists due to low overhead clearance.
Modes affected:
Cyclists, pedestrians, equestrians, and other active transportation modes.
Consultation Feedback:
"Pave the mid-causeway overpass' links to the Causeway's west-side sidewalks. Currently, they are mud and roots."
Source: Stanley Park Cycling Questionnaire (2011)





**ISSUE #17:** Need for improved bike access from the West End neighbourhood, including the Alberni bicycle route, the proposed Haro Street Bikeway and planned Comox-Helmcken Greenway

Recommendation 17a: Install signage to and from Stanley Park on Alberni Street and Haro Street bike routes				
	Description	Pros	Cons	Considerations
	Install signage on Alberni Bicycle Route and proposed Haro Street Bikeway to guide users entering and exiting the park. Install large park map at foot of Alberni for all users entering Stanley Park.			Cyclists entering park via Haro Street should be guided to Chilco Street due to steep grades on pathway at foot of Haro.



Description:

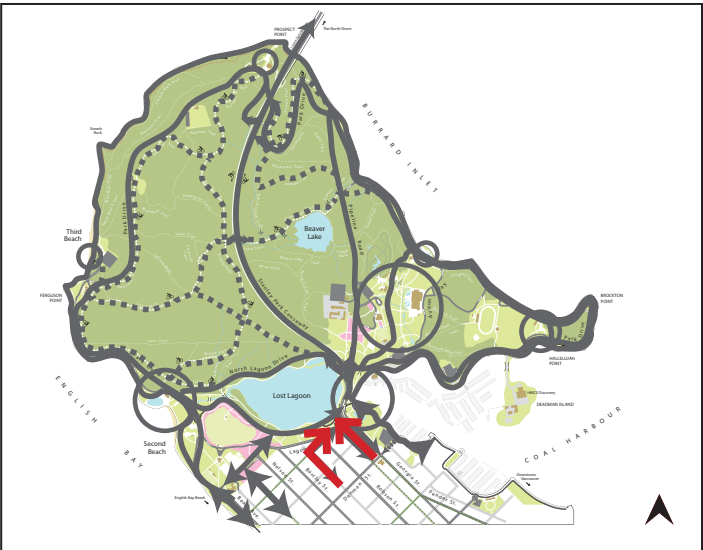
 City of Vancouver Bicycle Route requiring signage to Stanley Park

 Large format park map at entrance to park

Steep slope (>20%)



The foot of Alberni Street is one of the main entrances to the park for people arriving from the West End and from bicycle rental shops on Denman Street. The inclusion of a large format Stanley Park map would welcome park users and provide wayfinding information.

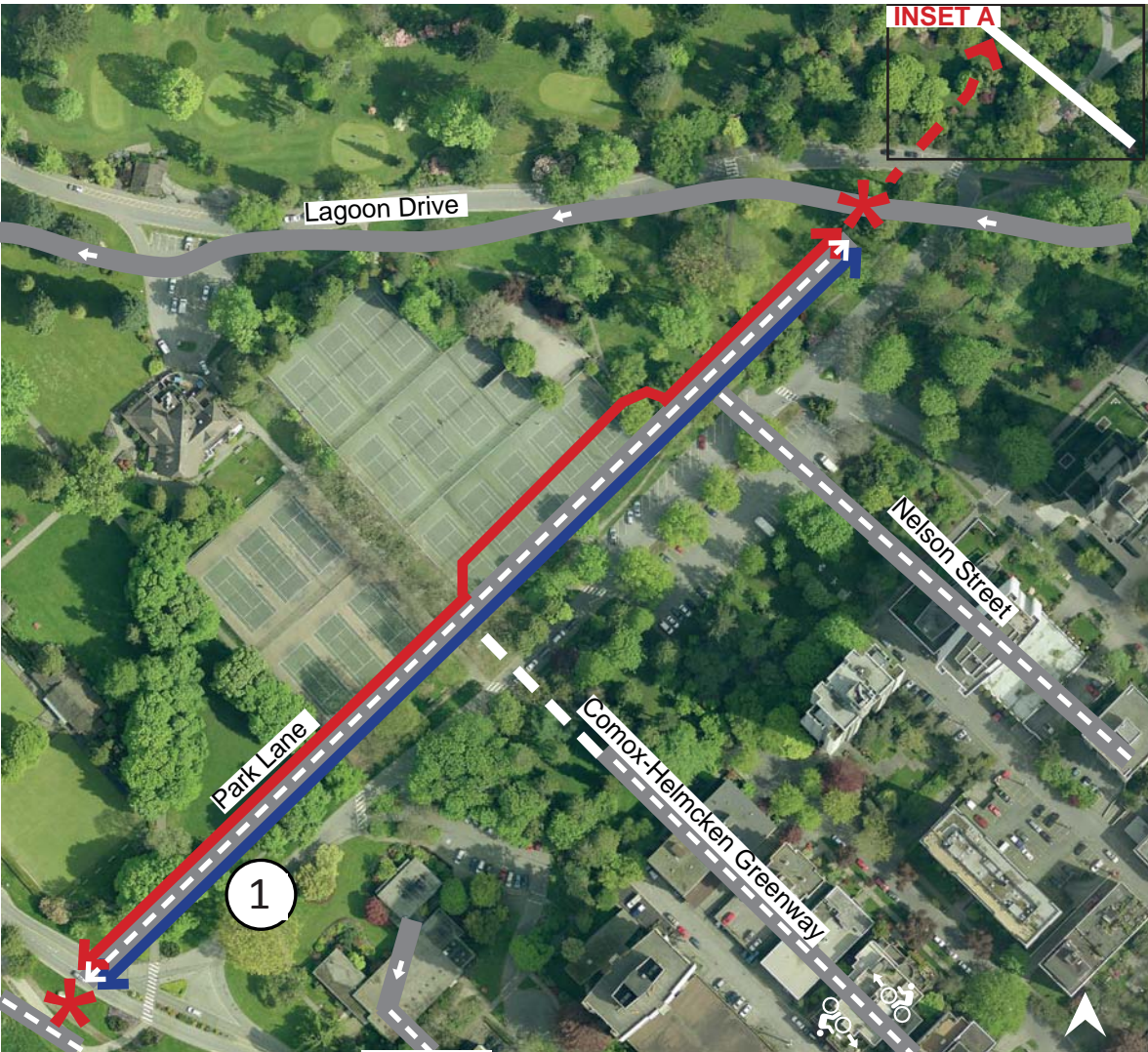
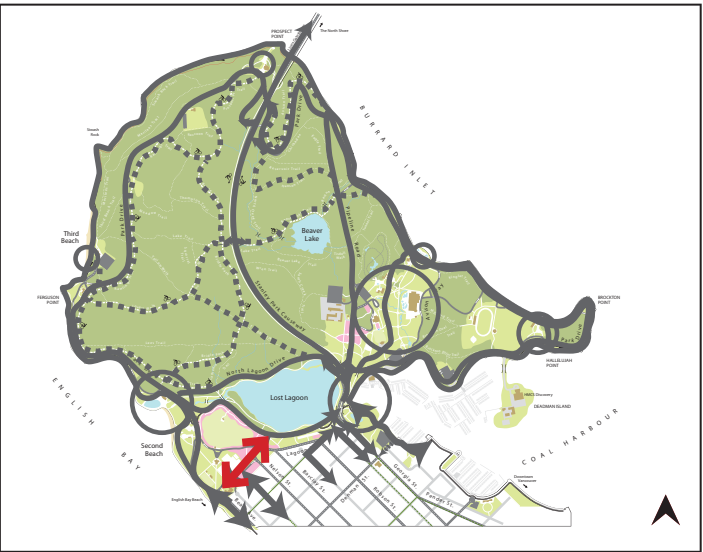


Location:
Alberni Street, Haro Street and Comox Street
Description of problem:
Currently, bicycle access from the West End is limited to a connection at the foot of Alberni Street. While many users enter at this location (including people renting bikes on Denman Street), the lack of signage makes it feel like a “back door” to the park. There is a City of Vancouver map at this location but no map of Stanley Park.
There is a lack of signage on bicycle routes in the West End indicating how cyclists can enter the park. There is also a lack of signage at park exits indicating how users can access on-street bike routes in the West End.
Modes affected:
Cyclists, pedestrians and other active transportation modes.
Consultation Feedback:
“Signage for shortest route to destinations outside Stanley Park, e.g. Lions Gate Bridge, West End and Coal Harbour via Seawall and Downtown via on street bike routes.”
Source: Stanley Park Cycling Questionnaire (2011)



# ISSUE #17: Need for improved bike access from the West End neighbourhood, including the Alberni bicycle route, the proposed Haro Street Bikeway and planned Comox-Helmcken Greenway

Recommendation 17b: Create two-way bike access on Park Lane and intersection upgrades				
Option	Description	Pros	Cons	Considerations
1	Two-way separated bikeway on west side of Park Lane.	Preferred for cyclists of all ages and abilities. Allows for some parallel parking.	Elimination of some parking. Cost of new infrastructure.	Traffic study required. Pedestrian upgrades should be considered in conjunction with these changes. Subject to implementation of the Comox-Helmcken Greenway.
2	Two-way separated bikeway on east side of Park Lane.	Preferred for cyclists of all ages and abilities.	Elimination of parking. Cost of new infrastructure.	Traffic study required. Pedestrian upgrades should be considered. Subject to implementation of the Comox-Helmcken Greenway.
3	Two-way shared vehicle and bike traffic on Park Lane.	Two way vehicle traffic may benefit the overall park circulation system (or two way until the parking lot only).	Not as safe for cyclists. Elimination of parking. Increased traffic flow may create conflicts with non-motorized movements from the West End.	Traffic study required to determine wider network impacts of two-way vehicle traffic.



**Description:**

Option 1: Two-way separated bikeway (west side)

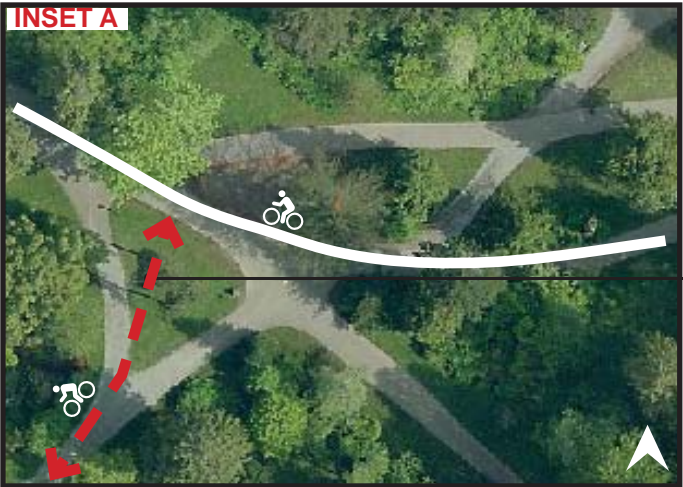
Option 2: Two-way separated bikeway (east side)

Option 3: Two-way vehicle traffic and on road cycling.

**\*** Reconfigure to T intersection to improve non-motorized movements and slow vehicle traffic. Intersection reconfiguration will compensate for greenspace lost elsewhere.

Proposed shared connection to bike and walking paths at Lost Lagoon (8% slope)

**Note:** All options require re-allocation of on-street parking along Park Lane, and may possibly affect pedestrians. This issue will require a traffic study in order to assess the best option for all users. This recommendation should be implemented in conjunction with the construction of the City of Vancouver Comox-Helmcken Greenway.



Pathway connection from Park Lane should be reconfigured to meet the Lost Lagoon bike path at a 90° angle.

Location:
Park Lane
Description of problem:
The City of Vancouver is planning to implement the Comox-Helmcken Greenway which will connect False Creek, through Stanley Park, to the North Shore. A cyclist and pedestrian connection to the park is required where the Greenway will terminate at Park Lane. Users entering Stanley park via the Greenway will require access to the pedestrian, cycling and rollerblade networks within the park.
Modes affected:
Cyclists, pedestrians, and other active transportation modes.

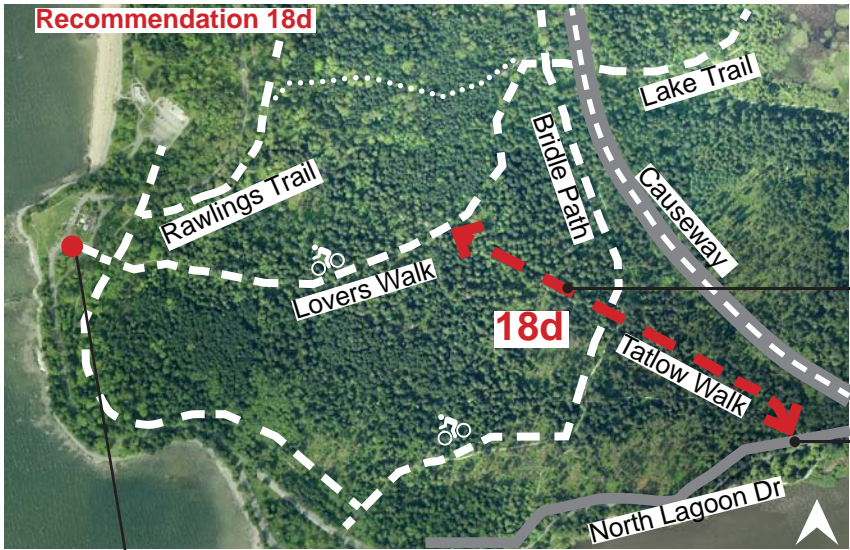
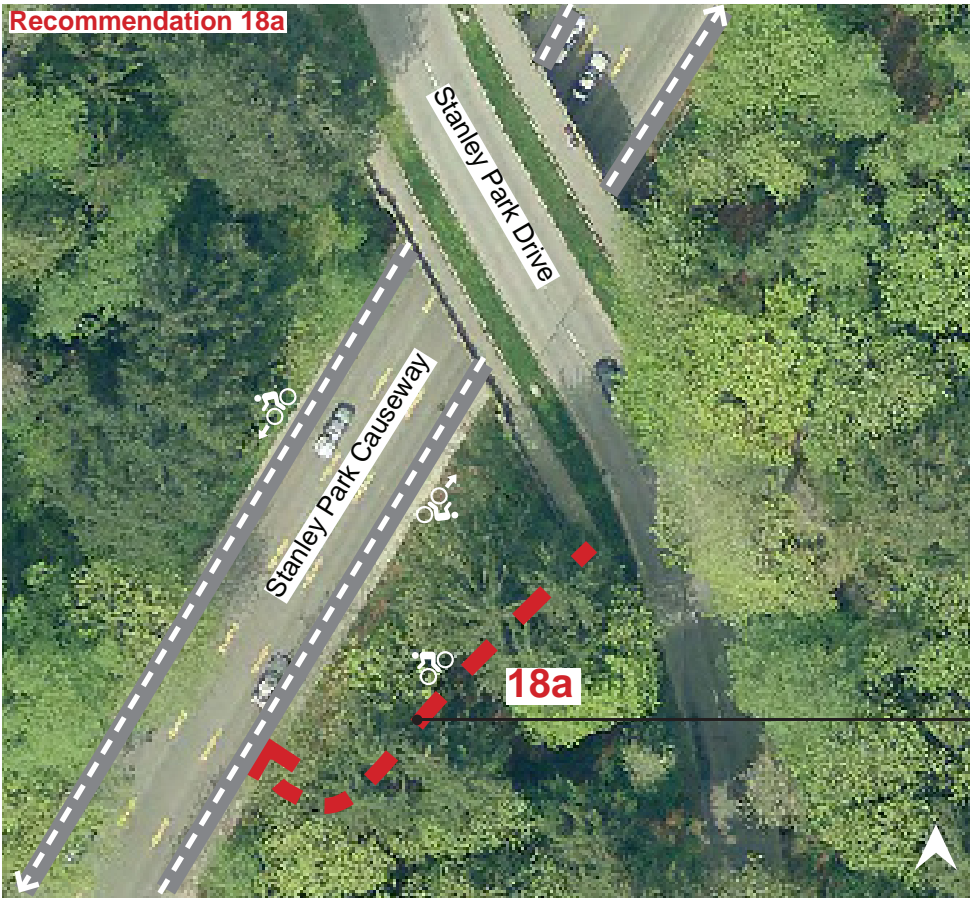
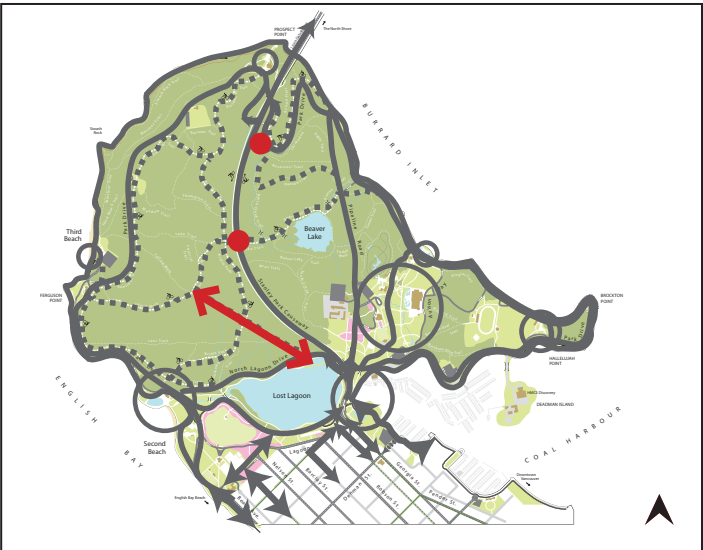


Two-way separated bikeway on east side of Park Lane.



ISSUE #18: Lack of connections for north and southbound cyclists from the Lions Gate Bridge to the trails

Description	Pros	Cons	Considerations
Recommendation 18a: Formalize shared gravel path to Causeway from Park Drive just south of the Bridge			
Upgrade existing gravel trail and designate as a shared use path.	Improves connectivity to and from the trails and the Lions Gate Bridge. Eliminates multiple unsanctioned paths.		
Recommendation 18b/16b: Create new shared pathway connection from southbound Causeway sidewalk to Lake Trail/Bridle Path			
Create new shared gravel surfaced pathway.	Provides access from Causeway to trails and attractions on the east and west sides of the park.	Fragmentation of greenspace.	See Recommendation #16b
Recommendation 18c/16c: Formalize path connection from northbound Causeway sidewalk to the Overpass			
Formalize new shared path between the east Causeway sidewalk and Lake Trail. Decommission pathway on north side of overpass.	Formalizes an existing desire line. Eliminates a hazard created by low overhead clearance on the north pathway.		See Recommendation #16c
Recommendation 18d: Designate Tatlow Walk as a shared use trail from North Lagoon Drive to Lovers Walk			
Designate Tatlow Walk as a shared use trail from North Lagoon Drive to Lovers Walk.	Provides connection from Bridle Path back towards Seawall Entrance and Coal Harbour. Provides direct connection to Ferguson Point via Lovers Walk.		Curb cuts are required where Lovers Walk meets Park Drive. Ties into North Lagoon Drive Recommendation #14b.



**Description:**  
Designate as Shared Bike/Walking Path

Designate Tatlow Walk as Shared use from North Lagoon Drive to Lovers Walk

Ties into North Lagoon Drive bike connection, see Recommendation #14b

Curb cuts required on Lovers Walk at Park Drive

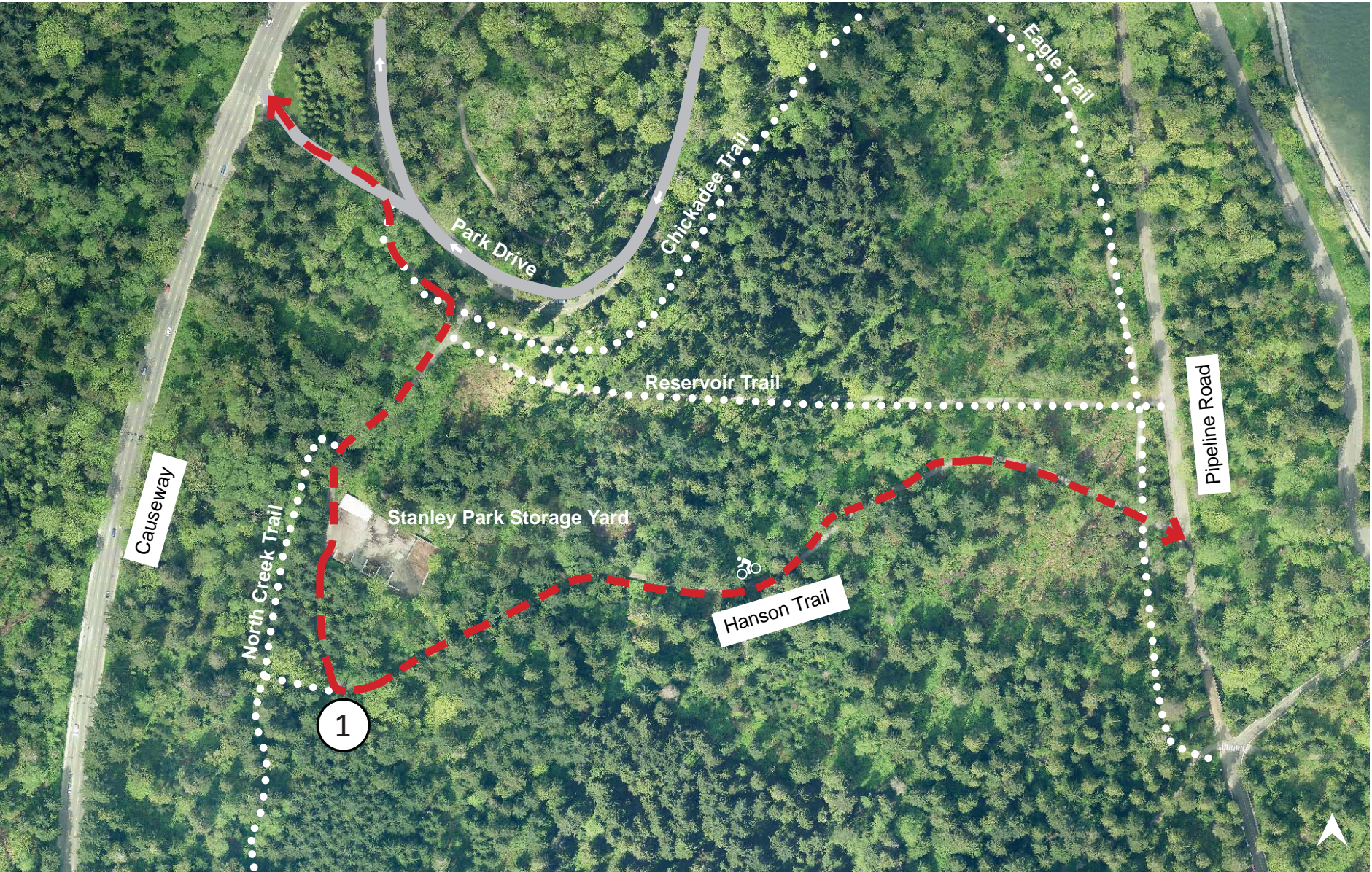
Formalize existing trail connection as a shared use path to improve access from Park Drive to the Causeway and Lions Gate Bridge.

<b>Location:</b>
Trail connections to and from the Causeway
<b>Description of problem:</b>
There are limited alternatives to and from the Causeway route. Access to the northbound Causeway sidewalk from Park Drive to the Lions Gate Bridge is currently a rough trail through brush.
North Creek Trail and Ravine Trail are currently used by cyclists, although these trails traverse ecologically sensitive areas and are designated as walking only paths.
<b>Modes affected:</b>
Cyclists, pedestrians.
<b>Relevant data:</b>
Causeway counters indicate an average of 1,000 cyclists use the Causeway sidewalks every day in peak months.
Source: City of Vancouver Bicycle Counters (2011)

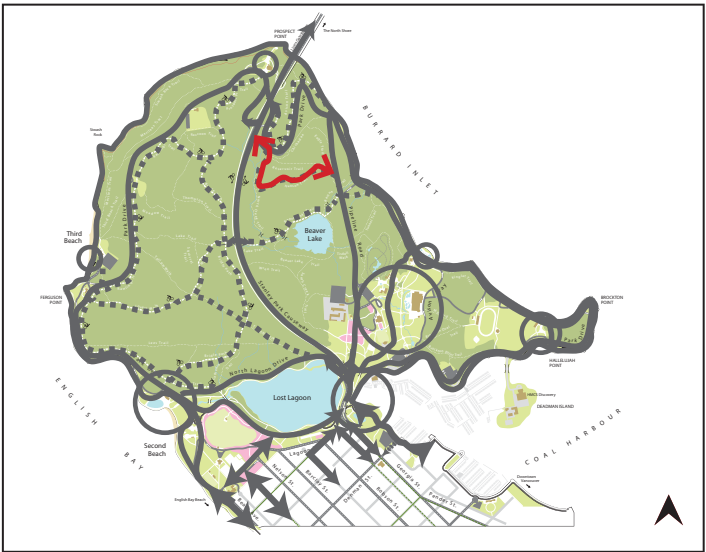


ISSUE #18: Lack of connections for north and southbound cyclists from the Lions Gate Bridge to the trails

Recommendation 18e: Designate Hanson Trail as a shared use trail				
	Description	Pros	Cons	Considerations
	Designate Hanson Trail as a shared use trail to allow increased access through the eastern portion of the park to the Lions Gate Bridge. The trail is a relatively easy grade for cyclists wanting to cut through the park from Pipeline Road to cross the Lions Gate Bridge.	Will alleviate unauthorized cycling on North Creek Trail alleviating current environmental pressures. Provides an alternative commuter connection to access the Lions Gate Bridge.	Contains a few short sections of steep grade - requires signage warning cyclists.	Route is currently used by service vehicles during weekdays but not during rush hour - appropriate warning signs should be posted before the storage yard. Vehicular access to the Causeway is closed at rush hour (3:30 - 6:30pm) on weekdays so commuter cyclists can safely reach the northbound sidewalk.



Description:  
Designate as shared bike/walking path



Hanson Trail is a well maintained and relatively low grade trail that will increase cycling access options through the eastern portion of the park and to the Lions Gate Bridge.



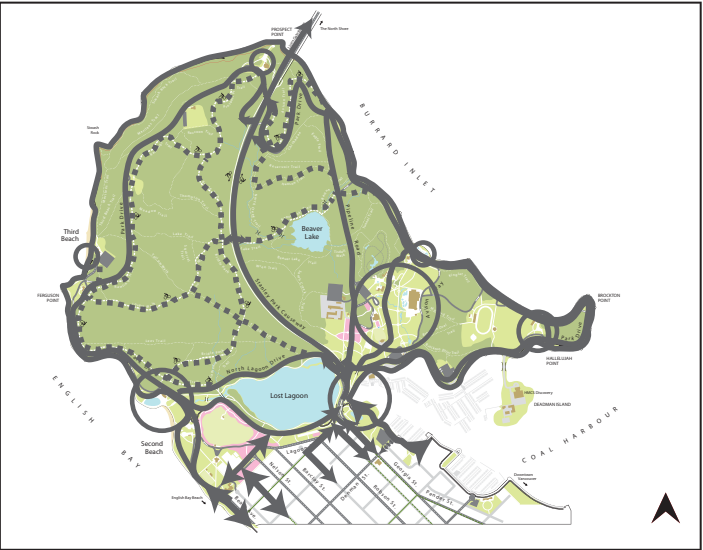
## THEME: INEFFECTIVE SIGNAGE/WAYFINDING





ISSUE #19: Regulations and advisories affecting cyclists are confusing

	Description	Considerations
Enforcement		
Recommendation 19a: Increase enforcement, especially during peak use times		
	Increase enforcement by re-allocating Rangers during peak use times or increasing enforcement resources	"Compliance" efforts should focus on educating park visitors on park stewardship and sharing the park with other users, rather than enforcing regulations that may be seen as inappropriate, arbitrary, or are simply ignored. Note that roadways and bike helmet use in Stanley Park is governed by the Motor Vehicle Act and enforced by the police.
Recommendation 19b: Promote park stewardship		
	<ul style="list-style-type: none"><li>Promote park stewardship and "positive peer pressure," i.e., Volunteer Park Ambassadors (similar to City Ambassadors), Bike Patrols, "Friends of the Seawall" (to work with Rangers)</li><li>Student Park Hosts in summer</li></ul>	
Education		
Recommendation 19c: Implement a signage program (warning and interdictory)		
	<ul style="list-style-type: none"><li>Reduce visual noise of signage - limit to wayfinding, warning and interdictory</li><li>Replace 15 km/hr signs with "Shared use" signs</li><li>Direct faster cyclists and training cyclists to Stanley Park Drive; announce opportunities for cyclists to join Stanley Park Drive from the Seawall</li><li>Display information on cycling etiquette (i.e., passing, use of bell, and e-bike regulations)</li><li>Use friendly, humorous messages (where appropriate)</li></ul>	<p>Should be implemented together with Recommendation 20c - Signage Program (Wayfinding).</p> <p>Note: humorous messaging should not be used on regulatory or warning signs.</p>
Recommendation 19d: Liaise with Bike Rental Shops on cycling etiquette		
	Liaise with Bike Rental Shops on cycling etiquette	Implement with Recommendation 20a, Cycling Map with rules and etiquette.



Location:
Throughout park
Description of problem:
15 km/hr signs are hard to enforce.
Cyclist etiquette in the park is not clearly communicated. Cyclists are faced with a barrage of different signage throughout the park.
Modes affected:
Cyclists, pedestrian and other active transportation modes.
Relevant data:
"More information on the signage/maps to let cyclists know their options re: the one way system could enhance more people's experience."
"Enhanced signage and recommended etiquette might be productive."
"Need more signage at main entrance to park especially points near bike rental shops."
"Unclear signage as to where the seawall bike path starts and how to get there."
Source: Stanley Park Cycling Questionnaire (2011)

**Attention Dog Guardians**

Pick up after your dogs - Thank you.

**Attention Dogs**

Grrrr, bark, woof. Good dog.

D.N.V. Dog Bylaw #5981

**Parks Note Book**

Pick up the kids after school ✓

Pick up milk, on the way home ✓

**Pick up after the dogs** ✓

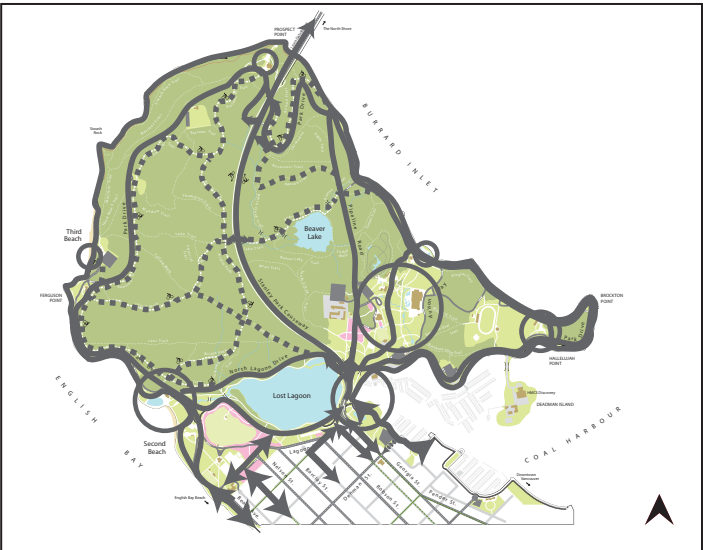
D.N.V. Dog Bylaw #5981

Humorous messaging developed by the District of North Vancouver



ISSUE #19: Regulations and advisories affecting cyclists are confusing

	Description	Considerations
Encouragement		
Recommendation 19e: Explore opportunities for cycling events and programming		
	Host a car-free event on Park Drive to raise the profile of sustainable modes for recreation and transportation	e.g., Ciclovía, World car-free day, bike/rollerblading/skating/longboarding events
Recommendation 19f: Consider installing bike “fix it” stations in the park		
	Consider “fix it” stations in park to provide air pump/water fountain station(s), and possibly some basic repair tools.	



COLOMBIA

On special days, two wheels reign supreme

Ciclovías – streets turned to massive cycling parks – began in Bogota, but are gaining

BY JIM WYSS

BOGOTA — One of Colombia's most successful exports isn't coffee or Shakira, but *ciclovías*. Starting in 1974, this Andean nation began closing down major streets of the capital to make way for bikers, walkers and joggers.

Now, every Sunday and holiday, some 700,000 people turn those streets, known here as *ciclovías*, into a massive urban park that winds 75 miles through the city.

The concept has been exported as far away as Canada, Peru, Chile and Mexico. San Francisco and Portland, Ore., have copied the model.

"The *ciclovía* is like a positive epidemic," said Jorge Mauricio Ramos, who coordinates the program for the city's District Institute for Sports and Recreation. "We have people come from all over the world to look at our model; Bogota is undoubtedly the reference point."

*Ciclovía* means bike lane in Spanish. But often the roads are so crowded with pedestrians, pets and joggers that biking can be a challenge. On Thursday night, arepa vendors and bundled up couples dodged skateboarders and cyclists for a once-a-year evening *ciclovía* that marks the beginning of the Christmas season. In the past, the event has drawn an esti-



While celebrating no-car day on the main streets of the Colombian capital, Bogota's former mayor Enrique Penalosa greets citizens, riding his bike, as he is accompanied by a street vendor. Ciclovías, main streets temporarily turned into bike lanes, are hugely popular.

of Brickell Avenue once a month. The events brought out thousands of people, but were complicated to produce, said Kathryn Moore, who worked as a special projects assistant to Mayor Diaz. Traffic had to be rerouted, police were required and some local businesses balked at having the road closed, she said.

When Diaz left office, political support for the project went with him. While Coconut Grove, Coral Gables and other cities have had special bike days, few are doing regular events.

"They don't cost a lot of money in the scheme of things," Moore said, "but in today's economic climate, every dollar is an issue."

Bogota has the benefit of free labour. Military cadets and high school students are required to log public service hours. As a result, they help provide about half of the 2,000 staff required to man the route from 7 a.m. to 2 p.m. on Sundays, said Ramos, the *ciclovía* director.

That's a luxury that many other cities don't have.

"When it's not well implemented and there is no political will, the tendency is for a *ciclovía* to disappear," he said. "We've seen a lot of them implemented around the world, but we've also seen a lot of them close."

For *ciclovías* to have staying



Bike pump stations could be installed in the park. Some include a bike repair station, such as this “Bike Fix-It Station” in Queensland, Australia.

Ciclovía car-free event (Vancouver Sun, December 10, 2011)



ISSUE #20: Wayfinding can be difficult for all park users through the forest trails and to attractions in the park

Recommendation 20a: Create and distribute a cycling map for Stanley Park

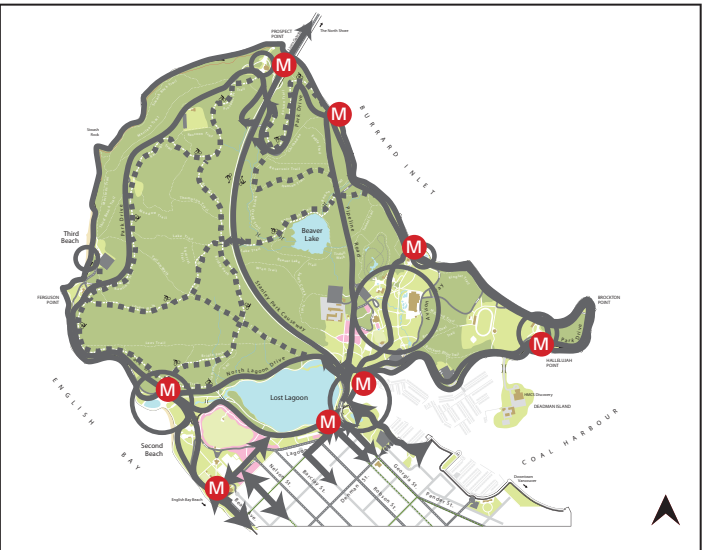
Description	Considerations
<ul style="list-style-type: none"><li>Install flat park maps at key locations within the forest.</li><li>Install large format park maps at all major nodes and entrances to the park including the Lions Gate Bridge (shown in key map, right). These maps should be at least twice as large as the current Stanley Park maps.</li><li>Develop a “Cycling Map and Info Guide” for Stanley Park that includes information on cycling routes, safety and etiquette. Distribute to bike shops and make available on-line.</li><li>Consider adding the Stanley Park routes to the City of Vancouver cycling map.</li><li>Identify cycling routes on the free <i>Vancouver Parks App</i> for iPhone, iPad and iTouch.</li></ul>	<p>Park entrances and nodes that receive high numbers of visitors would benefit from a larger version of the overall park map, so that more information can be displayed and more people can view them at one time. Existing park maps need cycling routes to be more clearly indicated.</p> <p>Maps should highlight where cyclists are allowed to cycle in the park to reduce confusion, especially for tourists and occasional park users.</p> <p>Consider issuing pocket cycling maps in other languages.</p>

Recommendation 20b: Undertake a lighting study for Stanley Park

	Although resolution is outside the scope of this study, many users, including cyclists, reported a lack of lighting to and from attractions that are open after dusk. To minimize light pollution in the park it is preferable for cyclists to use existing lit facilities, although these are currently very limited.
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Recommendation 20c: Implement a signage program (wayfinding)

<b>20c</b>	<ul style="list-style-type: none"><li>Improve park wayfinding signage including a hierarchy and clarity of signage that identifies loops and return routes by colour, distance and time.</li><li>Install signage at trail decision points, and where a cyclist could get off the Seawall or access an attraction.</li><li>Replace missing km/mile markers along Seawall.</li><li>Establish a minimum height for yellow wayfinding signs - in general, these are too high, and outside of “normal” field of vision.</li></ul>	<p>Signs should indicate travel times by bicycle, as distances in km are not meaningful to many people.</p> <p>Should be implemented together with Recommendation 19c - Signage Program (warning and interdictory).</p>
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<b>Location:</b>
Throughout park
<b>Description of problem:</b>
People are easily disoriented at decision points once on the trails. Most signs do not indicate that cycling is not permitted on forest trails or the signage has been removed. For example, a sign to Beaver Lake from the Seawall at Beaver Creek inadvertently directs cyclists under Park Drive and onto an ecologically sensitive pedestrian-only trail along the creek.
In general, yellow wayfinding signs are too high, and outside of “normal” field of vision.
There is insufficient lighting for park users. Visitors report finding themselves in the park as night approaches and having difficulty finding their way out in the dark.
<b>Modes affected:</b>
All modes



Stanley Park cycling routes could be added to the City of Vancouver/Bike Vancouver cycling map and info guide. The guide also contains information on cycling etiquette.



Yellow wayfinding signs require a minimum height for better legibility. A larger version of the overall park map should be installed at park entrances and nodes.



Some mile/kilometre markings along the Seawall are missing and are “hidden” to passing cyclists. More visible and consistent markers are needed.



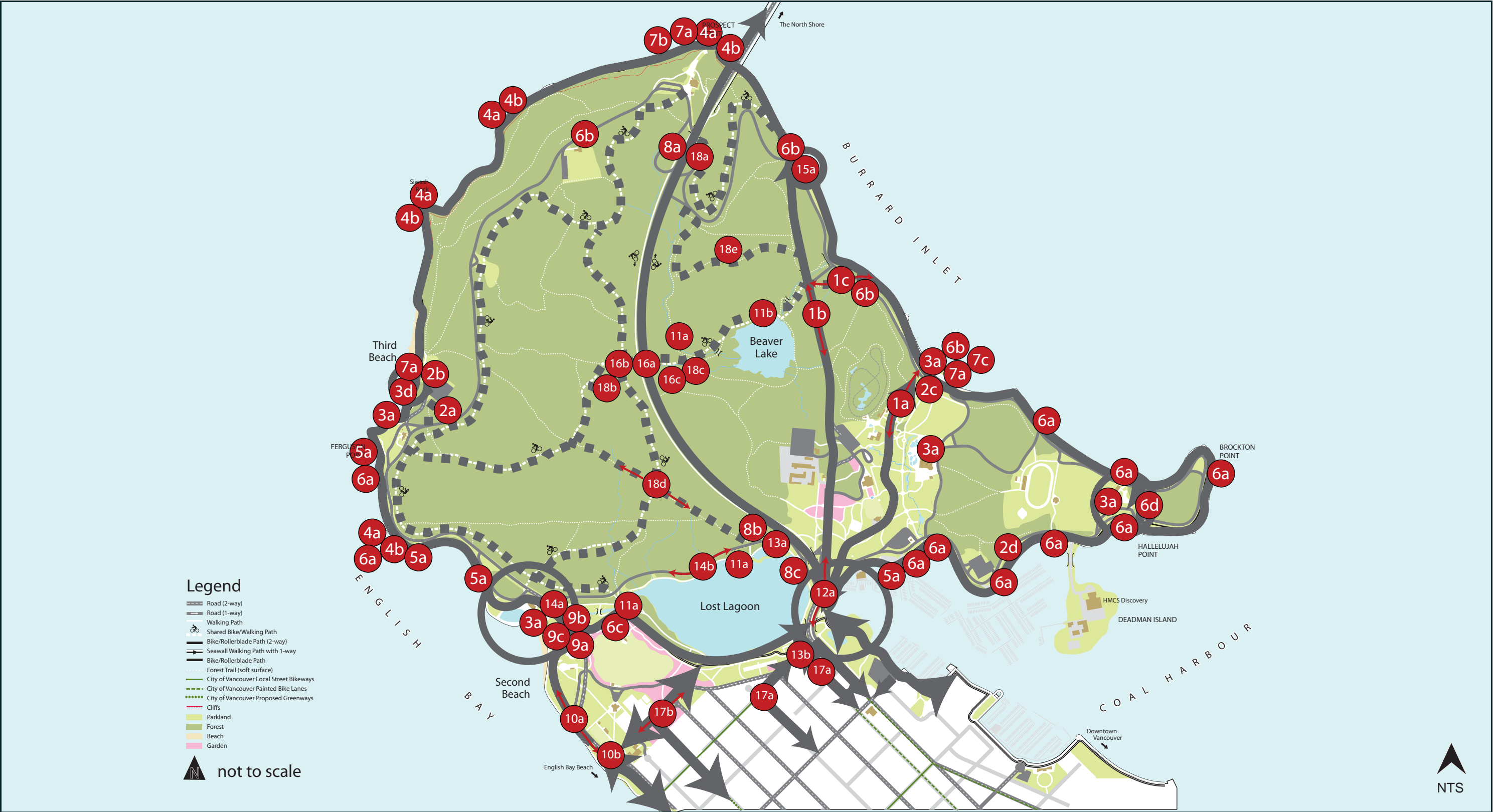
Table 1. Summary of Recommendations in Stanley Park (refer to Figure 11)

Theme: Challenge of one-way system		
#1	One way system constrains return to downtown from attractions along the Seawall and in the park	
	1a	Implement “Loop 1” Lumbermen’s Return Route
	1b	Implement “Loop 2” Pipeline Return Route (2 options; Traffic Study required)
	1c	Create a connection from the Seawall to Tunnel Trail and Beaver Lake Trail
#2	Wrong-way cycling on the seawall especially from Brockton Point to Devonian, and from 2nd to 3rd Beach	
	2a	Improve Rawlings Trail cycling access to Third Beach Concession
	2b	Create cycling access from Third Beach Concession to Seawall
	2c	Direct cyclists returning to downtown from Brockton Point via Lumbermen’s Return Route (1a)
	2d	Close one lane of Park Drive for returning cyclists following special events
Theme: Facility constraints		
#3	Insufficient bike parking at major park attractions	
	3a	Monitor bike usage on existing racks and add or relocate racks as necessary to meet demand
	3b	Create a bike valet policy for special events held in Stanley Park
	3c	Use temporary bike racks during special events
	3d	Enlarge bike rack area at north end of Third Beach
#4	Pinch points at several locations on the Seawall	
	4a	Install advance warning signage and remove site furniture at Seawall pinch points
	4b	Widen the Seawall at pinch points (through Seawall extension or cantilever)
#5	Physical separation (curb) on portions of the Seawall can be a tripping hazard	
	5a	Create curb cuts where pedestrians must cross the Seawall bike path
Theme: Conflicts between user groups		
#6	Pedestrian and cyclist conflicts at: Brockton Point, Totem Poles, Hallelujah Point Intersection, and pedestrian crossings of the bike path	
	6a	Use consistent crossing treatments at crossing/conflict zones
	6b	Make Stanley Park Drive safer for training cyclists to reduce Seawall congestion and conflicts
	6c	Re-route the bike/rollerblade ath at Lost Lagoon stone bridge south of the planted island
	6d	Improve cyclist wayfinding to and from the Totem Poles
#7	Congestion and conflict with pedestrians at dismount areas	
	7a	Use a textured paving strip and advance warning signage to indicate beginning and end of dismount areas
	7b	Widen Seawall (through Seawall extension or cantilever) to eliminate need for dismount area at Lighthouse
	7c	Implement a bike/rollerblade bypass route at the Kids Water Park
#8	Conflict caused when users are exiting the Causeway	
	8a	Create a “jug handle” at the Causeway exit just south of the bridge
	8b/13a	Create a pathway connection for cyclists exiting the Causeway southbound onto North Lagoon Drive
	8c	Paint cyclist crossing green and install a speed table where Park Drive exits the park
#9	Pedestrian and cyclist conflict at Ceperley Playground and Underpass	
	9a	Allow pedestrians to utilize tunnel at Ceperley Underpass, while providing other options to cyclists (2 options)
	9b	Create new pedestrian sidewalk along Stanley Park Drive at Second Beach
	9c	Create new walking paths at Ceperley Playground
#10	Unclear hierarchy and separation on pedestrian and bike path from Second Beach to English Bay	
	10a	Construct a separate pedestrian sidewalk between Second Beach and English Bay
	10b	Install signage directing pedestrians to the Seawall at English Bay

Theme: Ecological concerns		
#11	Impact of cycling on Stanley Park ecology from activities such as cycling on trails near water bodies	
	11a	Discourage cycling on non-designated trails
	11b	Upgrade surface of path around Beaver Lake to prevent gravel sloughing into lake
	11c	Create a clear single path where multiple unsanctioned paths exist
	11d	Remove redundant paving wherever possible
Theme: Lack of Connectivity		
#12	Unclear connections between the Causeway, the Seawall Entrance and Coal Harbour	
	12a	Implement the Gateway Node
#13	Unclear connections from the Causeway to Second Beach	
	13a/8b	Create a pathway connection for cyclists exiting the Causeway southbound onto North Lagoon Drive
#14	Unclear connections from Second Beach back to downtown, Coal Harbour and Seawall Entrance	
	14a	Implement wayfinding and signage interventions at Second Beach Node
	14b	Create two-way bike access on North Lagoon Drive (2 options; Traffic Study required)
#15	Connection between the Seawall and Prospect Point is not obvious or easy	
	15a	Implement the Prospect Point Access Node
#16	Difficult connection to the pedestrian overpass from the east and west sides of the Causeway	
	16a	Remove centre railing and overhead signs on Causeway Equestrian/Pedestrian overpass
	16b/18b	Create new shared pathway connection from southbound Causeway sidewalk to Lake Trail/Bridle Path
	16c/18c	Formalize shared path connection from northbound Causeway sidewalk to the south side of the Overpass. Decommission pathway on north side.
#17	Need for improved bike access from the West End neighbourhood, including the Alberni bicycle route, the proposed Haro Street Bikeway and planned Comox-Helmcken Greenway.	
	17a	Install signage to and from Stanley Park on Alberni Street and Haro Street bike routes
	17b	Create two-way bike access on Park Lane and intersection upgrades (3 options; Traffic Study required)
#18	Lack of connections for north and southbound cyclists from the Lions Gate Bridge to the trails	
	18a	Formalize shared gravel path to Causeway from Stanley Park Drive just south of the Lions Gate Bridge
	18b/16b	Create new shared pathway connection from southbound Causeway sidewalk to Lake Trail/Bridle Path
	18c/16c	Formalize shared path connection from northbound Causeway sidewalk to the south side of the Overpass
	18d	Designate Tatlow Walk as a shared use trail from North Lagoon Drive to Lovers Walk
	18e	Designate Hanson Trail as a shared use trail
Theme: Ineffective signage/wayfinding		
#19	Regulations and advisories affecting cyclists are confusing	
	19a	Increase enforcement, especially during peak use times
	19b	Promote park stewardship
	19c	Implement a signage program (warning and interdictory)
	19d	Liaise with bike rental shops on cycling etiquette
	19e	Explore opportunities for cycling events and programming
	19f	Consider installing bike “fix it” stations in the park
#20	Wayfinding can be difficult through the forest trails and to attractions in the park	
	20a	Create and distribute a cycling map for Stanley Park
	20b	Undertake a lighting study for Stanley Park
	20c	Implement a signage program (wayfinding)



Figure 11. Summary Map of Recommendations in Stanley Park (refer to Table 1)





# 6. PLAN IMPLEMENTATION

## 6.1 Prioritization and Phasing

Prioritization and phasing for the recommendations outlined in this Plan was determined through an evaluation of recommendations. Evaluation was based on criteria that reflect the overall project goals:

### Safety

- Does it improve safety for cyclists?
- Does it improve safety for other users, and put “pedestrians first”?

### Park Experience

- Does it increase network connectivity?
- Does it increase useability, enjoyment and convenience?
- Does it benefit a large number of park users?
- Does it improve universal accessibility?

### Ecology

- Will it have a positive impact on the ecology of Stanley Park?

### Implementation

- Can the recommendation be easily implemented?
- Is it important relative to nearby improvements?
- Does it resolve multiple issues?
- Is the cost low relative to other improvements?

Table 3 on the following pages lists recommendations in order from highest to lowest priority.

## 6.2 Implementation Steps

The implementation of each of the recommendations should involve the following steps:

- Confirmation of project scope and budget and incorporation into future Capital Plans;
- Discussions with Park Board partners to assist in funding and implementing the recommendations;
- Traffic studies (where required);
- Further public and stakeholder consultation (where required) and,
- Detailed design.

Decisions on annual investment will be subject to budget deliberations each year, and will be also driven by access to partnership funding from other levels of government and adjacent projects.

## 6.3 Cost Estimates

This plan recommends a total investment of approximately \$1.6M in physical construction projects, including engineering and contingency. This does not include signage not related to a specific recommended intervention nor staff costs at the Park Board. Individual construction project estimates are provided in Table 2.

Table 2. Schedule of Quantities and Prices

Project Summary Sheet		
1a	'Loop 1' Lumbermen's Return Route	\$ 205,000
1b	'Loop 2' Pipeline Return Route Separation (curb only)	\$ 178,000
2a/2b	Access Improvements to Third Beach via Rawlings Trail and new switchback path	\$ 69,000
7b	Seawall widening through extension/cantilever to at Lighthouse dismount area	\$ 500,000
7c	Bike/Rollerblade bypass route at the Kids Water Park (Stage 1)	\$ 77,000
7c	Cyclist connection at Stanley Park Drive to Lumbermen's Return Route (Stage 2)	\$ 42,000
9a	Ceperley Tunnel Cycling Bypass on east side of Park Drive (around Ceperley Meadow)	\$ 120,000
9b	New pedestrian sidewalk along Stanley Park Drive at Second Beach	\$ 50,000
9c	New walking paths at Ceperley Playground	\$ 24,000
10a	Separate pedestrian sidewalk between Second Beach and English Bay	\$ 119,000
10b	Grand Staircase to Seawall at foot of Park Lane	\$ 94,000
14b	Two-way separated bike access on North Lagoon Drive	\$ 140,000
17b	Two-way separated bike access on Park Lane	\$ 93,000
20a	Large format park maps for major nodes and entrances (10)	\$ 20,000
	<b>Subtotal Cost:</b>	<b>\$ 1,569,000</b>
	Note: costs reflects "Option 1" recommendations only.	
	*All costs include engineering and contingency, exclusive of HST	



**Table 3. Prioritization Table**

#	Prioritization of Recommendations	Safety		Park Experience				Ecology	Implementation					
		Improves safety for cyclists	Improves safety for other users	Increases network connectivity	Increases useability, enjoyment & convenience	Benefits a large number of park users	Improves universal accessibility	Positive impact on ecology of Stanley Park	Ease of Implementation	Important relative to nearby improvements	Resolves multiple issues	Relative Capital Cost	Relative Operating Cost	Score
SHORT TERM ACTIONS (1-5 YEARS)														
8b/13a	Create a pathway connection for cyclists exiting the Causeway southbound onto North Lagoon Drive	•	•	•	•	•			•	•	•	\$		9
7c	Implement a bike/rollerblade bypass route at the Kids Water Park	•	•	•	•	•	•	•		•	•	\$\$		9
2a	Improve Rawlings Trail cycling access to Third Beach Concession	•	•	•	•	•			•	•	•	\$		9
10a	Construct a separate pedestrian sidewalk between Second Beach and English Bay	•	•	•	•	•	•		•	•		\$\$		8
9c	Create new walking paths at Ceperley Playground	•	•	•	•	•	•		•	•		\$\$		8
2c	Direct cyclists returning to downtown from Brockton Point via Lumbermen's Return Route (1a)	•	•	•	•	•			•		•	\$		8
14a	Implement wayfinding and signage interventions at Second Beach Node	•	•	•	•	•			•	•		\$		8
6c	Re-route the bike/rollerblade path at Lost Lagoon stone bridge south of the planted island	•	•		•	•			•	•	•	\$		8
2b	Create cycling access from Third Beach Concession to Seawall	•	•	•	•	•	•	X		•	•	\$\$		7
16c/18c	Formalize shared path connection from northbound Causeway sidewalk to the south side of the Overpass. Decommission pathway on north side	•	•	•	•			•	•			\$		7
19c/20c	Implement a signage program	•	•	•	•	•		•	X	•	•	\$\$		7
10b	Install signage directing pedestrians to the Seawall at English Bay	•	•		•	•			•	•		\$		7
19b	Promote park stewardship	•	•		•	•		•			•		\$	7
2d	Close one lane of Park Drive for returning cyclists following special events	•	•	•	•	•					•		\$\$	6
1c	Create a connection from the Seawall to Tunnel Trail and Beaver Lake Trail			•	•	•	•	•	•			\$\$		6
20a	Create and distribute a cycling map for Stanley Park (implement with 19d)				•	•			•	•	•	\$		6
5a	Create curb cuts where pedestrians must cross the Seawall bike path		•		•	•	•		•			\$		6
18e	Designate Hanson Trail as a shared use trail			•	•				•	•	•	\$		6
1a	Implement "Loop 1" Lumbermen's Return Route	•	•	•	•	•		X		•	•	\$\$\$		6
15a	Implement the Prospect Point Access Node			•	•	•	•		•	•		\$\$		6
6d	Improve cyclist wayfinding to and from the Totem Poles			•	•	•			•	•		\$		6
4a	Install advance warning signage and remove site furniture at Seawall pinch points	•	•		•	•			•			\$		6
19d	Liaise with bike rental shops on cycling etiquette (implement with 20a)	•				•		•	•		•		\$	6
6b	Make Park Drive safer for training cyclists to reduce Seawall congestion and conflicts	•	•		•	•				•	•	\$\$		6
8c	Paint cyclist crossing green and install a speed table where Park Drive exits the park	•	•		•	•			•			\$		6
7a	Use a textured paving strip and advance warning signage at beginning and end of dismount areas		•		•	•			•	•		\$		6
6a	Use consistent crossing treatments at crossing/conflict zones	•	•		•	•			•	•		\$\$		6

LEGEND: • = Positive    = Neutral    X = Negative



#	Prioritization of Recommendations (...cont'd)	Safety		Park Experience				Ecology	Implementation					Score
		Improves safety for cyclists	Improves safety for other users	Increases network connectivity	Increases useability, enjoyment & convenience	Benefits a large number of park users	Improves universal accessibility	Positive impact on ecology of Stanley Park	Ease of Implementation	Important relative to nearby improvements	Resolves multiple issues	Relative Capital Cost	Relative Operating Cost	
MEDIUM TERM ACTIONS (5-10 YEARS)														
19f	Consider installing bike “fix it” stations in the park				•	•			•	•		\$		5
8a	Create a “jug handle” at the Causeway exit just south of the Lions Gate Bridge	•	•		•				•			\$		5
3d	Enlarge bike rack area at north end of Third Beach				•	•			•	•		\$		5
18a	Formalize shared gravel path to Causeway from Park Drive just south of the Lions Gate Bridge	•		•	•				•			\$		5
12a	Implement the Gateway Node			•	•	•				•	•	\$\$		5
17a	Install signage to and from Stanley Park on Alberni Street and Haro Street bike routes			•	•				•	•		\$		5
9a	Allow pedestrians to utilize tunnel at Ceperley Underpass, while providing other options to cyclists (2 options)	•	•	•	•	•		X		•		\$\$\$		5
3b	Create a bike valet policy for special events held in Stanley Park				•	•			•				\$	4
9b	Create new pedestrian sidewalk along Stanley Park Drive at Second Beach			•	•		•		•			\$\$\$		4
17b	Create two-way bike access on Park Lane and intersection upgrades (3 options; Traffic Study required)			•	•	•				•		\$\$\$		4
19a	Increase enforcement, especially during peak use times	•	•			•					•		\$\$	4
3a	Monitor bike usage on existing racks and add or relocate racks as necessary to meet demand				•	•			•			\$		4
16a	Remove centre railing and overhead signs on Causeway Equestrian/Pedestrian overpass				•				•	•		\$		4
3c	Use temporary bike racks during special events				•	•			•			\$		4
LONG TERM CONSIDERATIONS (10+ YEARS)														
7b	Widen Seawall (through Seawall extension or cantilever) to eliminate need for dismount area at Lighthouse	•	•		•	•						\$\$\$		4
4b	Widen the Seawall at pinch points (through Seawall extension or cantilever)	•	•		•	•						\$\$\$		4
14b	Create two-way bike access on North Lagoon Drive (2 options; Traffic Study required)			•	•					•		\$\$		3
16b/18b	Create new shared pathway connection from southbound Causeway sidewalk to Lake Trail/Bridle Path			•	•			X			•	\$		3
18d	Designate Tatlow Walk as a shared use trail from North Lagoon Drive (14b) to Lovers Walk			•	•							\$		3
19e	Explore opportunities for cycling events and programming				•	•							\$	3
1b	Implement "Loop 2" Pipeline Return Route (2 options; Traffic Study required)			•	•				•			\$\$		3
20b	Undertake a Lighting Study for Stanley Park	•	•		•	•		X				\$\$		3

LEGEND: • = Positive      = Neutral      X = Negative



# 7. CONCLUSION

The Stanley Park Cycling Plan lays out a comprehensive vision to address cycling deficiencies in the park and enhance the overall park experience for all users, especially pedestrians and other modes of active transportation. The Plan sets priorities for phased improvements to the cycling network based on safety, user experience, “pedestrians first” priority, ecology, increased universal accessibility, implementation and cost.

The Plan is envisioned as a living document. Capital budgets and operations goals should be updated each year. The overall capital cost estimates and priorities should be reviewed every five years.

The proposed network and supported recommendations identified in this Plan, are intended to encourage and promote more and safer cycling both recreationally and as a means of transportation in and through the park. This plan will assist the Park Board in achieving its mission to “Provide, preserve and advocate for parks and recreation services to benefit people, communities and the environment” and Vancouver’s Greenest City Goal, “to make walking, cycling, and public transit preferred transportation options.” The Cycling Plan is a foundation for further active transportation planning in Stanley Park, for adjacent greenways and in other parks within Metro Vancouver.

Active transportation facilities, including bicycle and pedestrian paths, are increasingly recognized as having significant health, social, environmental and economic benefits for communities. The implementation of the Stanley Park Cycling Plan will help to realize these benefits for the City of Vancouver and the millions who visit Stanley Park.



## Benefits of Active Transportation

### Health and social benefits:

- Preparing individuals and families for fluctuating and increasing fuel costs
- Creating recreational opportunities
- Enhancing community cohesion
- Promoting healthy lifestyles
- Increasing road safety

### Environmental benefits, such as:

- Reducing traffic congestion
- Reducing harmful carbon emissions

### Economic benefits, such as:

- Increasing tourist appeal
- Increasing pedestrian activity in commercial areas
- Reducing municipal infrastructure costs



# 8. GLOSSARY

## Facility Types

The following facility types are used or proposed in Stanley Park:

**Bike/Rollerblade Path** – paths shared by cyclists, rollerbladers and other wheeled modes of active transportation, such as skateboarders. Significant sections of the Seawall are comprised of this type of path.

**Forest Trail** – a walking or shared bike/walking path, occurring within Stanley Park’s forest. These trails are typically gravel surfaced.

**On-road Cycling** – cyclists may choose to cycle on roads within the park. Exercise and Commuter cyclists are most likely to participate in on-road cycling within the park.

**Seawall** – also known as the Seaside Greenway, the Seawall is an 8.8 km paved walking, jogging, cycling and rollerblading path that lines Stanley Park’s waterfront edge. The walking path is separated from the bike/rollerblade path, sometimes with a curb.

**Separated Bikeway** – bike lanes that are separated from on-road traffic by a physical barrier. They are intended to appeal to those who are not comfortable riding with vehicular traffic.

**Shared Bike/Walking Path** – a shared use path for pedestrians and cyclists.

**Sharrows** – road markings that help cyclists and drivers to share the road. They are used where bicycles and motor vehicles share a lane, where insufficient space exists for separate vehicle and bicycle lanes.

**Walking Path** – walking facilities include sidewalks, shared paths, and separated paths designated exclusively for pedestrians. Significant sections of the Seawall have walking only paths. Walking paths are generally paved with concrete, asphalt or unit pavers.

## Crossing Types

The following “menu” of crossing options are presented in this report:

**Elephant’s Feet** – also called “crossbikes” these markings are used to distinguish crossings where cyclists are permitted to ride. Elephant’s feet should be considered at appropriate crossing locations in Stanley Park.



**Raised Crossings** – crossings that maintain a consistent raised elevation, rather than dropping to typical road elevations. Raised crossings signal for motorists to slow down, while alerting other users to the possibility of vehicle presence. Raised crossings should be designed to allow for positive drainage.



**Special Paving** – separation of modes can be indicated through changes in surface material type and colour. For example, coloured concrete may be used where pedestrian and cyclists cross vehicular lanes, or unit pavers may be used to indicate pedestrian rights of way.



**Zebra Stripes** – a type of pedestrian crossing distinguished by alternating dark and light stripes on the road surface. Zebra stripes create a more conspicuous crossing.



## Traffic Calming Terms

Traffic calming measures are intended to discourage excessive vehicular speeds and improve safety for pedestrians and cyclists, as well as other drivers. These may include:

**Curb Extension** – also called a “curb bulge” or “neckdown.” An extension of the sidewalk, reducing the crossing distance and allowing pedestrians and approaching motorists to see each other when vehicles parked in a parking lane would otherwise block visibility.



**Speed Cushion** – designed as three small speed humps, placed side by side the width of a road, speed cushions resemble a split speed hump. They effectively slow motorists down, while allowing cyclists to travel between the humps, and emergency vehicles and buses with wider axles to pass without experiencing a “bump.”



**Speed Hump**– speed humps are raised, rounded traffic calming devices, placed across the road to slow traffic. They are often installed in a series in order to prevent cars from speeding before and after the hump. They differ from speed cushions in that they are continuous, rather than split, features.



**Speed Table** – a long, flat version of a speed hump. A speed table may also act as a raised crossing.



## User Terms

The following terms are used throughout the report:

**Commuter Cyclist** – those who travel through the park to and from work or school. Commuter cyclists often travel over the Lions Gate bridge between Vancouver and the North Shore.

**Exercise Cyclist** – cyclists who use the park for training. High speed and long distances traveled are typical characteristics of an exercise cyclist’s use of the park.

**Recreational Cyclist** – the majority of cyclists visiting the park. These cyclists, including tourists, as well as locals, are in the park for a leisurely bike ride, without a focus on speed or exercise.

**Transportation Cyclist** – transportation cyclists make trips to and from destinations in the park (e.g., aquarium, sports facilities, restaurants, events etc.).

## Other Terms

**Jug Handle** – a change in alignment of a pathway or bicycle lane where cyclists make a left turn or cross a road to the left, that reorients cyclists so that they are perpendicular or close to perpendicular to approaching traffic, for improved visibility and manoeuvrability.





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S.Golden and Associates, 2010. *Stanley Park Accessibility Network Map*. Scale: NTS.

Vancouver Park Board, 2009. *Fire Access Routes Map*.

Vancouver Park Board, 2011. *Aerial Photo of Stanley Park*.

## Bicycle Counts

**Beaver Lake**  
Stanley Park Ecology Society (Sep 17,18 & Oct 2,9, 2011).

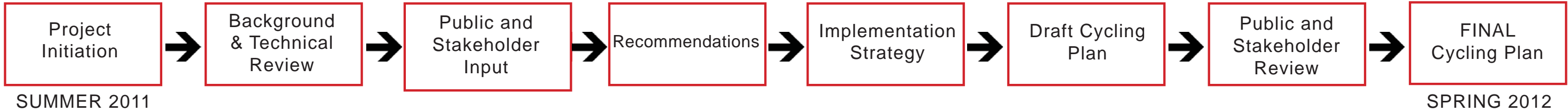
**Causeway** - City of Vancouver Engineering Department, Daily Bicycle Hose Counts (Sep 5 - Oct 4, 2011) .

**Seawall**  
Vancouver Park Board (July 31, 2005) 10am - 5pm.  
City of Vancouver Engineering Department - Daily Bicycle Hose Counts (Aug 4 - Sep 5, 2011).





# APPENDIX A: METHODOLOGY



The development of the Stanley Park Cycling Plan was based on the eight phase process diagram shown above. The process included extensive engagement with Vancouver Park Board and City staff, who were involved in each phase. Consultation was also held with stakeholders and the general public. The following specific steps were undertaken:

### Background Review

The first phase involved the review of background information such as previous reports, maps and GIS files for Stanley Park. A list of background information reviewed is provided in Chapter 10: References.

### Field Inventory / "Rideabouts"

Field work included three Rideabouts facilitated by the consultant team, and attended by representatives from the Staff Team, Park Operations, Park Rangers, and the Stanley Park Ecology Society. The focus of the rideabouts was to identify key opportunities and constraints and to groundtruth possible solutions. The product of the Rideabouts was a series of Issue Sheets which form the basis of Chapter 5: Issues and Recommendations by Theme.

### Public Open House

A Public Open House was held on September 10, 2011 to identify key issues related to the Stanley Park Cycling Plan. Members of the public were welcomed at two main entry locations in the park to view display panels, document issues on maps provided, and submit input via a Questionnaire.

### Stanley Park Cycling Questionnaire

From September 1 to September 30, 2011 an on-line Questionnaire was made available to solicit suggestions and comments on cycling in Stanley Park. The

Questionnaire was designed to gather opinions from a range of users including pedestrians, cyclists, skaters and motorists. A total of 552 people completed the questionnaire, including 122 at the Open House and 430 who completed it on-line. Comments were also collected via e-mail, Twitter, and the Bike Vancouver and Vancouver Park Board Facebook pages. Please refer to Chapter 3 for consultation highlights and Appendix D (under separate cover) for a full summary of public consultation input.

### Staff Team Meetings

Park Board and City of Vancouver staff were involved throughout the process including a total of six technical review meetings.

### Draft and Final Report

Following the consultation and issues identification phase of the study, the consultants prepared a draft version of the report for discussion with the Staff Team. The draft report was posted to the Vancouver Park Board website for public review and comment and circulated to stakeholders. Following the draft plan review adjustments were made, and a final report submitted.





# APPENDIX B: BICYCLE COUNTS

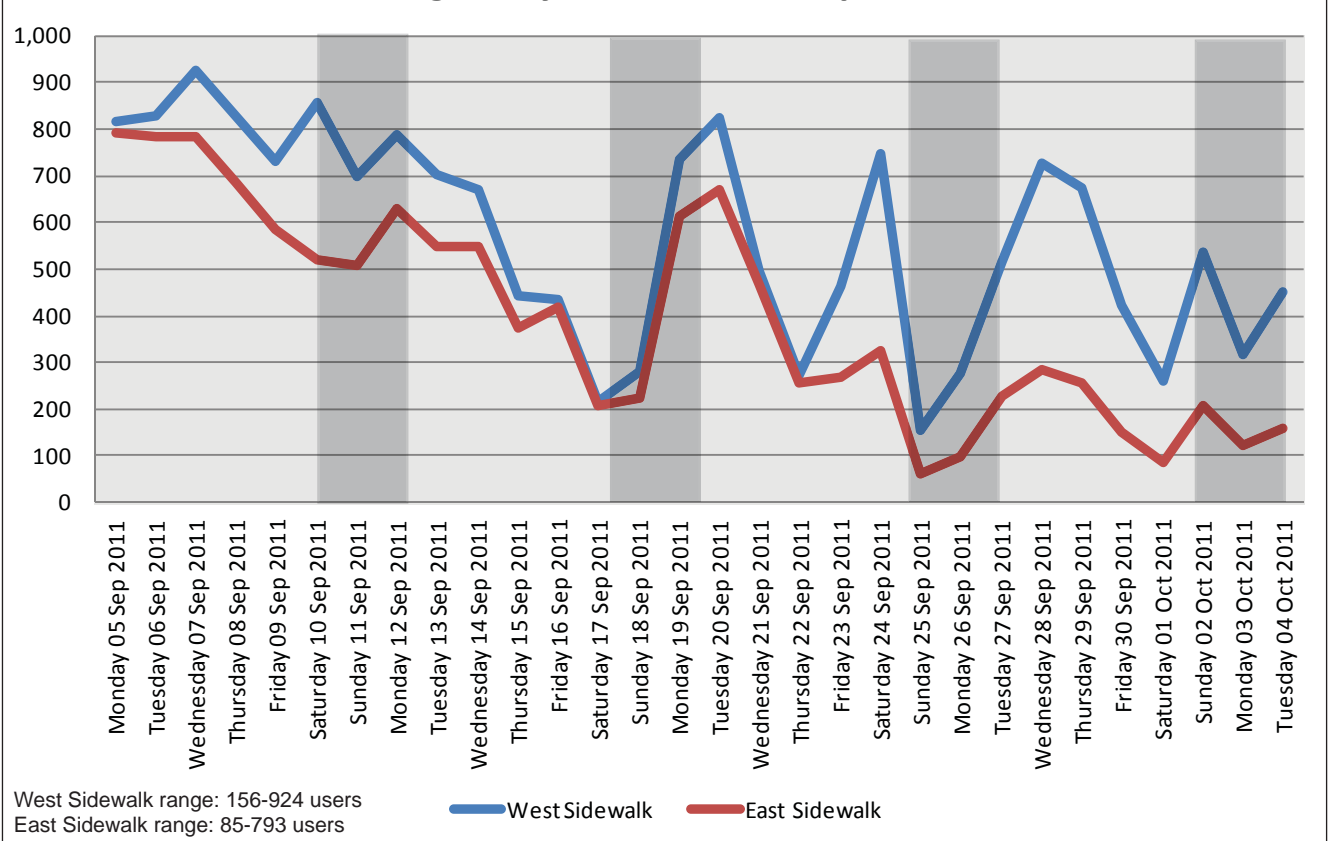
Figure 12. Average Daily Bicycle Counts - Seawall (Summer Months)

Results suggest that the Seawall is just as busy all the way around, with highest use at English Bay. The range of counts are shown in brackets, where counts were conducted over multiple days.



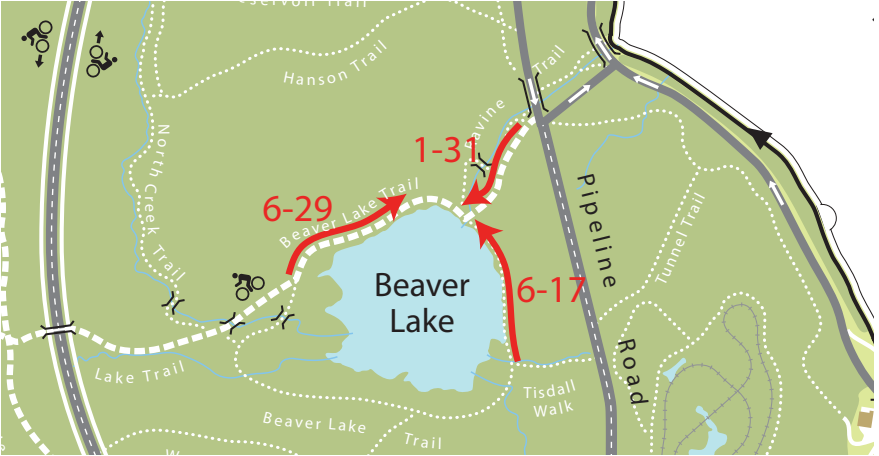
Sources:  
Seawall - Vancouver Park Board (July 31 2005) 10am - 5pm; City of Vancouver Engineering Department - Daily Hose Counts (Aug 4 - Sep 5 2011).  
Lions Gate Bridge - Ministry of Transportation (Oct 26 2005).  
Causeway - City of Vancouver Engineering Department (Sep 5 - Oct 4 2011) Daily Bicycle Hose Counts - note: counter was malfunctioning and under reporting for 2 day period.

Figure 13. Daily Bicycle Counts - Lions Gate Bridge



Source: City of Vancouver, Engineering Services - Daily Bicycle Hose Counts, Sep 5 - Oct 4, 2011.  
Note: Counter was malfunctioning and under reporting east sidewalk on September 22 & 23, 2011.

Figure 14. Average Bicycle Counts - Beaver Lake



Source: Stanley Park Ecology Society  
Notes: 1) Counts are based on a three hour periods on Sep 17, 18 & Oct 2, 9, 2011.  
2) Cycling is not permitted on the east side of Beaver Lake.



# APPENDIX C: CONSULTATION SUMMARY

(Under separate cover)