# GRANVILLE ISLAND 2040: TRANSPORTATION STRATEGY

**DRAFT STRATEGY – SPRING 2018** 

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# **OVERVIEW**

he *Granville Island Transportation Strategy* is being developed by Canada Mortgage and Housing Corporation (CMHC)–Granville Island to advance the strategy to "Improve Access" to Granville Island, one of the four pillars of *Granville Island 2040: Bridging Past & Future*, a long-range vision document released in May 2017.

Central to the *Granville Island 2040* vision is the idea that Granville Island's long term success will require increasing visitor numbers while decreasing the number of cars. This view is based on the observation that, given the Island's limited road network, car-dependent visitor growth is not physically possible, especially at peak times of the year when the Island's roads and parking lots are near full capacity. And over time, the *Granville Island 2040* vision involves the reduction of surface parking in order to provide the necessary space for critical new developments that will continue to support tenant operations while attracting more visitors. To achieve this vision, future growth in visitor numbers will have to be largely accommodated by travel modes other than the automobile – walking, cycling, transit and ferry use.

The purpose of this *Transportation Strategy* is to provide direction on how CMHC-Granville Island will work towards achieving this vision. The Strategy will present a range of policies that will work in a coordinated fashion to improve access to Granville Island. It establishes key targets, and will require ongoing monitoring that will facilitate data-driven decision making over the lifespan of the *Transportation Strategy*.



CONTEXT

ranville Island's transportation network is shaped by both the specific conditions on the Island as well as the wider trends in the surrounding neighbourhood, city, regional, and global contexts. Understanding the Island's unique transportation system, including its challenges and opportunities, in light of these contextual considerations is crucial to the development of policies and actions most likely to bring about the changes envisioned by *Granville Island 2040*.

# Challenges

As most visitors to Granville Island understand, there are a number of transportation challenges that can affect the overall quality of experience. The following are some of the most important ones.

**Central, but disconnected.** Despite its central location in the City of Vancouver, Granville Island is disconnected from major transportation networks. False Creek separates the Island from the downtown peninsula and limits connections to the surrounding False Creek neighbourhood, while West 2nd Avenue/Lamey's Mill Road separates the Island from Vancouver's road network. These physical constraints present barriers to improving transit, and to a lesser degree cycling and walking.

Auto-dominated pedestrian experience. All visitors to Granville Island, regardless of their chosen travel mode, become pedestrians. Research shows that visitors tend to come in groups, often multigenerational in composition, and choose Granville Island for the overall "experience." Making sure that Granville Island is safe and comfortable for people of all ages and abilities is crucial to the Island's long-term success. However, in the view of many visitors, the pedestrian experience at Granville Island is undermined by the dominating presence of cars.

Balancing the need for vehicle access while promoting the use of other modes. Granville Island is an important commercial hub where vehicle access is essential for businesses to operate and flourish. This includes commercial vehicle deliveries, as well as car access for customers. For many visitors – such as those coming from outside Vancouver, families, groups, seniors, and people with mobility challenges – automobile may be the best travel option. At the same time, the *Granville Island 2040* vision is to shift the primary mode of travel to and from the Island from private cars to other modes. A central challenge for Granville Island will be to maintain access for commercial deliveries and for those who need to drive, while encouraging a mode shift for those who have other travel mode options.

**Road and parking capacity.** During peak periods, the Island's road and parking space is effectively at capacity. At these times, vehicles travel the Island slowly, impeded by other vehicles – including those waiting for another vehicle to leave a parking spot, or circling the Island searching for parking – and there is friction between pedestrians and cyclists. Given that peak periods run for much of the summer months, there is limited opportunity to increase the number of visitors to the Island by adding new car trips.

**Regional road congestion.** The population of greater Vancouver has grown significantly over the past decade and is projected to continue increasing. As such, road congestion has risen throughout the region. The experience of driving through congested city streets, only to face more and even worse congestion at Granville Island, can taint a visitor's experience of Granville Island.

**Impact of tourism and tour buses.** Tourism has increased dramatically in Vancouver over the past few years. As tourism has grown, so have the number of tour buses on Granville Island. These buses further congest the Island's roads and use limited parking and road space. More importantly, there is a risk that Granville Island is increasingly seen as a tourist destination instead of a place for locals, especially during the summer months. Context



Walking trips grew at approximately the same rate as the population, while cycling and transit both increased at higher rates.

# **Opportunities**

In addressing these challenges, there are a number of opportunities that can be leveraged to improve access to Granville Island.

**Nearby population density and growth.** Granville Island is within 15-minute walking distance of 6,800 people, and within a 15-minute bike ride for 215,000 people. The number of people within a 15-minute ferry ride include many living in the dense Downtown South neighbourhoods. Continuing residential development along False Creek North and South will grow the nearby population, increasing the number of residents within a 15-minute walk or cycle to the Island.

**City seawall and greenways.** Granville Island is adjacent to Vancouver's seawall, a major walking and cycling path used both for recreation and commuting. Currently, the seawall near Granville Island is undergoing upgrades that will allow for the accommodation of more cyclists and pedestrians. The City also recently completed the first stage of the new

Arbutus Corridor, a north-south greenway that starts at the corner of Fir Street and 5th Avenue (about 500 m from Granville Island) and runs south to the Fraser River. These changes will help encourage those who live within walking and cycling distance to use these modes to visit Granville Island as opposed to driving.

**Future transit projects.** Nearby transit projects are planned for the area. The Millennium Line SkyTrain extension will roughly follow the current 99 B-Line bus route and include a stop at Granville Street and Broadway, about a 15-minute walk to Granville Island. In addition, the City of Vancouver is studying the feasibility of a future streetcar line around False Creek linking Granville Island, Olympic Village, and Stanley Park. This concept enjoys high levels of support in the community, with many people fondly remembering the popular but temporary streetcar service that ran between Granville Island and the Olympic Village Canada Line during the 2010 Olympics. **Citywide transportation trends.** Transportation trends in the wider Vancouver context align with Granville Island's goal of shifting new trips to the Island to travel modes other than automobile. City of Vancouver data shows that more than 50% of trips in Vancouver are now made by modes other than private vehicle. The continuing growth in walking, cycling, transit, and car sharing in the city will likely be reflected in the travel mode choices of visitors to Granville Island.

Regional transportation trends. In the broader regional area, people are generally taking more trips than they were a decade ago, while car trips are falling, and the use of alternative modes is growing. While each municipality's transportation story is unique, according to the Regional Trip diary study, car trips grew more slowly than population growth between 2011 and 2018 in Metro Vancouver. Walking trips grew at approximately the same rate as the population, while cycling and transit both increased at significantly higher rates.

# EXISTING CONDITIONS & TRENDS

wo recent studies have been commissioned by CMHC-Granville Island that help in the understanding of existing transportation conditions at Granville Island. In 2017, a random survey of over 3,000 Public Market visitors provided information on how people travel to Granville Island, as well as other data relevant to the *Transportation Strategy*. The second major study was conducted in 2016 as part of the *Granville Island 2040* planning process, which included a traffic count that quantified the number of people, and their travel mode, accessing Granville Island during the study period. This research replicated a traffic study conducted 10 years earlier, with the two data sets allowing for comparison in total visitor numbers and changes in travel mode.

**Number of visitors.** Between 2005 and 2016, the number of visitors increased by roughly 10%, or just under 1% per year. The studies observed an increase of approximately 1,500 on a summer weekday (15,880 in 2016) and 1,800 on a summer weekend day (19,150 in 2016), which is calculated to represent about 433,000 additional annual visitors.



Figure 1: Changes in August Saturday Mode Split

**Mode share.** The findings from the 2016 study showed that on a given day, the travel mode used most often to access Granville Island is the automobile, accounting for 38% of visitor trips during peak times. This represents a decrease from 2005, when the automobile accounted for 45% of all trips to the Island. The second largest share of trips to Granville Island is walking, which in 2016 was 25% of all trips during the study period, slightly down from 2005, when the walk share was 26%. The 2016 study found that ferry trips represent 20% of all trips, which is significantly higher than the 2005 share of 15%. Transit trips, at about 6%, while up one percentage point from 2005, is much lower than the transit mode share for trips in the rest of the City of Vancouver. Cycling grew from a 3% share in 2005 to 5% in 2016. **Transportation trends in Vancouver.** Travel mode shifts seen at Granville Island over the past eleven years, including lower rates of car trips, reflect wider transportation shifts in the rest of Vancouver. According to the City of Vancouver's annual Transportation Panel Survey Report, just over 50% of trips in Vancouver in 2016 were walk, bike or transit, with car use on the decline. The City's 2040 transportation target is one-third of trips made by car while the other two-thirds of trips are made by sustainable modes, such as transit, walking, and cycling.

**Economic impact.** Granville Island includes approximately 700,000 sf. of net leasable area and accommodates over 275 businesses. The Island is estimated to provide approximately 2,480 Full Time Equivalent (FTE) jobs and generate roughly \$285 million in sales (2016). The ability of business customers and employees to access the Island in a manner that is convenient and predictable has a direct influence on the overall economic performance of the Island.

Results from the 2017 Public Market survey found that visitors that drive account for almost half of the overall sales at the Public Market. This illustrates the importance of automobile access to the current overall economic performance of the Public Market. At the same time, the same survey found that the travel mode associated with the highest annual spend per person was walking. This suggests that higher rates of walking to the Island could have a positive economic impact on the Island, even if there is an associated decrease in driving rates.



Mode

Figure 2: Annual spend at Public Market per person by mode (October 2017)

# 2040 TRANSPORTATION TARGETS

ver the past decade, trips to Granville Island increased at a growth rate of just under 1% per year. Assuming the status quo continues, and extending this rate over the full duration of the *Granville Island 2040* planning horizon, Granville Island could expect in 2040 to attract approximately 4,400 more people on a summer weekend day, adding up to 1,050,000 more people annually than today. If Granville Island moves towards the vision in *Granville Island 2040* with an expanded Public Market, increased programming, and generally more reasons to visit, these numbers could be even higher. Granville Island will strive to meet the City of Vancouver's mode split targets of one-third trips by automobile and twothirds trips by other modes by 2040. Given the current growth rate, this would involve a slight increase in the number of automobile trips on a summer weekend day, with the majority of new trips being made using other modes. Alternative modes would each need to increase by 1%. For cycling, for instance, this would mean an increase of 560 cyclists on a summer Saturday by 2040.



Figure 3: Summer Weekend Daily Visitor & Mode Split: Current vs. 2040 Target

ACTIONS

he following sections outline how CMHC-Granville Island plans to accommodate the more than one million more annual visitors expected by 2040 by improving transportation conditions for all modes.

# Walking

The number of people walking to Granville Island has grown over the past decade. However, as a percentage of trips, it is actually slightly lower in 2016 than in 2005. This may reflect the relatively slow rate of residential development in and around the South False Creek neighbourhood. Nevertheless, at about a quarter of all trips to Granville Island, walking is a major transportation mode for the Island. And with continuing residential development around False Creek, including anticipated future growth in the South False Creek neighbourhood, the creation of the Arbutus Corridor, and seawall improvements, walking trips to the Island will likely increase. Past surveys show that people who walk to Granville Island are the most likely of the travel modes to be local residents who visit often. This helps explain why of all travel modes, people that walk to the Island spend more annually at the Public Market compared to people using other modes.

In order to meet the 2040 transportation mode share targets, the number of walkers accessing Granville Island would have to increase from the roughly 4,790 seen on a summer Saturday today, to 6,230 over the next 20 years.



# Granville Island Entrance Placemaking Project

*Granville Island 2040* recommended that the segment of Anderson Street between 2nd Avenue to the intersection at Cartwright Street be piloted as a "complete street," which is a street designed to accommodate all ages, abilities, and modes of travel. Expanding on this, there is an opportunity to make improvements to these streets through an overall placemaking project that would reimagine Anderson Street and Cartwright Street as a place for people and activities, as well as transportation. Safety concerns need to be considered, particularly at the seawall crossing on Anderson Street and the area of Cartwright Street in front of the Kids Market.

### Action

1.1 Conduct a Granville Island Entrance Placemaking project aimed at making Anderson and Cartwright Streets safe, comfortable and beautiful public spaces and "complete streets" that encourage walking and cycling

# Wayfinding to Granville Island

Currently, about a quarter of people access Granville Island by walking and another 5% come by cycling. Recent data show that while over half these trips are made by Vancouver residents, a significant portion of people walking and cycling to the Island are visitors from outside Metro Vancouver. Improved off-Island wayfinding would enhance the travel experience for pedestrians and cyclists to Granville Island – particularly for people unfamiliar with the area. In addition to wayfinding signage, opportunities to incorporate public art into a wayfinding scheme should be explored. This work will involve collaboration with the City of Vancouver.

#### Action

1.2 Improve wayfinding to Granville Island from key neighbourhood locations

# Pedestrian Experience on Granville Island

Once on Granville Island, everyone is a pedestrian. Walking is an integral part of the experience that attracts visitors and keeps people coming back. Moreover, visitor research shows that Granville Island is a popular destination for social outings in groups, especially for families. It is important that the experience of walking around Granville Island is safe and pleasant for all visitors – particularly children, seniors, and people with disabilities. Improvements could include providing more safe walking paths throughout the Island, removing raised curbs, and enhancing lighting.

### Action

1.3 Conduct an assessment of walking conditions at Granville Island and implement recommended improvements

# Alder Bay Bridge

*Granville Island 2040* recommends constructing a pedestrian and cycling bridge across Alder Bay to connect Granville Island to the seawall along False Creek South. As envisioned in the *Granville Island 2040* report, this bridge would connect to the seawall at approximately Forge Walk to the southeast part of Granville Island close to Ron Basford Park. In addition to providing a time-saving alternative entrance for pedestrians and cyclists travelling east along the seawall, a bridge would add an iconic urban design element to the Island, which could attract new visitors.

## Action

1.4 Explore the feasibility of constructing an Alder Bay Bridge



Actions



# Cycling

Although there are various cycling routes nearby, no official bikeways currently enter Granville Island. Cyclists can access the Island via Anderson Street or Island Park Walk. These routes connect to the seawall and Lamey's Mill Road/ West 2nd Avenue, both of which are designated as official bikeways. Over the past decade, the number of cyclists accessing Granville Island has increased by approximately 25%. This number is expected to continue rising given the growth of cycling in Vancouver. Moreover, nearby infrastructure improvements including the Arbutus Greenway and seawall upgrades will also attract more cyclists. The 2040 transportation mode share target would be roughly 1,450 cyclists on a summer Saturday, an increase of 560 more than the 890 cyclists currently visiting.

# Cycling at Granville Island

Granville Island is well-positioned to continue to attract higher numbers of cyclists. In addition to ongoing cycling infrastructure improvements throughout the city, and especially along the False Creek South seawall, since 2016 Granville Island has provided seven-day-a-week bike valet during the summer. This initiative, along with campaigns with the Vancouver Police Department and Project 529, a bike registration system and anti-theft mobile app, has helped reduce bike theft at Granville Island by more than 70% between 2015 and 2017. The Granville Island Entrance Placemaking project, discussed previously under the Pedestrian section, will also improve cycling conditions.

With more than 2000 full time jobs on the Island, commuter trips are an important consideration as well. Improving end-of-trip cycling facilities, such as expanding secure bicycling parking and creating shower rooms and lockers, may encourage more employees to cycle, which in turn could improve automobile parking availability.

#### Actions

1.5 Continue seven-day-a-week bike valet program for the summer months

1.6 As part of the Granville Island Entrance Placemaking project, consider how Anderson and Cartwright Streets can better accommodate cycling

1.7 Consider expanding end-of-trip cycling facilities for Granville Island employees

### Bicycle maintenance and support facility

To further encourage cycling, Granville Island could provide a bicycle maintenance and support facility. There may be opportunities to tie this into the bike valet program or it could operate independently.

#### Action

1.8 Explore opportunities to provide bicycle and maintenance facility

#### **Bike share**

Since the summer of 2016, Vancouver has been served by a public bike share system. As of 2017, Mobi bike share operates about 1,200 bicycles which can be used within the system zone. The closest station to Granville Island is located at Anderson Street & West 2nd Avenue. In the summer of 2017, Mobi installed a temporary station near the Public Market, with the future intention of installing a permanent station at Granville Island once the necessary equipment is available.

#### Action

1.9 Continue to work with Mobi towards establishing a permanent bike share station on Granville Island

# **Public Transit**

Despite its central location, Granville Island is not on a major transit route, and accordingly, transit usage to Granville Island is much lower than in Vancouver as a whole. The nearest bus stop – located about 350 m from the centre of the Island at Anderson Street & West 2nd Avenue – connects to a single bus route, which provides 15-minute service. The next closest transit stops are more than a five minute walk from the Island, which can be inconvenient for some visitors. This includes a bus stop for a number of bus routes at Granville Street & West 5th Avenue, and the 84 UBC/VCC-Clark Station bus service, with stops at Fir & West 4th Avenue. The nearest Skytrain station is Olympic Village, approximately 2 km away.

The 2040 transportation mode share target is to achieve for an increase of approximately 630 visitors using public transit on a summer weekend day. However, a large transit project like the ones explored in the following sections would likely cause a much greater jump in transit access to the Island.

#### False Creek Streetcar

The City of Vancouver owns a rail right-of-way that runs adjacent to Granville Island. During the 2010 Winter Olympics, the City of Vancouver provided streetcar service along this corridor between the Olympic Village Canada Line station and Granville Island. For the short time that the streetcar was running, this service was very popular, and retains its appeal as a potential future transit service for visitors to Granville Island. The City of Vancouver is exploring the feasibility of providing streetcar service along this corridor, as part of a long-term vision of streetcar service that would travel along the Arbutus Greenway, through False Creek and downtown, with a terminus at Stanley Park. As part of this concept, Granville Island would be served by a station at or near the existing streetcar platform at Anderson Street and West 2nd Avenue.

Actions

#### Action

1.10 Support the City of Vancouver in its exploration of the feasibility of providing streetcar service adjacent to Granville Island

### **Shuttle Bus**

The closest Skytrain station is the Olympic Village Canada Line station, at Cambie and 2nd Avenue, which is 2.2 km from the Public Market – almost a half hour walk. The intersection at Broadway and Granville Street, the nearest 99 B-Line stop, is about a 15-minute walk. Given how far Granville Island is from these important transit nodes, it is not surprising that CMHC-Granville Island has heard through past surveys and engagement that there is interest for a shuttle service that would connect the Island to these and possibly other key locations around the city. With potentially high start-up and operating costs, the first step would be to conduct a feasibility study to better understand the costs and benefits of such a service.

#### Action

1.11 Investigate the feasibility of providing a shuttle between Granville Island and key off-Island locations, such as the Olympic Village Skytrain station and the Broadway-Granville Street transit hub

The 2040 transportation mode share target is to achieve for an increase of approximately 630 visitors using public transit on a summer weekend day.

# Water Access

Given Granville Island's location in False Creek, water access is an important piece of the island's transportation story. As part of the ongoing efforts to improve access, CMHC-Granville Island should develop a good understanding of how people currently access the Island via water, how these existing services could be improved, and what new services might create more opportunities for water access.

# Ferries

Two privately operated companies, Aquabus and False Creek Ferries, offer ferry service to the Island and their ridership has increased significantly over the past decade. The ferries offer a unique experience to visitors, with ferry riders most likely of all visitors to rate their experience of travelling to Granville Island as positive. It is believed that integrating ferries into the larger public transit network would help bring more visitors to Granville Island. Through the *Granville Island 2040* engagement process, many suggested that allowing the use of Translink's Compass payment card on the ferries would make for more seamless transfers and increase ridership. The ferries 2040 transportation mode share target is to increase ridership by 1,230 on a summer Saturday.

## Action

1.12 Support ferry operators and TransLink to integrate Compass Cards as a ferry payment option

# **Public Docks**

Granville Island's public docks are managed by CMHC-Granville Island through a manual reservation system. Generally, the rules mirror False Creek's anchoring permit parameters and the moorage is a mixture of permanent moorage, daily reservations, and free space for visits under three hours. To increase the number of Island visitors and improve their travel experience, a Moorage Strategy should be considered to evaluate current practices and explore the best use of Granville Island's public docks.

## Action

1.13 Assess the current use of Granville Island's public moorage space and explore opportunities to optimize its use and help increase public access to Granville Island by water



# **Tour Buses**

Vancouver has experienced record-breaking levels of tourism in recent years. In 2016 Vancouver received more than 10 million out-of-town visitors, which was more than a million higher than in 2014. As one of the city's top attractions, Granville Island sees high numbers of tourists, especially in the summer. This overall increase in tourism to Vancouver has involved the growth in sight-seeing bus tours, with many city tour packages in Vancouver featuring stops at Granville Island. This has resulted in annual increases in the number of tour buses driving onto the Island.

Although tour buses bring a considerable number of visitors to Granville Island, the increasing number of buses on the Island must be managed responsibly in order to limit the potential impact on Island operations and the overall experience for visitors. Some of these impacts include increased traffic congestion as buses maneuver the Island's constricted road network, as well as the cumulative impact of large numbers of buses on the Granville Island "people place" ambience. Solutions could include changes to tour bus pick-up/drop-off operations on the Island as well as exploring off-Island parking options.

#### Action

1.14 Develop a tour bus policy that will limit the negative impact of tour buses on Granville Island operations and visitor experience

# **Commercial Vehicles**

Access for commercial vehicles and loading zones are critical to Granville Island business operations. The overall management of the Island's transportation system must account for the requirements of commercial vehicles, while acknowledging the limited amount of space available for all types of vehicles. There are a number of issues with respect to commercial vehicle access and parking on the Island. In some areas of the Island, there are not enough loading areas. which can result in the ad hoc temporary cordoning-off of space, and improper parking. Also, the unique requirements of large trucks, including vehicles pulling trailers, need to be accommodated. At the Public Market, the loading zone is directly in front of the Market, with deliveries throughout the day. While supportive of Market business, some believe that these conditions detract from the Market's visual appeal. To optimize the use of commercial vehicle space and better support the operational requirements of Island business, CMHC-Granville Island should work with Island businesses and stakeholders in ensuring the maintenance and enhancement of commercial vehicle access.

#### Actions

1.15 Evaluate the existing approach to commercial deliveries for the Public Market and Island businesses

1.16 Evaluate the existing number and location of loading zones and consider creating additional zones and delivery times

## Automobile

The number of car trips to Granville Island has dropped over the past decade, both in absolute numbers and as a percentage of travel modes. Since 2005, there has been a 7% decrease in the number of people arriving by private vehicle, while the overall number of visitors to Granville Island has increased by about 10%. This is consistent with trends in the wider Vancouver context, where the percentage of car trips is decreasing while the number of total trips is growing.

The *Granville Island 2040* vision is to continue the current trend of decreasing the rate of car trips to Granville Island while increasing the overall number of visitors. By reducing over time the amount of cars needed to be accommodated on the Island, there are opportunities to reallocate parking and road space to other uses, whether for new public space or new businesses and attractions – one of the keys to the *Granville Island 2040* vision.

While working toward this goal, it is recognized that for the foreseeable future, automobile access will remain an important option for some visitors. This would include people making large or heavy purchases, people who live in an area not well served by transit, and people with mobility challenges. A key goal of the Transportation Strategy is to improve conditions for these drivers, while encouraging drivers with other options to shift their travel mode.



# Parking Management Strategy

In total, there are about 1,231 parking spaces at Granville Island which, along with the Island's road network, account for approximately 20% of Granville Island's total land use area. Parking space is distributed across Granville Island, and includes surface parking lots, parking garages, and on-street parking. Most parking stalls are either three-hour free or pay, which together account for about 75% of all parking stalls on the Island. The remaining stalls include reserved, one-hour free, handicap parking, and others.

Currently, there are 600 free parking stalls on the Island, with most of these in close proximity to the Public Market. The Island's pay parking stalls are mainly on the east side of the Island.

The current approach to parking is a major contributor to the Island's congestion, which during peak times can be significant. On the Island, the most desirable parking spaces – the free stalls near the Public Market – are also the furthest to drive to on the Island. In order to get to these spaces, the driver passes almost all of the other parking space options on the Island. During peak times when the free spaces are at capacity, the hope of finding one of the coveted free spots likely entices many drivers to circle the Island at least once before resorting to pay parking.

In order to address the issue of peak period traffic congestion at the Island, a more strategic approach to parking is required. Typically, as in other parts of the city and elsewhere, where there is higher demand for parking than supply, there is a cost to park. This helps ensure that the available parking space is better shared among the many people who wish to use it. At Granville Island, where parking can be at or near full capacity at peak times, this suggests that parking rates are too low. At the same time, during slower times of the year, where there is an abundance of available parking, parking rates could be lowered.

A first step for Granville Island is to meter all parking stalls on the Island, so that accurate data on parking usage can be collected. Currently, there is only parking usage data collected from the paid stalls, which is only about 40% of the total. A second and on-going step is to set the parking rates at a level that achieve about an 85% usage rate.

#### Action

1.17 Develop a Parking Management Strategy that will include the metering of all parking stalls on the Island with the aim of achieving a parking stall usage rate of 85% capacity



Figure 4: Current Granville Island Parking Mix (January 2018)

# Given decreasing rates of car ownership, it is important for Granville Island to continue to meet the needs of Vancouverites using car share services to make trips.

### **Granville Island Employee Parking**

A large portion of parking space at Granville Island is used by people who work at Granville Island. CMHC-Granville Island issues about 300 monthly passes, which are available to people who work on Granville Island. For a fixed price, the monthly parking pass allows the pass holder unlimited parking in specific areas on Granville Island during the month. This system likely induces some driving, as the per day cost decreases, the more often the pass is used. Given that parking space can be scarce at peak times, CMHC-Granville Island should encourage Island workers to use other travel modes, with the goal of freeing up more parking space for the use of visitors.

#### Action

1.18 Develop an Employee Parking program that will help reduce the usage of on-Island parking by people that work at Granville Island

### Car Share

According to ICBC statistics, car ownership rates are decreasing in Vancouver. At the same time, the percentage of local residents with car share memberships continues to climb. According to a survey conducted by the City of Vancouver, 29% of adult Vancouverites had subscriptions to car-share programs in 2016. As fleet sizes and permitted driving and parking zones grow, the rate of subscriptions can be expected to increase. Granville Island at present has thirteen stalls designated for car share vehicles: four Evo stalls and nine car2go stalls. CMHC-Granville Island is able to request seasonal data regarding the usage rates of car share at Granville Island, and as a first step, should systematically collect and analyze this data. This information will help CMHC-Granville Island allocate an appropriate amount of parking for car share spaces. Given decreasing rates of car ownership, it is important for Granville Island to continue to meet the needs of Vancouverites using car share to make trips.

#### Action

1.19 Collect and analyze on-Island car share usage data, and use this information to maintain appropriate levels of parking for car share

#### **Electric Vehicles**

The rate of electric vehicle ownership in Vancouver is increasing and expected to continue growing. Currently on the Island there are two stations, which are operated by Edible Canada. To accomodate the increasing number of electric cars, CMHC-Granville Island is creating an additional six. Presently, there is no fee planned for the use of these charging stations. As the demand for electric car charging stations continues to grow, CMHC- Granville Island will consider providing additional charging infrastructure, along with an appropriate pricing model to further serve this need.

#### Action

1.20 Monitor the usage of Granville Island's electric car charging stations and assess the feasibility and pricing models to meet growing demand for this infrastructure

### Home-Delivery Grocery Service

Home-delivery grocery services are growing in popularity in Vancouver. Businesses including SPUD, Save-On-Foods, and Smart City Foods deliver to people's homes, while other grocery stores, including Superstore, offer in-store pick-up of groceries that customers purchase online. In order to compete with these food retailers, some Public Market tenants have expressed interest in exploring the potential for a Public Market delivery service.

Research shows that grocery businesses – which include a number of key Public Market businesses selling meat, fish and green groceries – tend to rely more on their customers being able to drive and park near the store than some other types of business, such as those where food is consumed on site. The implications of this for the Transportation Strategy is that a home delivery service offers the potential to increase sales without adding more cars to the Island's road network.

#### Action

1.21 Explore the feasibility of a shared Public Market business home delivery service, either in partnership with merchants, or in a supporting role to a third party service provider MONITORING

onitoring is essential to measuring and evaluating the progress of the initiatives outlined in this report. The projects designed to achieve the Transportation Strategy targets will most likely require adjustments along the way and having current and accurate data on how people travel to Granville Island will allow CMHC-Granville Island to make evidence-based decisions and inform future projects.

The quantitative and qualitative metrics needed to evaluate the initiatives are described in the tables below.

# Table 1: Quantitative Metrics

METRIC	BASELINE	2040 TARGET	3 YEAR MILESTONE
Pedestrian volumes	Summer Saturday 2005: 4,510 Summer Saturday 2016: 4,790	Summer Saturday: 6,240	Summer Saturday: 5,030
Cyclist volumes	Summer Saturday 2005: 520 Summer Saturday 2016: 890	Summer Saturday: 1,450	Summer Saturday: 980
Number of bicycles using bike valet service	2017: 11,346	13,840	11,780
Number of bicycles registered with Project 529	2017: 900	1,100	935
Number of bicycle thefts	Summer 2015: 120 Summer 2016: 60 Summer 2017: 40	Zero	Zero
On-Island Mobi bike-share station usage	Summer 2017 trial	Permanent Mobi station on Granville Island	Permanent Mobi station on Granville Island
Transit visitor volumes	Summer Saturday 2005: 870 Summer Saturday 2016: 1,220	Summer Saturday: 1,850	Summer Saturdays: 1,320

Monitoring

METRIC	BASELINE	2040 TARGET	3 YEAR MILESTONE
Ferry rider volumes	Summer Saturday 2005: 2,600 Summer Saturday 2016: 3,830	Summer Saturday: 5,060	Summer Saturdays: 4,040
Boat rider volumes		Increase by 1%/year	Increase by 1%/year
Number of tour bus PUDO incidents	N/A	Zero	Zero
Number of commercial vehicle safety incidents	Zero	Zero	Zero
Automobile volumes	Summer Saturday 2005: 7,800 Summer Saturday 2016: 7,280	Summer Saturday: 7,770	Summer Saturdays: 7,360
Automobile speeds	Not currently collected	Maximum 30km/h	Maximum 30km/h
Automobile congestion	Not currently collected	15 minutes to enter and exit the Island during peak times	20 minutes to enter and exit the Island during peak times
ICBC collision and accident statistics	2011 – 2015: 12 vehicle crashes (5 casualties, 7 property damage only), 2 involving pedestrians	Zero	Zero
Parking availability	80-99% occupancy during peak times, 10-40% occupancy during non-peak times	85% occupancy during peak times, 60-85% occupancy during non-peak times	85% occupancy during peak times, 60-85% occupancy during non-peak times
Number of employee-occupied parking stalls	Not currently collected	Reduce by 50% (using 2018 baseline)	Reduce by 10% (using 2018 baseline)
Car share – car and parking availability	Unknown	1 car and 1 parking stall availability at all times	1 car and 1 parking stall availability 75% of time
Electric vehicle charging station usage	Unknown	85% occupancy	85% occupancy

Monitoring

# Table 2: Qualitative Metrics

METRIC	BASELINE	2040 TARGET	3 YEAR MILESTONE
Travel experience	2016: 75% Good to excellent	100% Good to excellent	80% Good to excellent
Pedestrians and cyclists –comfort and safety	Anecdotal information	100% of respondents report feeling comfortable and safe walking, cycling on the Island	85% of respondents report feeling comfortable and safe walking / cycling on the Island
Tenant levels of satisfaction with loading zones (locations & times)	Anecdotal information	98% of tenants are satisfied with loading zones on the Island	90% of tenants are satisfied with loading zones on the Island

# Having current and accurate data on how people travel to Granville Island will allow CMHC-Granville Island to make evidence-based decisions and inform future projects.

IMPLEMENTATION

his report presents strategies that will help achieve the *Granville Island 2040* vision for the future of transportation at Granville Island. To support priority setting and planning for project phasing, the table below provides an implementation planning matrix. Note that some of the transportation improvements are ultimately outside of Granville Island's control and have been assigned an 'Ongoing' end date.

# Table 3: Implementation Plan

TRANSPORTATION IMPROVEMENT	MODE IMPACT	METRIC	RESPONSIBLE PARTY	START	END
1. Granville Island Entrance Placemaking	<ul> <li>↑ Pedestrians</li> <li>↑ Cyclists</li> </ul>	Pedestrian, cyclist, and automobile visitor volumes; reported perceptions of safety; vehicle speeds; collision and accident statistics	Granville Island, City of Vancouver	2018	2020
2. Improve wayfinding	Pedestrians	Reported visitor experience, number of walking trips	Granville Island, City of Vancouver	2018	2018
3. Granville Island walking strategy	↑ Visitors	Reported visitor experience and perception of safety	Granville Island	2019	2019
4. Alder Bay Bridge	<ul><li>Pedestrians</li><li>Cyclists</li></ul>	Pedestrian and cyclist visitor volumes	Granville Island, City of Vancouver	Long Term	Long Term
5. Continue seven-day-a- week bike valet	↑ Cyclists	Number of bike thefts, number of bikes using valet service	Granville Island	2018	Ongoing
6. Cycling assessment of entrance as part of Placemaking project	↑ Cyclists	Cycling trips	Granville Island, City of Vancouver	2018	2020
7. End-of-trip cycling facilities	<ul><li>↑ Cyclists</li><li>↓ Automobiles</li></ul>	Cycling trips	Granville Island	2020	2020

Implementations

TRANSPORTATION IMPROVEMENT	MODE IMPACT	METRIC	RESPONSIBLE PARTY	START	END
8. Bicycle maintenance and support facility	↑ Cyclists	Number of bicycles serviced	Granville Island	2018	Ongoing
9. Permanent Mobi bike share station	↑ Cyclists	Station usage	Granville Island, Mobi Bike Share	2019	Ongoing
10. False Creek streetcar	↑ Transit riders	Transit visitor volumes	TransLink, City of Vancouver	Long Term	Long Term
11. Shuttle bus service feasibility study	↑ Transit riders	Transit visitor volumes	Granville Island	2019	2019
12. Ferries and Compass Cards	↑ Ferry riders	Ferry rider visitor volumes	Granville Island, Ferry operators, TransLink	2019	Ongoing
13. Public docks	<b>↑</b> Boat riders	Boat rider visitor volumes	Granville Island	2018	2019
14. Tour bus policy		Vehicle congestion, reported visitor experience	Granville Island, Tour bus operators	2018	2019
15. Commercial vehicle and deliveries strategy		Tenant feedback, reported visitor experience	Granville Island, Granville Island tenants	2019	2019
16. Loading zones		Vehicle congestion	Granville Island	2019	2019
17. Parking management strategy	↓ Automobiles	Parking availability, reported visitor experience	Granville Island	2018	2019

Implementations

TRANSPORTATION IMPROVEMENT	MODE IMPACT	METRIC	RESPONSIBLE PARTY	START	END
18. Employee and CMHC staff parking program	Parking availability	Increased parking availability	Granville Island, Granville Island tenants	2019	2019
19. Car share data collection and parking increases	↑ Car share vehicles	Parking stall usage	Granville Island	2019	Ongoing
20. Additional electric vehicle charging stations	↑ Electric vehicles	Charging station usage	Granville Island	2018	2018
21. Home deliveries service	↓ Visitors	Purchases	Granville Island, Granville Island tenants	Long Term	Long Term

