



July 11, 2022

**TO:** Park Board Chair and Commissioners  
**FROM:** General Manager – Vancouver Board of Parks and Recreation  
**SUBJECT:** Stanley Park Mobility Study – Initial Findings & Directions

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## RECOMMENDATION

- A. THAT the Vancouver Park Board receive for information, this update on the Stanley Park Mobility Study, specifically the **Preliminary Mobility Context Report** and the **Engagement Update Report** (Phases 1 and 2) appended to this Report; and
- B. THAT the Vancouver Park Board approve the draft 'Guiding Principles' in this Report which will inform future work on developing and evaluating options. Draft 'Guiding Principles':
  1. Safety
  2. Accessibility
  3. Economic Vitality
  4. Climate Action & Environmental
  5. A Flexible & Resilient System
  6. A Connected Transportation Network
  7. Enhance Park Experience

## REPORT SUMMARY

This report is intended to give the Park Board an update on the project, share the analysis findings of mobility and visitor use data and the results of the public survey, and to seek the Board's approval of the seven guiding principles. These guiding principles will be used to inform the criteria that all proposed mobility options will be evaluated against, and the outcomes of this will form recommendations to the Board as part of the final Stanley Park Mobility Study that will be presented to the Board in early 2023.

## PREVIOUS DECISIONS/UPDATES

In April 2018 the [Stanley Park Comprehensive Plan](#) was presented to the Board. The Plan is a long-range plan and the development of 100-year vision for the park currently underway in partnership with Musqueam, Squamish and Tsleil-Waututh Nations. The need to study the use, efficiency and the potential future of the transportation network in the park was identified during the Stanley Park Comprehensive Planning process.

In April 2020, with the onset of the COVID-19 pandemic when specifics of disease transmission was less understood, the Park Board General Manager made a public health [operational decision](#)

to close Stanley Park to vehicles in order to allow pedestrians and cyclists more space for physical distancing.

In June 2020, the Board carried a [motion](#) to reopen the park to vehicles as detailed in the Park Board's Reopening and Recovery Plan, and a temporary bike lane was installed on one of the two lanes on Park Drive.

On June 8, 2020, the Board carried a [motion](#) to direct staff to: "explore the long term feasibility of reducing motor vehicle traffic in Stanley Park, including but not restricted to, reducing roadways to single lanes while maintaining access to the park, while increasing accessibility for those with disabilities". This motion established the need for the Stanley Park Mobility Study, separate from but informing the Stanley Park Comprehensive Plan.

On November 15, 2021, Board carried a [motion](#) to direct staff to: "to extend the timeframe for the Stanley Park temporary bike lane on Park Drive until the Stanley Park Mobility Study is complete and staff report back with long-term recommendations."

## **BACKGROUND**

Park Drive has existed since 1888 originally built to allow for "pleasure drives" around the Park, first by horse and carriage and then by automobile by the early colonizers of Vancouver. At 11 km, Park Drive is the longest continuous road in Vancouver's park system and provides access to many destination attractions. Park Drive itself is an attraction traveling along its perimeter providing relief from the city's dense urban environment with an immersive forest experience and breathtaking views of Burrard Inlet, English Bay and the North Shore. As a transportation route Park Drive is unique and complex with over 40 individual intersections. Preliminary data analysis suggests that Stanley Park receives significantly more than the originally estimated 10 million visits a year, and Park Drive along with the Seawall play a pivotal role in providing access for visitors.

Across the region and in fact, across North America and the world, destination parks have been reaching peak vehicle capacity and park management agencies have been implementing vehicle management programs to enhance safety, protect park experiences and environments, and deal with increasing demand that has exceeded capacity.

The Stanley Park Mobility Study examines the feasibility of different approaches for reducing vehicle traffic, while maintaining functionality and access, through the park through data collection, analysis and engagement. The project involves transportation planning experts, mobility data specialists, and economic specialists, supported by engagement with Park Stakeholders, and a multi-disciplinary team of Park Board and City of Vancouver staff. The goal of the Stanley Park Mobility Study is to improve park access and experiences, while developing and evaluating the feasibility of options for the reduction in private vehicle traffic.

### **Mobility Study Project Scope**

How people access and move around Stanley Park is complex and has a major impact on the overall function, management, use and enjoyment of the Park. There are many questions to ask

in order to understand this, and these questions helped shape the following key deliverables and scope of work:

- **Mobility Data & User Travel Profile Review:** To start, the project aims to determine how many visitors come to Stanley Park, and what their preferences are. Past estimates were developed prior to 2016 and are now outdated, especially considering the increase in park use, densification and increase in tourism.
- **Best Practice & Case Study Review:** The project includes examining the many other major city park examples out there including their different approaches to mobility and the impacts of changing their mobility patterns and reducing vehicular travel.
- **Economic Analysis:** In order to determine the economic impacts of reducing vehicle traffic, the study aims to understand what Stanley Park's contribution is to the region's tourism economy, impacts to the Park Board's budget, and what role the park's existing transportation network plays.
- **Access Analysis:** There are many attractions, amenities, operational facilities and businesses in the Park that require varying levels of access. The Study aims to more deeply analyze what level of access people currently have and map out how specific areas are accessed.
- **Options Development & Evaluation:** There are many different approaches to reducing vehicle trips in a park. The Study will develop and refine these options, and will be evaluated against a set of important criteria to determine resulting recommendations for implementation or for further study.

### Project Timeline

Overall the project will be delivered over three phases, as indicated in the timeline graphic below, and is aimed to be completed by the end of 2022.

Figure 1: Mobility Study Overall Phasing



The project is near the end of Phase 2, and will be continuing on to Phase 3 Feasibility Study & Report, following the outcomes of this Report to the Board.

### DISCUSSION

The following is a summary of the work completed to date in Phases 1 and 2. For further information and details, refer to the **Preliminary Mobility Context Report** in Appendix 1 and the **Public Engagement Update** in Appendix 2.

### **Analysis of Previous Public Engagement**

Over the past two years, public surveys on mobility in Stanley Park have provided a large amount of interest and response. These findings were presented to the Board on the 2020 Stanley Park COVID-19 Response ([November 23, 2020](#)) and on the 2021 Bike Lane ([November 15, 2021](#)). Key findings include:

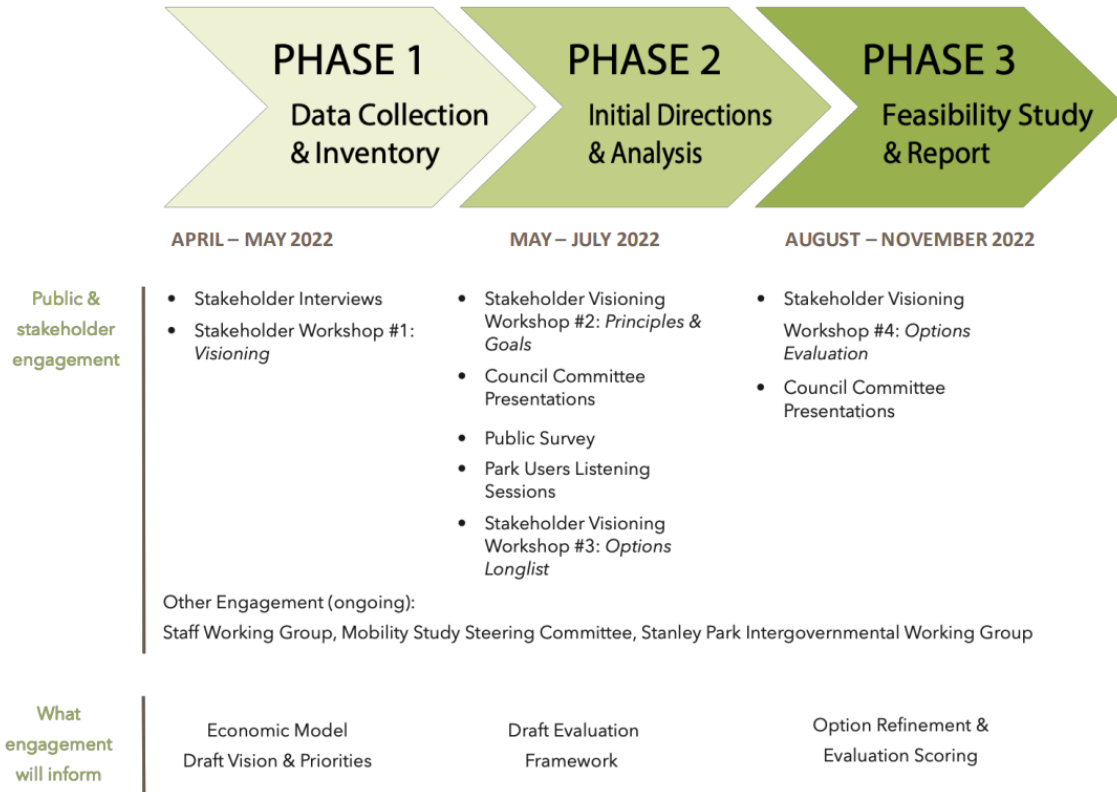
- There was a recognition for the need for change of mobility in Stanley Park
- Input from youth and younger adults has been underrepresented in the past
- There was an overall public sentiment trend toward fewer private cars
- When respondents were asked why they visit Stanley Park, the top 5 reasons were:
  - For “passive recreation (walk, roll, cycle) - 73%
  - To access nature in the City – 59%
  - To visit the beaches and picnic areas – 47%
  - To show visitors (ie. From out of town) around the Park – 30%
  - To drive through the Park – 19%

These initial findings helped shape the design of the formal public engagement process for the project as outlined below.

### **Public Engagement**

The public engagement process was designed to be transparent, clear and equitable and to ensure that staff heard from a diversity of users and stakeholders. The focus of engagement was to start with values, centre equity and provide mutual learning opportunities for all stakeholders to help understand each other’s common, and sometimes competing, needs and interests. The phases of engagement and how they are influencing the project’s scope and deliverables are noted in the graphic below:

**Figure 2:** Engagement as it relates to Overall Project Phasing



### Park Stakeholder and User Engagement

- **Park Stakeholder Interviews** – One-on-one meetings with select stakeholders who see the most visitors in Stanley Park were conducted in order to collect background and other pertinent information to inform the project. The interviews were 30-45 minutes and included questions about access, employee commutes, visitor travel and frequency, servicing and delivery needs.
- **Park Stakeholder Workshops** - A series of three out of four workshops have been conducted with stakeholder groups that operate in or rely on access to Stanley Park. The purpose of these workshops is to update Park stakeholders on the process, share the work that is underway, and receive valuable input at key points in the Study.
- **Community & Youth Group “Listening Sessions”** - Two sessions were held with representative/leader groups that consist of demographic populations who were missing or underrepresented in past engagement processes, specifically youth and families. These sessions were facilitated in a “world café” format where participants took part in multiple small group discussions in several rounds. Workshops were supported with information collected to date, previous phases of engagement, site maps and user profiles to help participants consider the perspectives of different users of the site.
- **Council Advisory Committees** - Seven (7) Advisory Committees were contacted for engagement on the project and the following four (4) have been engaged on the project so far:
  - Persons with Disabilities Advisory Committee (PDAC)

- Urban Indigenous Peoples' Advisory Committee (UIPAC)
- Transportation Advisory Committee (TAC)
- Racial and Ethno-Cultural Equity Advisory Committee

The following are scheduled for upcoming engagement:

- 2SLGBTQ+ Advisory Committee
- Children, Youth and Families Advisory Committee

And the following remaining Advisory Committee has been contacted but yet to be scheduled:

- Seniors Advisory Committee (SAC)

The full list of Park Stakeholders and User Groups can be found in the **Engagement Update** report attached in Appendix 2.

### **Public Engagement & Survey**

Information on the project has been available online through the project's [Shape Your City website](#), including a web form and email address for comments. And from May 18 to June 9, 2022, a public survey was hosted online on the Shape Your City site (and in print form in key locations). The survey was promoted through posters in the park, community centres and other high traffic locations, social media, online advertising (targeting both locals and tourists), mailing lists, and information bulletins to the media. Paper copies of the survey are provided to community organizations for seniors and others, who may experience barriers to online participation.

The survey garnered approximately 4,036 responses, and was created to fill in gaps from the engagement completed to date on past mobility projects in Stanley Park over the past two years. Preliminary results of this public survey are included in the *Preliminary Mobility Context Report* in Appendix 1, and will continue to be reviewed, analyzed and relied upon for future work throughout the project.

### **Best Practice & Case Study Review**

The Best Practice & Case Study Review in the Preliminary Mobility Context Report outlines some of the many urban parks that opted for low car approaches especially over the last several years:

- Golden Gate Park (San Francisco, CA, USA)
- Central Park (New York, NY, USA)
- Prospect Park (Brooklyn NY, USA)
- Royal Djurgården (Stockholm, Sweden)
- Phoenix Park (Dublin, Ireland)
- Washington Park (Denver, CO, USA)
- Royal Parks (London, England)
- Metro Park (Washington, D.C.)

While the pandemic prompted these projects in many cases, parks like Central Park, Prospect Park, and Royal Djurgården had begun implementing low car initiatives pre-COVID to mitigate the impacts of congestion and overcrowding, to become more sustainable, and to retain park value. The following lists some of the key lessons learned from the review:

- Experience shows that low-car initiatives in parks typically increase visitor numbers, and particularly the amount of people using active and low-impact modes of transportation.
- Longer-term low-car options must be carefully approached and studied; moving too quickly may diminish public support. They are typically implemented in phases, and often provide alternative ways to facilitate access while also maintaining universal accessibility (for persons with disabilities).
- Other contributive factors to implementing low car approaches included a strong political backing and/or initial community advocacy, the desire to enhance park culture significance, and to increase safety.
- Public opinion was generally favourable once changes were made, with positive outcomes including maintaining and enhancing park experiences, less noise and pollution, roadway and parking space reallocated for events, and continued business vitality.
- Some parks are managing vehicle access through fees, pre-booked timeslots, and other innovative measures.

Further details of each park in the Best Practice & Case Study review can be found in the *Preliminary Mobility Context Report* attached as Appendix 1.

### **Mobility Data Collection & Analysis**

Visitors to Stanley Park travel to and within the park using a variety of modes and via a wide variety of routes, including roads, the Seawall, and gravel trails. Access to the park by different users is influenced and constrained by existing transportation infrastructure, the layout of points of interests around the park, and the topography of the area. Access to the park remained relatively consistent for the recent history of the park until the spring of 2020, when the Covid-19 pandemic spurred multiple shifts in policies and infrastructure that also resulted in shifts in transportation behaviour, opportunities, and challenges in the park.

The study utilized a wide-variety of data sources, including location-based smartphone data, multiple public surveys of park users, parking meter transactions, and historical counts of park visitors in order to analyze mobility in the park for the 2019 baseline and determine how mobility has changed since then through the pandemic. Key findings from the Mobility Context Report are as listed below:

- **Mode Share** - The location-based smartphone data shows that in 2021, 51% of trips into the park were made by walking or rolling, 33% were made by car, 15% by bike, and 1% by public transit. This roughly aligns with what respondents to the 2022 public survey selected as their ideal mode of travel.
- **Transit Access** - survey respondents indicated that multiple transfers and limited route coverage and frequency were barriers to using public transit to access the park. Park users with disabilities affecting their mobility use motorized modes to visit the park than those without mobility issues. As far as overall challenges in travelling to the park,

difficulties finding parking, navigating, and feeling unsafe sharing roads were mentioned most frequently.

- **Opportunities/ Challenges** - In discussing the potential for reducing private vehicle travel to the park, the 2022 survey of park users identified the main challenges being access for those with mobility issues and those travelling with large families or groups. However, approximately 70% of survey respondents reported that they believe there are opportunities with reducing vehicle traffic, namely reducing noise and pollution and providing more space for other modes of transportation.
- **Behaviour of Different Modes** - Those that travel to Stanley Park in high occupancy vehicles spend more money at businesses than those visiting by other modes. Those that walk or bike to the park spend relatively small amount of money on each visit, they visit the park more frequently, on average, than those that use motorized modes of travel, and spend a moderate amount of money over the course of a year, on average. Park users that drive alone spend approximately half of what pedestrians and cyclists do over the course over the year, and those that travel by transit and taxi spend relatively little in total.
- **Total Park Visitation** - Approximately 17.1 million trips to Stanley Park were made in 2019, before the onset of the Covid-19 pandemic. The number of annual visitors fell in 2020, but surpassed 2019 levels in 2021 with an estimated 18.0 million annual visitors. Since 2017, the total annual trips to Stanley Park by all motorized modes have decreased, while the total annual trips by active modes have increased.
- **Visits vs Visitors** - Based on the analysis of 2021 data, 48% of trips to Stanley Park were made by locals that live within 10 km of the Park. Approximately 9.5 million different people visited Stanley Park in 2021. The majority of those people were tourists who visited the park only once per year, while approximately 160,000 locals living within 10 km of Stanley Park who repeatedly visited make up the rest of the annual visits.

The above is just a high level list of some of the findings. The full **Preliminary Mobility Context Report** can be found in the attached Appendix 1.

### **Foundational Values**

Building off existing Park Board policies, and previous public engagement, the project identified two key foundational values that govern the work of the Mobility Study:

1. **Reconciliation** - Stanley Park is a significant place to the Musqueam, Squamish and Tsleil-Waututh people. Through ongoing work with the Nations at the Stanley Park Intergovernmental Committee and Working Group, understanding the history of how the Park's transportation infrastructure has impacted the Nations and their ongoing access and cultural practices in the Park, is an underpinning consideration in all options that will be explored as part of the Mobility Study.
2. **Equity** - Experiences are shaped by intersecting identities, favoured social systems, and often inequitable means, and so we must recognize that everyone has different needs and experiences in the Park. We also recognize that not everyone can easily access the park, particularly those who live further away and cannot or choose not to drive and struggle to experience the Park in any form. This work seeks to advance equity in process and outcome, such that those with limited ability to currently access the Park are centered.



## Guiding Principles

Through stakeholder and public engagement, and informed by the technical analysis of the mobility and visitor use data, the following seven guiding principles were developed that will help inform how future options will be developed and evaluated as part of the Mobility Study:

1. **Safety** - To create a safer mobility environment, we will aim to reduce potential conflicts between diverse users, enhance user comfort through all times of the day, and maintain a network that supports access for emergency response.
2. **Accessibility** - We will prioritize the needs of users who face increased barriers accessing locations in the park and increase universal accessibility by design. We must recognize the diverse accessibility needs for persons with disabilities, with an awareness that multiple approaches will be required/need to be considered.
3. **Economic Vitality** - We will maintain economic vitality by recognizing the contributions of existing and future opportunities enabled by Stanley Park. We will also center the natural value of Stanley Park as a key contributor to the regional economy and explicitly consider the financial implications of proposed options on Park Board budgets and services.
4. **Climate Action & Environmental Protection** - By reducing private vehicle traffic, we can contribute to bold climate action and decrease carbon emissions, air and noise pollution, and water contamination. Lower demand for paved surface area can unlock potential to increase natural areas, sequester carbon, and safeguard Stanley Park's core natural value.
5. **A Flexible & Resilient System** - To accommodate different levels of user activity over the course of a day, a week, a year, and into the future, the transportation network will be planned and designed for different uses and demand. With increased flexibility, the transportation network can better respond to changes in the Park as well as negative impacts such as storm surges and sea level rise into the future.
6. **A Connected Transportation Network** - We will evolve the existing transportation network into one that provides more direct routes, is more intuitive for users, and enables improved connection to the City's transportation system. In particular, this will consider the need to support public transit operations. This future network - one that provides access for all - will require innovative ways to manage access.
7. **Enhance Park Experience** – The options will consider what people love and appreciate about Stanley Park, and how to enhance experiences leading up to the pandemic and today.

The recommendations for implementation in the next phase of this project will need to balance these priorities and analyze trade-offs. The evaluation criteria and weighting will be developed through further engagement and analysis, in order to support this process.

## Upcoming Work

This preliminary Mobility Context Report is intended to be updated with additional analysis, stakeholder and public engagement input, and study outcomes. As well, based on direction from the Park Board, finalized guiding principles will be used to guide the development and evaluation of options. At this point in the process, various options have been generated in consultation with stakeholders, Park Board and City staff. No decisions have been made regarding potential

options, and further work is required to complete the options long-list and outline these in more detail, ahead of evaluation. Anticipated upcoming work are as follows:

- Revise the guiding principles based on Park Board direction.
- Complete the Access and Economic baseline analyses
- Augment the currently planned Phase 3 stakeholder and public engagement progress, based on emerging needs and Park Board direction.
- Finalize options long-list, study feasibility, and evaluate options in more detail.
- Contribute toward future decision-making regarding the current temporary Park Drive bike lane (which is one of many potential options to evaluate).
- Develop recommendations that support the goals of the study and consider how these may be implemented and/or phased over time.

### **FINANCIAL CONSIDERATIONS**

Resourcing for the Stanley Park Mobility Study is funded through the current Capital Budget. Financial implications of any final recommendations, including potential impacts on the Park Board operating and capital budgets and public feedback on those budgetary impacts collected during Phase 3 of the stakeholder and public engagement process, will be detailed in the final draft report anticipated for Board decision in early 2023, supported by the economic model.

### **CLIMATE CONSIDERATIONS**

As outlined in the Study's draft Principle #4 Climate Action & Environmental Protection, reducing private vehicle trips within Stanley Park, is consistent with Vancouver's Climate Emergency Action Plan, Big Move #2 Active Transportation & Transit Actions (with a target of 2/3 of all trips to be by foot, bike or transit by 2030).

### **NEXT STEPS**

Over the next several months, the Feasibility Study and Report will be developed as part of the project's Phase 3. As part of this work, development and refinement of options, evaluation criteria development, and evaluation scoring will be completed along with continued public and stakeholder engagement. Engagement for this final phase will include a Stakeholder Visioning Workshop #4: Options Evaluation, further Council of Committee Presentations, Staff Working Groups, Steering Committee and Stanley Park Intergovernmental Working Group meetings.

Based on all the inputs and work described above, the final proposed Stanley Park Mobility Report is anticipated to be complete in early 2023 and will be presented to the Board for consideration and decision at that time.

### **CONCLUSION**

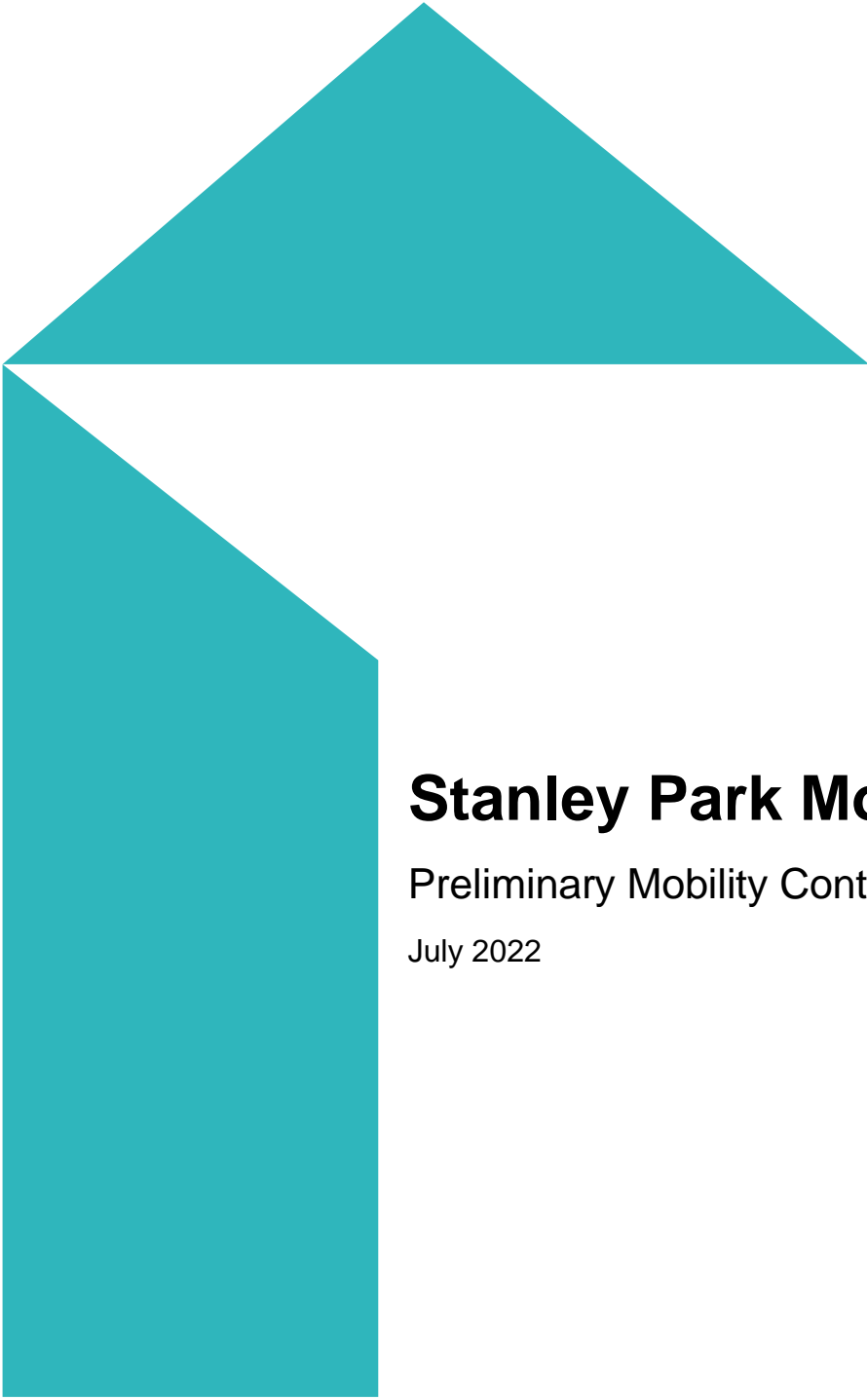
Staff recommend that the Vancouver Park Board accept this update on the Stanley Park Mobility Study project; and approve the draft 'Guiding Principles' which will inform future work on developing and evaluating options. By confirming the Guiding Principles staff can move forward with establishing options and evaluation criteria to complete the Mobility Study, and ensure that

effective solutions are developed to support the use, management, enjoyment and protection of Stanley Park long into the future.

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# **Stanley Park Mobility Study**

Preliminary Mobility Context Report

July 2022

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# **Stanley Park Mobility Study**

Preliminary Mobility Context Report

July 2022

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# Executive summary

The location and natural beauty of Stanley Park (the 'Park') mean that it is highly valued as a destination for recreation and urban respite, not only by Vancouverites but also by visitors from the rest of the region and around the world. The value of Stanley Park to residents and visitors alike was brought into sharp focus at the onset of the COVID-19 pandemic when temporary changes were made to the Park's transportation system. Inspired by these changes, the Vancouver Board of Parks and Recreation passed a motion in June 2020 to *"explore the long-term feasibility of reducing motor vehicle traffic in Stanley Park, including but not restricted to, reducing roadways to single lanes while maintaining access to the park, while increasing accessibility for those with disabilities"*. This motion, and the ongoing Stanley Park Comprehensive Master Plan process, prompted the need for a Stanley Park Mobility Study. This Preliminary Mobility Context Report presents the findings of the first two phases of the study. The following are the primary findings of the work so far.

Based on impacts to the Park experience documented at various times, including congestion, safety, noise, and pollution concerns, studies since the 1980's have explored options to reduce private vehicle traffic in the Park, while maintaining access for all park users. This study builds on previous work and assesses the existing mobility context of Stanley Park based on stakeholder and public input, and the analysis of a variety of mobility data sources. Further, it aligns with policy direction that comes from multiple levels of government and partner agencies.

A review of landmark urban parks in cities around the world revealed that many have taken measures to reduce private vehicle trips to the park in recent years. In some parks, car-reduction measures, including closure of roads to vehicles, sometimes coupled with the expansion of transit or shuttles, were implemented in response to the COVID-19 pandemic. Other parks started on a journey of low-car approaches prior to the pandemic.

The interim bike lane currently located on the inner lane of Park Drive is one of multiple options that will be evaluated as a possible longer-term option during later stages of this study. Due to it being installed at this time there is considerable evaluative data already available, some of which is captured in this report. However, 2019 and the conditions at that time form the "baseline year" as part of the options development and evaluation phase.

Prior to the onset of the COVID-19 pandemic, in 2019 approximately 17.1 million trips were made to Stanley Park, which is a 70% increase from frequently quoted estimates of 10 million visits per year from earlier years. The number of annual visitors fell in 2020, but 2021 surpassed 2019 levels with an estimated 18.0 million annual visitors. Analysis has shown that in 2021, about 48% of trips to Stanley Park were made by locals that live within 10 km of the Park and approximately 9.5 million different people visited Stanley Park.

Results of a 2022 public survey indicated that approximately half of respondents have some level of interest or enthusiasm for cycling but concern over safety. In addition, survey respondents indicated that multiple transfers and limited route coverage and frequency were barriers to using public transit to access the park. Park users with disabilities affecting their mobility use motorized modes to visit the park more than those without mobility issues.

In seeking respondent's views on the potential for reducing vehicle travel to the park, 85% of survey respondents identified a resulting challenge, of which access for those with mobility issues and those travelling with large families were the most frequently cited. However, over

70% of respondents perceived there to be opportunities associated with reducing vehicles, namely reducing noise and pollution, and providing space for other modes of transportation.

Other key findings in this Mobility Context Report include:

- The average group size for visits to the park is 2.3, and the average auto occupancy for trips to the park is 2.7, considerably higher than the average occupancy rate in the city and region.
- On a relative basis, international visitors tend to frequent attractions in the eastern and northern areas of the Park such as the aquarium and the totem poles at Brockton Point, whereas local visitors tend to frequent destinations in the western and southwestern areas of the Park.
- Visitors using vehicles tend to have a specific destination in mind, whereas those that cycle are less likely to have a specific destination in mind, suggesting trip purpose and destination is of lower priority and recreation is of higher priority for cyclists.
- Overall, parking occupancy did not exceed capacity throughout the busiest months suggesting that current parking capacity is sufficient for the Park overall. Parking demand does approach available capacity at some lots at the busiest times, which may lead to localized congestion during peak periods.
- People who walk to access the Park are the most frequent visitors, while public transit users are the least frequent visitors.
- Based on existing mode share and visit frequency, as a whole, people who access the park by vehicles and in larger groups spend the most money in Stanley Park over the course of a year. They are followed by active transportation and micromobility users. People who access the Park by vehicles alone spend about half the amount that active transportation users do.

This preliminary Mobility Context Report will be updated with additional analysis, stakeholder and public engagement input, and study outcomes. Based on direction from the Park Board, guiding principles will be used to steer the development and evaluation of options for the future of mobility in Stanley Park in consultation with stakeholders and park and City staff. These guiding principles are part of a Park Board staff report to commissioners and will be incorporated into the Mobility Study reporting once finalized.

# 1 Introduction

Mott MacDonald has been engaged by the Vancouver Board of Parks and Recreation (the 'Park Board') to undertake the Stanley Park Mobility Study. Inspired by the temporary changes made to the Park's transportation system in response to the COVID-19 pandemic, the Park Board passed a motion in June 2020 to "explore the long-term feasibility of reducing motor vehicle traffic in Stanley Park, including but not restricted to, reducing roadways to single lanes while maintaining access to the park, while increasing accessibility for those with disabilities". The need to study the use, function, and the potential future of the transportation network in the Park was also identified through the Stanley Park Comprehensive Master Planning process. In response to the June 2020 motion, the need for the Mobility Study was established.

## 1.1 Background

Stanley Park (the 'Park') is situated immediately northwest of downtown Vancouver, next to the vibrant and densely populated urban neighbourhoods of the West End and Coal Harbour. While it acts as a backyard for these residents, it is valued by visitors across Metro Vancouver. Visitors from further afar quickly uncover a natural beauty that lives on in photos and minds. These memories and experiences add to the long and storied presence and histories of the  $x^w m \theta k^w \dot{a} y \dot{e} m$  (Musqueam),  $S k w x w \acute{u} 7 m e s h$  (Squamish), and  $s \dot{e} l i l w \acute{e} t \dot{a} \dot{t}$  (Tsleil-Waututh) peoples, on whose traditional and unceded territory Stanley Park is located. Shaping these histories is its unique geographical location, a peninsula reaching out toward the Salish Sea and North Shore mountains. Its location contrastingly offers urban respite, while being bisected by the Stanley Park Causeway connecting downtown Vancouver to the North Shore.



The Park's internal transportation system is largely characterised by the Seawall, which comprises an 8km uninterrupted walkway and a counter-clockwise cycling path circling the Park adjacent to the sea, and the counter-clockwise two-lane Park Drive also circling the Park periphery. There are also numerous trails that criss-cross the interior of the Park, and several additional two-lane roadways that run through the eastern portion of the Park. These facilities support access for numerous modes of transportation, including for people walking or rolling, on

bikes, scooters and other micromobility modes, tour buses, taxis and ride-hailing vehicles, and private vehicles. Public transit access is currently limited to the eastern section of the Park.

Access to, through, and into Stanley Park has been the subject of ongoing study and community discourse since (and as part of) its colonial inception. In 1888, First Nations villages were forcefully removed to make way for the Park's dedication<sup>1</sup>, and evictions of additional "undesirable settlers" and "squatters" occurred thereafter<sup>2</sup>. The Park was opened by Lord Stanley, who proclaimed it for "*the use and enjoyment of people of all colours, creeds and customs for all time.*"<sup>3</sup> These juxtaposing events suggest complex and profound implications as to what is meant by access: for who, for what, when, and to what extent.

Mobility—the ability to move—is a key component of access. As such, questions around access and mobility are closely linked. A transportation system, and the infrastructure and services it consists of, plays a large role in shaping mobility and access outcomes. Given the Park's unique geographical location, and its variety of amenities, attractions, and spaces, mobility and access outcomes may vary across current and future visitors, whether local or from afar.

Ultimately, a typical goal when developing transportation systems is to provide access for all people. However, given geographic, spatial, and resource limitations, achieving such a goal requires trade-offs, a thoughtful review of existing access and mobility patterns and infrastructure, and a recognition that many transportation systems have historically favoured the needs of some modes—and thus the people that use them—over others. Access to Stanley Park has historically focused on vehicular travel; however, not all visitors can drive or have access to private vehicle mobility. As well, to increase access by vehicle, additional roads and parking lots would be required in the Park. This context contributes to formulating the purpose of this study.

## 1.2 Study Purpose

Based on the June 2020 Park Board motion and context noted above, prior stakeholder and public engagement, and known challenges, the purpose of the Stanley Park Mobility Study is to:

- Understand potential opportunities and challenges of reducing private vehicle traffic in Stanley Park
- Explore ways to improve access into Stanley Park
- Enhance the experience of visiting Stanley Park

As the study and analysis progresses, and through further public and stakeholder engagement, it is anticipated that these aspects of the study purpose will be formulated into a more defined goal of the study.

## 1.3 Study Scope and Process

The Stanley Park Mobility Study consists of three main phases, as shown in **Figure 1-1** below.

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<sup>1</sup> Park Board *VanPlay Strategic Bold Moves Report* October 2019, Pg 21

<sup>2</sup> Kheraj 2013, *Inventing Stanley Park*, UBC Press, Pg 82-91

<sup>3</sup> Canadian Encyclopedia 2008, *Lord Stanley*, [www.thecanadianencyclopedia.ca](http://www.thecanadianencyclopedia.ca)



**Figure 1-1: Study Processes Phases**



The Mobility Context Report (this report) documents technical analysis undertaken in Phase 1 and 2, covering scope items as identified in the following table.

**Table 1-1: Stanley Park Mobility Study Scope**

Phase / Report	Scope Item	Key Questions
Mobility Context Report (Section 2)	<b>Policy and Planning Context</b>	<ul style="list-style-type: none"> <li>- What prior transportation planning work and data collection has been done for the Park?</li> <li>- What policy context, specific to Stanley Park and more broadly, is this study building one?</li> </ul>
Mobility Context Report (Section 3)	<b>Best Practice Review</b>	<ul style="list-style-type: none"> <li>- How do other urban parks improve access within the context of reducing vehicular travel? What are some key challenges, impacts, and outcomes?</li> </ul>
Mobility Context Report (Section 4)	<b>Mobility Data &amp; User Travel Profile Assessment</b>	<ul style="list-style-type: none"> <li>- What were the transportation volumes in 2019, which is generally considered the baseline year and precedes the significant data collection undertaken as part of the pandemic response?</li> <li>- How many visitors are there and what is their estimated make-up?</li> <li>- What is the existing visitor profile and trip-making pattern based on public survey feedback?</li> </ul>
To be completed as part of Phase 3	<b>Economic Analysis</b>	<ul style="list-style-type: none"> <li>- What is Stanley Park’s contribution to the region’s tourism economy?</li> <li>- How does the Stanley Park economy relate to the existing transportation system?</li> <li>- What are the cost and revenue flows?</li> </ul>
To be completed as part of Phase 3	<b>Access Analysis</b>	<ul style="list-style-type: none"> <li>- What level of access do people using different modes currently have to Stanley Park</li> <li>- How are specific areas and uses in the Park accessed?</li> </ul>
To be completed as part of Phase 3	<b>Options Development &amp; Evaluation</b>	<ul style="list-style-type: none"> <li>- What options can contribute to the principles and goals of the study, and what additional objectives should the options aim to meet?</li> </ul>

### 1.4 Stakeholder and Public Engagement

The Mobility Study is being informed by an extensive stakeholder and public engagement process. Many of the findings in this report and the data analysis discussed in **Section 4** below contain direct outputs from the public survey administered in May 2022. This report is augmented by the Phase 1 and 2 Engagement Update delivered under separate cover, which provides a summary of activities undertaken so far.



## 2 Planning & Policy Context

Over the years, several studies and planning processes have reviewed the mobility and access considerations for the Park. The work being undertaken in the Stanley Park Mobility Study intends to build on this past work. This section provides a condensed review of these past initiatives and highlights key findings or recommendations that remain relevant in today's context. These studies also provide historical mobility data, which is used within this report to provide cross-comparatives and to indicate potential trends.

### 2.1 Planning in Stanley Park – Past Policy Review

#### 2.1.1 Stanley Park Transportation Update (1989)

This study built upon and evaluated progress related to the 1985 Stanley Park Master Plan's transportation recommendations and identified new issues and opportunities. The study had two key objectives:

- **Primary Objective:** to increase the enjoyment of park users by decreasing the level of dissatisfaction with the current transportation circulation and parking situation.
- **Secondary Objective:** to identify new modes of transportation that are considered to be compatible with the existing park operation.

The study does not clearly define what can be considered “compatible” in terms of new modes; however, the study also responded to a directive from the Park Board to staff to “*devise methods of restriction of [vehicular] access in combination with an improved level of public transit service to the park and such experiments be reported to the [Parks] Board.*”

One such experiment was the 1988 Stanley Park Centennial celebration, which involved restricting vehicular access to much of the Park during peak periods. The study reported that the consensus among park users was that this was successful. Further, it reported that much of Park Drive could be closed to private automobiles, while retaining access to the Park given commensurate alternatives. As such, the study also explored several access improvement options, and new modes of transportation, including:

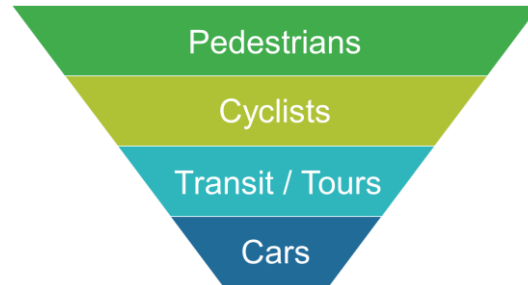
- Marine transportation: noting that at the time both False Creek and Coal Harbour were starting to see significant development, ferries were deemed a potentially attractive opportunity. Yet it was also recognized that more suitable vessels than those operating on False Creek would be required for routes to Stanley Park.
- The use of “jitneys”, varying in form from horse-drawn carriages, pedicabs (pedal-powered), or golf carts. All of these were noted to come with unique challenges, including the one-way nature of Park Drive, capacity issues, impacts to other users, and the ability to provide the required service levels efficiently (economically speaking).
- Increased promotion and customer information for the *Around the Park (#52)* public bus service operated by BC Transit. At the time, ridership on a typical Saturday or Sunday was around 230 people – the study noted the low service headways as a challenge to providing necessary capacity and attractiveness.
- The use of higher capacity trackless trolleys or people movers, which the study deemed as potentially able to meet the necessary mobility criteria (at the time), with the required level of attractiveness, flexibility, capacity and reliability.

- The use of external parking lots (also known as intercept parking lots) to accommodate those who wish to get to the Park by vehicle.

Additional recommendations such as the further rollout of pay parking, extension of Route 19 into the Park (from the former Chilco Street Loop), and some localized roadway improvements have since been implemented.

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

This report was the culmination of a series of recommendations developed by a Stanley Park Task Force, a Staff Advisory Group, and Board resolutions starting in 1993. **This process established a transportation mode hierarchy**, building from a 1991 Board resolution that recommended transportation decisions “favour walking, cycling, public transit, goods movement, and then the automobile.”



The final report noted that two issues galvanized public input:

- **Conflicts between visitors travelling at different speeds on the Seawall**
- **The presence of large numbers of cars and buses on Park Drive, and the resulting noise and pollution**

These two issues underpinned the report’s development and recommendations, further noting that:

- Recreational uses have priority over transportation uses
- Private car traffic in the park will be discouraged

As such, the study investigated steps that would be taken to start reducing the number of private vehicles in the park. While this work was more explicit than previous planning endeavours in the need to reduce private vehicle traffic, it also recognized the need to provide alternative access and mobility means. It provided 16 key proposals, some of which expanded on previous recommendations:

1. Reduce roadside parking along Park Drive and North Lagoon Drive.
2. Reduce road capacity by limiting cars to one lane only on Park Drive and North Lagoon Drive.
3. Experiment with car-free days.
4. Raise parking fees.
5. Develop new uses for the old service yard on Pipeline Road.
6. Designate bus-only lane on Park Drive and North Lagoon Drive.
7. Introduce a park jitney system.
8. Request BC Transit to further improve service.
9. Promote taking public transit to the park
10. Improve tour bus facilities.
11. Increase pedestrian safety and convenience on the Seawall by providing better separation from cyclists and in-line skaters.
12. Improve the connections between English Bay and Coal Harbour for pedestrians, cyclists and in-line skaters.
13. Improve accessibility of pedestrian trails.
14. Improve cycling facilities.
15. Request the City of Vancouver to give priority to construction of bike routes leading to the park.
16. Promote walking, cycling and in-line skating in and on the way to Stanley Park

Many of the proposals in the study were subsequently implemented, particularly those that provided infrastructure or service improvements, including a Stanley Park Shuttle (jitney) and further Seawall separation. Several of the other proposals in the study specifically recommended reducing space allocated for private vehicle travel. There has been limited progress in their implementation<sup>4</sup>. It was recognized that in the short-term this may cause some new challenges including localized congestion; however, travel patterns would shift and the overall efficiency and capacity of the network would increase, leading to improved access and enjoyment outcomes. Given these outcomes, the study went on to note that in the longer-term there would “*probably be no alternative to a park substantially free of car traffic*”.

“the endless circulation of cars on Park Drive is an unnecessary intrusion into the peaceful park atmosphere. Steps will be taken to start reducing the number of private cars in the park, including efforts to get people to leave their cars outside the park. Roadside parking along Park Drive and North Lagoon Drive will be reduced by 70%. Road capacity will be reduced by limiting private cars to one lane only during the busy season. Car-free days will be introduced to give visitors the experience of a more quiet park.”

### 2.1.3 Stanley Park Cycling Plan (2012)

This plan recognized the need to address several ongoing transportation issues in Stanley Park, reiterating some of the key issues raised in prior work and highlight newer challenges including:

- Capacity constraints on the Seawall, and a tension between different speeds and user types
- One-way travel, which creates long travel times for destination-oriented cycling trips
- The need to improve cycling as a means of transportation in the absence of transit
- Wayfinding and connectivity to parts of the West End and Coal Harbour



While its focus was on cycling issues and opportunities, the plan was undertaken with the needs of all user groups in mind. The plan also reaffirmed the transportation mode hierarchy for the park, putting walking as the priority, and noted that vehicle traffic would continue to be a means of access, particularly for those with families and mobility challenges. Within the context of balancing the needs of a variety of park users at a system-wide level, the study recommended that:

- Stanley Park Drive be reduced to one vehicle lane where needed to accommodate through-cyclists

<sup>4</sup> The COVID-19 pandemic provided a recent opportunity to test Proposals 2 & 3 and collect public feedback. The current bike lane remains a temporary initiative.

- Stanley Park Drive be made safer for training and exercise cyclists, to reduce Seawall congestion and conflicts
- That a transportation study be conducted to examine the possibility of having two-way cycle paths on vehicular roads or converting one-way roads to two-way where it may better facilitate cycling in the Park.

The study provided an implementation plan for capital improvements, including additional paths and localized Seawall widening. Some progress has been made, but many of the larger improvements and new paths have not been implemented. It is unclear to what extent these new pathway recommendations continue to align with the need to be ecologically sensitive. The system-wide improvements have also not been implemented (as permanent facilities).

#### 2.1.4 Stanley Park Comprehensive Master Plan Process (2014 and onwards)

In 2014 the Park Board and Musqueam, Squamish, and Tsleil-Waututh First Nations formalized the Stanley Park Intergovernmental Committee and Working Group to steer and develop the Stanley Park Comprehensive Master Plan, a 100-year vision for the Park. The intent of this work is to create a unified and comprehensive vision for the Park, acknowledging its significance to the three First Nations as well as their untold stories and history. In April 2018, the Intergovernmental Committee and Working Group terms of reference were approved in a project update to the Park Board. The report also outlined numerous additional challenges for the Park, ranging from sea level rise, wildlife loss, decline in water quality, climate change stressors, increasing drought conditions, and invasive species. It went on to note that these outcomes can be partially attributed to colonial settlement.

The Stanley Park Mobility Study is being undertaken under the broader framework of the Comprehensive Master Plan process. As such, it is imperative that this policy context is embedded in the Mobility Study, and that reconciliation is a foundational tenet of the work.

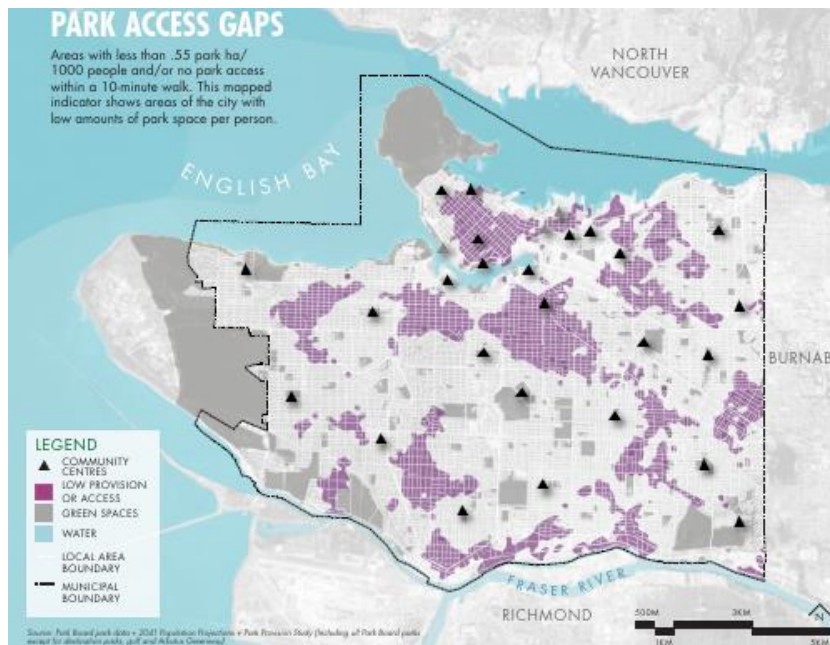
#### 2.1.5 VanPlay (2020)

VanPlay is the overall framework and decision-making guide for the Park Board. The framework contains three key directions:

- **Deliver Services Equitably** – a fair and effective parks and recreation system
- **Welcome Everyone** – parks and recreation experiences that improve quality of life
- **Weave the City Together** – parks, nature, recreation and culture integrated into everyday life

These key directions are directly relevant to the purpose of the Stanley Park Mobility Study. Multiple supportive actions are provided under each of these three key directions that provide further guidance. The plan also identifies areas in Vancouver that have a low provision or lack of access to parks (within walking distance). Despite its relative proximity to Stanley Park, much of downtown Vancouver continues to experience a gap in park access as shown in **Figure 2-1** below.

**Figure 2-1: VanPlay Park Access Gaps Inventory**



VanPlay’s implementation plan also identifies the need to improve flow and access throughout Stanley Park by separating pedestrians and cyclists for safety by implementing the Stanley Park Cycling Plan. Additionally, VanPlay’s Parking Policy calls for an “*approach to appropriate vehicle parking in and adjacent to parks*”.

**2.1.6 Park Board COVID-19 Pandemic Response (2020-2021)**

In response to the COVID-19 pandemic the Park Board restricted vehicular mobility on Park Drive in April 2020 to facilitate physical distancing. A couple months later, this evolved into the placement of a temporary separated bike facility in one lane of Park Drive. The separation was removed and then in 2021, enhanced based on public, stakeholder and staff feedback, and an enhanced temporary facility remains in place for 2022. Throughout these changes, the Park Board undertook significant data collection and administered two public surveys. In terms of options for the future of the transportation system, the Stanley Park Mobility Study is starting from a blank slate. However, the surveys provided insight into higher-level values and public opinion, including:

- A majority of respondents stating the experience was better with the restriction to vehicles, than it was prior to COVID-19.
- A general agreement that a change in the existing transportation system is required.
- A general desire to see some space reallocated to other modes of transportation, subject to further engagement.
- A split opinion on the idea of Stanley Park being car-free in the future.
- Recognition of access difficulties for persons with disabilities.

**2.2 Related Local and Regional Plans**

The following recent plans and policy documents will also contribute toward shaping the direction of the Stanley Park Mobility Study. While this is a non-exhaustive review of local and regional strategic efforts, these plans are considered most closely related to this work.



### 2.2.1 City of Vancouver - Climate Emergency Action Plan (2020)

In 2019, the City of Vancouver approved the Climate Emergency response in the face of the worsening climate crisis. It included several transportation “Big Moves” aiming for:

- 90% of people living within an easy walk or roll of their daily needs
- Two-thirds of trips in Vancouver to be by active transportation and transit.
- 50% of the km driven on Vancouver’s roads to be by zero emissions vehicles

Building on the Climate Emergency Response, the City of Vancouver approved its Climate Emergency Action Plan (CEAP) in late 2020. Among a comprehensive set of actions, the CEAP included transportation-related “game-changer” actions intended to measurably shift away from vehicle travel.

“In terms of affordability, the individual (internal) costs of driving are already beyond the means of many. This trend will increase. There is no technological, economic, geopolitical, or spatial land use trend that will reverse this trend while reducing environmental impact. The opportunity to improve affordability for all lies in providing a means of access to opportunities through other less-prohibitive modes of transportation and the provision of walkable, complete communities.”

If we are to mitigate worsening climate change effects, ongoing transportation planning initiatives of all scope and size must endeavour to contribute positively toward these ambitious yet necessary targets.

### 2.2.2 TransLink Transport 2050: 10-Year Priorities (2022)

Transport 2050 was adopted in early 2022 as the new Regional Transportation Strategy with the overarching theme of **Access for Everyone**. As well, the strategy establishes five headline goals. As it relates to the goals of this study, key among them is the continued need to shift more regional and longer-distances trips from private vehicles to sustainable modes of transportation.

Since the adoption of the Transport 2050, TransLink has been developing the new 10-Year Priorities plan. This plan builds on Transport 2050, and provides more detail on potential capital projects, strategies, and new service areas. Through ongoing engagement between TransLink and municipal partners over the last few years, Stanley Park has been identified as a new service area. Further work is required to determine what kind and the level of transit service required. This presents an opportunity for the Stanley Park Mobility Study to more directly shape transit servicing concepts for Stanley Park in the shorter-term.



### 2.2.3 Metro Vancouver - Clean Air Plan (2021)

Metro Vancouver finalized the regional Clean Air Plan in 2021 with transportation as one of six specific issue areas. It establishes several goals and targets that are intended to ensure we breathe clean air including:

- a 65% reduction in passenger vehicle GHG emissions from 2010 levels
- a 25% reduction in diesel particulate matter and 40% reduction in nitrogen oxide emissions from all surface transportation

To work toward these goals, the plan identifies a number of specific strategies and actions for the region, with member jurisdictions identified to be a partner among most of these. Several of the actions are also noted as big moves that explicitly consider municipalities as the lead agency or lead partner, including:

- The use of pricing to reduce driving and emissions
- The expansion of active transportation networks
- The regulation of existing medium and heavy trucks

**The Clean Air Plan** makes clear that municipal action is fundamental to achieving regional and provincial climate objectives.

### 2.2.4 Metro Vancouver – Access to Regional Parks Report (2022)

In June 2022, Metro Vancouver endorsed the two-part Access to Regional Parks Report. These reports found:

- strong public support for improving access to parks by bicycling and transit.
- that improving access by transit and bicycling will promote equitable access to the health benefits of regional parks.

The report went on to identify specific implementation actions to improve multimodal access, including planning for shuttle bus or ferry connections.

While Stanley Park is not a regional park from a jurisdictional perspective, it has a large regional draw. Many of the findings and options recommended in the Access to Regional Parks Report contain principles that can be applied to the Stanley Park Mobility Study.

### 2.2.5 CleanBC – Roadmap to 2030 (2022)

As part of the CleanBC program, British Columbia (the “Province”) recently released its Roadmap to 2030. The Roadmap provides specific transportation objectives, several of which align with the Stanley Park Mobility Study’s purpose to explore a reduction in private vehicle traffic including:

- accelerating the transition to zero-emissions vehicles to 90% of all light-duty vehicles sold in the Province, and targets for medium and heavy-duty vehicles
- reducing the energy intensity of goods movement by 10%
- reducing vehicle distances travelled by 25%, and encouraging a mode shift to 30% of trips by sustainable transportation modes by 2030

These actions combined are intended to contribute toward the Provincial, and therefore local, transportation and emissions reduction targets. Importantly, **these policy targets signal a need to significantly reduce vehicle travel, acknowledging that a shift to technological solutions (e.g. electric vehicles) alone will not be adequate to meet objectives.**

### 2.2.6 Additional Initiatives

The City of Vancouver has launched several key social policy initiatives that inform the Stanley Park Mobility Study, including the Reconciliation Framework, the Equity Framework and ongoing work being undertaken through the Accessibility Strategy. These complement initiatives being spearheaded by the Park Board.

### 2.3 Summary

There is considerable supporting policy at multiple levels of government to reduce and shift vehicular travel to sustainable modes of transportation. While not all trips can easily be shifted, particularly for persons with disabilities, there is an opportunity for Stanley Park's transportation system to contribute toward these policies and the Park Board's own strategic goals.

Given its importance to residents and tourist visitors alike, considerable effort has gone into planning and developing Stanley Park's transportation system. Past study has explored ways to improve access into the Park via new or alternative modes of transportation, and to enhance the user experience while reducing private vehicle use. Progress implementing past recommendations has been limited, which speaks to the need to provide a thoughtful approach building on past work.





### 3 Case Study & Best Practice Review

The COVID-19 pandemic has spurred many cities to reflect on the underlying value of parks and needs of residents in terms of how park space is used. Many cities sought to reallocate existing road and parking space toward other uses and modes of travel. The review in this section focuses on several iconic parks located in North America and Europe of a similar size to Stanley Park. The information was gathered mainly through a desktop review, as well as notes received from Park Board staff capturing prior discussions with officials at two of the reviewed parks (Golden Gate Park and Central Park). The review outlines the “low car” approaches taken, challenges, and outcomes. Each of these parks have their own unique community contexts, geographical conditions, and access needs. This review provides the study process information to draw from, yet Stanley Park also has its own unique context and needs.

Table 3-1 directly below provides a descriptive overview of the case studies, and Section 3.8 provides a summary of key lessons learned.

**Table 3-1: Best Practise Scan Descriptive Summary**

Parks	Area	Annual Visitors	Key Destination & Amenities	Key Low Car Approach Elements
Golden Gate Park	4.10 km <sup>2</sup>	15 million (2019)	<ul style="list-style-type: none"> <li>• Cultural Institutions (conservatories, museums, concert areas etc)</li> <li>• Sports and recreation</li> <li>• Transit infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Extension of the City’s Slow Streets program into the park</li> <li>• Strong local group support that encouraged more bike lanes in the park</li> </ul>
Central Park	3.41 km <sup>2</sup>	42 million (2020)	<ul style="list-style-type: none"> <li>• Tours and recreation</li> <li>• Cultural Institutions (entertainment, landmarks)</li> <li>• Transit infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Implemented closures in phases</li> <li>• Backed by strong political support</li> </ul>
Prospect Park	2.10 km <sup>2</sup>	8-10 million (2018)	<ul style="list-style-type: none"> <li>• Cultural Institutions (entertainment, landmarks)</li> <li>• Recreational opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• Implemented closures in phases</li> <li>• Backed by strong political support</li> <li>• Support from local park group advocacy</li> </ul>
Royal Djurgården , Stockholm	2.79 km <sup>2</sup>	15 million (2021)	<ul style="list-style-type: none"> <li>• Cultural Institutions (museum, galleries)</li> <li>• Historical buildings</li> <li>• Recreational opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• Public opinion and general cultural and policy direction as part of a broader sustainability initiative (including a car-free vision)</li> </ul>
Phoenix Park	7.07 km <sup>2</sup>	10 million (2019)	<ul style="list-style-type: none"> <li>• Infrastructure (monuments, etc)</li> <li>• Recreational opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• Introduced during covid-19 to provide safe space for public</li> <li>• Public were in favour of the road closures</li> </ul>
Washington Park	0.67 km <sup>2</sup>	Unknown	<ul style="list-style-type: none"> <li>• Historic sites</li> <li>• Vegetation</li> <li>• Recreational opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• Introduced during Covid-19.</li> <li>• Public were in favour of the closure</li> <li>• Support from local community groups</li> </ul>

### 3.1 Golden Gate Park, San Francisco

#### Background

Spread over 4.1km<sup>2</sup>, Golden Gate Park stands as one of the world’s largest urban parks located in San Francisco. With one of the edges located right next to the sea, the park provides hundreds of beautiful places for visitors to explore. It also includes sporting fields, gardens, small lakes, and several museums. The park contains a number of mostly two-lane bidirectional streets that facilitate visitor access, and a north-south arterial that bisects the park.

#### Low Car Approach

In April of 2020, San Francisco Municipal Transportation Agency (SFMTA) introduced their Slow Street Program to temper vehicle access and prioritize walking and biking and other activities on select streets in response to the pandemic<sup>5</sup>. This program was widely supported by San Franciscans and the city intends on converting the temporary traffic calming measures, including barricades and signage, to permanent solutions on many streets. An evaluation report on the program suggested that 100% of the slow streets experienced below maximum traffic levels for low-stress shared streets. Moreover, the designated lanes showed an average decrease of 35% in daily traffic and 14% decrease in vehicle speed<sup>6</sup>. Following this initiative and to create safer space for people, Golden Gate Park also implemented a program to promote car free streets within the park under the collaboration of SFMTA and the SF Recreation and Parks Department (RPD).

**Figure 3-1: Golden Gate Park Before and After Slow Streets Implementation**



**John F Kennedy Drive—converted to a car-free route—is shown in dark green**

John F Kennedy Drive is one of the main east-west streets in the Park. Prior to the pandemic, the street would occasionally restrict vehicle travel. A significant portion of the street has now become part of a car-free route from one end of the park to the other (from Stanyan Street at the east of the park to Ocean Beach and the Great Highway at the west end)<sup>7</sup>.

The Park also has free shuttle services running regularly on weekdays and weekends through JFK Drive. Golden Gate Park Stakeholder Working Group, a local advocacy, was established to

<sup>5</sup> [Slow Streets Program | SFMTA](#)

<sup>6</sup> [slow\\_street\\_eval\\_summary\\_final\\_10202021\\_update.pdf \(sfmta.com\)](#)

<sup>7</sup> San Francisco Recreation & Parks, Golden Gate Park Access & Safety Program [GGP-Access-Fact-Sheet \(sfrecpark.org\)](#)

promote equity and mobility within the Park and some of their core values were to support parking spaces for people with disabilities, improve the park shuttle services and install more bike stations<sup>8</sup>.

**Outcomes & Lessons Learned**

**The conversion of John F Kennedy Drive to a car-free route resulted in a 36% increase in daily park visits to the portions of the street with the closure.** Moreover, 75% of the westbound trips on John F Kennedy Dr were used for getting elsewhere and not the park. Since implementation, there has been no traffic collisions resulting in reported injury.<sup>7</sup>

When asked about the impact on business after the closure of John F Kennedy Drive, staff from San Francisco Recreation and Parks Department noted in an informal interview that their extensive studies found no material change in business activity. **Table 3-2** below shows the change in road usage before and after the closure of John F Kennedy Drive<sup>9</sup>. **The results show significant increase in pedestrian and cyclist volumes and a decrease in vehicle traffic.**

**Table 3-2: Change in John F Kennedy Drive Usage Patterns**

Dates	Pedestrians	Bicycles	Autos/Trucks/Bus
5/7/2019 - 5/13/2019	32,537	8,571	85,892
5/5/2020 - 5/11/2020	69,000	44,842	2,751
<i>% Change</i>	<b>112.1%</b>	<b>423.2%</b>	<b>-96.8%</b>
5/14/2019 - 5/20/2019	43,375	7,820	80,522
5/12/2020 - 5/18/2020	69,995	51,606	2,841
<i>% Change</i>	<b>61.4%</b>	<b>559.9%</b>	<b>-96.5%</b>

<sup>8</sup> [Golden Gate Park's JFK Drive Likely to Go Car-Free Permanently \(funcheap.com\)](https://www.funcheap.com)

<sup>9</sup> Information comes from Park Board staff notes based on informal interview with San Francisco Recreation and Parks Department staff.

### 3.2 Central Park, New York

#### Background

Central Park is located between the upper west and upper east side of Manhattan, spanning an area of 3.41km<sup>2</sup> and with an estimated total of 42 million visitors annually in 2020. The park consists of various tourist destinations such as a zoo, rinks, a theatre, and hundreds of species of flora and fauna. Moreover, the park is covered by a system of streets and walkways and is also served by public transportation. Recreational activities include carriage-horses, bicycle tours, sports facilities, and concerts. New York City has relatively low car ownership and most people access the park by walking or transit.

#### Low Car Approach

In 2015, the Mayor of New York announced that vehicular access to streets north of 72nd Street would be restricted permanently<sup>10</sup> (following a summer trial of road closure<sup>11</sup>) and that the streets below 72nd Street would have scheduled closures, as per **Figure 3-2**. By 2018, the streets below 72nd Street were also converted to full-time car-free facilities except for emergency vehicles. These closures were scheduled in phases.

#### Outcomes & Lessons Learned

A former NYC staff noted that there was significant political backing for reducing vehicle traffic in Central Park and the changes implemented were slow but incremental. Enhancing the network around the park and analyzing the factors like circulation to the park and impacts to access facilitated eventual private vehicle restrictions in the Central Park<sup>12</sup>.

Given the incremental process, and significant community support, limited information on quantified outcomes is available: qualitative review suggests large-scale support and positive outcomes.<sup>13</sup> **However, one key lesson learned is that the legacy design of the streets—to accommodate automobiles—need to be improved to provide a safer environment that creates fewer conflicts for active transportation users<sup>14</sup>:**

*“But popularity has brought conflicts among different user groups. Runners and walkers use a bi-directional lane that is adjacent to a cycling lane shared by cyclists of all skill levels, from tourists on rented bikes to competitive racers in training.”*

**Figure 3-2: Central Park Low Car Implementation Map**





### 3.3 Prospect Park, Brooklyn

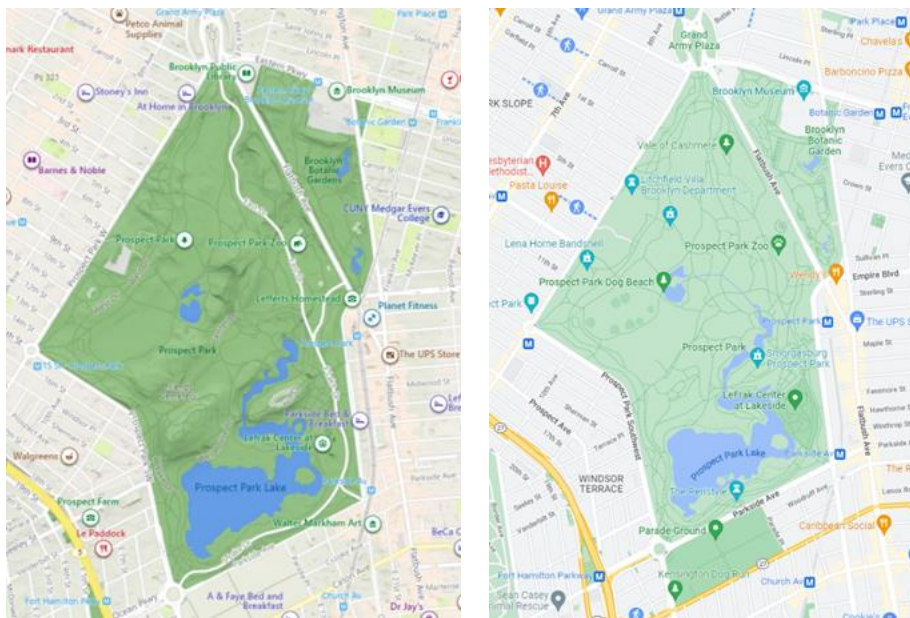
#### Background

Located between bustling neighborhoods, Prospect Park is spread over 2.1km<sup>2</sup>, making it the second largest park in the Borough of Brooklyn. It provides a variety of tourist spots like museums, historic buildings, lush gardens, viewpoints, and a Zoo. The park is enclosed by major roads on all sides and a four-lane connector road (Flatbush Avenue) bisects the northeast section of the park.

#### Low Car Approach

Prior to a low car approach, Prospect Park consisted of West Drive and East Drive that went all the way from the northwest side to the southeast side of the park to form a loop on the outside of the park. West Drive permanently restricted vehicle traffic in 2015. East Drive remained open to traffic during the weekday morning peak between 7am and 9am<sup>15</sup>. However, during the summer of 2017, the park introduced a car-free trial. As the summer trials on East Drive became popular among citizens, the City received petitions with more than 1000 signatures urging for permanent car-free hours for the entire park. As a result, in October 2018, the Mayor of New York announced a permanent car-free condition for East Drive. At the time, the number of people who accessed the park on East Drive using active transportation outnumbered the cars that went through those drives on a regular day.

**Figure 3-3: Prospect Park Before and After Car-Free East Drive**



<sup>10</sup> [Cars To Be Banned In Central Park, Mayor Says | Central Park, NY Patch](#)

<sup>11</sup> [West Side Rag » MORE THAN HALF OF CENTRAL PARK WILL BE CAR-FREE THIS SUMMER](#)

<sup>12</sup> Information comes from Park Board staff notes based on informal interview with San Francisco Recreation and Parks Department staff.

<sup>13</sup> [Learning from NYC's Car-Free Parks - SF Weekly](#)

<sup>14</sup> Central Park Advocates, *How to Improve Central Park Using Data, Design & Collaboration*

<sup>15</sup> [Prospect Park Is Now Officially Car-Free - Bklyner](#)

## Outcomes & Lessons Learned

The Department of Transport found that traffic on alternate routes was only marginally effected during the car-free trials: after West Drive converted to car-free, the travel time of alternate southbound routes increased by less than a minute<sup>16</sup>.

Like Central Park, Prospect Park also implemented an iterative and incremental approach to reducing vehicle travel in the park. Over the course of many years, changes included the removal of parking and closing street entrances at designated hours in the day, restricting directionality and lanes, leading to the eventual closure of the drive through streets. Political backing and the support of local non-profit organizations also played a large role in the low car approach for Prospect Park.

Similar to Central Park above, there is limited information on quantified outcomes of the car-free initiatives. However, it is worth noting that both the Central Park and Prospect Park initiatives were undertaken as part a combined program spearheaded by the Mayor, which may have provided the public a better understanding of the rationale and broader strategic goals.

### 3.4 Royal Djurgården, Stockholm

#### Background

The Royal Djurgården Park (Djurgården) is an island in central Stockholm, Sweden spread over an area of 2.79km<sup>2</sup>. It is part of a larger park area that includes the peninsular Ladugårdsgärdet Park. Djurgården is known for its recreational spaces and tourist destinations. Annually, Djurgården attracts close to 15 million visitors of which 50% come to visit the museum and amusement parks within it<sup>17,18</sup>. Alongside vehicular travel, access to the Park is currently supported by a tram line, bus route, and several ferry routes, alongside walking and cycling.

**Figure 3-4: Geographical Context of Djurgården**



The western parts of the park, which are the nearest to the city centre of Stockholm, contain most of the businesses and ticketed tourist attractions and provide both private vehicle and public transit access. While vehicle trips to the more forested areas further from the city centre are possible, access is limited by a system of cul-de-sacs and one-way directional limitations. In addition, many of the internal roads in the park prohibit motorized vehicle use.

#### Low Car Approach

With Djurgården being the most popular destination in Stockholm for various art exhibitions and other events during summer, the park experiences over 1 million visits during the month of

<sup>16</sup> Mayor de Blasio Announces Prospect Park is Now Completely Car-Free Starting Today | City of New York (nyc.gov)

<sup>17</sup> Electric taxis have priority at Djurgården - Sustainable Stockholm (royaldjurgarden.se)

<sup>18</sup> Visitor numbers as of 2007. Djurgården - Wikipedia

July<sup>19</sup>. On such occasions, Djurgården is completely closed to cars to make the park more convenient for the pedestrians, cyclists, and people who take public transit. Moreover, park authorities convert parking spaces into small temporary exhibits where people can showcase their art or provide cycling schools<sup>20</sup>. During festive seasons, visitors are strongly encouraged to access the park by foot, bike, or public transport.

The festival initiatives are part of a larger drive toward a “car-free, fossil-free Djurgården”, which is one of four focus areas to improve park sustainability. Stockholmers are generally supportive of the vision for a car-free Djurgården, and additional initiatives have been implemented or are planned<sup>21</sup>:

- In 2019, seven park attractions came together to offer a free ferry service to compliment existing services.
- In 2021, a self-driving, electric minibus was debuted.
- The park has been working with Zero Zone, an organization that promotes electric taxi transportation.
- A hop-on, hop-off internal sight-seeing train visits all attractions in the park.
- A new active transportation bridge was constructed in 2019.
- Partnerships with new mobility providers including a shared three-wheeled pods, and cargo-bike deliveries.
- A statement of intent to plan to go environment friendly by working with partners to switch to electric ferries<sup>22</sup>.

### Outcomes & Lessons Learned

As noted, Djurgården is working comprehensively toward a car-free vision as part of a more overarching sustainability and climate change goal. In 2019, the park began collecting wide-ranging data to better understand access and trip-making as part of their improvement initiatives. Unfortunately, the pandemic shifted focus, and there is no readily available quantified information at this time.

Of note, is one of the other four focus areas to improve sustainability – an “open, accessible and welcoming” park. It is clear that Djurgården sees the goals of reducing car-travel and increasing sustainability as aligning with those of making the park more accessible:

*“With a car-free Djurgården, we are also testing converting parking spaces into places for art, cycling schools and people. So on 2-7 June, the Djurgården Bridge will be closed to car traffic, for a more accessible and delightful Djurgården.”<sup>23</sup>*

Equally clear is also that this will require sufficient transportation alternatives and a concerted effort toward implementation.

## 3.5 Phoenix Park, Dublin

### Background

Phoenix Park is located at the western edge of the Dublin City Centre, north of River Liffey. The Park is spread over 7.07km<sup>2</sup> and is enclosed by a 11 km perimeter wall. While the park serves

<sup>19</sup> [Djurgården's attractions come together for a car-free Djurgården - Sustainable Stockholm \(royaldjurgarden.se\)](https://royaldjurgarden.se/en/attractions-together)

<sup>20</sup> [An eventful week - Royal Djurgarden](https://royaldjurgarden.se/en/royal-djurgarden)

<sup>21</sup> A car-free, fossil-free Djurgården, [A car-free, fossil-free Djurgården - Sustainable Stockholm \(royaldjurgarden.se\)](https://royaldjurgarden.se/en/royal-djurgarden)

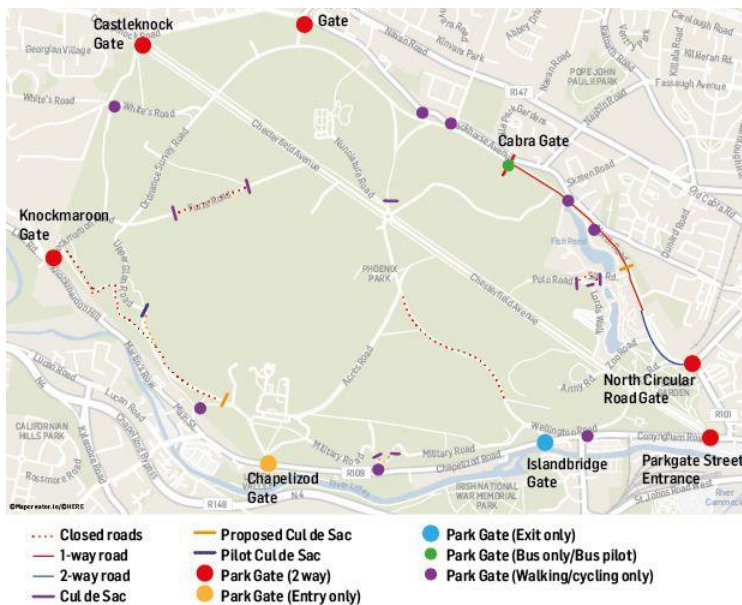
<sup>22</sup> [Open Letter: Give Djurgården all-electric public transport - Royal Djurgarden](https://royaldjurgarden.se/en/royal-djurgarden)

<sup>23</sup> Royal Djurgarden 2022, [An eventful week - Royal Djurgarden](https://royaldjurgarden.se/en/royal-djurgarden)

as a prime destination for tourists and visitors seeking a wide range of biodiversity, recreational spaces, and institutions, it also consists of heavily trafficked vehicle routes that flow through the park connecting the city center with the suburbs. Chesterfield Avenue serves as the major road that starts from the northwest point and runs to the southeast end of the Park. With ever-growing visitors transiting through the park, the streets have experienced significant increases in vehicular traffic volumes which have led city officials to take measures to curb this issue in order to restore the value of the Park.

### Low Car Approach

**Figure 3-5: Road Closures Introduced to Phoenix Park**



In early 2020, thousands of petitioners called for ending the use of Dublin Park as a throughway for vehicles<sup>24</sup>. The Park restricted some of its routes to vehicular traffic to prevent through traffic on a number of roads. This approach was termed ‘cul-de-sac’ and was introduced initially during the pandemic. By the middle of 2020, six of the peripheral routes/gates restricted access to vehicular traffic. This provided cyclists and pedestrians access to 7 km of roadway and increased space allocated to those modes by 33%.

However, in 2021, concerns arose that congestion would likely occur on the north side of the park due to the ‘cul-de-sac’ approach. In response to further public opinion, the Office of Public Works (OPW) published a plan to scale back the ‘cul-de-sac’ closures. Instead, the OPW decreased speed limits to 30 km/h and added bus services. They also dedicated certain gates that had previously been used for two-way traffic for only one of either the entry or exit for vehicle and bus services<sup>25</sup>. In addition, one of the bidirectional painted bike lanes that had replace a lane of vehicle traffic through the park was made permanent. The main concerns prompting the scaling back of the closures were how congestion on parallel routes would be affected. The conditions are being closely monitored.

### Outcomes & Lessons Learned

A Transport and Mobility study was published later in 2021, in parallel and in response to the 2020 initiatives. Listed below are key aspects of that strategy<sup>26</sup>:

- Reducing the impact of vehicles on Phoenix Park and surrounding areas while contributing to improving the amenity of the Park.

<sup>24</sup> Thousands seek end of through-traffic in Dublin's Phoenix Park (irishtimes.com)

<sup>25</sup> Phoenix Park traffic restrictions to be scaled back (irishtimes.com)

<sup>26</sup> gov.ie - Phoenix Park Transport and Mobility Options Study (www.gov.ie)



- *Prioritizing sustainable transport modes in accessing Phoenix Park.*
- *Providing improved alternatives to the private car access to Phoenix Park from a wider metropolitan regional and national catchment while acknowledging that private cars have a role in accessing the Park.*

The Transport and Mobility study also developed several options. At this time, aside from the direction discussed above, it is not yet clear which options are being implemented. Nevertheless, **a key lesson learned in this review is that longer-term options must be carefully approached and studied, and that moving too quickly may diminish public support.**

### 3.6 Washington Park, Denver

#### Background

Washington Park is a public urban park in Denver, Colorado covering an area of 0.67km<sup>2</sup>. It consists of several soccer fields, playgrounds, recreational spaces, and lakes and is covered by roads on the perimeter. The park also hosts concerts during the summer.

While this park is significantly smaller than others in this best practise scan, it is included here given its focus on universal accessibility and parking.

#### Low Car Approach

**Figure 3-6: Washington Park Road Closure**



When the first wave of COVID-19 hit the city in 2020, residents started using the parks of the city to escape the cabin fever resulting from stay-at-home orders. This resulted in overcrowding of parks with a large number of vehicles and pedestrians using the facilities all at once. The crowding lead the Denver Parks and Recreation (DPR) to opt for car restrictions in 11 of its major parks as a way to resolve the congestion issue.<sup>27</sup> The approach was received favourably by

residents as more space was available for them to walk and enjoy the parks<sup>28</sup>. Denver Streets Partnership, a community-led group advocating for 'people-friendly' streets sent out a survey to the residents after the vehicle restrictions were imposed.

#### Outcomes & Lessons Learned

Survey results found that 82% of the 4200 respondents supported the permanent ban of vehicles throughout various parks where the restrictions where put in place.<sup>29</sup> However, not all

<sup>27</sup> [Some of Denver's car-banning COVID-19 experiments could become permanent in city parks and roads | Coronavirus | denvergazette.com](https://denvergazette.com)

<sup>28</sup> [Petition - Make Denver Park Roads Permanently Car Free - Change.org](https://change.org)

<sup>29</sup> [Denver's major parks won't be car free this spring, but most will be car-lite - Denverite, the Denver site!](https://denverite.com)

residents were supportive. A few of the residents who did not live near the park expressed concern that they would no longer be able to drive to their favourite spots. People who lived near the parks were concerned with park visitors parking on residential streets and reducing on-street parking spot availability. Issues around parking had a large impact in how survey respondents felt about the Denver Parks and Recreation's program.

The survey report published by DPR summarized the major concerns that were observed during the closure on all the parks. The common concerns among all the parks are listed below<sup>30</sup>:

- *Accessibility – for people with disabilities and older adults with mobility needs, general access to Denver's regional parks for those who do not live nearby, and the implication that the closures send a message of exclusion*
- *Parking Lots – a desire for some parking lots to remain open, to address the need for access*
- *Other Park uses -- a need for flexibility during COVID-19 was appreciated but access needs for future events and other park activities was also noted.*
- *Barricades – there were many issues with the temporary barricades used in 2020, and improvements are needed for easier bike access and prevention of movement.*

**A key lesson learned in this review is the role that parking has in influencing perceptions around low-car approaches, potentially being key drivers of support or opposition.**

### 3.7 Additional Parks and Low Car Initiatives

#### 3.7.1 Programmatic Approach

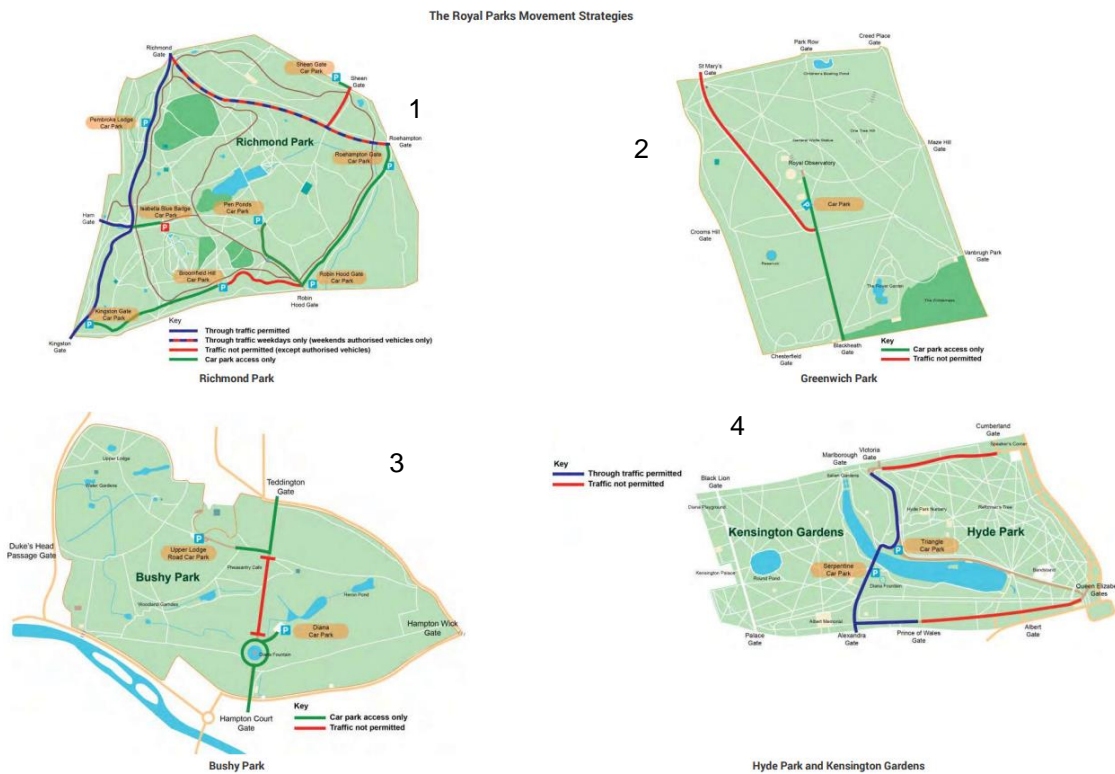
Many parks across the world have been implementing low car approaches over the past few years. With the onset of COVID-19, such movements have often been widely supported by the public to make those changes permanent. Many parks in London (images below) have experimented with this approach, where they have introduced periodic closures to control the through traffic within the parks from August 2020 to February 2021 on a trial basis. Full time closures were also implemented on some of the roads<sup>31</sup>.

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<sup>30</sup> [Roads-Survey-Analysis-SUMMARY-2021.pdf \(wp-denverite.s3.amazonaws.com\)](#)

<sup>31</sup> [Royal Parks to close some roads to motor vehicles in bid to combat through-traffic | road.cc](#)

**Figure 3-7: Low Car Approaches in the Royal Parks, London**



Richmond Park (Figure 3-7 Image 1) restricted all-through traffic on the southern end during weekends and a full-time closure on the northwest side of the park. Additionally, the park also experimented with cutting vehicle traffic at the northeast lane to create a quiet zone. Greenwich Park introduced a full-time closure on the north east avenue (Image 2). Bushy Park (Image 3) closed a central road and Hyde Park (Image 4) closed the northeast and sound west roads during the trial period<sup>32</sup>.

**3.7.2 Addressing Environmental Goals**

**Figure 3-8: Metro Park, Washington**



Apart from road closures to prevent traffic, some parks have implemented closures due to environmental threats to the park. Metro Park, Washington has closed its 5-mile Drive loop to motorized vehicle to prevent slope damage and resultant threat to public safety. A recent press release assessed the geotechnical slope stability

<sup>32</sup> [The Royal Parks creates car-free spaces for visitors - Hyde Park; Richmond Park; The Regent's Park; Kensington Gardens; Greenwich Park; Greenwich Park Revealed; St James's Park; Bushy Park; Green Park - The Royal Parks](#)

and confirmed that due to ongoing erosion it could be a possible threat to the public and the environment. In response, authorities took closed the loop for vehicles but maintained access by bikes or foot<sup>33</sup>.

To address climate change issues, political parties in San Diego have raised vehicle congestion concerns in Balboa Park. The Park serves some of the major bus routes and is a popular destination spot for tourists as well as locals. The Park features bike lanes, bus lanes and vehicle lanes. With an ongoing proposal to replace the water mains under one of the streets in the park, officials are seeking to redesign the whole street by testing various streetscape and modal improvements (extending/adding bike lanes, curbs, etc)<sup>34 35</sup>.

Parking management is an additional challenge in Balboa Park. Drivers circulate around for free lots on busy days, impeding pedestrians and cyclist movement. A city-based transportation planner and economist quoted that the current parking problem is not a supply problem but a lack of a proper management issue<sup>36</sup>.

### 3.7.3 Innovative Access Management

Some parks around the world require paid entry or exit for cars/taxis, while not charging admission for people who access the park by foot or bike. For example, Sentosa Park, Singapore charges a certain entry fee (\$2-\$6) for entry (payable upon exiting) for taxis or private vehicles on weekends and public holidays, but no admission fee is required if the park is accessed by transit, walking, or biking<sup>37</sup>. Similarly, Pebble beach in California has a scenic mile that is open to vehicles with an admission fee<sup>38</sup>.

Locally, the Buntzen Lake Recreation Area is piloting a parking reservation system that requires that visitors arriving by vehicle prebook specified timeslots (AM, PM or All-day). No charge is associated with pre-booking. This was done to better manage demand on the local access road, and the existing on-site parking capacity, and to better manage crowding overall<sup>39</sup>.

## 3.8 Summary

The best practise case studies outlined some of the many urban parks that opted for low car approaches over the last several years. While the pandemic prompted these projects in many cases, parks like Central Park, Prospect Park, and Royal Djurgården had begun implementing low car initiatives pre-COVID to mitigate the impacts of congestion and overcrowding, to become more sustainable, and to retain park value. The following lists some of the key lessons learned from the review, which is summarized in **Section 3.8**.

- Experience shows that low-car initiatives in parks typically increase visitor numbers, and particularly the amount of people using active and low-impact modes of transportation.
- Where substantive low-car approaches are undertaken and considerable space is reallocated from facilities designed primarily for vehicles, further and thoughtful design interventions are required.
- Low-car approaches for parks may benefit from a programmatic approach, whereby the initiatives are introduced to several parks at the same time.

<sup>33</sup> [Outer Loop of Five Mile Drive closing to vehicles permanently for safety \(q13fox.com\)](#)

<sup>34</sup> [PowerPoint Presentation \(sandiego.gov\)](#)

<sup>35</sup> [Balboa Park street project tests San Diego's commitment to biking, transit goals | KPBS Public Media](#)

<sup>36</sup> [Experts: Paid Parking at Balboa Park Could End Parking Woes | Voice of San Diego](#)

<sup>37</sup> [How to get to Sentosa](#)

<sup>38</sup> [Scenic 17-Mile Drive in Picturesque Pebble Beach \(pebblebeach.com\)](#)

<sup>39</sup> [Parking reservation system pilot project planned for Buntzen Lake \(bchydro.com\)](#)

- The goals of a low-car approach can align or bolster goals of creating more accessible parks.
- Longer-term low-car options must be carefully approached and studied; moving too quickly may diminish public support. They are typically implemented in phases, and often provide alternative ways to facilitate access while also maintaining universal accessibility (for persons with disabilities).
- Other contributive factors to implementing low car approaches included a strong political backing and/or initial community advocacy, the desire to enhance park culture significance, and to increase safety.
- Public opinion was generally favourable once changes were made, with positive outcomes including less noise and pollution, roadway and parking space reallocated for events, and continued business vitality.
- Some parks are managing vehicle access through fees, prebooked timeslots, and other innovative measures.



## 4 Existing Mobility & Access Conditions

In order to generate effective and appropriate options for the future of mobility in Stanley Park in future phases of this mobility study, it is important to understand how park visitors are currently travelling to and within the park. In this section of the report, the existing conditions of mobility in Stanley Park are described using a variety of data sources.

Because visitation patterns in Stanley Park have changed significantly since the onset of the COVID-19 pandemic, travel patterns from 2019 and earlier were investigated in addition to existing patterns and conditions to give an understanding of the baseline conditions in the park without the ongoing impacts of the pandemic. For most of the analyses documented in this section of the report, 2019 was considered the “base year”.

### 4.1 Mobility Data Sources

Existing conditions for travel to and within Stanley Park were assessed using multiple data sources. Because visitors to Stanley Park have such a variety in their modes and routes of travel, data collection to understand that travel behaviour had to be similarly varied. In addition, because travel behaviour in the park and the Park Board’s data collection program have both changed significantly since the onset of the COVID-19 pandemic, traffic volume estimation methodologies relying on variety of data sources were utilized, including those using big data technologies.

#### **StreetLight Location-Based Data**

StreetLight is a data source that utilizes location-based data from smartphones and navigational data from vehicle GPS units to measure trip patterns and volumes. Based on the movements of those smartphones and GPS units into and around Stanley Park, this calibrated data source can measure the volume of trips for all modes of travel at any area of the park.

StreetLight data was used for this study to obtain historical travel behaviour in Stanley Park from before the spring of 2020 when the Vancouver Park Board began its current multi-modal data collection program. In addition, the location-based data was valuable for observing access to the park at its interface with the West End of Vancouver, because of the high density of access points for which traditional counting hardware is not well suited.

#### **Parking Meter Data**

Transactions from each of the parking meters in the park were recorded between 2016 and 2022 and summarized on an hourly basis. This data source allowed for the observation and analysis of where visitors are parking, and how the rate of parking entries in different lots relate to the number of available stalls.

#### **Arrivalist Location-Based Data**

The data platform Arrivalist collected location-based data from the smartphones of international visitors to Stanley Park between August 2018 and May 2019 on the spatial distribution of visitation within the park. For this study, the Arrivalist data was used to understand which areas of the park are visited most by international tourists.

## Shape Your City Survey

An online public survey about travel patterns, barriers, and opportunities for visitors to Stanley Park was conducted from May 21 to June 9, 2022 using the City of Vancouver Shape Your City platform and received 4046 responses. The survey respondents primarily reported residing within the City of Vancouver (74%), with one-quarter (22%) residing outside of the City of Vancouver but inside the Greater Vancouver Region, and the remaining respondents residing elsewhere.

The sample of respondents consists of 49% men, 40% women, 2% non-binary or gender-diverse, and 9% unidentified. The sample contains an even distribution of respondents aged 30 to 59 (between 16 – 19% for each 10-year age group), with 7% of respondents under the age of 30 and 36% of respondents 60 or older. Households with children under the age of 19 are represented by 22% of the sample. Persons with disabilities that impact their mobility comprised 10% of the sample, and persons with disabilities that do not impact their mobility comprised 6% of the sample.

In addition, data from a public survey from August and September 2020, which focused on the impacts of the COVID-19 pandemic, closure of the park to vehicles in spring 2020, and the interim bike lane on park visitation was also used to supplement the 2022 survey for some analyses documented in this section of the report.



## 4.2 Park Total Visitation

While the data analyzed in the report up to this point in this document and in most previous studies on Stanley Park was limited to survey samples and counts of vehicles or people entering the park, investigation of the total number of visits to the park have previously been limited by the complexity of collecting data about multiple accesses to the park, its large and porous boundary with the rest of the city, and the variety of modes used to access the park. The following subsection of this report documents the analysis of total park visitation trends using smartphone location (StreetLight data), which allows for a level of detailed analysis that was not previously feasible.

### 4.2.1 Local and Tourist Trips

StreetLight was used to investigate the home location of visitors to Stanley Park in order to understand the proportion of trips into the park made by locals. For this analysis, a local was defined as a person living within 10 kilometres of the park, which includes residents of the City of Vancouver, UBC, and the developed parts of North Vancouver and West Vancouver. This distinction is significant because locals have the opportunity to visit the park for an unstructured or impromptu recreational visit. Conversely, people living further than 10km from the park are

likely to visit the park on a planned, structured outing and visit the tourist attractions and restaurants in the park.

It is noted that tourists from further afield may stay within 10 km of the park, but their visitation behaviour while in Stanley Park is likely to be more similar to those travelling over 10 km to reach the park. For this reason, distance from Stanley Park to home was used as the variable of interest for this analysis, not the length of the trip into the park.

**Based on the analysis of StreetLight data, 48% of trips to Stanley Park were made by locals that live within 10 km of the Park.**

#### 4.2.2 Total Visitation and Mode of Travel

In order to measure the significance of Stanley Park's role in the city and region for recreation and economic impact, the total number of annual visitors was assessed. Because of the permeability of the southeastern boundary of the park with downtown Vancouver and the high variety of routes and modes with which people access the park, the total number of visitors is complex to measure, and previous transportation studies have only estimated the quantity based on a short time window and extrapolating to an annual basis. Estimates prior to this study have typically assumed about 10 million visitors per year.

This study made use of StreetLight to count the total visitors to Stanley Park using location-based smartphone data and GPS devices in vehicles. In addition, the total number of visitors was broken down by mode to understand the different ways in which park users are travelling to Stanley Park. The mode split information documented in this section of the report will be used to generate and evaluate appropriate and effective options for mobility in Stanley Park in future phases of this study.

The StreetLight methodology for estimating pedestrian, bike, and bus trips into the park required calibration data in order to calculate the total number of annual trips. Pedestrian calibration data came from permanent counters operated by the West End, Downtown, and South Granville Business Improvements Associations, in addition to a number of short-term counts performed on the Seawall by the Park Board in 2020 and 2021. Bike calibration data came from City of Vancouver permanent count stations. Finally, bus calibration data came from the TransLink Transit Service Performance Review.

The number of vehicle trips were measured using StreetLight, and an average auto occupancy of 2.7 was measured using the public engagement survey for this study. The number of observed trips was multiplied by the average auto occupancy to estimate the total number of visitors by car.

The number of park visitors using tour bus was estimated using a variety of data sources. Data from parking meters around the park was used to measure the number of buses entering the park each year from 2018-2020, and the average number of visitors alighting from each bus was calculated based on a study from fall 2019 that observed tour buses at Prospect Point for a period of two weeks. The number of tour buses each year was multiplied by the average number of alightings to calculate the number of visitors using your buses each year.

Total visitation numbers between 2017 and 2021 are shown in **Table 4-1** and depicted graphically in **Figure 4-5**.

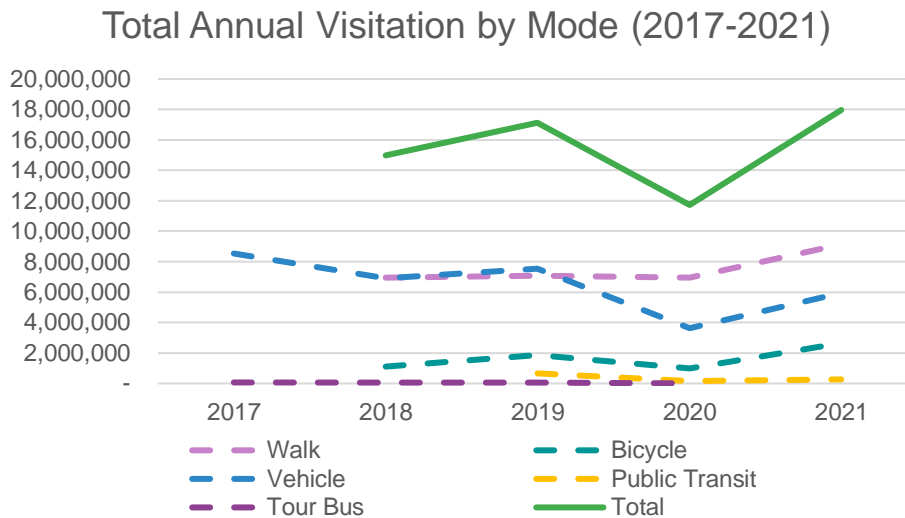


**Table 4-1: Historic Patterns in Annual Visitation by Mode**

**Annual Visitors by Mode**

Year	Walk	Bicycle	Vehicle	Public Transit	Tour Bus	Total
2017	- <sup>40</sup>	- <sup>40</sup>	8,500,000	- <sup>40</sup>	60,000	-
2018	7,000,000	1,100,000	6,900,000	- <sup>40</sup>	60,000	15,000,000
2019	7,100,000	1,900,000	7,500,000	600,000	60,000	17,100,000
2020	7,000,000	1,000,000	3,600,000	100,000	4,000	11,700,000
2021	9,100,000	2,600,000	5,900,000	200,000	- <sup>41</sup>	18,000,000

**Figure 4-1: Historic Patterns in Annual Visitation by Mode**



Approximately 17.1 million trips to Stanley Park were made in 2019, before the onset of the COVID-19 pandemic. The number of annual visitors fell in 2020, but surpassed 2019 levels in 2021 with an estimated 18.0 million annual visitors. Since 2017, the total trips annual trip to Stanley Park by all motorized modes has decreased, while the total annual trips by active modes has increased.

# 18 million yearly visitors

## 4.2.3 Unique Park Visitors

The analysis documented in **Section 4.2.2** was built upon to determine how the total number of trips to the park was distributed between unique and repeat park visitors.

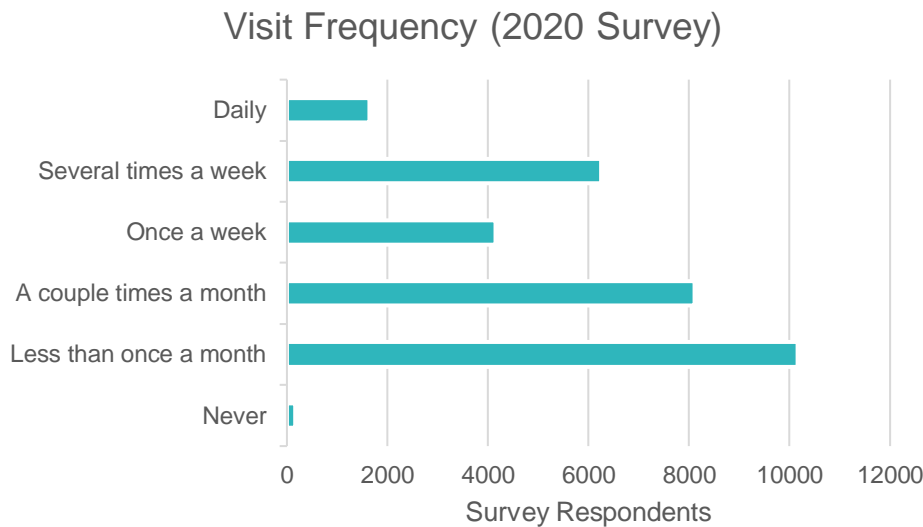
<sup>40</sup> Location-based smartphone data (StreetLight data) was not available for this mode and year

<sup>41</sup> Parking meter data with tour bus information was not available for this year

For the 52% of trips classified as being by tourists using the StreetLight methodology described in **Section 4.2.14.1**, it was assumed that each tourist would only make one trip to the Park per year, based on the distance between the park and their home.

Of the 48% of annual trips to the park made by locals, visitation frequency was estimated based on responses to a question in the fall 2020 public survey, with results shown in **Figure 4-2**. By making assumptions about the average number of visits per year associated with each of the categories shown in **Figure 4-2**, it was estimated that the average visitor to Stanley Park living in Vancouver visits the park 55 times per year. While most Vancouverites will visit Stanley Park fewer times than the average, the significant number of locals who visit every day or multiple times per week skew the average number of visits relatively high.

**Figure 4-2: Visit Frequency by 2020 Public Survey Respondents**



The number of visits was divided by the average annual visits per person to estimate the number of unique visitors separately for locals and tourists, as demonstrated in **Figure 4-2**.

**Table 4-2: Total Trips and Unique Park Visitors<sup>42</sup>**

	<b>Total Visits</b>	18,000,000
<b>Tourists</b> (Live greater than 10 km from Park)	<b>Number of Trips</b>	9,300,000
	<b>Average Annual Visits per Person</b>	1
	<b>Unique Visitors</b>	9,300,000
<b>Locals</b> (within 10 km of Park)	<b>Number of Trips</b>	8,600,000
	<b>Average Annual Visits per Person</b>	55
	<b>Unique Visitors</b>	160,000
	<b>Total Unique Visitors</b>	9,500,000

<sup>42</sup> This table “blends” information over the last couple years. The total visits are from 2021, as this is indicative of the currently understood trend, whereas unique visitor numbers are more indicative of 2019 conditions. As well, the estimate for unique visits among locals relies on a weighted average across the visit frequency distribution obtained from the survey sample. In reality, this distribution likely takes a less-constrained, meaning that the unique local visitors estimate, is likely an underestimate.

Approximately 9.5 million different people visited Stanley Park in 2021. The majority of those people were tourists who visited the park only once per year, while approximately 160,000 locals who live within 10 km of Stanley Park and who repeatedly visited make up the rest of the annual visits.

### 4.3 Historical Mobility and Access Patterns

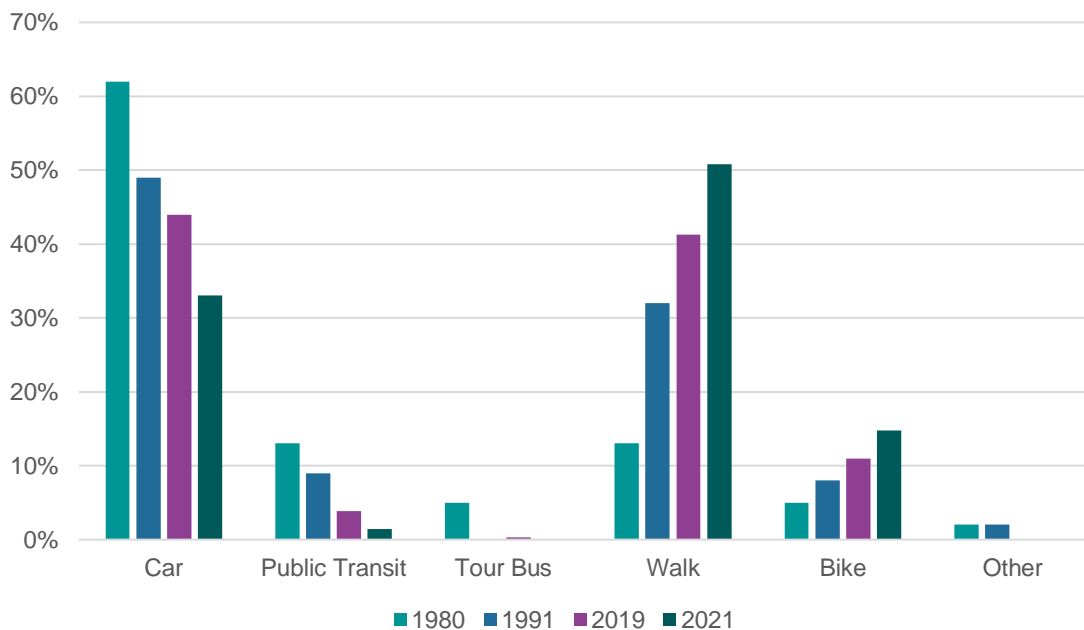
This section assesses historical mobility and access patterns, going back about 40 years. Data for this assessment comes from prior planning initiatives and reports discussed in Section 2, and combines it with StreetLight data and other recent screenline data.

#### 4.3.1 Historical Transportation Mode Share

StreetLight data from 2019 and 2021 was compared to mode split data from historic studies on Stanley Park by the City of Vancouver from 1980 and 1991 to illustrate the shift in mode split over time, as shown in **Figure 4-3. A clear trend from the data is the relative reduction in mode share by all motorized modes of travel, while active modes have occupied an increasing share of the mode split at each year they have been measured.** A portion of this shift can be attributed to the differences in data collection technology as discussed earlier. The shift towards active modes can also be attributed to an increase in supportive infrastructure and culture for travel by both walking and cycling throughout the City of Vancouver, an increase in population in downtown Vancouver, and increased tourism activity. By 2019, the share of walking and vehicle trips to access the Park was approximately even. The shift toward active modes was especially pronounced during the COVID-19 pandemic.

**Figure 4-3: Historic Patterns in Mode Share**

Transportation Mode Share over Time



#### 4.3.2 Historical Active Transportation Volumes

Historical reports and studies contain cyclist volume data at several locations along the Seawall. Over the years, this data was tabulated across different time periods (daily or hourly volumes)

and not always in the same location. These were compared to more recent data for comparable locations. As such, not every year or location has complete data. However, where data was comparable, the trend shown in **Table 4-3** is clear. **Cycling volumes at all locations along the Seawall have increased over the years, approximately doubling in the last 15 years at several key locations.** Similar historical data for walking trips was not found to be available. Given the large overall increase in people accessing the Park on foot, it can be safely assumed that a similar—if not greater—trend exists along the Seawall for walking.

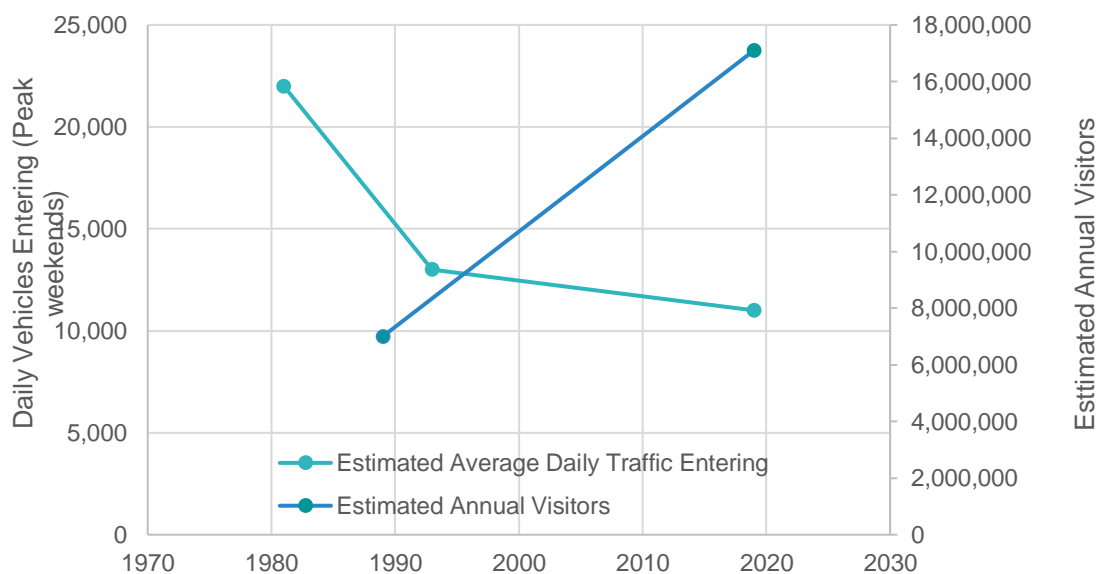
**Table 4-3: Historical Cycling Volumes along the Seawall**

Location	1980	1992	1996	2005	2011	2019	Type of volume
Hallelujah Point	400	-	300	-	-	700	Peak (per hour)
Prospect Point	-	2250	-	-	3050	-	Daily (per day)
Lumberman's Arch	-	-	-	2500	-	5700	Daily (per day)
Second Beach	-	-	-	3000	3900	5800	Daily (per day)
Third Beach	-	1100	-	1700	-	-	Daily (per day)

### 4.3.3 Historical Park Visitation

Using the readily available historical data, it was possible to reconstruct historical overall visitation and that by vehicle travel extending back almost 40 years as shown in **Figure 4-4** below. From the historical data, it is not possible to fully retrace the methodologies used, however the trends shown in the figure are clear<sup>43</sup>.

**Figure 4-4: Total Visitors vs Park Vehicle Entries**



<sup>43</sup> For example, the vehicle entry estimate for 1980/81 was noted in the 1989 Stanley Park Transportation Update. That report noted an estimate between 17,000 and 26,000 vehicles entering on a summer weekend day. The average is shown here. The more recent (2019) vehicle volume shown also use a typical summer weekend estimate.

The total amount of visitors entering Stanley Park has increased almost 2.5 times while the number of people entering the park by vehicles has decreased by about one-third over the same time.

#### 4.4 Transportation Supply and Spatial Context

While the majority of Stanley Park's area is forested, the existing behaviour of park visitors is mostly determined by the layout of the transportation network and developed areas in the park. Features of the transportation network, in addition to the points of interest that attract trips on that network, are described below to provide context to the information on existing mobility behaviour that is shown later in this section of the document.

Figure 4-5 shows a set of the typical destinations in the developed areas around Stanley Park. While many of the trip attractors are within the southern and eastern parts of the park, both fairly easily accessible from downtown Vancouver, some of the most popular destinations at Prospect Point and Third Beach are in the more relatively remote areas of the park. Trips to both Prospect Point and Third beach require longer trips on Stanley Park Drive or the Seawall.

Both the labelled lookout points and restaurants shown on Figure 4-5 indicate developed areas of the park that are notable attractors for visits to Stanley Park. The scenic views from multiple locations are one of the park's most valuable resources for attracting both tourists and locals, and the various restaurants and concession stands in the park serve areas where most of the activities in the park take place, especially in the summer months. The map also demonstrates how Vancouver's bikeshare system also serves the most popular areas of the park and facilitates short biking trips to those destinations.

Figure 4-5: Typical Destinations in Stanley Park



The elevation contours in Stanley Park are shown in **Figure 4-6**. The relatively high elevation around Prospect Point has a significant effect on behaviour and trip planning around the park. The elevation gain required to access Prospect Point can be a barrier for some people visiting the park by bike or on foot because of the effort involved to reach the top. However, the elevation gain is also a trip attractor for a certain segment of park visitors, namely sports cyclists, who visit the park specifically for the opportunity to climb up to Prospect Point.

The steep cliffs indicated on **Figure 4-6** between the Seawall and the areas around Prospect Point also influence trip behaviour in the park. While most of the length of the Seawall around the park has frequent access points that allow for short walking loops and good access by private vehicle, there is no access to the Seawall between the Lion's Gate Bridge and Third Beach due to the constraints imposed by the elevation change in that area. As a result, any visitors accessing that part of the Seawall must walk or cycle a relatively long distance compared to other parts of the Seawall.

**Figure 4-6: Elevation Changes in Stanley Park**

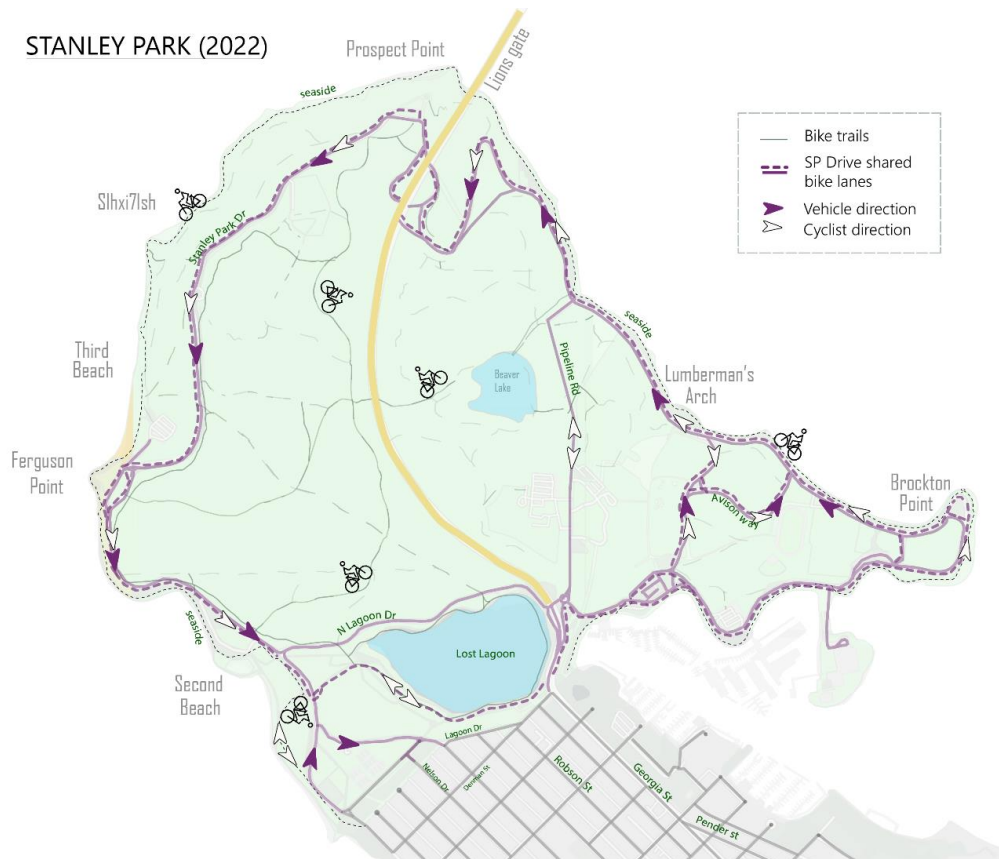




**Figure 4-7** shows the multi-modal transportation network through Stanley Park, with a focus on the bike and vehicle network. Although the pedestrian network is not labelled in detail on the map, those visiting the park on foot can travel along any of the roads, trails, or paths, including the Seawall, in any direction. All areas of the Park are highly accessible for pedestrians because of the dense network of trail and paths, but some people visiting the park on foot may find the relatively large distance to and from downtown Vancouver to the far north and eastern parts of the park to be challenging to access.

The network of trails and roads that allow bicycle and/or vehicle access is shown in **Figure 4-7**, in addition to the specified direction of travel. In general, cyclists and vehicle drivers on the roads in Stanley Park travel in a counter-clockwise direction, and cyclists on the Seawall also travel counter-clockwise. Bidirectional travel on Pipeline Road gives cyclists and motorists and option for shortened loops around the park.

**Figure 4-7: Multi-Modal Transportation Network in Stanley Park**

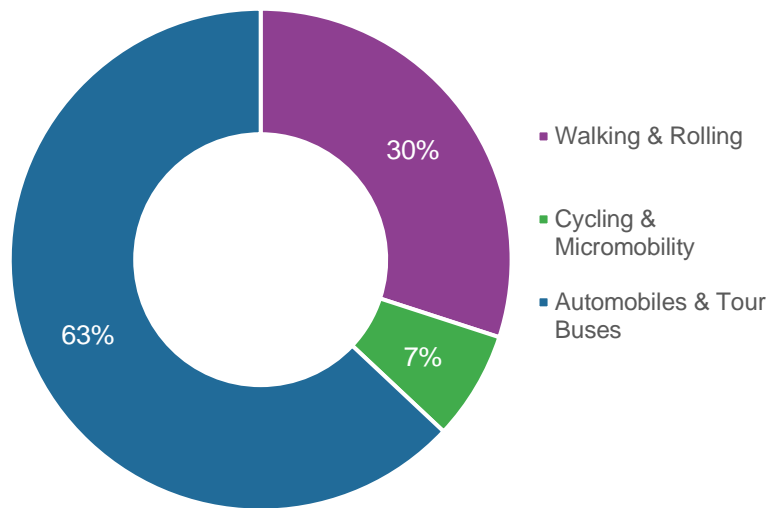




#### 4.4.1 Space Allocation

**Figure 4-8** illustrates the approximate amount of paved space allocated to the main transportation modes using the Park’s transportation system in the 2019 baseline condition. **Just under two-thirds of the paved area used for transportation in Stanley Park is allocated to vehicular modes of travel.** This predominantly includes private vehicles, but also service and operational vehicles, and tour buses, and cyclists or micromobility users that prefer mixed facilities. Sections further below discuss the share of trips made by these transportation modes and the volume profiles; it will be worth considering how space is allocated in that context.

**Figure 4-8: Proportion of Paved Surface Allocated to Main Transportation Modes<sup>44</sup>**



#### 4.5 Reasons for Visiting Stanley Park

Park users visit Stanley Park for a variety of reasons that reflect the range of attractions in both forested and developed spaces in the park. **Figure 4-9** shows the typical reasons for visiting Stanley Park identified by the respondents of the 2022 public survey. Respondents most frequently identified the natural resources of the park, including the beaches and picnic areas,

<sup>44</sup> Park Board, Regular Board Meeting Nov 23, 2020. Chart indicates 2019 space allocation, the baseline for this study



as their main draw. While a significant number of respondents identified the attractions, restaurants, and developed play areas as their main reason for visiting, they were relatively few compared to those that travelled to Stanley Park to experience the natural spaces. “Other” reasons identified by respondents include for events, travel (i.e., commuting through the Park), employment/volunteer work, and to retreat (i.e., meditation, relaxation).

The public survey drew a distinction between “passive” recreation – which included walking, birdwatching, and similarly unstructured activities – and “active” recreation – which included rugby, lawn bowling, and similarly organized sports and activities. Respondents of the survey were over twice as likely to identify passive recreation as their reason for visiting relative to active recreation.

**Figure 4-9: Reasons for Visiting Stanley Park**



**4.6 Mode of Travel and Mode Share**

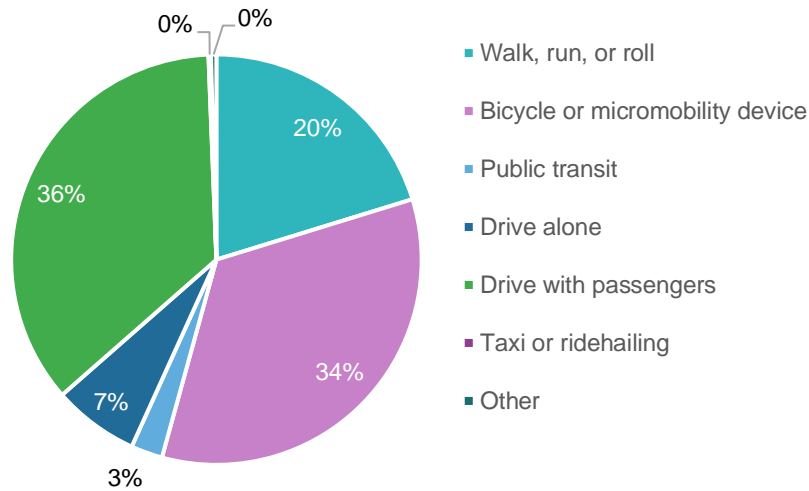
The transportation mode with which park users travel to and within Stanley Park has a significant effect on the way those visitors experience the park and the infrastructure that is required to facilitate their visit. This section of the report explores multiple sources of data about existing patterns of mode split for travel to and within the park, and also assesses the opportunities, challenges, and preferences for shifting that mode split in the future.

The mode of travel for trips into and around Stanley Park by respondents of the public survey are shown in **Figure 4-10**. Driving with passengers and riding a bicycle or micromobility device were the most frequently observed modes in the survey, representing 36% and 34% of respondents, respectively. Some respondents reported travelling to the park on foot (20%), and few by driving alone, transit, or taxi or ride hailing (combined 10%). The small number of respondents that selected “Other” as their travel mode typically travelled by boat, swimming, or a combination of modes.

It is noted that the mode split shown in **Figure 4-10** is a cross-section of survey respondents and their most frequent mode of travel into the park. Over the course of a week, month, or year, the distribution of trips between different modes will change given the relative frequency of trips by different modes, and analyses of that trend will be explored in other subsections further below.

**Figure 4-10: Travel Modes from the Public Survey**

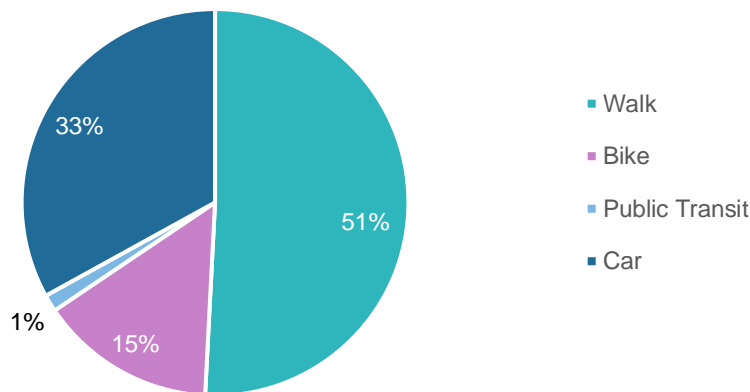
How do you most frequently travel to and around Stanley Park? (2022)



To compare with the mode split data from survey responses shown above, trips into the park observed using location-based smartphone data on the StreetLight platform were categorized by mode as shown in **Figure 4-11**.

**Figure 4-11: Travel Modes from Location-Based Data**

StreetLight Mode of Travel (2021)



The main difference between the location-based data and the survey data is the relative size of the walking mode split, which is significantly higher in the location-based data, for two main reasons:

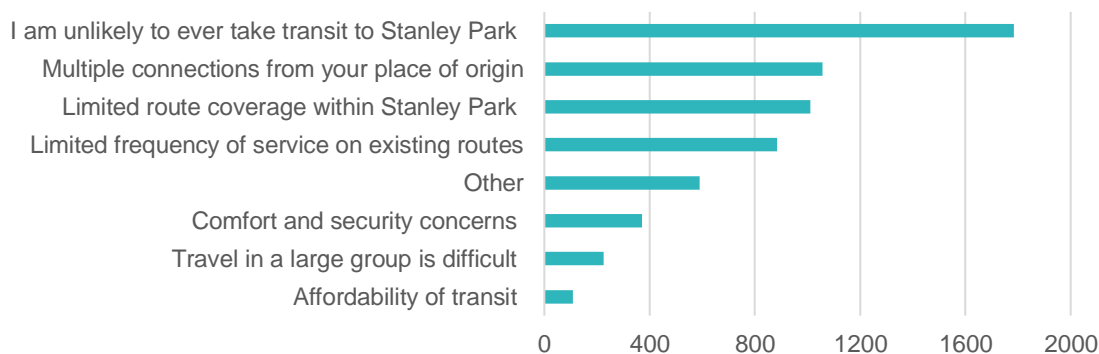
- 1) First, the StreetLight mode split shown in **Figure 4-11** is representative of all trips in 2021, whereas the survey mode split shown in **Figure 4-10** is only a cross-section of park visitors and their typical mode choice. As a result, the StreetLight mode split

- inherently considers the relative difference in trip frequency by different modes throughout the year for repeat visitors to the park. The results indicate that park users that travel on foot visit the park more frequently than those that travel by other modes.
- 2) Second, the passive nature of the location-based data collection allows for the observation of trips that are not captured in surveys of Stanley Park users, and that have often not been counted in studies of park visitation. Namely, the location-based StreetLight data observes short walking trips into the park made by people travelling from the West End and downtown Vancouver, some of which are short and enter the park by the multiple accesses where pedestrian count data collection has been limited in the past. As a result, the StreetLight data observes a significantly larger walking mode share than other data sources that have relied on survey responses or counting pedestrians on the Seawall.

Public transit is an opportunity for those living far from the park or who may, require motorized transportation because of a disability or limited mobility to access the park in a way that is more sustainable and causes less congestion than a private vehicle. However, usage of public transit to access Stanley Park has historically been and continues to be, low (see **Section 4.2.2** of this report). Respondents of the 2022 public survey were also asked what they see as the biggest barrier to taking transit more often to and around Stanley Park (**Figure 4-12**). **Having to make multiple connections or transfers, limited route coverage within Stanley Park, and limited frequency of service on existing routes were the most commonly stated barriers for using public transit to travel to Stanley Park.** Affordability of transit was least stated to be a barrier. “Other” barriers people face to using transit in Stanley Park include lack of comfort in seating or space (i.e., overcrowding), increased travel time, reliability and timing of services and connections, and limited bike accommodation on transit or through park and ride facilities.

**Figure 4-12: Barriers to Using Transit More Often**

What do you see as the largest barrier to using transit more often to get to and around Stanley Park?

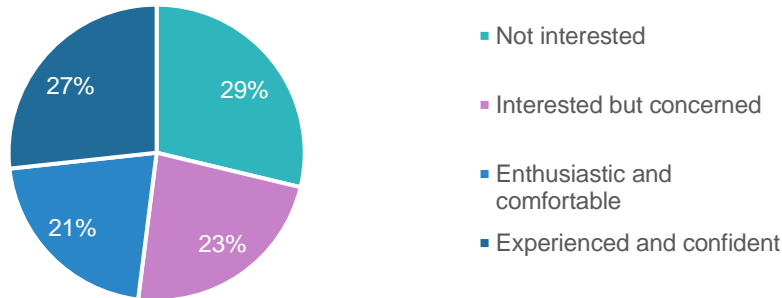


Although visits to Stanley Park by bicycle have increased historically, there remain barriers to cycling to and within the park for many visitors. **Figure 4-13** shows the comfort level for cycling of respondents from the 2022 public survey. The responses demonstrate that approximately half of survey respondents are interested or enthusiastic about cycling but have varying levels of safety concerns related to infrastructure and driver behaviour. **Because of the safety concerns related to cycling held by approximately half of park visitors, policies and**

infrastructure that affect perceived and actual safety for cyclists will have a significant effect on the number of people that choose to bike to or within Stanley Park.

**Figure 4-13: Cycling Comfort Level**

Please choose the statement that best describes your interest and comfort level for cycling?

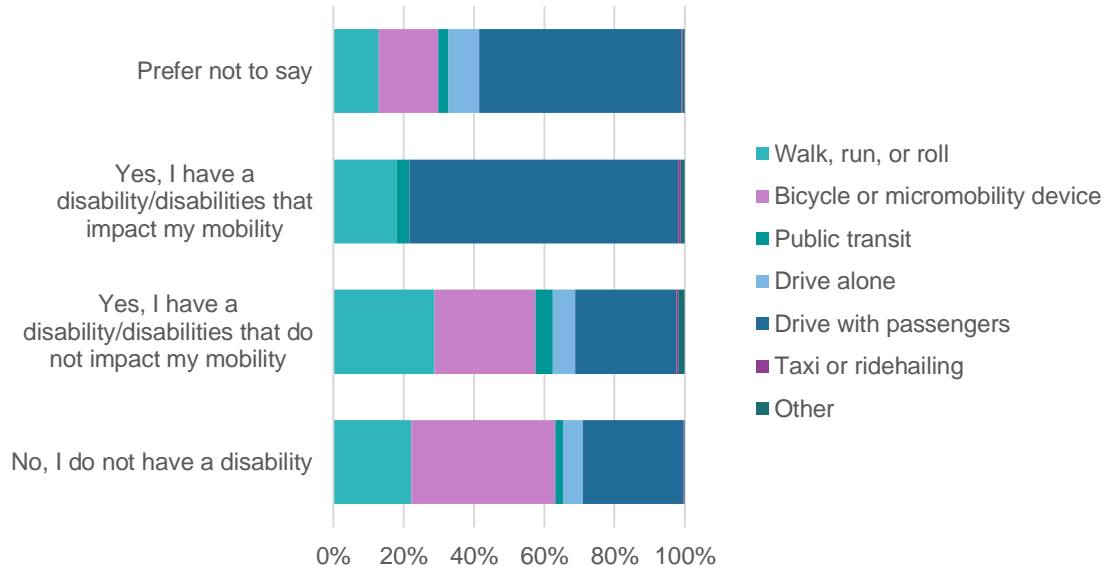


Mode choice for travel to and within Stanley Park is constrained for some visitors by a disability or mobility issue. The charts in **Figure 4-14** shows the relationship between disabilities and impacted mobility with mode choice from the 2022 public survey data. **Approximately 80% of park users with disabilities that impact their mobility visit the Park by high-occupancy vehicle (i.e., as a group), demonstrating the importance of ensuring that access to the park is provided for the segment of the population that faces barriers to using active modes of travel.**

Contrastingly, park users with disabilities that do not affect their mobility reported walking, running, or rolling to the park more than those without any reported disability. It is worth noting that almost one out of five respondents that reported a disability that impacts their mobility accessed the park without motorized transportation. **These results suggest that there are differing needs among persons with disabilities, and that access by motorized transportation is one of many considerations.**

**Figure 4-14: Relationship between Mode Choice and Disability Status**

Do you identify yourself as having a disability? / How do you most frequently travel around Stanley Park?



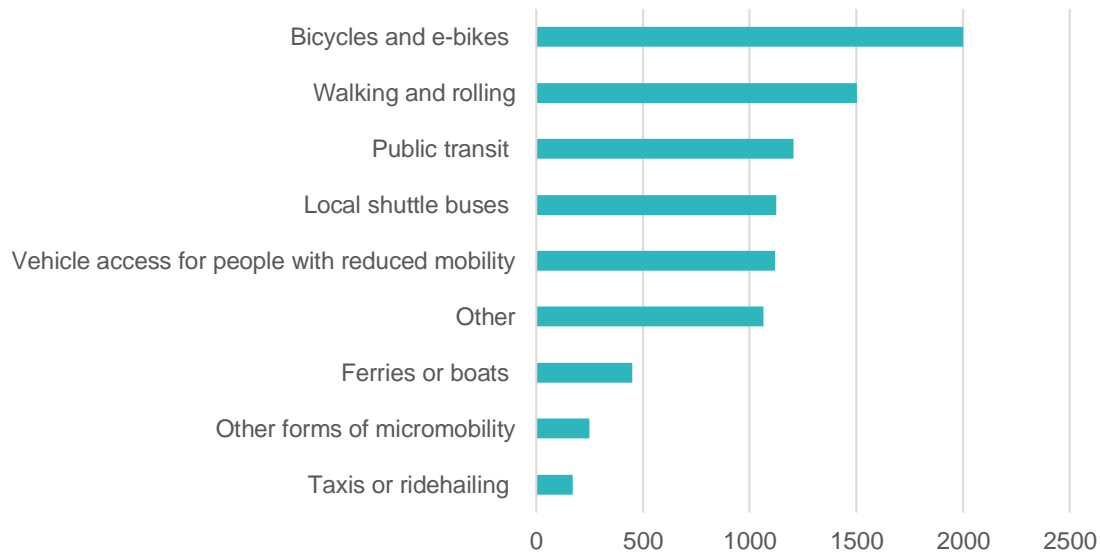
Respondents were asked which transportation mode should be focused on to improve access for themselves and for everyone else, more broadly (Figure 4-15 and Figure 4-16)<sup>45</sup>. When asked how access into and around Stanley Park could be improved for themselves, respondents reported the need to focus on bicycles and e-bikes, walking and roll modes, and public transit. "Other" modes of transportation identified by respondents to improve access personally include electric vehicles, car share, motorcycles, bike taxis and bike tours, road/gravel bikes and e-bikes, free shuttles/trams/trains and Skytrain. When asked how access could be improved for everyone, respondents focused on public transit, vehicle access for people with disabilities or reduced mobility, and local shuttle buses. "Other" modes of transportation identified by respondents to improve access for everyone include electric vehicles, motorcycles, tour coaches, Skytrain, tram/shuttle, hop on/hop off bus, and ferry boats.

These results indicate that while improvements to park access for active modes would have significant benefits for park visitors, those same users are cognizant of the importance of some kind of motorized transportation mode of travel into and around Stanley Park to improve access for all.

<sup>45</sup> Note, in keeping with one of the main study purposes – to assess the opportunities of and challenges of reduced private vehicle travel – this option was omitted from the list of choices. The "Other" category was used by some respondents to express this desire

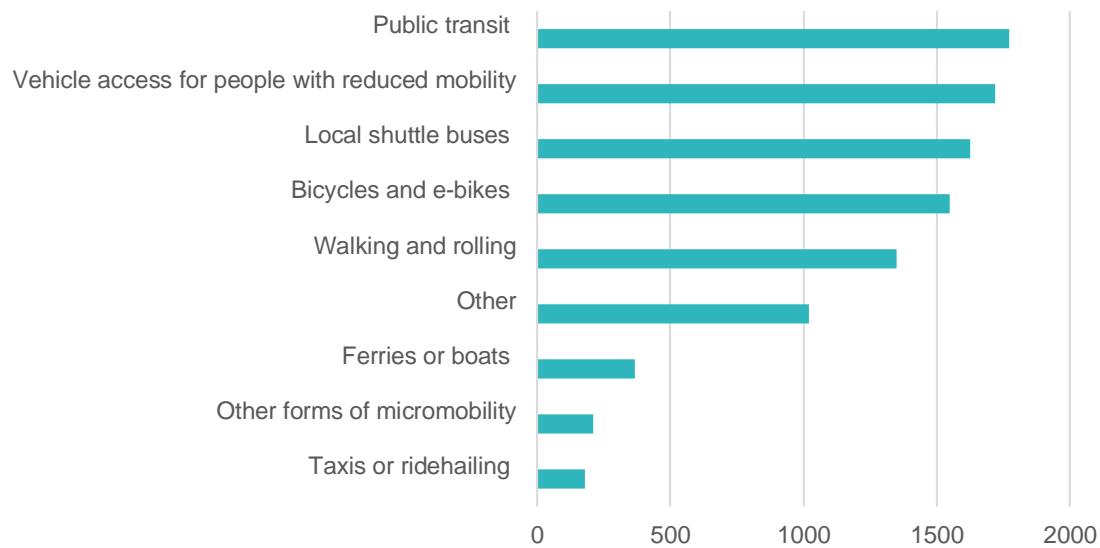
**Figure 4-15: Transportation Modes Most Affecting Access for the Respondent**

To improve access into and around Stanley Park for yourself, which mode(s) of transportation do you think should be the main focus?



**Figure 4-16: Transportation Modes Most Affecting Access for Everyone**

To improve access into and around Stanley Park for everyone, which mode(s) of transportation do you think should be the main focus?

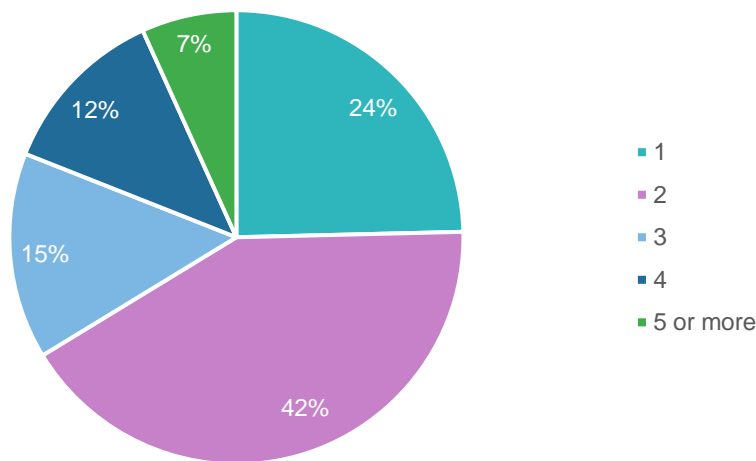


### 4.7 Group Size and Vehicle Occupancy

Many visitors to Stanley Park travel in groups, and group size can influence and constrain travel behaviour, and impact the amount of money spent at businesses by park users. As shown in **Figure 4-17**, a quarter of respondents from the 2022 public survey conducted trips unaccompanied, with 42% traveling in a pair, and the remaining 34% of respondents traveling in groups of 3 or more.

**Figure 4-17: Travel Group Size in the 2022 Public Survey**

Thinking about the last time you travelled to Stanley Park, approximately how many people were in your group?



Group size data from the public survey was cross tabulated with responses about most frequent travel mode to see how group size varied across the modes, and the results are given in **Table 4-4**. The small number of respondents that selected “Other” as their travel mode typically travelled by boat, swimming, or a combination of modes. The resulting group size for the Drive Alone mode being greater than 1 indicates that some drivers meet others from their group for activities in the park after driving in alone.



**Table 4-4: Group Size by Mode**

Mode	Average Group Size
Walk, run, or roll	2.0
Bicycle or micromobility device	2.1
Public transit	2.5
Drive alone	1.6
Drive with passengers	2.9
Taxi or ride hailing	2.9
Other	3.2
<b>All Modes</b>	<b>2.3</b>

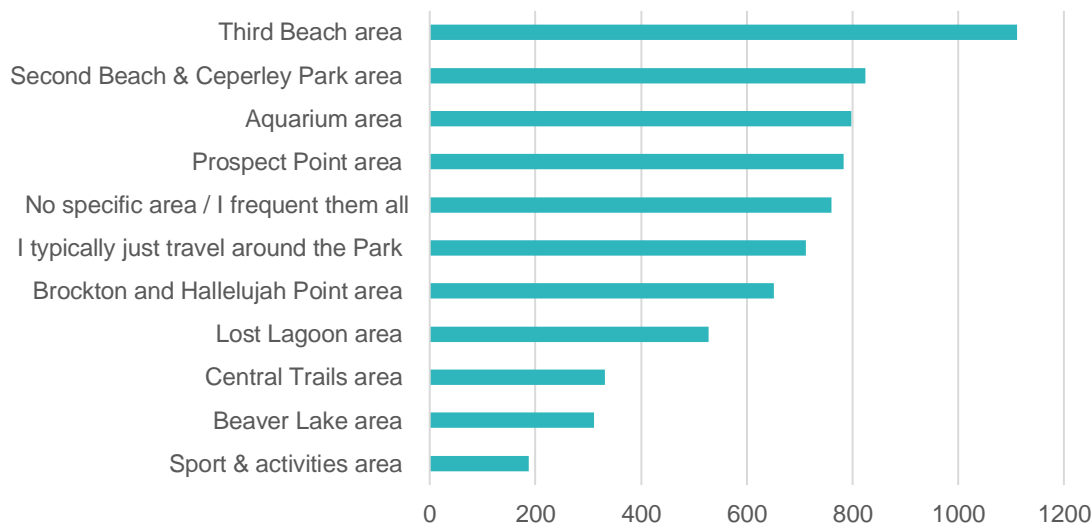
The average group size for visits to Stanley Park is 2.3, and the average auto occupancy (based on a weighed average of the drive alone and drive with passengers mode) is 2.7, which is considerably higher than the average auto occupancy for a typical vehicle trip in Vancouver and the region generally.

#### 4.8 Spatial Distribution of Park Visits

The most frequented destinations in Stanley Park, according to survey respondents, are shown in **Figure 4-18** below. The most visited destination is Third Beach, followed by Second Beach & Ceperley Park area, the Aquarium, and Prospect Point.

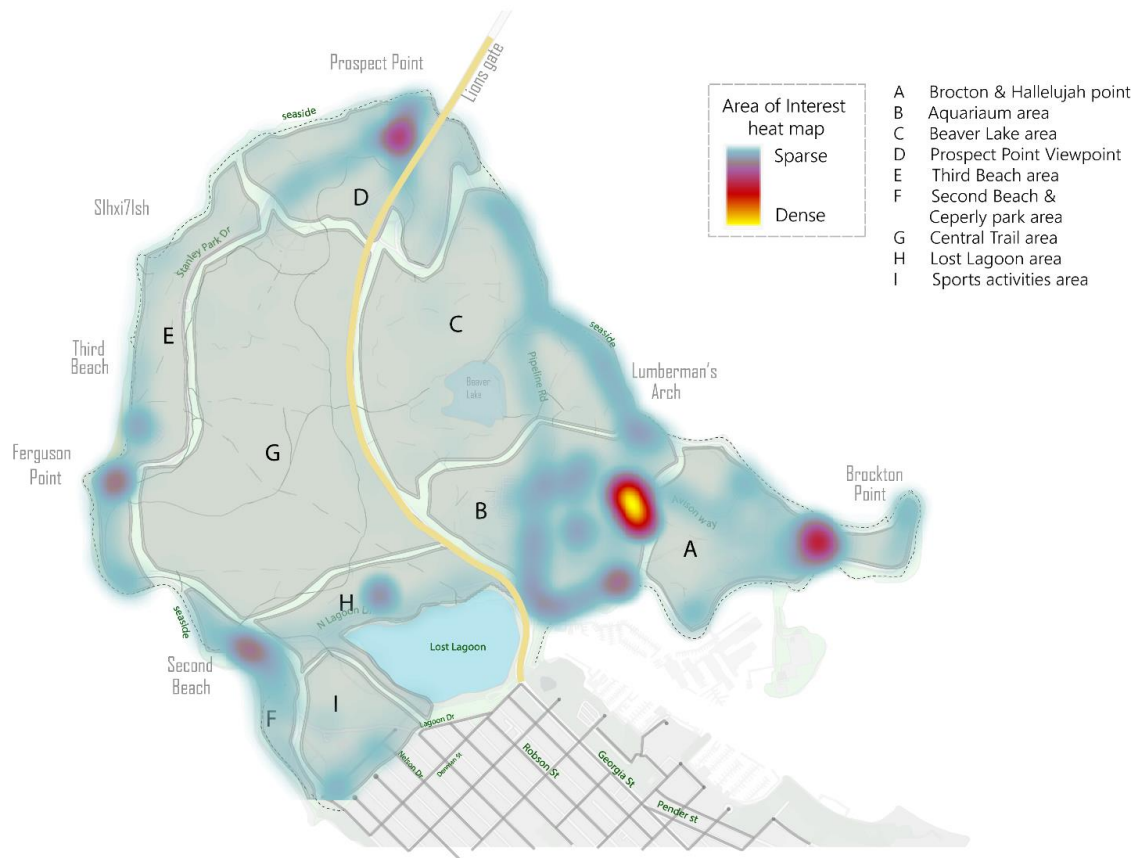
**Figure 4-18: Most Frequented Destinations within Stanley Park**

When you go to Stanley Park, what area of the park to do you most frequent?



In contrast with the public survey by residents of Vancouver, location-based data from Arrivalist was used to observe the spatial distribution of visitation patterns by international tourists, and a heatmap of the density of visit locations is shown in **Figure 4-19**. The most visited location by international tourists is the Aquarium by a significant margin, followed by the totem poles and Prospect Point.

**Figure 4-19: Location-Based Data for Visitation to Areas of Interest**



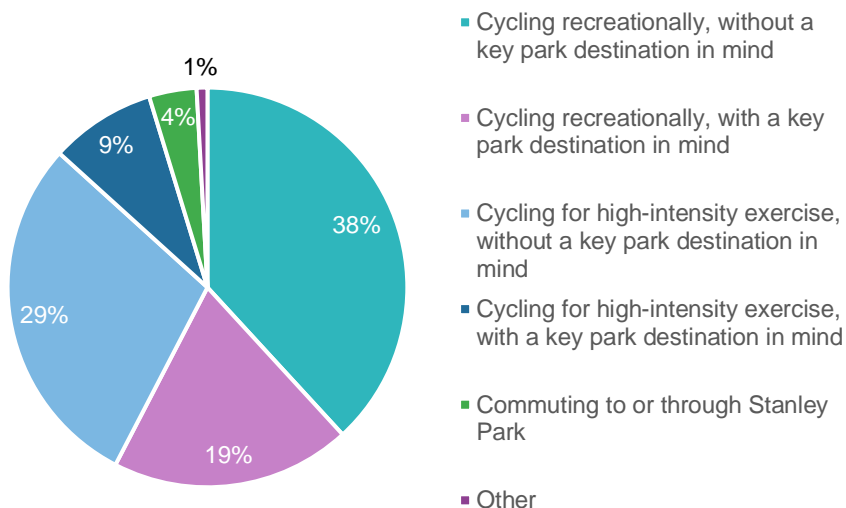
The differences in visitation patterns by locals and international tourists (highlighted by the differences between **Figure 4-18** and **Figure 4-19**) demonstrate the varying priorities and ways in which different types of park users choose to experience Stanley Park. **On average, international tourists visit attractions on the eastern and northern areas of the Park, namely the Aquarium, Totem Poles, and Prospect Point more than locals. Conversely, locals visit destinations in the western area of the park, namely Third Beach and Second Beach, more than international tourists. Similar to how travel mode and group size influence and constrain travel behaviour in the park and the resulting performance of transportation policies and infrastructure, the differing priorities of locals and tourists should be considered in this study when generating and evaluating options for the future of transportation in the park.**

**4.9 Mobility Behaviour of Different Modes**

For respondents who cycle into Stanley Park (**Figure 4-20**), the majority (57%) cycle for recreational purposes, while approximately one-third (38%) cycle for high-intensity exercise. For either purpose, most respondents cycle without a key park destination in mind (67%). “Other” purposes that people have for cycling in the park include for exercise, cycling tours, and to access destinations. For respondents who drive into Stanley Park (**Figure 4-21**), the majority have one or more destination stops planned (71%). However, nearly a quarter (22%) of these respondents do not have a particular destination in mind but may make one or more stops during their trip. Less than 10% of driving trips to and around Stanley Park are scenic drives with no destination in mind or stops intended.

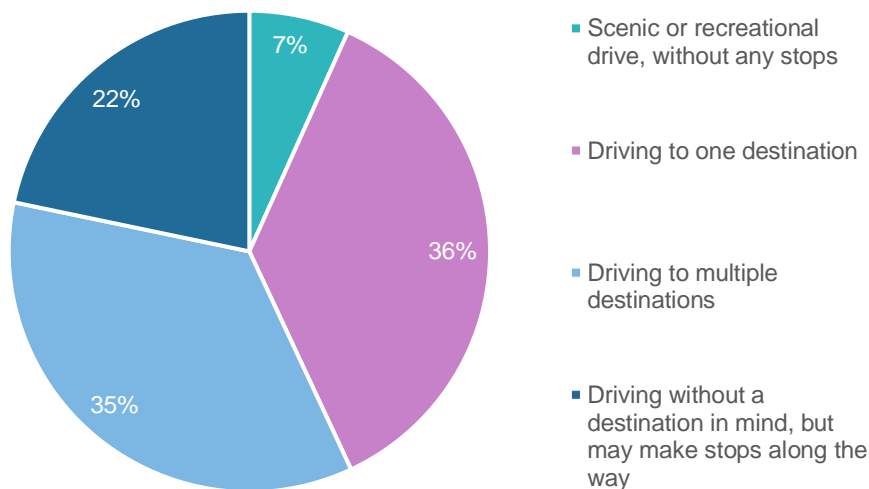
**Figure 4-20: Cycling Purpose**

How do you typically cycle into Stanley Park?



**Figure 4-21: Driving Purpose**

When visiting Stanley Park by car, how would you describe your typical driving trip?



**In summary, cyclists typically visit different areas of the park with significantly different objectives for their destination than vehicle drivers. While the majority of cyclists would**

likely be content to go anywhere in the park as long as they can recreate in nature or get exercise, most drivers intend to visit at least one specific destination in the park.

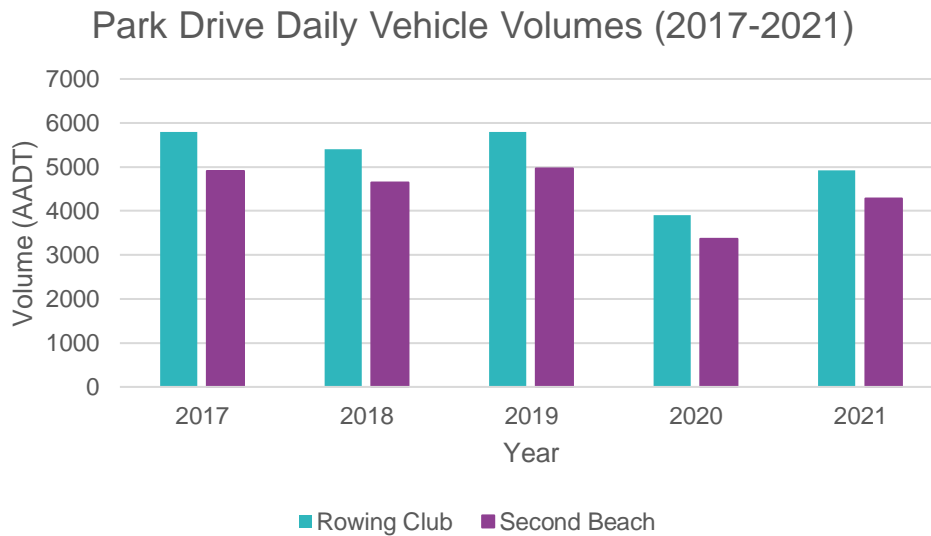
#### 4.10 Park Drive Recent Historical Traffic Patterns

StreetLight was used to investigate the historical change in vehicle volumes on Stanley Park Drive, and the annual average daily traffic (AADT) from 2017 to 2021 is shown in **Figure 4-22** for screenlines in front of the Rowing Club and the Second Beach parking lot. Daily average vehicle volumes peaked in 2019 with approximately 5800 vehicles per day at the Rowing Club and 5000 vehicles per day at Second Beach.

Vehicle volumes were reduced significantly in 2020 due to the combined factors of overall reduced travel in the city and the temporary closure of the park to vehicles in the spring of that year. In 2021, volumes increased significantly relative to 2020, but remained below the 2019 peak.

Because the peak volumes were observed in 2019, that year will be used to examine seasonal and daily traffic patterns for the baseline peak conditions analyzed in this study.

**Figure 4-22: Park Drive Historical Traffic Patterns**

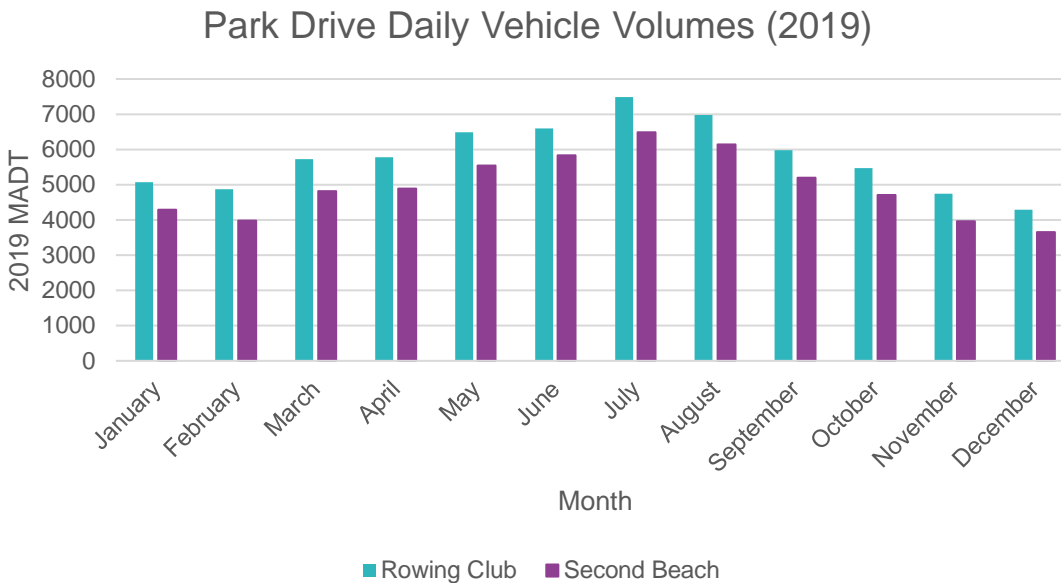


#### 4.11 Park Drive Seasonal Traffic Patterns

StreetLight was used to investigate the seasonal patterns in vehicle volumes on Stanley Park Drive, and the monthly average daily traffic (MADT) in 2019 is shown in **Figure 4-23** for screenlines in front of the Rowing Club and the Second Beach parking lot. The highest daily volumes were measured in July, with approximately 7500 and 6500 vehicles per day at the Rowing Club and Second Beach, respectively. In general, traffic volumes are increased during the warmest and sunniest seasons of the year.

Based on the patterns displayed in **Figure 4-23**, the peak summer months of June, July, and August are investigated in this study to understand how the volumes fluctuate throughout the day during the busiest season of the year.

**Figure 4-23: Park Drive Seasonal Traffic Patterns**



**4.12 Park Drive Daily Traffic Profile**

StreetLight was used to investigate the daily patterns in vehicle volumes on Stanley Park Drive in summer, when the average volumes are highest, and in winter, when the average volumes are lowest.

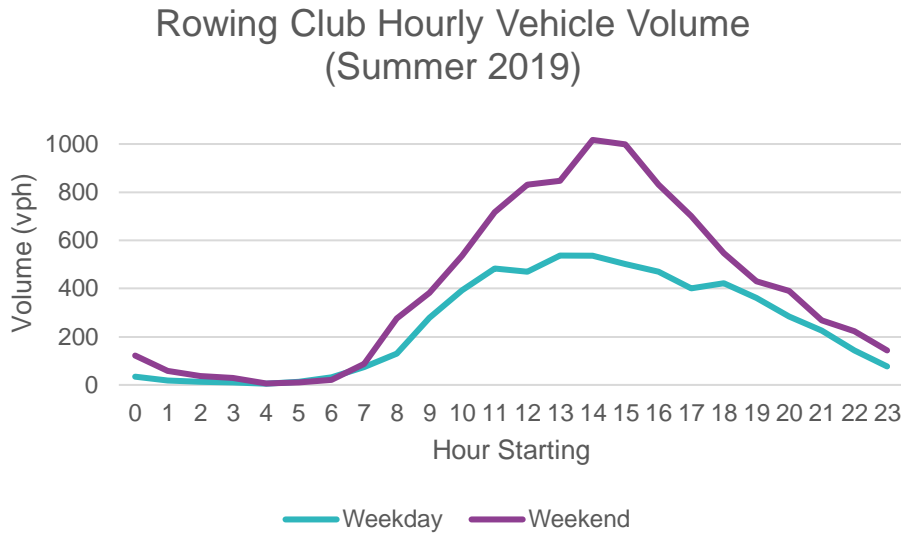
The volumes on Stanley Park Drive in June, July, and August of 2019 are shown in **Figure 4-24** and **Figure 4-25** for screenlines in front of the Rowing Club and the Second Beach parking lot, respectively.

**At the Rowing Club, the location on Stanley Park Drive where volumes are highest, hourly vehicle volumes reached a peak of approximately 1010 vehicles per hour at 2 PM on weekends, while weekday volumes reached a peak of 540 vehicles per hour at 1PM.**

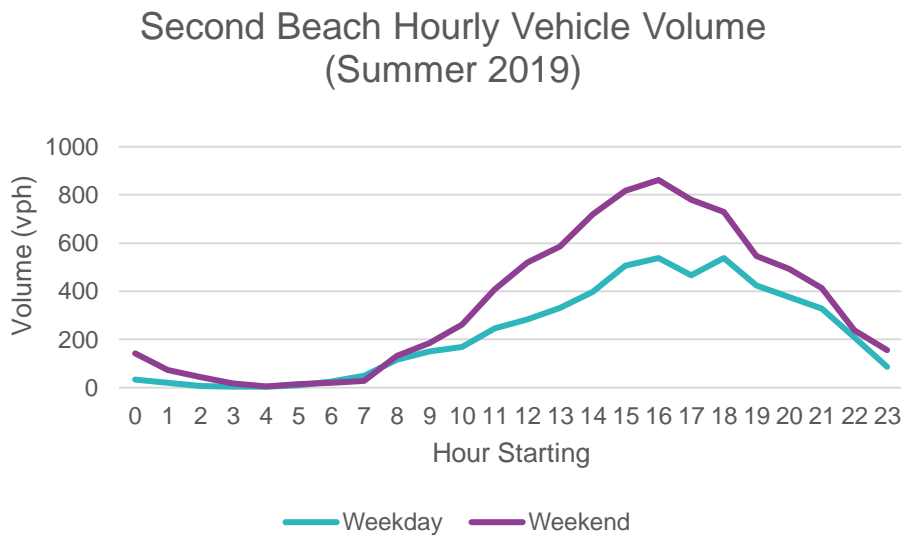
Overall, the daily profile exhibits a single daily peak in the early afternoon, unlike the two-peak commuter profile observed on most other roads in Vancouver.

At Second Beach, hourly volumes on Stanley Park Drive reached a peak of approximately 860 and 540 vehicles per hour at 4 PM on weekends and weekdays, respectively. Overall, the daily profile exhibits a single daily peak in the late afternoon, two to three hours later than the peak observed at the Rowing Club, where volumes are higher.

**Figure 4-24: Park Drive Rowing Club Daily Summer Traffic Profile**



**Figure 4-25: Park Drive Second Beach Daily Summer Traffic Profile**

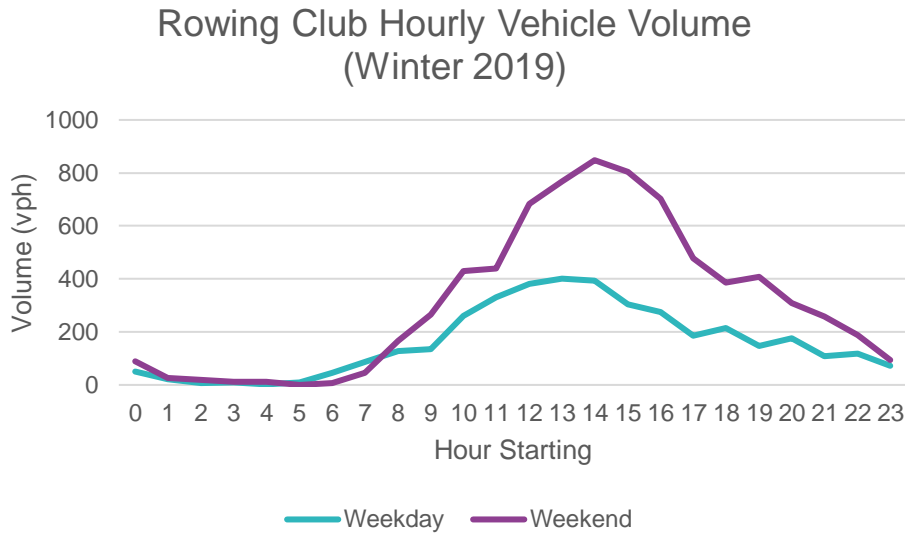


Daily traffic patterns on Stanley Park Drive during the winter months when average traffic volumes are lowest were also investigated, and patterns similar to those from the summer were found, although with less traffic overall. Traffic profiles for Stanley Park Drive in December 2018 and January and February 2019 are shown in **Figure 4-26** and **Figure 4-27** for screenlines in front of the Rowing Club and the Second Beach parking lot, respectively.

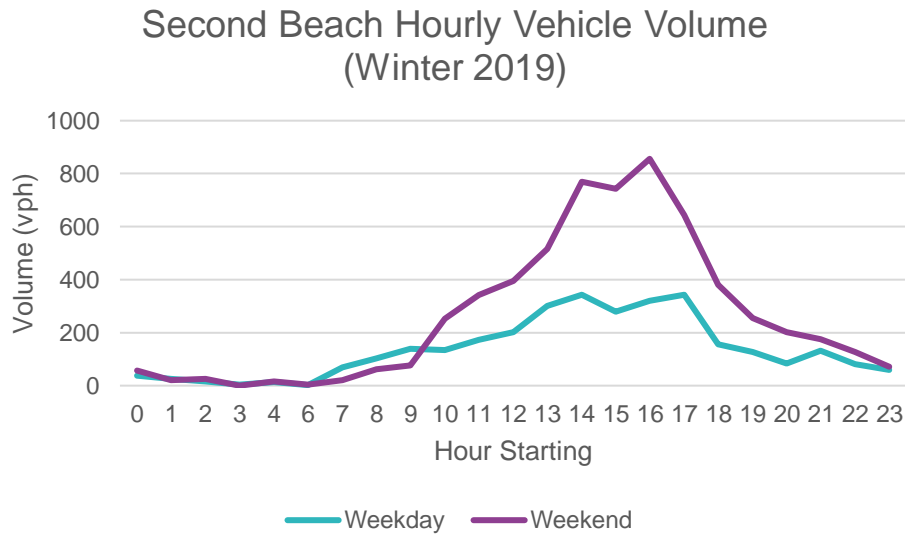
At the Rowing Club, hourly volumes on Stanley Park Drive reached a winter peak of approximately 850 vehicles per hour at 2 PM on weekends, while weekday volumes reached a peak of 400 vehicles per hour at 1PM.

At Second Beach, hourly volumes on Stanley Park Drive reached a peak of approximately 860 and 860 vehicles per hour at 4 PM on weekends and while weekday volumes reached a peak of 340 vehicles per hour at both 2 PM and 5 PM

**Figure 4-26: Park Drive Rowing Club Daily Winter Traffic Profile**



**Figure 4-27: Park Drive Rowing Club Daily Summer Traffic Profile**





**Figure 4-28: North Lagoon Drive at Most Times of the Day**

Typical urban traffic conditions see two peaks per day—an am and a pm peak—five days a week throughout most of the year. This contrasts with the traffic patterns in Stanley Park, where there is one relatively short peak period occurring midday on weekends during a few summer months only.

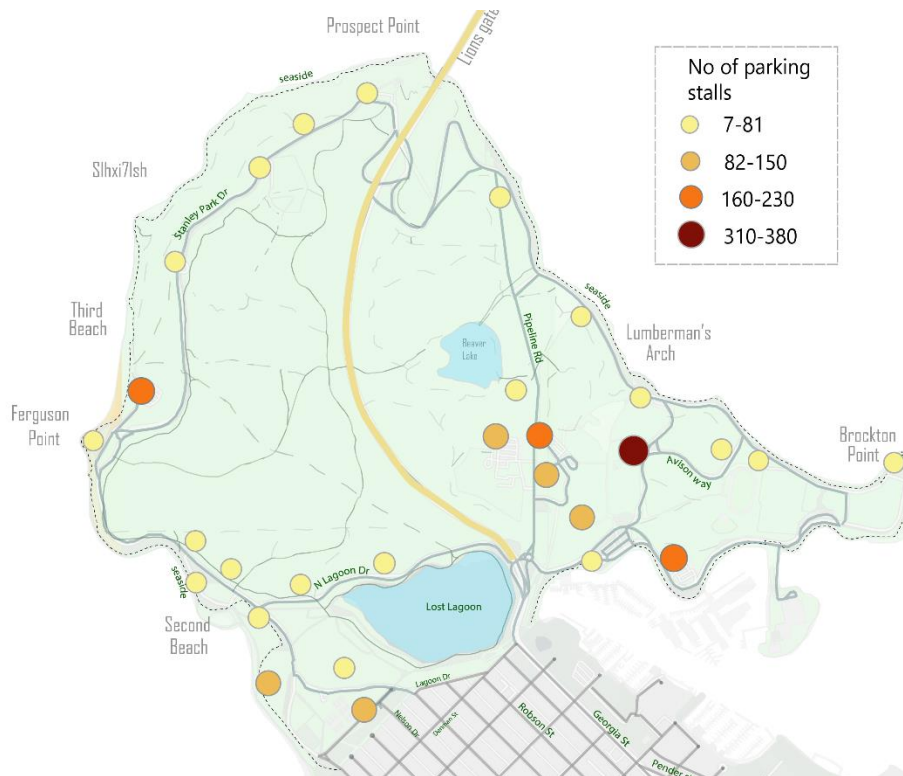


Source: stanleyparkvan.com

### 4.13 Vehicle Parking

For visitors to Stanley Park travelling by car, the availability of parking is an important factor in planning their trip, including where, when, and if to visit. There are many different parking lots and on-street parking areas throughout the park, with varying number of stalls to accommodate the variation in demand for parking in different areas. The parking areas and their capacities are shown graphically in **Figure 4-29**, with emphasis on the largest parking lot at the Aquarium, and other relatively large lots at Third Beach, the Stanley Park Train, and the Vancouver Yacht Club.

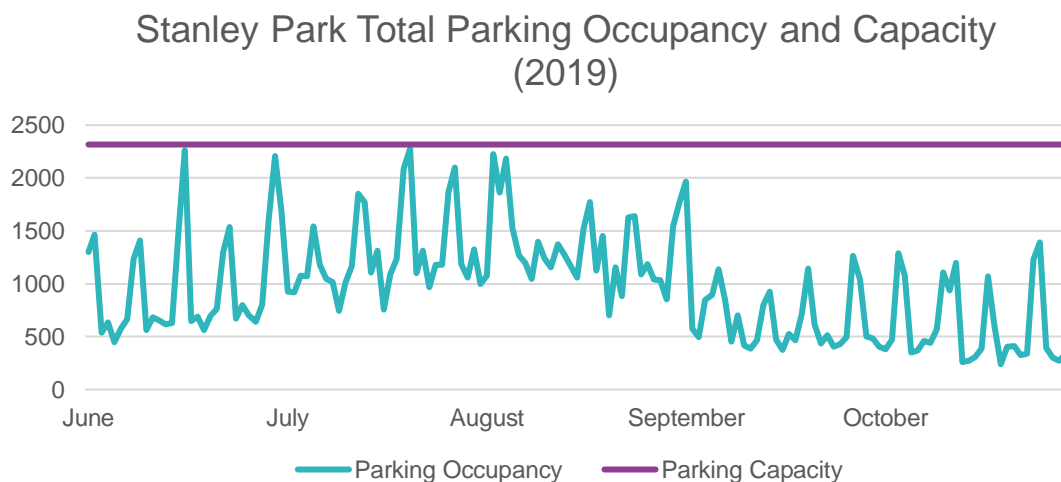
**Figure 4-29: Parking Capacity around the Park**



Parking data from meters around the park was analyzed to determine how usage relates to capacity in Stanley Park as a whole and in different areas.

Peak daily parking occupancy for the park as a whole was measured for each day from June to October – the busiest months of the year – 2019, and is shown in **Figure 4-30** relative to the total capacity for parking in Stanley Park, which was 2317 stalls in 2019. As shown, **parking occupancy did not exceed capacity through the busiest months of the year, and occupancy only exceeded 2000 vehicles seven times in 2019. It is clear from the data that as a whole, parking capacity is not an issue in the park.**

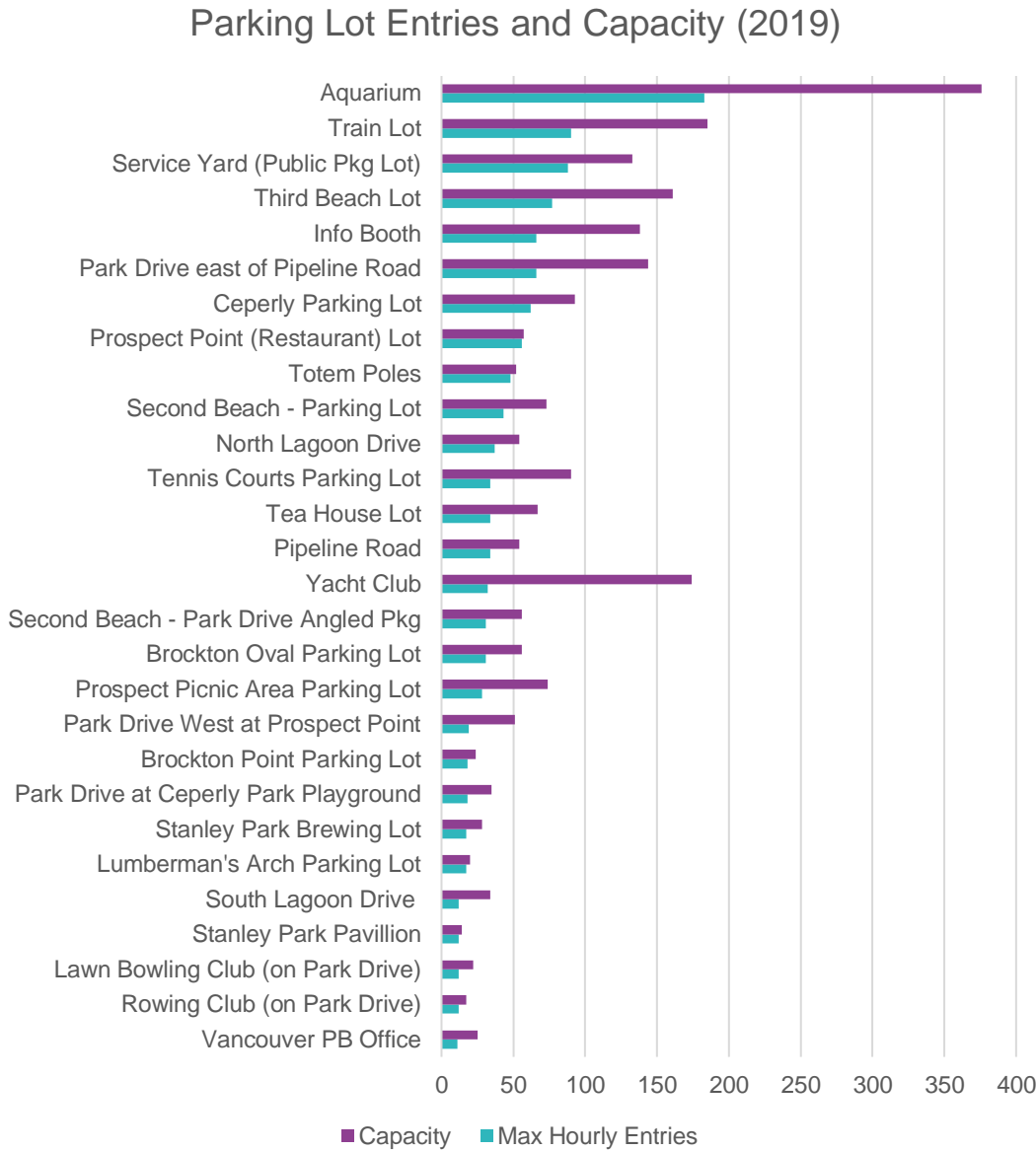
**Figure 4-30: Parking Occupancy and Capacity for all Lots in Stanley Park**



Hourly parking entries at each of the parking lots in Stanley Park in 2019 were analyzed relative to the capacity of the lots. **Figure 4-31** shows the maximum hourly entries from the whole year and parking capacities at each of the lots in the park. The chart allows for the comparison of relative utilization between the different lots, indicating the following broad categorization:

- The Prospect Point Restaurant, Totem Poles, Lumberman's Arch, Stanley Park Pavilion, and Rowing Club parking lots have maximum hourly entries from 2019 approaching the capacity of the lots, and as a result may experience congestion and visitors circling for parking during the peak periods of the year.
- The Vancouver Yacht Club, and to a lesser extent, the Prospect Point picnic area and tennis courts, have capacity far beyond the maximum hourly entries, and as a result have excess parking stalls even during the peak periods of the year.
- For areas where visitors are expected to park their vehicles for over an hour, such as the Aquarium, Third Beach, Second Beach, and Ceperly Meadows, the relationship between maximum hourly parking entries and capacity indicate that parking availability may be constrained during the peak periods of the year, but this data source provides limited insight into the frequency and severity of those capacity issues.

**Figure 4-31: Parking Entries and Capacity for Each Lot in Stanley Park**



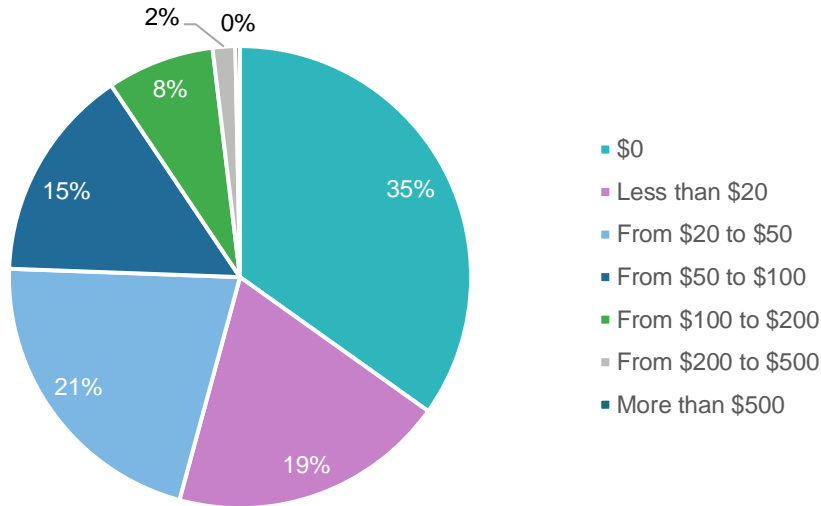
#### 4.14 Spending Patterns

For some park users, visiting a restaurant or attraction is a core part of the experience to the Park and may be the main reason they were attracted to Stanley Park. For other park users, businesses in the park simply represent an opportunity to purchase food or refreshments while they continue their recreational activities. In addition, a significant number of park users rarely visit businesses in the park at all. Data from both the fall 2020 and spring 2022 public surveys were combined to quantify the spending behaviour of different park users.

**Figure 4-32** reports how much money respondents from the 2022 survey typically spent at attractions, businesses, or dining locations within Stanley Park. Most respondents reported typically spending less than \$20, with 20% of respondents spending between \$20 and \$50. Some respondents spent \$50 - \$100 (15%) and few spent \$100 or more (10%).

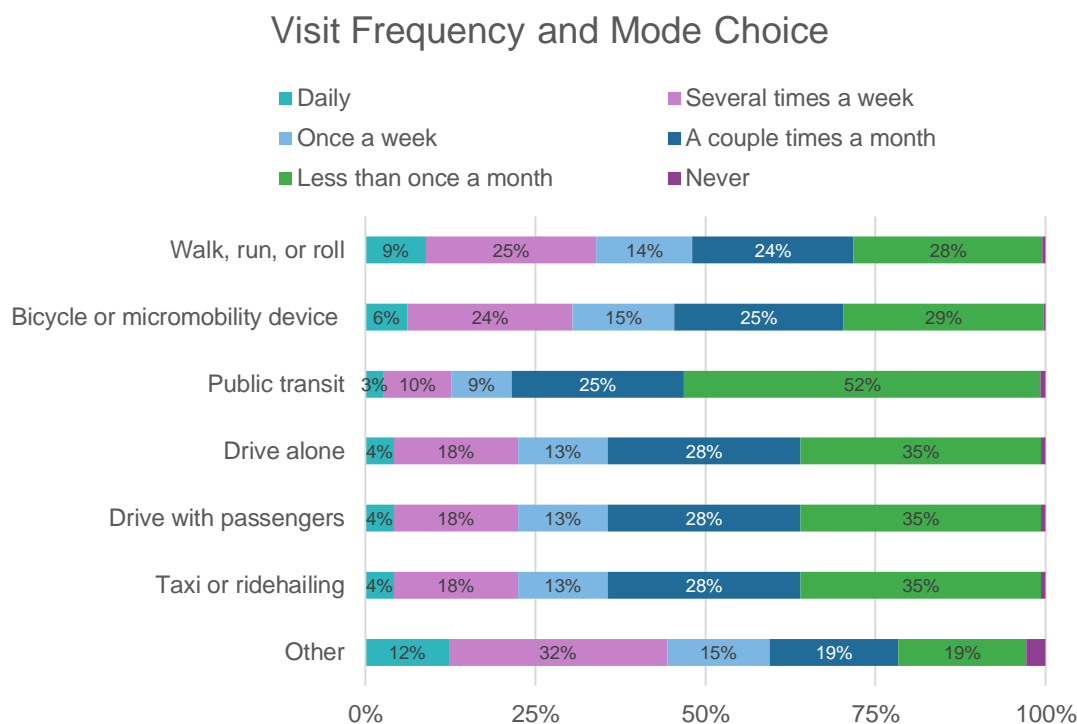
**Figure 4-32: Dollars Spent in Stanley Park from the 2022 Public Survey**

Approximately how much money do you spend at the attractions, businesses, or dining locations (not including parking)?



In order to calculate the total amount of money spent in a year by park visitors based on the average amount of money spent on each trip measured in the 2022 public survey, data about frequency of visitation by each park user from the 2020 public survey was used, as shown in **Figure 4-33**.

**Figure 4-33: Visitation Frequency by Travel Mode**



Visit frequency was cross tabulated with travel mode, and the results indicate that park users travelling by active modes visit the park more frequently than those travelling by motorized modes.

Responses from the 2022 public survey about money spent, in addition to responses from the 2020 public survey about visitation frequency were cross tabulated with responses about travel mode in order to estimate the relative difference in money spent in the park by those travelling by varying modes, and the results are shown in **Table 4-5**.

A limitation of this methodology is the self-reported nature of the survey data for money spent and visitation frequency. While it is likely that respondents of the public survey overestimated their combined visitation frequency and money spent, as a relative comparison of spending across the varying modes, the trends shown, and conclusions drawn are considered valid.

**Table 4-5: Money Spent in the Park by Mode**

Mode	Average Spend per Visit	Average Annual Visit Frequency	Average Annual Spend	2022 Survey Respondents	Total Annual Spend by Survey Respondents
Walk, run, or roll	\$20	72	\$1,400	819	\$1,200,000
Bicycle or micromobility device	\$15	62	\$900	1377	\$1,300,000
Public transit	\$25	31	\$800	101	\$80,000
Drive alone	\$44	48	\$2,100	273	\$580,000
Drive with passengers	\$73	48	\$3,500	1450	\$5,100,000
Taxi or ridehailing	\$50	48	\$2,400	8	\$20,000



Those that travel to Stanley Park as in high-occupancy vehicles (as a large group) spend more money in the Park than those visiting by other modes. Individual drivers also spend a comparatively high amount on an average visit. Those that walk or bike to the park spend a lower amount of money on each visit; however, they visit the park more frequently than those that use motorized modes of travel, and more local visitors reported using walk or bike modes. As such, taken together, Park users that drive alone spend approximately half of what pedestrians and cyclists do over the course over the year, and those that travel by transit and taxi spend relatively little in total because of how few visitors to Stanley Park travel by those modes, overall.

**As such, residents who arrive in Stanley Park by vehicle in a group spend the most overall, followed by active transportation users<sup>46</sup>.**

#### 4.15 Challenges and Opportunities

In addition to insights into existing behaviour in Stanley Park by visitors, the 2022 public survey also gave respondents the opportunity to express their thoughts on challenges faced when travelling to the park, and on how a reduction in vehicle traffic to Stanley Park might benefit or impact them.

When asked about challenges experienced when traveling in Stanley Park, some respondents (18%) reported not experiencing any issues (**Figure 4-34**). **The most frequently reported challenges associated with travelling to Stanley Park were finding parking, including for bicycles and other micromobility, navigating around Stanley Park, feeling unsafe sharing or crossing roads, or feeling that their trip took too long.** “Other” challenges people face in travelling in Stanley Park include exit & lane closures, user conflicts, fast-traveling cars, difficulty finding parking, cycling clarity and wayfinding, signage, and lack of transit.

The perceived difficulty in finding parking observed in the survey contrasts with the findings of the analysis documented in **Section 4.13** that indicate that parking capacity was generally sufficient to meet demand around the park as a whole and in most of the lots most of the time. This finding suggests that the perceived difficulty in finding parking is likely the result of capacity constraints during the limited peak hours of the year identified at certain lots in **Section 4.13**, namely the Prospect Point Restaurant and Totem Poles. In addition, the parking entry data provides limited insight into the occupancy of lots where it is expected that visitors will park for over an hour, such as the Aquarium, where survey respondents may be having difficulty finding parking. It may also be a result of limited information available as to where and when spaces are more likely to be available.

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<sup>46</sup> As discussed earlier and as a limitation of this approach, the public survey from which this data is drawn largely captures responses from residents in the region only. It is worth recognizing that respondents that report driving with passengers are estimating a spend across their entire group, particularly if these are families, whereas individual mode users (drivers, cyclists, pedestrians), are likely to be reporting their own spend, suggesting that on a per person basis, the estimate for people who access the Park as a group in a vehicle is a significantly lower value than that reported here (yet, still higher than those for active transportation modes).

**Figure 4-34: Challenges Traveling in Stanley Park**

Thinking about the last time you travelled in Stanley Park, did you face any of the following challenges?



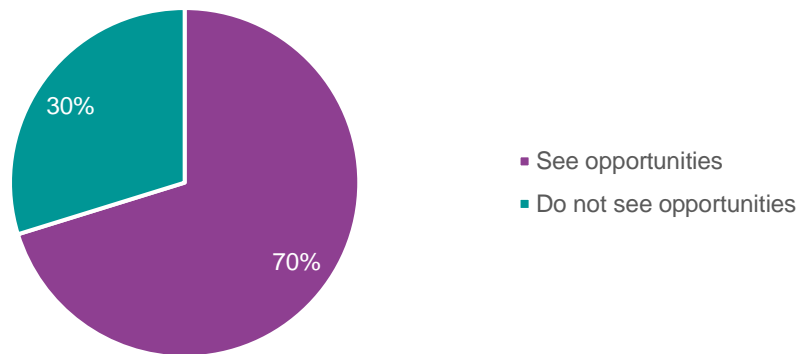
Opinions on the challenges and opportunities of reducing private vehicle traffic in Stanley Park are shown in **Figure 4-35**, **Figure 4-36**, and **Figure 4-37**. Some respondents (30%) stated that reducing private vehicle traffic would not present any opportunities. **However, most respondents (70%) stated that there would be opportunities associated with reducing private vehicle traffic in Stanley Park, including reducing noise and pollution, providing more space for other modes of transportation, and achieving a safer network.** “Other” opportunities participants stated include reducing crowding in the Park with more people taking alternative modes of transportation and the attraction to the Park as a car-free space (emphasizing Vancouver as a “green city”).

When asked about the challenges of reducing private vehicle traffic, few respondents (15%) stated that there would be no challenges, while most respondents identified challenges. **The most frequently identified challenges associated with reducing vehicle traffic in Stanley Park were challenges for those with mobility challenges and those that travel with families or in large groups, increased difficulties engaging in some park activities (e.g., picnics, sports, etc.), and potential impacts to businesses. Mobility options generated as part of this study will consider their impact on the challenges identified in the survey in their development and evaluation.** “Other” challenges participants stated in

reducing vehicle traffic, include access for tourists and anyone in or outside of the Metro Vancouver area, lack of alternative transportation, access for emergency vehicles, access to destinations that are too far to walk, accessibility for those with mobility challenges and equity concerns.

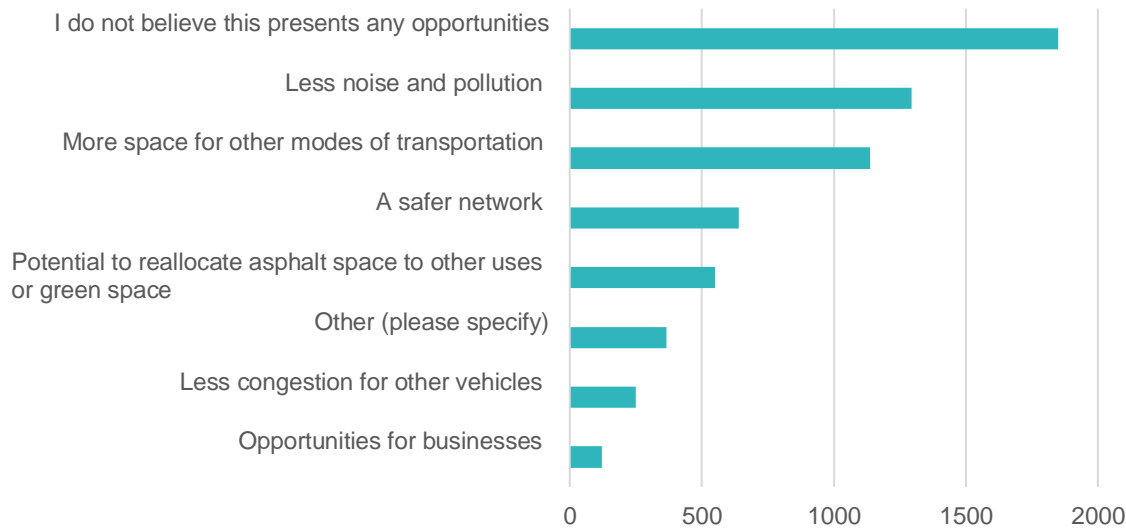
**Figure 4-35: Perceptions on Reducing Private Vehicle Traffic**

Seeing Opportunities if Private Vehicle Traffic were Reduced



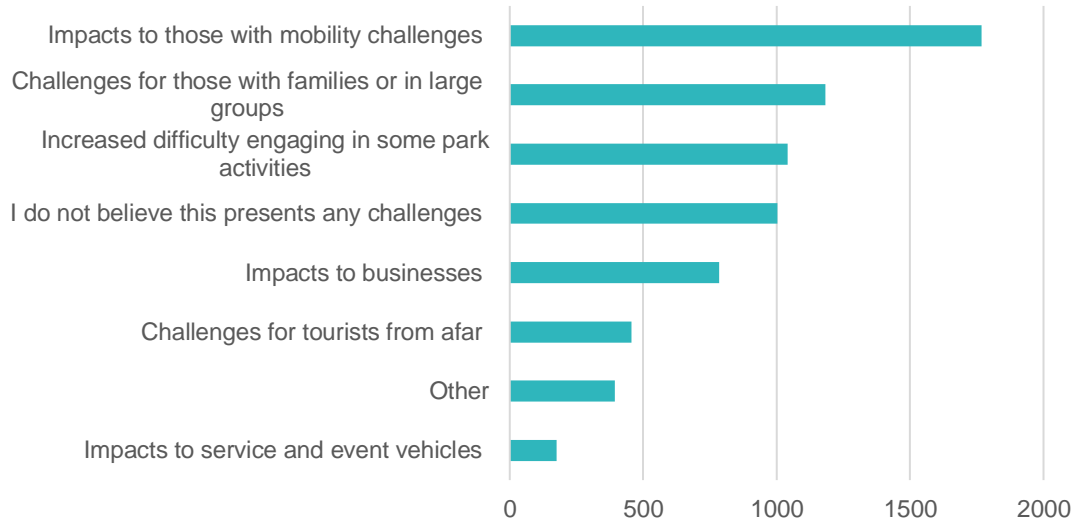
**Figure 4-36: Biggest Opportunities from Reducing Private Vehicle Traffic**

What do you see as the biggest opportunities if private vehicle traffic were to be reduced in Stanley Park?



**Figure 4-37: Biggest Challenges from Reducing Private Vehicle Traffic**

What do you see as the biggest challenge(s) if private vehicle traffic were to be reduced in Stanley Park?



## 5 Future Work

This part of the report will be completed as part of the detailed analysis being undertaken in the next phase of the study. It will provide quantified information regarding the existing levels of access across different transportation modes and relevant socio-demographics, as well as an economic analysis baseline. These baselines will then be used to further inform option development and evaluation.

### 5.1 Access Analysis

The concepts of mobility and access are closely linked. For the most part, mobility is a means to an end, and not an end in and of itself. Residents and visitors desire the activity at the end of their trip. For those trips in Stanley Park that are considered leisurely or for sightseeing (sometimes termed passive recreation), they then become the activity that people desire to access. This suggests a lower importance on fast mobility in the Park, and a greater importance on access into the Park and its key areas. It is important that this is explicitly measured to work toward a Stanley Park that can be accessed by all.

*“...many cities are doing the right thing, but they are still afraid of measuring the right thing. They keep collecting data about the same issues, which circle them back to the same problems, pointing at the same solutions, which are then assessed with the same evaluation tools, which turn out the same results justifying the same kind of investments. **If transport should serve everyone – and I think it is hard to suggest anything else – then let's measure if everybody is indeed being served well.** Once we start doing that, we can create a ranking of **who's being served well and who is poorly served; of who is at the top and who is at the bottom.** Once cities start doing this, they will know exactly where to start...”*

*- Karel Martens (author of Transport Justice)*

### 5.2 Economic Analysis

The tourism sector is a substantial contributor to the economy of Greater Vancouver, generating over \$20 billion in 2018.<sup>47</sup> and Stanley Park is an integral part of this offer. As such, it is important that the park's significance as a visitor attraction—and the economic benefits this generates—is taken into account for future decision-making, especially if future changes to the park could impact economic activity. This section will be completed once all economic and business-related data has been collected. It will present an overview of existing economic and commercial activity at the park and will be structured as follows:

- Establishing the economic contribution of Stanley Park. This will set out a baseline value for the economic impact of Stanley Park as a visitor destination and its contribution to Vancouver's visitor and recreation economy.
- Setting out an overview of the costs of maintaining Stanley Park relative to the revenues it generates.
- Understand how this activity relates to the transportation network and traffic conditions, including how dependent existing economic activity is on the current transportation network and traffic conditions, how this changed during the pandemic and what may happen as a result of reconfiguring the network.

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<sup>47</sup> <https://www.boardoftrade.com/news/50-news/2020/1825-media-statement-board-of-trade-supports-stanley-park-businesses>

## 6 Summary & Next Steps

### 6.1 Key Findings

Based on a review of past planning initiatives, existing policy direction, a best practise scan of other iconic urban parks, numerous park mobility and access data, and results from the public survey, the following points summarize the key findings:

- There is considerable supporting policy direction at multiple levels of government to reduce and shift vehicle traffic to sustainable modes of transportation. Past study of Stanley Park has explored ways to improve access into the Park while reducing vehicle use, and this study should build upon past work and policy direction.
- Public opinion generally desires changes in the Park's transportation system, including reallocating space to other modes and/or reducing private vehicle traffic.
- The share of visits made by active transportation has increased significantly over the last 40 years, with cycling doubling, and walking increasing about three-fold from 1980 to 2019. The pandemic has bolstered that trend.
- Transit use to the Park continues to be low, with the need to make multiple transfers, limited coverage within the Park, and limited service frequency cited by residents as key challenges.
- Despite a drop in the number of vehicle entries over the years, the overall number of visitors has increased significantly and is estimated to be about 18,000,000 per year.
- A comparatively large amount of paved space is used to facilitate vehicular access, although large vehicle volumes typically occur during a short peak time on weekends in the peak summer season.
- The interim bike lane currently located on the inner lane of Park Drive is one of many options that will be evaluated as a possible longer-term option within this study. Due to it being installed at this time there is considerable evaluative data already available, some of which is captured in this report. However, 2019 and the conditions at that time form the report baseline year.
- 80% of park users with disabilities that impact their mobility visit the park by high-occupancy private vehicle (i.e., as a group), demonstrating a need to ensure access given barriers to using active transportation. However, the 1 in 5 residents with an ambulatory disability that accessed the Park without motorized modes highlight the varied needs and preferences of persons with disabilities.
- The average group size for visits to the park is 2.3, and the average auto occupancy for trips to the park is 2.7, considerably higher than the average in the city and region.
- On a relative basis, international visitors tend to frequent attractions in the eastern and northern areas of the Park, whereas local visitors tend to frequent destinations in the western and southwestern areas of the Park such as Second and Third Beach.
- Visitors using vehicles tend to have a specific destination in mind, whereas those that cycle are less likely to have a specific destination in mind, suggesting trip purpose and destination is of lower priority and recreation is of higher priority for cyclists.
- Some visitors arriving by vehicle express difficulties finding parking. Overall, parking occupancy did not exceed capacity throughout the busiest months of the year suggesting parking capacity is sufficient for the park overall. Parking demand does approach available capacity at some lots at the busiest times, which may lead to localized parking congestion



during peak periods, potentially prompting these visitor concerns. This suggests the issue lies in how parking is managed or the level of information available to visitors.

- People who walk to access the Park are the most frequent visitors, with public transit users as the least frequent visitors.
- Based on existing mode share and visit frequency, as a whole, people who access the park by vehicles in larger groups spend the most money in Stanley Park over the course of a year. They are followed by active transportation and micromobility users. People who access the Park by vehicles alone spend about half the amount that active transportation users do.
- About 18 million visits are made to Stanley Park per year. About 48% of these are made by residents that live within 10 km of the Park (locals), and the other half by tourists (domestic or international). It's estimated that there are about 9.5 million unique visitors.

## 6.2 Next Steps

This preliminary Mobility Context Report is intended to be updated with additional analysis, stakeholder and public engagement input, and study outcomes. As well, based on direction from the Park Board, finalized guiding principles will be used to guide the development and evaluation of options<sup>48</sup>. At this point in the process, various options have been generated in consultation with stakeholders and park and City staff. No decisions have been made regarding potential options, and further work is required to complete the options long-list and outline these in more detail, ahead of evaluation. Anticipated next steps are as follows:

- Obtain further direction from the Park Board with respect to the guiding principles.
- Complete the Access and Economic baseline analyses.
- Augment the currently planned Phase 3 stakeholder and public engagement progress, based on emerging needs and Park Board direction.
- Finalize options long-list, study feasibility, and evaluate options in more detail.
- Contribute toward future decision-making regarding the current temporary Park Drive bike lane (which is one of many potential options to evaluate).
- Develop recommendations that support the goals of the study and consider how these may be implemented and/or phased over time.

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<sup>48</sup> At this time, the guiding principles are included under separate cover as part of the Park Board staff internal report to commissioners.



# PHASE 1 & 2 ENGAGEMENT UPDATE

## VANCOUVER PARKS BOARD, STANLEY PARK MOBILITY STUDY

Date: July 2022



## ENGAGEMENT ACTIVITIES (April 2022 – June 2022)

Activity	Date	Participation
Stakeholder Interviews	April 2022	6
Public Survey	May 18 <sup>th</sup> - June 9 <sup>th</sup> , 2022	4,036
Park Stakeholder Group Workshops		
Visioning Workshop (#1)	May 5 <sup>th</sup> , 2022	13
Principles & Objectives Workshop (#2)	May 25 <sup>th</sup> 2022	12
Options Development Workshop (#3)	June 15 <sup>th</sup> 2022	8
Listening Sessions		
Community Listening Session	June 27 <sup>th</sup> 2022	8
Youth Listening Session	June 28 <sup>th</sup> 2022	4
Steering Committee Workshops (2)	May 16 <sup>th</sup> 2022 June 3 <sup>rd</sup> 2022	11
Staff Working Group Workshops (2)	May 27 <sup>th</sup> 2022 June 20 <sup>th</sup> 2022	19
Council Committee Presentations		
Persons with Disabilities Advisory Committee (PDAC) Urban Indigenous Peoples' Advisory Committee (UIPAC) Racial and Ethno-Cultural Equity Advisory Committee Transportation Advisory Committee  (Upcoming) 2SLGBTQ+ Advisory Committee Children, Youth and Families Advisory Committee	May – July 2022	

## PAST PUBLIC ENGAGEMENT (2020- 2021)

The engagement process for the Stanley Park Mobility Study is informed by feedback from past engagement, specifically the 2020 and 2021 public surveys on the COVID-19 response and temporary separated bike lane. **The key take-aways and revealed park values from the surveys provided a foundation for developing the draft guiding principles.**

High level take-aways from the past surveys include:

- A majority of respondents stating the experience was better with the restriction to vehicles, than it was prior to COVID-19
- A general agreement that a change in the existing transportation system is required.

- A general desire to see some space reallocated to other modes of transportation, subject to further engagement.
- A split opinion on the idea of Stanley Park being car-free in the future.
- Recognition of access difficulties for persons with disabilities.

Public feedback also revealed priority values and other important topics to consider as part of this Study:

#### *Natural Environment*

83% of respondents indicated that they value the natural environment most in Stanley Park.

Related to this value, participants commented on the need to reduce greenhouse gas emissions and noise and to preserve nature and wildlife habitat through less vehicle use in the Park.

#### *Open Space (to recreate, walk, run, cycle)*

79% of respondents value open spaces most in Stanley Park to recreate, walk, run, and cycle.

Other comments about the temporary changes to the Park emphasized *safety* as a priority for the different uses of space, including the separation of different modes of transportation and concern for the speed of traffic of both cyclists and drivers.

#### *Location (convenient and proximity to the City)*

67% of respondents value the location of Stanley Park most.

*Accessibility* was a key theme from other comments about the temporary changes to the Park, emphasizing the need to ensure access for emergency vehicles, seniors, persons with disabilities, families, and park users who live outside of Vancouver/Downtown.

Also of value to respondents were the park's features and attractions (25%), the dining opportunities in the park (12%), and the opportunity to learn about history and connect to the past (6%).

## SUMMARY OF PHASE 1 & 2 ACTIVITIES & FEEDBACK

The following is a summary of feedback from engagement activities to date. These workshops and listening sessions provided an opportunity for park stakeholders, Parks Board staff, community groups and youth to build on the values and topics heard from past public engagement to develop the draft guiding principles.

A detailed "What We Heard" engagement report will be shared later this Fall (2022) once all engagement in this Phase is complete.

## Stakeholder Interviews

As part of the first phase of engagement for the Stanley Park Mobility Study, the project team conducted interviews with businesses that operate in Stanley Park. The purpose of these interviews was to better understand the needs, challenges, and opportunities around mobility and access.

The 6 businesses interviewed included:

- Stanley Park Lawn Bowling Club
- Vancouver Aquarium
- Sequoia Restaurants (The Teahouse)
- Stanley Park Brewing
- Capilano Group (Prospect Point Café)
- Stanley Park Horse-Drawn Tours

To begin each interview, we asked participants the main reasons people visit Stanley Park. Key motivations mentioned include access to nature (i.e., trails, water and green space), connection to the Indigenous history and learning opportunities, the wide range of activities that are suitable for diverse income levels, and the variety of recreational attractions and entertainment that bring people into the Park.

**Current challenges** discussed in the interviews include safety related to adequate lighting, public transportation, and wildlife, available parking and access for persons with disabilities, traffic issues caused by the temporary single lane road, and employee retainment because of the difficulty in accessing locations in the park.

**Future opportunities** for mobility in Stanley Park are more direct public transportation options, enhanced signage and wayfinding to key attractions, trails, etc., safer division between different modes of travel, and increased use of alternative transportation modes with less environmental impact such as bikes and electric vehicles.

**Business needs** identified include maintained customer traffic through all modes of transportation, retained parking spaces or areas for pick up and drop off, special event programming, and people with disabilities, support for tourism and tourist access to the Park throughout the year.

## Stakeholder Workshops

We facilitated three workshops with Park stakeholders (see “Stakeholder List” in the following section for a list of groups).

### Visioning Workshop

In the first session, we asked participants to reflect on the purpose of the Mobility Study and consider opportunities for current park users, businesses, future park users, and the planet.

Key points of discussion included:

- Accessibility- importance of Park access for everyone, especially those with mobility issues, seniors and regional visitors who do not live in walking or cycling distance
- Cycling- dedicated and separated cycling routes
- Youth Needs- barriers to accessing the Park that may be specific to youth (i.e., those without private vehicles)
- Congestion- addressing traffic on the seawall and shared space between different modes of transportation



- Pollution Reduction- supporting electric modes of transportation and ways to reduce carbon footprint by encouraging use of active transportation
- Tourism- acknowledging the significant role that tourism plays locally

### **Principles & Objectives Workshop**

In this second workshop, we discussed the key topics that will inform the guiding principles and how we might measure success if the principles were to be implemented.

Topics that were most discussed included:

- Safety- throughout various times of the day and between different modes of transportation, access for emergency vehicles
- Economic Vitality- maintaining parking access and pick-up/drop-off areas for deliveries and visitors
- High Quality Visitor Experience- decreasing congestion through the Park and addressing local needs
- Connectivity- multi-modal connectivity across the broader regional network (i.e., from tours to trails)
- Climate Action- supporting modes of transportation with less greenhouse gas emissions and addressing waste reduction

### **Options Development Workshop**

In this third workshop, we discussed actions we could take in Stanley Park that would meet our draft guiding principles.

Big ideas to come out of this session included:

- Dynamic pricing of parking, depending on demand (peak or off-peak times)
- Timed entry into Park
- Electric trams or shuttles within Park that accommodates cargo (e.g., sports equipment, strollers, etc.)
- E-bike stations
- Flexible lanes for special events and programming
- Connections to other parts of town

## **Community Listening Session**

The purpose of the first virtual community listening session in this phase was to bring community groups together to have in-depth conversations about how people move through Stanley Park and what is most important as we plan a vision for the future.

The project team identified and reached out to organizations representing a range of community groups including recreational users, seniors, families, recent immigrants, and persons with disabilities.

A full list of organizations that were invited and that attended the session are included in the “Stakeholder List” in the following section.

In the listening session, we asked participants what guiding principles are most important to them.

Safety and Accessibility were prioritized as most important principles in the roundtable discussion.

### *Safety*

Participants expressed the need to ensure safe environments for all park users, specifically people taking trips with children and different types of cyclists (i.e., high intensity cycling, recreational, etc.). There is opportunity to encourage cycling on gravel paths to further separate these uses.

### *Accessibility*

The Study should consider accessibility for those with mobility challenges and as well as other barriers to accessing the park, including financial limitations. Participants discussed overlapping needs and accommodating people with disabilities who may use modified bikes, for example.

Other considerations related to the guiding principles included:

- Park tourism requires different types of access needs (i.e., cycle tours, bus tours, etc.)
- Economic and environmental business activities can be aligned so that they are broad and inclusive, recognizing the many ways users can contribute to economic vitality
- Future climate change impacts on our mobility system should be considered
- Needed investment and expansion of the Seawall to address future sea level rise

## Youth Listening Session

We facilitated a second listening session specifically for youth.

In asking participants which guiding principles should be prioritized, Accessibility and Environmental Protection and Climate Action were discussed as most important.

### *Accessibility*

Participants expressed the need for people of all abilities and lifestyles to have access to the Park. Wayfinding and information to support different kinds of trips into the Park is an important way to support this. Buses or public transit were suggested as an option, especially to access more elevated areas of the Park and for those who do not have vehicles.

### *Environmental Protection and Climate Action*

Reducing vehicle travel and diversifying modes of transportation was emphasized. Participants suggested encouraging use of alternative modes such as buses, e-bikes, shuttles and potential ferry or water taxi services. This also includes reducing and managing waste in the Park, planting of more native species, and shoreline cleanups.

Other ideas and actions related to the guiding principles included:

- Dedicated 'bike bus' for people to ride around the Park with their bikes and gear (ways to accommodate multi-modal trips)
- Bus-only lanes and larger buses for quicker pick ups
- Physical separation of modes to create safer barriers (i.e., concrete rather than cones)
- Additional parking available around key entry/access points

## Staff Working Group Workshops

We facilitated two workshops with the staff working group, including park operations, business services (film and events, commercial operations, etc.) and park development. This purpose of these workshops was to build out draft guiding principles and understand how they might be implemented.

Key points of discussion in developing draft guiding principles include:

- Accessibility- Considerations for new mobility devices and people with mobility challenges and equity of space and users. This also include the importance of wayfinding and signage
- Safety – Prioritization of emergency vehicle access and reduced number of mobility related accidents, supported by an improved lighting system
- Economic Opportunities- Spaces and amenities to support events (e.g., areas for food trucks) and understanding of economic value of seawall and access for filming industry
- Flexibility – Creative infrastructure to change flow of traffic or vehicle lane structure depending on need
- Climate Resilience- Enhanced foliage cover to reduce heat island effect and need to align with Climate Emergency Goals
- Operations- Maintained access for snow removal and maintenance
- Natural Beauty- Ensuring natural coastal environments are protected and the access to nature for visitors

Ideas for actions to implement in Stanley Park included:

- Centring equity in accommodating Park access
- Phased approach to testing options
- Vehicle admission or access fee
- Stanley Park bus loop or transit hub
- Two-way seawall and connected internal pathways
- Opportunity for e-bikes and electric shuttles
- Open bike access to more internal gravel and forested trails

## Public Survey

From May 18<sup>th</sup> to June 9<sup>th</sup> 2022, a (24 question) public survey was available on the project [Shape Your City page](#) and in print form. Since there has already been extensive surveying of the public along with detailed reporting over the past two years, data and new learnings from this survey have been analyzed within the Mobility Context Report. Survey results and key themes will be included in the Engagement Summary Report later this Fall.

4,036 people responded to the public survey. Key take-aways from the demographic data collected from respondents include:

- *Place of Residence:* 75% live in Vancouver (28% in West End or Downtown; 47% Elsewhere in Vancouver)
- *Most Frequently Travel to/around Stanley Park:* 36% drive with passengers; 34% bicycle or use a micro mobility device; 20% take public transit
- *Persons with Disabilities:* 11% indicated having a disability that impacts their mobility; 5% have a disability that does not impact their mobility

- *Gender Identity*: 50% identify as a man; 41% identify as a woman; 10% as non-binary/gender diverse or prefer not to say
- *Age Distribution*: 6% between 19-29; 17% between 30-39; 16% between 40-49; 19% between 50-59; 22% between 60-69; 14% are 70+ years
- *Ethnicity*: 69% European; 8% Asian; 3% Indigenous (First Nations, Metis, Inuit)

## STAKEHOLDER LIST

Organizations listed under each engagement group were sent project information/updates and were invited to engagement opportunities (workshops, listening sessions).

Organizations that participated in at least one workshop or listening session are indicated with (\*).

### Stanley Park Stakeholder Group

- EasyPark\*
- DND HMCS Discovery (Deadman's Island)\*
- Landsea Tours & Adventures
- MOBI Bike Share\*
- MODO
- Royal Vancouver Yacht Club
- Stanley Park Ecology Society (SPES)
- Stanley Park Police Mounted Squad
- Destination Vancouver\*
- Vancouver Aquarium\*
- Vancouver Fire and Rescue Services
- Vancouver Rowing Club\*
- Stanley Park Lawn Bowling Club\*
- West Coast Sightseeing Ltd.\*
- AAA Horse & Carriage \*
- Capilano Group of Companies (Prospect Point & SP Pavillion)\*
- Sequoia Group (Teahouse)\*
- Stanley Park Brewery

### Community Listening Session

- HUB Cycling\*
- Spinal Cord Injury BC (SCI BC)\*
- Handcycling group\*
- Kids' rides in Stanley Park\*
- Spokes Cycles (HUB member)\*
- VORCA (Vancouver Off Road Cycling Association)\*
- Disability Alliance BC
- WE Seniors Community Planning Table
- West End Seniors Network
- West End Families in Action

- Vancouver Aboriginal Friendship Centre Society
- MOSIAC
- Gordon Neighbourhood House
- Eastside Family Place
- South Vancouver Family Place
- West Side Family Place
- BEST
- Cycling Without Age
- Cycling BC
- Cycle City Tours (bike rentals and tours)

#### **Youth Listening Session**

- HUB Cycling Youth Committee\*
- UNYA (Urban Native Youth Association)
- Red Fox Society
- Environmental Youth Alliance
- Sustainability Teens
- SP Ecological Society Youth Camps
- West End & Coal Harbour Community Centre Youth Council
- Trout Lake Community Centre Youth Council
- Hastings Community Centre Youth Council
- Marpole Community Centre Youth Council
- False Creek Community Centre Youth Council
- Kitsilano Community Centre Youth Council
- Douglas Park Community Centre Youth Council
- Mount Pleasant Community Centre Youth Council
- Parks Board City-Wide Youth Council
- Society for Children and Youth of BC
- Dusk to Dawn Youth Resource Centre
- Directions Youth Services

## **NEXT STEPS**

Once all engagement in this Phase is complete, a detailed summary of what we heard through the engagement activities will be shared later this Fall (2022).