CAMBIE CORRIDOR PHASE 2 EVALUATION FRAMEWORK

jr min

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This GCS project was conducted under the mentorship of City staff. The opinions and recommendations in this report, and any errors, are those of the author, and do not necessarily reflect the views of the City of Vancouver or The University of British Columbia.

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OVERVIEW

This evaluation framework is a guide for the evaluation and monitoring of area planning and the resulting development in the City of Vancouver. The evaluation framework provides the City and community with a greater understanding of the pace and alignment of development with communitybased City principles and goals. Its purpose is to provide a holistic look at area planning programs, using city-wide goals and targets.

The framework was created using the seven Cambie Corridor principles. Out of these principles, 23 indicators were selected. These are measured and evaluated on a number of performance measures.

DEVELOPING THE FRAMEWORK

The framework was developed as part of the Greenest City Scholar program, a joint initiative of the City of Vancouver and University of British Columbia from May, 2017 to August, 2017. The framework was developed as an evaluative tool for Cambie Corridor Phase 2, though the intent is to be able to apply it to any area scale planning program at the City of Vancouver.

The framework combines goals and targets from Vancouver's Greenest City Strategy, Transportation 2040 Plan, Renewable City Strategy, and Healthy City Strategy, as well as input from local Cambie Corridor community groups and City staff. Other background research includes assessment and performance frameworks from cities including: Kelowna; North Vancouver; Victoria; Portland; and San Francisco. See the references section for more detailed information.

The following two summary pages show the framework's indicators and performance measures under each Cambie Corridor principle. Citywide targets or desired directions are also included for each measure. The light grey text indicates that these measures are not included in the following Cambie Corridor Phase 2 evaluation, either due to data or time constraints.

The framework can also be reorganized under six general themes, not specific to the Cambie Corridor, as shown in Appendix A. This general framework could be used for other City area plans.

Cambie Corridor Planning Principles

- 1. Provide land use that optimizes the investment in transit
- 2. Provide a complete community
- Create a walkable and cycleable Corridor of neighbourhoods seamlessly linked to public transit
- 4. Focus intensity, mix and community activity at stations and other areas with strategic opportunities for sustainability, renewable energy and public amenity
- 5. Provide a range of housing choices and affordability
- 6. Balance citywide and regional goals with existing community and its context
- 7. Ensure job space and diversity

CAMBIE CORRIDOR FRAMEWORK OUTLINE

PRINCIPLE 1		
Indicator	Performance Measure	Target/Direction
#1 Transportation shift	Mode share Vehicle count Pedestrian count Access to rapid transit Commute duration	2/3 of trips by foot, bike + transit Decrease/maintain Increase pedestrians Increase Decrease
#2 Land use density	Population density Dwelling density Employment density	Increase Increase Increase
PRINCIPLE 2		
Indicator	Performance Measure	Target/Direction
#3 Urban complexity	Cultural + non-profit spaces Industrial + institutional spaces Retail spaces Entertainment spaces	Increase/maintain Increase/maintain Increase/maintain Increase/maintain
#4 Social cohesion	Availability of childcare Support network Access to doctor Access to community centres Sense of belonging	Increase 4+ people to rely on Increase Increase Increase by 10%
PRINCIPLE 3		
Indicator	Performance Measure	Target/Direction
#5 Cycling infrastructure + experience	Network connectivity Bike racks + other infrastructure Cyclist safety Cyclist count	Increase connectivity Increase Eliminate fatalities Increase cyclists
#6 Pedestrian infrastructure + experience	Pedestrian safety Sidewalk network Sidewalk maintenance Neighbourhood walkscore	Eliminate fatalities Improve connectivity Improve sidewalk quality Greater than 70
#7 Public realm	Active uses at grade Perceived safety Street furnishings Public play spaces	Increase Increase Increase + improve Increase + improve
PRINCIPLE 4		
Indicator	Performance Measure	Target/Direction
#8 Density in proximity to stations	Population within 400 m Dwellings within 400 m Industrial + office within 400 m Major trip generators near transit	Increase Increase Increase/maintain Increase/maintain
#9 Contributions from development	t Amenities planned Amenities delivered	Increase Increase
#10 Placemaking	Preserved historical places Activities in public spaces Public art Street trees	Increase/maintain Increase Increase Increase

PRINCIPLE 5		
Indicator	Performance Measure	Target/Direction
#11 Demographics	Age profile Household spending on housing Family structure Seniors living alone	Increase diversity Decrease/maintain Increase diversity Decrease
#12 Housing composition	Housing tenure Built form Unit type Family units Seniors' + adaptable units	Increase social + secured rental Increase diversity Increase diversity Increase Increase
#13 Affordable + rental housing	Social + secured rental units Affordable seniors + adaptable Average rent	Increase Increase Decrease/maintain
PRINCIPLE 6		
Indicator	Performance Measure	Target/Direction
#14 Access to nature	Proximity to green spaces Tree canopy cover	All residents within 400 m Increase to 22% by 2050
#15 Local food	Food assets Food security	Increase by 50% over 2010 levels Increase
#16 Citizen engagement	Planning engagement sessions Participants engaged Community volunteerism	Increase Increase Increase
Storm + rainwater management	Management features	Increase
Clean water	Water quality	Increase/maintain
Clean air	Air quality	Increase/maintain
Energy efficiency	Green buildings Energy use Renewable energy generation	All new buildings carbon-neutral Decrease 100% renewable by 2050
Water use	Water use	Reduce per capita by 33%
Zero Waste	Waste diversion	Increase
PRINCIPLE 7		
Indicator	Performance Measure	Target/Direction

#17 Employment + green economy Job space Affordable commercial space Green jobs

Increase/maintain Increase Increase

CAMBIE CORRIDOR PHASE 2 EVALUATION

INTRODUCTION

This section of the report includes a description of each of the framework indicators, along with related data analysis and key findings and trends. The report starts with an overview of the current status of Phase 2 and concludes with the main findings. These findings include challenges and opportunities identified through the evaluation process, along with potential planning implications, opportunities and next steps.

METHODOLOGY

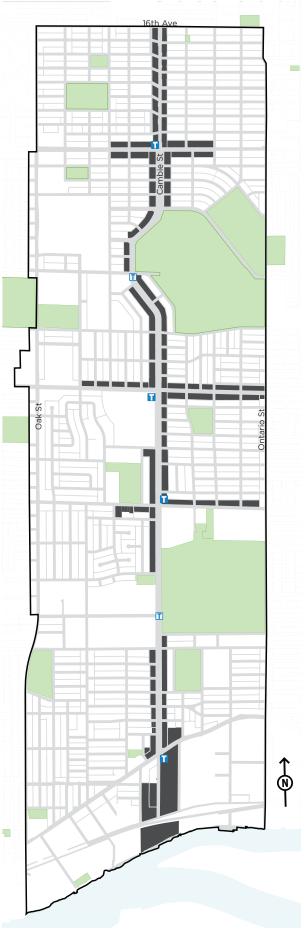
This evaluation was undertaken from May to August of 2017. It began with a background review of Cambie Corridor and other related City documents, followed by a high level review of similar monitoring and evaluation frameworks from regional and international municipalities.

Following this, relevant metrics for the Cambie Corridor Phase 2 evaluation were identified from background research, staff input, and recommendations from three local community groups: Riley Park South Cambie Community Visions group; the Marpole Residents' Coalition; and Oakridge Langara Area Residents' group. Metrics were considered based on data availability, level of importance, and relevance. Some metrics were initially identified for inclusion but were later added as recommendations for future collection as no existing usable data was found.

Data was collected and analyzed for each indicator. Where available, data was collected for two timeframes, 2010/11 and 2016/17, to show any change that has occurred within Phase 2 to date. Findings were also broken down by neighbourhood, where possible. For some indicators, historic data was not available and so Phase 2 change cannot be evaluated. However, the current data has been included as it may serve as a baseline for potential future evaluations.

The evaluation does not compare the Corridor to other area plans, or the City overall. It represents a snapshot of Phase 2 at this point in time.





LIMITATIONS

There are several important limitations of this work. One limitation is the lack of wider community input. Though the project used input from three local community groups, with the goal of representing Cambie Corridor residents, there are many longtime and new Cambie Corridor residents whose views were not taken into account.

In addition, due to the limited project timeframe, only existing data was used. Therefore, the evaluation is quantitative in nature. This means that valuable qualitative metrics, such as community experience with the pace of change, were not included in the report. This limited timeframe also means that some existing data from other City departments was not able to be collected, though it may exist.

Other limitations include the lack of area-level data for important indicators such as zero waste, energy efficiency, clean water, clean air and climate and renewables. As a result, many of these indicators are included as potential indicators for other area plans, or for a future Cambie Corridor evaluation, if the data becomes available. Further, this report attempts to evaluate Phase 2 of the Cambie Corridor, though, in many instances Phase 2 and Phase 3 plans are included. This is because the three phases together provide a comprehensive plan for the area, and cannot necessarily be isolated. For example, amenities delivered or planned in areas outside of the Phase 2 land area still have important implications for Phase 2 residents.

Lastly, this evaluation represents a snapshot of Phase 2 at this point in time. Phase 2 is still far from complete and Phase 3, which will significantly affect Phase 2 residents, is still evolving and being developed.



Figure 2: Cambie Corridor within the City of Vancouver

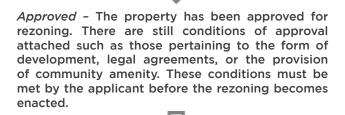
PHASE 2 STATUS

GROWTH IN THE CORRIDOR

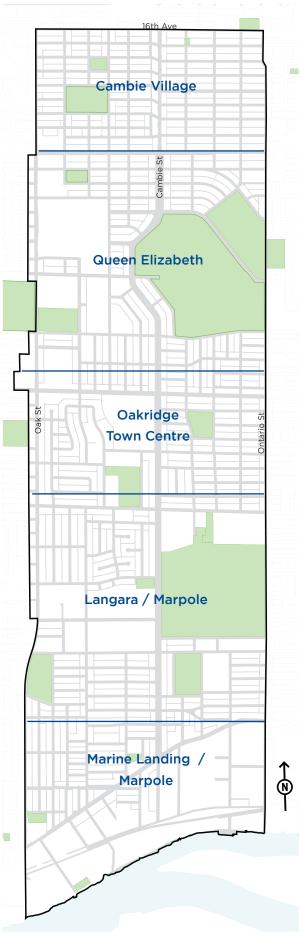
To begin the evaluation, it is important to understand the progress of Phase 2 of the Cambie Corridor. This section seeks to analyze the change by neighbourhood.

In order to better understand the pace of development, proposed, approved and enacted rezoning applications were reviewed. The rezonings represent the vast majority of new development within Phase 2 of the Cambie Corridor. A brief description of each of the rezoning phases is given below.

Proposed – The applicant has submitted a formal application to rezone a property. Planning staff gather input from other City departments, the public, and advisory groups to recommend whether the application should be sent to public hearing and approved, or refused.



Enacted - Once the conditions of approval are satisfied, the rezoning application becomes enacted. At this point, the applicant's and city's lawyers create legal restrictions and agreements. Once both parties are satisfied with the terms of agreement, the applicant may apply for a development permit. Once this permit is issued, development begins.



REZONING APPLICATIONS

This section describes the existing, planned and proposed developments within the Cambie Corridor as of June, 2017. Information from this section is sourced from rezoning applications, and does not include rezonings within the Marpole Community Plan that are outside of Phase 2 boundaries.

Oakridge Centre and *Pearson Dogwood have been included in the following statistics, except where noted otherwise.

*At the time of data analysis Pearson Dogwood was a proposed project and is therefore included in the proposed figures throughout this report. The application has since been approved at a regular council meeting on July 25, 2017.

Residential

Since 2011, approximately 1,700 residential units have been built to completion within Phase 2 of the Cambie Corridor. As of June, 2017 nearly 1,150 units are under construction.

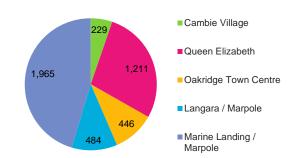
In addition to these figures, approximately 250 residential units have been built or are in the process of being built under the Marpole Community Plan within RM-8 and RM-9 zoning in the Marpole area. These units are in the form of rowhouses, townhomes and stacked townhomes, and low-rise apartments. These units are not within the Phase 2 land area but are closely related in proximity.

In total, from 2010 to June, 2017 there have been approximately:

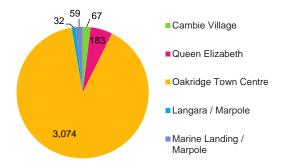
- 4,300 residential units enacted;
- 3,400 residential units approved; and
- 2,800 residential units proposed.

For a further breakdown of residential units, see Principle 5, indicators #12 and #13.

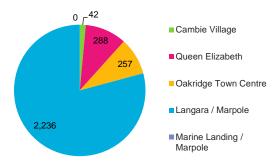
Cambie Corridor Phase 2 Enacted Residential Units by Neighbourhood



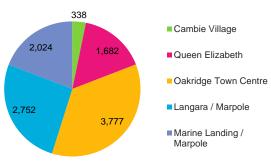
Cambie Corridor Phase 2 Approved Residential Units by Neighbourhood



Cambie Corridor Phase 2 Proposed Residential Units by Neighbourhood



Cambie Corridor Phase 2 Total Residential Units in Rezoning Process



Retail

Since 2011, approximately 286,000 retail square feet has been built to completion within Phase 2 of the Cambie Corridor. As of June, 2017 nearly 24,000 square feet is under construction.

From 2011 to June, 2017 there has been about:

- 316,000 sq. ft. enacted;
- 1.82 million sq. ft. approved; and
- 133,000 sq. ft. proposed.

Office

Since 2011, approximately 269,000 square feet of office has been built to completion. As of June, 2017 there is no office space currently under construction. In total, from 2011 to June, 2017 there has been approximately:

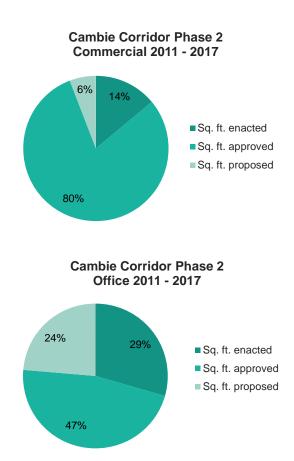
- 269,000 sq. ft. enacted;
- 428,000 sq. ft. approved; and
- 216,000 sq. ft. proposed.

The majority of new retail and office space enacted, approved, and proposed has been concentrated in three neighbourhoods. This is a result of several significant projects including Marine Gateway (enacted), Oakridge Centre (approved), and Pearson Dogwood (proposed).

Table 1 gives a summary of enacted, approved and proposed rezoning applications within the Cambie Corridor from 2011 to June, 2017.

Table 1

Cambie Corridor 2011-2017 Rezoning Summary Table	Rezoning Enacted	Rezoning Approved	Rezoning Proposed
Residential units	4,300	3,400	2,800
Retail sq. ft.	316,000	1.82 million	133,000
Office sq. ft.	269,000	428,000	216,000



LAND AREA

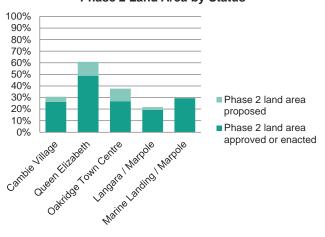
Land Area Rezoned

This section describes the percentage of Phase 2 land area that has been enacted, approved or proposed for a rezoning, by neighbourhood. The land area does not include roads, recent strata developments that are not likely to be redeveloped in the near future, or other non-developable land such as the RM-3A zoning in Cambie Village.

The calculation does not include major project sites such as Oakridge Centre or Pearson Dogwood as the land area is not included in Phase 2 and the large projects sites would skew the findings.

- Approximately 31% of all Cambie Corridor Phase 2 lands have been enacted or approved and about 6% are proposed for rezoning.
- The neighbourhood with the greatest percentage of its corresponding Phase 2 land area involved in the rezoning process is Queen Elizabeth with just over 60%.
- The neighbourhood with the smallest percentage of its corresponding Phase 2 land area involved in the rezoning process is Langara / Marpole with 22%.

Much of the remaining developable land area in the Marine Landing / Marpole neighbourhood is zoned for mixed employment and will not include a residential component. Some of this land is planned to be developed as park space.



Phase 2 Land Area by Status

Page 16 Cambie Corridor Phase 2 Evaluation Framework | Phase 2 Status

DESIGN

FSR Range + FSR Approved

The 2011 Cambie Corridor Plan has floor space ratio (FSR) ranges for different areas of the Corridor. The density range is an estimate based on urban design performance and closely tied to detailed built form guidelines. A 2015 review of 15 approved developments found that 14 of the 15 exceeded the top range of the FSR guideline. These 14 developments exceeded the top FSR guideline by an average of 9%, or a median of 7%.

There are several other valid measures to evaluate design including height, whether townhomes were provided at the back of the lot, and the length of buildings. These were not included in the evaluation due to time constraints, but would be interesting to note in future evaluations.



Figure 4: Cambie Corridor Phase 2 development

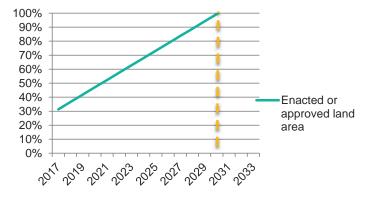
KEY FINDINGS & TRENDS

Phase 2 Land Area Projections

If rezoning applications continue at the average rate seen from 2011 to 2017, all land within Phase 2 of the Cambie Corridor will have been approved or enacted by approximately 2030.

It is important to note the limitations of this projection. The steady continuance of rezoning applications over time is unlikely. As is the assumption that 100% of the land area will be built out. In reality, these assumptions rely on the availability of developable land, and other factors such as market demand, and planning policies for other areas of the city. In addition, the approval of Phase 3 of the Cambie Corridor, as well as unique sites and major projects planning, will likely shift some of the demand away from the Phase 2 land area.

Phase 2 Land Area Approved or Enacted Rezoning Applications Projection



Summary

The pace of change for Phase 2 of the Cambie Corridor varies greatly depending on the neighbourhood. Some neighbourhoods, including Marine Landing / Marpole and Queen Elizabeth, have seen significant change in a short timeframe. Others, namely Oakridge Town Centre and Langara / Marpole have not seen significant changes yet but have major projects approved and proposed that will provide significant development in the coming years. The only neighbourhood that has not seen high levels of change, with no proposed major changes, is Cambie Village.

The vast majority of office and commercial space that has been enacted, approved and proposed is found within a few major developments, including Oakridge Centre, Pearson Dogwood and Marine Gateway.

LIMITATIONS

Community members have expressed an issue with properties remaining vacant for long periods of time while they are awaiting redevelopment. This topic would be interesting to explore, however, there was no method found to calculate the length of time a property sits vacant. Going forward, the City's vacant home tax will apply to homes going through the redevelopment process and so, in the future, there will be a method for this calculation, as well as a disincentive to keep homes empty.

The evaluation of design and built form guidelines was limited to one brief study on FSR. Further analysis of other design measures such as building height and length would be interesting going forward.

PRINCIPLE 1

PROVIDE LAND USE THAT OPTIMIZES THE INVESTMENT IN TRANSIT

Objectives

1.1 Encourage a shift in travel choice to walking, biking and taking transit1.2 Promote land uses that primarily support these sustainable movement modes

Related City Directions + Policies

Transportation 2040 Plan

"By 2040, at least two-thirds of all trips will be made by foot, bike and transit." p. 10

"Prioritize and encourage a dense and diverse mix of services, amenities, jobs, and housing types in areas well served by frequent, high-capacity transit." p. 17

"Locate major trip generators near rapid transit stations or along transit corridors." p. 17

Greenest City 2020 Action Plan

"Goal: Make walking, cycling and public transit preferred transportation options." p. 21



Figure 5: Outside Langara - 49th Ave Canada Line station

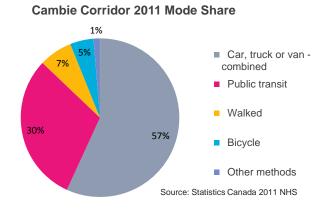
#1 TRANSPORTATION SHIFT

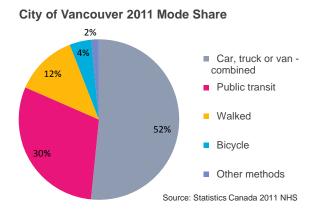
Transportation shift refers to a shift in residents' mode of travel from vehicle to more sustainable modes including walking, cycling and public transit. Transportation shift can be evaluated by performance measures including mode share, distance driven, traffic and pedestrian counts, access to transit services and frequency of transit services.

Mode Share

Mode share refers to the transportation mode of residents to their regular place of work. According to the 2011 National Household Survey, 42% of Cambie Corridor residents commuted using a sustainable mode of transportation, compared to 47% of all City of Vancouver residents.

2016 Census journey to work data will not be released until November 29, 2017. Therefore, it is not possible to evaluate whether mode share has become more sustainable in the Cambie Corridor since 2011. This data should be evaluated as it becomes available.





Vehicle & Pedestrian Counts

Vehicle and pedestrian counts are shown for major intersections within the Corridor. Some major intersections such as Cambie St and 41st Ave and Cambie St and SW Marine Drive are not shown as data was not available for the appropriate timeframe.

Vehicle and pedestrian counts were taken from 2010/2011 and 2014/2015 to show change. The counts generally took place in October, December or February. AM and PM counts were averaged to find an average hourly count, during high commute times.

It should be noted that point in time counts are not the most valid measure for this data and should not be used to establish trends, however, it is the best data available. In addition, the counts were all taken during the same hours though the weather may have affected the figures shown. This is especially true of pedestrian counts.

Vehicle Counts

Vehicle counts were higherin 2014/2015 for every intersection counted. The greatest increase in vehicle counts was seen at Cambie St and King Edward Ave, while the smallest increase was at Cambie St and 49th Ave.

Ta	b	le	2

Total hourly vehicle turning movement count (averaged all directions)	2010/ 2011	2014/ 2015
1. Cambie St & 16th	3,300	7,000
2. Cambie St & King Ed	5,100	13,700
3. Cambie St & 33rd	3,500	6,700
4. Cambie St & 43rd	2,900	5,600
5. Cambie St & 49th	4,500	7,800
6. Cambie St & 57th	3,100	5,800

Though all directional volumes were averaged, in general, vehicle counts were higher on the north and south leg of the intersection as opposed to east or west leg. The one exception to this finding is King Edward Ave, which saw similarly high volumes on the east and west leg count.

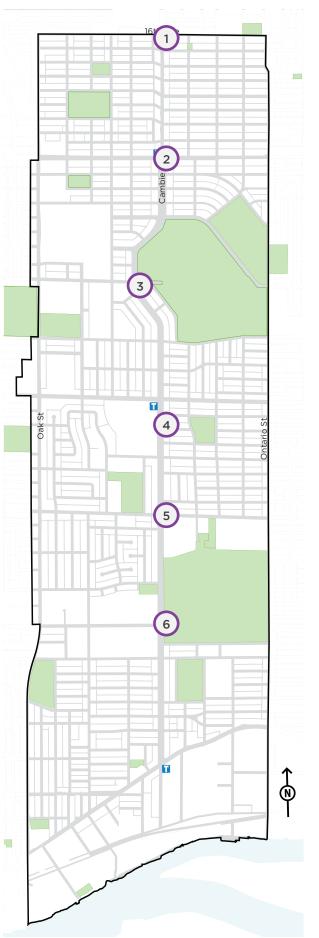


Figure 6: Traffic count intersections

Pedestrian Counts

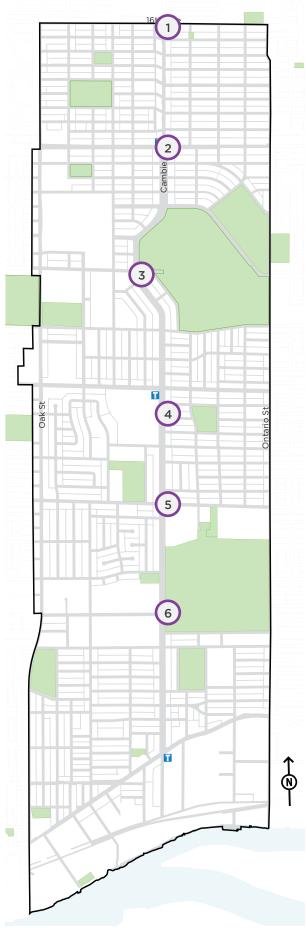
Pedestrian crossing volumes varied greatly by location. Cambie St and King Edward Ave had the highest average hourly volumes, while Cambie St and 33rd Ave, and Cambie St and 43rd Ave had the lowest.

Cambie St and King Edward Ave had a much higher pedestrian count in 2014/2015 than in 2010/2011, while Cambie St and 57th Ave had a much lower count.

Table 3

Total hourly pedestrian crossing count (averaged all crossings)	2010/ 2011	2014/ 2015
1. Cambie St & 16th	186	218
2. Cambie St & King Ed	882	1,816
3. Cambie St & 33rd	26	38
4. Cambie St & 43rd	33	29
5. Cambie St & 49th	582	491
6. Cambie St & 57th	85	35

Though these figures represent the best pedestrian volume data available, the fall and winter collection dates likely affected the number of pedestrians. Therefore, these should not be presumed to represent year-round behaviour.



Access to Rapid Transit Services

Table 4 shows the population within a 400 metre radius, or an approximate 5 minute walking distance, of an existing Canada Line station.

Table 4

Canada Line station 400 m radius	2011 2016 population populati		Increase per station
King Edward	2,260	2,300	40
Oakridge 41st	2,080	2,080	0
Langara 49th	2,170	2,380	210
Marine Drive	1,620	2,190	570
Total	8,130	8,950	820

In 2011, 24.2% of the Cambie Corridor population was within 400 metres of a rapid transit station. By 2016, this figure had increased by 820 residents, meaning 25.8% of the Corridor's population was within a 5 minute walk of a rapid transit station.

This 2016 figure is likely an underestimate of the residents living near rapid transit, as some buildings did not reach full occupancy until after census collection.

In addition to rapid transit services, there are several regular bus routes servicing the Cambie Corridor along Cambie Street, 16th Ave, King Edward Ave, 33rd Ave, 41st Ave, 49th Ave, SW Marine Drive, and Oak Street.

Access to rapid transit services will increase in the future with the planned addition of a rapid bus service along 41st Ave and improved Canada Line service.

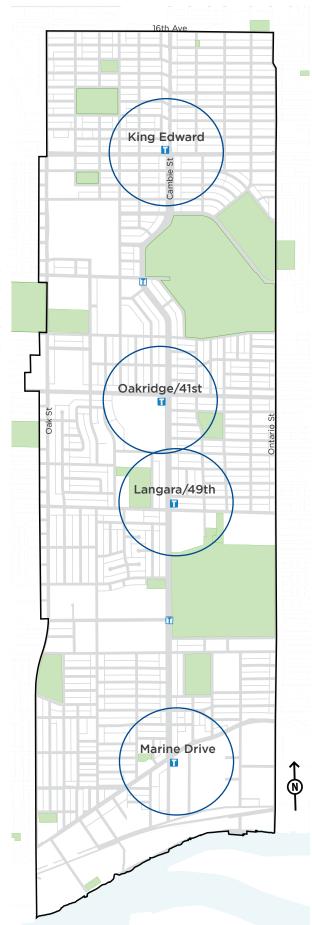


Figure 8: 400 metre station radius

#2 LAND USE DENSITY

Land use density refers to the amount of residential and employment floor space built within an area. An appropriate level of density helps promote walking and biking by providing shops and services within walking and biking distance. Density in close proximity to rapid transit helps optimize investment through higher levels of access and use.

The below statistics represent the entire neighbourhood area. Phase 2 area cannot be isolated due to the format of the data available, however, the majority of change can be presumed to be a result of Phase 2 planning.

Population / Residents

The population within the Cambie Corridor grew by 3.3% between 2011 and 2016, while population within the City of Vancouver grew at 4.6% during the same period. The neighbourhoods that saw the greatest population growth during this period were Marine Landing / Marpole followed by Oakridge Town Centre. The neighbourhood that saw the least population growth was Langara / Marpole, the only neighbourhood with negative change, followed by Cambie Village. Though the Corridor is increasing in residential density, it is still significantly lower than the City of Vancouver as a whole.

Residential Population	Cambie Village	Queen Elizabeth	Oakridge Town Centre	Langara / Marpole	Marine Landing / Marpole	Cambie Corridor	City of Vancouver
2011	8,900	3,800	6,700	8,800	5,400	33,600	603,500
2016	9,200	4,000	7,300	8,300	5,900	34,700	631,500
% change	3.4%	5.3%	9.0 %	-5.7%	9.3 %	3.3%	4.6%

Table 5

Residential Density (population per hectare)

2011 density	63	15	43	32	32	34	52
2016 density	65	16	47	30	35	35	55

Private Dwellings

Table 6

The number of private dwellings in the Cambie is still significantly lower within the Corridor when Corridor increased by approximately 13% from 2011 to 2016, higher than the nearly 8% seen in the City as a whole. The neighbourhoods that saw the greatest growth in dwellings were Marine Landing / Marpole and Queen Elizabeth. The neighbourhoods that saw the least growth in dwellings were Langara / Marpole and Cambie Village. Though dwelling density is increasing, it

compared to the City overall. The Cambie Village neighbourhood is an exception to this, with 29 dwellings per hectare in 2016.

Private Dwellings	Cambie Village	Queen Elizabeth	Oakridge Town Centre	Langara / Marpole	Marine Landing / Marpole	Cambie Corridor	City of Vancouver
2011	4,100	1,200	2,800	3,200	2,500	13,800	286,700
2016	4,200	1,500	3,300	3,200	3,400	15,600	309,400
% change	2.4%	25.0%	17.9%	0.0%	36.0%	13.0%	7.9 %

Dwolling Donsity (dwollings por bostaro)

Dweinn	Dwening Density (dwenings per nectare)								
2011 de	ensity	29	5	18	12	15	14	25	
2016 d		29	6	21	12	20	16	27	

Private Businesses

According to issued business license data, the It is important to note that this data does not Cambie Corridor had close to 1,100 businesses as include several major employers within the of 2017, 80% of which are small businesses with Corridor including Langara College, BC Women's less than 10 employees. This includes home-based businesses. These businesses have approximately 9,000 employees in total, creating an employment density within the Corridor of 9 jobs per hectare.

and Children's Hospital and other institutions such as elementary schools and churches. Therefore, employment density is actually higher than the figures stated.

Table 7

Number of private businesses 2017	Cambie Village	Queen Elizabeth	Oakridge Town Centre	Langara / Marpole	Marine Landing / Marpole	Cambie Corridor
Businesses total	200	100	350	130	300	1,080
Small businesses (less than 10 employees)	170	90	270	120	210	860
% of small businesses	85%	90 %	77%	92 %	70%	80%

Employment Density (employees per hectare)

Number of employees	1,000	700	2,900	500	3,900	9,000	
Employment density	7	3	19	2	23	9	

KEY FINDINGS & TRENDS

There are several key findings or trends:

- Though residential and dwelling density are increasing within the Corridor, both remain below the City of Vancouver's overall densities.
- Dwelling density is increasing at a faster rate than that of the City, while population density is increasing at a slower rate. This could be the result of fewer people per unit, or new units could be included before full occupancy.
- Vehicle counts were higher in 2014/2015 than in 2010/2011 at the intersections counted. Vehicle volumes are related to regional influences and transportation networks and are therefore not a direct result of Phase 2 changes. However, it is important to note the change and monitor this in the future.
- No significant findings can be extracted from the pedestrian count analysis but it is interesting to note that volumes were higher in 2014/2015 than in 2010/2011 in the three northern most intersections counted and lower at the three most southern intersections. In addition, Cambie St and King Edward Ave increased substantially more than any other intersection.
- Access to rapid transit services has increased for residents of the Corridor and will continue to do so as Phase 2 lands become more densely populated. There doesn't appear to be a strong correlation to pedestrian volumes at this time, but it would be interesting to see this relationship in the future, when more data is available. For example, intersection volumes at Marine Drive and Cambie St have likely increased significantly but the corresponding pedestrian volume data is not available at this time.

LIMITATIONS

One important limitation is the 2016 transportation mode share, which has not been released by Statistics Canada at the time of writing this report. When it is released in November, 2017, this data should be reviewed and added to the evaluation. Cambie Corridor mode share can then be evaluated on how well it is progressing towards the City's 2040 mode share target.

In addition, there were several major intersections with missing pedestrian and vehicle count data. Further, the data available is a result of a point in time count, which is not the most reliable data to extract trends from.

PRINCIPLE 2

PROVIDE A COMPLETE COMMUNITY

Objectives

- 2.1 Provide a diverse land use mix that offers a variety of opportunities to work, live, shop, play and learn
- 2.2 Significantly improve walking experiences
- 2.3 Support rich social interactions and the inclusion of all residents in community life

Related City Directions + Policies

Healthy City Strategy

"Getting Around – Vancouverites enjoy safe, active, and accessible ways of getting around the city." p.14

"Healthy Human Services - Vancouverites have equitable access to high-quality social, community, and health services." p. 13

"Cultivating Connections – Vancouverites are connected and engaged in the places and spaces that matter to us." p. 14

"All Vancouverites report that they have at least 4 people in their network they can rely on for support in times of need." p. 14



Figure 9: Hillcrest Community Centre

#3 URBAN COMPLEXITY

Urban complexity refers to the diversity of businesses, institutions, infrastructure and associations, within a given area (Rueda, 2014). A diverse mix of uses within an area brings people closer to jobs, services and recreation. This helps to promote walking and increased social interactions within the community.

Urban complexity can be evaluated on performance measures such as the number of different businesses and associations, and the amount of space dedicated to different uses such as office, entertainment, incubator, institutional, retail, residential and non-profit and cultural space.

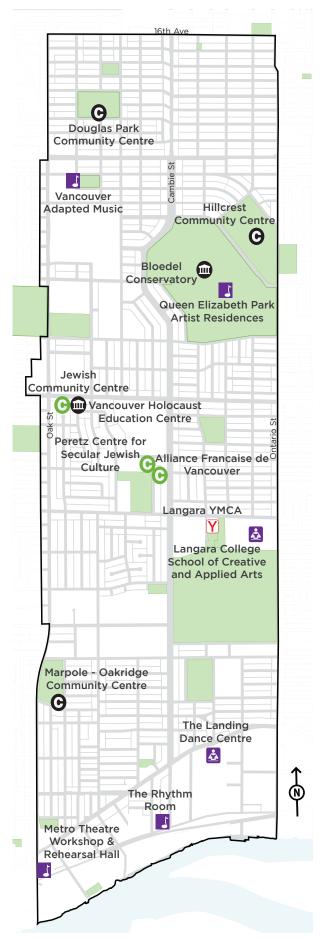
Cultural Spaces

Figure 10 shows existing private, public and nonprofit cultural and community spaces within the Cambie Corridor. There are three public community centres: Douglas Park; Hillcrest and Marpole-Oakridge. It also shows a number of privately and publicly owned cultural spaces including:

- Vancouver Adapted Music (private)
- Queen Elizabeth Park Artist Residence (public)
- Bloedel Conservatory (public)
- Jewish Community Centre (non-profit)
- Peretz Centre for Secular Jewish Culture (nonprofit)
- Alliance Francaise de Vancouver (private)
- Langara College School of Creative and Applied Arts (public)
- The Landing Dance Centre (private)
- The Rhythm Room (private)
- Metro Theatre Workshop and Rehearsal Hall (non-profit)







Institutional + Industrial Space

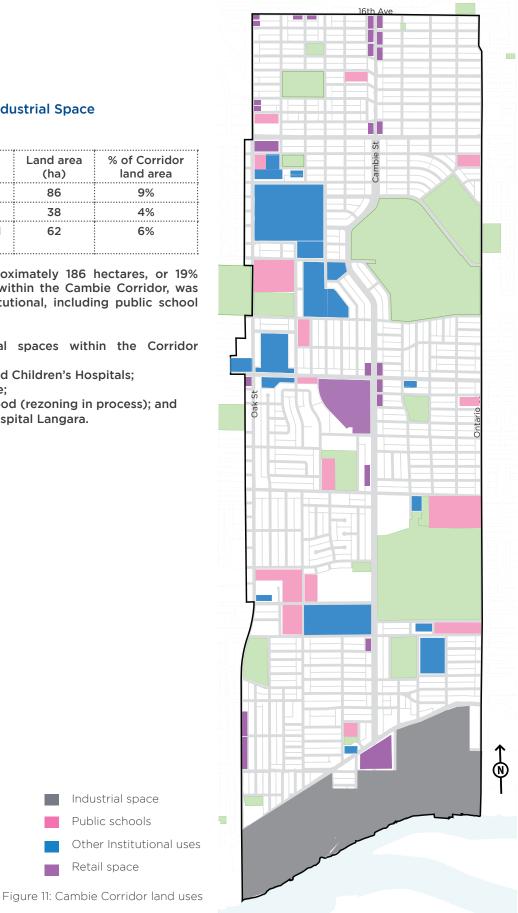
Table	e 8
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2016 Land Use	Land area (ha)	% of Corridor land area
Industrial Zone	86	9%
Public Schools	38	4%
Other Institutional Uses	62	6%

As of 2016, approximately 186 hectares, or 19% of the land area within the Cambie Corridor, was industrial or institutional, including public school sites.

Major institutional spaces within the Corridor include:

- BC Women's and Children's Hospitals;
- Langara College;
- Pearson Dogwood (rezoning in process); and
- St. Vincent's Hospital Langara.



Page 30 Cambie Corridor Phase 2 Evaluation Framework | Principle 2

Industrial space Public schools

Retail space

Retail Space

There are several retail concentrations within the Cambie Corridor including: Cambie Village, Oakridge Town Centre and Marine Landing.

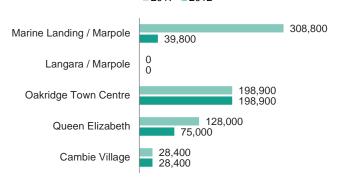
- Cambie Village has smaller scale retail from 16th Ave to 19th Ave, with a second small concentration close to King Edward Ave.
- Oakridge Centre has a mix of large format and small scale retailers. The mall has an approved rezoning application for redevelopment with 1.8 million sq. ft. of new retail space planned
- Marine Gateway has approximately 300,000 sq. ft. of newly built retail in large and small scale formats.

In addition, there are also several smaller scale retail spaces scattered throughout the Corridor, as shown in Figure 11.

Office Space

Office space has increased from approximately 342,100 sq. ft. in 2011 to 664,100 sq. ft. in 2017. Marine Landing / Marpole has seen the greatest increase with 269,000 sq. ft. of new space. The only other increase was seen in the Queen Elizabeth Neighbourhood.

There is a significant amount of office space planned for the Corridor, mainly in Oakridge Centre and Pearson Dogwood, as described in the Phase 2 Status section.



Office Space by Neighbourhood (sq. ft.) 2017 2012

#4 SOCIAL COHESION

Social cohesion is a broad ranging category that includes concepts such as civic culture, social networks and capital, and place attachment and community identity. According to the American Planning Association, social cohesion refers to "the shared sense of belonging and social interaction within communities" (p. 20, Ricklin, A. & Shah, S., 2017). Key elements to the promotion of social cohesion include: citizen involvement in the community and decision making processes; social connections, networks and bonds with others; institutions and policies that support mutual respect and understanding; and equity, inclusion and access (Toye, M., 2007).

Social cohesion can be evaluated on performance measures such as proximity to community hubs, schools, community amenities and services. It can also be evaluated on access to services such as healthcare and community centres and whether residents have a support network and feel a sense of belonging.

Childcare

As of 2011, there were 779 public and private childcare spaces within the Cambie Corridor.

Since 2011, 74 childcare spaces have been added to the Corridor in the Marine Landing / Marpole neighbourhood. As of June, 2017, there were an additional 366 to 480 childcare spaces planned for future major projects and unique sites throughout the Corridor, including 69 spaces at Oakridge Centre and 69 spaces at Pearson Dogwood redevelopment.

It is important to note that these planned childcare spaces are not net additions. Some of them will serve as replacements for sites undergoing redevelopment. There is a no net loss childcare policy in Cambie Corridor Phase 2, which will continue in Phase 3.

2011 Cambie Corridor Childcare Spaces by Neighbourhood

Childcare spaces



Table 9

2011 Childcare Data Type of License	Number of Spaces
Under 36 months	48
30 months to school age	244
School age	487
Total	779

Support Network

In 2013 and 2014 *My Health My Community*, a nonprofit partnership between Vancouver Coastal Health, Fraser Health and the eHealth Strategy Office at the University of British Columbia, undertook a survey to improve future health and wellness related community programs and services. As part of the survey, residents were asked "How many people do you have in your network that you could confide in, tell your problems to, or call when you really need help?"

The results cannot be broken down by the Cambie Corridor, but are provided by local area boundary.

Table 10	
Local area boundary	4+ people to confide in / turn for help
Riley Park	54%
South Cambie & Oakridge	53%
Marpole	40%
City of Vancouver	50%

This is the first iteration of the survey, and so there is no previous data to compare to. However, there are tentative plans to launch a second round of the survey in mid-2018.

Access to Doctor

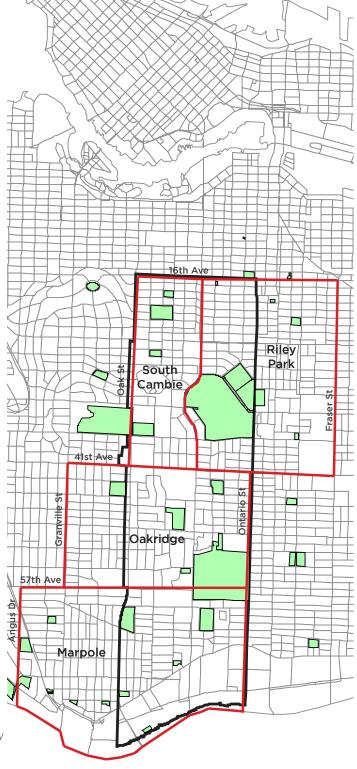
Within the *My Health My Community* survey, there was also a question about residents' access to health care. Participants were asked if they had a regular family doctor.

Table 11	•••••••••••••••••••••••••••••••••••••••
Local area boundary	Family doctor access
Riley Park	80%
South Cambie & Oakridge	86%
Marpole	81%
City of Vancouver	83%

Cambie Corridor boundary

Local area boundaries

Figure 12: Local area boundaries



Sense of Belonging

The 2013/2014 *My Health My Community* survey asked residents on a 4 point scale from very strong to very weak, "How would you describe your sense of belonging to your local community?"

The results are shown by local area boundary. Riley Park was the only neighbourhood in the Corridor with a higher sense of belonging than the City overall.

Access to Community Centres

The Vancouver Board of Parks and Recreation and Recreation Services are currently exploring a citywide recreation evaluation framework. It is still in its infancy, but could include the evaluation of community centre accessibility, operational efficiency, operational health and safety, customer experience feedback, budget, and recreation capacity. Though this framework is not yet complete, Recreation Services prepared a few draft figures for the community centres within and surrounding the Cambie Corridor.

It should be noted that the below figures are approximate figures. The average percent full for activity classes figures shown in Table 13 could be lower than actual figures by as much as 5 to 10%. In addition, data for Hillcrest and Marpole-Oakridge do not include fitness centre activity class visits or capacity, while the other centres do. This is because these fitness centres are run by the Park Board, not the community centre, and the data is not available at this time. This missing data will skew the annual activity class visits down; it is not know how it would affect the average percent full of activity classes.

Table 12

Table 13

Local area boundary	Community belonging (strong / somewhat strong)
Riley Park	58%
South Cambie & Oakridge	47%
Marpole	46%
City of Vancouver	54%

Table 13			
Community centre	Neighbourhood	Annual activity class visits	Average % full of activity classes
Douglas Park	Cambie Village	42,300	83%
Hillcrest*	Queen Elizabeth	80,100	54%
Marpole- Oakridge*	Langara / Marpole	63,000	51%
Sunset	Sunset (outside Corridor)	80,300	59%
Mount Pleasant	Mount Pleasant (outside Corridor)	90,600	51%

* These centres do not include fitness centre data

KEY FINDINGS & TRENDS

In terms of urban complexity, there are a number of different institutional, industrial, retail and cultural uses in the Corridor. Since there is no 2011 cultural inventory for the Corridor, it is challenging to say whether there has been an increase or decrease in the smaller scale cultural spaces. However, at a minumum, two artist studios were added in the Marine Landing / Marpole neighbourhoods. Larger cultural spaces have remained the same, with some improvements to Hillcrest Community Centre.

Office and retail space has increased in the Corridor due to the Marine Gateway development in Marine Landing / Marpole. There will be additional office and retail added in the coming years within the Oakridge Centre and Pearson Dogwood redevelopments.

Social cohesion is a complex target that is challenging to evaluate. For performance measures such as childcare, the needs of the community need to be better understood in order to evaluate whether enough new spaces are being added. This projection has been undertaken for the public benefits strategy, as part of Phase 3 of the Cambie Corridor planning program, but was not available for this evaluation.

From the performance measures available, social cohesion appears to be unequally felt throughout the Corridor. Though the specific Cambie Corridor boundaries are not available for many of the measures, the Marpole neighbourhood, which forms a large section of the Cambie Corridor, scores poorer on support network and social cohesion, and low on access to a family doctor when compared to other local areas.

Looking at community centres, the most active centres in or around the Corridor are Mount Pleasant, followed by Hillcrest. However, these centres appear to have a greater capacity for visitors, with activity classes on average only 51% and 54% full. This is fairly low compared to the Douglas Park Community Centre, which saw half the activity class visitors, but with activity classes that were on average 83% full.

LIMITATIONS

There are several important limitations in this section. Namely, the boundaries for the My Health My Community survey do not align with the Cambie Corridor boundary. Further, 2013/14 was the first iteration of the survey and, therefore, change from 2011 cannot be measured. If a second iteration of the survey does not occur, it will be difficult to continue to measure these metrics without another census or survey in place.

The access to community centres data are approximate figures. Two of the centres, Hillcrest and Marpole-Oakridge, have underestimated total activity class visits because their fitness centre classes are not included in the figures. Further, the average percent of full activity classes may be underestimated for all centres by as much as 5 to 10%.

PRINCIPLE 3

CREATE A WALKABLE AND CYCLEABLE CORRIDOR OF NEIGHBOURHOODS SEAMLESSLY LINKED TO PUBLIC TRANSIT

Objectives

- 3.1 Ensure that routes and infrastructure for pedestrians and cyclists are safe, attractive, convenient, navigable, barrier-free and accessible to transit
- 3.2 Create active, engaging, human-scale design

Related City Directions + Policies

Healthy City Strategy

"Being and Feeling Safe and Included - Vancouver is a safe city in which residents feel secure." p. 13

"Increase Vancouver residents' sense of safety by 10%." p. 13

"Every Vancouver neighbourhood has a Walk Score of at least 70 (indicating that most errands can be accomplished on foot)". p. 14

Transportation 2040 Plan

Walking policies (p. 23)

- W1 Pedestrian Network
- W1.1 Make streets safer for walking
- W1.2 Provide generous, unobstructed sidewalks on all streets
- W1.3 Make streets accessible for all people
- W1.4 Make streets and public spaces rain-friendly
- W1.5 Address gaps in the pedestrian network
- W1.6 Provide a blueprint for great pedestrian realm design
- W1.7 Make the city easy to navigate on footW2 Public Spaces
- W2.1 Enable and encourage creative use of the street
- W2.2 Create public plazas and gathering spaces throughout the city

Cycling policies (p. 23)

- C1 Cycling Network
- C1.1 Build cycling routes that feel comfortable for people of all ages and abilities
- C1.2 Upgrade and expand the cycling network to efficiently connect people to destinations
- C1.3 Maintain bikeways in a state of good repair
- C1.4 Make the cycling network easy to navigate

"Vancouver's ultimate safety goal is to eliminate all fatalities from the transportation system." p. 12

TRANSPORTATION IMPROVEMENTS 2013 - 2017

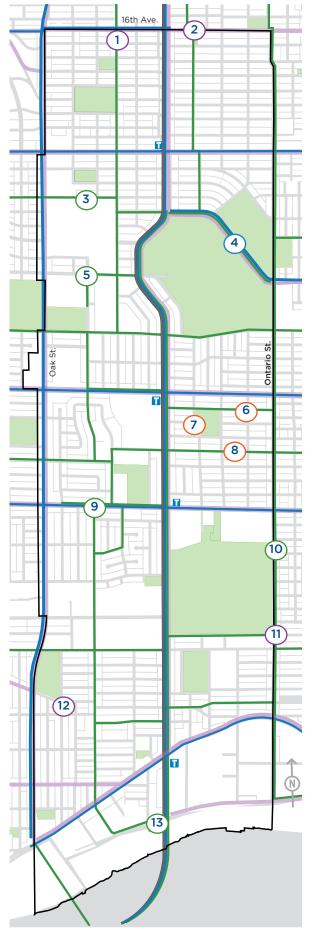
This section describes transportation improvements to the Corridor from 2013 to 2017. This information will help inform the indicators to follow.

New improved sidewalk and crossings

- Three new corner bulges located at W 16th Ave and Heather St
- 2 New and improved pedestrian and cycling crossing
- 1) Enhanced raised crosswalk at Ontario and E 58th Ave
- (12) New sidewalk on Fremlin St

New improved cycling infrastructure

- (3) New W 28th Ave protected bike lanes
- 5 New protected bike lanes and improved crossings on W 33rd Ave
- 9 New buffered bike lanes on W 49th Ave
- (10) New protected bike lanes on Ontario St
- 13 Pedestrian and cycling connections to Canada Line Bridge
- New traffic signal
- (4) New full traffic signal at Clancy Loranger Way
- New pedestrian and bike activated signal
- 5 New pedestrian activated signal at Willow and W 33rd Ave
- New traffic calming (speed humps)
- 6 New speed humps on W 42nd Ave
- 7 New speed humps on Columbia St
- 8 New speed humps on W 44th Ave



#5 CYCLING INFRASTRUCTURE + EXPERIENCE

Cycling infrastructure and experience refers to the accessibility and quality of cycling infrastructure and routes within an area. Attractive and safe cycling routes help promote the mode of transportation. This indicator can be evaluated based on performance measures such as cycling routes, number of cyclists along major routes, bike racks, and number of incidents or fatalities involving a cyclist.

Route Connectivity Improvements

As noted in Figure 13, there have been several improvements to cycling infrastructure since 2013. This includes new protected bike lanes along Ontario St, W 28th Ave, and W 33rd Ave. It also includes a new buffered bike lane along W 49th Ave, improved connection to the Canada Line bridge, and improved crossing at W 33rd Ave.

When looking at the cycling network, there is stronger north/south connectivity than east/west. However, there are several planned improvements with Phase 3 of the Corridor, including:

- improve existing bikeways (ex. 33rd Ave);
- create new cycling routes (ex. King Edward Ave, 59th Ave and other routes in Marpole);
- create separated bike lanes along several major arterials; and
- expand the public bike share service area.

Bike Racks

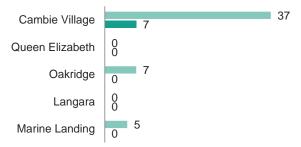
Prior to 2011 there were only 7 bike racks located within the Cambie Corridor. From 2012 to 2016 a total of 49 bike racks were installed in 17 different locations. The greatest number of bike racks were installed in the Cambie Village neighbourhood, followed by Oakridge Town Centre and Marine Landing.

These figures do not include bike racks installed on private property.

Bike Racks Installed in the Cambie Corridor

2012 - 2016 number installed

■ 2011 and prior number installed



Cyclist Safety

From 2006 to 2010, there were 92 collisions involving cyclists within the Cambie Corridor. Many of these collisions were located in the Cambie Village neighbourhood, with concentrated incidents along Ontario St and W 16th Ave.

From 2011 to 2015, there were 156 bike collisions within the Cambie Corridor, representing a 70% increase. Again, many of these occurred within the Cambie Village neighbourhood, followed by the Queen Elizabeth neighbourhood. The total number of bike collisions increased significantly between the two time periods, though, this may be due to an increased total number of cyclists. The City of Vancouver saw a similar 57% increase in bike collisions between these two time periods.

The neighbourhood that saw the greatest total increase in collisions involving cyclists was Marine Landing / Marpole. This neighbourhood saw the greatest number of new units since 2011 and thus may have seen the greatest increase in cyclists as well.

There have been no cyclist fatalities within the Cambie Corridor since prior to 1996.

It should be noted that the above figures include parking flag collisions; a collision between a cyclist and parked vehicle or a vehicle in the process of parking.

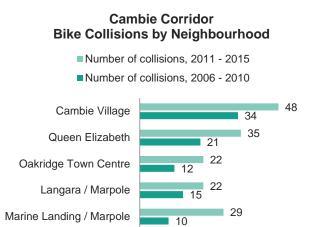
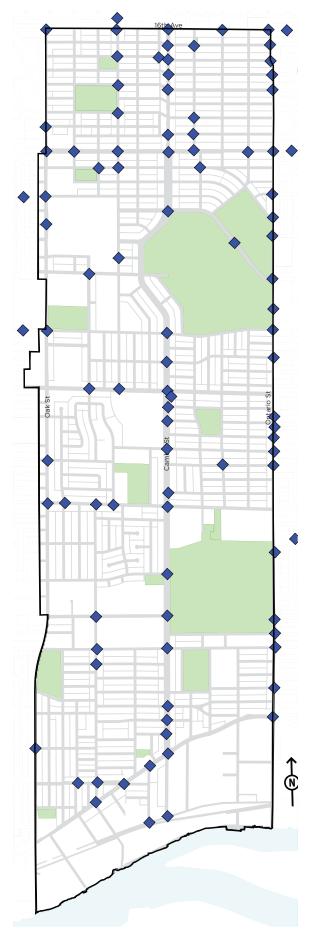


Figure 14: Bike collision locations 2011 - 2015 (there may be more than one collision per icon)



#6 PEDESTRIAN INFRASTRUCTURE + EXPERIENCE

Pedestrian infrastructure and experience refers to the accessibility and quality of pedestrian infrastructure and routes. Convenient, navigable and safe routes encourage residents to walk. This indicator can be evaluated based on performance measures such as the maintenance of sidewalks, wayfinding, neighbourhood walk scores, and number of incidents or fatalities involving a pedestrian.

Infrastructure Improvements

As shown in Figure 13, there have been a number of improvements to pedestrian infrastructure since 2013. These include improved sidewalks and crossings in the Cambie Village neighbourhood and Marpole area, and a new pedestrian activated signal at W 33rd Ave and Willow St. There were also several traffic calming speed humps installed in the Oakridge Town Centre area, which improves pedestrian experience by slowing vehicles.

Wayfinding is another important factor of the pedestrian experience. In 2009 and 2010, 10 new wayfinding map stands were installed in the Corridor. These were updated with new and improved content in 2013 and 2014, to provide a greater level of detail.

Neighbourhood Walk Score

A walk score is an evaluation of a neighbourhoods walkability. A private company uses a patented system to evaluate walkability by analyzing walking routes to nearby amenities. It also considers population density and road metrics such as block length and intersection density. Walk scores are not available for the Corridor boundary, but are shown by local area boundary.

Та	b	le	1	4

Local area boundary	Walk Score (2017)
Riley Park	80
South Cambie	77
Oakridge	61
Marpole	72
City of Vancouver	78

50 - 69 Somewhat Walkable - Some errands can be accomplished on foot. 70 - 89 Very Walkable- Most errands can be accomplished on foot. 90 - 100 Walker's Paradise - Daily errands do not require a car.

Δνο Rilev ţ Park South è Cambie 41st Ave t anville <u>e</u> Ontari Oakridge 57th Ave à hgub Marpole Cambie Corridor boundary Local area boundaries

Figure 15: Local area boundaries

Sidewalk Network

A 2014 missing sidewalk map identifies streets with no sidewalk or only one sidewalk. As shown, there are a significant number of missing sidewalks in the Oakridge Town Centre neighbourhood and Langara / Marpole and Marine Landing / Marpole.

According to the transportation improvements map, the only new sidewalk added was on Fremlin Street in Langara / Marpole. This sidewalk is not identified as missing on the missing sidewalk map and therefore the map likely remains fairly accurate in 2017.

Sidewalk Maintenance

In 2013 and 2014 the *My Health My Community* survey asked residents to indicate to what extent they agreed or disagreed with the statement "The sidewalks in my neighbourhood are well maintained (paved, with few cracks) and not obstructed."

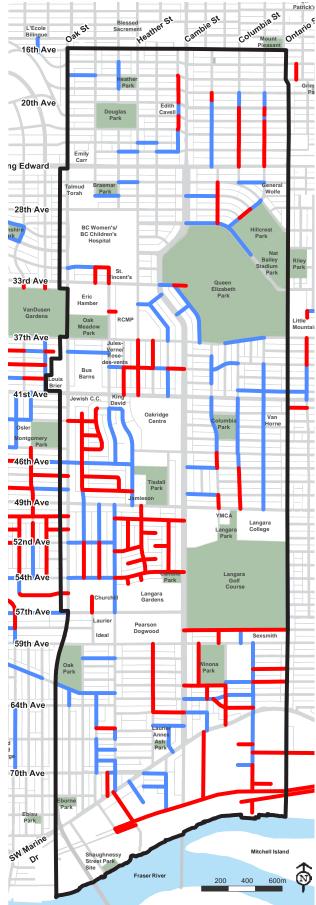
The results cannot be broken down by the Cambie Corridor, but are provided by local area boundary.

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Local area boundary	Sidewalks well maintained (strongly / somewhat agree)
Riley Park	85%
South Cambie & Oakridge	83%
Marpole	80%
City of Vancouver	80%



Figure 16 Missing sidewalks map 2014

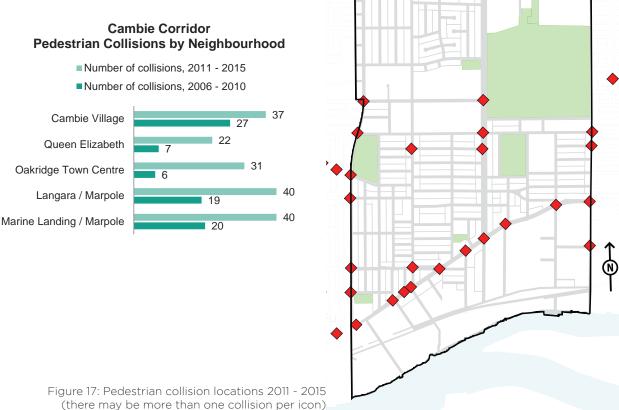


Pedestrian Safety

From 2006 to 2010, there were 79 collisions involving pedestrians within the Cambie Corridor; 27 of these were in the Cambie Village neighbourhood, concentrated along Cambie St and 16th Ave. There were also a number within the Langara / Marpole and Marine Landing / Marpole neighbourhoods. One of these collisions resulted in a pedestrian fatality, in 2007.

From 2011 to 2015, there were 170 collisions involving pedestrians within the Cambie Corridor, representing a 115% increase. The neighbourhoods with the greatest number of collisions involving pedestrians was Langara / Marpole, followed by Marine Landing / Marpole. Oakridge Town Centre had the greatest increase in number of incidents. The City of Vancouver saw a much less significant increase of 24% between the same time periods.

None of the 2011 to 2015 collisions resulted in a pedestrian fatality. Prior to the 2007 fatality, the last pedestrian fatality within the Corridor occurred in 1999.



#7 PUBLIC REALM

Public realm refers to public space and includes all exterior social spaces that are generally open and accessible to all people regardless of ownership. These spaces include streets, lanes, greenways, squares, plazas, parks, natural areas, transit hubs and other communal spaces.

Performance measures to evaluate the public realm include street furnishings and lighting, public play spaces, reported crime rates, active uses at grade, and whether residents feel safe walking at night.

Active Uses at Grade

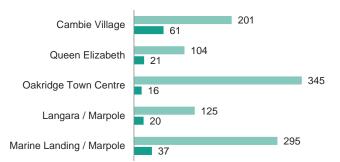
Active street frontages enliven the public realm through increased pedestrian activity. To evaluate active uses within the Cambie Corridor, 2017 business license data was analyzed. Licenses were tabulated for certain categories that are likely to be at grade and activate the public realm. These license categories included food establishments, restaurants, and retail uses. Liquor stores were excluded.

According to the above definition, approximately 14% of all businesses in the Cambie Corridor are an active use business. Most active uses can be found in the Cambie Village neighbourhood, followed by Marine Landing / Marpole. Oakridge Town Centre has the least active uses at grade, because businesses within the mall have been excluded. If the internal businesses were included, it would add approximately 100 active use businesses to the Oakridge Town Centre neighbourhood and increase the ratio of active uses in the Corridor to 24%.

Geo-located business license data from 2011 was not available and therefore it is not possible to see whether there has been change in Phase 2. However, many of the Marine Landing / Marpole active uses are found within the new Marine Landing development. This neighbourhood has likely seen a significant increase in active uses at grade since 2011.

Cambie Corridor Active Uses at Grade (2017)

Number of businesses total Number of active use businesses

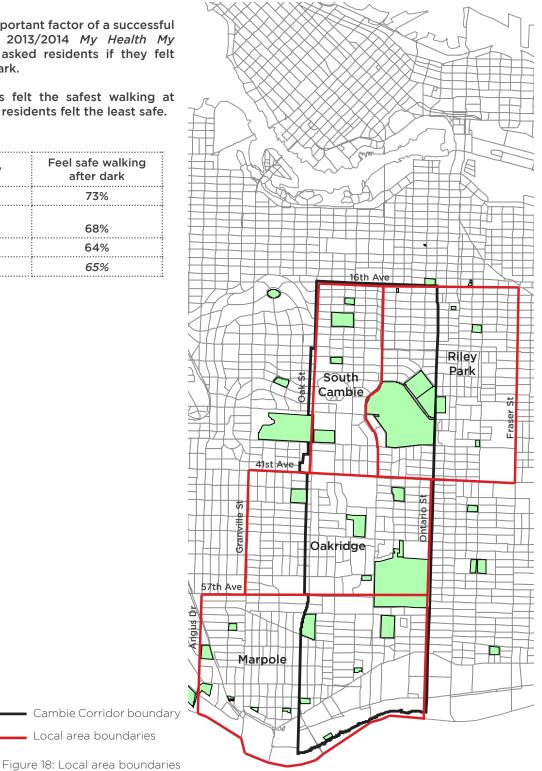


Perceived Safety

Feeling safe is an important factor of a successful public realm. The 2013/2014 My Health My Community survey asked residents if they felt safe walking after dark.

Riley Park residents felt the safest walking at night while Marpole residents felt the least safe.

Table 16	
Local area boundary	Feel safe walking after dark
Riley Park	73%
South Cambie & Oakridge	68%
Marpole	64%
City of Vancouver	65%



KEY FINDINGS & TRENDS

Pedestrian and cyclist collisions have increased significantly from 2006 - 2010 to 2011 - 2015. This is likely correlated to the significant increase in vehicle counts found in Indicator #1, as well as increasing pedestrian and cyclist volumes.

Missing sidewalks have not changed significantly in the Corridor. This is because Phase 2 is focused on development along the arterial streets, which have existing sidewalks. Phase 3 will include development off of the arterial streets where some sidewalks are missing. These Phase 3 developments will help to deliver new sidewalks.

For walkability ratings, only Oakridge is not meeting the City's goal of a 70 walkability score. It is also an area with a significant number of missing sidewalks and the greatest increase in collisions involving pedestrians. This data signals that the area should be a focus for pedestrian infrastructure and safety improvements going forward.

It is not possible to identify changes in residents' sense of safety because there has only been one iteration of the *My Health My Community* survey. However, according to the 2013/2014 survey, Marpole has a lower sense of safety than other neighbourhoods. This may be related to the previous findings of generally lower social cohesion in the Marpole neighbourhood.

LIMITATIONS

Though the data on increased cyclist and pedestrian collisions is valuable, it would be more valuable if there was better data on cycling and pedestrian volumes, including cyclist volumes along major bike routes, and whether there has been change from 2011. It would be useful to know, for example, if cyclist volumes have tripled along with the tripling of collisions involving cyclists in the Marine Drive / Marpole neighbourhood.

In addition, no data was found on changes in the quantity of, or the demand for, street lighting and furnishings. Further, 2011 business license data is not available in a geo-located format and therefore, it is not possible to see whether there has been a change in active uses during Phase 2.

PRINCIPLE 4

FOCUS INTENSITY AND COMMUNITY ACTIVITY AT STATIONS AND OTHER AREAS WITH STRATEGIC OPPORTUNITIES FOR SUSTAINABILITY, RENEWABLE ENERGY AND PUBLIC AMENITY

Objectives

- 4.1 Locate higher densities and a mix of uses close to the stations with sensitive transitions to surrounding neighbourhoods
- 4.2 Achieve renewable energy gains and significant public amenities through strategically located development
- 4.3 Achieve a coordinated, quality public realm to help define the station area's "sense of place" and create focus for the broader community
- 4.4 Consider creative and sensitive transitions in scale from station area developments and adjacent neighbourhoods, respecting the context and authenticity of the existing neighbourhoods

Related City Directions + Policies

Healthy City Strategy "Increase Vancouver residents' sense of belonging by 10%." p. 13

Renewable City Strategy "Derive 100% of the energy used in Vancouver from renewable sources before 2050." p. 6

"Reduce greenhouse gas emissions by at least 80% below 2007 levels before 2050." p. 6



Figure 19: Marine Drive Canada Line station art

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#8 DENSITY IN PROXIMITY TO STATIONS

This indicator refers to the type and amount of land use within close proximity to a rapid transit station. A dense and diverse mix of land uses in close proximity to stations promotes use of transit and creates a hub of activity around the station.

This indicator is evaluated on performance measures such as population, dwellings, industrial space, office space, retail space, and major trip generators such as hospitals, and community centres in close proximity to stations. The analysis uses a 400 metre radius, or an approximate five minute walk time.

Station Analysis (400 m buffer)

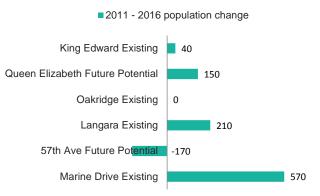
Population and dwellings have increased at all existing Canada Line station areas. Office has increased at only one existing station and one future potential station.

The greatest change was seen near the Marine Drive station, with the addition of Marine Gateway. The least amount of change at existing stations was seen at the King Edward and Oakridge station areas. However, Oakridge is going to see significant increases in all three categories in the near future due to the redevelopment of Oakridge Centre.

In terms of future potential stations, 57th Ave experienced negative growth in population and dwellings, likely as a result of the major redevelopment proposed.

A retail inventory for 2011 and 2016 was not available for the station areas. However, it is expected that most stations areas have not experienced significant change in retail space with the exception of Marine Drive, which saw an increase of close to 300,000 sq. ft. at Marine Gateway.

Population Change by 400 m Station Radius



Dwelling Change by 400 m Station Radius

2011 - 2016 dwelling change



Office Space Change by 400 m Station Radius



Table 17 King Edward Station

	Population	Dwellings	Office sq ft*
2011	2,260	960	22,800
2016	2,300	1,000	22,800
% change	2%	4%	0%

Queen Elizabeth 33rd Ave - Future Potential Station

	Population	Dwellings	Office sq ft*
2011	680	220	0
2016	930	450	53,000
% change	22 %	105%	n/a

Oakridge 41st Ave Station

	Population	Dwellings	Office sq ft*
2011	2,080	1,000	183,200
2016	2,080	1,060	470,200
% change	0%	6 %	157%

Langara 49th Ave Station

	Population	Dwellings	Office sq ft*
2011	2,170	1,000	0
2016	2,380	1,170	0
% change	10%	17%	no change

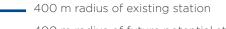
57th Ave -Future Potential Station

	Population	Dwellings	Office sq ft*
2011	2,020	820	0
2016	1,850	800	0
% change	-8%	-2%	no change

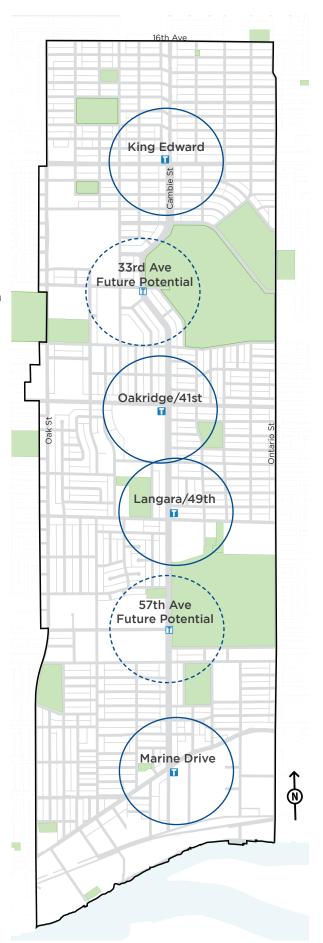
Marine Drive Station

	Population	Dwellings	Office sq ft*
2011	1,620	660	0
2016	2,190	1,580	269,000
% change	35%	<i>139%</i>	n/a

* Office space data corresponds to 2012 and 2017 data



400 m radius of future potential station
Figure 20: 400 metre station radius



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Major Trip Generators

In addition to population, dwellings, retail, and office space within 400 metres of existing and future potential Canada Line stations, it is important to consider major trip generators near stations. Existing major trip generators include:

King Edward Station

- BC Women's / BC Children's Hospitals complex
- Honoria Conway at St. Vincent's
- Hillcrest Community Centre

Queen Elizabeth 33rd Ave - Future Potential Station

- Queen Elizabeth Park
- BC Women's / BC Children's Hospitals complex
- · Honoria Conway at St. Vincent's

Oakridge 41st Ave Station

- Oakridge Centre
- Vancouver Public Library Oakridge Branch

Langara 49th Ave Station

- Langara YMCA
- Langara Golf Course
- Langara College (within 800 m, 10 minute walk time)

Pearson Dogwood 57th Ave - Future Potential Station

 Pearson Dogwood redevelopment proposal includes a YMCA, community health centre and other health focused land uses

Marine Drive Station

- Regional Growth Strategy designated industrial area - 7.43 hectares
- Regional Growth Strategy designated mixed employment area - 8.68 hectares

#9 CONTRIBUTIONS FROM DEVELOPMENT

Contributions from development refers to the public amenities allocated and achieved through new development within the area. Amenities include affordable housing, childcare, parks and open spaces, public realm and greenway improvements, cultural spaces, non-profit spaces, heritage designations, community facilities, and public art.

This indicator can be measured by the contributions allocated by type of amenity and location, amenities approved by type and location and the objectives achieved through the delivery of amenities.

CACs Secured

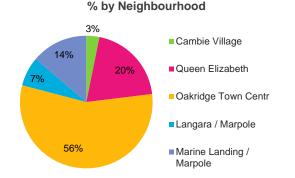
This section shows the amount of Community Amenity Contributions (CACs) that have been secured. These funds have been secured through approved rezoning applications. The funds shown have been used, or will be used in the near future, to deliver amenities.

It is important to note that CACs that have been secured are not collected in cash until the rezoning has been enacted, or in-kind until the development has been built. CACs that have been allocated have not necessarily been delivered but have been allocated into one of several areas that will be built or delivered in the future.

As of June 2017, approximately \$309 million in CACs have been secured in the Cambie Corridor as a whole, including Oakridge Centre. Of this figure, about 49% of it is represented by cash contributions and 51% in-kind contributions.

56% of all CACs secured are a result of rezonings within the Oakridge Town Centre neighbourhood. The majority of this is from the Oakridge Centre rezoning. The neighbourhood with the second most secured CAC collections from rezonings is Queen Elizabeth. The neighbourhoods with the least CACs secured is Cambie Village, followed by Langara / Marpole.

Note: CACs secured from Langara / Marpole rezonings is expected to increase significantly when the proposed Pearson Dogwood development is approved.



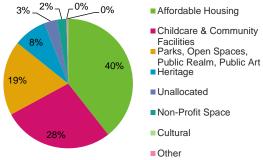
CACs Secured for Collection

When CACs are secured, they are allocated for use by amenity type. The below graph shows this allocation.

Of the CACs allocated, 45% of both in-kind and cash contributions is planned for use for affordable housing. The next largest allocation of CACs is childcare and community facilities with 31%, followed by parks and open spaces with 10%, and public art with 6%. Cash and in-kind CAC allocations are shown separately in the adjacent pie charts.

Some of the secured CAC cash contributions are planned by location, though not all of them. Therefore, it is difficult to estimate where the amenities will be located within the Corridor, with the exception of the improvements planned so far (shown on page 53). However, in-kind contributions can be tracked by neighbourhood and are shown below.

Cambie Corridor CAC Cash Allocations by Percentage



Cambie Corridor CAC In-kind Allocations by Percentage

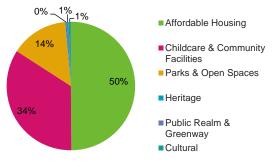
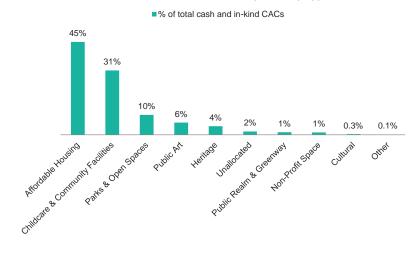


Table 18

In-kind CACs Allocated by Neighbourhood		
Cambie Village 0.2%		
Queen Elizabeth	0.1%	
Oakridge Town Centre	92.1%	
Langara / Marpole	0.0%	
Marine Landing / Marpole	7.6%	





Amenities Delivered & Planned

This section details the amenities that have been delivered and planned improvements in the Cambie Corridor. The funding for these amenities may come directly from community amenity contributions (CACs), development cost levies (DCLs), related departmental funding, or some combination of these sources.

Transportation improvements should also be included in this section. These improvements have been included with Principle 3, on page 37.

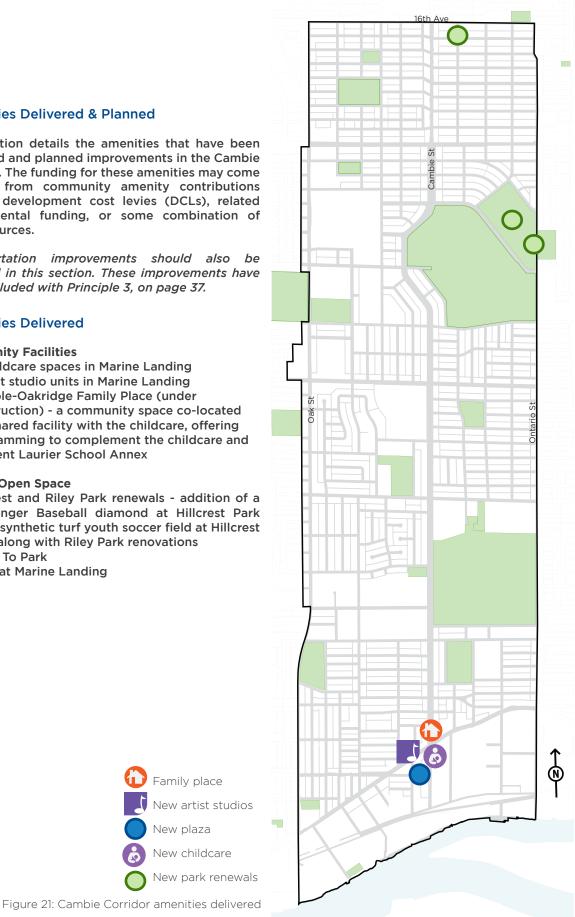
Amenities Delivered

Community Facilities

- 74 childcare spaces in Marine Landing
- 2 artist studio units in Marine Landing
- Marpole-Oakridge Family Place (under construction) - a community space co-located in a shared facility with the childcare, offering programming to complement the childcare and adjacent Laurier School Annex

Parks & Open Space

- · Hillcrest and Riley Park renewals addition of a Challenger Baseball diamond at Hillcrest Park and a synthetic turf youth soccer field at Hillcrest Park, along with Riley Park renovations
- Lillian To Park
- Plaza at Marine Landing



New plaza

Planned Improvements & Benefits

A full public benefits strategy will be delivered with the Phase 3 of the Cambie Corridor plan. To date, a number of 10-year target priorities have been identified.

Community Facilities

- Hillcrest Community Centre Fitness Centre expansion
- New childcare facilities on major projects, Unique Sites, and school sites - 138 - 207 spaces for 0 - 4 years old, and 90 - 135 spaces for 5 - 12 years old
- Oakridge Centre redevelopments new civic centre, including community centre, library, seniors centre, and 69-space childcare facility
- Pearson Dogwood redevelopment 69-space childcare facility, adult day centre and urban farm
- Marpole-Oakridge Community Centre renewal
- YMCA redevelopment

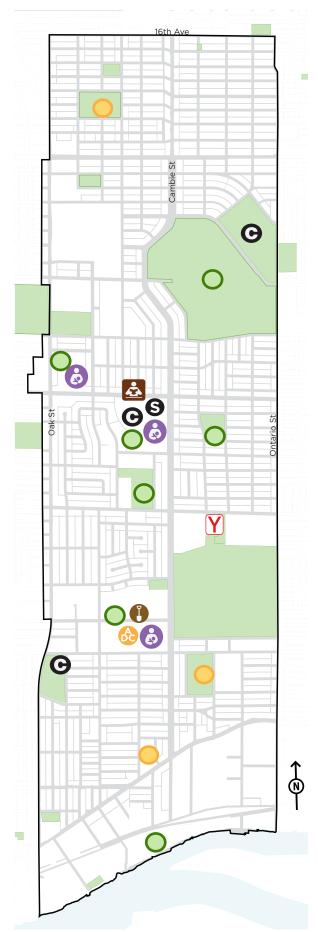
Parks & Open Space

- Queen Elizabeth Master Plan Phase 1 upgrades
- Columbia Park fieldhouse renewal
- Tisdall Park upgrades
- Oakridge Transit Centre 2.3 acres park and open space
- Oakridge Centre redevelopment 9.0 acre park and other public realm components such as plazas and pocket parks
- Pearson Dogwood redevelopments 1 hectare park and public plaza
- Playground renewals at Douglas Park, Ash Park and Winona Park
- New destination park on the Fraser River
- Plazas and enhanced open space improvements in various locations

In addition to the above amenities delivered and planned improvements, there have been a number of improvements delivered and planned with regards to transportation within the Corridor. These improvements have been outlined in indicators #5, cycling infrastructure and experience, and #6, pedestrian infrastructure and experience.



Figure 22: Cambie Corridor amenity priorities



#10 PLACEMAKING

"Placemaking refers to a collaborative process by which we can shape our public realm in order to maximize shared value. More than just promoting better urban design, Placemaking facilitates creative patterns of use, paying particular attention to the physical, cultural and social identities that define a place and support its ongoing evolution." (Project for Public Spaces, 2009)

Though difficult to evaluate, placemaking aims to capitalize on local community assets to create quality public spaces that contribute to health, happiness, well-being, and belonging. Performance measures that can be used to evaluate placemaking include public art, preserved historical places and landmarks, activities in public spaces such as markets, block parties, food carts, etc., and the quality and quantity of public plazas and spaces.

Public Plazas

There has been one new plaza created in Phase 2 at Marine Gateway, in the Marine Landing / Marpole neighbourhood. The development includes a public art program with several installations.

A number of additional plazas have been planned as part of Phase 3 of the planning program.



Figure 23: Douglas Coupland's Golden Tree at Marine Drive and Cambie Street

Preserved Historical Places & Landmarks

According to the 2015 Cambie Corridor Community Profile, there are 62 sites in the Cambie Corridor that are listed on the Vancouver Heritage Register. Classification of the 62 sites includes:

- 7 as "A" (primary);
- 34 as "B" (significant);
- 19 as "C" (contextual or character); and
- 2 landscape resources (Queen Elizabeth Park and Cambie Heritage Boulevard).

Fourteen of these sites are protected by a legal designation, either through a municipal heritage designation or a heritage revitalization agreement. Sites included in the "A" designation require an independent consultant's report to the Director of Planning for review. All other designations may be demolished if the owner does not wish to preserve it, though incentives and disincentives are used to try to preserve them.

To date, in Phase 2 of the Cambie Corridor, two properties listed on the heritage register have been successfully retained. These two properties are:

James Residence (Hobbit House)

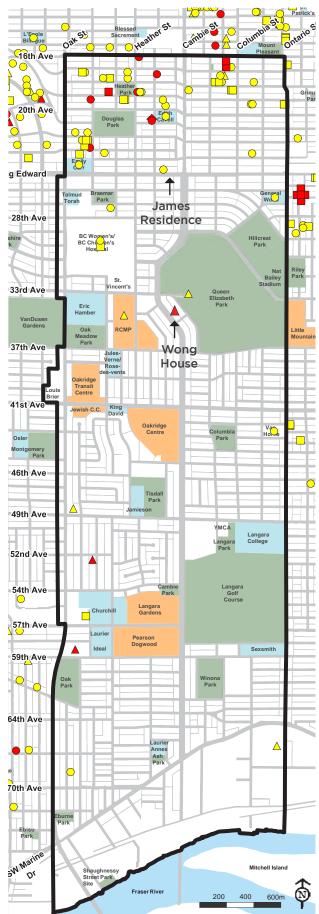
The James Residence is a heritage "B" listed property, protected by the municipal heritage designation bylaw, that was retained and restored as part of a townhouse development along King Edward Ave.

Wong House

The Wong House is an "A" listed property, protected by the municipal heritage designation bylaw, that was retained and restored as part of a seven storey residential development along Cambie St.



Figure 24: Heritage building by class (red indicates protected by legal designation)



KEY FINDINGS & TRENDS

Density is increasing in proximity to Canada Line stations and is expected to continue to do so with more proposed developments in close proximity to stations. Langara is the only existing station with no office space within 400 metres.

In-kind CAC allocations are concentrated in several large redevelopments, namely Oakridge Town Centre and Marine Landing, because the scale of these projects is more favourable to accommodating inkind contributions. Amenities should also be created in areas outside of these major redevelopments, to ensure the whole Corridor has a diversity of residents with access to amenities.

In terms of Placemaking, the goal of preserving historical places and landmarks appears to be working with two successfully retained historical places to date.

LIMITATIONS

The number of jobs in close proximity to existing and future potential Canada Line stations would be valuable to note but this Census data has not been released by Statistics Canada. The release date for labour data is scheduled for November 29, 2017.

Further, it would be interesting to analyze ridership data for the Canada Line to better understand the directionality and on/offloading of riders. With this data, development of job space could be encouraged at station areas that don't currently receive high levels of offloading during the morning commute.

PRINCIPLE 5

PROVIDE A RANGE OF HOUSING CHOICES AND AFFORDABILITY

Objectives

- 5.1 Provide a variety of housing forms, tenures, unit types and sizes
- 5.2 Strategic retention and enhancement of purpose-built rental options and affordable housing stock
- 5.3 Provide adequate options for a diverse community, inclusive of income, age, families, disabled persons, and those with mental illness or addictions

Related City Directions + Policies

Healthy City Strategy "A Home for Everyone – A range of affordable housing choices is available for all Vancouverites." p. 13

Vancouver Housing Strategy (in process)

Our priorities:

- Create more of the right type of housing
- Accommodate Vancouver's changing communities
- Ensure a healthy rental market
- Provide more City land to build new rental housing
- Prioritize delivery of projects
- Prevent, support, and increase pathways out of homelessness



Figure 25: Townhomes near Tisdall Park

#11 DEMOGRAPHICS

Demographics refer to the makeup of the community with regards to age, families, population change, and household spending on housing. This indicator helps identify community diversity and whether the area is becoming more or less diverse. Performance measures that can be used to evaluate this indicator include households spending 30% or more of their income on housing, the age profile of residents, family type of residents, and population change by group.

As of the writing of this report, Statistics Canada 2016 Census data on families and income had not been released. This data should be added to this section when it is released.

Age Profile

The age profile of the City of Vancouver did not change significantly from 2011 to 2016 with slightly fewer children and more residents over the age of 65. The Cambie Corridor saw similar change from 2011 to 2016.

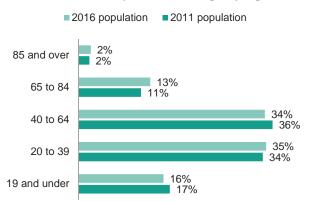
However, the Corridor's age profile does differ from the City in that there are more residents aged 65 and over in the Corridor (19%) than the City (15%). There are also fewer young adults, aged 20 to 39 in the Corridor (30%) compared to the City (35%) but more children under the age of 19.

By neighbourhood, Cambie Village has the greatest percentage of residents below the age of 19 and the fewest seniors aged 65 or over in 2016. Queen Elizabeth and Langara / Marpole have a significant number of seniors over 65, while Marine Landing /Marpole have more mid-range residents in comparison.

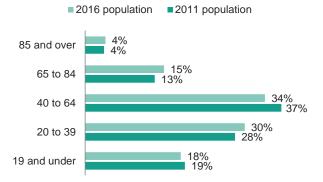
Table 19

2016 Age	Cambie Village	Queen Elizabeth	Oakridge Town Centre	Langara/ Marpole	Marine Landing/ Marpole
19 and under	21%	17%	17%	18%	15%
20 to 39	33%	26%	28%	23%	37%
40 to 64	35%	31%	32%	34%	35%
65 to 84	10%	18%	19%	18%	11%
85 and over	1%	7%	4%	7%	2%

Vancouver Population Change by Age



Cambie Corridor Population Change by Age



#12 HOUSING COMPOSITION

Housing composition refers to the makeup of housing within the area. This indicator measures the variety of forms, tenures, unit types and sizes. This indicator can be evaluated based on housing form, tenure, unit types and sizes and the number of adaptable units for seniors or people with disabilities.

Units Built or Under Construction by Tenure

There has been approximately 1,700 new housing units added to the Cambie Corridor since 2011, and 1,150 units currently under construction. These figures do not take into account the housing that was replaced during this process. However, this development has taken place on approximately 75 parcels of land, much of which was previously single family, and therefore the net additional housing is likely similar to the figures stated.

Marine Landing has seen the greatest number of units built or under construction, with close to 1,400 units. This is followed by Queen Elizabeth neighbourhood with nearly 650 units and Oakridge Town Centre with almost 400 units.

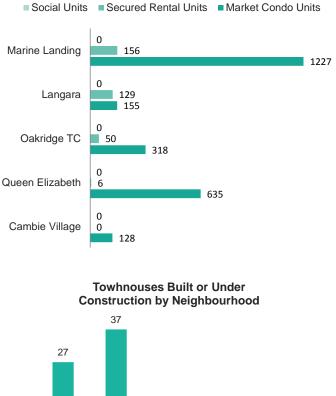
By tenure, about 88% of all units built or under construction in the Cambie Corridor have been market condo units. The remaining 12% of units have been secured rental units. No social units have been built or are under construction within the Corridor as of June, 2017. According to CMHC's Housing Starts and Completions Survey, from 2012 to 2016, 23% of all housing starts in the City of Vancouver were rental units. Though, these are not necessarily secured rental units.

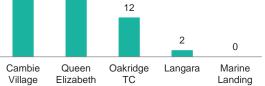
Units Built or Under Construction by Form

About 97% of all units built or under construction are in the form of apartments. The remaining 3%, or 78 units, is in the form of townhomes. Most of these townhomes have been delivered in the Queen Elizabeth neighbourhood, followed by Cambie Village and Oakridge Town Centre.

These figures do not include the approximately 250 townhomes that fall within the Cambie Corridor boundary but were delivered through the Marpole Community Plan.

Tenure of Units Under Construction or Built by Neighbourhood





Apartment Units by Unit Type

About 57% of apartment units built or under construction in Phase 2 of the Cambie Corridor are one bedroom units. There are few studio or three bedroom units in comparison. Most studio units are located within the Langara neighbourhood, and most three bedroom units are located within the Queen Elizabeth neighbourhood.

These figures do not take into account the 78 townhome units, which are two or three bedrooms.

Family Units Built or Under Construction

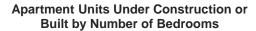
Approximately 42% of all units built or under construction have been family units, defined as units with two or more bedrooms. The percentage of units developed that qualified as family units differ by neighbourhood. Almost 60% of all units built or under construction in the Cambie Village and Queen Elizabeth neighbourhoods qualify as family units. Only 34% of units in the Marine Landing neighbourhood qualify as family units.

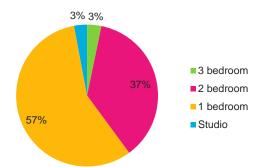
In 2016, the City introduced a new housing mix policy with a minimum requirement of 35% family units in all residential projects. In strata projects, 25% must be two bedrooms and 10% three or more bedrooms. In rental projects any mix of two and three bedrooms is permitted. This policy will increase the number of three bedroom units in the Corridor going forward.

Seniors' & Adaptable Units

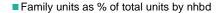
There have been 91 units of seniors' housing built to date in Phase 2 of the Cambie Corridor. These units are found within one building in the Oakridge Town Centre neighbourhood. The building is an unsecured rental building.

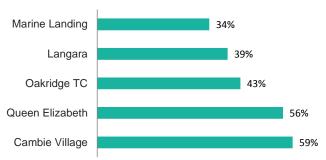
In terms of adaptable units, all dwelling units in the City constructed since 2014 provide adaptability features as required in the Vancouver Building Bylaw. These are interior unit features including a 3-piece washroom on the main level, wider corridors and doors, and accessible hardware. However, the current bylaws do not ensure accessibility to the exterior of the home, or to the elevator in an apartment building. Therefore, it is difficult to estimate how many units are accessible from both the exterior and interior. This gap in building bylaw is currently being explored by City staff.





Family Units as % of Total Units Built or Under Construction by Neighbourhood





#13 AFFORDABLE + RENTAL HOUSING

Affordable and rental housing refers to the retention and addition of affordable and rental housing within the district area. This housing stock is very important to maintaining and creating a diverse community. Performance measures that can be used to evaluate this indicator include supportive, social, seniors', secured rental and secondary rental housing. Average rents and the use of Vancouver's DCL waiver to provide lower rents are also potential measures.

Social & Secured Rental Units

As shown in Indicator #12, there are no social housing units under construction or built within Phase 2 of the Cambie Corridor as of June, 2017. However, there are two rezoning applications approved in the Oakridge Town Centre neighbourhood that will contain 336 social housing units, in total. There is also one rezoning proposed for the Langara / Marpole neighbourhood that will contain 525 units of social housing in the form of affordable and supportive housing.

There have been 341 units of secured rental housing built or under construction as of June, 2017. Secured rental housing is important to creating affordability and stability for renters over time. These units are largely concentrated in the Marine Landing and Langara neighbourhoods. As of April, 2017, there was approximately 3,000 units of secured rental housing under construction in the City of Vancouver.

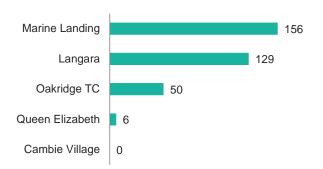
Seniors' & Secondary Rental Units

As described in Indicator #12, 91 units of seniors' housing have been built in the Oakridge Town Centre neighbourhood. However, these were market rate, unsecured rental units and are thus not considered affordable.

In terms of secondary rental units, at this time there is no way to measure the number of market condo units that are being rented out in the secondary market.

Cambie Corridor Phase 2 Secured Rental Units Built or Under Construction

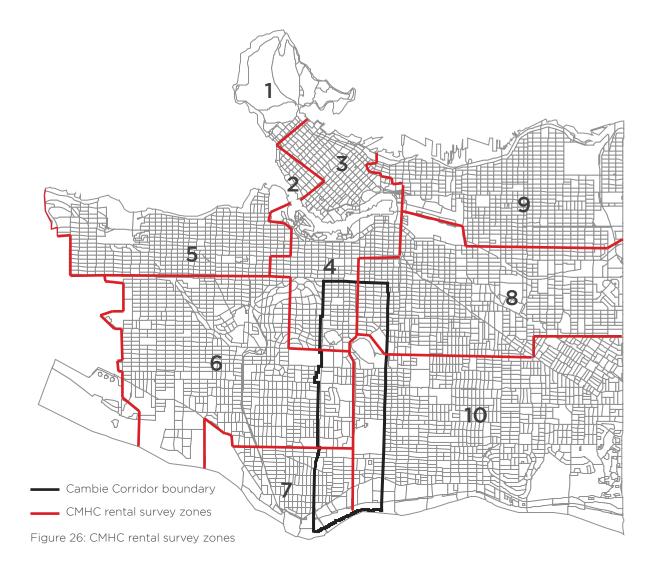
Secured rental units built or under construction



Average Rent

2011 and 2016 average rent rates are shown by unit type, sourced from the Canadian Housing and Mortgage Corporation's (CMHC) Rental Market Survey. CMHC defines area by zones, as shown in Figure 26; there are five different zones that help make up the Corridor and its surrounding area.

The rents shown are an indicator for market rents; the CMHC survey tends to underestimate rents, especially for newer rental stock.



CMHC Rental Market Reports

The below charts show the change in rent by zone for 2011 and 2016.

Though this is the best data available, it should be noted that these zones cover large areas outside of the Corridor and tend to underestimate rents.

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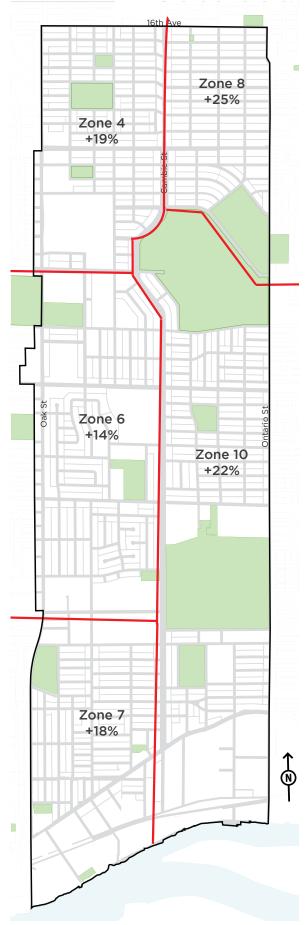
2011 by Zone	Studio	1 - bed	2- bed	3 - bed
4 - South Granville/Oak	\$857	\$1,084	\$1,527	\$1,860
6 - Westside/ Kerrisdale	\$819	\$1,115	\$1,705	\$2,395
8 - Mt. Pleasant /Renfrew Heights	\$766	\$915	\$1,174	\$1,327
10 - Southeast Vancouver	\$740	\$922	\$1,239	\$1,072
7 - Marpole	\$696	\$812	\$1,069	\$1,120
Vancouver	\$881	\$1,045	\$1,493	\$1,859

Table 21

2016 by Zone	Studio	1 - bed	2- bed	3 - bed
4 - South Granville/Oak	\$1,047	\$1,295	\$1,799	\$2,199
6 - Westside/ Kerrisdale	\$965	\$1,264	\$1,885	\$2,697
8 - Mt. Pleasant /Renfrew Heights	\$998	\$1,103	\$1,459	\$1,667
10 - Southeast Vancouver	\$958	\$1,159	\$1,425	\$1,272
7 - Marpole	\$815	\$955	\$1,200	\$1,394
Vancouver	\$982	\$1,268	\$1,757	<i>\$2,105</i>

From 2011 to 2016, the City of Vancouver's average rent for all bedroom types increased by 16%. All CMHC rental zones within the Cambie Corridor, with the exception of Zone 6 - Westside/Kerrisdale increased at a greater rate than that of the City.





KEY FINDINGS & TRENDS

Phase 2 has added a smaller proportion of rental units built, 12%, when compared to the City of Vancouver, 23%, during a similar timeframe. However this ratio does not take into account proposed secured rental units, of which there are close to 600. In addition, this ratio is expected to change with the introduction of Phase 3 of the Cambie Corridor.

The secured rental units that have been built, or are under construction, in Phase 2 are not distributed evenly throughout the Corridor. For example, Queen Elizabeth has had half the total number of units developed as Marine Landing, but only has six, compared to 156, secured rental units. Though the economics for secured rental may be more favourable in larger developments, such as those found in Marine Landing, areas that have no social or secured rental units may experience less community diversity and social cohesion over time.

Further, there have been no social housing units built in Phase 2 of the Cambie Corridor to date. There are some units planned for the Corridor; these are also concentrated in a few neighbourhoods, within major developments.

In addition to the units planned, and expected Phase 3 policies related to social and rental housing, there are also policies within the Marpole Community Plan related to social and rental housing. This includes a target of 20% social housing units on several sites identified near Cambie Street and SW Marine Drive, with 50% of these units provided to families.

LIMITATIONS

Statistics Canada 2016 Census information on families and income has not been released yet. This is a major limitation and should be considered in the demographics section once it is released.

Another limitation is the estimated rents. These rents are for zones that span the boundaries of the Cambie Corridor and are likely underestimated. Further, it would be valuable to know the average rents or sale prices of newly developed units in the Corridor, but this data is unavailable.

PRINCIPLE 6

BALANCE CITY-WIDE AND REGIONAL GOALS WITH THE COMMUNITY AND ITS CONTEXT

Objectives

- 6.1 Contribute to Vancouver's goal of becoming the greenest city
- 6.2 Design and locate densities and forms to meet city and regional needs
- 6.3 Work with the community in the planning of the Corridor, recognizing the uniqueness of the neighbourhoods

Related City Directions + Policies

Greenest City 2020 Action Plan

"Goal: Lead the world in green building design and construction." p. 15

"Goal: Vancouver residents enjoy incomparable access to green spaces, including the world's most spectacular urban forest." p. 33

"Goal: Vancouver will become a global leader in urban food systems." p. 45

Healthy City Strategy

"Feeding Ourselves Well - Vancouver has a healthy, just and sustainable food system." p. 13

"Active Living and Getting Outside - Vancouverites are engaged in active living and have incomparable access to nature." p. 14



Figure 28: Tisdall Park

#14 ACCESS TO NATURE

Access to nature refers to residents and visitors access to green spaces and nature. These spaces include community gardens, city parks, and greenways. These spaces have associated health benefits and contribute to a sense of community. This indicator can be evaluated based on performance measures such as proximity to green spaces, number of trees or canopy cover, and impervious surface cover.

Canopy Cover

Canopy cover refers to how much ground is covered by tree leaf canopies as seen from the air. The Cambie Corridor had a canopy cover of approximately 12.7% as of 2013. As shown in Figure 29, there is less canopy cover in the Marine Landing / Marpole neighbourhood and Oakridge. This is related to land uses in these neighbourhoods, including industrial and employment lands near SW Marine Drive and Oakridge Centre.

A 2014 study by the City of Vancouver found that the City had an 18% canopy cover overall, including Stanley Park. It also found that canopy cover has been declining citywide from 22.5% in 1995, to 20% in 2006, and 18% in 2013. Much of the City's canopy is found on private property, including residential, institutional, commercial and industrial land area.



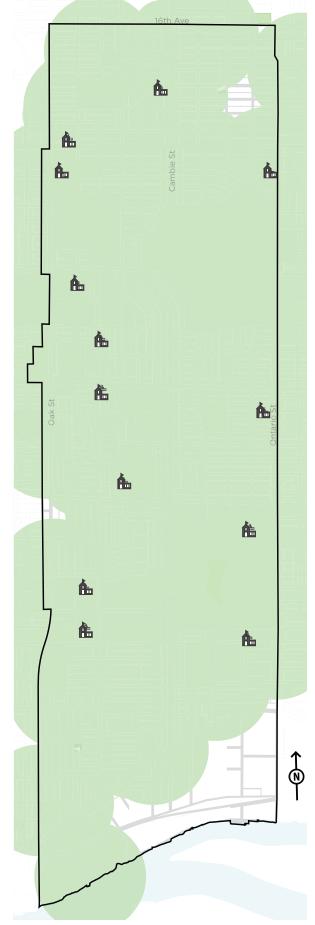
Figure 29: Tree canopy cover map

Proximity to Green Space

The Cambie Corridor has ample park space. It is estimated that only 2% of the Corridor's population, or about 700 people, are not within a five minute (400 metre) walk of a park, or other green space. This includes green spaces found on institutional sites such as schools.

This figure is expected to improve with the planned addition of a waterfront park near Cambie St and the Fraser River, where a notable gap currently exists.

This performance measure does not take into account the quality of the green space. This is difficult to measure but is also expected to improve with the planned park expansions and improvements, and new green spaces coming to major project sites such as Oakridge Town Centre and Pearson Dogwood. As the Cambie Corridor becomes more concentrated with multifamily developments, the quality and quantity of public green spaces will become increasingly important.





Areas within 400 m of green space

Figure 30: Areas within 400 m access to green space

#15 LOCAL FOOD

Local food refers to local food assets within the district area. Food assets include community garden plots, urban orchards, urban farms, farmers markets, community food markets, community kitchens, community composting and food hubs. This indicator can be evaluated on performance measures including the number of local food assets, neighbourhood food networks, proximity to food stores and food security.

Food Security

In 2013/2014 the *My Health My Community* survey asked residents about their food security. Specifically, participants were asked "Which of the following statements best describes the food eaten in your household in the past 12 months?". Answer options included "You always have enough of the kinds of food you wanted to eat", "You had enough to eat, but not always the kind of food you wanted", "Sometimes you did not have enough to eat" and "Often you did not have enough to eat".

The results are broken down by local area boundary, as shown below.

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Local area boundary	Food secure (enough to eat)
Riley Park	95%
South Cambie & Oakridge	97%
Marpole	91%
City of Vancouver	92 %

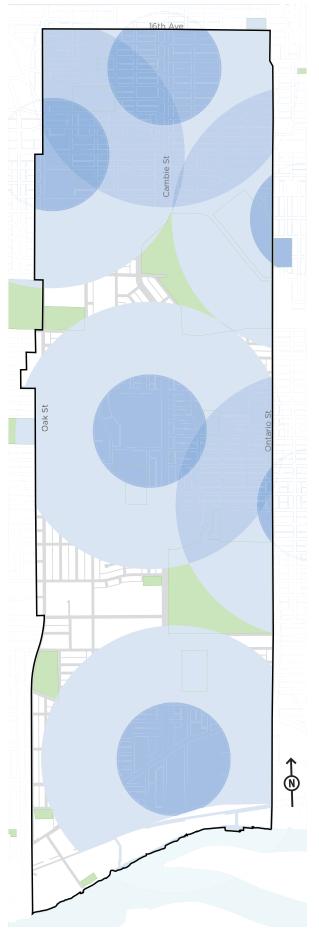
Proximity to Food Stores

In 2010, there were three grocery stores of approximately 80,000 sq. ft. located in the Cambie Corridor. Since then, a fourth grocery store has opened in Marine Landing, increasing that figure to 105,000 sq. ft. Figure 29 shows an approximate 5 and 10 minute walking radius to the supermarkets or other smaller food stores.

400 m radius (5 min walk)

800 m radius (10 min walk)

Figure 31: 400 m and 800 m proximity to food stores



Neighbourhood Food Networks

Neighbourhood Food Networks (NFNs) are a result of a collaborative effort by community members, organizations, and agencies to create communitybased food initiatives and programs. NFN representatives from across the City collaborate, share best practices, and advocate for food justice.

There are currently two food networks that cover a large span of the Cambie Corridor. The Marpole-Oakridge NFN operates in the Marpole and Oakridge neighbourhoods; it was founded in the Spring of 2013. The Little Mountain Riley Park NFN operates in the Riley Park neighbourhood and was founded in 2014.

Food Assets

As of 2017, there are only four community gardens within the Cambie Corridor with another three just outside of it. All of the gardens are either private or owned by the Park Board. Within the City of Vancouver, there are over 110 community gardens in city parks, schoolyards and on private property.

Other food assets include urban orchards, urban farms (businesses), farmers markets, community food markets, community kitchens, community composting and food hubs. Other known food assets have been mapped in Figure 32. The Little Mountain Riley Park NFN is currently in the process of mapping food assets for their operational area.





#16 CITIZEN ENGAGEMENT

Citizen engagement refers to the involvement of stakeholders in decision making. This indicator involves accountability in decision making as well as diversity of stakeholder engagement. This indicator can be evaluated on the number of planning engagement sessions and participants at the engagement sessions. Community volunteerism is another good measure of citizen engagement.

Number of Citizens Engaged

Over 1,500 residents, citizens, businesses, property owners, and other stakeholders participated in the Phase 2 planning process in 2010 and 2011. This included interested organizations, community groups, public agencies, firms, institutions and individuals in a variety of settings. Events included five large scale open houses with a total of 1,060 attendees, three mid-scale workshops and walkabouts, and numerous small scale community group and stakeholder meetings.

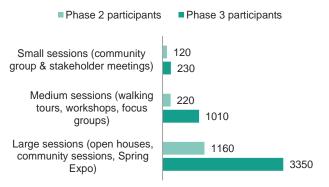
In comparison, Phase 3 of the Cambie Corridor planning process has involved the engagement of close to 6,000 people from 2015 to July of 2017. This number will continue to increase as the planning process continues.

Number of Engagement Sessions

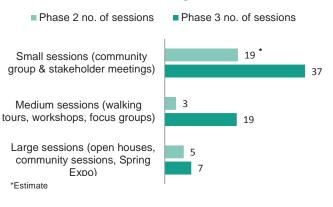
Phase 2 held approximately 27 sessions to engage the community and stakeholders, including 5 large scale open houses. Phase 3 to date has held approximately 63 sessions to date, including 7 large scale open houses and community sessions.

In addition to the above-mentioned Phase 2 engagement sessions, each rezoning application has an open house and legally mandated pubic hearing. These events provide additional opportunity for the community to provide feedback and engage in the development process.

Citizens Engaged in Cambie Corridor Planning Process



Engagement Sessions for Cambie Corridor Planning Process



KEY FINDINGS & TRENDS

The Cambie Corridor has good access to park and green space and this is anticipated to improve with the addition of a park in Marine Landing.

Canopy cover is lower in the Corridor than the City overall, though the City's figure includes Stanley Park. Tree canopy should be protected and new trees planted in the Corridor, as with the City overall, which is trying to increase overall canopy cover to 22% by 2050.

Access to food is improving in the Corridor, with the addition of a new supermarket at Marine Gateway. However, there are still large areas in Langara / Marpole, around 57th Ave, that are lacking easy access to healthy food options.

Citizen engagement has significantly increased from Phase 2 to Phase 3 of the Corridor planning. Small and medium engagement sessions have increased substantially, which is a result of feedback received by the City after Phase 2. This is a positive shift, showing the City is increasing its involvement of citizens and increasing the number of opportunities to become involved. However, there is still missing qualitative data relating to whether the community feels empowered through this process. This question is relevant to the City in general, and relates to engagement practices and processes.

LIMITATIONS

Community volunteerism, or a similar metric that measures the amount residents contribute to the greater community, would be valuable to better assess citizen engagement. However, no known census or survey records this information.

In addition, there is no canopy cover data from 2010/11 to compare the most recent data to. The canopy cover is not believed to have changed significantly, though more information related to trees removed and planted would help to better inform the access to nature indicator.

PRINCIPLE 7

ENSURE JOB SPACE AND DIVERSITY

Objectives

- 7.1 Encourage high levels of employment density and consider the value of existing affordable commercial spaces
- 7.2 Promote office, entertainment, creative incubators, educational facilities and retail space within mixed use developments
- 7.3 Avoid displacement or destabilization of existing industrial and employment areas

Related City Directions + Policies

Vancouver Economic Action Strategy "Target 1B: Protect, enhance, increase and densify employment spaces." p. 10

Healthy City Strategy "Making Ends Meet and Working Well - Our residents have adequate income to cover the costs of basic necessities, and have access to a broad range of healthy employment opportunities." p. 13



Figure 33: Retail at Marine Gateway

#17 EMPLOYMENT + GREEN ECONOMY

Employment and green economy refer to the amount and diversity of employment uses within the district. Adequate job space provides local employment opportunities for residents and helps create a more complete community. A diverse mix of employment opportunities also increases urban complexity.

Employment and green economy can be evaluated on performance measures such as industrial land area, employment land area, job space and affordable commercial space and green jobs.

Employment Space

As identified in Indicator #3, Urban Complexity, there is approximately 186 ha of industrial and institutional space within the Cambie Corridor. This space is spread throughout the Corridor, with a concentration of industrial land in the Marine Landing / Marpole neighbourhood.

Office space in the Corridor has increased from 342,100 to 664,100 sq. ft. from 2012 to 2017. The vast majority of this new space is found in Marine Landing / Marpole, though there will be significant new office space developed in the approved Oakridge Centre and newly approved Pearson Dogwood developments.

Retail has also increased in the Corridor, largely a result of the Marine Landing developments, which added approximately 300,000 sq. ft. of retail space.

Other major employment centres within the Corridor, including:

- Oakridge Centre (rezoning in process);
- Pearson Dogwood (rezoning in process);
- Langara College; and
- BC Women's and Children's Hospital.

Green Jobs

Vancouver's Green Economy includes seven subsectors:

- 1. Local food
- 2. Green building design and construction
- 3. Clean technology, alternative energy and green building products
- 4.Green infrastructure, transportation and planning
- 5. Sustainability services and education
- 6. Land and water remediation and environmental consulting
- 7. Materials management and recycling

In 2010 there were an estimated 54 green jobs on five sites within the Corridor. Four out of five of these sites were within the Marine Drive / Marpole industrial area, with the fifth at Langara College.

The results of a 2016 green job survey are set to be released soon. However, due to a change in methodology, these results will not be geo-located and thus a change within the Corridor will likely not be measurable.

KEY FINDINGS & TRENDS

The Cambie Corridor has a good mix of industrial, institutional and other employment space. Office and retail spaces have increased since 2011, with institutional and industrial spaces remaining fairly stable to date.

DATA LIMITATIONS

The City hired a consultant to undertake a comprehensive employment and jobs inventory in 2012; however there is no more recent data of these figures available for this evaluation. This data would be valuable in that it would allow for an analysis of the types of businesses and employers coming to and leaving the Corridor.

In addition, there are no recent green job figures geo-located and, with the change in methodology, it is unclear whether there will be more data in the future.

EVALUATION FINDINGS

FINDINGS SUMMARY

SOCIAL COHESION + ACCESSIBILITY				
Indicator	Performance Measure	Findings 2010/11 - 2016/17		
#4 Social cohesion	Availability of childcare Support network Access to doctor Sense of belonging Access to community centres	Increased No findings (no new data) No findings (no new data) No findings (no new data) No findings (no 2011 data)		
#9 Contributions from developmen	nt Amenities planned Amenities delivered	Significant amenities planned Few amenities delivered to date		
#11 Demographics	Age profile Household spending on housing Family structure Seniors living alone	No significant change Not included Not included Not included		
#12 Housing composition	Housing tenure Built form Unit type Family units Seniors' + adaptable units	Increase in diversity through rental Increase in diversity (townhomes) Most units 1-bed and 2-bed 42% of new units 91 new seniors' units, not enough information on adaptable units		
#13 Affordable + rental housing	Social + secured rental units Affordable seniors' + adaptable Average rent	341 secured rental units, no social units (861 social units planned) No affordable seniors' units General greater increase than City		
#16 Citizen engagement	Planning engagement sessions Participants engaged Community volunteerism	Significant increase (Phase 2 to 3) Significant increase (Phase 2 to 3) Not included		

TRANSPORTATION + MOBILITY

Indicator	Performance Measure	Findings 2010/11 - 2016/17			
#1 Transportation shift	Mode share Vehicle count Pedestrian count Access to rapid transit Commute duration	Census data not yet available Significantly increased No notable trends Increased Not included			
#5 Cycling infrastructure + experience	Network connectivity Bike racks + other infrastructure Cyclist safety Cyclist count	Increased connectivity Increase in bike racks Increased collisions Not included			
#6 Pedestrian infrastructure + experience	Pedestrian safety Sidewalk network Sidewalk maintenance Neighbourhood walkscore	Increased collisions No change No findings (no new data) Most nhbds greater than 70			

PUBLIC SPACE			
Indicator	Performance Measure	Findings 2010/11 - 2016/17	
	Active uses at grade Perceived safety Street furnishings Public play spaces	No findings (no 2011 data) No findings (no new data) Not included Not included	
	Preserved historical places Activities in public spaces Public art Street trees	Two properties retained/restored Not included Not included Not included	
DENSITY + COMPLEXITY			
Indicator	Performance Measure	Findings 2010/11 - 2016/17	
-	Population density Dwelling density Employment density	General increase (varied by nhbd) General increase (varied by nhbd) No findings (no 2011 data)	
	Cultural + non-profit spaces Industrial + institutional spaces Retail spaces Entertainment spaces	No findings (no 2011 data) No findings (no 2011 data) Increase in some nhbds Not included	
	Population within 400 m of station Dwellings within 400 m of station Industrial + office within 400 m Major trip generators near transit		
	Job space Affordable commercial space Green jobs	Some increase in office space Not included Not included	
URBAN METABOLISM			
Indicator	Performance Measure	Findings 2010/11 - 2016/17	
	Green buildings Energy use Renewable energy generation	Not included Not included Not included	
Water use	Water use	Not included	
Zero Waste	Waste diversion	Not included	
HABITAT + ECOSYSTEM			
	Proximity to green spaces Tree canopy cover	98% of residents within 400 m 12.7% canopy cover	
	Food assets Food security	Increased No findings (no new data)	
	Management features	Not included	
Storm + rainwater management	Management leatures		
	Water quality	Not included	

FINDINGS SUMMARY CONT.

The indicators have been reorganized by theme in summary pages 76 and 77. This has been done to better summarize the key themes and findings by topic.

Many of the indicators do not have significant findings at this time due to the lack of historical data from 2010/2011 and/or more recent data. However, available information has been included to provide a benchmark for potential future evaluations.

Indicators show that Phase 2 has helped improve Social Cohesion + Accessibility with the addition of childcare, and more diversity in housing tenure, built form, and new seniors' and family units. Secured rental units have been added to the Corridor's housing stock, though no social housing units have been delivered in Phase 2 to date. There have been few amenities delivered as of this evaluation, though significant amenities have been planned for the Corridor. These include new social housing, additional childcare, new and improved park spaces, etc. In addition, several significant amenities are currently under construction, including the Marpole Family Place and childcare at Marine Landing. Citizen engagement markedly increased from the Phase 2 to Phase 3 planning programs, with more citizens becoming engaged and more opportunities for engagement in smaller event settings.

In terms of **Transportation + Mobility**, several key performance measures such as mode share, and vehicle, cyclist and pedestrian volumes were not available for this evaluation. However, data shows that vehicle counts at certain intersections have increased, along with collisions involving pedestrians and cyclists. There have been some improvements to cyclist and pedestrian experience and connectivity, though most improvements have been planned to occur in Phase 3 of the plan. Access to rapid transit has improved with increased density near stations, and is expected to continue to improve with the addition of more density and transportation improvements.

No significant findings were found for the theme of **Public Space**. There was a lack of data for the Public Realm and Placemaking indicators. Two historical properties have been retained in Phase 2 thus far. Much of the Corridor's public realm has

not seen significant change since 2011, with the exception of a new public plaza at Marine Gateway and park improvements at Hillcrest and Riley Park. These indicators will see significant additions and improvements within Phase 3.

Density + Complexity have generally increased within the Corridor, with more dwellings, population, office and retail space. Most new additions have been concentrated in certain neighbourhoods, specifically the Marine Drive / Marpole neighbourhood with the addition of Marine Gateway. There is no historical inventory of cultural and non-profit spaces, therefore, this factor of urban complexity cannot be evaluated at this time. Density in proximity to stations has increased at certain stations, with more change expected with the redevelopment of Oakridge Town Centre. There is a lack of data for overall employment space and jobs, though office and retail space has increased in Phase 2.

No data was found under the theme of **Urban Metabolism**. However, performance measures such as green buildings, energy use, renewable energy generation, water use, and waste diversion, should be considered in potential future evaluations.

Habitat + Ecosystem has improved somewhat in Phase 2, though many performance measures were not able to be evaluated at this time. Most residents already enjoy close proximity to green space, though canopy cover is lower in the Corridor than the City overall, and significantly less than the City's goal. The local food indicator has improved with the addition of two Neighbourhood Food Networks, although, the Corridor has few community gardens compared to other areas of the City. Other indicators including storm and rainwater management, clean water, and clean air were not evaluated.

CHALLENGES + OPPORTUNITIES

There are a number of challenges and opportunities identified through the development of this report. First, because this evaluation has occurred in a short timeframe, and for the first time, some data was found to be unavailable and some was not tracked down in the time required. As a result, this document should be considered a baseline for future evaluations, not a complete evaluation.

In addition, Phase 2 is still largely incomplete and there is still a significant amount of development to come. A public benefits strategy and many transportation improvements have been planned for Phase 3 of the Corridor, making it difficult to evaluate these measures at this time. In future iterations of the evaluation, the two Cambie Corridor planning phases should be evaluated as one, to give a more holistic view.

Another challenge is the difficulty of knowing who the new Cambie Corridor residents are. Family Census data will shed some light on this when it is released in August of 2017; however, many of the developments are newly occupied and these residents will likely not be included in Census figures. Understanding who is moving into the Corridor is important to the planning of public benefits and amenities. It would also be interesting to know whether families are occupying new developments or whether these family units are being occupied by other demographics.

In addition to new residents' experience in the Corridor, it would be valuable to have a better understanding of all residents' experience with Phase 2 so far, and to understand what amenities and infrastructure they perceive as lacking. The three community groups involved in this process discussed a number of concerns, and it would be beneficial to understand how widely these concerns are shared within the community.

This missing data creates an opportunity for the City to learn more. To better understand new residents' experiences in the Cambie Corridor and to help plan for Phase 3 of the Corridor, a postoccupancy survey could be conducted. Wider resident input would also be valuable for the planning of Phase 3, though some of this has been captured through increased citizen engagement in the Phase 3 planning process

Missing data

Some of the most prominent and important missing data identified is 2016 Statistics Canada Census data. Data such as income, percent of income spent on housing, family status, and transportation mode, has been collected as part of the Census but has not been released. This data should be considered and added into the evaluation when it becomes available.

In addition, there are several indicators that were identified as related to the Cambie Corridor principles, but were not included in this evaluation. These indicators include Energy Efficiency, Water Use, Zero Waste, Storm and Rainwater Management, Clean Water, and Clean Air. These were not included in the report as data for the Corridor area was not readily available at the time of this report.

Further, there were some issues identified by community groups that were not included due to a lack of data or the inability to evaluate the data. For example, concerns were raised about the length of time a property is vacant prior to development, due to related issues of litter, graffiti, unkept yards, etc. Another issue raised was the quality of play spaces included in new developments. These would be interesting measures to evaluate, though no method was found to do so within the project timeframe.

Lastly, for some performance measures such as childcare, and non-profit and cultural spaces, amongst others, it was difficult to find the net difference from 2011. This is because new additions are kept track of but not spaces lost or replaced through the development process. The spaces lost are believed to be minimal at this point in time, though, going forward this may become more of an issue as more areas are redeveloped. It should be noted that there is a no net loss childcare policy in place for Phase 2 and 3 of the Cambie Corridor, and so no net loss of childcare is expected.

PLANNING IMPLICATIONS

Many important "wins" that have been delivered or planned for the Corridor so far, such as social and affordable housing, and new childcare spaces, are the result of in-kind contributions in large project sites. Though these large project site additions are important for the Corridor overall, it is also important to consider how, once these sites have been built out, the Corridor will continue to gain more social, affordable, and secured rental housing, and childcare. Further, how these important amenities are distributed throughout the Corridor is important. If they are only concentrated on several large sites, community diversity will not be promoted as effectively.

Sustainable transportation modes, and a safe and attractive walking and cycling environment, are important components of the Phase 2 Cambie Corridor plan. The data for mode share within the Corridor is not available at this point in time, however, available data indicates that there have been more pedestrian and cyclist collisions and an increase in vehicle traffic. Some of these increased cyclist and pedestrian collisions may be due to increased overall volumes, however, more emphasis should be placed on pedestrian and cyclist safety going forward in Phase 3 of the Cambie Corridor, especially with increased residential and employment space planned.

Further, in many cases, it was difficult to evaluate whether the addition or planned addition of an amenity is sufficient for the needs of the community. This is because there is no target or needs assessment that estimates the level of amenity needed by the existing and future community. For example, more childcare will always be an improvement, but given the assumption that some of the new units will be occupied by young families, how much is enough? A needs assessment is currently underway to assist in the planning of a public benefits strategy as part of Phase 3 of the Cambie Corridor, however, this assessment was not available at the time of evaluation. Going forward, this information could help evaluate the level of remaining need in the Corridor.

Lastly, this evaluation could be of more value if it included a comparative analysis, either to other City area plans or to the City overall. Data was collected for the City for comparison where available, though it is missing in many indicators. This analysis would allow the City to benchmark the Corridor's progress against other planning areas or the City overall. If several area plans were compared, it would also allow the City to understand which plans have been the most successful and unsuccessful in certain areas, and determine what policies or processes have made them work, to improve future planning processes.

NEXT STEPS

This report represents a baseline evaluation of the Cambie Corridor. Therefore, it is important to continually assess the area plan into the future. The best timeframe for this continued evaluation is the year after Census data has been collected, or every 5 years. The next timing of evaluation based on the Census timeframe would be the end of 2022 or early 2023.

Ideally, future evaluation iterations would collect the same metrics as this report, with the addition of other metrics that were unavailable at this time. This will allow for a longitudinal study of change in the Cambie Corridor.

In addition, if the evaluation process continues, it could become more formalized. As a more regular and continual evaluation process evolves, relationships and deliverables with related City departments could be formalized to make the data collection process more efficient and reliable. If an evaluation process was implemented for all City area plans, there could be a regular expectation that indicator-related City departments regularly collect and report out on each area plan. This should not be too time consuming for other departments, as it is largely a matter of being aware of what data to collect on a regular basis and for what geography.

Further, other City departments may have, or may be exploring, their own evaluation frameworks. For instance, Recreation Services is currently exploring the development of a framework for the evaluation of community centres. If and when these frameworks are complete, they should be added to this evaluation, to create a more complete and comprehensive review.

Lastly, as a result of community group interest and project findings, the City has expressed interest in surveying new residents of the Corridor to better understand who is moving in and what their experiences have been thus far. A draft postoccupancy survey has been created with the community groups and City staff, and has been attached in Appendix B.



Figure 34: Marine Drive Canada Line station

REFERENCES

Background Information

City of Vancouver documents

- Cambie Corridor Plan (2011)
- Cambie Corridor Phase 3 Community Profile (2015)
- 2009 Social Indicators Report (Social Development)
- City of Vancouver Grandview-Woodland Community Plan: Trace document (2016)
- Greenest City 2020 Action Plan 2015 2020
- Healthy City Strategy Phase 1 2014 2025
- Healthy City Strategy Phase 2 Action Plan 2015 2018
- Transportation 2040 Plan (2016)
- Vancouver Biodiversity Strategy (2016)
- Vancouver Economic Action Strategy (2016)

Related documents

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DATA SOURCES

	Indicator	Data Source
	Phase 2 status	Cambie Corridor Rezoning Applications and Development Tracking spreadsheet Internal design analysis
#1	Transportation shift	Statistics Canada Census (mode share) City of Vancouver Traffic & Data Management (vehicle, pedestrian counts)
#2	Land use density	Statistics Canada Census (population, dwellings) VanMap Issued business licenses 2017 (private businesses)
#3	Urban complexity	City of Vancouver Open Data Catalogue (cultural spaces) MapInfo (institutional and industrial spaces) Rezoning applications (retail and office spaces)
#4	Social cohesion	Cambie Corridor 2015 Community Profile (childcare) Cambie Corridor Spring 2017 open house boards (childcare) My Health My Community survey (support network, access to doctor) Board of Parks and Recreation (access to community centres)
#5	Cycling infrastructure + experience	Cambie Corridor Spring 2017 open house boards (transportation improvements) City of Vancouver Open Data Catalogue (bike racks) City of Vancouver Traffic & Data Management (cyclist collisions)
#6	Pedestrian infrastructure + experience	Cambie Corridor Spring 2017 open house boards (transportation improvements) City of Vancouver Traffic & Data Management (pedestrian collisions) My Health My Community Survey (sidewalk network) www.walkscore.com
#7	Public realm	VanMap Issued business licenses 2017 (active uses) My Health My Community survey (perceived safety)
#8	Density in proximity to stations	Statistics Canada Census (population, dwellings) MapInfo office inventory
#9	Contributions from development	Cambie Corridor Public Benefits Tracking spreadsheet Cambie Corridor Spring 2017 open house boards (amenities delivered and planned)
#10	Placemaking	My Health My Community survey (community belonging) Cambie Corridor 2015 Community Profile (heritage buildings)
#11	Demographics	Statistics Canada Census (population)
#12	Housing composition	Cambie Corridor Rezoning Applications and Development Tracking spreadsheet
#13	Affordable + rental housing	Cambie Corridor Rezoning Applications and Development Tracking spreadsheet CMHC Rental Market Survey
#14	Access to nature	City of Vancouver Parks Department (tree canopy)
#15	Local food	My Health My Community survey (food secure) City of Vancouver Open Data Catalogue (community gardens and food trees)
#16	Citizen engagement	Cambie Corridor Outreach Tracking spreadsheet
#17	Employment + green economy	MapInfo (green jobs)

APPENDIX A: GENERAL FRAMEWORK OUTLINE

SOCIAL COHESION + ACCESSIBILITY					
Indicator	Performance Measure	Target/Direction			
Social cohesion	Availability of childcare Support network Access to doctor Access to community centres	Increase 4+ people to rely on Increase Increase			
Contributions from development	Amenities planned Amenities delivered	Increase Increase			
Demographics	Age profile Household spending on housing Family structure Seniors living alone	Increase diversity Decrease Increase diversity Decrease			
Housing composition	Housing tenure Built form Unit type Family units Seniors' + adaptable units	Increase social + secured rental Increase diversity Increase diversity Increase Increase			
Affordable + rental housing	Social + secured rental units Affordable seniors + adaptable Average rent	Increase Increase Decrease/maintain			
Citizen engagement	Planning engagement sessions Participants engaged Community volunteerism	Increase Increase Increase			

TRANSPORTATION + MOBILITY

Indicator	Performance Measure	<i>Target/Direction</i> 2/3 of trips by foot, bike + transit Decrease/maintain Increase pedestrians Increase Decrease		
Transportation shift	Mode share Vehicle count Pedestrian count Access to rapid transit Commute duration			
Cycling infrastructure + experience	Network connectivity Bike racks + other infrastructure Cyclist safety Cyclist count	Increase connectivity Increase Eliminate fatalities Increase cyclists		
Pedestrian infrastructure + experience	Pedestrian safety Sidewalk network Sidewalk maintenance Neighbourhood walkscore	Eliminate fatalities Improve connectivity Improve sidewalk quality Greater than 70		

	PUBLIC SPACE		
	Indicator	Performance Measure	Target/Direction
	Public realm	Active uses at grade Perceived safety Street furnishings Public play spaces	Increase Increase Increase + improve Increase + improve
	Placemaking	Sense of belonging Preserved historical places Activities in public spaces Public art Street trees	Increase by 10% Increase/maintain Increase Increase Increase
	DENSITY + COMPLEXITY		
	Indicator	Performance Measure	Target/Direction
	Land use density	Population density Dwelling density Employment density	Increase Increase Increase
U	Urban complexity	Cultural + non-profit spaces Industrial + institutional spaces Retail spaces Entertainment spaces	Increase/maintain Increase/maintain Increase/maintain Increase/maintain
	Density in proximity to stations	Population within 400 m Dwellings within 400 m Industrial + office within 400 m Major trip generators near transit	Increase Increase Increase/maintain Increase/maintain
	Employment + green economy	Job space Affordable commercial space Green jobs	Increase/maintain Increase Increase
	URBAN METABOLISM		
	Indicator	Performance Measure	Target/Direction
	Energy efficiency	Green buildings Energy use Renewable energy generation	All new buildings carbon-neutral Decrease 100% renewable by 2050
	Water use	Water use	Reduce per capita by 33%
	Zero Waste diversion		Increase
	HABITAT + ECOSYSTEM		
	Indicator	Performance Measure	Target/Direction
	Access to nature	Proximity to green spaces Tree canopy cover	All residents within 400 m Increase to 22% by 2050
	Local food	Food assets Food security	Increase by 50% of 2010 levels Increase
	Storm + rainwater management	Management features	Increase
	Clean water	Water quality	Increase/maintain
	Clean air	Air quality	Increase/maintain

APPENDIX B: DRAFT POST-OCCUPANCY SURVEY

- 1. Why did you choose to move to your new home in the Cambie Corridor? Please rank responses with 1 as the most important reason.
 - ___ Proximity to transit
 - ____ Neighbourhood amenities (park space, libraries, childcare facilities, community centres, cultural facilities, neighbourhood houses)
 - ___ Proximity to work or school
 - ____ Neighbourhood walkability to shops, restaurants, entertainment, etc.
 - ___ I wanted to downsize from my previous, larger home
 - ___ Other _____

2. Thinking about your experience in your neighbourhood to date, please rate the following on a scale of 1 to 5.

	1 Very poor	2 Poor	3 Fair	4 Good	5 Very good	Don't know
Sense of safety as a pedestrian						
Public realm (sidewalks, lighting, public art, benches, etc.)						
Neighbourhood walkability to stores, restaurants, entertainment etc.						
Quality of public transit (rider experience, frequency, etc.)						
Sense of belonging (feeling included in the neighbourhood)						
General livability of neighbourhood						

- 3. Do the amenities in your neighbourhood meet your needs? Amenities include park space, libraries, childcare facilities, community centres, cultural facilities, and neighbourhood houses.
 - __ Yes

__ No

If you answered no, please tell us why.

- 4. What do you love about your neighbourhood?
- 5. Is there anything you would change about your neighbourhood?
- 6. Overall, are you satisfied with your decision to move to your current home in the Cambie Corridor?
 - ____ Yes, I am satisfied.
 - __ No, I am not satisfied.

If you answered no, please tell us why.

DRAFT POST-OCCUPANCY SURVEY CONTINUED

- 7. Do you rent or own your home?
 - ___ Rent
 - __ Own
- 8. Which age group do you belong to?
 - ____ 19 and under
 - ___ 20 29
 - ____ 30 49
 - ___ 50 69
 - ___ 70+
- 9. Do you have children under the age of 18 living in your home full- or part-time?
 - __ Yes
 - ___ No
 - ____ No, but I have children over the age of 18 living at home
- 10. If you answered yes to question 5, how many children do you have under the age of 18 and what are their ages?
- If you answered no to question 5, please leave blank

Number of children _____ Age(s) of children _____

- 11. Before living at your current address, did you live:
 - ____ Elsewhere within the Cambie Corridor
 - ___ Outside the Cambie Corridor but within the City of Vancouver
 - ___ Outside the City of Vancouver
- 12. What is your primary mode of transportation for getting around?
 - ___ Private vehicle as driver
 - ___ Private vehicle as passenger
 - ___ Car share vehicle (ex. Car2Go, Evo, Modo)
 - ___ Public transit
 - ____ Walking
 - __ Cycling
- 13. How many vehicles does your household own?
 - __ 0
 - ___ 1
 - ____2
 - ____3
 - __ 4+
- 14. How often do you use the Canada Line?
 - ___ Every day
 - Once or twice a week
 - ___ Once every two to three weeks
 - __ Once a month
 - __ Once every couple of months
 - ___ Once a year
 - ___ Never
- 15. What is your home postal code: _____