



ADMINISTRATIVE REPORT

Report Date: July 12, 2018
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Meeting Date: July 24, 2018

TO: Vancouver City Council
FROM: Director of Finance
SUBJECT: Final 2019-2022 Capital Plan & Plebiscite Questions

RECOMMENDATION

- A. THAT Council approve the 2019-2022 Capital Plan totalling \$2.8 billion as outlined in Appendix A and summarized as follows:

Affordable housing	\$ 540 million
Childcare	\$ 123 million
Parks & open spaces	\$ 264 million
Arts & culture	\$ 185 million
Community facilities	\$ 234 million
Public safety	\$ 48 million
Civic facilities & equipment	\$ 108 million
Transportation & street use	\$ 311 million
One water	\$ 616 million
Solid waste	\$ 92 million
Renewable energy	\$ 41 million
Technology	\$ 100 million
Emerging priorities	\$ 88 million
Overhead	\$ 20 million

with anticipated funding from the following sources:

City contributions (\$1,049 million):	
Plebiscite authority	\$ 300 million
<u>Council authority (utilities)</u>	<u>\$ 195 million</u>
Debt financing	\$ 495 million
Property tax	\$ 206 million
<u>Utility fees</u>	<u>\$ 202 million</u>
Pay-as-you-go City contributions	\$ 408 million
Tax & fee funded capital reserves	\$ 146 million

Development contributions (\$1,615 million):	
Development connection fees	\$ 110 million
<u>In-kind development contributions</u>	<u>\$ 569 million</u>
Pay-as-you-go development contributions	\$ 679 million
DCLs and cash CACs reserves	\$ 936 million
Partner contributions (\$107 million):	
Pay-as-you-go Partner contributions	\$ 95 million
Partner funded reserves	\$ 12 million

B. THAT the 2019-2022 Capital Plan borrowing plebiscite contain three questions as follows:

Transportation and Technology.....	\$ 100,353,000
Capital Maintenance and Renovation Programs for Existing Community Facilities, Civic Facilities and Parks....	\$ 99,557,000
Replacement of Existing Community Facilities and Civic Facilities.....	<u>\$ 100,090,000</u>
	<u>\$ 300,000,000</u>

FURTHER THAT the wording of the questions be generally as set out in Appendix B, subject to any modifications required by the Director of Legal Services to ensure consistency with the requirements of the *Vancouver Charter*.

A By-law authorizing these questions will be brought before Council on July 25, 2018.

REPORT SUMMARY

The purpose of this report is three-fold:

- Share with Council the public feedback gathered on the Draft 2019-2022 Capital Plan;
- Seek Council approval of the Final 2019-2022 Capital Plan and associated funding strategy; and
- Seek Council approval of the borrowing plebiscite questions that will appear on the ballot in the October municipal election.

The City owns approximately \$25 billion of infrastructure and amenities (excluding land), encompassing underground water and sewer infrastructure; roadways, walkways and bikeways; affordable housing; community facilities, parks and open spaces; public safety facilities and service yards. As Vancouver continues to grow, we need to make strategic, long-term infrastructure investments to enhance the sustainability and resilience of our city.

The 2019-2022 Capital Plan (Appendix A) contemplates \$2.8 billion of capital investment priorities over the next four years to achieve the following strategic objectives:

- Maintain the City’s critical infrastructure and amenities in an appropriate state of repair;
- Optimize the City’s network of infrastructure and amenities to support growth and economic development; and
- Advance Council, Board and community priorities in a financially sustainable and resilient manner.

Guided by key Council, Board and community priorities, our proposed capital investments will focus in the following areas:

- Renew critical aging water and sewer infrastructure
- Renew and upgrade aging park and community facilities to serve existing and new residents
- Renew and upgrade aging civic facilities to strengthen business continuity and resilience
- Renew and expand transportation infrastructure to move people and goods
- Preserve and create affordable housing and childcare to attract and retain our workforce and grow our economy
- Preserve and create affordable and sustainable social, arts and cultural spaces through partnerships to enhance social and economic vitality

In addition to the above, resources have been dedicated to commence research, policy and strategy work in partnership with regional and senior governments to address emerging priorities such as climate change adaptation, shoreline flood protection, seismic and resilience. This work is a long term strategy and will inform future Capital Plans.

In developing the 2019-2022 Capital Plan, a key consideration is to address our growing portfolio of aging infrastructure and amenities in a financially sustainable and resilient manner. To support this multi-decade infrastructure renewal strategy, a gradual increase in funding allocation from the annual budget will be required for the next decade. Staff will continue to assess the outcome of the strategy and recommend any adjustment as necessary for Council consideration.

The infrastructure challenge is not unique to Vancouver. As cities across Canada continue to understand more about the needs and costs associated with infrastructure renewal, many have developed long-term asset management strategies with dedicated funding for infrastructure renewal. A number of municipalities, including Toronto, Mississauga, Winnipeg, Saskatoon, North Vancouver and New Westminster all have implemented an infrastructure levy, or some form of dedicated revenue, to address the growing deficit.

The proposed funding strategy strikes a balance in using capital reserves (39%), pay-as-you-go (22%), debt financing (18%), and in-kind amenities delivered through community amenity contributions triggered through rezoning applications in the areas of housing, childcare, recreation, culture and social policy (21%).

The City completed a two-phase public engagement strategy as part of the 2019-2022 Capital Plan process:

- *Phase 1 on Long-term Capital Planning (April 2018)* – Public input was gathered on long-term infrastructure and amenity needs (10+ years in the future) and the level of support for investing in renewing aging infrastructure and amenities. About 2,300 responses were received during this phase. This input helped to frame priorities for the draft Capital Plan.
- *Phase 2 on draft 2019-2022 Capital Plan (June 2018)* – Public input was gathered on the City's draft Capital Plan and financial strategy. About 900 responses were received during this phase. Below is the high level summary (additional details are included in the public engagement section and in Appendix C):
 - 70% believe the draft Capital Plan's proposal for new infrastructure and amenities completely or moderately captures community priorities;
 - 70% agree with relying on developer contributions to fund new infrastructure and amenities;

- 92% agree with the City advocating for and pursuing senior government funding to support the City's capital program; and
- 93% agree with maintaining the City's strong credit ratings & keeping debt at manageable level.

Since Council received the draft Capital Plan in June 2018, further work has been completed in a number of program areas and a total of \$199 million is proposed to be incorporated in the Final Capital Plan. Notable changes include (see Financial Implications for a more comprehensive list):

- Include funding to support the significant water, sewer and drainage infrastructure related to growth, based on the recently-completed work for the City-wide Utility Development Levy: additional \$158 million
- Include detailed design plans for the West End Community Centre site: additional \$10 million
- Include funding to implement the next phase of renewal at Hastings Park/PNE (funding from the Hastings Park Reserve): additional \$10 million
- Increase the size of the new Marpole-Oakridge Community Centre from ~30,000 square feet to ~40,000 square feet: additional \$8.6 million
- Increase funding for new public art: additional \$2 million

The final Capital Plan totals approximately \$2.8 billion, with 53% targeted to maintain and renew existing infrastructure and amenities and 47% to add new infrastructure and amenities.

Of this amount, \$300 million is proposed to be financed through debt that requires approval by a majority of electors. Three plebiscite questions are recommended to be included on the ballot for the municipal election in October 2018, as follows (refer to Appendix B for details):

- Transportation and Technology: \$100,353,000
- Capital Maintenance and Renovation Programs for Community Facilities, Civic Facilities and Parks: \$99,557,000
- Replacement of Community Facilities & Civic Facilities: \$100,090,000

The final Capital Plan will be presented to the Library Board on July 18th and Park Board on July 19th.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

The funding strategy for the City's critical infrastructure and amenities is guided by a number of long-standing Council policies and/or practices. The following section summarizes the key funding/financing sources for the 2019-2022 Capital Plan.

Debenture Borrowing – Under the *Vancouver Charter*, Section 242 gives Council the authority to borrow funds for the construction, installation, maintenance, replacement, repair and regulation of waterworks, sewerage & drainage, and energy utility systems without the assent of the electorate. Section 245 requires that the borrowing authority for all other purposes be established through the electorate's approval of a borrowing plebiscite.

The requirement to borrow funds to finance capital investments is established by Council at the time of the approval of the annual capital budget. Borrowed funds are generally paid back over 10 years to ensure that a systematic borrowing program can be administered, that outstanding debt does not accumulate to unacceptable levels, and that annual debt servicing charges (principal and interest) are maintained at a level that does not put undue pressure on the operating budget.

Section 247 A of the *Vancouver Charter* requires that full provision of annual debt servicing charges (principal and interest) be made in the annual operating budget. This ensures that debenture holders are paid the interest component at the prescribed rate and time and that sufficient funding is available to retire the obligation at maturity.

Pay-as-you-go – As part of the City’s long-term financial strategy, the Capital Plan incorporates a pay-as-you-go component funded from current property taxes and fees to maintain a balance between borrowed and current funding, to manage the City’s long-term debt profile, and to limit future debt repayment obligations.

Internal Financing – Internal financing of capital expenditures through the Capital Financing Fund (CFF) is appropriate in situations where the capital investment can be justified on the basis of a business case, providing a source for repayment without impacting property taxes.

Developer Contributions – In 2004, Council adopted the *Financing Growth Policy* that sets the framework for the collection and allocation of development cost levies (DCLs) and community amenity contributions (CACs) to help deliver infrastructure and amenities to support growth.

Pursuant to the *Vancouver Charter* and applicable DCL By-laws, DCLs may be applied towards parks, housing, engineering infrastructure, and childcare. For capital planning purposes, the proposed DCL allocation for the 2019-2022 Capital Plan is estimated to not exceed 100% of the DCL available at the beginning of the Capital Plan and what may reasonably be expected to collect in future years. In July 2018, Council approved a dedicated City-wide Utilities DCL program to fund the significant water, sewer, and drainage utility infrastructure to support growth. This program will include the Cambie Corridor as the first utility servicing plan to be completed alongside the land use plan. Over time, this program would address the capital needed to build new infrastructure capacity to support new population growth resulting through redevelopment citywide.

CACs are provided by property owners when Council grants development rights through rezoning. CACs typically come in two forms: in-kind onsite amenities and cash contributions. CACs may be applied to a wide range of amenities including those that are not DCL eligible such as new or expanded recreation, cultural and social facilities, libraries, and firehalls.

External Partnership Funding – The City actively pursues innovative partnership and funding opportunities with senior levels of government, Metro Vancouver, TransLink, private and community partners to optimize the value for every tax dollar in advancing Council, Board and community priorities.

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The City Manager RECOMMENDS approval of A and B.

REPORT

Background/Context

On June 5, 2018, Council approved:

- A. *THAT Council receive the draft 2019-2022 Capital Plan (Appendix A of the Administrative Report dated May 22, 2018, entitled “Draft 2019-2022 Capital Plan”) for information, and direct the Director of Finance to seek public input as outlined in the Public Engagement section of the above-noted report.*
- B. *THAT Council approve in principle a borrowing limit totalling \$495 million supported by property tax and utility fees in the draft 2019-2022 Capital Plan:*
 - *Plebiscite-approved General Borrowing Authority - \$300 million*

- *Council-approved Borrowing Authority for Sewer and Neighborhood Energy Utilities - \$195 million*

AND THAT the above borrowing limit guides the next phase of capital planning work and be subject to approval by Council as part of the final 2019-2022 Capital Plan in July 2018.

- C. *THAT the Director of Finance report back with the final 2019-2022 Capital Plan, incorporating results of the public engagement and plebiscite borrowing questions, for Council's consideration in July 2018.*

Since approval of the above recommendations, staff has completed the second phase of public engagement to seek input on the investment priorities and funding strategy contained in the draft 2019-2022 Capital Plan. Summary information on the public engagement is provided under the Strategic Analysis section of the report.

Strategic Analysis

Over the past decade, City services have grown significantly in importance and scale. The City has assumed a leading role within the region in a number of key areas, such as economic development, innovation, livability, resilience and climate change adaptation. The City has also become increasingly active in addressing needs that fall within the jurisdiction and traditional mandate of the provincial government. In this regard, significant investments have been made in affordable housing, childcare, social services, mental health and addictions, public safety and emergency response, and other core services that serve both the City and the Metro Vancouver region.

The City owns approximately \$25 billion of infrastructure and amenities (replacement value excluding land), encompassing underground water and sewer infrastructure; roadways, walkways and bikeways; affordable housing; community facilities, parks and open spaces; public safety facilities and service yards. Having a network of well-maintained infrastructure and amenities is essential to our quality of life and helps to create equity, support economic development, increase prosperity, and create jobs. As Vancouver continues to grow, we need to make strategic, long-term infrastructure investments to enhance the sustainability and resilience of our city.

The City strives to balance the need for maintaining our existing assets in an appropriate state of repair, and expanding our network of infrastructure and amenities to support growth. The growing need for affordable housing and childcare represents significant capital investments, while the costs of asset renewal are growing as our infrastructure and amenities age. As the owner of an expansive portfolio of capital assets, the City continues to evolve and enhance our asset condition assessments to inform our long-term asset planning and management strategies. The goal is to ensure that critical infrastructure such as bridges, roads, water and sewer pipes are maintained in a state of good repair; and that public amenities are well maintained to deliver the necessary services to residents and businesses.

I. 2019-2022 CAPITAL PLAN

As part of the City Building Framework, the key strategic objectives of the 2019-2022 Capital Plan are:

- Address the growing need for renewing and maintaining the City's critical infrastructure and amenities in an appropriate state of repair.
- Optimize the City's network of infrastructure and amenities to support economic development and growth.
- Advance Council, Board and community priorities in a sustainable and resilient manner.

The Capital Plan contemplates \$2.8 billion of strategic capital investments over the next four years, comprised of \$2.2 billion City-led capital programs and \$0.6 billion in-kind contributions

achieved through development. Excluding in-kind contributions, the proposed \$2.2 billion City-led capital programs represents an almost 50% increase over the adjusted 2015-2018 Capital Plan of \$1.5 billion. Approximately two-thirds of the City-led capital programs are dedicated towards maintenance and renewal of aging assets, while the remaining one-third is dedicated towards adding or upgrading infrastructure and amenities to support growth. The Capital Plan will be updated as additional development contributions and partnership funding is secured over the next four years.

<i>\$ millions</i>	Existing assets	New assets	Total	
Affordable housing	42	498	540	
Childcare	8	116	123	
Parks & open spaces	77	187	264	
Arts & culture	127	58	185	
Community facilities	115	119	234	
Public safety	48	-	48	
Civic facilities & equipment	108	1	108	
Transportation & street use	160	150	311	
One water (water, sewer & green infrastructure)	529	87	616	
Solid waste	92	-	92	
Renewable energy	-	41	41	
Technology	71	29	100	
Overhead	20	-	20	
Emerging priorities	88	-	88	
Total	\$1,485	\$1,286	\$2,771	
	Subtotal cash	1,463	740	2,203
	Subtotal in-kind	22	547	569

Guided by key Council, Board and community priorities, our proposed capital investments will focus in the following areas:

- Renew critical aging water and sewer infrastructure
- Renew and upgrade aging park and community facilities to serve existing and new residents
- Renew and upgrade aging civic facilities to strengthen business continuity and resilience
- Renew and expand transportation infrastructure to move people and goods
- Preserve and create affordable housing and childcare to attract and retain our workforce and grow our economy
- Preserve and create affordable and sustainable social, arts and cultural spaces through partnerships to enhance social and economic vitality

As well, the City will continue to proactively prepare for the threats posed by climate change and major events (e.g. seismic). Flooding and severe storms witnessed in recent years in Canada and other parts of the world demonstrates the importance to be prepared to respond to such events as they happen and to quickly resume business across the city. Storm intensities have already increased in Vancouver. Learning from these events, both locally and nationally, helps inform our infrastructure investments and our focus on preparedness. Resources have been dedicated to commence research, policy and strategy work in partnership with regional and senior governments to address emerging priorities such as climate change adaptation, shoreline flood protection, seismic and resilience. This work will inform future Capital Plans.

Significant funding has also been committed by the Federal and Provincial Governments to advance the Millennium Line Broadway Extension to realize the economic potential of the second largest employment centre in British Columbia and to enable efficient movement of people and access to jobs. Taken together, the above strategic investments will enable Council

to achieve important public policy objectives while ensuring economic, environmental and social sustainability over the long term.

Emerging needs (e.g. climate change adaptation, shoreline flood protection, seismic), evolving municipal mandate (e.g. housing, childcare), and the growing need for critical infrastructure renewal require strategic, long-term inter-government partnership and predictable long-term funding arrangement. Partnerships are particularly central to the City's ability to deliver affordable housing and childcare:

- *Affordable Housing* - In recent months, both Federal and Provincial governments have introduced funding programs for creating and sustaining affordable housing. In November 2017, the Federal Government announced the *National Housing Strategy*, which includes a number of funding programs to support creation of new housing and preservation of existing housing. In February 2018, the Provincial Government announced "A 30-Point Plan for Housing Affordability in British Columbia", which includes a number of new tax measures to dampen speculative demand and generate new revenues to fund affordable housing. In June 2018, the federal and provincial government signed the Canada-B.C. bilateral agreement to renew and expand affordable housing.

Having a sustainable inter-governmental partnership and funding arrangement with senior governments would substantially enable new affordable housing supply as well as the much needed building repairs for all co-op and non-market housing on City land. In the absence of senior government support, the City alone will not be able to sustain and grow the affordable housing portfolio over the long term.

- *Childcare* – Both Federal and Provincial governments have announced strategies to enable new supply and enhance affordable childcare with varying degree of details.

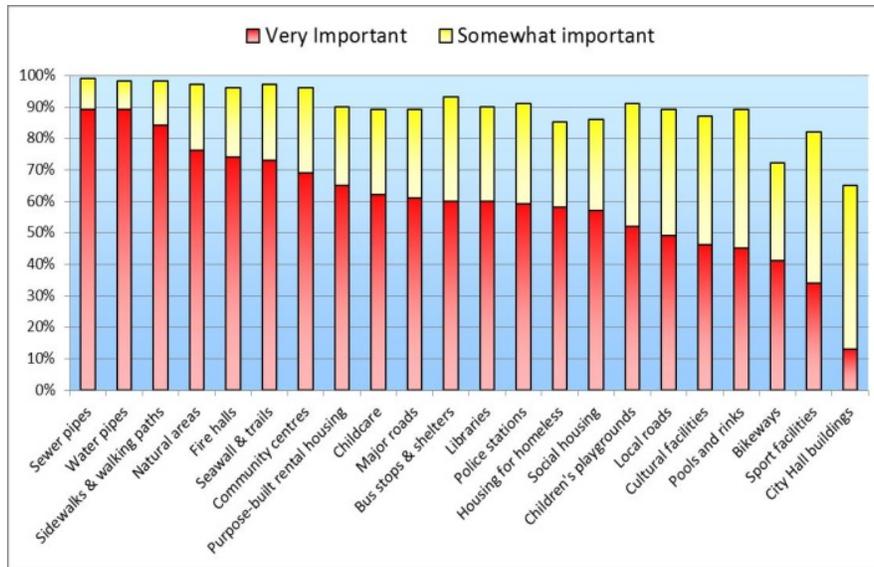
The City with its limited revenue sources will not be able to address these broad issues alone in a meaningful way without support from senior governments. Staff will continue to pursue a coordinated, sustainable intergovernmental partnership and funding arrangement to address affordable housing, childcare, critical infrastructure renewal, and emerging needs.

II. PUBLIC ENGAGEMENT

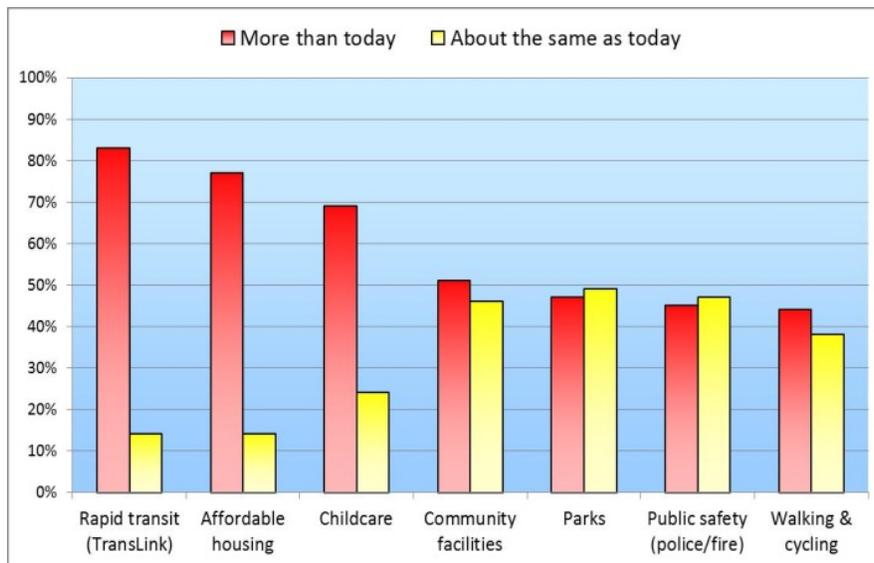
Phase I – Long-term Capital Planning

In April 2018, public input was gathered on long-term infrastructure and amenity needs (10+ years in the future) and the level of support for investing in renewing aging infrastructure and amenities. About 2,300 responses were received during this phase. Key findings:

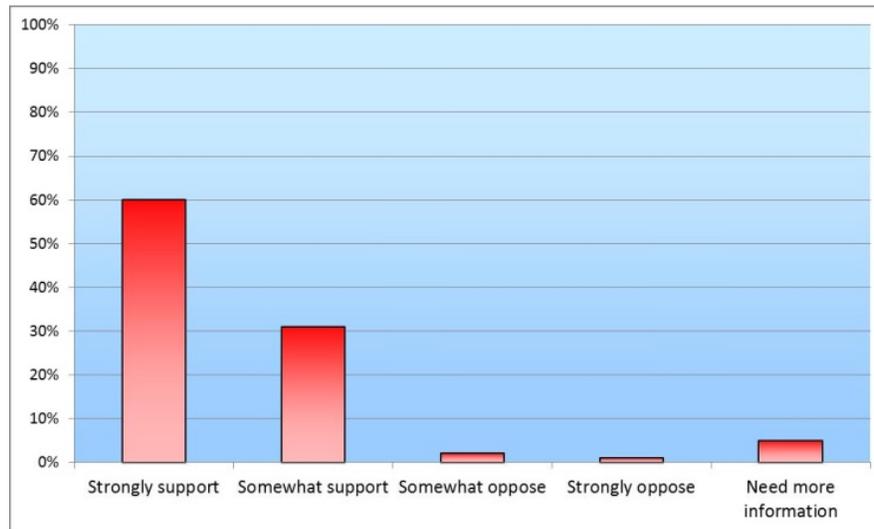
- *The vast majority of the City's existing infrastructure and amenities are viewed as important to the broader community.* This year's results are consistent with the results from 2014. This should lead to a broad-based capital renewal program that ensures funding toward a wide range of infrastructure and amenities.



- The top priorities for new infrastructure and amenities are rapid transit, affordable housing and childcare. This year's results are consistent with the results from 2014.



- Citizens indicated a strong willingness (90% support) to allocate more funding toward the renewal of aging infrastructure and amenities. This was a new question posed in 2018.



The input from this first phase helped to frame priorities for the 2019-2022 Capital Plan.

Phase II – Input on the Draft 2019-2022 Capital Plan

A second phase of public engagement was held after the Draft Capital Plan was presented to Council on June 5, 2018. Summary information is provided below. Refer to the Consultation Summary Report in Appendix C for details.

The following tools were used to share information:

- The [City's capital planning website](#) outlined the [Draft Capital Plan](#) in detail, accompanied by “[The City in 90 Seconds](#)” video and the [consultation summary report](#) from the first phase of public engagement on Long-term Capital Planning in April 2018.
- Presentation boards outlining the Draft Capital Plan in detail were prepared and used at the face-to-face events (20 in total, included in Appendix C). A digital version of the presentation boards was made available on the Talk Vancouver website.
- Portable kiosks providing easy-to-access information about the Capital Plan were prepared (eight in English, three in Chinese and one in Punjabi) and displayed at community facilities and public events.



Notification:

- Email notifications were sent to approximately 15,000 Talk Vancouver panel members and approximately 400 individuals and groups on the City's and Park Board's stakeholder lists.
- 24 social media posts were placed on Twitter, Facebook and Instagram, and generated 100,000+ impressions.
- The Draft Capital Plan was featured on the City's main webpage under “what's new” for seven days.

The following events were organized:

- Four public open houses held at the Central Library (June 21) and the storefront City Lab at 511 West Broadway (June 22-24).
- The portable kiosks were displayed at eight community centres and libraries, and three Canada Day events (Granville Island, Sunset Park and Thunderbird Centre).
- Park Board staff hosted a stakeholder information session on June 12.
- City staff hosted a stakeholder workshop on June 27.
- Five focus group sessions were facilitated by Ipsos-Reid (an independent research firm hired by the City) between June 27 and July 3:
 - four with residents (two in English, one in Mandarin and one in Cantonese); and
 - one with business owners (in English).



The following tools were used to gather input:

- An online questionnaire hosted on Talk Vancouver website (available June 15th to July 2nd).
- Hard copy questionnaires were available at the four public open houses and the City stakeholder session.
- Comment cards were available at the portable kiosks.
- Park Board had an online submission form for parks and recreation (available May 30th to June 22nd).
- Notes were taken at the City stakeholder workshop and five focus group sessions.

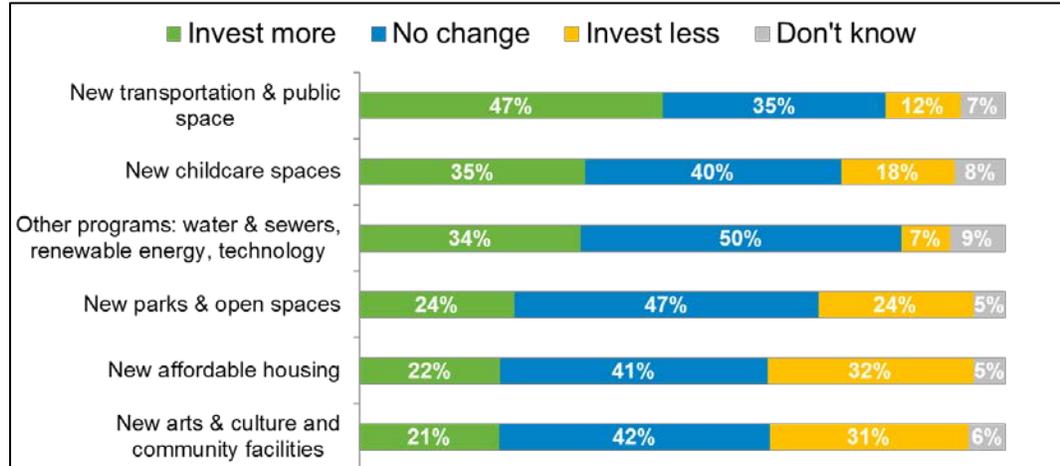
Participation:

- A total of 896 questionnaires were filled in (886 online and 10 hard copy). This is somewhat lower than the number of questionnaires filled in for the Draft 2015-2018 Capital Plan (1,087), but substantially higher when compared to previous capital plans (typically 200 to 400).
- Approximately 150 to 200 individuals dropped by the public open houses.
- 274 comment cards were filled in at the portable kiosks.
- 95 individuals and groups submitted 161 ideas/projects on parks & recreation to Park Board staff.
- 22 individuals attended the Park Board stakeholder information session.
- 4 individuals attended the City stakeholder workshop.
- 50 individuals participated in the five focus groups.
- Three letters/emails were received from the following community groups: the RayCam Co-operative Centre, the Firehall Arts Centre, and the City's Public Art Committee.

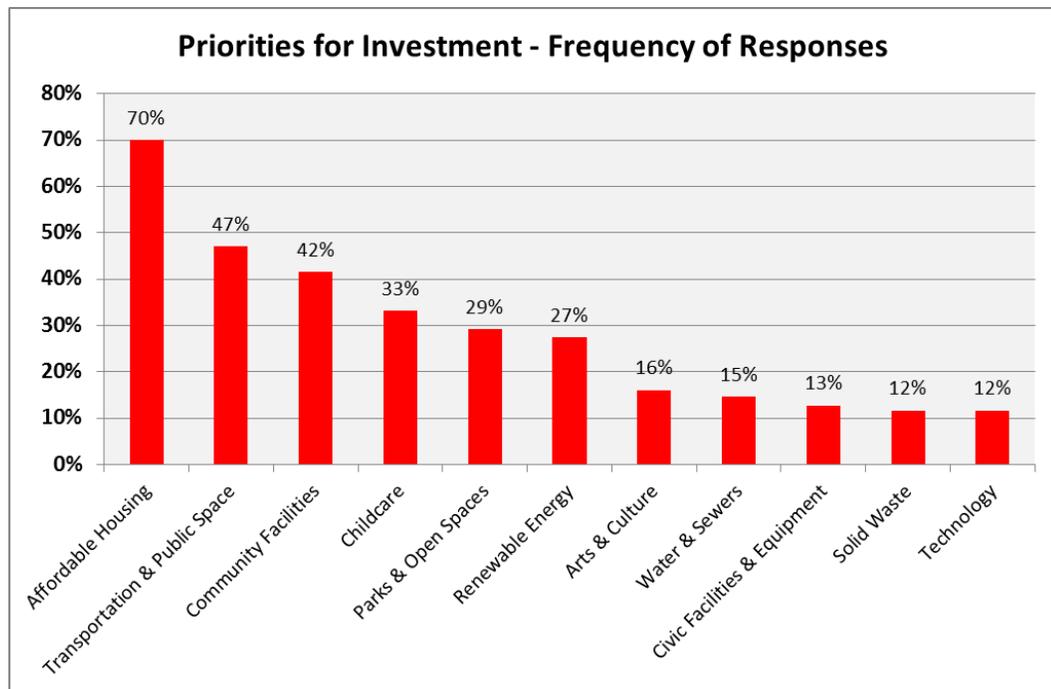
Results:

- Questionnaires:
 - *Profile of the 896 respondents:*
 - The sample is a good representation of Vancouver’s population.
 - The following factors need to be kept in mind when interpreting the results:
 - *Age:* young adults aged 15 to 29 years old are significantly under-represented (24% of population; 5% of questionnaire respondents)
 - *Gender:* women are moderately under-represented (52% of population; 41% of questionnaire respondents)
 - *Housing:* renters are moderately under-represented (43% of population; 33% of questionnaire respondents)
 - *Geographic distribution:* southeast Vancouver is slightly under-represented (20% of population; 14% of questionnaire respondents)
 - *Familiarity with capital planning* is limited:
 - 37% are very or fairly familiar with capital planning
 - 42% had participated in Phase 1 engagement in April
 - *Renewal of existing infrastructure and amenities:*
 - Note: questions in this section were open-ended (not multiple choice)
 - Areas needing more investment:
 - Frequently mentioned: affordable housing and childcare
 - Also mentioned: water, sewers, roads and sidewalks
 - Areas needing less investment:
 - Frequently mentioned: arts & culture, bikeways and civic facilities
 - There was confusion over what is included in Emerging Priorities and therefore a desire to shift it to other areas
 - Suggestions for how to prioritize:
 - Prioritize infrastructure that needs to be fixed, as opposed to “nice to have” items
 - Focus investments on disadvantaged communities with higher populations where more people will benefit from improvements
 - *New infrastructure and amenities:*
 - 70% believe the Draft Capital Plan’s proposal for new infrastructure and amenities completely or moderately captures community priorities

- The chart below indicates whether participants would invest more, make no change or invest less after reviewing the draft Capital Plan:



- Note: the strong support for additional investment in transportation is partially due to participants wanting greater investment in rapid transit.
- *Financial strategy:*
 - 93% agree with maintaining the City's strong credit ratings & keeping debt at manageable level
 - 92% agree with the City advocating for and pursuing senior government funding to support the City's capital program
 - 70% agree with relying on developer contributions to fund new infrastructure and amenities
- *Public engagement materials:*
 - 80% agreed that the information provided was well organized
 - 76% agreed that the information provided was clear
- Comment cards:
 - 274 comment cards filled in
 - Participants were asked for the top 3 areas they thought the City should invest in.
 - Most frequently identified: Affordable housing, Transportation & Public Space and Community Facilities.



- Parks & recreation submission forms:
 - 161 ideas/projects submitted – refer to Appendix C for details.
- City stakeholder workshop:
 - Four participants attended representing the Downtown Vancouver Business Improvement Association, Strathcona Community Association and South Granville Seniors Centre
 - Key themes:
 - Plan for an aging population
 - Invest in active and interactive spaces – support healthy living
 - Invest in shared spaces
 - Improve clarity about the renewal of community facilities: the factors involved in creating a prioritized list and a sense as to which facilities are likely to be renewed in the next 10-15 years
- Focus groups:
 - Five focus group sessions were facilitated by Ipsos-Reid
 - Key themes:
 - Housing and traffic congestion were the two top priorities across the focus groups.
 - For the most part, participants were comfortable with the new infrastructure and amenities set out in the Capital Plan.
 - Participants strongly supported the City's approach to funding including a focus on development contributions, pursuing funding from the provincial/federal government, and maintaining a strong credit rating and manageable debt.
- Community groups:
 - 5 letters/emails/motions were received from the following community groups:

- *RayCam Co-operative Centre:*
 - recognition of the \$2 M included in the draft Capital Plan to complete planning/design for the renewal of the centre;
 - clarification that the proposed partnership with B.C. Housing was not related to Stamp's Place (the affordable housing project located south of RayCam Centre); and
 - request that the City include funding to renew the centre in the 2019-2022 Capital Plan.
 - Staff response: there are three larger community facilities with funding to complete planning/design in the 2019-2022 Capital Plan (Britannia Centre, Ray Cam Centre and West End Centre); timing of construction for these projects will depend on multiple factors including securing partnership funding from senior governments; it is recommended that funding options be reviewed as part of the facility planning/design process and, where appropriate, be considered as Emerging Priorities.
- *Firehall Arts Centre:*
 - recognition of funding earmarked in the draft Capital Plan to prepare conceptual options to guide renovations for the centre and the adjacent Police Museum; and
 - request that the City include funding to renovate the centre in the 2019-2022 Capital Plan.
 - Staff response: it is recommended that funding options be reviewed as part of the facility planning/design process and, where appropriate, be considered as Emerging Priorities.
- *City's Arts & Culture Policy Council:*
 - request that the City increase the cultural infrastructure grants program from \$1 million per year to \$6 million per year to support the acquisition of commercial and industrial properties by qualified non-profit organizations.
 - Staff response: the draft Capital Plan includes an increase from \$1 million per year to \$1.5 million per year for the Cultural Infrastructure Grant program. The draft Capital Plan also includes an allocation to support a Social Infrastructure Grant program, with \$375,000 per year.
- *City's Public Art Committee:*
 - request that the City increase funding above what is included in the draft Capital Plan; and
 - request that at least 50% of funding comes from non-development contributions.
 - Staff response: the draft Capital Plan included \$2 M for public art maintenance (50% funded by City contribution), \$8 M for new public art on public property (100% funded by Development contribution) and \$10 M as an estimate for how much new public art will be built as in-kind projects on private property (100% funded by Development contribution).

Staff has reviewed the balances in the public art reserves and is recommending to increase funding for new public art on public property from \$8 M to \$10 M. With this increase, the overall funding contemplated for new public art would be \$20 M for the 2019-2022 Capital Plan.

With funding already available in various public art reserves and the amount of development contributions projected to be received over the next four years, staff believes the contemplated work program can reasonably be undertaken. In recognition of the cyclical nature of development contribution receipts, interim City funding sources will be identified to address short-term cash flow issues to ensure timely execution of the public art work program.

- *Downtown Vancouver Business Improvement Association:*
 - recognition that key themes in the draft Capital Plan closely match the key themes identified in DVBIA's "Re-imagine Downtown" in 2015:
 - more affordable housing to support a diverse population
 - improved transportation and accessibility
 - more public gathering places
 - recognition that arts and culture is another important sector in need of strong civic investments.
 - recommendation to approve the Capital Plan.

Summary:

- There is generally **strong support** for the City's proposed investments in **childcare, streets, sidewalks, water pipes and sewer pipes**.
- **Affordable housing** continues to be **top of mind** for citizens. The overall response to the City's affordable housing proposal was positive, though it is noteworthy that one third of participants suggested they would invest less in new affordable housing after reviewing the City's proposal.
- There is support for programs such as **arts and culture and bikeways**, however less than programs such as childcare, sidewalks and water pipes.
- Programs such as **civic facilities** (e.g. the critical role that service yards play in delivering day-to-day services) and **emerging priorities** (e.g. reserving funding for projects that require additional business case analysis and/or strategic partnership and funding commitment from senior levels of government over the next four years) seem not to be well understood.
- The City's **financial strategies** that guide the Capital Plan are **well supported**.

Look ahead:

- This was the second time the City engaged citizens in long-term capital planning. Like in 2014, citizens were keen on sharing information about what is important to them, which helps guide prioritization choices as the City prepares its draft Capital Plan.
- The following enhancements to the public engagement process are proposed for the next round of capital planning in 2022:
 - Inviting other service providers (e.g. non-profit agencies, TransLink, School Board) to provide information and data and participate in the City's process;
 - Providing additional easy-to-digest information and data about existing infrastructure and amenities, e.g. geographic distribution across the city and desired levels of service;
 - Providing information about how the City makes longer-term strategic decisions, e.g. the City's longer-term strategy for renewing community facilities; and

- o Engaging more young adults to participate in the process, as well as taking initiatives to achieve a better gender and geographic balance.

Implications/Related Issues/Risk (if applicable)

Financial

Within the City's financial planning framework, understanding the long-term implications arising from our capital investments is a key consideration in developing the 2019-2022 Capital Plan. Identifying the financial and debt capacity upfront ensures that the Capital Plan is developed in a fiscally prudent manner which considers the City's long-term financial health, credit ratings, and future impacts on our tax and fee payers.

The 2019-2022 Capital Plan contemplates \$2.8 billion of strategic capital investments over the next four years, comprised of \$2.2 billion City-led capital programs and \$0.6 billion in-kind contributions achieved through development. Excluding in-kind contributions, approximately two-thirds of City-led capital programs are dedicated towards maintenance and renewal of aging assets, while the remaining one-third is dedicated towards adding or upgrading infrastructure and amenities to support growth. The 2019-2022 Capital Plan will be updated as additional development contributions and partnership funding is secured over the next four years.

The following table summarizes the proposed capital investments by program areas and funding sources (i.e. City taxes/fees, development contributions, partner contributions).

<i>\$ millions</i>	Existing assets	New assets	Total	City	Dev.	Partner	
Affordable housing	42	498	540	3	537	-	
Childcare	8	116	123	8	110	5	
Parks & open spaces	77	187	264	31	234	-	
Arts & culture	127	58	185	38	133	14	
Community facilities	115	119	234	63	161	10	
Public safety	48	-	48	47	1	-	
Civic facilities & equipment	108	1	108	108	-	-	
Transportation & street use	160	150	311	101	141	68	
One water (water, sewer & green infrastructure)	529	87	616	322	294	-	
Solid waste	92	-	92	84	-	9	
Renewable energy	-	41	41	36	4	2	
Technology	71	29	100	100	-	-	
Overhead	20	-	20	20	-	-	
Emerging priorities	88	-	88	88	-	-	
Total	\$1,485	\$1,286	\$2,771	\$1,049	\$1,615	\$107	
	Subtotal cash	1,463	740	2,203	1,049	1,046	107
	Subtotal in-kind	22	547	569	-	569	-

Since Council received the Draft Capital Plan in June 2018, further work has been completed in a number of program areas and a total of \$199 million is proposed to be incorporated in the Final Capital Plan. Notable changes include:

Capital category	Change	Amount
Affordable housing	Increase funding for planning and studies	\$1.2 M
Childcare	Include the replacement of the 45-spaces of daycare and preschool at Marpole-Oakridge Community Centre in the Childcare section	\$6.8 M
Arts & culture	Increase funding for new public art	\$2.0 M
	Include funding to implement the next phase of renewal at Hastings Park/Pacific National Exhibition	\$10.0 M
Community facilities	Increase the size of the new Marpole-Oakridge Community Centre from ~30,000 square feet to ~40,000 square feet	\$8.6 M

Capital category	Change	Amount
	Include the replacement of the 45-spaces of daycare and preschool at Marpole-Oakridge Community Centre in the Childcare section	(\$6.8 M)
	Include detailed design plans for the West End Community Centre / Joe Fortes Library / King George Secondary School site	\$10.0 M
	Adjust the scope and budget for relocating City Archives to Central Library	(\$7.0 M)
Public safety	Increase the fire truck & vehicle replacement program from 36 to 39 vehicles	\$3.8 M
Civic facilities and equipment	Increase the public works vehicle replacement programs from 204 to 244 vehicles	\$7.6 M
One water (water, sewers and green infrastructure)	Include expanded water, sewer and drainage projects based on the new framework for financing growth-triggered utility infrastructure upgrades	\$158 M
Solid waste	Increase the sanitation and disposal truck replacement program from 71 to 82 vehicles	\$2.2 M
Renewable energy	Include funding for the next phase of implementation of the Electric Vehicle infrastructure strategy	\$1.8 M

In July 2018, Council approved a dedicated City-wide Utilities DCL program to fund the significant water, sewer, and drainage utility infrastructure to support growth. This program will include the Cambie Corridor as the first utility servicing plan to be completed alongside the land use plan. Over time, this program would address the capital needed to build new infrastructure capacity to support new population growth resulting through redevelopment citywide. \$549 million is expected to generate from this program over eight years, of which \$188 million is included in the final 2019-2022 Capital Plan (\$30 million previously identified in the draft Capital Plan and \$158 million added to the final Capital Plan). Growth-triggered upgrades that are not delivered through this program will continue to be secured through conditions of development, which is not included in the Capital Plan.

With these changes, the Final Capital Plan totals approximately \$2.8 billion, with 54% targeted to maintain and renew existing infrastructure and amenities and 46% to add new infrastructure and amenities.

One-time Implications

The funding strategy for the Capital Plan is developed based on historical experience, economic outlook, benchmark ratios with like organizations and rating agencies, and best practices in municipal debt management. Considering the City's debt capacity as well as property tax and fee impact, the recommend plan includes the following funding strategy:

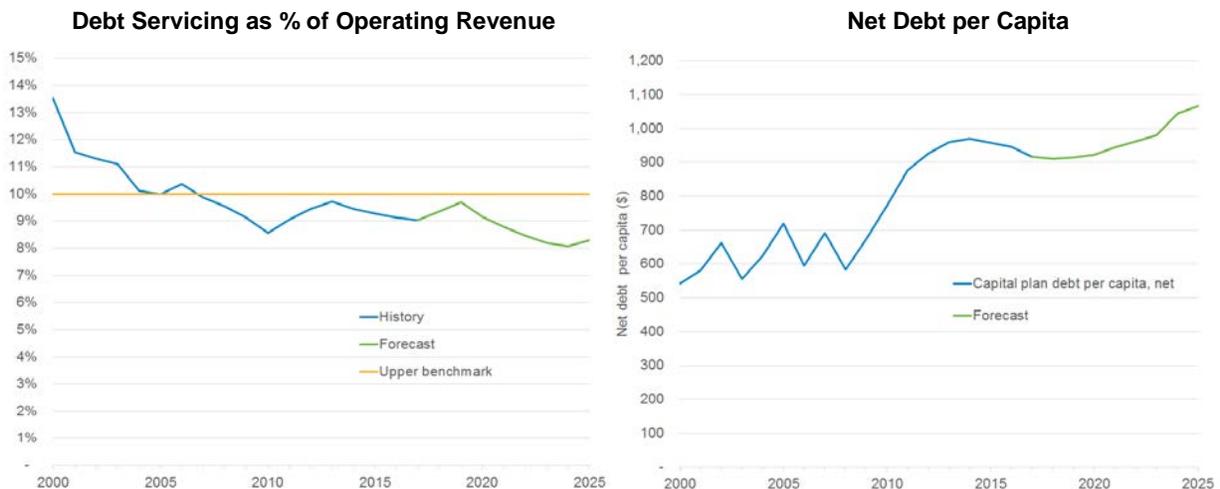
City contributions (\$1,049 million):	
Plebiscite authority	\$ 300 million
<u>Council authority (utilities)</u>	<u>\$ 195 million</u>
Debt financing	\$ 495 million
Property tax	\$ 206 million
<u>Utility fees</u>	<u>\$ 202 million</u>
Pay-as-you-go City contributions	\$ 408 million
Tax & fee funded capital reserves	\$ 146 million
Development contributions (\$1,615 million):	
Development connection fees	\$ 110 million
<u>In-kind development contributions</u>	<u>\$ 569 million</u>
Pay-as-you-go development contributions	\$ 679 million
DCLs and cash CACs reserves	\$ 936 million

Partner contributions (\$107 million):

Pay-as-you-go Partner contributions	\$	95 million
Partner funded reserves	\$	12 million

Debt Management Strategy – Staff recommend that only 25% of City-led programs in the Capital Plan be financed through debenture borrowing, which is lower than 35% in the 2015-2018 Capital Plan. This strategy builds on the program that commenced in 2012 when the Water Utility started transitioning its infrastructure renewal program from debt financing to pay-as-you-go to save interest costs over the long term. That program is now complete. In 2015, the Sewer Utility began a similar transition, and will continue over the future Capital Plans.

The following charts show the two key financial health metrics and trends. Through our proactive debt management strategy over the last decade, including transitioning the City’s water utilities from debt financing to pay-as-you-go, we have created room in our debt capacity to ramp up the asset renewal program. The projected growth in net debt per capita reflects a thoughtful, gradual increase in capital investments in renewing and upgrading our aging infrastructure and amenities. The trajectory could reverse should future Councils choose to transition more capital work from debt financing to pay-as-you-go sooner. Lowering debt financing would achieve long-term interest savings, but result in higher property tax and fee impacts during transition years. Staff will continue to monitor and adjust our financial strategy to strike a balance between debt financing and pay-as-you-go.



Infrastructure Renewal Strategy – To address the growing need for maintaining the City’s critical infrastructure and amenities in a state of good repair as contemplated in the Capital Plan, a gradual increase in funding allocation from the operating budget is required (on average approximately 1% of property tax levy and 5% utility fees for each of the next four years); the final funding allocation to be subject to the annual budget process in each year of the plan. Staff will continue to assess the outcome of the strategy and recommend any adjustment as necessary for Council consideration.

Senior Government Partnership Strategy – Emerging priorities (e.g. climate change adaptation, shoreline flood protection, seismic), evolving municipal mandate (e.g. housing, childcare), and the growing need for critical infrastructure renewal require strategic, long-term inter-government partnership and predictable long-term funding arrangements. The City with its limited revenue sources will not be able to address these broad issues alone in a meaningful way without support from senior governments. Staff, in consultation with other Metro Vancouver municipalities, Union of BC Municipalities, and Federation of Canadian Municipalities, is actively engaging senior levels of government to pursue such opportunities, and will report back to Council as appropriate.

Value for Money – Confronted with a growing asset base, ever-increasing public expectation, and rapid escalation in land, construction and other costs, staff will undertake further work to

rationalize the scope and level of service as well as service delivery models to manage future renewal and growth costs.

On-going Implications

Capital investments, especially for new/upgraded infrastructure and public amenities, often involve ongoing programming, facility operation and asset lifecycle costs, which will put further pressure on the City's budgets in future years, and will be brought forward as part of the annual budget process.

Affordable housing has been one of the fastest growing public amenities in Vancouver, and the trend is expected to continue as part of the *Housing Vancouver Strategy*. It has been Council policy that all affordable housing projects be self-sustaining and require no further operating subsidies from the City. The affordability level would be established to ensure that rental income would be adequate to sustain the project over the life of the project.

All long-term financial implications arising from the 2019-2022 Capital Plan will be considered as part of long-term financial planning process.

Plebiscite Borrowing Authority Questions

The *Vancouver Charter* gives Council the authority to approve borrowing for water, sewer and energy utility systems (\$195 million) without reference to the electorate. Borrowing for all other capital programs (\$300 million) requires electorate approval. The electorate-approved borrowing authorities will be grouped into three plebiscite questions as follows:

Question 1: Transportation and Technology

Street and Bridge Infrastructure.....	\$ 47,429,000
Traffic Signals and Street Lighting.....	\$ 42,924,000
Technology.....	\$ 10,000,000
	<u>\$ 100,353,000</u>

Question 2: Capital Maintenance and Renovation Programs for Existing Community Facilities, Civic Facilities and Parks

Maintenance of Community and Civic Facilities.....	\$ 59,175,000
Renovations of Community and Civic Facilities.....	\$ 23,975,000
Maintenance and Renovation of Parks.....	\$ 16,407,000
	<u>\$ 99,557,000</u>

Question 3: Replacement of Existing Community Facilities and Civic Facilities

Replacement of Community Facilities.....	\$ 62,840,000
Replacement of Civic Facilities.....	\$ 37,250,000
	<u>\$ 100,090,000</u>

TOTAL: \$ 300,000,000

Subject to Council approval, the wording of the questions will be generally as set out in Appendix B, subject to any modifications required by the Director of Legal Services to ensure consistency with the requirements of the *Vancouver Charter*. A by-law authorizing that these questions will be brought before Council on July 25, 2018.

CONCLUSION

The 2019-2022 Capital Plan contemplates \$2.8 billion of strategic capital investments over the next four years to 1) invest in our critical infrastructure and amenities to work towards a state of good repair; 2) optimize our network of infrastructure and amenities to best serve our residents and businesses; and 3) advance Council, Board and community priorities within the City's long-term financial capacity. The plan also lays out a long-term infrastructure renewal strategy and funding approach to address the growing need for maintaining and renewing our critical infrastructure and amenities to ensure the sustainability and resilience of our city.

The proposed funding strategy for each program is presented in Appendix A and the proposed wording for the borrowing plebiscite questions that will be submitted to the electorate during the October municipal election is presented in Appendix B.

* * * * *



2019-2022 CAPITAL PLAN



July 2018

2019-2022 CAPITAL PLAN

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EXECUTIVE SUMMARY

The City owns approximately \$25 billion of infrastructure and amenities (replacement value excluding land), encompassing underground water and sewer infrastructure; roadways, walkways and bikeways; affordable housing; community facilities, parks and open spaces; public safety facilities and service yards. Having a network of well-maintained infrastructure and amenities is essential to our quality of life and help drive economy, increase prosperity and create jobs. As Vancouver continues to grow, we need to make strategic, long-term infrastructure investments to enhance the sustainability and resilience of our city.

Over the past decade, City services have grown significantly in importance and scale. The City has assumed a leading role within the region in economic development, innovation, livability, resilience and climate change adaptation. The City has also become increasingly active in addressing needs that fall within the jurisdiction and traditional mandate of the provincial government. In this regard, significant investments have been made in public safety and emergency response, affordable housing, social services, mental health and addictions, childcare, and other core services that serve both the City and the Metro Vancouver region.

As part of the City Building Framework, the key strategic objectives of the 2019-2022 Capital Plan are:

- Address the growing need for renewing and maintaining the City’s critical infrastructure and amenities in an appropriate state of repair.
- Optimize the City’s network of infrastructure and amenities to support economic development and growth.
- Advance Council, Board (Park, Library & Police) and community priorities in a sustainable and resilient manner.

The 2019-2022 Capital Plan contemplates \$2.8 billion of strategic capital investments over the next four years, comprised of \$2.2 billion City-led capital programs and \$0.6 billion in-kind contributions achieved through development. Excluding in-kind contributions, approximately two-thirds of City-led capital programs are dedicated towards maintenance and renewal of aging assets, while the remaining one-third is dedicated towards adding or upgrading infrastructure and amenities to support growth. The Capital Plan will be updated as additional development contributions and partnership funding is secured over the next four years. The following table summarizes the proposed capital investments by program areas and funding sources (i.e. City taxes/fees, development contributions, partner contributions).

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2019-2022 CAPITAL PLAN

Guided by key Council, Board and community priorities, our proposed capital investments will focus in the following areas:

- Renew critical aging water and sewer infrastructure
- Renew and upgrade aging park and community facilities to serve existing and new residents
- Renew and upgrade aging civic facilities to strengthen business continuity and resilience
- Renew and expand transportation infrastructure to move people and goods
- Preserve and create affordable housing and childcare to attract and retain our workforce and grow our economy
- Preserve and create affordable and sustainable social, arts and cultural spaces through partnerships to enhance social and economic vitality

As well, the City will continue to proactively prepare for the threats posed by climate change and major events (e.g. seismic). Flooding and severe storms witnessed in recent years in Canada and other parts of the world demonstrate the importance to be prepared to respond to such events as they happen and to quickly resume business across the city. Storm intensities have already increased in Vancouver. Learning from these events, both locally and nationally, helps inform our infrastructure investments and our focus on preparedness. Resources have been dedicated to continue research, policy and strategy work in partnership with regional and senior governments to address emerging needs such as climate change adaptation, shoreline flood protection and seismic resilience. This work will inform future Capital Plans.

Significant funding has also been committed by the Federal and Provincial Governments to advance the Millennium Line Broadway Extension to realize the economic potential of the second largest employment centre in British Columbia and to enable efficient movement of people and access to jobs. Taken together, the above strategic investments will enable Council to achieve important public policy objectives while ensuring economic, environmental and social sustainability over the long term.

In developing the Capital Plan, a key consideration is to address our growing portfolio of aging infrastructure and amenities in a financially sustainable and resilient manner. The infrastructure challenge is not unique to Vancouver. As cities across Canada continue to understand more about the needs and costs associated with infrastructure renewal, many have developed long-term asset management strategies with dedicated funding for infrastructure renewal. A number of municipalities, including Toronto, Mississauga, Winnipeg, Saskatoon, North Vancouver and New Westminster all have implemented an infrastructure levy, or some form of dedicated revenue, to address the growing deficit. For Vancouver, a gradual increase in funding allocation from the annual budget will be required for the next decade to support the multi-decade infrastructure renewal strategy as contemplated in the Capital Plan. The outcome of the strategy will be assessed and adjusted as necessary over time.

Emerging needs (e.g. climate change adaptation, shoreline flood protection, seismic), evolving municipal mandate (e.g. housing, childcare), and the growing need for critical infrastructure renewal require strategic, long-term inter-government partnership and predictable long-term funding arrangements. The City with its limited revenue sources will not be able to address these broad issues alone in a meaningful way without support from senior governments. The City, in consultation with other Metro Vancouver municipalities, Union of BC Municipalities, and Federation of Canadian Municipalities, is actively engaging senior levels of government to pursue such opportunities to augment our capital program in a financially sustainable way.

LONG-TERM PRIORITIES: PEOPLE, PROSPERITY & ENVIRONMENT

The City's mission is "to create a great city of communities that cares about its people, its environment, and the opportunities to live, work, and prosper". To accomplish this, our long-term capital investments are prioritized to support Vancouver's three long-term priorities: People, Prosperity & Environment.

People

Goal: Cultivate and sustain vibrant, creative, safe and caring communities for the wide diversity of individuals and families who live in, work in and visit Vancouver.



Vancouver is the eighth largest city in Canada. Our city is remarkable for its diverse population, with half of our residents speaking English as a second language. The health and vitality of Vancouver's communities and the celebration of their diversity make the city a magnet for people from around the world. With 5,250 people per square kilometer, Vancouver is one of the most densely populated cities in the country. Our limited land base and growing population have given rise to unique issues related to affordability and the availability of land for housing and a full range of economic activity.

Prosperity

Goal: Provide and enhance the services, infrastructure and conditions that sustain a healthy, diverse and resilient local economy.



Vancouver has one of the most diverse and resilient economies in North America. Building on the foundation of our robust natural resource sector, our growing digital media and clean technology sectors as well as our strong tourism and international education sectors also contribute to the City's continued economic growth, prosperity, and livability.

Vancouver is North America's gateway to Asia and a major regional transportation hub. The city is home to Port Metro Vancouver—the busiest and largest port in Canada—and is in close proximity to the Vancouver International Airport, often rated as one of the world's best. Our well-educated, highly skilled, and culturally diverse workforce further reinforces our competitive position in the global market.

Council has prioritized economic development by promoting and strengthening local businesses while also making the city an attractive destination for businesses from around the world. In 2011, Vancouver Economic Commission (VEC) launched the *Vancouver Economic Action Strategy*, which focuses on changes that will most improve Vancouver's business climate, support existing local businesses, facilitate new investment, and attract the people essential to our future economic success. It places particular emphasis on our global leadership in creative industries and clean technology and on opportunities for greening our local businesses.

Significant funding has been committed by the Federal and Provincial Governments to advance the Regional Transportation Strategy, including the Millennium Line Broadway Extension, which will be fundamental to reaching the economic potential of the second-most important economic corridor in the Province. A Broadway subway will ensure the efficient movement of people and the ability to accommodate access to jobs.

Environment

Goal: Protect and enhance Vancouver's climate, ecology, natural resources and connections to the city's remarkable natural setting for future generations.



Vancouver is home to world-class parks and green spaces and the wealth that stems from our abundant natural setting.

The *Greenest City 2020 Action Plan* was launched in 2011 with measurable and ambitious targets for reducing carbon and waste and improving ecosystems. This key plan addresses goals and issues across diverse areas and has put Vancouver on the path to sustainability in most aspects of life and work in the city. Likewise, the *Renewable City Strategy*, adopted in 2016, provides a longer term roadmap for the City to derive 100% of its energy from renewable sources before 2050.

CITY BUILDING GOALS

In developing the City's long-term planning framework, the following key goals have been identified which help inform the development of the Capital Plan.

Reconciliation – Embrace reconciliation and value the government-to-government relationship with Musqueam, Squamish and Tsleil-Waututh Indigenous Nations in shaping how the city will evolve. Align City policies and actions to support urban Indigenous people in achieving their full potential and ensure opportunity to share in prosperity.

Resilience – Be ready to respond to sudden 'shock' events and emerging system 'stressors'. Address climate change and sea-level rise through long-term infrastructure and land-use planning strategies. Implement energy efficient policies to enable a carbon-neutral city so that energy costs for residents are stable and affordable. Enable low-carbon transportation infrastructure and networks to provide safe, accessible and quality mobility options for all residents. Ensure residents have food security and access to diverse and sustainable food options. Integrate sustainability into all aspects of the city.

Equity, Diversity & Inclusion – Guided by the Healthy City Strategy and emerging work on poverty reduction, develop and implement strategies, plans, and policies on topics such as housing, childcare, social and cultural infrastructure, employment lands, and the green economy to ensure residents of all ages, backgrounds, and incomes can live, work, and stay in the city over the long term without compromising quality of life. Develop social, cultural, and recreation strategies that ensure residents of all ages, backgrounds, and incomes have equitable access to recreation, public services, the natural environment, and social networks to support their optimal health and well-being. Embrace civic policies that foster a sense of belonging for all residents and universal participation in city life.

Sustainable – Integrate livability, health, prosperity and resilience with a fundamental zero-carbon mandate. Be a global leader in advancing climate action through all aspects of civic activity and services, and continue to support green economy innovation while ensuring environmental protection and social equity.

Complete Communities – Embrace and support the unique character of Vancouver's communities through Community Plans. Ensure adequate and appropriate improvements to transportation, housing choice, access to facilities, parks, childcare and recreation to support growth. Commit to a diligent, thoughtful collaborative planning process to honor the spirit of each community.

Economic Vitality – Enable a high-performing economy as a regional center of entrepreneurship fueled by the digital, technical, medical and education fields. Ensure the depth and breadth in economic sectors, and green jobs continue to drive growth. Integrate Vancouver regionally, advance the circular economy, and contribute to global prosperity while advancing local equity.

Vibrant Society & Culture – Encourage all residents to access and participate in society and culture. Permeate the city with arts, culture, and social experience. Create opportunities for people to engage in creative social expression in a diversity of ways.

City Built for People – Make Vancouver a place where people love to be. Ensure thoughtfully designed public places, beautiful and energy efficient buildings, access to multimodal transportation, people-oriented built form, equitable access to parks, views, and the natural environment.

Adaptable & Smart – Integrate technological advances to improve efficiencies in citizen participation, and optimize all civic facilities, services and functions while improving resident

dignity and quality of life. Leverage technology to be an equitable, connected, resilient and adaptable city.

Regional Leadership & Integration – Develop strategies to advance Vancouver’s position as a major city in the Cascadia Region, while maintaining strong collaborative partnerships with municipalities, institutions and industries in the Lower Mainland and across the Province. Align regional integration with the responsibility of contributing to regional prosperity and advancing equity.

Fiscal Sustainability – Provide exceptional service to Vancouver residents and businesses in a fiscally prudent and financially sustainable manner through careful financial planning and data-driven decision making framework. Ensure fiscal decisions are transparent, consistent, and effective. Maximize service provision partnership opportunities.

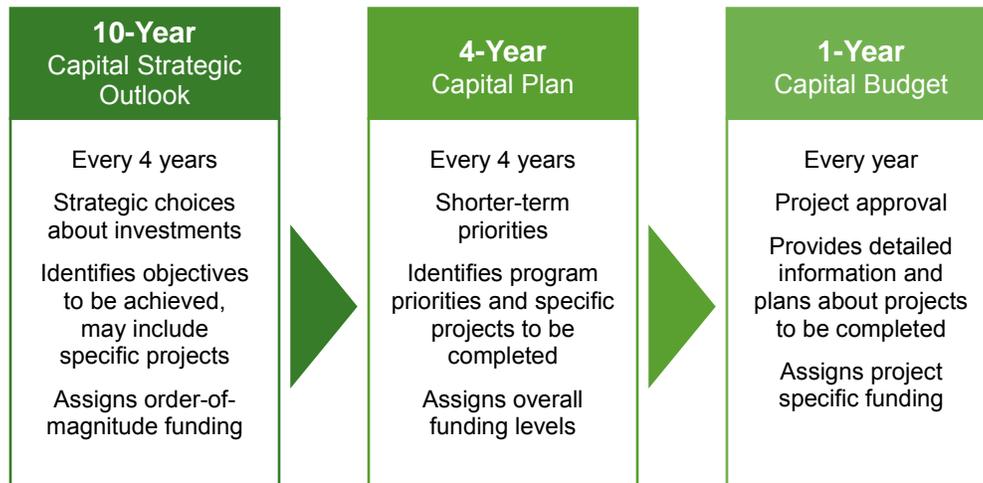
STRATEGIC CAPITAL PLANNING

10-year outlook → 4-year plan → Annual budget

In times of rapid growth driven by market and demographic forces, we need a strategic planning framework to guide the intentional transformation of the city over the next 30 years. The City’s long-term planning framework articulates the following principles:

- Establish a long-term horizon, and nest short and mid-term plans within that
- Be comprehensive, considering all aspects of community needs and municipal services
- Be transformative, not simply incremental improvement or “business as usual”
- Be willing to challenge status quo
- Connect actions to long term vision and overarching strategies
- Optimize the use of municipal toolkit and select the best approach (or mix) for implementation: regulation, investment, advocacy/partnership
- Set the right time horizon for the policy, program or investment
- Consider alternative service delivery models
- Be clear about life cycle cost of capital investment
- Establish performance measures and ongoing monitoring and evaluation

Strategic Capital Planning Framework



The 10-year Capital Strategic Outlook presents the City’s long-term vision with regards to strategic capital investments in critical infrastructure and amenities. It lays the foundation for the City’s long-term service and financial planning.

The 4-year Capital Plan sets out the financial and debt capacity, and the funding strategy for the capital investment priorities over the course of the Plan. It informs the City’s long-term service and financial planning, striking a strategic balance among the City’s needs to maintain its critical assets in an appropriate state of repair; enhance its network of infrastructure and amenities to support growth and economic development; and advance Council, Board and community priorities within the City’s long-term financial capacity.

The annual budget sets out Council-authorized funding and spending for the year, as well as detailed project information and outcomes. It provides the authority to proceed with specific capital projects, and defines both the Multi-Year Capital Project Budget and the Annual Capital Expenditure Budget for all approved work.

FINANCIAL CAPACITY

Vancouver, like other Canadian cities, offers a broad range of services but has a limited revenue stream. The City adheres to prudent fiscal stewardship with careful financial planning that balances short-term operating needs with long-term public amenity and infrastructure requirements. To ensure that appropriate capital investments are made to advance Council and community priorities in a fiscally prudent and financially sustainable manner while considering external economic conditions that could have an impact on residents and businesses, the City's capital planning process is guided by a set of financial sustainability guiding principles and financial health targets.

I. Financial Sustainability Guiding Principles

Fiscal Prudence

- Live within our means
- Consider long-term implications in all decisions
- Maintain a stable and predictable revenue stream
- Keep debt at a manageable level
- Build in flexibility and contingencies for emerging priorities and opportunities

Affordability & Cost Effectiveness

- Deliver services that are relevant and result in desired public outcomes
- Ensure value for money through productivity and innovation
- Keep property tax and user fees affordable and competitive

Asset Management

- Maintain assets in an appropriate state of repair
- Optimize capital investments to meet public and economic needs while achieving value for the investment

II. Funding Strategy for Capital Investments

The City takes a comprehensive approach to assessing the short and long-term economic indicators to inform the development of the Capital Plan. The City funds capital investments from a range of sources (who pays) using a balanced mix of payment methods (when to pay).

Funding Sources

- **Property Tax & User Fees** - Operating revenues (e.g. property tax, water & sewer fees, parking revenue) typically fund most capital work
- **Development Contributions** - Consistent with the City's Financing Growth Policy (2004), new and expanded amenities and infrastructure to support growth are funded in part through development contributions (e.g. DCLs, voluntary CACs, connection charges)

CACs are voluntary public benefit contributions offered by a rezoning applicant to address the impacts of rezoning. Acceptance of CACs by the City is generally guided by Community Plans and Public Benefit Strategies, and applicable Council policies in the areas such as housing, childcare, cultural and heritage. CACs typically come in two forms: in-kind onsite amenity and cash contributions.

- **Partner Contributions** - The City receives funding from provincial and federal governments, from TransLink for road work, and from non-profit agencies, foundations and philanthropists particularly in the area of childcare and affordable housing.

Payment Methods (When to Pay)

- **Pay In Advance: Capital Reserves** - Capital reserves are like savings accounts, used to accumulate funds from current revenues or other sources over time to fund future capital investments. This method is typically used when other partners are involved and the City wishes to make clear its own commitment is protected. In other cases, the commitment is made as part of a community planning process and funded through development fees, while the timing of the project may not occur for a significant period of time.
- **Pay-as-you-go** - Pay-as-you-go funds capital investments using current revenues, user fees and other sources. It is used for some of the City's utility renewal – such as water infrastructure - that all taxpayers benefit from. This method enables residents and businesses to contribute on an ongoing basis to capital investments which are fundamental to the health of the City; and ensures the City's borrowing capacity is preserved for important, one-off capital investments that are not appropriate or are too costly to be funded on a pay-as-you-go basis.
- **Pay Over Time: Debt Financing** - Like most major Canadian cities and senior levels of government, the City uses debt in its mix of payment methods to fund capital investments, allowing payment to be made over a longer timeframe to align with the useful life of the underlying capital assets and ensure that more residents and businesses that benefit from the capital investments participate in paying for them. When used strategically, paid back within 10 years (much shorter than a typical mortgage and the average life cycle of a capital asset), and within best practices for responsible borrowing, debt financing allows the City to continue to renew its infrastructure on a regular basis and provide new amenities when necessary to accommodate growth while maintaining its fiscal health.

The City takes a very careful approach to its use of debt, funding repayment over 10 years while ensuring a balanced operating budget and keeping property tax and fees at an affordable level. The City's consistently strong credit ratings and favorable borrowing rates reflect this careful approach.

III. Long-term Financial Plan

When developing its long-term financial plan, the City maintains a commitment to strong financial discipline and continued management of debt to ensure that capital investments will not unduly burden the Operating Budget through debt servicing, operating costs and asset lifecycle costs. Both Moody's and Standard & Poor's credit rating agencies have acknowledged the City's efforts by awarding it with the highest credit rating.

Keep Debt at a Manageable Level

The City determines its long-term borrowing capacity for regular, non-utility related capital programs by limiting the ratio of annual debt servicing to operating expenditures at a maximum of 10%. This is to ensure that the City does not accumulate debt at unacceptable levels, and that annual debt servicing does not put undue pressure on the annual budget.

As part of our long-term debt management strategy, the water utility has transitioned its infrastructure lifecycle replacement programs from debt financing to pay-as-you-go. This will help lower the City's overall debt and save interest costs over the long-term. Looking ahead, we will continue to explore opportunities, where appropriate, to transition our general capital program and the sewer utility to a higher proportion of pay-as-you-go to improve the City's long-term debt profile and enhance our credit ratings.

Maintain Strong Credit Ratings and Access to Low Borrowing Costs

The City's strong credit ratings (AAA) are among the best for Canadian cities, and are supported by a diverse economy and a strong and stable tax base. Continued management of debt within target levels is critical to maintaining and enhancing the City's credit ratings. Most world class cities are managed in a fiscally prudent and financially sustainable manner and enjoy high credit ratings. Maintaining current credit ratings among the top tier cities is critical to Vancouver's long-term competitive advantage. It is estimated that the long-term borrowing costs would increase by 5-10 basis points for each level of downgrade, or approximately \$1 million in additional interest over the term of each \$100 million debenture issue.

Keep Property Tax and Fees Affordable & Competitive

Property taxes in recent years have seen a modest increase – ranging from 1.4% to 4.3% – in line with most other Metro Vancouver municipalities. During this period, the City has enhanced our network of public amenities in the areas of housing, community services and public safety, and has invested in core infrastructure, such as sewer separation and renewal and upgrading transportation infrastructure for pedestrians, bikes, and vehicles. All these were accomplished through continuous innovation, business transformation and productivity enhancement, while absorbing above-inflation wage increases.

Looking ahead, the growing need for asset renewal and new infrastructure and amenities to support growth will put further pressure on the City's budget. Understanding the long-term impacts on our tax and fee payers arising from our capital investment decisions, including debt servicing, ongoing operating costs and asset lifecycle costs, is a key consideration in developing the 2019-2022 Capital Plan.

Maintain Assets in an Appropriate State of Repair

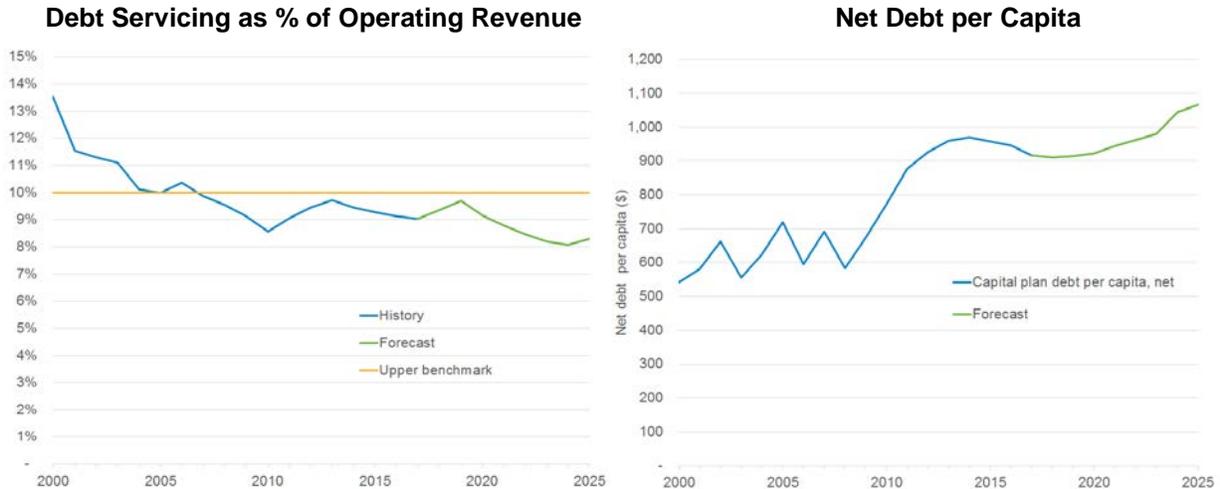
Maintaining core infrastructure and amenities in an appropriate state of repair is critical to the City's long-term financial health and resilience, and helps ensure asset management obligations are not deferred and infrastructure deficits do not accumulate to unacceptable levels – one of the key factors that credit rating agencies consider as part of the rating reviews.

Optimize Capital Investments

Before adding new facilities, the City will consider repurposing and right-sizing existing facilities, and continue to advance on colocation and functional integration of services to enhance operational efficiency. All new facilities will be designed with flexible, adaptable and expandable spaces to accommodate changing demographics and future growth.

IV. Financial Health Indicators

For long-term financial planning purposes, the City tracks a number of metrics to provide an indication of its financial health and long-term borrowing capacity, which inform the capital planning process. Below are two key financial health metrics and trends over the next decade: Debt Servicing as a % of Operating Expenditures and Net Debt per Capita.



In developing the Capital Plan, a key constraining factor is the impact on the operating budget and property tax increase arising from debt servicing and pay-as-you-go funding to support the capital program, as well as future operating costs and asset lifecycle costs. Our goal is to stabilize the debt level over the long term and minimize the year-over-year budget impact driven by our capital program, thereby maintaining our property tax and user fees at affordable and competitive levels.

Through our proactive debt management strategy over the last decade, including transitioning the City’s water utilities from debt financing to pay-as-you-go, we have created room in our debt capacity to ramp up the asset renewal program. The projected growth in net debt per capita reflects a thoughtful, gradual increase in capital investments in renewing and upgrading our infrastructure and amenities. The trajectory could reverse should future Councils choose to transition more capital work from debt financing to pay-as-you-go sooner. Lowering debt financing would achieve long-term interest savings, but result in higher property tax and fee impacts during transition years. The City will continue to monitor and adjust our financial strategy to strike a balance between debt financing and pay-as-you-go.

STRATEGIC CAPITAL PLANNING GUIDING PRINCIPLES

The following principles guide strategic capital planning across service categories:

Vision

- Inspire a vibrant, inclusive and safe city with a resilient local economy
- Advance public policy goals and strategic priorities of City Council and Boards (Park, Library & Police)
- Align with the City's corporate strategic plan and long-term financial plan
- Integrate environmental, operational and financial sustainability principles
- Be adaptive to emerging priorities and changing demographics

Innovation

Partner strategically with senior levels of government, charitable & non-profit organizations, and private sector

- Optimize service delivery through business transformation, co-location and functional integration
- Maximize value for investments through creative design and planning, and strategic procurement and resourcing
- Be opportunistic and nimble

Strategic Planning

- Rationalize network of public amenities and services across agencies (City, Vancouver School Board, charitable and non-profit organizations, etc.) to enhance collaboration and synergies
- Consider repurposing, right-sizing, relocation, co-location and decommission of existing assets as part of renewal strategy
- Build flexible, adaptable and expandable spaces to accommodate changing demographics and future growth
- Phase in large-scale, high impact capital programs/projects to mitigate financial impact
- Synchronize multi-project timing to maximize efficiencies and economy of scale

Financial Sustainability

- Live within our means
- Consider long-term financial implications in all investment decisions
- Maintain assets in appropriate state of repair

Regional and provincial governments are responsible for delivering schools, health care, and transit. Senior governments also hold mandates to deliver social housing and childcare. The City continues to encourage senior governments to uphold their responsibilities for social housing and childcare; in the meantime, the City has used its regulatory tools, strategic partnerships and capital investment to create these amenities, in recognition of their role as essential public amenities that support residents and workers in Vancouver.

RESILIENCE AND SUSTAINABILITY

These two concepts have become fundamental tools in assessing, planning and guiding how cities and communities should be built and managed. **Urban resilience** refers to the capacity of cities and the systems that support them to survive, adapt and thrive, no matter what kind of chronic stresses and acute shocks are experienced. **Sustainability** is the capacity to meet the needs of the present without negatively impacting the ability of future generations to meet their own needs. These two concepts are intertwined and increasingly shaping municipal decisions, including how cities plan, build and manage infrastructure and amenities.

While Vancouver has made significant progress creating and refining its sustainability framework, the City is currently in the process of creating its resilience framework. Once developed, there will be the need to integrate key elements in these two frameworks.

The following are some of the key priorities identified by community stakeholders through the initial work on the **Resilient Vancouver Strategy**:

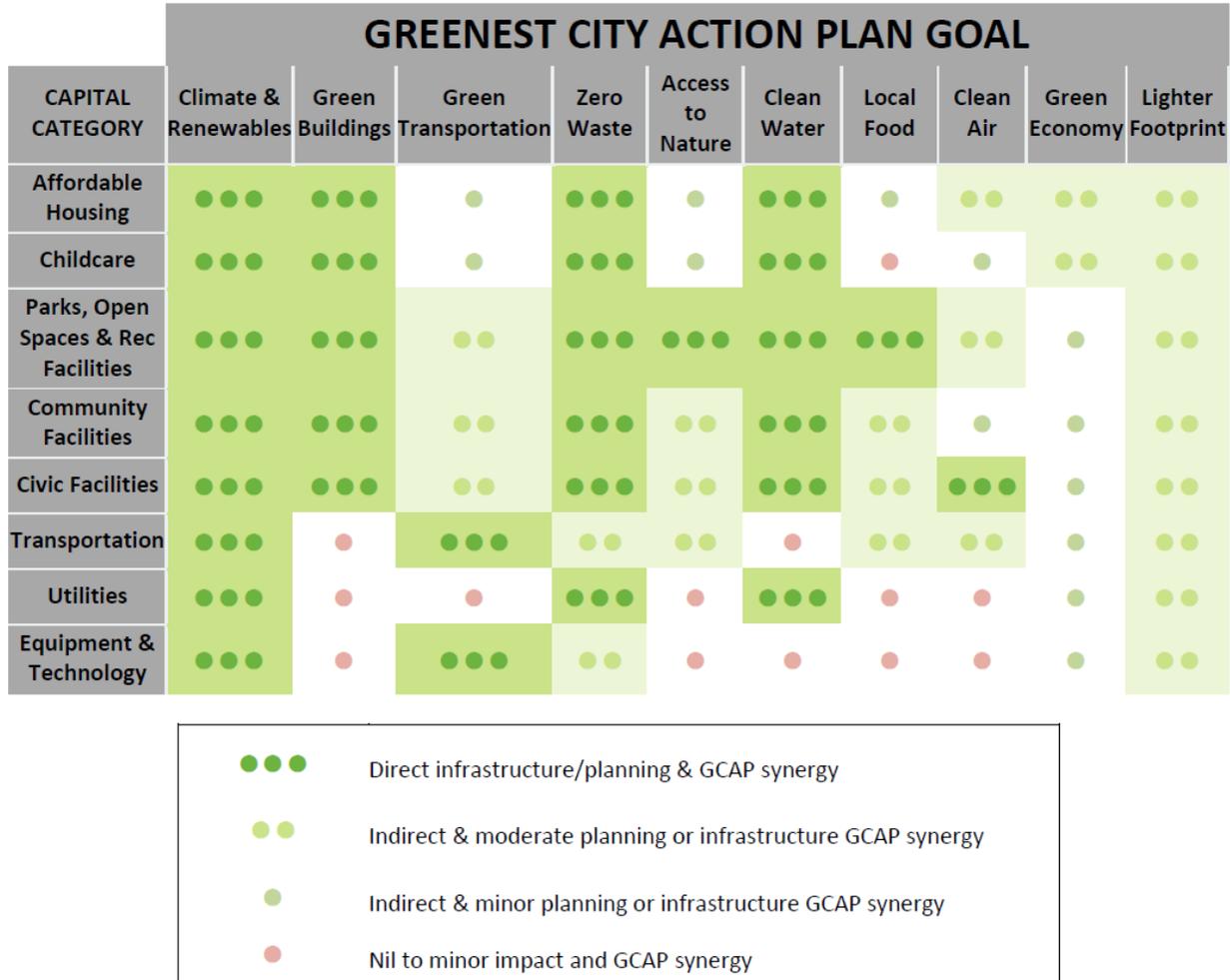
- **Disaster resilient buildings and infrastructure:** Vancouver is at significant risk of a catastrophic earthquake. Experts estimate that there is a 1 in 5 chance that Vancouver will experience a catastrophic earthquake in the next 30 years, costing more than \$75 billion in economic losses. While the City and partners have taken steps to improve earthquake response, much more work has to be completed to improve our collective state of readiness. As our city grows, and new technology becomes available, there is an opportunity to build and renew infrastructure and buildings to ensure that people and the economy can recover from a catastrophic event.
- **Climate change resilience:** Vancouver's waterfront and low-lying areas will be affected by 1 to 2 m of sea level rise over the next 50-75 years. Further, Vancouver's infrastructure (e.g. drainage pipes, streets) and amenities (e.g. trees in parks and along streets) will be affected by wetter winters and dryer summers. Fortunately, the City is equipped with the Climate Change Adaptation Strategy (2012), which has guided recent initiatives such as the Coastal Flood Risk Assessment (2014-2018).
- **Community resilience:** Vancouver's neighbourhoods are affected by a wide range of local and global trends that influence the strength and bonds in our communities, and the capacity to absorb and adapt to change in the future. Examples include income disparity within the city, rapidly rising housing costs, displacement due to gentrification, food insecurity and the changing nature of retail and role of shopping streets. The City took an important step with its Healthy City Strategy in 2014 to respond to these challenges, and must continue to prioritize equity, diversity and inclusion in conjunction with sustainability goals.
- **Government resilience:** the success, prosperity and livability of Vancouver relies on having a proactive, stable government that can transform and adapt to meet the needs of the community today and in the future. This includes having the staff available – and the supporting infrastructure – to provide ongoing services, including during and after acute shocks. It also implies having a financially healthy government, in the short, medium and long terms, and leveraging data and technology to improve service delivery, infrastructure management, and access to city services for all people.

The City's **sustainability framework** is embodied in the **Greenest City Action Plan** (2011, updated in 2015), which is organized around ten goal areas and 15 measurable targets to guide Vancouver toward becoming the greenest city in the world by 2020. Since 2011, 80% of the high priority actions named in the plan have been completed, such as creating a food scrap collection program, increasing farmers markets and community gardens and creating 32,000 green jobs since 2010.

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In 2016, staff created a preliminary **matrix** to better outline the intersections between sustainability planning and capital asset planning and management. Understanding where intersections occur can help shape capital asset planning and management so that the City may achieve its Greenest City goals.

Figure 1 - Integrating sustainability into capital planning and asset management.



The work to create and integrate overarching frameworks with respect to resilience, sustainability and capital planning and asset management is well underway and will continue over the next couple of years. While these frameworks have brought greater awareness in this round of capital planning, it is anticipated that they will help inform and prioritize the next round of capital planning in 2022 in a much more holistic and meaningful way.

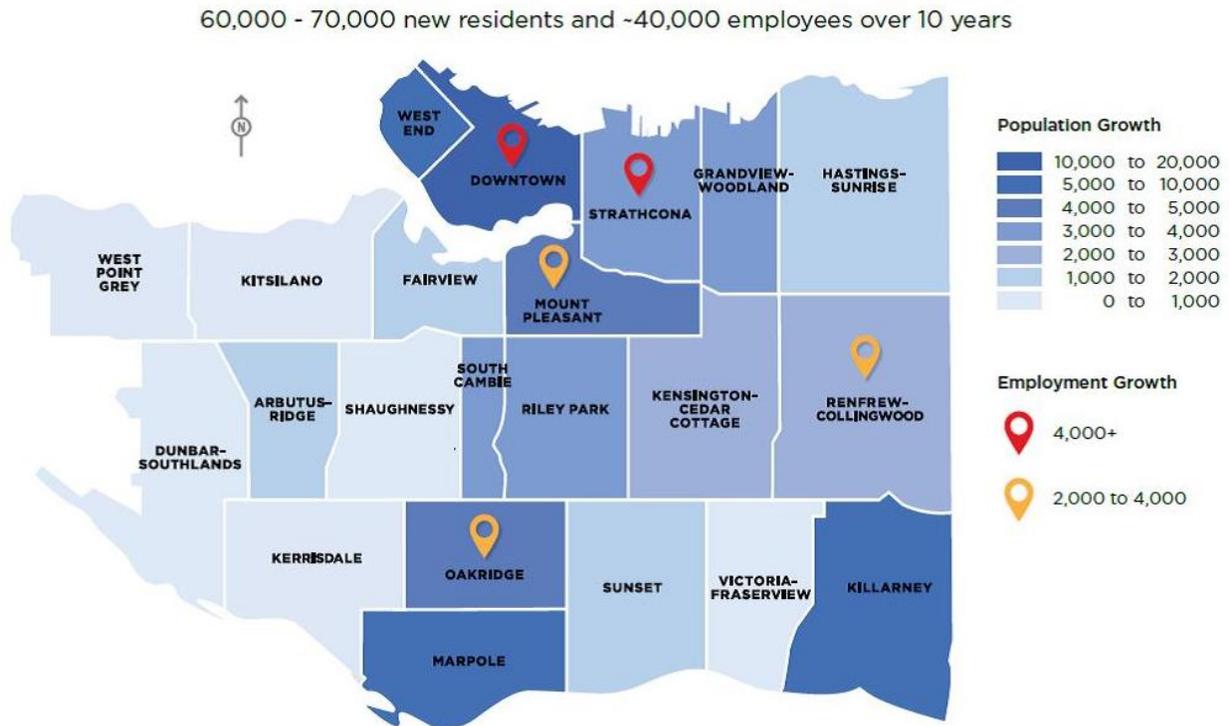
ANTICIPATED POPULATION AND EMPLOYMENT GROWTH

Vancouver grows by an average of 5,000 to 6,000 residents per year and the City and partner agencies need to provide a range of services to these new residents.

Growth areas change over time, based on zoning changes and development opportunities. Significant growth occurred in False Creek South and Champlain Heights in the 1970s and 1980s, and in False Creek North, Downtown South, Coal Harbour, Collingwood Village and West Fraser Lands in the 1990s and 2000s.

Growth in recent years and over the next decade is anticipated to be concentrated in the West End, Northeast False Creek, Southeast False Creek, the Cambie Corridor, Marpole and East Fraser Lands. Growth is also anticipated to occur in the Downtown Eastside, Mount Pleasant, Grandview-Woodland, Norquay Village and Joyce-Collingwood. Growth in these areas is guided by community/area plans which include a 'public benefits strategy' to inform infrastructure and amenity priorities.

The following map shows the geographic distribution of population and employment growth for the next decade:



OVERVIEW OF CITY INFRASTRUCTURE & AMENITIES

The City owns over \$25 billion of capital assets (replacement value excluding land) encompassing:

- 7.7 million square feet of facilities providing a broad range of recreation, community, social and cultural programs and services, affordable housing, public safety, and civic administration
- 1,370 hectares of parks and open spaces
- 4,550 km of sidewalks, streets and lanes
- 3,600 km of underground water and sewer mains

The lifespan of capital assets varies considerably across asset categories from water and sewer pipes (80-100 years), to buildings, sidewalks, trees (40-60 years), road pavement, traffic signals (20-40 years), playgrounds/playfields (10-20 years) and vehicles, information technology and other equipment (less than 10 years).

Since 2011, the City has adopted a **service-based capital planning framework** to drive accountability, enhance transparency, and enable a more holistic city-wide approach to long-term capital investment decision-making. Service plans inform the output metrics for the 10-year Capital Strategic Outlook and 4-year Capital Plan for each service categories. The following table summarizes the service categories and sub-categories used for the 2019-2022 Capital Plan.

Capital Planning Service Categories

Affordable housing

- Non-market rental housing (social & supportive)
- Purpose-built market rental housing

Childcare

- Infant/toddler/preschool (0-4 years old)
- School age (5-12 years old)

Parks & open spaces

- Park land
- Park amenities
- Programmed activity areas
- Seawall & waterfront
- Urban forest & natural areas
- Park buildings
- General features & infrastructure

Arts & culture

- Cultural facilities
- Entertainment & exhibition facilities
- Public art
- Heritage

Community facilities

- Libraries & archives
- Recreation facilities
- Social facilities

Public safety

- Police
- Fire & rescue
- Animal control

Civic facilities and equipment

- Administrative facilities
- Service yards, vehicles & equipment

Transportation & street use

- Transportation network
- Sustainable transportation
- Street use

One water

- Potable water
- Sewerage & drainage
- Green infrastructure

Solid waste

- Sanitation
- Disposal

Renewable energy

- Neighborhood energy
- Electric vehicle infrastructure

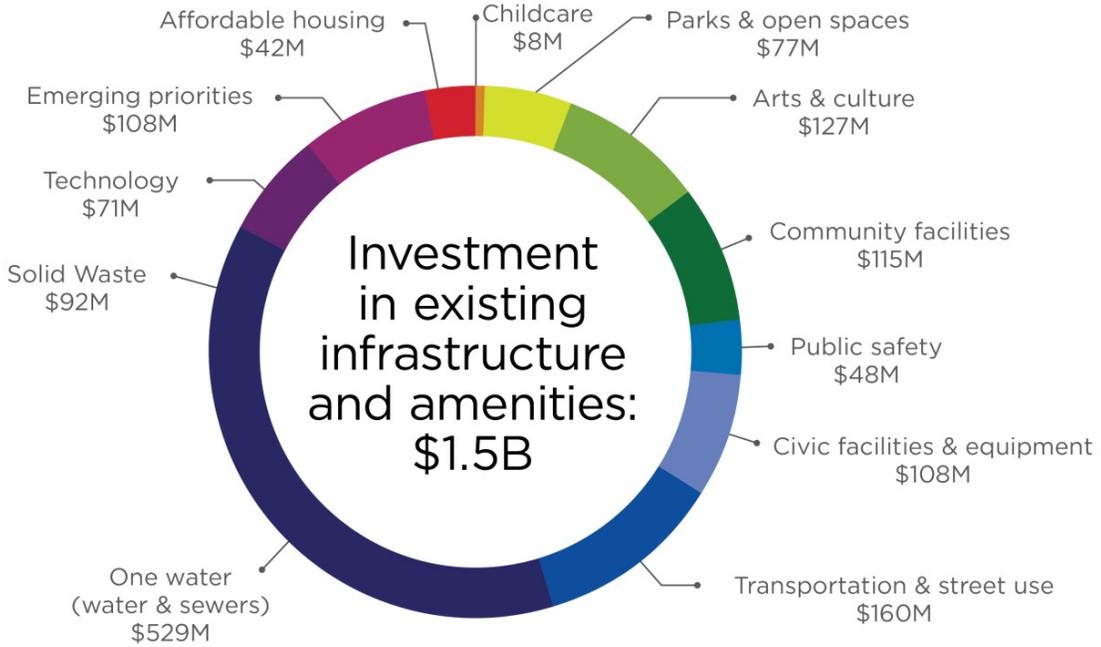
Technology

- Hardware
- Applications

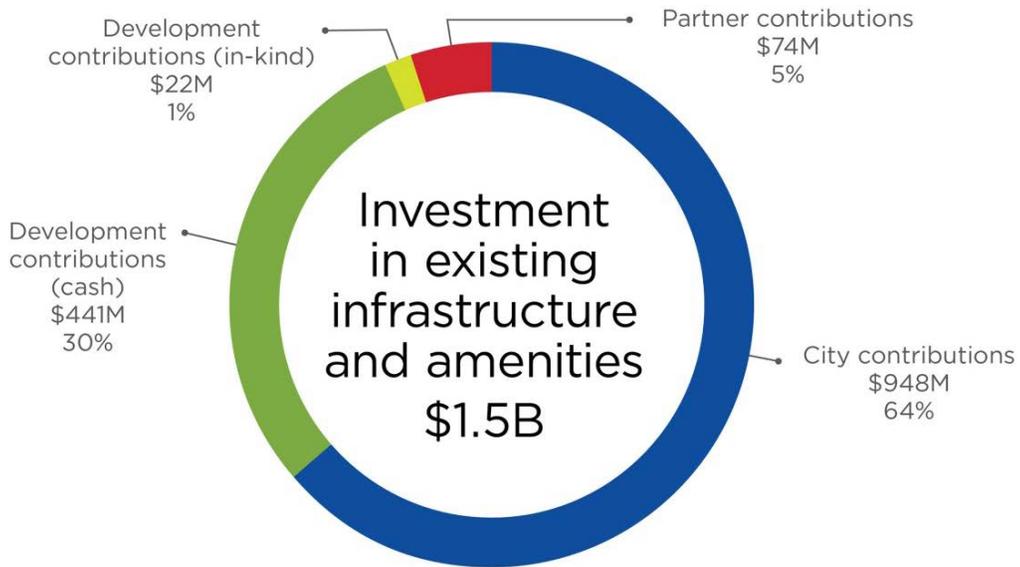
INVESTMENT SUMMARY

A) EXISTING INFRASTRUCTURE AND AMENITIES: \$1.5 BILLION

Investment by service area:

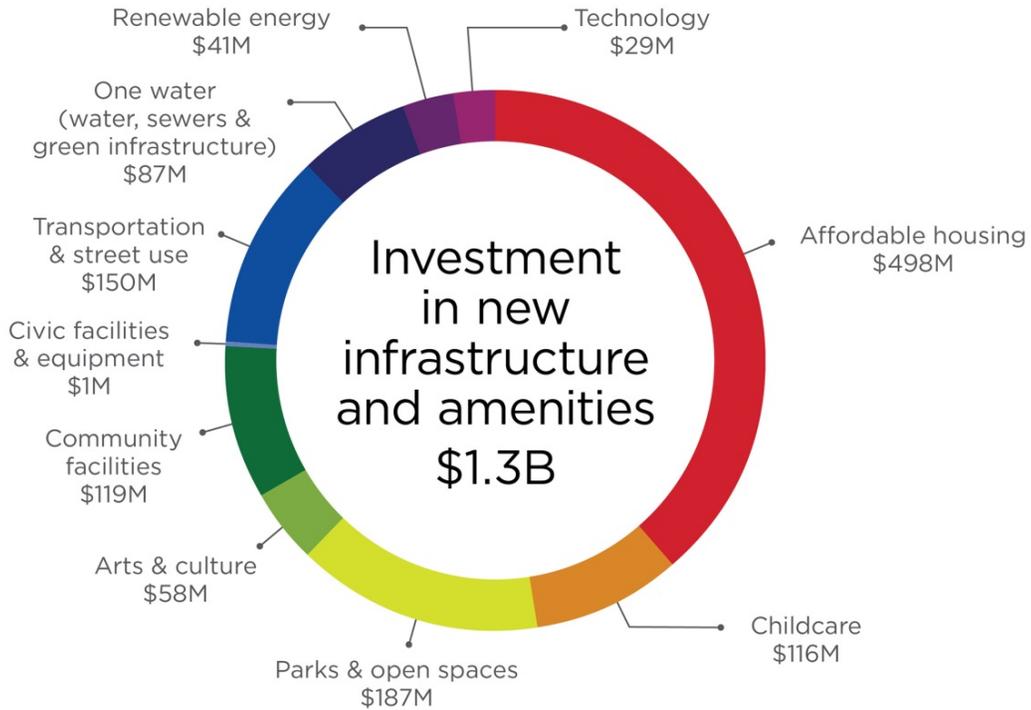


Funding sources:

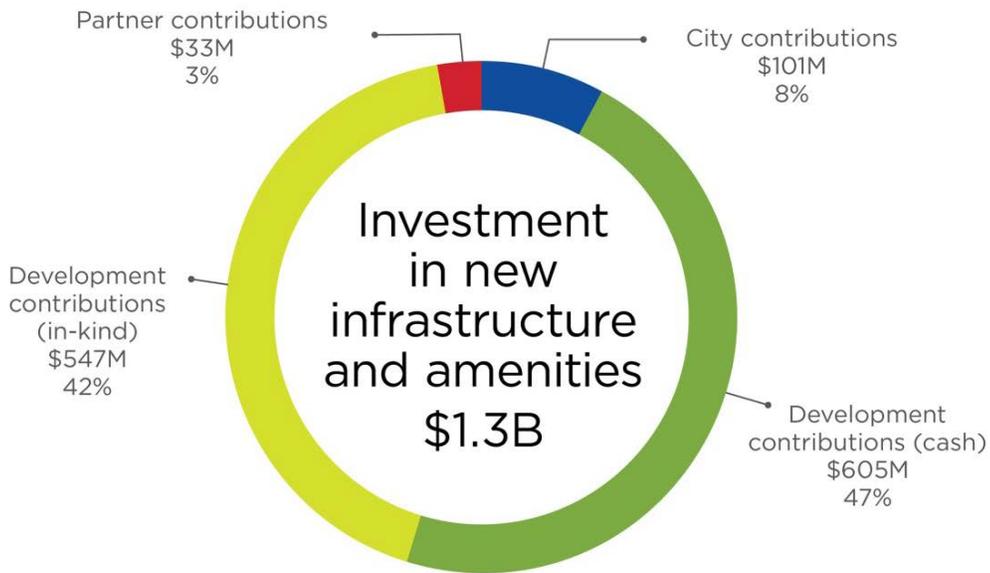


B) NEW INFRASTRUCTURE AND AMENITIES: \$1.3 BILLION

Investment by service area:

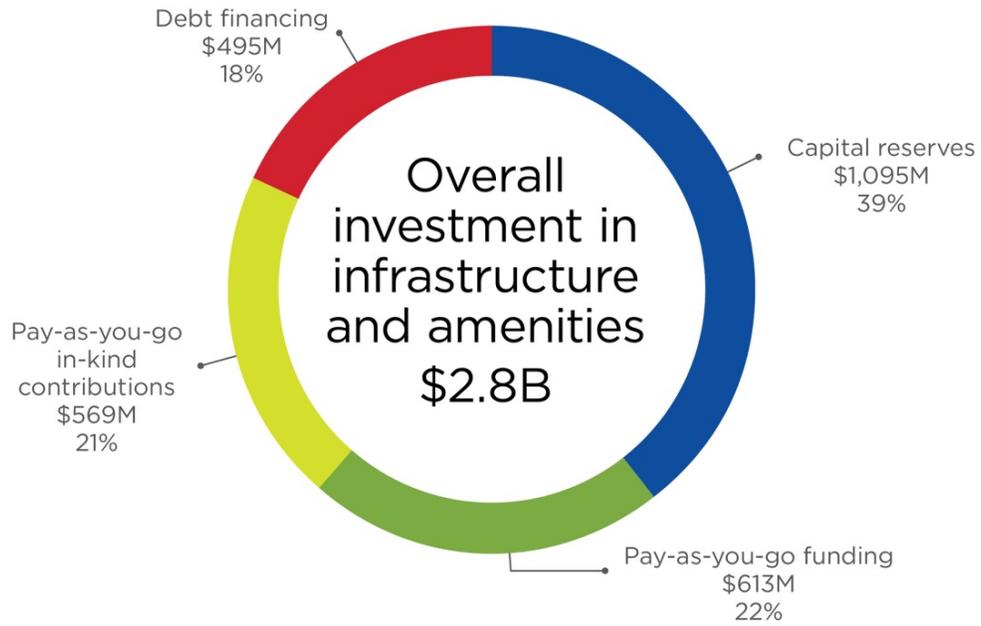


Funding sources:



C) OVERALL CAPITAL PLAN: \$2.8 BILLION

Financing methods:



AFFORDABLE HOUSING

I. Overview

Having an affordable and varied housing stock in Vancouver helps support the needs of a growing population and maintain the diversity, inclusivity and vibrancy of a city. As housing is becoming increasingly unaffordable in the region, more residents are facing significant and growing housing cost burden. To preserve the city’s community and economic resiliency, housing needs to be accessible, affordable, and suitable to local incomes and a variety of households including families with children, seniors, low-and moderate-income workers and those with mobility challenges.

II. Inventory of Assets

There are approximately 284,000 housing units in the city of Vancouver (2016 census), categorized as follow using the City’s housing continuum chart:



The following summarizes the different types of affordable housing owned by the City or located on City land:

	City Assets	Replacement Value	% in Good / Fair Condition	Partner Assets
Shelters (year-round)	<ul style="list-style-type: none"> 5 parcels of City-owned land leased to partners 	-	-	<ul style="list-style-type: none"> ~300 beds on City-owned land ~700 beds on non-City land
SROs (privately-owned)	<ul style="list-style-type: none"> n/a 	-	-	<ul style="list-style-type: none"> ~4,200 SRO rooms owned by private sector
Supportive housing & Non-market rental	<ul style="list-style-type: none"> ~750 units in City buildings ~200 parcels of City-owned land leased to partners 	\$190 M	65%	<ul style="list-style-type: none"> ~10,200 units on City-owned land ~14,700 units on non-City land
Purpose-built rental	<ul style="list-style-type: none"> ~100 units (#1 Kingsway) 	\$30 M	100%	<ul style="list-style-type: none"> ~58,000 units



The following table summarizes major work completed in the last 10 years (2009-2018) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Supportive housing & Non-market rental	<ul style="list-style-type: none"> • Old Continental Hotel on Granville St. replaced by Kingsway Continental • Roddan Lodge renewal & expansion (underway) 	<ul style="list-style-type: none"> • ~2,500 additional units completed by City and partner agencies
Purpose-built rental	<ul style="list-style-type: none"> • n/a 	<ul style="list-style-type: none"> • ~2,500 additional units completed by the private sector • ~100 additional units completed by the City

III. Long-term Vision

Metro Vancouver’s *Regional Growth Strategy* (2011) provides direction to create complete communities with a range of housing choices close to employment, amenities, and transit. These directions are supported in the *Regional Affordable Housing Strategy* (2016), which directs the expansion of rental housing supply along the frequent transit network, recognizing the affordability benefits achieved when housing is located within easy access of high-quality public transit.

Housing Vancouver Strategy (2017) highlights the need to align housing affordability to local incomes. To maintain diversity, the strategy provides updated housing targets focusing on the “right supply” by including consideration of the location, building type, tenure, and affordability of this new housing.

Housing Diversity

Ensure that Vancouver's housing stock can accommodate residents with a broad range of incomes and occupations, and households at all life stages to maintain a diverse population and workforce.

- Preserve and expand existing social and supportive housing for vulnerable residents.
- Require new rental projects to include a portion of larger units and enable appropriate built forms for seniors and families.

Housing Affordability

Provide a range of affordability, from social to rental housing options, to accommodate a diversity of households, including singles, seniors, and families at a range of income levels, to live and work in neighborhoods well-served by transit, parks and other amenities.

- *Existing rental housing* – Older rental housing stock is generally more affordable and better meets the needs of low to moderate income households than new market rental housing.
 - Prioritize retention of existing purpose-built rental housing through the *Rental Housing Stock ODP* regulations, which requires replacement of existing rental units on applicable sites (e.g. CD-1 zoned sites).
 - Enable some redevelopment with replacement of the rental units.
- New Secured Market Rental Housing
 - Encourage market rental housing through incentives available under the City's *Secured Market Rental Housing Policy: Rental 100* (e.g. additional height and/or density, Development Cost Levy waivers, parking reductions).
- *New Moderate Income Rental Housing* – Rising rental rates are putting pressure on moderate-income households, many of which are paying more than 30% of their income on housing and are increasingly unable to afford market rental housing.
 - Secure moderate income rental housing units as part of secured rental housing projects, where a portion of the units are secured at rents that are affordable to households with incomes between \$30,000 and \$80,000 per year.
- *Social Housing* - Social housing is a critical source of affordable housing for low- and moderate-income households in Vancouver. Many social housing projects have rents geared to residents' incomes, making them a truly affordable option for families, seniors, and vulnerable residents who would not otherwise be able to afford market rental units.
 - Secure social housing on City land in partnerships involving senior government funding, and through inclusionary zoning policies and grants to non-profit led housing developments.
- *Supportive Housing* – The most effective way to address homelessness is to provide sufficient homes for those on low-income and with physical, mental health and addiction challenges. Supportive Housing is recognized to be the most effective type of housing as it combines low rents with additional staffing supports and services, tailored to individual resident needs.
 - Enable supportive housing on City and/or third party land through senior government capital and *operating* investments. A recent example is the innovative provincial partnership to deliver 600 new Temporary Modular Homes with supports.

Other key city-wide strategies such as the *Healthy City Strategy* (2014), *Transportation 2040* (2012), and the *Greenest City Action Plan* (2011) also help guide the City's housing strategy.

- Increase housing diversity, supply, and new affordable housing options close to transit in a pedestrian-friendly environment that is well-served by amenities.
- Locate housing options near transit to reduce the need for a car, minimize commuting times and distances, and free up overall household income.

IV. Strategy for the Next 10 Years

The Housing Vancouver Strategy (2017) aims to change the future of housing in Vancouver – housing should be affordable and suitable to local incomes and a variety of households, including low- and moderate-income workers, families, seniors, while addressing the needs of our most vulnerable populations. The strategy's three-year action plan includes over 110 actions, including priorities to advance the transformation of low-density neighborhoods, increase rental protection and affordability, provide housing for homeless residents, and develop a 10-year affordable housing delivery and financial plan to support the development of 12,000 social, supportive, and co-op homes.

Providing social housing is primarily the responsibility of senior governments. In recent months, both Federal and Provincial governments have introduced funding programs for creating and sustaining affordable housing. In November 2017, the Federal Government announced the National Housing Strategy, which includes a number of funding programs to support creation of new housing and preservation of existing housing. In February 2018, the Provincial Government announced "A 30-Point Plan for Housing Affordability in British Columbia", which includes a number of new tax measures to dampen speculative demand and generate new revenues to fund affordable housing. In June 2018, the federal and provincial government signed the Canada-B.C. bilateral agreement to renew and expand affordable housing. The City welcomes these new initiatives, since in the absence of senior government support, the City alone will not be able to sustain and grow the affordable housing portfolio over the long term.

The City is actively exploring strategic partnerships with other levels of government to deliver much-needed affordable housing through various means, including funding for capital and operating costs in new affordable housing; financing to support affordable housing construction; and legislative changes to enable new municipal housing and land use initiatives.

Having a sustainable partnership and funding arrangement with senior governments would substantially enable new affordable housing supply as well as the much needed building repairs for all co-op and non-market housing on City land.

The City uses a variety of enabling tools to leverage affordable housing in partnership with senior governments and private and/or non-profit housing partners:

- *Contributions through Development* – As part of market residential and/or mixed use development, there may be opportunities to secure "turn-key" non-market housing to the City through voluntary community amenity contributions and/or inclusionary zoning polices. Non-profit housing partners can be selected to operate and maintain the housing projects at prescribed affordability over the lease term (usually 60 years).
- *City Land Contributions* – The City leverages long term land leases to housing partners at below market rent for 60 years or longer for the purpose of creating new affordable housing. Partners may be involved solely in operating non-market housing or may undertake the comprehensive development and long term operational responsibility, depending on the nature of the partnership with the City.

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- *Capital Grants* – The City allocates grants to non-profit partners to enhance viability and affordability of their non-market housing projects, with additional funding available to encourage delivery of supportive housing and family-sized units.
- *Development Cost Levies (DCL's) Waivers/Exemptions* – Social housing projects are exempt from DCLs. Secured market rental projects may qualify for DCL waiver if the development meets the various criteria under the applicable DCL by-law.
- *Property Tax Exemptions* – Supportive housing, if designated by the Province as a Class 3 property, is subject to special valuation rules that reduce the assessed value to a nominal amount and are effectively exempt from property taxes.

V. 2019-2022 Capital Plan: \$140 million (+\$400 million in-kind)

The following table outlines the proposed funding envelope for various housing programs.

\$ millions	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Dev.	Partner
	SROs	SRO upgrade granting program (\$6.0M)	6.0	-	6.0	-	6.0	-
	Supportive housing	Supportive housing granting program (\$900K)	0.9	-	0.9	-	0.9	-
	City-owned & City operated	Replacement of City-operated residences (\$12.0M) Seismic evaluation of existing facilities (\$475K) Renovations to keep facilities functional & efficient (\$1.0M) Capital maintenance program (\$2.0M)	15.5	-	15.5	3.5	12.0	-
	City-owned & Partner operated	New units delivered through development (\$400.0M, est. 1,200-1,600 units in-kind)	-	400.0	400.0	-	400.0	-
	Non-City housing on City-owned land	Preservation of existing non-market & co-op housing (\$15.0M) Acquisition of new land for affordable housing (\$75.0M)	15.0	75.0	90.0	-	90.0	-
	Non-City housing on Non-City land	Chinatown housing partnerships (\$1.6M) Infrastructure granting program for new social housing (\$20.0M)	1.6	20.0	21.6	-	21.6	-
	Subtotal		32.1	495.0	527.1	3.5	523.6	-
	Purpose built rental & other	Rental protection & relocation and other programs (\$1.5M)	1.5	-	1.5	-	1.5	-
	Implementation & research	Planning & studies for non-City housing on City-owned land (\$1.5M, VAHA) Planning & studies for other affordable housing (\$3.2M, ACCS)	1.6	3.1	4.7	-	4.7	-
	Affordable housing		\$42.0	\$498.1	\$540.1	\$3.5	\$536.7	-
		Subtotal cash	42.0	98.1	140.1	3.5	136.7	-
		Subtotal in-kind	-	400.0	400.0	-	400.0	-

Major renewal projects/programs include:

- \$12 million has been earmarked for the replacement of **City-operated non-market housing**
- **Preservation of existing non-market & co-op housing:** In partnership with senior governments, \$15 million has been earmarked to assist with the much needed building repairs for co-op and non-market housing on City land.
- As part of the Downtown Eastside Local Area Plan (2014), Council endorsed the creation of a capital grant program to assist with the **upgrading of existing Single Room Occupancy (SROs) hotels** owned and/or managed by non-profit agencies. SROs play an important role among the lowest income residents in Vancouver. The program will help improve the safety, livability and health conditions of SROs. \$6 million has been earmarked in the 2019-2022 Capital Plan to assist with SRO upgrades. The program will support emerging partnerships with senior governments and the non-profit sector, ultimately looking to replace SROs with new non-market housing units, but in the interim focusing on improving management, securing affordability, and improving livability especially the private SROs.

Major new/upgrade projects/programs include:

- 1,200 to 1,600 units secured through voluntary **in-kind CACs and inclusionary zoning** at an estimated value of \$400 million.
- \$75 million has been earmarked in the Capital Plan for **housing site acquisition** to enable senior governments and non-profit housing partners to design, build, finance, operate and maintain housing projects on City land. This is in addition to land already owned or secured by the City dedicated for affordable housing.
- \$20 million has been earmarked for **capital grants** (\$10,000 to \$30,000 per door) to enable housing projects to be delivered through community partners.

Potential affordable housing projects to be delivered on City land in partnership with senior governments include, but not limited to, the option sites in Northeast False Creek, the Coal Harbour site to be co-located with a school and a childcare, and other sites that have been dedicated to the Vancouver Affordable Housing Agency that are in various stages of design and development.

In June 2018, City Council approved the formation of the Vancouver Affordable Housing Endowment Fund to consolidate all non-market housing assets from the Property Endowment Fund and the Capital Fund, with a clear mandate of preserving and growing the City's affordable housing in a sustainable way. This new approach would further leverage portfolio-wide optimization of the City's non-market housing assets, economies of scale in development and operation, strategic partnerships with senior governments and housing partners, and direct investments from social purpose funds and the private sector. Work is underway to develop the mandate, governance and legal structure, staffing and other resources required to support the development and ongoing management of the Fund.

Consistent with Council policies, affordable housing delivery will focus on the *Housing Vancouver* income targets. Projects are expected to be self-sustaining over the long term where rents are set at levels that will cover mortgage payments (to repay some or all of the construction costs), operating costs and capital replacement; and do not require further operating subsidies, property tax exemptions, and/or financial guarantees from the City. To fully achieve the *Housing Vancouver* income targets and the necessary level of affordability, the City will need partnership funding such as Provincial rent supplements, BC Housing, CMHC, and/or non-profit and partner equity contributions.

The City's Rental 100 Program as well as zoning policies relating to laneway housing and secondary suites are expected to continue to significantly increase the supply of affordable market rental units.

CHILDCARE

I. Overview

With more housing opportunities for families with children contemplated in the *Housing Vancouver Strategy*, the number of children and youth in the city is anticipated to increase over time.

Affordable, accessible, and quality childcare has long-lasting positive impacts on child development, and is important to the success of many working families. Childcare includes preschool spaces, infants and toddlers programs aged 0 to 4, and out-of-school care for children aged 5 to 12.

While childcare is primarily a senior government responsibility, the City leverages key partnerships with Vancouver School Board, Vancouver Park Board, Vancouver Public Library, and other levels of government and non-profit organizations to provide a range of childcare programs across the city. Together with programs provided through family places, community centres and neighborhood houses, and public education provided through Vancouver School Board, the City strives to provide the much needed services to ensure that children and families in Vancouver can thrive and enjoy a healthy development, and help support a strong economy and a healthier city for all.

II. Inventory of Assets

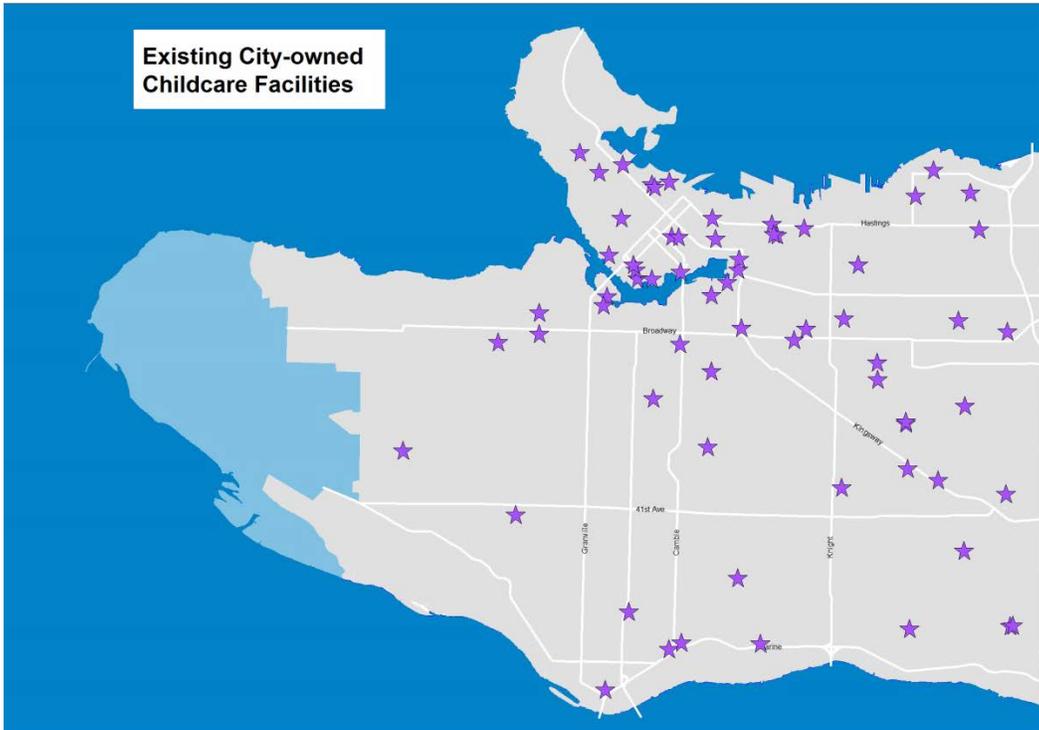
There are currently approximately 13,000 licensed childcare spaces in Vancouver. The City has facilitated approximately 4,300 of these spaces¹, close to 1 in 3 licensed childcare spaces (33%).

Most preschool spaces in City-owned buildings are located in community centres and date from the 1950s and 1960s. These spaces are gradually being renewed as the community centres are renewed. About a dozen daycares (mostly portables) were built between 1970 and the early 1990s and most of these facilities have been or are in the process of being renewed. Only three remain to be renewed.

	City Assets	Replacement Value	% in Good / Fair Condition	Partner Assets
Infant, toddler & preschool (0-4 years old)	<ul style="list-style-type: none"> 66 facilities with 2,240 spaces 	\$230 M	~80%	<ul style="list-style-type: none"> ~5,200 spaces provided by VSB, non-profit agencies, and private sector
School age (5-12 years old)	<ul style="list-style-type: none"> 17 facilities with 824 spaces 	n/a ²	-	<ul style="list-style-type: none"> ~4,000 spaces provided by VSB, non-profit agencies, and private sector

¹ As of March 31, 2018

² School age care is part-time and the spaces are typically shared with other community uses.



The following table summarizes major work completed in the last 10 years (2009-2018) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Infant, toddler & preschool (0-4 years old)	<ul style="list-style-type: none"> 75 spaces in buildings on City land 	<ul style="list-style-type: none"> 2,000 licensed spaces created by the City, VSB and other providers
School age (5-12 years old)	<ul style="list-style-type: none"> 105 spaces in City-owned buildings 	<ul style="list-style-type: none"> 1,000 licensed spaces created by the City, VSB and other providers

III. Long-term Vision

Provision of quality licensed childcare is key to reducing child vulnerability and ensuring children begin school developmentally ready to learn. While childcare is primarily a senior government responsibility, the City forms partnerships, advocates, and invests in creating quality and accessible childcare spaces, which are operated by non-profit partners.

The City has met its four-year target to create 1,000 new childcare spaces during the course of the 2015-2018 Capital Plan period in partnership with senior governments and other childcare providers, and this meets about half of the need for new spaces generated by growth.

The City has a number of strategies that guide the planning, design and development of childcare facilities in Vancouver:

- Leverage new development to help create childcare facilities
- Provide modest operating and capital grants, facilities maintenance support, and organizational capacity-building to support non-profit childcare providers

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- Partner with Vancouver School Board, Vancouver Park Board to facilitate new childcare facilities

The City, Vancouver Park Board, and Vancouver School Board have made commitments to increase the number and availability of quality childcare spaces in Vancouver, and have forged a strong partnership with non-profit childcare operators. The City continues to advocate for greater participation of the federal and/or provincial governments in the delivery of childcare services.

IV. Strategy for the Next 10 Years

- Strengthen and grow the City's partnership with the Province in developing new licensed childcare spaces, including those in Vancouver schools and BC Housing projects. The Provincial plan *Child Care BC – Caring for Kids, Lifting Up Families – The Path to Universal Childcare* will invest \$1B in childcare in B.C. over the next three years, to bring down fees for parents, build more licensed spaces, and work to increase the number of qualified Early Childhood Educators in B.C. while better supporting ECEs already working in the field.
- Utilize opportunities to facilitate the development of additional childcare spaces for children aged 0 to 4 and out-of-school care for children aged 5 to 12, including:
 - Schools undergoing seismic upgrade or replacement (for children aged 0 to 4), and existing schools and school land for out-of-school care (for children aged 5 to 12).
 - New development in high-growth areas and major project sites.
 - Community centre expansions or renewals.
- Locate new childcare facilities in convenient and accessible locations:
 - In areas with higher-density, family-focused residential developments and co-located with affordable housing.
 - Co-located with schools and other civic facilities.
 - Close to schools, parks, recreation facilities and service hubs.
 - In areas of high employment.
 - In areas with high accessibility to public transit.
- Ensure no net loss of childcare spaces by retaining, replacing, or expanding existing childcare facilities.

V. 2019-2022 Capital Plan: \$86 million (+\$38 million in-kind)

\$ millions	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
Infant, toddler & preschool (0-4 years old)	City-owned	Renewal of childcare at Marpole-Oakridge Community Centre (\$6.8M)	7.8	112.5	120.3	7.8	107.5	5.0
		Renovations to keep facilities functional & efficient (\$750K)						
		Capital maintenance program (\$325K)						
		New 0-4 spaces delivered by development (\$37.5M, ~250, in-kind)						
School age	City-owned	New 0-4 spaces delivered by the City or partners (\$75.0M, ~500)	-	2.5	2.5	-	2.5	-
		New or upgraded space to provide 5-12 spaces (\$2.5M, ~250)	-	2.5	2.5	-	2.5	-
Implementation & research		Planning & overhead (\$600K)	-	0.6	0.6	0.6	-	-
Childcare			\$7.8	\$115.6	\$123.4	\$8.4	\$110.0	\$5.0
Subtotal cash			7.8	78.1	85.9	8.4	72.5	5.0
Subtotal in-kind			-	37.5	37.5	-	37.5	-

Major renewal projects include:

Renewal of the 45-space daycare and preschool currently located at Marpole-Oakridge Community Centre at a cost of \$6.75 million

Major new/upgrade projects include:

- Creation of ~750 new spaces for infants, toddlers & preschoolers (0-4 years old):
 - ~500 spaces delivered by the City or partners, including:
 - 200 to 250 spaces at City-owned sites (e.g. additional spaces at the renewed Marpole-Oakridge Community Centre, new childcare co-located with Marpole Library, new childcare in the Fraser Lands); and
 - 250 to 300 spaces co-located with schools, either at new schools (e.g. Coal Harbour) and schools undergoing seismic upgrade or replacement (locations to be determined; recent examples include Nelson, Fleming and Tennyson Schools).
 - ~250 spaces delivered by development (in-kind projects), including anticipated projects at Little Mountain, Oakridge Centre, Dogwood-Pearson and Marine & Fraser Streets.
- Creation of ~250 new childcare spaces for school age children (5-12 years old) delivered by the City or partners

PARKS & OPEN SPACES

I. Overview

The livability of a city is strongly tied to the quality of its parks, open spaces, and public places. Parks and plazas provide spaces for people to gather, play, socialize and relax. They play a crucial role in supporting public health and social connections, maintaining urban ecological systems, providing connections with nature, and fostering a sense of community.

As Vancouver continues to grow over the coming decades, its parks, open spaces, and public places will become increasingly important. New and existing residents living in more compact communities will need parks that are well maintained, with amenities and features that meet their leisure and recreational needs.

II. Inventory of Assets

Vancouver’s network of parks and open spaces includes over 300 sites distributed across the city, accounting for 1,370 hectares (13.7 km²) or about 10% of all land within municipal boundaries. These open spaces vary in size (from small urban plazas and mini-parks to major parks like Stanley Park) and function (e.g. natural areas, sports and recreation, leisure activities and public gatherings). The vast majority of parks and open spaces are managed by Vancouver Board of Parks and Recreation. Other government agencies that provide open space in Vancouver include the Vancouver School Board (VSB), Granville Island, Canada Place, hospitals and post-secondary schools.

	City Assets	Replacement Value	% in Good / Fair Condition	Partner Assets
Parks & Open Spaces	<ul style="list-style-type: none"> • 1,370 hectares of parks & open spaces • 215,000 trees • 32 km of seawall • 180 sport fields • 229 sport courts • 160 playgrounds • 36 dog off-leash areas • 6 golf courses • 1 cemetery • 149 park buildings 	\$1.8 B	~65%	<ul style="list-style-type: none"> • Playgrounds, playfields and sport courts at VSB schools • Open spaces on Granville Island • Open spaces at Canada Place and Convention Centre • Open spaces at hospitals and post-secondary schools



The following table summarizes major work completed in the last 10 years (2009-2018) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Parks & Open Spaces	<ul style="list-style-type: none"> • 9 park renewal projects • 20 playgrounds • 7 fieldhouses & washrooms • 5 sport fields • 57 sport court surfaces • VanDusen Botanical Garden Visitor Centre • Mountain View Cemetery buildings 	<ul style="list-style-type: none"> • 9 hectares of new park • 0.6 km of new seawall • 9 new playgrounds • 8 new synthetic turf sport fields • 4 new basketball courts • 4 new skateboard and bike parks • 3 new dog off-leash areas • 5 new fieldhouses and washrooms

III. Long-term Vision

The City and Vancouver Park Board are committed to ensuring that all residents have access to high quality parks and recreation experiences. This commitment is supported through policies and strategies such as:

- The *Park Board's Strategic Framework* (2012) sets a vision of connecting people to green space, active living and community, with a strong focus on inclusion and accessibility for all backgrounds, genders, incomes, and abilities.

- The *Greenest City 2020 Action Plan* (2011, updated 2015) includes targets to:
 - ensure every person lives within a five-minute walk of a park, beach, greenway, or other natural space
 - plant 150,000 additional trees between 2010 and 2020
 - increase access to the waterfront, particularly the Fraser River
- The *Biodiversity Strategy* (2016), in conjunction with the *Urban Forest Strategy*, *Environmental Education and Stewardship Action Plan*, and *Bird Strategy*, provides a foundation for:
 - restoring and protecting natural areas and species
 - improving access to nature across the city
 - supporting biodiversity on public and private lands in Vancouver
- The new *VanPlay - Parks and Recreation Services Master Plan* (in progress 2018), will guide the long-term renewal and expansion of the parks and recreation system, as well as development of new park provision metrics and policies
- *VanSplash: Vancouver Aquatic Strategy* (in progress 2018) will guide the future of Vancouver's pools and beaches, exploring innovative options to support community and personal well-being
- *People, Parks and Dogs Strategy* (2017) guides the planning and design of safe, engaging, and appealing parks for people with and without dogs

IV. Strategy for the Next 10 Years

Key Priorities

- Targeting equity, inclusion and access for all
- Resiliency of spaces, ecosystems, amenities and facilities (climate, density, disaster)
- Reconciliation with and learning from local First Nations rights-holders

Key Outcomes

- Grow park and green spaces by ~20 hectares (~50 acres)
- Build a network of connectivity between new and existing park spaces
- Add four geographically dispersed destination parks (Northeast False Creek, East Fraser Lands, Fraser River, Oakridge)
- Continue to grow existing park spaces and amenities (~20 parks)

Trends Impacting Parks & Recreation over the next 10 years

- ~60,000 new residents resulting in parks catering for more residents at once
- Densification mainly in urban core and growth areas, reducing access to private recreation space and reducing tree canopy cover
- Rising inequity in service provision at a city wide scale
- Aging population requiring parks and recreation amenities to adapt to changing needs
- Increasing demand for wellness amenities

- Increased desire for access to nature and to experience nature in the city
- A changing climate which is impacting ecosystems, maintenance requirements and services required

Actions to Address Priorities and Trends

- Acquire and develop new parks, and add amenities to existing parks to improve service in areas of high need (e.g. areas with significant population growth and/or service gap), and to serve the active and passive park needs of all ages (e.g. paths and trails, skateparks, seating, drinking fountains, playgrounds, off-leash dog areas, multi-use hard surfaces and courts).
- Pursue partnerships, development and acquisition to connect park spaces together and to provide access to the waterfront (especially along the Fraser River).
- Grow the urban forest through tree planting on public lands, streets, private property, and developments sites.
- Use green infrastructure, living shorelines, daylight streams to restore natural hydrology and enhance ecological networks.
- Support thriving environmental stewardship to care for natural areas and provide opportunities for recreation through volunteerism and care of natural areas in leisure time.
- Integrating elements of Musqueam, Squamish, Tsleil-Waututh Nations and Urban Indigenous Peoples history and living culture in park design.
- Increase the capacity of parks to cater to increased demand and build resilience to a changing climate by building and upgrading parks and fields with durable surfaces and amenities.

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V. 2019-2022 Capital Plan: \$264 million

\$ millions	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.*	Partner
	Park land	Land acquisition program (\$80.0M)	-	80.0	80.0	-	80.0	-
		Renewal & upgrades of existing parks (\$29.2M)						
	Park development	Renewal & upgrades of playgrounds, spraypads, etc. (\$9.0M)	38.8	43.5	82.3	3.8	78.5	-
		Universal access improvements (\$600K)						
		New park development (\$43.5M)						
	Park amenities	Other	0.4	4.0	4.4	0.4	4.0	-
		Skate & bike facilities/tracks (\$2.4M)						
		Dog parks & amenities (\$2.0M)						
	Planning & overhead	Parks & recreations studies (\$2.7M)	2.1	16.6	18.7	2.1	16.6	-
		Project management (\$16.0M)						
	Subtotal		41.3	64.1	105.4	6.3	99.1	-
		Grass field renewals & upgrades (\$1.5M)						
		Synthetic field renewals & upgrades (\$4.0M)						
	Fields	Renewal & upgrades to ball diamonds & cricket program (\$0.5M)	6.2	5.4	11.6	3.9	7.7	-
		Field lighting renewals & upgrades (\$200K)						
		New synthetic turf field (\$5.4M)						
	Tracks	Renewals & upgrades of running tracks (\$1.3M)	1.3	10.0	11.3	0.6	10.8	-
		New competitive track & field training facility (\$10.0M)						
	Other sport amenities	Renewal & upgrades of courts (\$1.0M)	1.5	-	1.5	0.8	0.8	-
		Golf course improvements (\$500K)						
	Subtotal		9.0	15.4	24.4	5.2	19.2	-
	Waterfront &	Renewal & upgrade of bridges, boardwalks & piers (\$4.5M)	4.5	-	4.5	3.5	1.0	-
	Seawall	Seawall maintenance & renewal (\$1.7M)	1.9	2.0	3.9	1.9	2.0	-
		Seaside greenway (\$2.0M)						
		Shoreline maintenance (\$200K)						
	Subtotal		6.4	2.0	8.4	5.4	3.0	-
	Trees	New trees (\$8.2M, ~67,000)	0.5	8.2	8.6	0.5	8.2	-
		Replacement trees (\$482K, ~4,000)						
	Biodiversity	Biodiversity projects (\$3.7M)	-	3.7	3.7	-	3.7	-
	Restoration & maintenance	Stanley Park cliff scaling (\$461K)	0.5	1.6	2.1	0.5	1.6	-
		Hastings Park stream & wetland creation (\$1.6M)						
	Subtotal		0.9	13.4	14.4	0.9	13.4	-
	Pedestrian access	Rehabilitation of pedestrian bridges (\$3.5M)	3.5	1.5	5.0	3.5	1.5	-
		New & improved pathways (\$1.5M)						
	Vehicle access	Rehabilitation of paved surfaces (\$1.9M)	1.9	-	1.9	1.9	-	-
	Park infrastructure	Rehabilitation of park infrastructure (\$250K)	0.9	1.5	2.4	0.6	1.8	-
		Green infrastructure & drainage (\$1.5M)						
		Maintenance & upgrades to electrical systems (\$600K)						
	Other features	Community garden upgrades (\$400K)	1.1	0.7	1.7	0.7	1.1	-
		Irrigation systems & water conservation (\$1.3M)						
	Subtotal		7.3	3.7	10.9	6.6	4.4	-
	Park buildings	Renewal & upgrades of washrooms, fieldhouses & concessions (\$8.3M)	12.3	8.7	21.0	6.1	14.9	-
		Capital maintenance (\$4.0M)						
		New washrooms & fieldhouses (\$8.7M)						
	Parks & open spaces		\$77.3	\$187.2	\$264.5	\$30.5	\$234.0	-

* Excludes assets expected to be delivered in-kind from development.

In the next four years, the Park Board is considering undertaking a number of major renewal projects, including park renewals for Oak Park and John Hendry Park. Additionally a number of major projects will expand park access and amenities, including new parks in Southeast False Creek and East Fraser Lands, and building a new washroom facility at Columbia Park. Highlights of the Capital Plan for the next four years are described below and shown on the accompanying map.

Parkland Acquisition

This category is for parkland acquisition across the City. The Fraser River waterfront continues to be an area of focus, as is expanding neighborhood parks and natural areas.

Park Amenities

This category includes new parks and renewals as well as new and upgraded amenities in parks such as playgrounds, skateboard and bicycle parks, courts, pathways and dog off leash areas. On the horizon is the design and development of a new park in the eastern portion of South East False Creek, development of the parks and foreshore in East Fraser Lands, and an expansion to the park in the Burrard Slopes Neighborhood. Furthering plans for Andy Livingstone Park and a new and renewed Creekside Park in North East False Creek, as well as planning for increased park amenities in the West End, Downtown, and Cambie Corridor are upcoming works. Additionally, ongoing emphasis on the park renewal program, playground renewal program, and providing for emerging new types of recreation facilities will be important

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throughout the park system, especially in areas of growth, in areas of need and adjacent to the Arbutus Greenway.

Programmed Activity Areas

This category includes areas for sport use in parks including grass and synthetic play fields, tennis and basketball courts, and ball diamonds. The first competitive and training track and field facility is to be built in addition to upgrades to aging recreational tracks, a grass sport field renewal, 2 new synthetic turf fields and sport court resurfacing.

Seawall and Waterfront

This category provides funds for new waterfront developments and for the repair and upkeep of shorelines and seawalls on the ocean and riverfronts. The renewal of bridges and piers in parks, as well as the False Creek seawalls are included here.

Urban Forest and Natural Features

Planting of trees in parks and through reforestation works, and furthering creek restoration projects such the Tatlow and Volunteer Park and Beaver Creek in Stanley Park are in this category and link to the Park Board's Biodiversity Strategy.

Park Buildings

Renewing park washrooms and fieldhouses and concessions, and building new washroom and fieldhouse amenities is a priority for the upcoming plan. This category also includes funds for the general maintenance and upkeep of ~150 existing park buildings.

General Features and Infrastructure

Continued investment in park infrastructure will support the growing activity across the city. This includes bridges, pavements and parking lots, irrigation systems to further water conservation goals, and other general park infrastructure investments.



ARTS & CULTURE AND COMMUNITY FACILITIES

I. Overview

As Vancouver continues to grow, the well-being of the community is dependent on the availability, accessibility, and affordability of community facilities and programs for people of all ages, incomes, backgrounds, and abilities.

The City leverages key partnerships with Vancouver Park Board, Vancouver Public Library, Vancouver School Board, Vancouver Coastal Health, other levels of government, and non-profit organizations to provide a range of facilities, services and programs across the city.

II. Inventory of Assets

Community facilities include arts, cultural and entertainment/exhibition facilities, libraries, recreation and social facilities.

Cultural

The City owns 55 cultural facilities. Arts and cultural spaces are vital to a city. With the goals of cultivating and enhancing a diverse and thriving cultural ecology that enriches the lives of residents and visitors, the City offers support for cultural facilities through the provision of space, capital grants, technical advice, and regulatory assistance. Vancouver's vibrant cultural ecology relies on a network of accessible, affordable and secure artist creation, exhibition, performance and ancillary spaces.

Entertainment/Exhibition

This category includes Nat Bailey Stadium at Hillcrest Park and the following buildings managed by the Pacific National Exhibition (PNE) at Hastings Park: the Pacific Coliseum, the Forum, Rollerland, and the Livestock Building. These buildings were all built between 1930 and 1970. Also included is Playland amusement park at Hastings Park.

Libraries & Archives

Vancouver's network of libraries includes a central library and 20 branch libraries. Most of the libraries were built between 1945 and 1980. Since 1980, two libraries have been added to the system and 11 have been renewed. The renewal process will continue, and the location, size and service area of libraries are determined by the Library Board and the City as part of the renewal process. The City Archives is currently located in Vanier Park (facility built in 1972).

Recreation

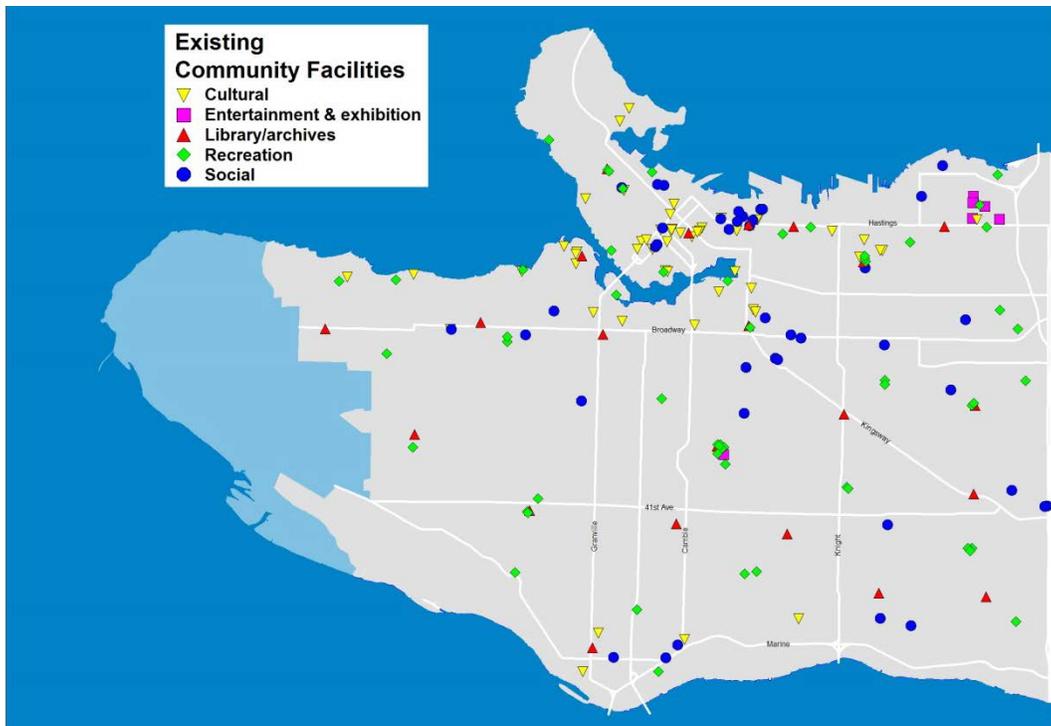
There are 55 recreation facilities across the City, comprised of 24 community centres, one satellite centre, nine indoor swimming pools, five outdoor swimming pools, nine ice rinks and seven non-profit recreation clubs (e.g. curling). The bulk of the recreation facilities were built between 1945 and 1980, and the City started renewing the portfolio in the 1990s and will continue to do so for the next 20-30 years. Significant progress has been made in the last 20 years: 11 facilities have been renewed and three new community centres have been built in high-growth area (Roundhouse, Coal Harbor and Creekside).

Social

The City has been involved in the provision of social facilities since the 1970s and currently owns 41 social facilities. These social facilities have a variety of program and service models, but are typically operated by non-profit organizations that enhance the lives of residents through innovative and essential social programs and services to the community. The programs and services foster resilience among populations and address marginalization and vulnerability. For example, there are 12 integrated services models (e.g. Neighborhood Houses) and 28 sites delivering specialized services (e.g. Boys & Girls Club).

2019-2022 CAPITAL PLAN

	City Assets	Replacement Value	% in Good/ Fair Condition	Partner Assets
Cultural	<ul style="list-style-type: none"> 55 facilities (1,310,000 sq.ft.) 	\$880 M	~55%	<ul style="list-style-type: none"> Non-profit cultural facilities
Entertainment & Exhibition	<ul style="list-style-type: none"> 5 facilities (380,000 sq.ft.) Playland amusement park 	\$320 M	>25%	<ul style="list-style-type: none"> B.C. Place Stadium Rogers Arena Convention Centre
Public Art	<ul style="list-style-type: none"> ~300 art installations 	\$50 M	~75%	<ul style="list-style-type: none"> ~100 art installations on private land
Libraries & Archives	<ul style="list-style-type: none"> 22 facilities (575,000 sf) 	\$670 M	~85%	<ul style="list-style-type: none"> n/a
Recreation	<ul style="list-style-type: none"> 55 facilities (1,680,000 sq.ft.) 	\$1.51 B	~40%	<ul style="list-style-type: none"> YMCA, YWCA
Social	<ul style="list-style-type: none"> 41 facilities (570,000 sq.ft.) 	\$400 M	~60%	<ul style="list-style-type: none"> Non-profit social facilities



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The following table summarizes major work completed in the last 10 years (2009-2018) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Cultural	<ul style="list-style-type: none"> 1 facility renewed (Vancouver East Cultural Centre) 	<ul style="list-style-type: none"> 13 new facilities 1 facility expanded ~175,000 sq.ft. added
Entertainment & Exhibition	<ul style="list-style-type: none"> Basic renovations and maintenance of facilities 	<ul style="list-style-type: none"> Seating expansion at Nat Bailey Stadium
Public Art	<ul style="list-style-type: none"> 6 art installations restored 13 art installations repaired 	<ul style="list-style-type: none"> ~50 art installations added
Libraries & Archives	<ul style="list-style-type: none"> 3 facilities renewed 	<ul style="list-style-type: none"> 1 facility expanded 3 facilities expanded as part of facility renewal project ~60,000 sq.ft. added
Recreation	<ul style="list-style-type: none"> 8 facilities renewed 	<ul style="list-style-type: none"> 1 new facility 1 facility expanded 7 facilities expanded as part of facility renewal project ~130,000 sq.ft. added
Social	<ul style="list-style-type: none"> 1 facility renewed (Marpole Place) 1 facility underway (Evelyne Saller Centre) 	<ul style="list-style-type: none"> 10 new facilities ~240,000 sq.ft. added

III. Long-term Vision

Community spaces play a significant role in community resilience, as they enable access to services for residents; foster the health, well-being and economic prosperity of residents and neighborhoods; and create socially resilient communities. These spaces can encompass initiatives towards being a City of Reconciliation, and can also function as emergency preparedness centres and information centres after a major event (e.g. earthquake). Vancouver’s long-term community well-being is guided by a number of city-wide strategies and policies.

Health & Social Well-being

The City is committed to ensure that all residents have equitable access to high-quality social, community and health services through the following policies and strategies:

- The *Healthy City Strategy* (2014) aims to create a healthy city for all by supporting healthy people, healthy communities, and healthy environments. This cross-agency plan fosters a socially sustainable city through increasing access to community facilities and high-quality programs, and early development opportunities for children.
- The *Social Infrastructure Plan* (in progress 2018) will determine what social infrastructure will be needed in the future, how these will be funded, along with decision-making criteria to guide strategic and sustainable investments. An equity lens will be incorporated to ensure strategic investment in facilities that supports vulnerable and marginalized groups, especially low income.

- The *Age Friendly Action Plan* (2013) includes more than 60 actions to make the city safer, more inclusive, and engaging for seniors.

Seniors

The City collaborates with senior levels of government and community partners to provide a range of facilities and programs to keep seniors active, engaged, and connected to the health services they need.

Youth

The City collaborates with senior levels of government and community partners to facilitate the development and operations of youth services. These programs allow youth to access health, social, education and counselling services, and, in some cases, transition housing.

Recreation

The City and Vancouver Park Board are committed to ensuring that all residents have access to parks and public spaces and recreation facilities. This commitment is supported through the following policies and strategies.

- The *Park Board's Strategic Framework* (2012) sets a vision of connecting people to green space, active living and community, with a strong focus on inclusion and accessibility for all backgrounds, genders, incomes, and abilities.
- The new *VanPlay: Parks and Recreation Services Master Plan* (in progress 2018), also informed by the Vancouver Sport Strategy (2008), the Youth Development Strategy (2013), and the Economic Access Policy (1992), will guide the long-term renewal and expansion of the parks and recreation system, as well as development of new park provision metrics and policies.
- *VanSplash: Vancouver Aquatic Strategy* (in progress 2018) will guide the future of Vancouver's pools and beaches, exploring innovative options to support community and personal well-being.

Arts & Culture

The City supports a diverse and thriving cultural ecology that enriches the lives of residents and visitors. The *Creative City Strategy* (in progress 2018) and the Making Space for Art and Culture: Cultural Infrastructure Plan (in progress 2018) will guide the City's cultural infrastructure initiatives to preserve, enhance and develop arts and cultural spaces.

Libraries

The City and the Vancouver Public Library Board ("VPL") are building an informed, engaged, connected city by providing free places for everyone to discover, create and share ideas and information. The City and VPL will continue to work together to offer equitable opportunities for learning, creativity and innovation through accessible and inviting spaces and digital connections. The VPL's Facilities Master Plan (approved by the VPL Board in June 2018) provides guidance to the long-term renewal and expansion of the library network.

Heritage

Heritage conservation retains and enhances historic places and features that are significant to Vancouver for their history and have educational, aesthetic, social and/or cultural value. Historic places are often sites with other community benefits. For example, Queen Elizabeth Park is a heritage landscape that is widely enjoyed as a place for recreation, sports, and social life.

IV. Strategy for the Next 10 Years

Children & Families

With more family housing opportunities enabled through the *Housing Vancouver Strategy* (2017), the number of children and youth in Vancouver is anticipated to increase over time. Services such as family places, community centres, libraries, neighborhood houses, and childcare facilities are needed to ensure that families thrive and enjoy a healthy development.

- Provide support programs and facilities for families through financing growth tools and grants.
- Explore opportunities to renew or create neighborhood houses and family places.

Youth

Youth programs are typically offered within community centres, libraries and schools, or dedicated youth services hubs that provide a range of programs and services in one location.

- Provide youth services hubs along transit and close to schools.
- Ensure new and renewed community facilities accommodate youth programs.

Seniors

Given the aging population and the City's aim to foster a healthy city for people of all ages and abilities, there is a need for the retention, expansion, and creation of seniors programs, services, and facilities to enable seniors to age in place.

- Explore opportunities for retention, renewal, and expansion of seniors centres and community care facilities.
- Ensure new and renewed community facilities accommodate seniors programs, with a focus on strong transit connectivity, siting accessibility, and affordability.
- Support seniors programs and services that foster independence, empowerment, and community connectedness for an aging population (e.g. community kitchens, peer support, and information and referral services).

Recreation

Recreation facilities, including community centres, pools, and ice rinks are crucial to the well-being of the residents of Vancouver.

Vancouver's recreation facilities vary greatly in terms of age, size, and condition, but most are well used and popular with residents. The facility locations and sizes are rationalized as part of renewal guided by broader Vancouver Park Board strategies. Where there is sufficient concentrated population growth that is not well-served by existing facilities, Vancouver Park Board considers the development of new facilities, or the expansion of existing facilities.

- Set priorities for recreation facility renewal, development, expansion, and programming guided by the *VanPlay: Parks and Recreation Services Master Plan* and *VanSplash: Vancouver Aquatic Strategy*.
- Set priorities for development of outdoor sport facilities guided by the *Vancouver Sport Strategy*.
- Develop flexible, modular approaches to deliver recreation programming in parks.
- Continue to collaborate with the Vancouver School Board on shared gymnasiums, multi-use spaces, and outdoor recreation amenities.
- Explore partnership opportunities for public use of non-Park Board aquatic facilities.

Arts & Culture

Arts and culture play an important role in contributing to quality of life as well as the social and economic vitality of cities. Participation in the arts has been linked to better health and life satisfaction, social cohesion, increased civic engagement and volunteerism, and a more robust local economy. A stronger cultural foundation also provides a basis on which to celebrate community values, identity, and aspirations.

- Explore opportunities and partnerships to preserve, enhance and develop arts and cultural space to be guided by the *Creative City Strategy* (in progress 2018) and the *Making Space for Art and Culture: Cultural Infrastructure Plan* (in progress 2018).
- Address issues of affordability, suitability, displacement, and tenure.
- Expand tools to support community initiatives to build sector capacity.
- Incorporate low-barrier, affordable spaces for cultural activities and programs in community centres, social facilities and other shared spaces.
- Maximize opportunities for cultural use of parks, green space, and plazas through provision of event infrastructure.
- Integrate cultural spaces (e.g. artist studios, artist social housing) into residential and mixed-use buildings where appropriate and feasible.
- Explore flexibility in land use regulations to enable multiple cultural uses and evolving aspects of artistic practice (e.g. producing and presenting work in the same space).
- Support Indigenous cultural spaces and explore opportunities to improve Indigenous visibility.
- Support equity and access to cultural spaces for underserved populations.

Heritage

The purpose of heritage conservation is to retain and enhance historic places and features that are significant to the community.

- Protects historic places (e.g. buildings, bridges, parks) and features (e.g. trees) that are officially recognized as heritage in the Vancouver Heritage Register.
- Enable zoning that supports historic building retention.
- Reveal hidden stories through public art and public realm improvements (e.g. wayfinding signage).
- Allocate community amenity contributions to support heritage conservation efforts city-wide (Heritage Amenity Reserve Fund).

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V. 2019-2022 Capital Plan: \$288 million (+\$131 million in-kind)

Arts & culture								
\$ millions	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
Cultural facilities	City-owned	New performance space at Oakridge Centre (\$15.0M est. in-kind)	14.1	33.0	47.1	13.9	33.2	-
		New cultural hub at 801 Pacific (\$16.0M est. in-kind)						
		New production space at Main & 2nd (\$2.0M est. in-kind)						
		Renovations to keep facilities functional & efficient (\$825K)						
	Capital maintenance program (\$13.3M)							
Non-City	Cultural capital grant programs (\$6.0M)	11.0	-	11.0	4.0	2.5	4.5	
	Chinatown cultural partnerships (\$5.0M)							
Subtotal			25.1	33.0	58.1	17.9	35.7	4.5
Entertain & exhibition facilities	Ongoing implementation of Hastings Park Master Plan (\$10.0M)		12.0	5.0	17.0	17.0	-	-
	Renovations to keep facilities functional & efficient (\$250K)							
	Capital maintenance program (\$6.8M)							
Public art	New public art on private property (\$10.0M est. in-kind)		2.0	20.0	22.0	1.0	21.0	-
	New public art on public property (\$10.0M)							
	Maintenance of existing public art (\$2.0M)							
Heritage	Heritage incentive programs (\$74.4M)		87.9	-	87.9	2.4	76.5	9.0
	Chinese Society Legacy Program (\$10.0M)							
	Redesign of Chinatown Memorial Plaza (\$3.5M)							
Arts & culture			\$127.0	\$58.0	\$185.0	\$38.3	\$133.2	\$13.5
Subtotal cash			127.0	15.0	142.0	38.3	90.2	13.5
Subtotal in-kind			-	43.0	43.0	-	43.0	-
Community facilities								
\$ millions	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
Libraries & archives	Libraries	Renewal & expansion of Marpole library (\$23.8M)	30.5	36.8	67.3	10.8	56.5	-
		Renewal & expansion of Oakridge library (\$37.4M, of which est. in-kind \$35.0M)						
		Renovations to keep facilities functional & efficient (\$700K)						
	Capital maintenance program (\$5.4M)							
Archives	Relocation & renewal of archives (\$18.0M)	18.0	-	18.0	4.0	4.0	10.0	
Subtotal			48.5	36.8	85.3	14.8	60.5	10.0
Recreation facilities	Community centres	Renewal of Marpole-Oakridge community centre (\$38.6M)	36.5	56.6	93.1	24.2	68.9	-
		Master plan & design of 1st phase of West End Community Centre / Joe Fortes Library / King George Secondary School site (\$10.0M)						
		Continued design for 1st phase of Britannia renewal (\$2.5M)						
	Planning for renewal of RayCam community centre (\$2.0M)							
	New Oakridge community centre (\$40.0M est. in-kind)							
Rinks & pools	Continued design for 1st phase of Britannia renewal (\$2.5M)	1.5	16.0	17.5	-	17.5	-	
Programs	Renovations to keep facilities functional & efficient (\$2.3M)	15.1	-	15.1	14.6	0.5	-	
	Capital maintenance program (\$12.8M)							
Subtotal			53.1	72.6	125.7	38.8	86.9	-
Social facilities	City-owned	Arbutus Village neighbourhood house & adult day centre (\$5.7M est. in-kind)	6.5	9.4	15.9	2.5	13.4	-
		Little Mountain neighbourhood house (\$7.4M est. in-kind)						
		Renovations to keep facilities functional & efficient (\$1.5M)						
	Capital maintenance program (\$1.3M)							
	Non-city	Social capital grant programs (\$1.5M)						
Downtown Eastside capital grant programs (\$4.0M)								
All social	Planning & overhead (\$1.8M)	1.8	-	1.8	1.8	-	-	
Subtotal			13.8	9.4	23.2	9.3	13.9	-
Community facilities			\$115.3	\$118.8	\$234.1	\$62.9	\$161.3	\$10.0
Subtotal cash			93.4	52.6	146.0	62.9	73.2	10.0
Subtotal in-kind			21.9	66.2	88.1	-	88.1	-
Summary								
\$ millions			Existing assets	New assets	Total	City	Devt.	Partner
Arts & culture			127.0	58.0	185.0	38.3	133.2	13.5
Community facilities			115.3	118.8	234.1	62.9	161.3	10.0
Total			\$242.3	\$176.8	\$419.1	\$101.2	\$294.4	\$23.5
Subtotal cash			220.4	67.6	288.0	101.2	163.3	23.5
Subtotal in-kind			21.9	109.2	131.1	-	131.1	-

Major renewal projects include:

Metro Core

- *Chinese Society buildings*: Next phase of program to rehabilitate up to five out of the twelve Society heritage buildings in Chinatown.
- *Archives*: Renewal and relocation of the existing facility from its current location in Vanier Park to Level 7 of the Central Library downtown (the facility will be approximately

28,000 sq.ft.). Project will proceed after the completion of the Central Library expansion project on Levels 8 and 9.

- *West End Community Centre / Joe Fortes Library / King George Secondary School* site: Funding to prepare a master plan, with the Vancouver School Board, to guide the redevelopment of this multi-use site that currently includes a community centre, an ice rink, a library, childcare and a secondary school, and funding to prepare detailed design plans for the project's first phase.
- Cultural facilities planning:
 - *Vanier Park* vision as a cultural hub will start by exploring the future programming and master plan options, with significant stakeholder and community engagement;
 - *Orpheum Theatre* planning will focus on the functional improvements to the existing performance space, as well as seismic and accessibility improvements; and
 - *Fire Hall Theatre & Police Museum* conceptual options will review functional needs of both organizations and future options for space accommodation, while addressing accessibility for these public facilities.

Cambie Corridor/Marpole

- *Little Mountain Neighbourhood House*: Renewal, expansion and relocation of neighbourhood house from its current location at Main & 24th to Main & 36th (the facility will increase in size from 6,000 sq.ft. to 12,000 sq.ft.), co-located with social housing and a 69 space childcare. This is an in-kind CAC project and is expected to start during the 2019-2022 period.
- *Marpole-Oakridge Community Centre*: Renewal and expansion of community centre at Oak Park. The current community centre is approximately 29,000 sq.ft. and will be expanded to approximately 40,000 sq.ft. The 45 spaces of daycare and preschool currently on site will be expanded to 69 spaces as part of this project (refer to the Childcare section for details.)
- *Marpole Library*: Renewal and expansion of library located near Granville & 67th (the facility will increase in size from 3,500 sq.ft. to 17,000 sq.ft.). This project includes provision of a new 69-space childcare centre, social/cultural non-profit space and social housing.
- *Oakridge Library*: Renewal and expansion of library located at Oakridge Centre, near Cambie & 41st (the facility will increase in size from 13,000 sq.ft. to 25,000 sq.ft.). Facility will be integrated within a larger civic centre that will include a community centre and 69-space childcare centre. This is an in-kind CAC project and is expected to start during the 2019-2022 Capital Plan period.

Strathcona/Grandview-Woodland/Hastings-Sunrise

- *Britannia Centre*: Funding for the design of the first phase of renewal of this community complex in Grandview-Woodland. The Master Plan is scheduled to be presented to Council on July 11, 2018. This will be followed by a rezoning application to modernize the CD-1 zoning by-law governing the site.

The Britannia Centre project will be built in several phases. The first building will include the pool, recreation centre, a childcare centre and housing, to be located west of the existing ice rink. The cost estimate for designing the first building will be between \$10 and \$15 million. Unused funding from the 2015-2018 Capital Plan (\$25 million was

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allocated) will be carried forward into the 2019-2022 Capital Plan. Construction of the first building is planned for the 2023-2026 Capital Plan.

- *RayCam Centre*: Funding to plan/design for the renewal of this centre located at Hastings and Campbell in Strathcona. There is an opportunity to partner with BC Housing to deliver affordable housing on the RayCam Centre site.
- *Hastings Park/Pacific National Exhibition (PNE)*: Funding to implement the next phase of the Hastings Park/PNE Master Plan: the “Heart of the Park” area.

Major new/upgrade projects include:

Metro Core

- *New cultural facility at Pacific & Howe*: Construction of 21,000 sq. ft. facility containing presentation, production, community, rehearsal and programming spaces. This is an in-kind CAC project and is expected to start during the 2019-2022 Capital Plan period.
- *New cultural facility at Main & 2nd*: Construction of 4,000 sq. ft. of artist studio production space in Mount Pleasant, co-located with low-income housing for artists and their families. This is an in-kind CAC project and is expected to be completed during the 2019-2022 Capital Plan period.

Cambie Corridor/Marpole

- *New Oakridge Civic Centre*: Construction of a community facility of approximately 44,000 sq.ft. to be located at Oakridge Centre, near Cambie & 41st. The project will include a community centre, seniors’ centre, youth centre and performance space, and be co-located with an expanded Oakridge Library and a new childcare centre. This is an in-kind CAC project and is expected to start during the 2019-2022 Capital Plan period.
- *New Marpole Outdoor Pool*: Provision of a new outdoor pool for the Marpole community is a priority the Vancouver Park Board unanimously supported in early 2018. Funding for design and construction is provided in this Capital Plan. Upcoming public engagement for the Marpole Community Centre at Oak Park will include ideas about the pool program and details for community input.

Arbutus/Kerrisdale

- *New community facility at Arbutus Centre*: Construction of a new neighborhood house, co-located with an adult day centre, at the Arbutus Shopping Centre site, near Arbutus & King Edward. The facility is anticipated to be approximately 20,000 sq.ft. This is an in-kind CAC project and is expected to start during the 2019-2022 Capital Plan period.

City-wide

- *New public art*: \$20 million allocation with \$10 million for new public art on public property and \$10 million as an estimate for how much new public art will be built as in-kind projects on private property. The \$10 million for new public art on public property includes working with the Musqueam, Squamish, and Tsleil-Waututh First Nations to scope and commission new signature artwork(s) for a prominent downtown site or sites. In order to ensure timely execution of the public art work program, interim City funding sources will be identified to address potential short-term cash flow issues that may be caused by the cyclical nature of development contribution receipts.

PUBLIC SAFETY AND CIVIC FACILITIES & EQUIPMENT

I. Overview

Civic Facilities include three core functions: Public safety (e.g. Fire, Police, Animal Control), municipal administration (e.g. City Hall and Park Board administration building), and service yards (e.g. industrial-type municipal facilities where trucks and equipment are stored and serviced). Most Civic Facilities serve a district or city-wide area, and are therefore concentrated in one or a handful of locations within Vancouver. The one exception is fire halls, which are geographically distributed within the municipality.

Fire halls, Police facilities and service yards play a significant role in community resilience. Most civic buildings provide essential service in the case of emergency.

II. Inventory of Assets

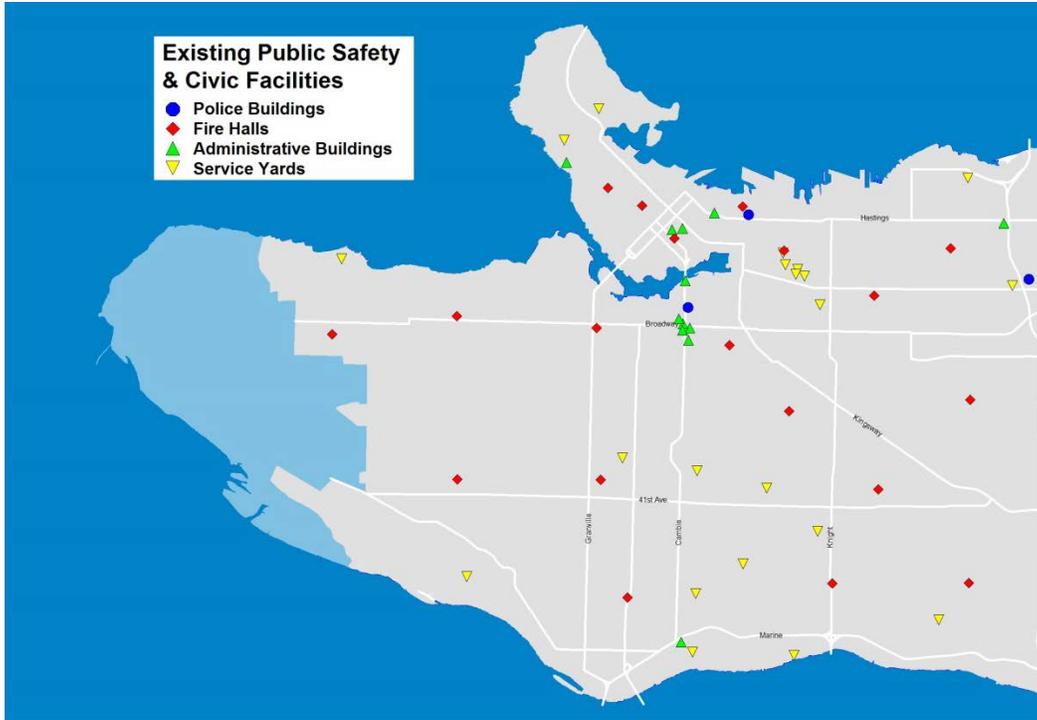
The City owns over 60 civic facilities including public safety, administrative buildings, and service yards. The bulk of Civic Facilities were built between 1886 and 1986. Police facilities have been significantly modernized in the last decade, including new office, training and storage space. Fire halls are gradually renewed as they age. The animal control shelter was built in the 1970s, but the facility is not optimally designed for the services offered today. While some administration buildings have been substantially upgraded in the last decade, some still require significant upgrades and expansion. While three service yards were rebuilt in the last 20 years³, two major yards have buildings in the range of 50 to 90 years old are in need of being renewed⁴.

	City Assets	Replacement Value	% in Good / Fair / Condition	Partner assets
Public Safety - Police	<ul style="list-style-type: none"> • 3 police stations • 8 other police buildings • ~465 vehicles & equipment 	\$705 M	~75%	• n/a
Public Safety - Fire	<ul style="list-style-type: none"> • 19 fire halls • 3 other fire buildings • ~110 vehicles & equipment 	\$340 M	~45%	• n/a
Public Safety - Animal Control	<ul style="list-style-type: none"> • 1 animal control shelter 	\$10-15 M	0%	• n/a
City Hall Buildings	<ul style="list-style-type: none"> • 12 administration buildings • 21 service yards • ~830 vehicles & equipment 	\$875 M	~40%	• n/a

³ Evans Yard, Kent Yard and National Yard

⁴ Manitoba Yard and Sunset Yard

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The following table summarizes major work completed in the last 10 years (2009-2018) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Public Safety - Police	<ul style="list-style-type: none"> • Police building on Graveley Street • Police property and evidence storage facility • Police dog squad 	<ul style="list-style-type: none"> • Police tactical training centre
Public Safety - Fire	<ul style="list-style-type: none"> • Fire hall #15 at 22nd & Nootka • Fire hall #5 at 54th & Kerr • Fire hall #17 at 55th & Knight (underway) 	<ul style="list-style-type: none"> • Heavy Urban Search and Rescue facility
Public Safety - Animal Control	<ul style="list-style-type: none"> • Capital maintenance of facility 	<ul style="list-style-type: none"> • n/a
City Hall Buildings	<ul style="list-style-type: none"> • City Hall heritage building: window replacement and exterior stone restoration. • City Hall West Annex (Cambie & 10th Ave.): seismic upgrade of building and new service counter for permits & licenses. • Tenant improvements of leased offices at Woodwards (Hastings & Abbott), Crossroads (Broadway & Cambie), 818 Richards and Marine Gateway (Cambie & Marine). 	<ul style="list-style-type: none"> • n/a

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III. Long-term Vision

The City needs to ensure that its public safe facilities, administrative buildings, and service yards are maintained in a state of good repair, as they provide core public services on a daily basis.

As part of the facility renew program, the City needs to ensure sufficient capacity for future expansion to support growth. As well, there is also a need to increase the resilience of the facilities, as a significant portion of the portfolio will likely be inoperable after a major event (e.g. earthquake). A number of facilities are currently located in low-lying areas that may be at risk of flooding due to sea level rise (e.g. service yards located in the False Creek Flats).

Other long-term considerations include:

- Designing and building Civic Facilities to be flexible and adaptable, with expandable spaces to accommodate multiple uses and growth of City services.
- Exploring opportunities to co-locate civic functions across City departments and with external agencies (e.g. Vancouver School Board, Provincial agencies).
- Implementing higher renewable energy targets and new buildings built to zero+ (carbon, energy, waste) standards.

IV. Strategy for the Next 10 Years

- Improve the overall physical condition of the Civic Facilities portfolio.
- Improve the resilience of the Civic Facilities portfolio, with higher priorities given to emergency preparedness, business continuity and high occupancy buildings.
- Prepare longer-term strategies for individual portfolios (e.g. police buildings, fire halls, administrative buildings, service yards) and specific sites (e.g. City Hall campus, Manitoba Yard).

V. 2019-2022 Capital Plan: \$156 million

Public safety								
\$ millions	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
Fire & rescue	Fire halls	Design for future renewal & expansion of one fire hall (\$3.0M)						
		Seismic upgrade to Fire hall #12 in Kitsilano (\$6.0M)						
		Renovations to keep facilities functional & efficient (\$525K)	11.2	-	11.2	10.2	1.0	-
		Capital maintenance program (\$1.7M)						
	Fire trucks	Renewal of VFRS vehicle & equipment (\$15.2M)	15.2	-	15.2	15.2	-	-
	Subtotal		26.4	-	26.4	25.4	1.0	-
Police	Police facilities	Renovations to keep facilities functional & efficient (\$1.5M)	2.8	-	2.8	2.8	-	-
		Capital maintenance program (\$1.3M)						
		Police cars	Renewal of VPD vehicle & equipment (\$18.2M)	18.2	-	18.2	18.2	-
	Subtotal		21.0	-	21.0	21.0	-	-
Animal control		Renovations to keep facilities functional & efficient (\$25K)	0.2	-	0.2	0.2	-	-
		Capital maintenance program (\$175K)						
	Public safety		\$47.6	-	\$47.6	\$46.6	\$1.0	-
Civic facilities & equipment								
\$ millions	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
Administrative facilities	City-owned	City Hall campus renewal - planning & design (\$5.0M)						
		Renovations to keep facilities functional & efficient (\$4.5M)	12.5	-	12.5	12.5	-	-
		Capital maintenance program (\$3.0M)						
Service yards, vehicles & equipment	Service yards	Renewal of Sunset Yard, phase 1 (\$9.0M)						
		Design for future renewal of Manitoba Yard renewal (\$3.7M)						
		Renovations to keep facilities functional & efficient (\$1.3M)	21.2	-	21.2	21.2	-	-
		Capital maintenance program (\$7.3M)						
	Vehicles & equipment	Renewal of public works, water and sewers vehicle & equipment (\$39.9M)	49.8	-	49.8	49.8	-	-
		Renewal of other vehicles & equipment (\$9.9M)						
	Subtotal		71.0	-	71.0	71.0	-	-
	Civic facilities & equipment		\$83.5	-	\$83.5	\$83.5	-	-

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All City facilities							
\$ millions	Program / Major projects	Existing assets	New assets	Total	City	Dev't.	Partner
	Planning & research (\$5.3M)						
All City facilities	Facility sustainability & resilience programs (\$5.5M)	24.4	0.5	24.9	24.9	-	-
	Other facility improvement programs (\$4.0M)						
	Project management and other support (\$10.1M)						
All City facilities		\$24.4	\$0.5	\$24.9	\$24.9	-	-
Summary							
\$ millions		Existing assets	New assets	Total	City	Dev't.	Partner
Public safety		47.6	-	47.6	46.6	1.0	-
Civic facilities & equipment		83.5	-	83.5	83.5	-	-
All City facilities		24.4	0.5	24.9	24.9	-	-
	Total	\$155.5	\$0.5	\$156.0	\$155.0	\$1.0	-

Major renewal projects include:

- Seismic upgrade of Fire hall #12 in Kitsilano; this fire hall was selected because it is in the right age group (approximately 30 years old) and in a relatively large geographic area (west of Arbutus Street) where no fire hall meets current seismic standards.
- Funding to design the next fire hall to be renewed (location to be determined). A priority area is the Metro Core which has five fire halls, all of which were built in the 1970s or earlier.
- First phase of renewal at Sunset Service Yard; this service yard is operated by the Park Board and located at Main Street and 51st Avenue in south-central Vancouver. The buildings and structures at the yard are aging and need to be renewed. Given the size of the service yard, the project will be completed in phases.

TRANSPORTATION & STREET USE

I. Overview

Livable cities are built upon an integrated transportation network, walkable land uses, and public spaces that support all residents to access jobs, services, and amenities across all modes of travel. As more people live and work in Vancouver, we need to accommodate more trips and economic activity within the same amount of space. The demand for public spaces for expression, relaxation, and enjoyment will also grow as Vancouver densifies.

By providing better access to transit, and walking and cycling facilities that are comfortable and convenient for people of all ages and abilities, we increase the opportunity for people to get around without driving or owning a car. In doing so, we also strengthen the City’s resilience and support more affordable, healthy, and sustainable lifestyles. Our economy also depends on a reliable transportation network to deliver goods and services, and for emergency response.

Our streets are among the City’s greatest public space assets. Vancouver’s streets host a range of uses that extend beyond their function of moving people and goods, and also serve as places for people to rest, gather and connect. Vibrant spaces and public realm amenities are vital nodes and destinations within an active transportation network and significantly contribute to the City’s quality of life, health, sustainability and economic vitality.

II. Inventory of Assets

The transportation network in Vancouver is provided jointly by three levels of government:

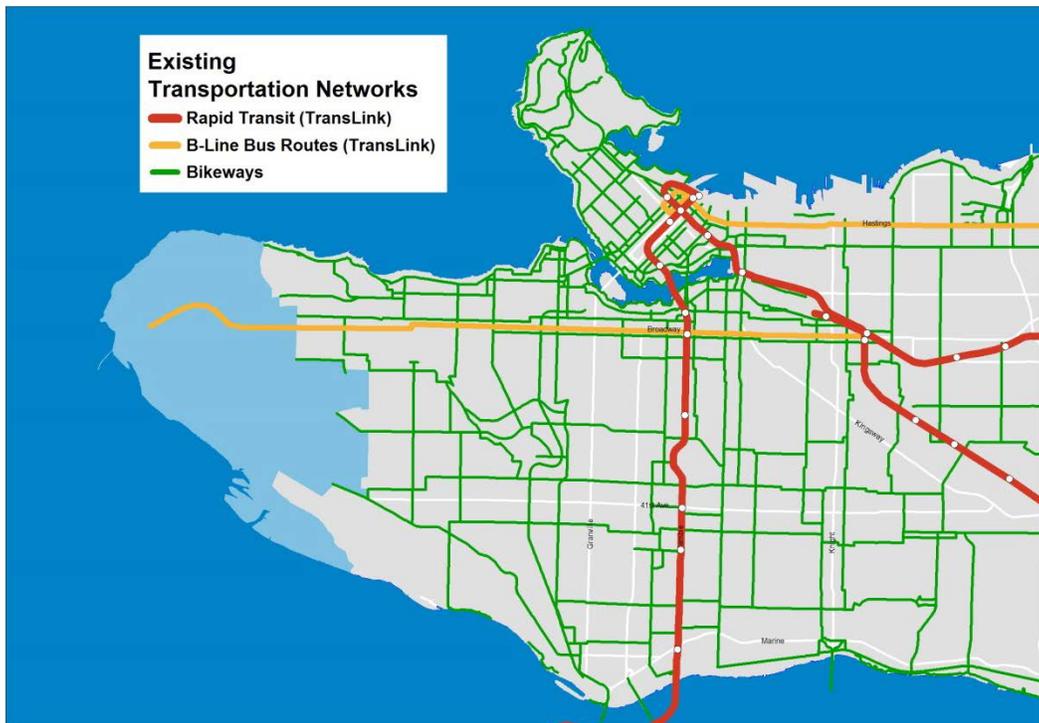
- The City owns and maintains over 4,000 km of walking, cycling and road networks, and a wide range of structures including the False Creek bridges and the viaducts
- TransLink owns, operates, and maintains all rapid transit and bus services, and provides funding for some of the roads, walking, and cycling facilities.
- The Province owns and maintains ~6 km of highways and three major bridges leading into Vancouver

Most of the sidewalks and streets were built between 1886 and 1986, and the City has gradually been renewing these assets as they age. In more recent years, the City has delivered the majority of its pedestrian-bicycle signals, bikeways, and greenways to expand mobility options within the network. Investment in pavement-to-plazas, parklets, and curbside patios is relatively new for the City and all of these assets have been constructed or installed in the last 10 years.

	City Assets	Replacement Value	% in Good / Fair Condition	Partner Assets
Walking & Cycling	<ul style="list-style-type: none"> • 2,165 km of sidewalk • 320 km of bikeways • 381 pedestrian-bike signals • 16 pedestrian bridges and tunnels 	Sidewalk: \$1.1B Ped-bike signals: \$114M Ped bridges: \$37M	Sidewalk: 82% Ped-bike signals: 68% Ped bridges: 76%	<ul style="list-style-type: none"> • Sidewalks & paths at Granville Island, Canada Place and Convention Centre
Transit	<ul style="list-style-type: none"> • 18 km of bus lanes • 2,000 bus stops 	n/a	90%	<ul style="list-style-type: none"> • 3 rapid transit lines with 25 km
Major Roads	<ul style="list-style-type: none"> • 358 km of arterial roads • 29 bridges • 486 traffic signals • 8,000 street light poles • 400 km of conduit 	<ul style="list-style-type: none"> • Arterials: \$1.8B • Bridges: \$2B • Signals: \$0.3B • Poles: \$37M • Conduit: \$0.2B 	<ul style="list-style-type: none"> • Arterials: 85% • Bridges: 78% • Signals: 42% • Poles: 70% • Conduit: 30% 	<ul style="list-style-type: none"> • 6 km of highways • 4 km within Port • 9 bridges

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	City Assets	Replacement Value	% in Good / Fair Condition	Partner Assets
Local Roads	<ul style="list-style-type: none"> 1,058 km of roads 650 km of lanes 24,000 street light poles 1,200 km of conduit 	<ul style="list-style-type: none"> Roads & lanes: \$2.5B Poles: \$110M Conduit: \$0.6B 	<ul style="list-style-type: none"> Roads & lanes: 86% Poles: 70% Conduit: 30% 	<ul style="list-style-type: none"> Local roads on Granville Island and within Port of Vancouver
Parking	<ul style="list-style-type: none"> 10,000 parking meters 	\$12M	85%	n/a
Parklets, Curbside Patios & Plazas	<ul style="list-style-type: none"> 20 parklets & curbside patios 4 pavement to plazas 	\$70 M	Parklets & curbside patios: 90% Pavement to plazas: 100%	
Street Furniture	<ul style="list-style-type: none"> 2,700 units (bus shelters, benches, bike racks) Two underground public washrooms 		Street furniture: 90% Washrooms: 0%	Over 3,500 units managed through Street Furniture Contract (wayfinding, automated public toilets, benches, litter cans)
Horticulture	<ul style="list-style-type: none"> 280,000 m² of Green Streets assets (planted curb bulges, traffic circles, medians, planters) 23 community gardens 		65%	



Highlights of transportation and street use projects completed in the last 10 years (2009-2018) include:

- Expanded the cycling network and upgraded existing bikeways and greenways to AAA (all ages and abilities), including the Comox-Helmcken Greenway, Dunsmuir and Hornby protected bike lanes, South False Creek Seaside Greenway, Union-Adanac Bikeway, 10th Avenue Corridor, Point Grey Road Seaside Greenway, and SW Marine Drive.
- Purchased the Arbutus Greenway and constructed a temporary path and amenities.
- Rehabilitation of the Burrard Bridge, including separate walking and cycling facilities and safety improvements, including adding means prevention and protected intersections.
- Constructed the Powell Street Overpass to improve safety and support goods movement to the Port of Vancouver.
- Improved safety by adding new pedestrian-bike signals across the city and safety upgrades at high collision intersections, such as at Knight Street and Marine Drive.
- Partnered with TransLink expand transit service including the Canada Line SkyTrain and expanded bus service, such as the Hastings B-Line.
- Constructed the first pavement-to-plaza (Jim Deva Plaza), the first parklet (Parallel Park), and approximately 6,000 m² of new parklets and plazas, including 800 Robson, Vernon-Adanac and Bute-Robson Plazas.
- Launched Mobi, the public bike share system with over 1,500 bikes and 150 stations.
- Expanded parking meter areas and Pay By Phone to better serve customer access to commercial areas.
- Completed the decontamination, removal and replacement of all PCB (polychlorinated biphenyl) contaminated bearings on both the Granville and Burrard street bridges, ensuring compliance with Federal regulations.
- Began conversion to more efficient LED street lighting.

III. Long-term Vision

As Vancouver continues to grow over the coming decades, the transportation network will continue to evolve with a focus on supporting residents to use sustainable modes of travel (walking, cycling, and transit) and in response to new and emerging technologies. A network of complete streets will provide residents with a wide range of transportation choices, and neighborhoods will evolve into complete communities where everyone can easily walk to local destinations. High quality, comfortable and reliable rapid transit will connect our communities across the City and to the rest of the region. Emergency response and movement of goods and services will be reliable and support a thriving economy.

More of our streets will be repurposed for walking, cycling, transit, green infrastructure and vibrant places for gathering and public life that encourages healthy lifestyles and social connectedness. A network of spaces invite people to sit and stay, connect and relax, and bring our community together to become a more friendly and livable city. Streets will have public realm treatments and amenities such as seating, bike racks, wayfinding signs that make lingering in and moving through spaces enjoyable and convenient. The street will be used in creative ways, such as through innovative public space programs like VIVA Vancouver and pilot initiatives for curbside seating and patios. These welcoming and accessible public spaces will become vital nodes and destinations within our active transportation network.

To achieve the long-term vision for transportation and street use, the City's investment is guided by a number of strategies:

- *Transportation 2040 Plan (2012)* is a long-range plan to accommodate the growth of the city and to support more sustainable ways to move people and goods. The plan provides direction on improving accessibility, increasing cycling networks for all ages and abilities (AAA), promoting sustainable travel choices, reliable goods and services movement including emergency services, and integrated land use. The plan also provides direction to enable and encourage creative uses of the street and create public plazas and gathering spaces throughout the city. Key targets that guide strategic investment include a mobility target for two-thirds of all trips to be made by walking, cycling and transit by 2040, and a safety target for zero traffic-related fatalities.
- The *Mayor's Council Regional Transportation Investments: A Vision for Metro Vancouver (2015)* outlines the region's 30-year vision and investments for the next 10 years. In March 2018, the Mayors' Council and the Province agreed on a plan to fund Phase 2 of the 10-Year Vision.
- The *Congestion Management Strategy (2017)* and *Complete Streets Policy Framework (2017)* provide guidance for shaping the future of streets and mobility, and for prioritizing investment towards using our streets more efficiently.
- The *Healthy City Strategy*, as well as new and existing Community Plans and public space policy will guide the delivery of new public spaces and improved public realm to meet the needs of a growing and densifying population. Key City policies recognize that streets are one of the city's most important public space assets.

IV. Strategy for the Next 10 Years

The backbone of a strong economy and a liveable city is a transportation system that allows people and goods to move around reliably. As such, we must effectively manage and maintain our transportation and street use assets in an appropriate state of repair. As part of our long-term asset renewal strategy, strategic investments will be prioritized to maintain and repair critical infrastructure and amenities such as bridges, roads, bikeways and sidewalks to minimize life cycle costs and ensure safe, comfortable, and effective service for all road users.

In order to move a growing number of people who live or work in our city, we also need to make the most efficient use of our limited road space. We do this by managing congestion and by reimagining our road space to increase mobility options and expanding capacity for sustainable and space-efficient transportation modes of walking, cycling, and transit. Guided by *Transportation 2040*, strategic investment will be made to advance objectives to reach our mobility target of two-thirds of all trips by walking, cycling or transit by 2040, and work towards a safety target of zero traffic-related fatalities by 2040. The City will also strategically improve streets and sidewalks to better support a vibrant public life that encourages healthy lifestyles and social connectedness for a healthy community.

Managing the Transportation Network

Planning & Monitoring

- Increase monitoring, and analysis to better inform decision-making, long-term planning, and operations of the street network.
- Replace assets as needed and implement new technologies for data collection.

Safety Improvements

- Work towards eliminating all transportation-related fatalities and serious injuries, with a focus on vulnerable road users and those with mobility challenges.
- Prioritize safety improvements for walking and cycling, particularly around schools and collision hot spots
- Partner with VPD, VCH, BC Ambulance, ICBC for improved data sharing and targeted enforcement and education campaigns.

Congestion Management

- Deliver on the City's Congestion Management Strategy to make traveling on city roads more predictable and reliable.
- Review rush-hour parking restrictions on arterial streets to provide greater capacity for moving vehicles, and implement measures to improve reliability
- Improve bus speed and reliability and implement transit signal priority

Curbside Management

- Effectively manage curbside use, using emerging technologies to help mitigate congestion and manage parking and support business activity.
- Replace aging and obsolete equipment, and improve security
- Improve performance-based pricing strategies and expand metered parking where needed
- Work towards asset-light infrastructure and increase mobile payment usage

Structure Management

- Improve the resiliency of critical infrastructure to known hazards such as seismic events, support the advancement of the City's earthquake preparedness strategy, complete important seismic upgrades to Cambie and Granville Street bridges.
- Develop a bridge coating renewal plan and implement initial phases.
- Rehabilitate aging components of the Granville Bridge. Coordinate bridge renewal with transportation improvements where practical.
- Replace Bridgeway pedestrian bridge.
- Develop a comprehensive long-term asset management plan for structures assets.
- Reduce percentage of structures assets in poor condition through renewal of infrastructure funded from capital.

Surface Management

- Maintain the TransLink Major Road Network (MRN) in a state of good repair.
- Develop work plans and strategies to, over time, improve the overall condition of the arterial road network to match that of the MRN network.
- Prioritize limited funding for the rehabilitation of the local road network to minimize the deterioration of the asset condition.
- Improve accessibility of sidewalks by advancing curb ramp construction.

Street Lighting Management

- Prioritize the replacement of aging electrical assets such as underground conduit, street light and traffic signal poles.
- Reduce safety risks to the public through the proactive replacement of all street light poles assessed to be in poor condition.
- Develop and implement long-term strategies to manage electrical assets, including establishing financial strategies to fund necessary capital expenditures.
- Modernize the street lighting networks to take advantage of new and emerging technologies such as LED lighting that provide improved functionality while also reducing energy requirements.
- Take advantage of opportunities to “electrify” the street ROW for new and expanded uses such as public events and food services.
- Leverage the renewal of underground conduit to install increased conduit capacity to meet expected future demands and build the city of tomorrow.

Signal Management

- Rehabilitate and replace traffic signal equipment for operational reliability.
- Upgrade control systems to smart and connected emerging technologies.
- Increase installation of pedestrian-bike signals to improve safety.

Rail Corridor

- Protect and improve rail corridors, and upgrade at-grade rail crossings for safety and new Transport Canada standards.

Expand Sustainable Transportation Capacity

Active Transportation

- Complete the pedestrian network, prioritizing safety improvements along routes to transit, schools, parks, community, and healthcare facilities
- Improve pedestrian accessibility through new or upgraded sidewalks, curb ramps, tactile cues, non-slip surfaces, and accessible pedestrian signals.
- Expand and upgrade the network of convenient and comfortable cycling routes for people of all ages and abilities (AAA) across the city.
- Support the growth of public bike share to enable more bicycle trips to access transit stations, employment sites, commercial areas, and destination-rich streets.

Complete Streets

- Continue taking a holistic approach to street network planning and design, considering the needs of people of all ages and abilities, and all modes of travel
- Prioritize projects that are coordinated with street rehabilitation, leverage opportunities from redevelopment, and have significant improvements to sustainable mode share and safety.

Transit

- Continue to upgrade bus stops and amenities for accessibility.
- Leverage regional funding and work with TransLink to design and construct the Millennium Line Broadway Extension, implement the 41st Avenue B-Line, improve overall bus speed and reliability.

Street Use

- Undertake asset review and develop asset management strategy for public spaces, and landscape and public realm amenities.
- Renew the Street Furniture Contract, which provides bus shelters, benches, litter cans, and wayfinding sign stands.
- Deliver new plazas, expand the Parklet program, and develop a Pavement-to-Plaza program to transform road spaces into people places, responding to spaces identified in Community Plans.
- Coordinate with Parks on a public washroom strategy to understand demand in order to serve a growing population and changing demographics.

2019-2022 CAPITAL PLAN

V. 2019-2022 Capital Plan: \$311 million

\$ millions	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Dev.*	Partner	
	Planning & monitoring	Transportation monitoring (\$4.7M) Transportation planning & studies (\$3.7M)	5.9	2.5	8.4	2.1	6.3	-	
	Safety improvements	Zero fatalities & serious injuries program (\$4.0M) School safety & active routes improvements (\$2.5M) Local street improvements (\$1.0M)	1.0	6.5	7.5	1.0	5.7	0.8	
	Congestion management	Congestion management & transit reliability (\$4.0M)	-	4.0	4.0	-	3.0	1.0	
	Curbside management	Replacement of parking meters (\$6.0M)	6.0	-	6.0	6.0	-	-	
Managing the transportation network	Structure management	Vehicular bridge repair & maintenance (\$3.0M) Granville & other vehicular bridge upgrades (\$24.6M) Greenway structures rehabilitation (\$1.6M) H-frame replacement (\$5.3M) Dock replacement (\$2.0M)	36.5	-	36.5	18.6	6.3	11.6	
	Surface management	Major road rehabilitation (\$37.4M) Local roads rehabilitation (\$8.0M) Pedestrian curb ramp program (\$5.0M) Sidewalk rehabilitation (\$4.0M) Downtown Historic Railway decommissioning (\$0.1M)	54.5	-	54.5	27.7	6.4	20.4	
	Street lighting management	Street light rehabilitation (\$21.9M) Trolley pole replacement (\$4.8M) New street lighting (\$1.5M)	26.7	1.5	28.2	23.4	2.2	2.6	
	Signal management	Traffic signal rehabilitation (\$16.8M) Pedestrian & bike signal rehabilitation (\$4.1M) New pedestrian & bicycle signals (\$4.0M)	20.9	4.0	24.9	14.3	3.2	7.4	
	Rail corridor	Rail crossing upgrades (\$3.5M)	3.5	-	3.5	3.5	-	-	
	Subtotal		154.9	18.5	173.4	96.6	33.0	43.8	
	Expand sustainable transportation capacity	Active transportation	Granville Bridge Greenway (\$25.0M) Arbutus Greenway (\$5.0M) Bute greenway & West End improvements (\$3.0M) City-wide corridors & spot improvements (\$49.8M) New sidewalks (\$7.0M)	-	89.8	89.8	-	66.0	23.8
		Complete streets	Gastown streets (\$10.0M) Georgia Gateway West - Chilco to Nicola (\$7.0M) Cambie Corridor - King Edward to 37th (\$2.8M)	-	19.8	19.8	-	19.8	-
		Other transit	Bus stop upgrades (\$2.0M) Rapid transit office (\$4.4M)	2.0	4.4	6.4	1.2	4.4	0.8
		Subtotal		2.0	114.0	116.0	1.2	90.2	24.6
Street use	Public space projects	800 Robson (\$8.0M) Robson & Alberni (\$8.0M)	-	16.0	16.0	-	16.0	-	
	Landscape, public realm & amenities	New public space assets and amenities (\$1.9M) Renew public space assets and amenities (\$2.3M)	2.3	1.9	4.2	2.3	1.9	-	
	Public toilet facilities	DTES public washroom renewal & washroom study (\$1.2M)	1.2	-	1.2	1.2	-	-	
	Subtotal		3.5	17.9	21.4	3.5	17.9	-	
Transportation & street use			\$160.3	\$150.4	\$310.7	\$101.2	\$141.1	\$68.4	

* Excludes transportation projects expected to be delivered in-kind or otherwise through conditions of development.

In addition to the above, transportation and street use investments planned for 2019-2022 include some portions of projects approved during the 2015-2018 Capital Plan to be delivered in the 2019/20 timeframe and assets expected to be delivered in-kind through development.

Major renewal projects include:

- Seismic upgrade and concrete repair for Granville Bridge.
- Pavement rehabilitation of 23 km of MRN and arterial streets.
- Replacement of streetlight poles to eliminate the backlog of poor condition assets.
- Rehabilitation of 16 km of aging, underground electrical conduit.
- Replace aging and obsolete parking meters and equipment.
- Advance replacement of traffic signal system, including communication network and controllers to new industry standard.

- Partner with BC Hydro to complete the elimination of the existing H-frame infrastructure in downtown lanes with upgraded, underground infrastructure.

Major new/upgrade projects include:

- Construct first phase of the permanent path and amenities of the Arbutus Greenway.
- Design and begin construction of the Granville Bridge greenway, coordinated with seismic and rehabilitation work.
- Upgrade and construct new active transportation corridors including 10th Avenue, Bute Greenway, Portside Greenway, Richards Street, Drake Street, East Van City Greenway, and other corridors identified in the 5-year cycling map.
- Design and begin construction of complete street improvements in Gastown, Georgia Gateway West, and portions of the Cambie Corridor.
- Complete upgrades to all rail crossings to improve safety and meet Transport Canada requirements.
- Construct 800 Robson Plaza and public realm improvements on Robson and Alberni Streets, supporting the vision for the Robson Square precinct.
- Construct Bute-Robson Plaza and new parklets, curbside patios, and pavement-to-plazas across the city.

In addition to the City's transportation investments, major investments will also be delivered through partnerships with TransLink, the Province and the Federal government including:

- Complete the design and begin construction of the 6 km Millennium Line Broadway Extension to serve Central Broadway (VCC-Clark station west to Arbutus), an investment of \$2.83 billion.
- Upgrade the Burrard SkyTrain Station, an investment of \$64 million.
- Implement transit priority and reliability improvements for B-Lines along Hastings Street and 41st Avenue.
- Upgrade the Central Valley Greenway and BC Parkway which are owned by TransLink.

ONE WATER (WATER, SEWERS & GREEN INFRASTRUCTURE)

I. Overview

One Water utility is responsible for all water-related services and policies in the city. Beyond the essential services of potable water, wastewater (often referred to as sewage) and rainwater (often referred to as drainage), One Water utility services also include shoreline protection, flood management, and climate change adaptation. These services are critical to maintaining the health and well-being of our residents, supporting a growing population, enabling local economy, and improving the city's sustainability and resilience.

One Water utility services are delivered by the City in collaboration with Metro Vancouver, which operates the regional system. Vancouver's potable water originates from the Capilano, Seymour, and Coquitlam reservoirs. On an average day, the water system delivers 300 million litres of high-quality drinking water throughout the city.

Vancouver's wastewater is collected and processed at the Iona Island treatment plant in Richmond before being discharged into the Straight of Georgia. Vancouver's rainwater is collected predominantly through our drainage pipe system and discharged in local waters such as Burrard Inlet, English Bay, False Creek and the Fraser River. The City has begun to incorporate green infrastructure systems throughout the city that seek to divert water from the combined and separated pipe systems through a suite of tools that use both engineered systems, soils and plants to mimic the natural water cycle in our urban environment. Current green infrastructure practices capture and clean rainwater, and help return water to its natural pathways.

II. Inventory of Assets

The potable water, wastewater and rainwater services in Vancouver are provided jointly by two levels of government:

- Metro Vancouver owns and maintains regional network components, such as the watersheds and reservoirs on the North Shore, the wastewater treatment plant in Richmond that serves Vancouver, and the water transmission mains, water reservoirs, and trunk sewers located within Vancouver.
- The City owns and maintains local serving components, such as water distribution mains, collection pipes for wastewater and rainwater, and green infrastructure assets located on public land.

The vast majority of the water, wastewater and rainwater systems were built between 1886 and 1986, and Metro Vancouver and the City have been gradually renewing and upgrading these assets as they age. The bulk of Vancouver's original wastewater and rainwater systems were built with "combined pipes". "Separated pipes" were constructed in Still Creek starting in the 1950s and the rest of the city starting in the 1970s.

2019-2022 CAPITAL PLAN

	City Assets	Replacement Value	% in Good/Fair Condition	Partner Assets
Potable Water	<ul style="list-style-type: none"> • 1,474 km of water mains • 12 km of dedicated fire protection (DFPS) water mains • 2 DFPS pump stations and 27 pressure reducing valve stations (PRVs) • ~100,000 water connections • ~20,000 water meters • ~6600 fire hydrants 	\$2.4 B	73%	<ul style="list-style-type: none"> • 103 km of water mains and 3 reservoirs (Metro Vancouver)
Sewers & Drainage	<ul style="list-style-type: none"> • 2,117 km of sewer & drainage mains • 24 pump stations • ~90,000 sewer connections • ~45,000 catch basins • ~200 green infrastructure features 	\$6.1 B	67%	<ul style="list-style-type: none"> • 125 km of sewer pipes (Metro Vancouver)

The City has been gradually renewing and upgrading these systems as they age. An on-going multi-decade sewer capital program is in place to replace combined sewer pipes with separated sewer pipes as part of renewal and/or growth-triggered upgrades. Over the past 10 years, sewer mains have been replaced at an annual rate of 0.6% of the system. The program, in conjunction with targeted green infrastructure, aims to reduce combined sewer overflows to Vancouver’s local waters such as Burrard Inlet, English Bay, False Creek and the Fraser River during heavy rain events, provide sanitary capacity to the sewer system to accommodate growth, and direct rainwater to receiving bodies to help reduce flooding concerns. Sewer renewal and green infrastructure also support the design of the future Metro Vancouver’s Iona Island Wastewater Treatment Plant secondary upgrade requirements by reducing rainwater being directed to the plant. The Iona Island upgrades are scheduled to be in completed in 2030.

There are annual ongoing programs to renew aging water system assets, such as transmission and distribution mains, service connections, meters, hydrants and pressure reducing valve stations, at or nearing end of service life. Over the last 10 years, water distribution mains have been replaced at an annual rate of 0.5% of the system.

The following table summarizes major work completed in the last 10 years (2009-2018) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Potable Water	<ul style="list-style-type: none"> • 86 km of water mains • ~1,600 water connections • ~2,650 water meters • 3 PRVs 	<ul style="list-style-type: none"> • 7 km of water mains • ~11,250 water connections • ~11,250 water meters
Sewers & Drainage	<ul style="list-style-type: none"> • 83 km of combined sewer mains replaced with 166 km of separated sewer mains • ~10,000 sewer connections • 5 sewer pump stations replaced or refurbished 	<ul style="list-style-type: none"> • 5 km of sewer mains • 140 green infrastructure practices installed • 3 new or upgraded pump stations

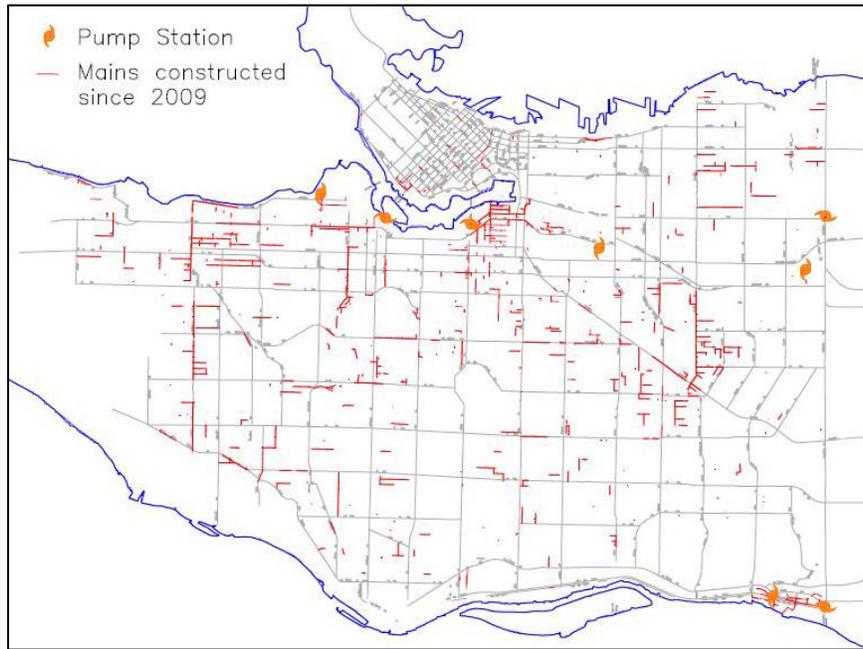
Major renewal projects completed include:

- Renewal of 83 km of sewer mains, including projects on major arterials such as Burrard, W 4th, Alma, SW Marine, Dunbar, Nanaimo, King Edward
- Renewal or refurbishment of five pump stations, including Skeena/Cornett, Boundary/1st, Granville Island, Kitsilano, and the Cambie Pump Station (formed part of the NEU facility)
- Replacement and upgrade of major water transmission mains on Pender, and 11th Ave (5.8 km of transmission main)
- Renewal of water distribution mains at end of life, including major projects on Burrard, Beach, Cambie, Hemlock, Knight, Nanaimo
- Trial of Japanese-standard seismically resilient water pipe for Jackson renewal as part of the hardened/resilient water grid
- Replaced three water pressure reducing valve stations at end of life
- Upgrade of sewer/water connections at an average rate of 1200/year for new developments

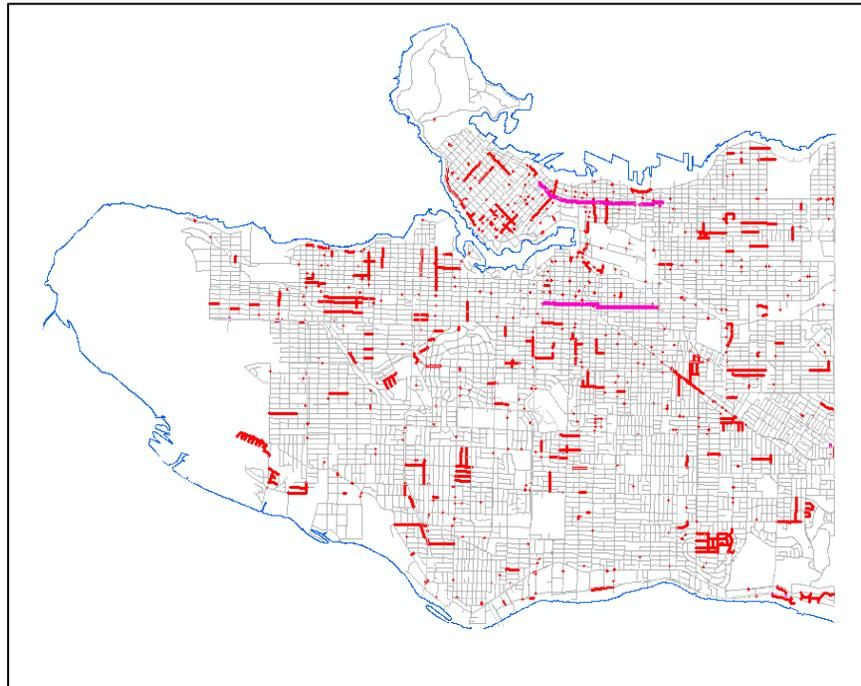
Major new/upgrade projects completed include:

- Upgraded sanitary and storm sewer trunk pipes servicing the residential area west of Oakridge Mall
- Received new sewer, water and green infrastructure as part of the East Fraserlands development and the Southeast False Creek Olympic Village
- Upgraded pump stations include Glen Pumps Station, White Pine Mill Pump Station, Kent/Kinross Pump Station
- 7 km of new or upgraded water mains to support development and increased density across the City
- New water meters for all growth and redevelopment sites, including single and dual family properties since 2012
- 63rd Ave and Yukon boulevard improvements which incorporated green infrastructure practices to manage and clean surface runoff from surrounding streets

New & Renewed Sewer Mains & Pump Stations (2009-2018)



New & Renewed Water Mains (2009-2018)



III. Long-term Vision

A city's waterworks and sewer infrastructure plays an important role in ensuring its overall sustainability and resiliency. Using water efficiently, being aware of what goes into the sewer, and how local waterways can be affected by sanitary and storm water are important steps in working towards the goal of becoming the greenest city in the world by 2020.

Our long-term investment is guided by a number of strategies:

- The *Greenest City 2020 Action Plan* (2011) sets the following goals for Vancouver:
 - Having the best drinking water quality in the world by 2020
 - Reducing potable water use by 33%
- The *Climate Change Adaptation Strategy* (2012) provides direction on resiliency as climate changes.
- Metro Vancouver's *Integrated Liquid Waste and Resource Management Plan* (2010) mandates the elimination of combined sewer overflows, separation of combined sewer mains, and protection of water quality in local receiving waters.
- The *Integrated Rainwater Management Plan* (2016) focuses on rainwater management and restoring the role of urban watersheds to support urban and natural ecosystems.
- The *Rain City Strategy* (in progress 2018) focuses on improving and protecting Vancouver's water quality, increasing community resilience through sustainable water management, and enhancing livability through healthy urban ecosystems.

The City's existing utility infrastructure represents generations of investments to manage drinking water, rainwater, and wastewater to support public health, safety, community resiliency, environmental stewardship and livability.

The two main drivers for utilities are:

- To ensure that our existing assets are well managed and robust to support community resiliency.
- To implement policies to manage water, in all its forms, to optimize investments to achieve city objectives for the long term.

The next 30 years will see a significant shift in how water resources are managed in the City to respond to pressures of aging infrastructure and growth, to improve water quality of our foreshore areas, and to mitigate the impacts of a changing climate. The strategic and thoughtful management of water plays a fundamental role in servicing and shaping city growth and resiliency. This is achieved through unifying the management of drinking water, ground water, surface water, rainwater and wastewater.

Integrated water management will provide flexibility and efficiency for meeting water quality standards and addressing broader city goals. Integrated policies will optimize local solutions based on availability of local resources including proximity of drinking water, wastewater collection, rainwater, groundwater supply, and permeable ground conditions. Servicing solutions are expected to broaden infrastructure assets beyond conventional piped water and sewer systems to include green infrastructure, local water storage systems and local treatment systems delivered on the building scale, district scale and citywide scale.

Mitigation strategies to accommodate sea-level rise and storm surge will be critical in protecting low-lying lands from the impacts of climate change and will provide co-benefit opportunities to improve public realm spaces through multi-use systems, while integrating with overall water management strategies.

IV. Strategy for the Next 10 Years

Like many cities around the world, Vancouver has aging infrastructure that has been deteriorating at a more rapid rate than renewal investment. Pressures of aging infrastructure combined with increased population density and development intensity, climate change and sea

level rise, and increased regulations around environmental water quality are already having significant impacts on our water, sewer and drainage utility infrastructure.

In conjunction with adopting an integrated “One Water” approach to utility servicing, the Water, Sewer and GI utilities must increase infrastructure renewal programs to replace existing infrastructure reaching end of life. Traditional infrastructure replacement combined with the integrated water management approach will allow for upgrading conventional underground pipe networks more cost-effectively while enhancing community resilience and livability. The integrated approach encompasses drinking water efficiency and reliability, storm water management, green infrastructure, sanitary wastewater collection and conveyance, and climate change adaptation.

Replacement or expansion of existing water, sewer and drainage utility systems will be needed to support future growth in Vancouver. On private lands, storm water performance targets and ground water regulations will be introduced to increase storm water retention on site to minimize discharge to the conventional sewer infrastructure over time. On public lands, integrated grey/green infrastructure will be implemented to reduce stormwater loading, treat stormwater, and provide a suite of sustainability and livability co-benefits. The City will also engage with Metro Vancouver to assess their asset capacity to accommodate future growth.

With respect to emergency preparedness, a major event (e.g. earthquake) could make the city’s conventional fire protection system unusable. Vancouver’s dedicated fire protection system is designed to pump potable water, plus salt water when needed, to supply adequate flows in the event of a disaster. Plans for a hardened grid of water mains city-wide will provide further system resiliency.

Integrated ‘One Water’ Utility Planning

- In order to realize transformative change around how utility services are planned and delivered, to be more resilient, resourceful and cost-effective, and to meet changing needs over time, an investment in an integrated water planning function is required.
- The first need is to integrate planning functions across water, wastewater and rainwater management.
- The second need is to integrate ‘one water’ utility planning with broader community, transportation, energy and land use planning functions so that Vancouver can meet the needs of a growing city in a way that is resilient, cost-effective and yields benefits for a broad range of community building goals.
- The implications of a new, more integrated approach to utility planning are significant and will also be critical to inform and align with Metro Vancouver utility planning and capital investment decisions for the Vancouver Sewerage District in the coming decades.

Potable Water

- Urgent need to increase infrastructure replacement rate over the next 10 years to manage deterioration due to a significant portion of mains reaching end of service life in the next 30 years.
- Incremental strategy to increase water main renewal to average of 0.7% over the Capital Plan, to allow for resource leveling, stability, continuity, and consistent funding levels.
- Strong focus on transmission main replacement for assets in critical condition.

- Scale of existing infrastructure deficit means that distribution main assets will continue to deteriorate over next several decades as replacement program catches up with deterioration rates.
- Several other smaller programs are funded only to basic levels to respond reactively to failures (hydrants and services) and will benefit from increased renewal through distribution main replacement projects.
- New initiatives to accelerate seismic resiliency upgrades and leakage and demand management programs to support water conservation and reduce water loss to support resilience goals.

Sewers and Drainage

- Renew sewer assets that have reached the end of their service lives.
- Implement system monitoring and modeling programs to support the integrated evaluation of the needs/opportunities/relationship of grey and green infrastructure.
- Continue with sewer separation efforts to meet regulatory target of eliminating combined sewer overflows as required by Metro Vancouver's Liquid Waste Management Plan.
- Mitigate against sea level rise by constructing dikes at East Fraserlands and evaluate mitigation options for the Fraser River, English Bay, False Creek and Coal Harbor.
- Replace and renew service connections in response to the development industry and to trouble calls related to blockages from tree roots and asset deterioration, resulting in property damage claims.
- Decrease the number of homes on the Sewer Connection Precautionary Rodding (PR) Program. (There are currently over 4,000 homes on the program.)
- Renew end of life sanitary Pump Stations with facilities that better protect the environment and maintain sewer service to residents.
- Shoreline protection due to climate change.

Green Infrastructure

- Commence the 30-year green infrastructure implementation outlook currently under development as part of the Rain City Strategy.
- Develop design standards to capture, manage and treat rainwater on-site to reduce liquid waste at their source.
- Perform detailed watershed and district-scale green infrastructure planning including the development of supportive policies, guidelines, tools, and investing in pilot programs. Learnings will direct implementation over the longer-term.
- Given that the outcome would include new classes of city and private assets in providing an important drainage function, investments are needed to closely manage green infrastructure performance and policy outcomes.

2019-2022 CAPITAL PLAN

V. 2019-2022 Capital Plan: \$616 million

\$ millions	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.*	Partner
Potable water	Water network	Distribution main renewals & upgrades (\$67.9M, 40-50 km)	90.6	0.6	91.3	79.4	11.9	-
		Transmission main renewal & upgrades (\$15.7M, ~5km)						
		Maintenance & replacement of other water components (\$6.6M)						
		Water access, quality & conservation (\$1.1M)						
	Connections & meters	Water connections renewals & upgrades (\$23.2M, ~1,400) Water meters, new & renewals (\$5.2M)	26.4	2.0	28.4	12.4	16.0	-
Water planning	One water: integrated utility planning initiative (\$6.3M) Engineering & site investigation (\$1.9M)	1.9	6.3	8.2	8.2	-	-	
Strategic initiatives	Resilience & demand management initiatives (\$13.1M)	5.4	7.7	13.1	13.1	-	-	
	Subtotal		124.3	16.6	140.9	113.0	27.9	-
Sewerage & drainage	Sewer network	Sewer main renewal & upgrades (\$248.4M, 45-50km)	288.2	-	288.2	169.0	119.2	-
		Pump station renewals & upgrades (\$25.4M, ~4)						
		Maintenance & replacement of other sewer components (\$14.3M)						
	Connections	Sewer connections renewal & upgrades (\$98.0M, ~4,500)	98.0	-	98.0	8.0	90.0	-
	Sewer monitoring & inspections	Sewer monitoring systems (\$3.4M)	5.7	-	5.7	5.7	-	-
		CCTV video inspection (\$2.3M)						
	Sewer planning	Sewer catchment planning (\$4.6M) System modeling (\$2.3M)	6.9	-	6.9	4.6	2.3	-
Flood management	Drainage studies/outfalls (\$4.4M)	4.4	-	4.4	4.4	-	-	
Shoreline protection	EFL shoreline protection design (\$9.7M)	-	9.7	9.7	9.7	-	-	
	Subtotal		403.2	9.7	412.9	201.4	211.5	-
Green infrastructure	GI implementation	GI implementation (\$52.5M)	1.1	52.5	53.6	2.5	51.1	-
		GI asset renewal (\$1.1M)						
	Water quality monitoring	Water quality & GI monitoring program (\$1.0M)	-	1.0	1.0	1.0	-	-
	GI planning	Green infrastructure planning (\$7.4M)	-	7.4	7.4	3.9	3.5	-
	Subtotal		1.1	60.9	62.0	7.4	54.6	-
Total			\$528.6	\$87.2	\$615.8	\$321.8	\$294.0	-

In addition to regular maintenance and renewal, the City needs to invest in significant water, sewer, and drainage utility infrastructure to support growth. Historically, the replacement and upsizing of water and sewer utilities to accommodate growth has been generally secured through rezoning/development conditions. In July 2018, City Council approved a dedicated City-wide Utilities DCL program to begin to address the tremendous growth pressures on the utilities. The program provides an equitable way of sharing growth-related utilities costs amongst new development, and provides more clarity on the works the City will be constructing, timing of those works and requirements for developers. This approach also allows utility servicing to be considered, designed, and constructed as a city-wide system.

This program will include the Cambie Corridor as the first utility servicing plan to be completed alongside the land use plan, outlining a sequenced plan to deliver the neighbourhood serving infrastructure. It also recommends the onsite management of rainwater through green infrastructure tools and recommends enforcement of on-site groundwater requirements to limit the impact of growth on existing aging infrastructure nearing capacity. Over time, this program would address the capital needed to build new infrastructure capacity to support new population growth resulting through redevelopment citywide.

~\$550 million is expected to generate from this program over eight years, of which ~\$190 million is included in the 2019-2022 Capital Plan. Growth-triggered upgrades that are not delivered through this program will continue to be secured through conditions of development, which is not included in the Capital Plan.

Major renewal projects include:

- Renewal of 35 - 45 km of water distribution and transmission mains
- Renewal of water connection, meter and hydrant assets at end of life
- Renewal of 30 - 40 km of sewer mains
- Plan, design, and refurbish or replace up to 4 pump stations
- Construction of diking in East Fraserlands
- 30 GI practices rehabilitated to level of service "A"

Major new/upgrade projects include:

- New/upgraded sewer/water connections and meters for development
- New water, sewer and drainage infrastructure to serve growth areas (e.g. Cambie Corridor)
- Drinking water loss and demand management projects
- Plan, design and replace the Thornton Pump Station
- 140 new GI practices to manage and treat stormwater
- Downspout disconnect program

In addition to the City delivered investments, major investment by Metro Vancouver include:

- Iona Wastewater Treatment Plant upgrade to secondary treatment by 2030

SOLID WASTE

I. Overview

Solid waste management is vital to maintaining the health and well-being of our residents, supporting local economy, and improving the city’s sustainability and resilience.

There are two basic services within solid waste management: the collection of materials and the processing and disposal of materials. The City is responsible for the collection of garbage and compostable organic materials from single-family and duplex homes. The City is also responsible for the disposal of garbage at the Vancouver Landfill and processing of compostable organics through contracts with the private sector. The City provides collection of waste and litter from the public realm, as well as street cleaning operations. The overall waste management system in the City includes two recycling centres, a waste transfer station and a landfill.

II. Inventory of Assets

The City-owned landfill in Delta started operations in the mid-1960s. The Vancouver South Transfer Station at Manitoba Yards was built in the late-1980s. The recycling centre at the Vancouver landfill was built in the 1990s and a new Zero Waste Centre, replacing the recycling centre at the transfer station, opened in 2018.

	City Assets	Replacement Value	% in Good / Fair Condition	Partner Assets
Solid Waste	<ul style="list-style-type: none"> Landfill in Delta (includes gas collection infrastructure) Transfer station 2 recycling centres ~140 vehicles and equipment 	<p>\$85 M</p> <p>Landfill: N/A</p>	<p>Transfer station: poor to fair</p> <p>Landfill: N/A</p>	<ul style="list-style-type: none"> Village Farms landfill gas beneficial use facility

The following table summarizes major work completed in the last 10 years (2009-2018) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Solid Waste	<ul style="list-style-type: none"> Recycling centre at Manitoba Yard (Zero Waste Centre) Landfill administration building first floor Transfer station floor, pit and scale repairs / replacement 	<ul style="list-style-type: none"> The City changed from manual to automated collection of garbage and green bin in 2006, purchasing a new fleet Food scrap collection was added to the Green Bin Program starting in 2010 City delivered recycling services to residential properties were wound down and transferred to Recycle BC in 2016 Landfill: <ul style="list-style-type: none"> completed closure of 63 ha upgraded pump station controls & new water line Landfill gas collection: <ul style="list-style-type: none"> Replacement of blowers and addition of four new flares for gas control Over 200 vertical wells and 44 horizontal collectors installed 2500 m of gas pipe and almost 1400 m of new pipe installed Transfer station: addition of two new scales

III. Long-term Vision

Societal and regulatory pressures will continue to focus on reducing the amount of waste we dispose and recovering the value from materials in the waste stream. Our long-term investment is guided by a number of strategies:

- The *Greenest City 2020 Action Plan* (2011) sets a goal of reducing the amount of solid waste going to landfill or incinerator by 50% from 2008 levels by 2020.
 - *Organic Wastes* – Food scraps and food-soiled paper from Vancouver represent ~24% of garbage disposed to landfills or incinerators. To maximize diversion of compostable organic waste, as part of the Green Bin Program, the City collects yard trimmings, food scraps and food soiled paper from single-family and duplex homes. Multi-family residential buildings, businesses and institutional buildings are required to have programs in place and work with private sector haulers to divert compostable organics. This area will require additional focus in order to further maximize diversion in the future. Alternative approaches to recovering and managing organic materials will be required.
 - *Construction & Demolition Wastes* – To significantly reduce the volume of construction, renovation, and demolition wastes disposed in the landfill or incinerator, the City implemented a program in 2014 requiring a minimum 75% reuse and recycling of demolition waste from pre-1940 homes, and 90% from pre-1940 homes with identified character features. Future focus will be on increasing the number of homes and buildings covered under green demolition and deconstruction requirements, supporting market development in the industry and recovering construction and demolition materials at the landfill for beneficial use.
- *Zero Waste 2040* (June 2018) is a long-term strategy that guides future waste management investments to achieve the City's zero waste goal. It provides a framework for Vancouver to reduce and ultimately eliminate waste disposed to landfill and incinerator by 2040.

IV. Strategy for the Next 10 Years

Reduce the disposal of organics, and construction, and demolition materials:

- Installing a system to convert landfill gas to renewable natural gas.
- Increase overall diversion of organics by promoting greater participation in food scraps recycling programs covering all sectors.
- Increase diversion at the landfill with a soil blending and aggregate processing facility and other initiatives.
- Divert waste from demolition, land clearing, and construction.
- Support building deconstruction through permitting to ensure reuse and recycling.
- Support expansions to the City's green demolition and deconstruction program through by-law updates to ensure reuse and recycling.
- Convene, collaborate, educate and support Vancouver as a community to focus on waste prevention, reduction and material reuse.
- Develop new systems and programs geared towards maximizing material recovery for beneficial use.

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V. 2019-2022 Capital Plan: \$92 million

<i>\$ millions</i>	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
	Transfer station	VSTS maintenance & upgrades (\$5.5M)	5.5	-	5.5	5.5	-	-
	Landfill non-closure	Regulatory requirements (\$23.0M) Landfill upgrades (\$9.9M)	32.9	-	32.9	32.9	-	-
Disposal	Landfill closure	Closure works (\$25.3M) Design for future closure works (\$3.5M)	28.8	-	28.8	20.2	-	8.6
	Vehicles & equipment	Renewal of vehicles & equipment (\$14.5M)	14.5	-	14.5	14.5	-	-
	Subtotal		81.7	-	81.7	73.0	-	8.6
Sanitation	Collections & street cleaning	Renewal of vehicles & equipment (\$10.1M) Other systems (\$450K)	10.6	-	10.6	10.6	-	-
	Subtotal		10.6	-	10.6	10.6	-	-
Solid waste			\$92.2	-	\$92.2	\$83.6	-	\$8.6

Major projects include:

- Replacement of Solid Waste equipment including, collection vehicles and Landfill machines.
- Closure and installation of gas collection infrastructure of completed areas of the Landfill (“Western 40 Hectares” & Phase IV areas).
- Installation of gas collection infrastructure in active areas of the Landfill.
- Expansion of the Landfill recycling centre and addition of two new scales to improve customer service.

RENEWABLE ENERGY

I. Overview

The City has the aspirational goal of being the greenest city in the world by 2020 and achieving 100% renewable energy city-wide by 2050. This requires actions to improve energy efficiency and reduce energy consumption, along with actions to increase the supply and use of renewable energy. Actions are largely focused on the building energy use and transportation sectors, which are the major sources of carbon pollution.

In Vancouver, 56% of all GHG emissions come from buildings, with the majority of emissions associated with heat and hot water use. Renewable energy technologies (e.g. geo-exchange systems, waste heat recovery, bio-fuels, solar energy) provide a means to supplement or replace conventional energy sources and thereby reduce GHG emissions. Renewable energy technologies can be implemented for individual homes and buildings, for clusters of buildings, or at the larger district or neighborhood scale.

On the transportation side, which accounts for roughly 37% of GHG emissions in the city, the transition to renewable energy means shifting to more walking, cycling and transit use, and replacing combustion-engine vehicles with electric vehicles.

II. Inventory of Assets

The City owns and operates the False Creek Neighbourhood Energy Utility (“NEU”), which has been operating since 2010 and utilizes waste heat recovered from sewage and bio-methane. There are also two fossil-fuel based neighbourhood energy systems owned by Provincial governmental agencies, and two systems owned by private utility operators.

	City Assets	Replacement Value	% in Good / Fair Condition	Partner Assets
Neighborhood Energy	<ul style="list-style-type: none"> 1 energy centre 6 km of pipes 33 transfer stations 	\$45M	100%	<ul style="list-style-type: none"> 2 systems owned by other governments 2 systems owned by private utility providers

The following table summarizes major work completed in the last 10 years (2009-2018) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Neighborhood Energy	<ul style="list-style-type: none"> n/a (note: system started in 2010) 	<ul style="list-style-type: none"> 1 energy centre 6 km of pipes 33 transfer stations

III. Long-term Vision

City Council has approved a number of policies and strategies to reduce energy consumption, increase the use of renewable energy, and reduce greenhouse gas emissions:

- The *Greenest City 2020 Action Plan* (2011) aims at reducing carbon, reducing waste, and supporting healthy ecosystems.
- The *Renewable City Strategy* (2015) sets a target of 100% reliance on renewable energy by 2050 and for new construction to be zero emissions by 2030.

- The *Zero Emissions Building Plan* (2016) outlines two pathways to achieve low-carbon new construction: through high performance buildings and low-carbon energy systems.
- The *Strategic Approach to Neighbourhood Energy* (2012) targets the conversion of existing fossil fuel based steam heat systems to renewable energy and the deployment of new renewable energy systems for high-density neighborhoods.
- The *Electric Vehicle Ecosystem Strategy* (2017) articulates the City's role in ensuring Vancouver is prepared for the rapid transition to electric mobility through the provision of home, workplace and public charging infrastructure.
- Other policies include the *Green Buildings Policy for Rezoning*, the *Rezoning Policy for Large Developments* (2010), zoning relaxations for the *Passive House* standard, and green demolition practices.
- The *Vancouver Building By-law* is regularly updated to require more efficient and sustainable construction. As sustainability regulations and policies develop city-wide, more stringent requirements will apply as we transition buildings to no longer be dependent on fossil fuels.

IV. Strategy for the Next 10 Years

In accordance with the *Renewable City Strategy*, key requirements include reducing demand for energy and increasing the supply and use of renewable energy.

Low Carbon Energy System

Recognizing that compact mixed-use communities provide an ideal context for neighborhood energy systems, the City will take the following actions:

- Continue to expand the City-owned False Creek NEU to areas of Mount Pleasant, the False Creek Flats and NE False Creek, and transition the utility towards 100% renewable energy supply.
- Continue policy support for the conversion of existing fossil-fuel based district energy systems that are owned by other parties to renewable fuel sources.
- Continue policy support to encourage investments by other parties in low carbon energy systems to serve areas of the Cambie Corridor, the Downtown, River District and other high density development sites.

Zero Emissions Vehicles

In addition to efforts to increase the share of trips from walking, cycling and transit to two thirds by 2040, the vehicle operating in the City will need to transition to zero emissions options (e.g. electric vehicles) in order for the Renewable City Strategy objectives to be met. To support that transition to zero emissions vehicles, the City is taking the following actions:

- Ensuring that new residential and commercial construction is ready for the transition to electric vehicles by having parking stalls be pre-wired for electric vehicle charging.
- Building out a network of public charging stations for electric vehicles so that residents and businesses can charge their vehicles when home or workplace charging is not available.
- Using parking policies to provide preferential access to zero emissions vehicles relative to private internal combustion engine vehicles.

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- Working with the provincial government to implement policy that increases the supply of zero emissions vehicles and renewable fuels so that residents and businesses have the ability to choose those options.

Low- & Zero Emission Buildings

Designing and constructing buildings to use less energy, less water, healthier materials, and improved indoor environmental quality help maximize energy efficiency and the health performance of buildings.

- Maximize energy efficiency and low-GHG performance of all buildings.
- Subject all new buildings to the green building requirements in the Vancouver Building Bylaw.
- Subject all rezoning projects to the *Green Buildings Policy for Rezoning*.

Building Retrofits

Due to poor energy efficiency performance and reliance on fossil fuels, older buildings consume more energy and have greater GHG emissions than newer buildings. Energy retrofit upgrades to homes and businesses can enable the city to reduce its total carbon footprint over time as it grows and evolves. Key actions include:

- Explore opportunities to partner with utility companies to assist landlords and homeowners with improving the energy efficiency of multiple-family buildings.
- Encourage building retrofit to lower energy consumption, with the goal of reducing total energy use in Vancouver over time despite population growth.
- Encourage implementation of low carbon energy systems (either building-scale or connection to a neighborhood energy system) and/or energy conservation measures as part of building renovation.

V. 2019-2022 Capital Plan: \$41 million

\$ millions	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
SEFC NEU	Generation	Expansion of SEFC energy centre (\$14.4M, 5 MW waste heat recovery)	-	17.1	17.1	17.1	-	-
		New satellite energy generation (\$2.7M, 5-8 MW gas peaking/backup)	-	-	-	-	-	-
	Distribution	Expansion of distribution network (\$14.0M, ~2,900m)	-	20.4	20.4	16.7	3.7	-
		New service connection & ETSs (\$6.4M, ~28 connections & ETSs)	-	-	-	-	-	-
Planning	System planning & overhead (\$2.2M)	-	2.2	2.2	2.2	-	-	
	Subtotal		-	39.7	39.7	36.0	3.7	-
EV infrastructure		Electric Vehicle Infrastructure Strategy (\$1.8M)	-	1.8	1.8	-	-	1.8
Renewable energy			-	\$41.5	\$41.5	\$36.0	\$3.7	\$1.8

Major renewal projects include:

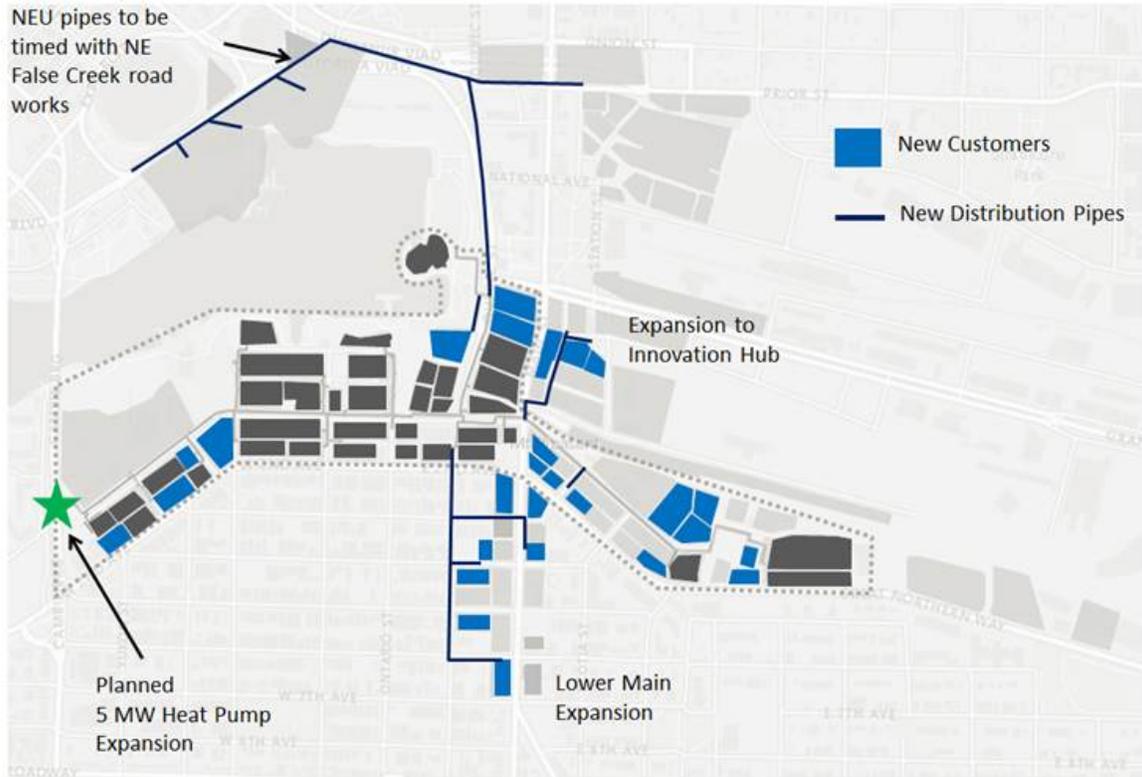
- Because the City-owned NEU has been in operation for less than 10 years, no significant renewable projects are anticipated.

Major new/upgrade projects include:

- Expansion of the 'fast charging' public network to between 20 and 24 charge points. This will put a 'fast charger' within a 10 minute drive of everywhere in Vancouver.
- Expansion of the 'Level 2' public network by adding 25 to 30 new charge points throughout Vancouver with a focus on community centres and Business Improvement Associations.
- Development of 5 megawatts of new sewage heat recovery capacity in the False Creek Energy Centre, to enable the NEU to continue to achieve its renewable energy targets

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- Expansion of the NEU distribution pipe network to areas of Mount Pleasant, the False Creek Flats, and NE False Creek (see map below)



TECHNOLOGY

I. Overview

In this era of digital transformation, big data, social media, mobility and cloud computing, technology has become a fundamental component of service delivery. Most City functions and service areas are technology enabled, including citizen-facing applications, corporate information systems, technology infrastructure, call centre services, and voice, data and printing services.

The City's Digital Strategy provides an overarching framework for coordination and prioritization of initiatives underway across the city and provides a step forward in establishing Vancouver as a leader in effectively leveraging digital technologies and supporting a vibrant digital economy.

II. Inventory of Assets

Information technology assets have short lifespans and require frequent replacement when compared to most other City assets. In addition, the world of information technology changes rapidly and is invariably accompanied by a change in the way work is done or a service is offered.

	City Assets	Replacement Value	% in Good / Fair Condition	Partner Assets
Technology	<ul style="list-style-type: none"> ~4,700 computers & laptops ~850 infrastructure components 400+ software applications 230+ km's of fibre optic cable 	\$0.4B	~75%	<ul style="list-style-type: none"> #VanWiFi free public WiFi network at 550 locations throughout the city is comprised of assets deployed by our partners, Telus & Shaw

The following table summarizes major work completed in the last 10 years (2009-2018) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Technology	<ul style="list-style-type: none"> ~11,000 computers and electronic devices replaced based on lifecycle Software applications renewed (includes SAP, online licences and permits, and online taxes and utility accounts software applications) 	<ul style="list-style-type: none"> VOIP phone system Software applications (includes Hansen asset management, VanDocs document management, and Lagan call centre management software applications) Updates to Posse permits and licensing systems and Tempest tax utilities billing systems to support the new Empty Homes Tax Software as a Service (SaaS) applications [includes volunteer management (Better Impact), donations tracking (Raiser's Edge), recreation management (ActiveNet) social media tracking (Hootsuite), and community collaboration (ePanel) software]

III. Long-term Vision

As technology continues to become a key enabler for City departments, the shared services model will continue to develop and evolve to ensure the smooth running and maintenance of

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critical infrastructure coupled with flexible business models to enable the timely delivery of new technologies.

Technology Services will proactively partner with the City's business units to deliver strategic initiatives that support business objectives, identifying solutions to increase operational efficiency, increase the availability of data for decision making and improve the user experience for members of the public when interacting with the City over digital channels.

IV. Strategy for the Next 10 Years

The City's digital strategy laid the foundation to increase the technology maturity of the city. The 2015-2018 Capital Plan focussed on foundational capabilities and the introduction of an enterprise culture. Future Capital Plans will ensure that the technology core of the city is maintained, and that transformation in the back office and multichannel service delivery models continues. It is also a key goal to enhance the City's data and analytics capabilities with a corporate enterprise data strategy. As data and connectivity improvements are delivered in the near term, the City will be enabled to adapt to the multiple emerging technologies on the horizon for the next decade such as the Internet of Things, Smart Mobility, Augmented and Virtual Reality, Machine Learning and Artificial Intelligence.

V. 2019-2022 Capital Plan: \$100 million

\$ millions	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
Digital	Maintenance & upgrades of IT systems & infrastructure (\$75.0M)	71.0	29.0	100.0	100.0	-	-
	Technology transformation (\$25.0M)						
Technology		\$71.0	\$29.0	\$100.0	\$100.0	-	-

Major renewal projects include:

- Major Microsoft Upgrade from Office 2010 as well as upgrade to Windows 10
- Upgrades to key support systems such as Lagan, Amanda, Tempest, Fairfax, Posse,
- Modernization of software development tools that support the city's ~400 custom built applications
- End of Life infrastructure replacement for City of Vancouver, Vancouver Public Library and Vancouver Police Department
- GIS Renewal

Content Management System

Major new/upgrade projects include:

- Data centre resilience and relocation project
- Cybersecurity and network investment
- Enterprise Data and Analytics
- Operating Technologies and Critical Infrastructure Improvements

EMERGING PRIORITIES

I. Overview & Strategy

While the City prepares multi-year work programs for the various service categories (e.g. affordable housing, community facilities, transportation), it is impossible to foresee all eventualities that will happen over a four-year period. For instance, there may be new or changes to existing funding programs at the Federal, Provincial or regional level, and these may create opportunities to advance one or several City-led projects. Certain projects may be at varying stage of planning where further work is required to develop business case and funding strategy, as well as strategic partnership and funding commitments from senior governments and multiple community partners and stakeholders.

In addition, the City's Capital Plan is prepared based on cost estimates from 2018. Projects that get executed in the second half of the four-year plan are likely to experience noticeable cost escalation.

The City's strategy is therefore to retain some financial capacity to address emerging priorities and cost escalations that is contemplated over the course of the four-year capital plan. Reserving some of the City's financial capacity for these eventualities is part of the City's prudent financial management strategy.

II. 2019-2022 Capital Plan: \$88 million

Other the overall \$2.8 billion, a total of \$88 M in City contributions has been earmarked to address emerging priorities and cost escalation. Priority will be given to projects related to renewal of existing infrastructure that receive partnership funding from external agencies (other governments and community partners). The renewal of Britannia Community Centre, RayCam Community Centre and the West End Community Centre are examples of candidate projects, as these projects are in the planning/design stage and could be ready to move to the construction stage prior to the end of the 2019-2022 Capital Plan.

<i>\$ millions</i>	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
	Tax supported funding for emerging priorities (\$88.0M)	88.0	-	88.0	88.0	-	-
	Emerging priorities	\$88.0	-	\$88.0	\$88.0	-	-

OVERHEAD

I. Overview & Strategy

The City incurs overhead costs as it executes on the Capital Plan. Examples include:

- Support from the Supply Chain Management team to organize and manage contracts that help design and construct capital projects;
- Support from the Legal Services team to review contracts and grant agreements; and
- Cost associated with debt issuance (for the portion of the Capital Plan that is funded using debt).

The City's strategy is to build these costs into the Capital Plan.

II. 2019-2022 Capital Plan: \$20 million

A total of \$20 M has been earmarked to cover capital-related corporate support, as follows:

- \$16 M to cover costs associated with the Supply Chain Management and Legal Services team; and
- \$4 M to cover costs associated with debt issuance.

<i>\$ millions</i>	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
	Indirect corporate overhead supporting capital (\$16.0M)	20.0	-	20.0	20.0	-	-
	Debt issuance costs (\$4.0M)						
Overhead		\$20.0	-	\$20.0	\$20.0	-	-

**2019-2022 CAPITAL PLAN
SUMMARY**

Affordable housing

<i>\$ millions</i>	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
	SROs	SRO upgrade granting program (\$6.0M)	6.0	-	6.0	-	6.0	-
	Supportive housing	Supportive housing granting program (\$900K)	0.9	-	0.9	-	0.9	-
	Non-market rental (Social housing & other)	City-owned & City operated Replacement of City-operated residences (\$12.0M) Seismic evaluation of existing facilities (\$475K) Renovations to keep facilities functional & efficient (\$1.0M) Capital maintenance program (\$2.0M)	15.5	-	15.5	3.5	12.0	-
		City-owned & Partner operated New units delivered through development (\$400.0M, est. 1,200-1,600 units in-kind)	-	400.0	400.0	-	400.0	-
		Non-City housing on City-owned land Preservation of existing non-market & co-op housing (\$15.0M) Acquisition of new land for affordable housing (\$75.0M)	15.0	75.0	90.0	-	90.0	-
		Non-City housing on Non-City land Chinatown housing partnerships (\$1.6M) Infrastructure granting program for new social housing (\$20.0M)	1.6	20.0	21.6	-	21.6	-
		Subtotal		32.1	495.0	527.1	3.5	523.6
	Purpose built rental & other	Rental protection & relocation and other programs (\$1.5M)	1.5	-	1.5	-	1.5	-
	Implementation & research	Planning & studies for non-City housing on City-owned land (\$1.5M, VAHA) Planning & studies for other affordable housing (\$3.2M, ACCS)	1.6	3.1	4.7	-	4.7	-
	Affordable housing		\$42.0	\$498.1	\$540.1	\$3.5	\$536.7	-
		Subtotal cash	42.0	98.1	140.1	3.5	136.7	-
		Subtotal in-kind	-	400.0	400.0	-	400.0	-

Childcare

<i>\$ millions</i>	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner	
	Infant, toddler & preschool (0-4 years old)	City-owned Renewal of childcare at Marpole-Oakridge Community Centre (\$6.8M) Renovations to keep facilities functional & efficient (\$750K) Capital maintenance program (\$325K)	7.8	112.5	120.3	7.8	107.5	5.0	
		City-owned New 0-4 spaces delivered by development (\$37.5M, ~250, in-kind) New 0-4 spaces delivered by the City or partners (\$75.0M, ~500)	-	2.5	2.5	-	2.5	-	
		School age	City-owned New or upgraded space to provide 5-12 spaces (\$2.5M, ~250)	-	2.5	2.5	-	2.5	-
		Implementation & research	Planning & overhead (\$600K)	-	0.6	0.6	0.6	-	-
	Childcare		\$7.8	\$115.6	\$123.4	\$8.4	\$110.0	\$5.0	
		Subtotal cash	7.8	78.1	85.9	8.4	72.5	5.0	
		Subtotal in-kind	-	37.5	37.5	-	37.5	-	

**2019-2022 CAPITAL PLAN
SUMMARY**

Park and open spaces

<i>\$ millions</i>	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.*	Partner
	Park land	Land acquisition program (\$80.0M)	-	80.0	80.0	-	80.0	-
	Park amenities	Park development Renewal & upgrades of existitng parks (\$29.2M) Renewal & upgrades of playgrounds, spraypads, etc. (\$9.0M) Universal access improvements (\$600K) New park development (\$43.5M)	38.8	43.5	82.3	3.8	78.5	-
		Other Skate & bike facilities/tracks (\$2.4M) Dog parks & amenities (\$2.0M)	0.4	4.0	4.4	0.4	4.0	-
		Planning & overhead Parks & recreations studies (\$2.7M) Project management (\$16.0M)	2.1	16.6	18.7	2.1	16.6	-
		Subtotal		41.3	64.1	105.4	6.3	99.1
	Programmed activity areas	Fields Grass field renewals & upgrades (\$1.5M) Synthetic field renewals & upgrades (\$4.0M) Renewal & upgrades to ball diamonds & cricket program (\$0.5M) Field lighting renewals & upgrades (\$200K) New synthetic turf field (\$5.4M)	6.2	5.4	11.6	3.9	7.7	-
		Tracks Renewals & upgrades of running tracks (\$1.3M) New competitive track & field training facility (\$10.0M)	1.3	10.0	11.3	0.6	10.8	-
		Other sport amenities Renewal & upgrades of courts (\$1.0M) Golf course improvements (\$500K)	1.5	-	1.5	0.8	0.8	-
		Subtotal		9.0	15.4	24.4	5.2	19.2
	Seawall & waterfront	Waterfront & Renewal & upgrade of bridges, boardwalks & piers (\$4.5M)	4.5	-	4.5	3.5	1.0	-
		Seawall Seawall maintenance & renewal (\$1.7M) Seaside greenway (\$2.0M) Shoreline maintenance (\$200K)	1.9	2.0	3.9	1.9	2.0	-
		Subtotal		6.4	2.0	8.4	5.4	3.0
	Urban forest & natural areas	Trees New trees (\$8.2M, ~67,000) Replacement trees (\$482K, ~4,000)	0.5	8.2	8.6	0.5	8.2	-
		Biodiversity Biodiversity projects (\$3.7M)	-	3.7	3.7	-	3.7	-
		Restoration & maintenance Stanley Park cliff scaling (\$461K) Hastings Park stream & wetland creation (\$1.6M)	0.5	1.6	2.1	0.5	1.6	-
		Subtotal		0.9	13.4	14.4	0.9	13.4
	General features & infrastructure	Pedestrian access Rehabilitation of pedestian bridges (\$3.5M) New & improved pathways (\$1.5M)	3.5	1.5	5.0	3.5	1.5	-
		Vehicle access Rehabilitation of paved surfaces (\$1.9M)	1.9	-	1.9	1.9	-	-
		Park infrastructure Rehabilitation of park infrastructure (\$250K) Green infrastructure & drainage (\$1.5M) Maintenance & upgrades to electrical systems (\$600K)	0.9	1.5	2.4	0.6	1.8	-
		Other features Community garden upgrades (\$400K) Irrigation systems & water conservation (\$1.3M)	1.1	0.7	1.7	0.7	1.1	-
		Subtotal		7.3	3.7	10.9	6.6	4.4
	Park buildings	Renewal & upgrades of washrooms, fieldhouses & concessions (\$8.3M) Capital maintenance (\$4.0M) New washrooms & fieldhouses (\$8.7M)	12.3	8.7	21.0	6.1	14.9	-
	Parks & open spaces		\$77.3	\$187.2	\$264.5	\$30.5	\$234.0	-

* Excludes assets expected to be delivered in-kind from development.

**2019-2022 CAPITAL PLAN
SUMMARY**

Arts & culture

<i>\$ millions</i>	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
	Cultural facilities	City-owned						
	Non-City							
	Subtotal		25.1	33.0	58.1	17.9	35.7	4.5
	Entertain & exhibition facilities							
	Public art							
	Heritage							
	Arts & Culture		\$127.0	\$58.0	\$185.0	\$38.3	\$133.2	\$13.5
		Subtotal cash	127.0	15.0	142.0	38.3	90.2	13.5
		Subtotal in-kind	-	43.0	43.0	-	43.0	-

**2019-2022 CAPITAL PLAN
SUMMARY**

Community facilities

<i>\$ millions</i>	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
Libraries & archives	Libraries	Renewal & expansion of Marpole library (\$23.8M)	30.5	36.8	67.3	10.8	56.5	-
		Renewal & expansion of Oakridge library (\$37.4M, of which est. in-kind \$35.0M)						
		Renovations to keep facilities functional & efficient (\$700K)						
	Archives	Capital maintenance program (\$5.4M)	18.0	-	18.0	4.0	4.0	10.0
	Subtotal	Relocation & renewal of archives (\$18.0M)	48.5	36.8	85.3	14.8	60.5	10.0
Recreation facilities	Community centres	Renewal of Marpole-Oakridge community centre (\$38.6M)	36.5	56.6	93.1	24.2	68.9	-
		Master plan & design of 1st phase of West End Community Centre / Joe Fortes Library / King George Secondary School site (\$10.0M)						
		Continued design for 1st phase of Britannia renewal (\$2.5M)						
		Planning for renewal of RayCam community centre (\$2.0M)						
	Rinks & pools	New Oakridge community centre (\$40.0M est. in-kind)	1.5	16.0	17.5	-	17.5	-
Programs	Continued design for 1st phase of Britannia renewal (\$2.5M)	15.1	-	15.1	14.6	0.5	-	
	Subtotal	New Marpole outdoor pool (\$15.0M)	53.1	72.6	125.7	38.8	86.9	-
Social facilities	City-owned	Renovations to keep facilities functional & efficient (\$2.3M)	6.5	9.4	15.9	2.5	13.4	-
		Capital maintenance program (\$1.3M)						
		Arbutus Village neighbourhood house & adult day centre (\$5.7M est. in-kind)						
	Non-city	Little Mountain neighbourhood house (\$7.4M est. in-kind)	5.5	-	5.5	5.0	0.5	-
	All social	Social capital grant programs (\$1.5M)	1.8	-	1.8	1.8	-	-
	Downtown Eastside capital grant programs (\$4.0M)	13.8	9.4	23.2	9.3	13.9	-	
	Subtotal	Planning & overhead (\$1.8M)	13.8	9.4	23.2	9.3	13.9	-
Community facilities			\$115.3	\$118.8	\$234.1	\$62.9	\$161.3	\$10.0
		Subtotal cash	93.4	52.6	146.0	62.9	73.2	10.0
		Subtotal in-kind	21.9	66.2	88.1	-	88.1	-

**2019-2022 CAPITAL PLAN
SUMMARY**

Public safety

<i>\$ millions</i>	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
Fire & rescue	Fire halls	Design for future renewal & expansion of one fire hall (\$3.0M)	11.2	-	11.2	10.2	1.0	-
		Seismic upgrade to Fire hall #12 in Kitsilano (\$6.0M)						
		Renovations to keep facilities functional & efficient (\$525K)						
	Fire trucks	Capital maintenance program (\$1.7M)						
		Renewal of VFRS vehicle & equipment (\$15.2M)	15.2	-	15.2	15.2	-	-
	Subtotal		26.4	-	26.4	25.4	1.0	-
Police	Police facilities	Renovations to keep facilities functional & efficient (\$1.5M)	2.8	-	2.8	2.8	-	-
		Capital maintenance program (\$1.3M)						
		Police cars	Renewal of VPD vehicle & equipment (\$18.2M)	18.2	-	18.2	18.2	-
	Subtotal		21.0	-	21.0	21.0	-	-
Animal control		Renovations to keep facilities functional & efficient (\$25K)	0.2	-	0.2	0.2	-	-
		Capital maintenance program (\$175K)						
Public safety			\$47.6	-	\$47.6	\$46.6	\$1.0	-

Civic facilities and equipment

<i>\$ millions</i>	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
Administrative facilities	City-owned	City Hall campus renewal - planning & design (\$5.0M)	12.5	-	12.5	12.5	-	-
		Renovations to keep facilities functional & efficient (\$4.5M)						
		Capital maintenance program (\$3.0M)						
Service yards, vehicles & equipment	Service yards	Renewal of Sunset Yard, phase 1 (\$9.0M)	21.2	-	21.2	21.2	-	-
		Design for future renewal of Manitoba Yard renewal (\$3.7M)						
		Renovations to keep facilities functional & efficient (\$1.3M)						
		Capital maintenance program (\$7.3M)						
	Vehicles & equipment	Renewal of public works, water and sewers vehicle & equipment (\$39.9M)	49.8	-	49.8	49.8	-	-
		Renewal of other vehicles & equipment (\$9.9M)						
	Subtotal		71.0	-	71.0	71.0	-	-
Civic facilities & equipment			\$83.5	-	\$83.5	\$83.5	-	-

All City facilities

<i>\$ millions</i>	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
All City facilities	Planning & research (\$5.3M)	24.4	0.5	24.9	24.9	-	-
	Facility sustainability & resilience programs (\$5.5M)						
	Other facility improvement programs (\$4.0M)						
	Project management and other support (\$10.1M)						
All City facilities		\$24.4	\$0.5	\$24.9	\$24.9	-	-

**2019-2022 CAPITAL PLAN
SUMMARY**

Transportation & street use

<i>\$ millions</i>	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.*	Partner
Managing the transportation network	Planning & monitoring	Transportation monitoring (\$4.7M)	5.9	2.5	8.4	2.1	6.3	-
		Transportation planning & studies (\$3.7M)						
	Safety improvements	Zero fatalities & serious injuries program (\$4.0M)	1.0	6.5	7.5	1.0	5.7	0.8
		School safety & active routes improvements (\$2.5M)						
		Local street improvements (\$1.0M)						
	Congestion management	Congestion management & transit reliability (\$4.0M)	-	4.0	4.0	-	3.0	1.0
	Curbside management	Replacement of parking meters (\$6.0M)	6.0	-	6.0	6.0	-	-
	Structure management	Vehicular bridge repair & maintenance (\$3.0M)	36.5	-	36.5	18.6	6.3	11.6
		Granville & other vehicular bridge upgrades (\$24.6M)						
		Greenway structures rehabilitation (\$1.6M)						
		H-frame replacement (\$5.3M)						
	Surface management	Dock replacement (\$2.0M)	54.5	-	54.5	27.7	6.4	20.4
		Major road rehabilitation (\$37.4M)						
		Local roads rehabilitation (\$8.0M)						
Pedestrian curb ramp program (\$5.0M)								
Sidewalk rehabilitation (\$4.0M)								
Downtown Historic Railway decommissioning (\$0.1M)								
Street lighting management	Street light rehabilitation (\$21.9M)	26.7	1.5	28.2	23.4	2.2	2.6	
	Trolley pole replacement (\$4.8M)							
	New street lighting (\$1.5M)							
Signal management	Traffic signal rehabilitation (\$16.8M)	20.9	4.0	24.9	14.3	3.2	7.4	
	Pedestrian & bike signal rehabilitation (\$4.1M)							
	New pedestrian & bicycle signals (\$4.0M)							
Rail corridor	Rail crossing upgrades (\$3.5M)	3.5	-	3.5	3.5	-	-	
Subtotal			154.9	18.5	173.4	96.6	33.0	43.8
Expand sustainable transportation capacity	Active transportation	Granville Bridge Greenway (\$25.0M)	-	89.8	89.8	-	66.0	23.8
		Arbutus Greenway (\$5.0M)						
		Bute greenway & West End improvements (\$3.0M)						
		City-wide corridors & spot improvements (\$49.8M)						
		New sidewalks (\$7.0M)						
Complete streets	Gastown streets (\$10.0M)	-	19.8	19.8	-	19.8	-	
	Georgia Gateway West - Chilco to Nicola (\$7.0M)							
	Cambie Corridor - King Edward to 37th (\$2.8M)							
Other transit	Bus stop upgrades (\$2.0M)	2.0	4.4	6.4	1.2	4.4	0.8	
	Rapid transit office (\$4.4M)							
Subtotal			2.0	114.0	116.0	1.2	90.2	24.6
Street use	Public space projects	800 Robson (\$8.0M)	-	16.0	16.0	-	16.0	-
		Robson & Alberni (\$8.0M)						
	Landscape, public realm & amenities	New public space assets and amenities (\$1.9M)	2.3	1.9	4.2	2.3	1.9	-
		Renew public space assets and amenities (\$2.3M)						
	Public toilet facilities	DTES public washroom renewal & washroom study (\$1.2M)	1.2	-	1.2	1.2	-	-
Subtotal			3.5	17.9	21.4	3.5	17.9	-
Transportation & street use			\$160.3	\$150.4	\$310.7	\$101.2	\$141.1	\$68.4

* Excludes transportation projects expected to be delivered in-kind or otherwise through conditions of development.

**2019-2022 CAPITAL PLAN
SUMMARY**

One water (water, sewers & green infrastructure)

<i>\$ millions</i>	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.*	Partner
Potable water	Water network	Distribution main renewals & upgrades (\$67.9M, 40-50 km)	90.6	0.6	91.3	79.4	11.9	-
		Transmission main renewal & upgrades (\$15.7M, ~5km)						
		Maintenance & replacement of other water components (\$6.6M)						
		Water access, quality & conservation (\$1.1M)						
	Connections & meters	Water connections renewals & upgrades (\$23.2M, ~1,400) Water meters, new & renewals (\$5.2M)	26.4	2.0	28.4	12.4	16.0	-
Water planning	One water: integrated utility planning initiative (\$6.3M) Engineering & site investigation (\$1.9M)	1.9	6.3	8.2	8.2	-	-	
Strategic initiatives	Resilience & demand management initiatives (\$13.1M)	5.4	7.7	13.1	13.1	-	-	
	Subtotal		124.3	16.6	140.9	113.0	27.9	-
Sewerage & drainage	Sewer network	Sewer main renewal & upgrades (\$248.4M, 45-50km)	288.2	-	288.2	169.0	119.2	-
		Pump station renewals & upgrades (\$25.4M, ~4)						
		Maintenance & replacement of other sewer components (\$14.3M)						
	Connections	Sewer connections renewal & upgrades (\$98.0M, ~4,500)	98.0	-	98.0	8.0	90.0	-
	Sewer monitoring & inspections	Sewer monitoring systems (\$3.4M)	5.7	-	5.7	5.7	-	-
		CCTV video inspection (\$2.3M)						
	Sewer planning	Sewer catchment planning (\$4.6M) System modeling (\$2.3M)	6.9	-	6.9	4.6	2.3	-
Flood management	Drainage studies/outfalls (\$4.4M)	4.4	-	4.4	4.4	-	-	
Shoreline protection	EFL shoreline protection design (\$9.7M)	-	9.7	9.7	9.7	-	-	
	Subtotal		403.2	9.7	412.9	201.4	211.5	-
Green infrastructure	GI implementation	GI implementation (\$52.5M)	1.1	52.5	53.6	2.5	51.1	-
		GI asset renewal (\$1.1M)						
	Water quality monitoring	Water quality & GI monitoring program (\$1.0M)	-	1.0	1.0	1.0	-	-
	GI planning	Green infrastructure planning (\$7.4M)	-	7.4	7.4	3.9	3.5	-
	Subtotal		1.1	60.9	62.0	7.4	54.6	-
Total			\$528.6	\$87.2	\$615.8	\$321.8	\$294.0	-

* Excludes infrastructure expected to be delivered in-kind or otherwise through conditions of development.

Solid waste

<i>\$ millions</i>	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
Disposal	Transfer station	VSTS maintenance & upgrades (\$5.5M)	5.5	-	5.5	5.5	-	-
	Landfill non-closure	Regulatory requirements (\$23.0M)	32.9	-	32.9	32.9	-	-
		Landfill upgrades (\$9.9M)						
	Landfill closure	Closure works (\$25.3M)	28.8	-	28.8	20.2	-	8.6
		Design for future closure works (\$3.5M)						
Vehicles & equipment	Renewal of vehicles & equipment (\$14.5M)	14.5	-	14.5	14.5	-	-	
	Subtotal		81.7	-	81.7	73.0	-	8.6
Sanitation	Collections & street cleaning	Renewal of vehicles & equipment (\$10.1M)	10.6	-	10.6	10.6	-	-
		Other systems (\$450K)						
	Subtotal		10.6	-	10.6	10.6	-	-
Solid waste			\$92.2	-	\$92.2	\$83.6	-	\$8.6

**2019-2022 CAPITAL PLAN
SUMMARY**

Renewable energy

<i>\$ millions</i>	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Dev.	Partner
SEFC NEU	Generation	Expansion of SEFC energy centre (\$14.4M, 5 MW waste heat recovery) New satellite energy generation (\$2.7M, 5-8 MW gas peaking/backup)	-	17.1	17.1	17.1	-	-
	Distribution	Expansion of distribution network (\$14.0M, ~2,900m) New service connection & ETSs (\$6.4M, ~28 connections & ETSs)	-	20.4	20.4	16.7	3.7	-
	Planning	System planning & overhead (\$2.2M)	-	2.2	2.2	2.2	-	-
	Subtotal		-	39.7	39.7	36.0	3.7	-
EV infrastructure	Electric Vehicle Infrastructure Strategy (\$1.8M)	-	1.8	1.8	-	-	1.8	
Renewable energy			-	\$41.5	\$41.5	\$36.0	\$3.7	\$1.8

Technology

<i>\$ millions</i>	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Dev.	Partner
Digital		Maintenance & upgrades of IT systems & infrastructure (\$75.0M) Technology transformation (\$25.0M)	71.0	29.0	100.0	100.0	-	-
Technology			\$71.0	\$29.0	\$100.0	\$100.0	-	-

Emerging priorities

<i>\$ millions</i>	Program / Major projects	Existing assets	New assets	Total	City	Dev.	Partner
	Tax supported funding for emerging priorities (\$88.0M)	88.0	-	88.0	88.0	-	-
Emerging priorities		\$88.0	-	\$88.0	\$88.0	-	-

Overhead

<i>\$ millions</i>	Program / Major projects	Existing assets	New assets	Total	City	Dev.	Partner
	Indirect corporate overhead supporting capital (\$16.0M) Debt issuance costs (\$4.0M)	20.0	-	20.0	20.0	-	-
Overhead		\$20.0	-	\$20.0	\$20.0	-	-

BY-LAW NO. _____

**A By-law to authorize questions for the assent
of electors regarding the 2019 – 2022 Capital Plan**

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. Council authorizes putting to the electors, under section 245 of the *Vancouver Charter*, the following questions with respect to the following matters:

“2019 – 2022 CAPITAL PLAN BORROWING QUESTIONS

The Capital Plan is the City’s four-year financial plan for investments in infrastructure and amenities, such as sidewalks, streets, fire halls, parks, community centres and libraries.

The Capital Plan has two primary goals:

- Maintaining existing infrastructure and amenities; and
- Providing new infrastructure and amenities to support a growing population and economy.

Approximately \$2.8 billion is planned to be invested during the 2019-2022 Capital Plan period.

Of this amount, \$300 million is proposed to be financed through debt that requires approval by a majority of electors.

The \$300 million amount has been organized into three questions, as follows:

1. TRANSPORTATION AND TECHNOLOGY

Are you in favour of Council having the authority, without further assent of the electors, to pass by-laws between January 1, 2019 and December 31, 2022 to borrow an aggregate \$100,353,000 for the following purposes?

A. Street and Bridge Infrastructure

To provide for major maintenance, reconstruction and enhancement of the arterial and neighbourhood transportation networks, sidewalks, greenways and cycle routes and to undertake major maintenance of bridges and other structures, including repairs and structural work on Granville Bridge.

\$47,429,000

B. Traffic Signals and Street Lighting

To provide for major maintenance, replacement and enhancement of traffic signals and street lighting that are beyond economical repair or no longer meet operational requirements.

\$42,924,000

C. Technology Projects

To provide for the renewal and enhancement of the City's information technology systems such as data centres, servers and applications that support the delivery of and access to City services and programs.

\$10,000,000

Total.....\$100,353,000

If this question receives the assent of the electors, Council has the power, without further assent of the electors, to pass by-laws, as and when Council considers appropriate, to borrow money for the projects described up to \$100,353,000.

EXPLANATORY NOTE FOR QUESTIONS 2 AND 3:

- Community facilities include buildings such as community centres, pools, rinks, libraries, childcare centres, cultural facilities, social facilities and affordable housing.
- Civic facilities include buildings such as fire halls, police buildings, administrative facilities and service yards.

2. CAPITAL MAINTENANCE AND RENOVATION PROGRAMS FOR EXISTING COMMUNITY FACILITIES, CIVIC FACILITIES AND PARKS

Are you in favour of Council having the authority, without further assent of the electors, to pass by-laws between January 1, 2019 and December 31, 2022 to borrow an aggregate \$99,557,000 for the following purposes?

A. Maintenance of Community and Civic Facilities

To provide for ongoing capital maintenance such as replacement of roofs, windows, elevators, heating/ventilation, electrical and plumbing systems.

\$59,175,000

B. Renovations of Community and Civic Facilities

To provide for renovations or other upgrades such as renovations to community spaces, wheelchair access improvements, energy conservation upgrades and removal of hazardous materials.

\$23,975,000

C. Maintenance and Renovations of Parks

To provide for ongoing capital maintenance, renovations or other upgrades of existing parks, park buildings and features within parks such as the seawall, pathways, playgrounds, playfields and sport courts.

\$16,407,000

Total..... \$99,557,000

If this question receives the assent of the electors, Council has the power, without further assent of the electors, to pass by-laws, as and when Council considers appropriate, to borrow money for the projects described up to \$99,557,000.

3. REPLACEMENT OF EXISTING COMMUNITY FACILITIES AND CIVIC FACILITIES

Are you in favour of Council having the authority, without further assent of the electors, to pass by-laws between January 1, 2019 and December 31, 2022 to borrow an aggregate \$100,090,000 for the following purposes?

A. Community Facilities

To provide for replacement, renewal or rehabilitation of existing community facilities, including Marpole-Oakridge Community Centre, Marpole Library, the City Archives, and other projects such as Britannia Community Centre, Ray-Cam Community Centre or West End Community Centre that are at the planning or design stage

\$62,840,000

B. Civic Facilities

To provide for replacement, renewal or rehabilitation of existing civic facilities, including the first phase at Sunset Service Yard, seismic upgrade of the Kitsilano Fire Hall, and other projects such as Manitoba Service Yard or one of the downtown fire halls that are at the planning or design stage

\$37,250,000

Total \$100,090,000

If this question receives the assent of the electors, Council has the power, without further assent of the electors, to pass by-laws, as and when Council considers appropriate, to borrow money for the projects described up to \$100,090,000."



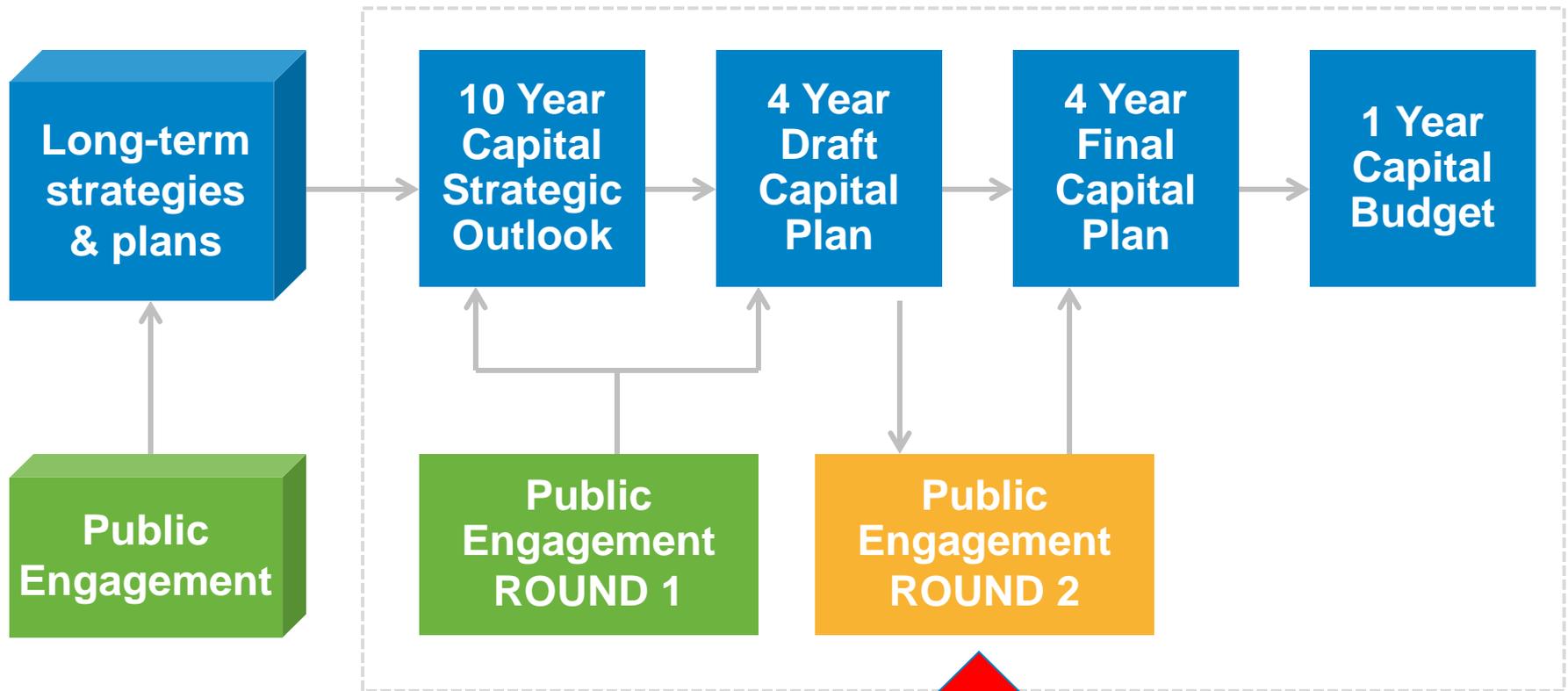
APPENDIX C

BUILDING THE CITY OF TODAY & TOMORROW

DRAFT 2019-2022
CAPITAL PLAN
Consultation Summary
July 2018



✓ | Capital planning process





Consultation Overview

- As a first step in the capital planning process, the City asked the public to help us identify city-wide priorities for long-term maintenance and investment.
- In April, we asked: “How would you rate city facilities and infrastructure in Vancouver? What do you think are the most important areas to invest in over the next 10 years?”
- In June, we brought the draft capital plan back to the public and stakeholders to test proposed investments and approaches for financing them.
- Our approach in this second and last phase of involvement was to share the direction and to validate and seek input on the approaches. At this stage in the process, it is not possible to completely shift, however, it is possible to make adjustments, to assess emerging priorities, to understand public values around financing, as well to better understand what public needs to make informed decisions.
- The methodology: a mix of online surveys, third party focus groups to probe values and understanding, face-to-face activities at community events and low barrier installations in high traffic public facilities.
- Going forward, we believe better outreach and education on the part of the City regarding what municipal government provides, funds and can plan for in a capital plan, will improve the quality and accessibility of public input.

How did we reach out?

Outreach activity

Highlighted news on vancouver.ca: 1,100 visitors to the Capital Plan page

Social media: 15 tweets, 5 Facebook posts, 2 Facebook ads, 2 Instagram posts (over 590 click throughs total)

Talk Vancouver member outreach to 15,000 panel members

Email invitations shared through networks

Kiosk displays at Community Centres, Libraries, and Community events

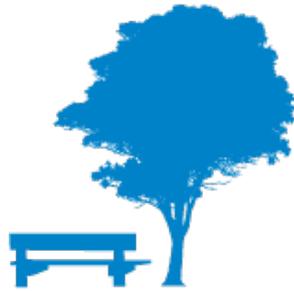
Park Board stakeholder information session

Focus groups: representative recruitment by IPSOS-Reid

Consultation activity	Participants
Online & hard copy questionnaires	896
Portable kiosks comment cards	274
Open house attendees @ Central Library & City storefront space	150-200
Park Board submission process	95
Focus groups (x5)	50
Park Board stakeholder session (June 12)	22
City stakeholder session (June 27)	4
Total	Approx. 1,500



Summary of Feedback



APPROACH

- The first phase of consultation is intended to identify public and stakeholder priorities now and in future. City staff are in regular conversation with residents and stakeholders about capital investments – both for new and existing infrastructure - through a variety of processes. These processes can include community planning, Park Board park and facilities planning, and ongoing engineering initiatives including transportation, streets and parking.
- The focused Capital Plan process offers a number of opportunities for staff to take a temperature check on community experiences of infrastructure / facilities and stakeholder knowledge of current and future community needs. Public input is one form of data, alongside technical, economic and policy direction that help forge the four year Capital Plan.

PHASES OF CONSULTATION

- The first phase of consultation, which ran in April 2018, sought to broadly identify priorities and to probe into specific areas of interest by stakeholder groups. A survey coupled with a three-day storefront open house and an invitational stakeholder meeting surfaced high-level themes, and emerging priorities. This information was used to help finalize a draft capital plan.
- The second phase of consultation, which ran from early June 2018, tested responses to the draft capital plan. This consultation included opportunities to comment via open houses at Central Library, the City's storefront space at 511 Broadway, representative focus groups with residents, held in English, Cantonese and Mandarin, and with businesses. We initiated outreach at a range of community centres, libraries and community events.

MAIN THEMES HEARD

Questionnaire - Talk Vancouver and Paper surveys at Open Houses (n=896):

- Familiarity with the Capital Plan was mixed. At least 80% were slightly familiar with the Capital Plan (and of those, 37% of were fairly/very familiar). Half of respondents had participated in the Phase 1 survey for the Capital Plan.
- For existing infrastructure and amenities, affordable housing and child care ranked high for areas needing more investment while arts and culture, bike lanes, and civic facilities ranked low for areas needing more investment
- Invest more in things that need repair, and prioritize need as opposed to nice to have

MAIN THEMES HEARD

Questionnaire - Talk Vancouver and Paper surveys at Open Houses (n=896): (con't)

- Focus investments on disadvantaged communities with higher populations where more people will benefit from improvements
- The overall assessment of investments in new infrastructure and amenities were positive. Close to 70% of respondents thought the proposed investments in new infrastructure and amenities captured their priorities.
- Respondents were most supportive of the proposed investments in programs such as water & sewers – 50% would not change the level of investment. Respondents wanted greater investment in new transportation and public space. Close to 50% said the City should invest more. Close to a third of respondents thought the City should invest less in affordable housing and arts & culture and community facilities.

MAIN THEMES HEARD

Kiosks displays at public facilities and community events (n=274)

- Affordable Housing, Transportation and Public Space, Community Facilities, and Childcare ranked high in list of priorities for City investment
- Many people felt like they were not informed enough about the topic to provide feedback
- Many people did not know what services/infrastructure the City was responsible for, therefore, the kiosk was a good education and public awareness tool

MAIN THEMES HEARD

Park Board stakeholder submissions (n=161)

- 22 people attended the stakeholder session held on June 12 at Creekside Community Centre.
- Residents and stakeholder groups were invited to submit up to three capital project ideas or priorities. An online submission form was available between May 30 and June 22. A total of 161 submissions were received from 95 individuals/groups.
- Key themes, input and highlights:
 - Allocate more resources to maintenance of existing facilities and infrastructure.
 - New park space: Fraser River
 - Urban Forest and Natural areas: expand ecological networks in the city, daylighting streams (Hastings-Sunrise), bird habitat.
 - Park and playground renewals: Choklit, Jones, Alice Townley, McLean, MacDonald, Sunset Phase II and the West End.

MAIN THEMES HEARD

Park Board stakeholder submissions (n=161)

- Key themes, input and highlights (con't):
 - New park amenities: parkour park, skate park, exercise equipment, splash park, tennis and pickleball courts, synthetic turf (field hockey and soccer), dog off-leash areas.
 - Upgraded amenities: grass sports fields, dog off-leash areas, nursery (Sunset), boardwalk (along the Fraser River), and seating areas.
 - New park buildings: accessible washrooms (Granville Loop), field houses adjacent to sports fields, and a sport bubble (Killarney)
 - New or expanded large amenities: ice rinks (68 submissions, desire for new twinned facility), pier (Jericho) and docks (Burrard Marina and Fraser River), commercial kitchen (Renfrew), pool (10 submissions, Mount Pleasant, Hastings, Trout Lake, Templeton, Sunset), community centres (e.g. Ray-Cam, Roundhouse, Strathcona, Renfrew Park, West End, Dunbar, Kitsilano, Barclay Manor), seniors centre (Sunset) and the Seawall (address safety and accessibility)

MAIN THEMES HEARD

Focus Groups (n=50)

- Priorities for new infrastructure was affordable housing and child care. Housing included mentions of affordable/social/modular housing as well as housing specifically for seniors. Child care referred to opening of new child care spaces, especially affordable child care.
- For existing infrastructure, the three top priorities included roads (better lighting, better signage, road repairs, wider roads, more lanes), housing (more affordable/social housing) and community centers. Many participants also mentioned the preservation of heritage buildings as a priority.
- For the most part, participants were comfortable with the new infrastructure and amenities set out in the Capital Plan. They felt it matched their own priorities especially related to affordable housing and child care. However, almost all groups said that the plan details for community facilities was heavily (exclusively to some) focused on the west-side (Marpole, Oakridge, Arbutus).
- Participants strongly supported the City's approach to funding including a focus on development contributions, pursuing funding from the provincial/federal government, and maintaining a strong credit rating and manageable debt.

MAIN THEMES HEARD

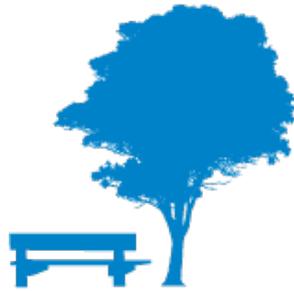
Stakeholder Meeting (n=4)

- Think longer term when planning for aging population, elder care alongside childcare investments
- Invest in active and interactive spaces – support healthy living, long-term thinking
- Leverage shared resources, invest in shared spaces
- Invest in community facilities
- Be clearer about how decisions are made and the schedule of renewal and new facilities is created.

The stakeholder meeting was poorly attended. Many invitees had attended multiple meetings in the past and had reported that they were completing their input online.



Questionnaire Topline Results





Questionnaire overview

The questionnaire for the Draft Capital Plan 2019 to 2022 ran from June 15 to July 2, 2018. A total of 896 respondents completed the questionnaire, which could be accessed via:

- Email invitation to Talk Vancouver panel members.
- Open invitation to non-members on the Capital Planning project page on the City of Vancouver website.

Who did we hear from?

- Almost three-quarters (71%) of respondents were between the ages of 30 and 64 (33% aged 30-44 and 41% aged 45-64).
- 54% of respondents were male and 41% female (with other identities or non-disclosure making up the remainder).
- Just over a quarter of respondents have (29%) have children in their household.
- The majority of respondents are homeowners (63%) , followed by renters (33%) and the remainder having other housing arrangements. (4%)

Is the questionnaire sample representative of Vancouver's population?

- The table on the following slide illustrates how the demographic characteristics compare to those of the population of Vancouver according to the most recent Statistics Canada data available.
- All of Vancouver's geographic regions were reflected among the respondents, but relative to Vancouver's population, there fewer respondents from the South, particularly the Southeast. A somewhat greater number of males than females took the survey relative to the population of Vancouver, and fewer younger people (under 30) took part.



Profile of Respondents



Demographic group	City of Vancouver	Questionnaire respondents
Geographic Zone		
Downtown and West End	23%	26%
Northeast	20%	18%
Northwest	22%	21%
Southeast	20%	14%
Southwest	15%	14%
Metro Vancouver	--	4%
Gender:		
Male	48%	54%
Female	52%	41%
Transgender	-	0%
Other/None of the above	-	2%
Prefer not to say	-	3%
Age:		
15-29	24%	5%
30-44	28%	30%
45-64	31%	41%
65 and over	17%	24%



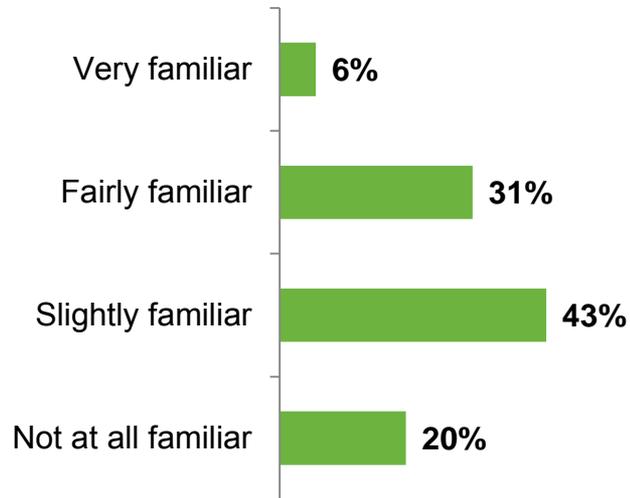
Profile of Respondents Cont.

Demographic group	City of Vancouver	Questionnaire respondents
Children:		
Children in household	33%	29%
Home ownership:		
Homeowners	57%	63%
Renters	43%	33%
Other	-	4%

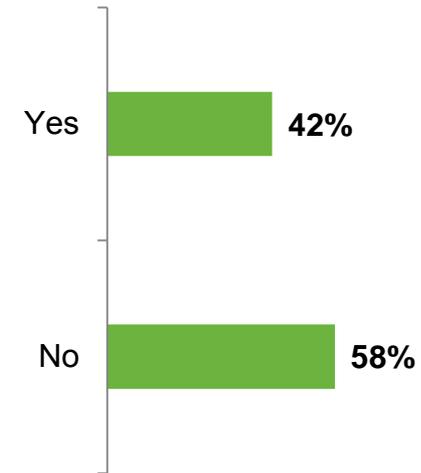


Familiarity with the Capital Plan was mixed. At least 80% were slightly familiar with the Capital Plan (and of those, 37% of were fairly/very familiar). Half of respondents had participated in the Phase 1 survey for the Capital Plan.

How familiar are you the City's Capital Plan in general?
(i.e. what it is and how it works)



Did you participate in a Talk Vancouver survey on the first phase of Capital Planning in April of this year?



Respondents = 896



Are there any areas that you suggest investing more for renewal of existing infrastructure and amenities? Any there any areas where you suggest investing less? (Respondents = 620)

- Affordable housing and child care ranked high for areas needing more investment
- Arts and culture, bike lanes, and civic facilities ranked low for areas needing more investment
- Water, sewers, roads, sidewalks, and transportation with exception of bike lanes also ranked high as areas that are a necessity and that we should be maintaining them properly
- There was confusion over emerging priorities and therefore, a desire to shift that to other areas with higher need

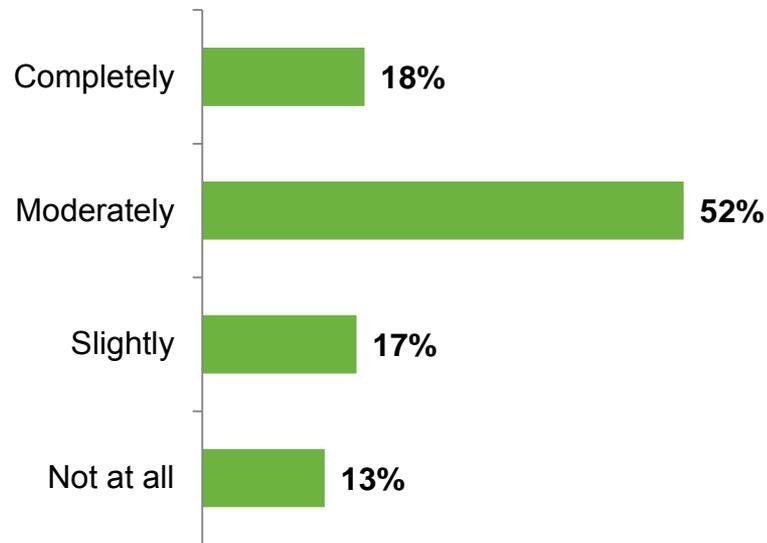
Do you have any comments about how the City should prioritize the renewal of existing infrastructure and amenities? (Respondents = 487)

- Invest more in things that need repair, and prioritize need as opposed to nice to have
- Focus investments on disadvantaged communities with higher populations where more people will benefit from improvements
- Consider the level of disrepair of current infrastructure/amenities and fix the oldest or most neglected areas first.
- Prioritize based on need.



Overall Assessment of Proposed Investments in New Infrastructure and Amenities

The overall assessment of investments in new infrastructure and amenities were positive. Close to 70% of respondents thought the proposed investments in new infrastructure and amenities captured their priorities.



Respondents (n=896)

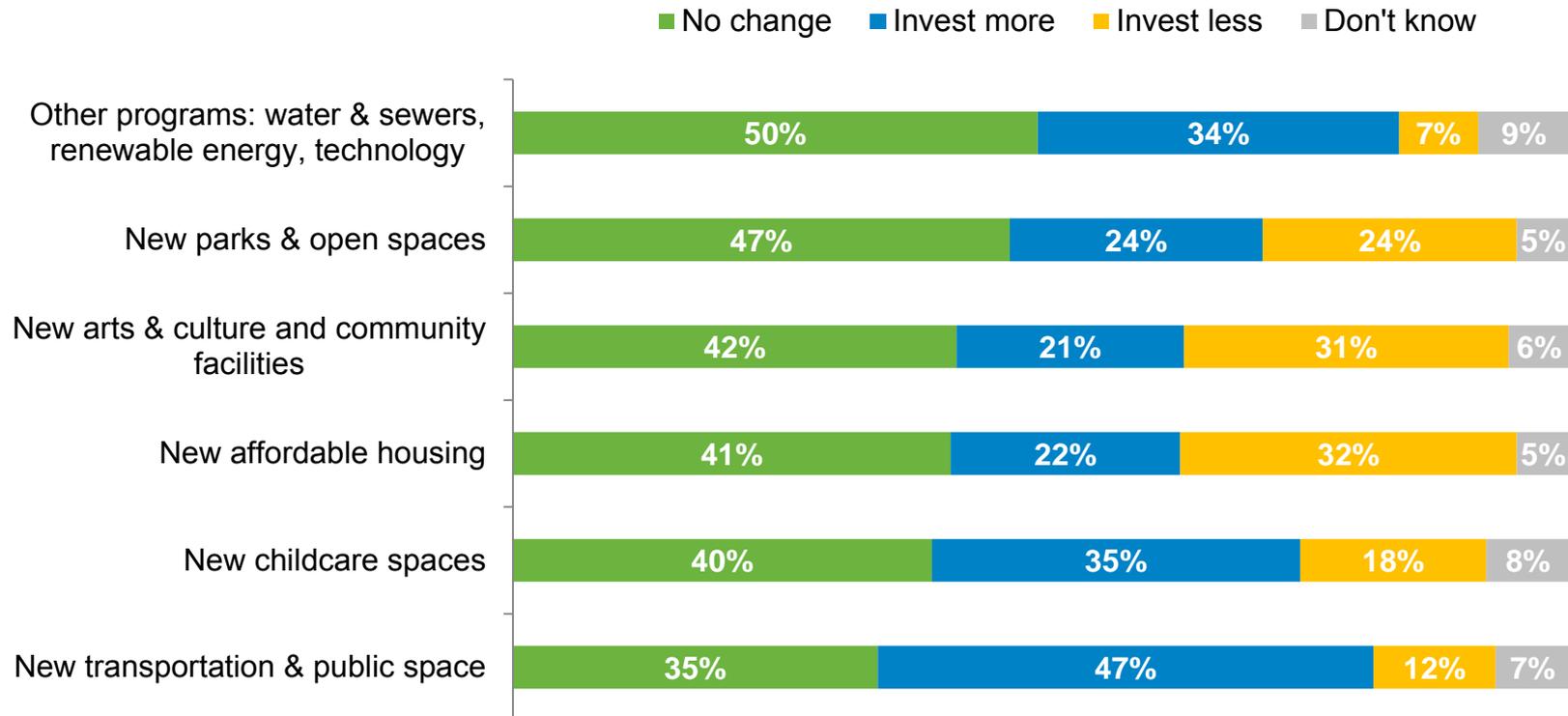
How well does this proposal capture what you see as the priorities for new infrastructure and amenities?



Changes to Proposed Investments in New Infrastructure and Amenities



Respondents were most supportive of the proposed investments in programs such as water & sewers – 50% would not change the level of investment. Respondents wanted greater investment in new transportation and public space. Close to 50% said the City should invest more. Close to a third of respondents thought the City should invest less in affordable housing and arts & culture and community facilities.



Respondents (n=896)

This table shows how the City's proposed investment in new infrastructure and amenities is distributed. Would you change any of the investments proposed for these items? ...For each item indicate if you would keep the investment as proposed, or whether you would invest more or less.



Do you have any other comments about how the City should prioritize investments in new infrastructure and amenities? Respondents (n=470)

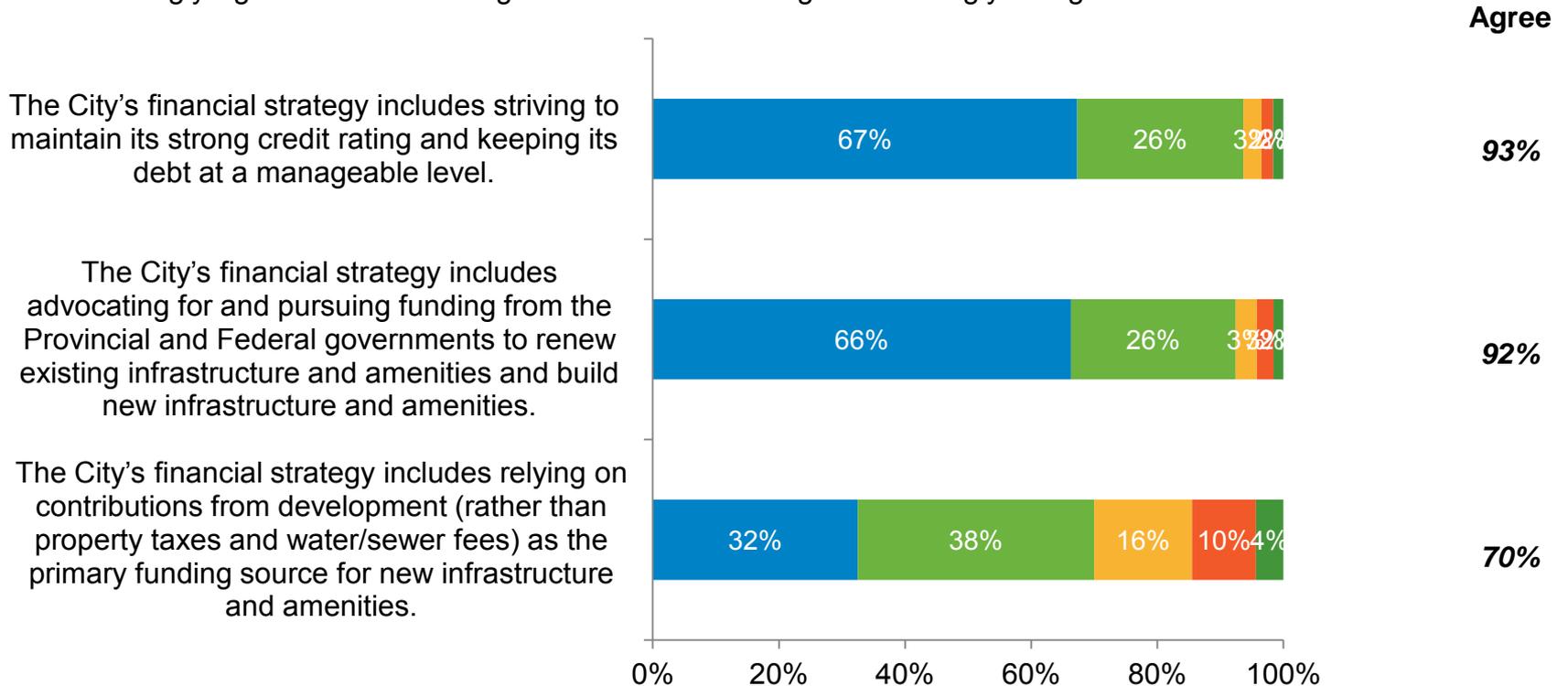
- Needs to define what affordable means
- Although affordable housing is a high priority, almost half a billion on affordable housing sounds like a lot, in comparison to the other categories
- Focus on repairing and maintaining what we currently have rather than build new
- Prioritize things that would benefit the most people
- Transportation, excluding bike lanes, is important for a growing city
- Schools was deemed very important, however there is lack of understanding that schools do not fall under the responsibility of municipal government
- Water and sewers are seen as essential, technology, on the other hand, should not be lumped into the same category as it is non-essential
- There is concern than the city is investing in areas which should be the responsibility of provincial and federal governments (ex. Childcare and housing)
- Renewable energy is seen as important for potential savings in the future



Support for Capital Plan Financial Strategies

The majority of respondents supported the financial strategies used to fund the Capital Plan (at least 70% or higher). Maintaining a strong credit rating and advocating and pursuing funding from higher levels of government were particularly popular.

■ Strongly Agree ■ Somewhat Agree ■ Somewhat Disagree ■ Strongly Disagree ■ Not sure



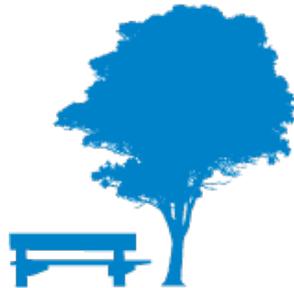


Do you have other comments about the financial strategy supporting the Capital Plan? (Respondents = 379)

- There are concerns and distrust in working with developers and giving rich multinational property developers undue influence over what happens locally
- User taxes is a concept that could be considered
- Spend less and reduce taxes
- Increase property taxes, especially for larger homes or those with high income bracket
- When developers build infrastructure, these costs are offloaded to the renters/owners
- Federal and Provincial governments need to spend more on housing
- Live within our means
- Stop over reliance on developers
- look at opportunities to spend more now for greater pay offs later



Community Outreach Summary



Kiosk displays (which included Traditional Chinese and Punjabi versions) describing the categories of infrastructure and amenities that the City invests in were set up at 11 community spaces including:

- 6 libraries: Central, Hastings, Marpole, ਨੱਚਾ?mat ct Strathcona, Oakridge, Renfrew
- 2 community centres: Hillcrest, Killarney, Sunset
- 3 Canada Day events : Sunset Park, Granville Island, Thunderbird Community Centre



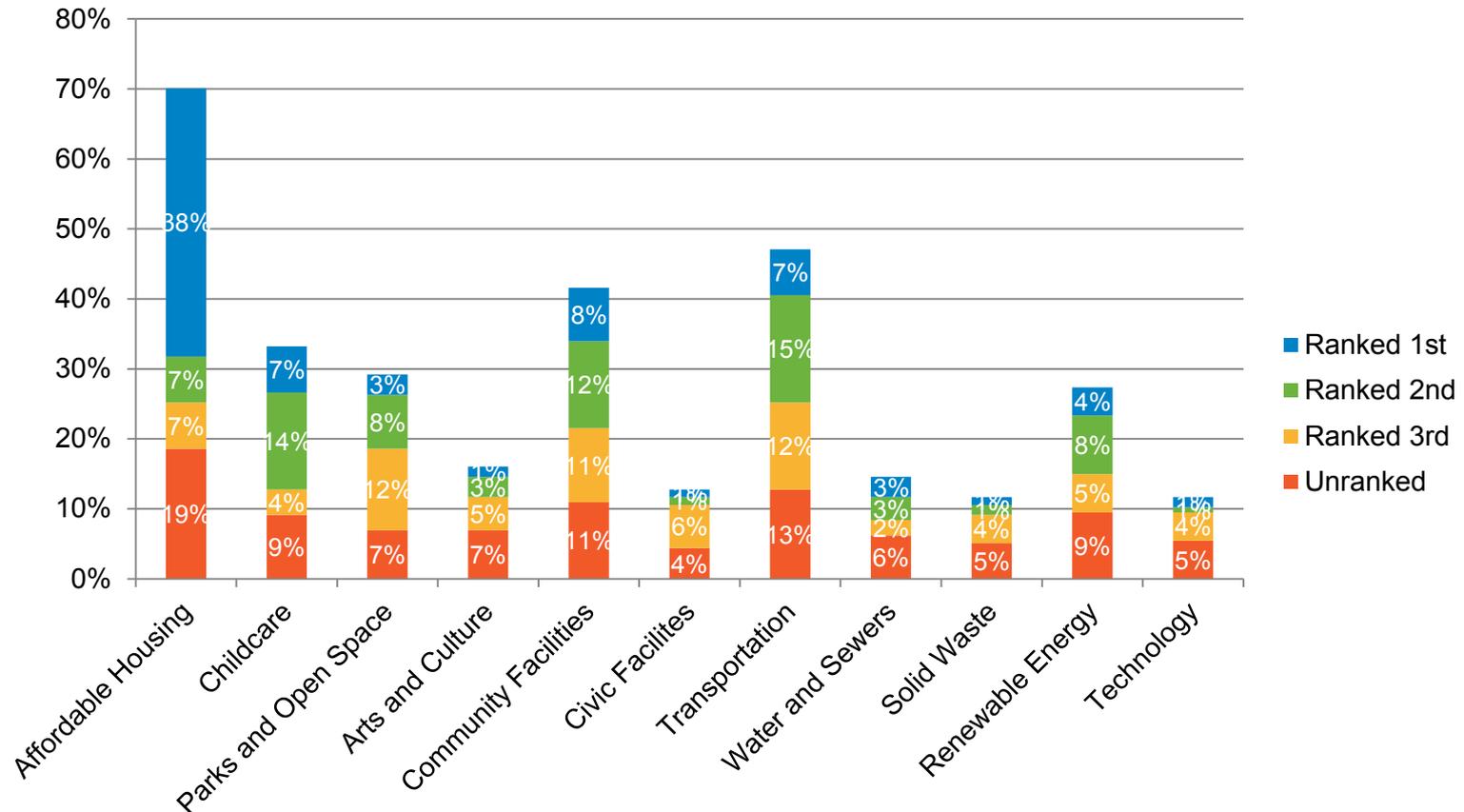
Almost 300 (n=274) comment cards were collected over the 5 day engagement period, some of which were passive interactions where displays were left at high traffic locations, and most were the result of multilingual (Cantonese, Mandarin, Punjabi) outreach staff that staffed the displays in the afternoon afterschool timeslot or during community events.



Top Priorities

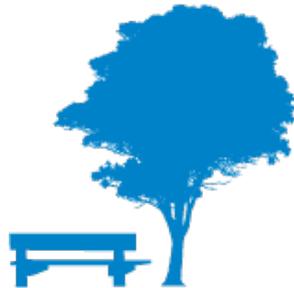
People were asked to share the top three areas they thought the City should invest in. Affordable Housing, Transportation and Public Space, Community Facilities, and Childcare ranked high. The graph below shows the % of people who chose these items among their top three priorities for City investment.

Priorities for Investment - Frequency of Responses (n=274)





Focus Group Summary





5 focus groups conducted June 27, 28 and July 3rd. A total of 50 participants took part in the 5 sessions, including two general public sessions, one Mandarin session, one Cantonese session and one Business session.

Date/Time	Group Type	# of Participants
June 27, 5:30 pm	Residents (English)	10
June 27, 7:30 pm	Residents (English)	10
June 28, 5:30 pm	Residents (Mandarin)	10
June 28, 7:30 pm	Residents (Cantonese)	10
July 2, 5:30 pm	Businesses	10

Top-of-Mind City Priorities

- Dealing with housing and traffic congestion were the two top priorities across the focus groups.
 - Housing issues included providing more affordable housing and social housing, with the two terms often used interchangeably.
 - Traffic congestion included a number of things such as widening roads, improving traffic management and improving transit.
- Other issues that came up in several groups, but not as often as housing or traffic congestion, included garbage/recycling (more frequent service, especially from two Chinese groups), health care (adding more hospitals, doctors, again more from Chinese groups) and bike lanes (a mix of pro and con mentions).



Top-of-Mind New Infrastructure

- The focus groups were generally consistent in their top-of-mind priorities for new infrastructure. The top two items were affordable housing and child care.
 - Housing included mentions of affordable/social/modular housing as well as housing specifically for seniors.
 - Child care referred to opening of new child care spaces, especially affordable child care.
- Many participants also mentioned community centres, and participants in the two Chinese groups often mentioned adding more health care services (e.g. hospitals, doctors) even though they were informed that the City is not responsible for health care.

Top-of-Mind Existing Infrastructure

- The focus groups were also consistent in terms of their top-of-mind priorities for maintenance/renewal of existing infrastructure, although many participants confused existing/new and asked for new infrastructure (especially housing) in this section.
- The three top priorities included
 - Roads - better lighting, better signage, road repairs, wider roads, more lanes
 - Housing- more affordable/social housing
 - Community centers
 - Many participants also mentioned the preservation of heritage buildings as a priority.



Feedback on New Infrastructure in Capital Plan

- Participants were comfortable with the new infrastructure and amenities set out in the Capital Plan. They felt it matched their own priorities especially related to affordable housing and child care. However, almost all groups said that the plan details for community facilities was heavily (exclusively to some) focused on the west-side (Marpole, Oakridge, Arbutus).

Feedback on Existing Infrastructure in Capital Plan

- Participants struggled with splitting spending up into new and existing buckets. When shown existing first (and even among many when shown existing second), they wanted to know why there is so little being spent on affordable housing and child care, and conversely why so much is being spent on arts and culture.
- As with new infrastructure, participants said that community facility spending is focused in the west-side (Marpole, Oakridge). Several participants (for new and existing) added that the west-side communities are already better served by community facilities.
- Participants also wondered what was included under spending on solid waste, technology and emerging priorities.



Financing the Capital Plan

- Participants were most likely to think that the Capital Plan is paid for by property taxes.
- Other mentions included gas taxes, contributions from other governments and the various licenses/fees/fines charged by the City.

Agreement with Financing Approach

- Strong support for the City's approach to funding including a focus on development contributions, pursuing funding from the provincial/federal government, and maintaining a strong credit rating and manageable debt.
- A few participants did note that developers are likely to pass on costs to end-users and that developers have limits to how much they can contribute (e.g. can only charge what market allows).
- A few participants also said that sometimes it might make sense for the City to take on debt.

Other Points

- Overall, this was not a topic that seemed very important to most participants. Few would ever have sought out information on the Capital Plan on their own.
- Even though participants frequently had trouble thinking of new and existing as distinct items (as well as Capital Plan items vs. day to day service delivery items), most still left the sessions thinking the City is focusing on the right priorities (housing, child care, community centres).

Positive/Negative Things Done by City

- Overall, participants had difficulty naming positive and negative things done by the City in the past couple of years, partly because of a lack of awareness, but also because of confusion about what services the City provides.
- The most frequent positives included banning plastic straws, adding bike lanes, supporting Canada Line and adding recycling services. The only negative to be raised in most groups was complaints about bike lanes.

Capital Plan Awareness

- Very few participants had any familiarity with the City's most recent Capital Plan, with a very small number of participants recalling investments in affordable/social housing or associating the plan with the removal of the viaducts.
- Those familiar with the term said that a Capital Plan refers to longer-term projects, large-scale projects and infrastructure.

Desired Focus on Existing or New Infrastructure

- Participants in the two General Public groups and the Business groups showed a preference for spending more on the maintenance and renewal of existing infrastructure and amenities. They argued that it's easier/cheaper to maintain what we have than to build new things.
- The two Chinese groups showed a preference for new infrastructure and amenities arguing that it is needed to accommodate growth and that new is better than updated infrastructure.

| Next steps

- Thank you to everyone who took the time to share their views with us.
- Public feedback has shaped the Long-term Capital Planning as well as the development of the Capital Plan for 2019-2022.



2019-2022

CAPITAL PLAN

Draft for Public Review

#VanCap2018

What is Capital Planning?

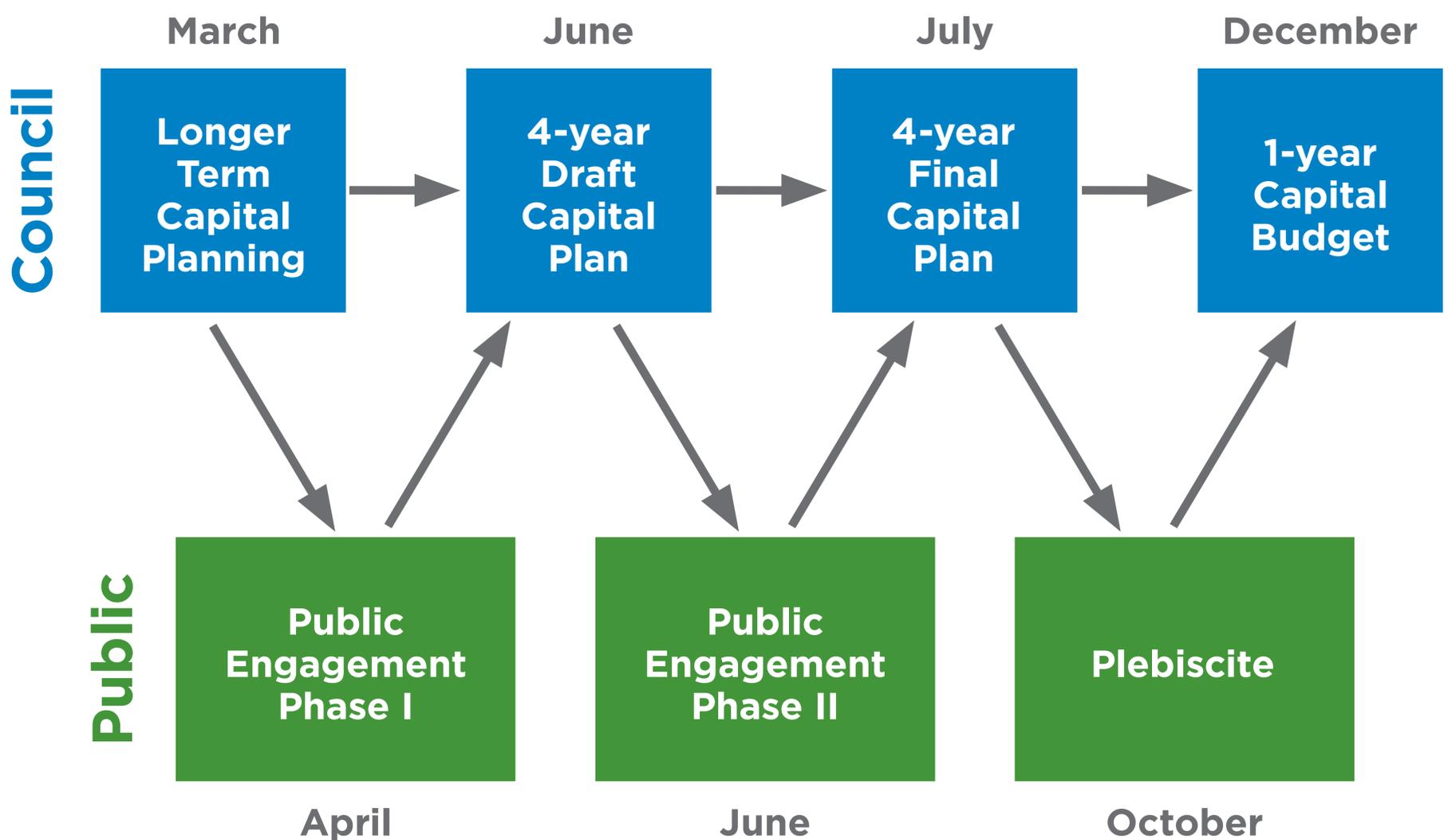
The City of Vancouver's capital plan is a four year financial plan for investments in our city's infrastructure and amenities.

All City services, from parks and community facilities, to streets, sidewalks, and water, require buildings and other infrastructure to support them. To keep all of this support running well - and build more as our city grows - we need careful long-term budgeting. That's capital planning.

A lot of the capital planning work is informed by long-term plans like Greenest City 2020, Transportation 2040 and our Housing Vancouver Strategy.

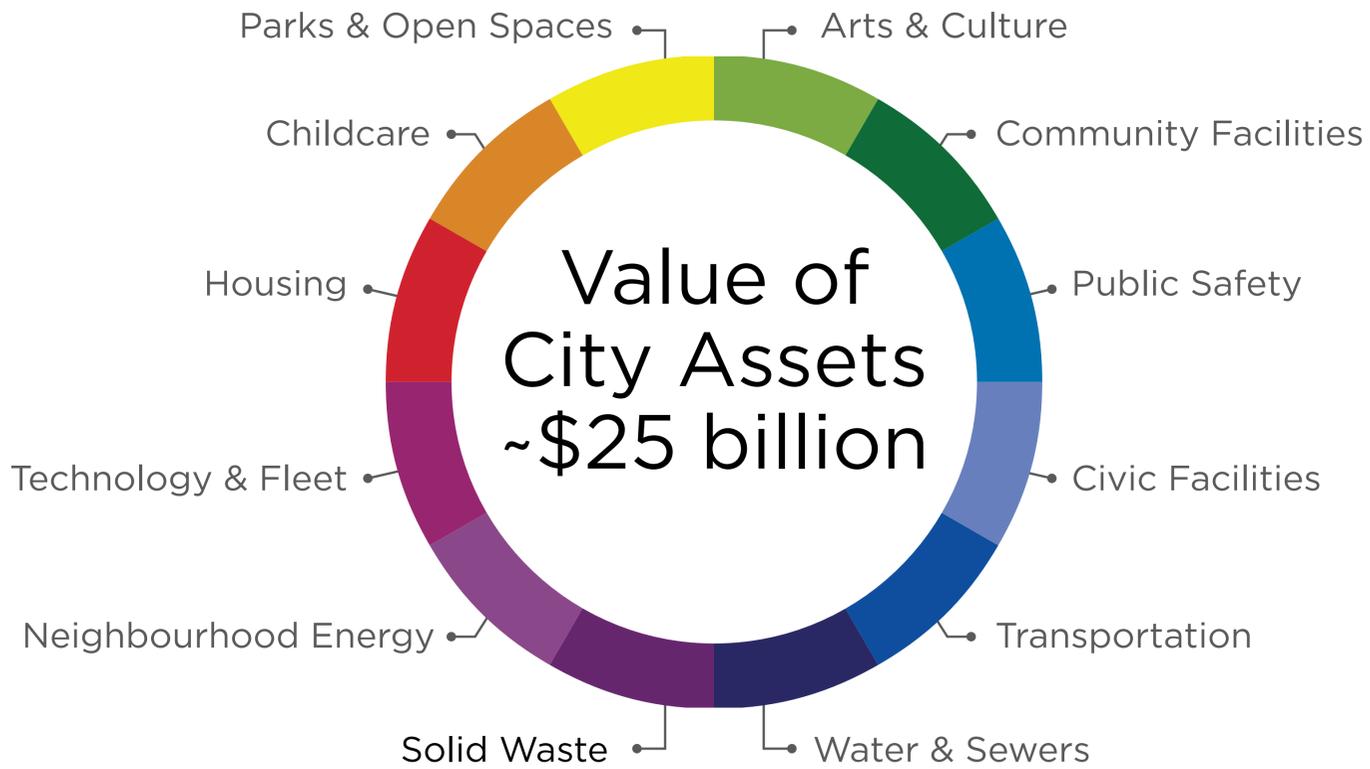
Capital plans match the term of Council, and allow for a vote on borrowing money to be held at the same time as the civic election.

Capital Planning Process



City of Today

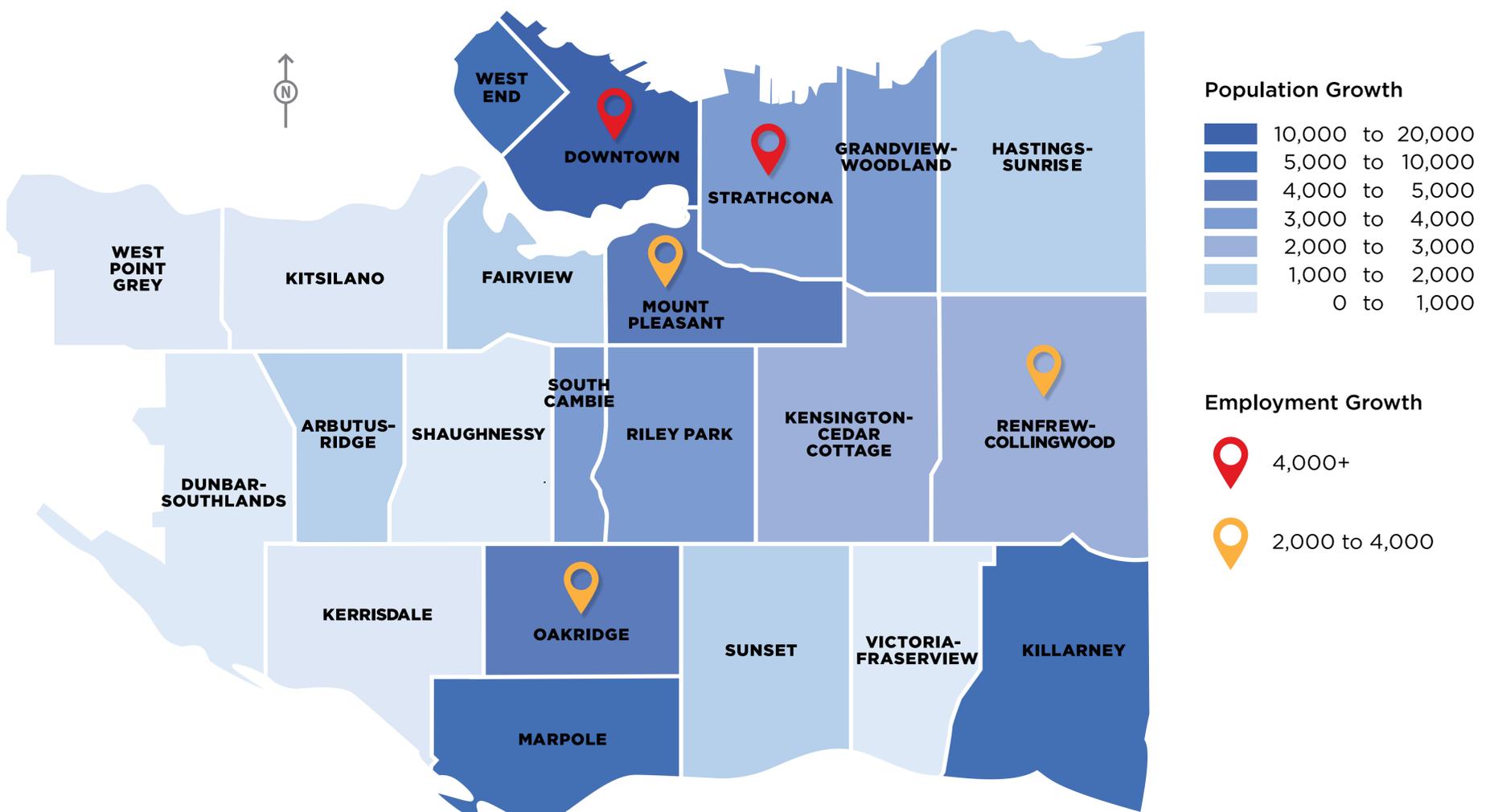
Renewing existing infrastructure and amenities



City of Tomorrow

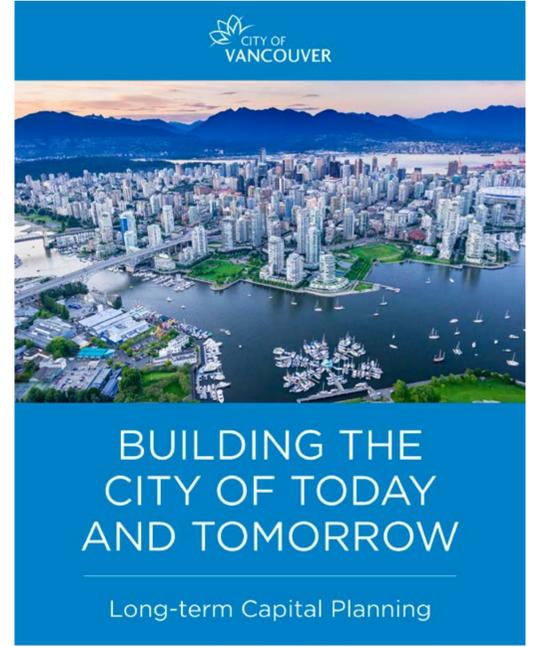
Providing new infrastructure and amenities

60,000 - 70,000 new residents and ~40,000 employees over 10 years



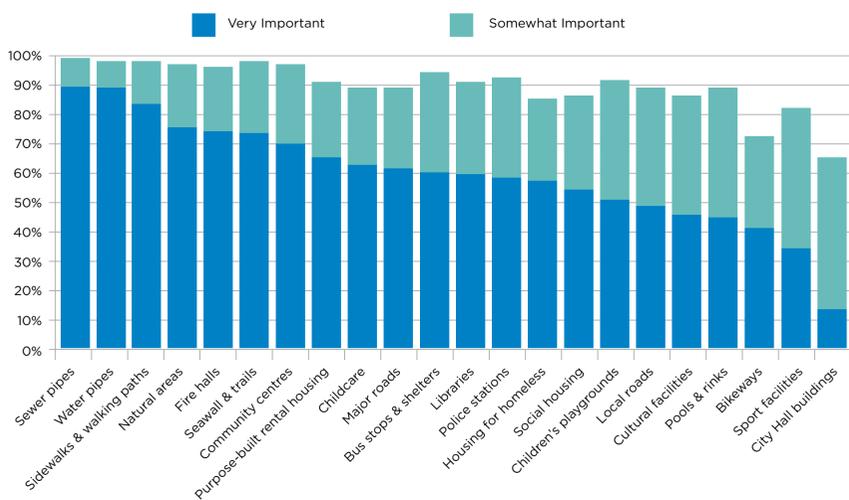
Public Feedback on Long-term Capital Planning

In April 2018, the City organized a round of public engagement to assist with long-term capital planning, which involves looking out 10 or more years into the future. About 2,300 citizens participated.



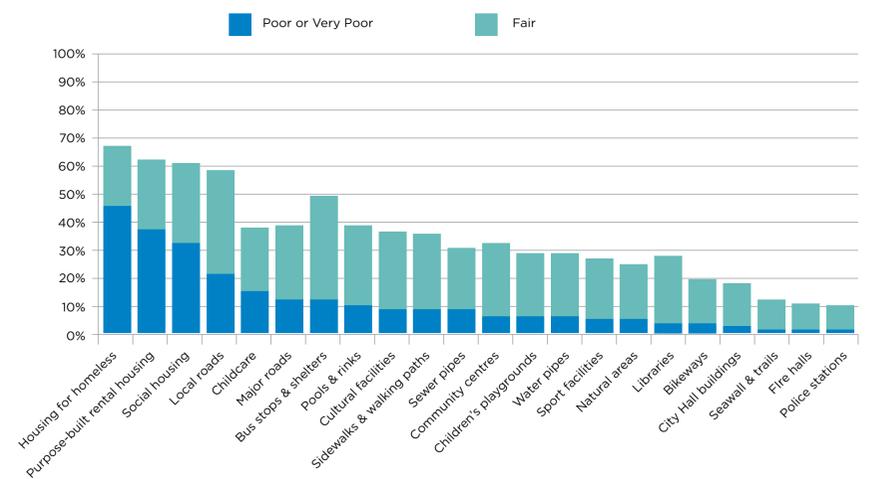
Q1

Importance of Existing Infrastructure & Amenities



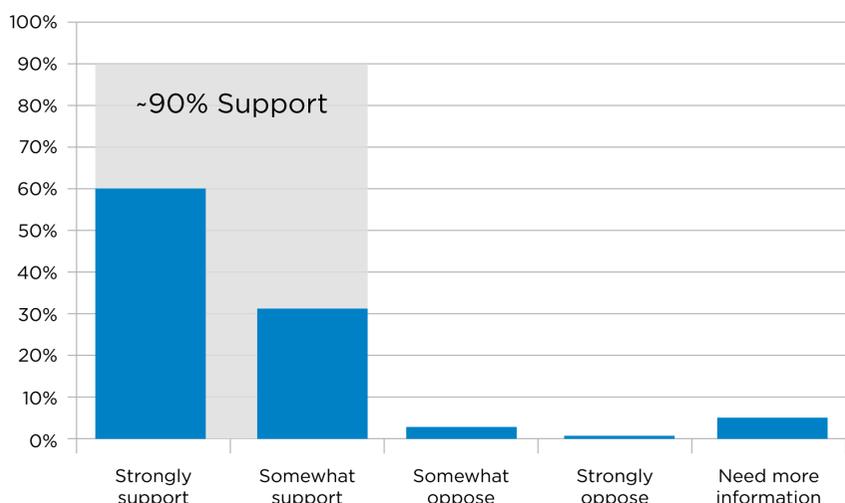
Q2

Assessment of Condition of Existing Infrastructure & Amenities



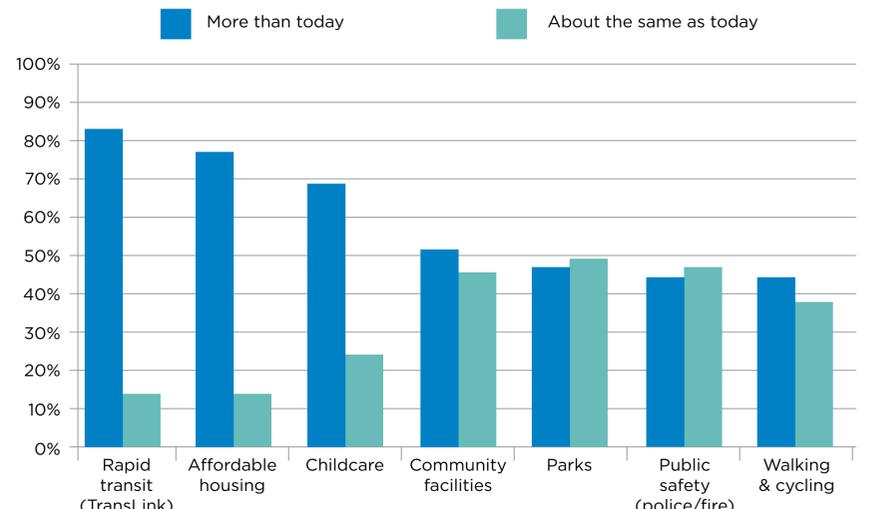
Q3

Support for Proposal to Invest More to Renew Aging Infrastructure and Amenities



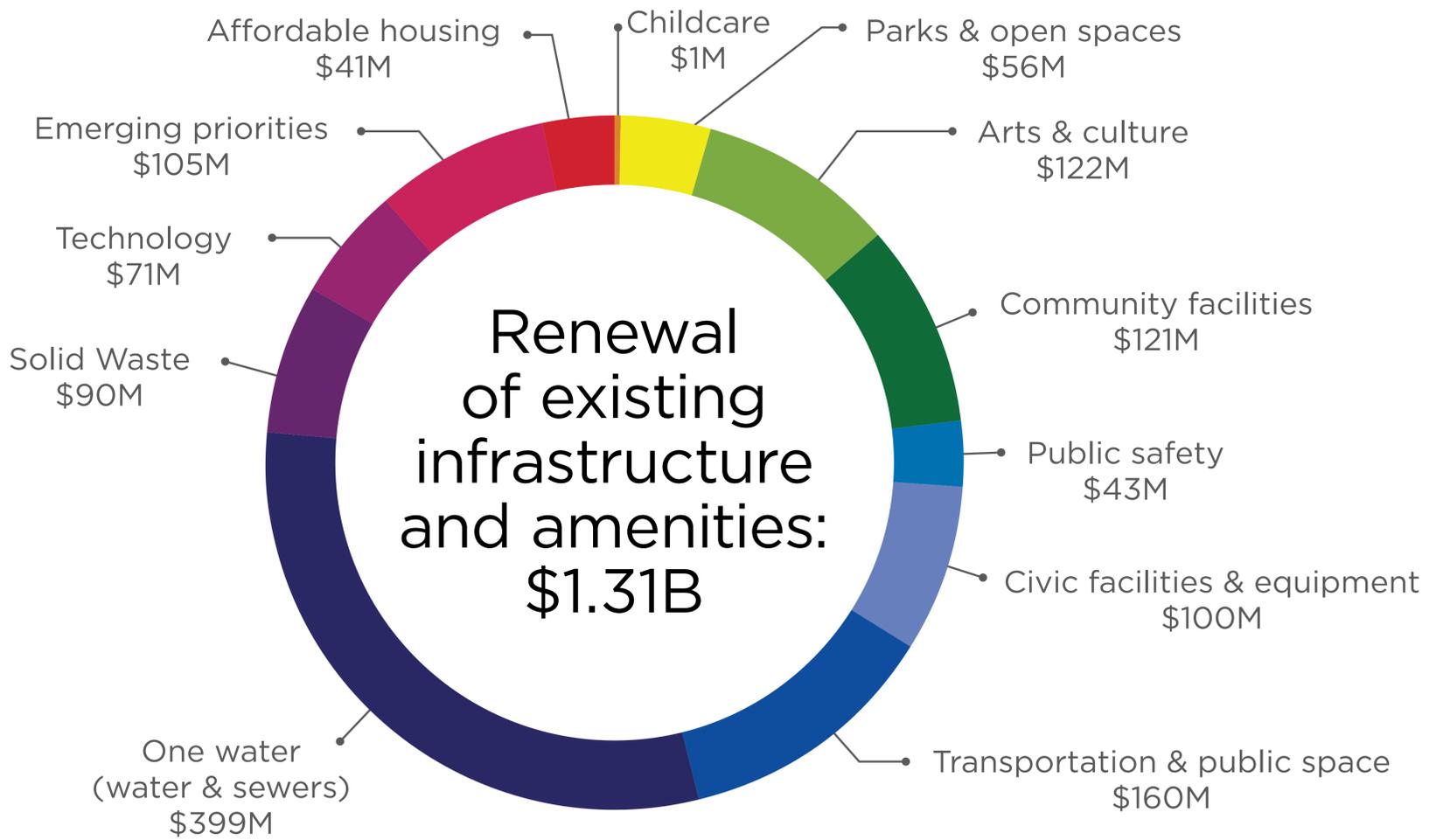
Q4

Prioritization for New Infrastructure & Amenities over the next 10 years

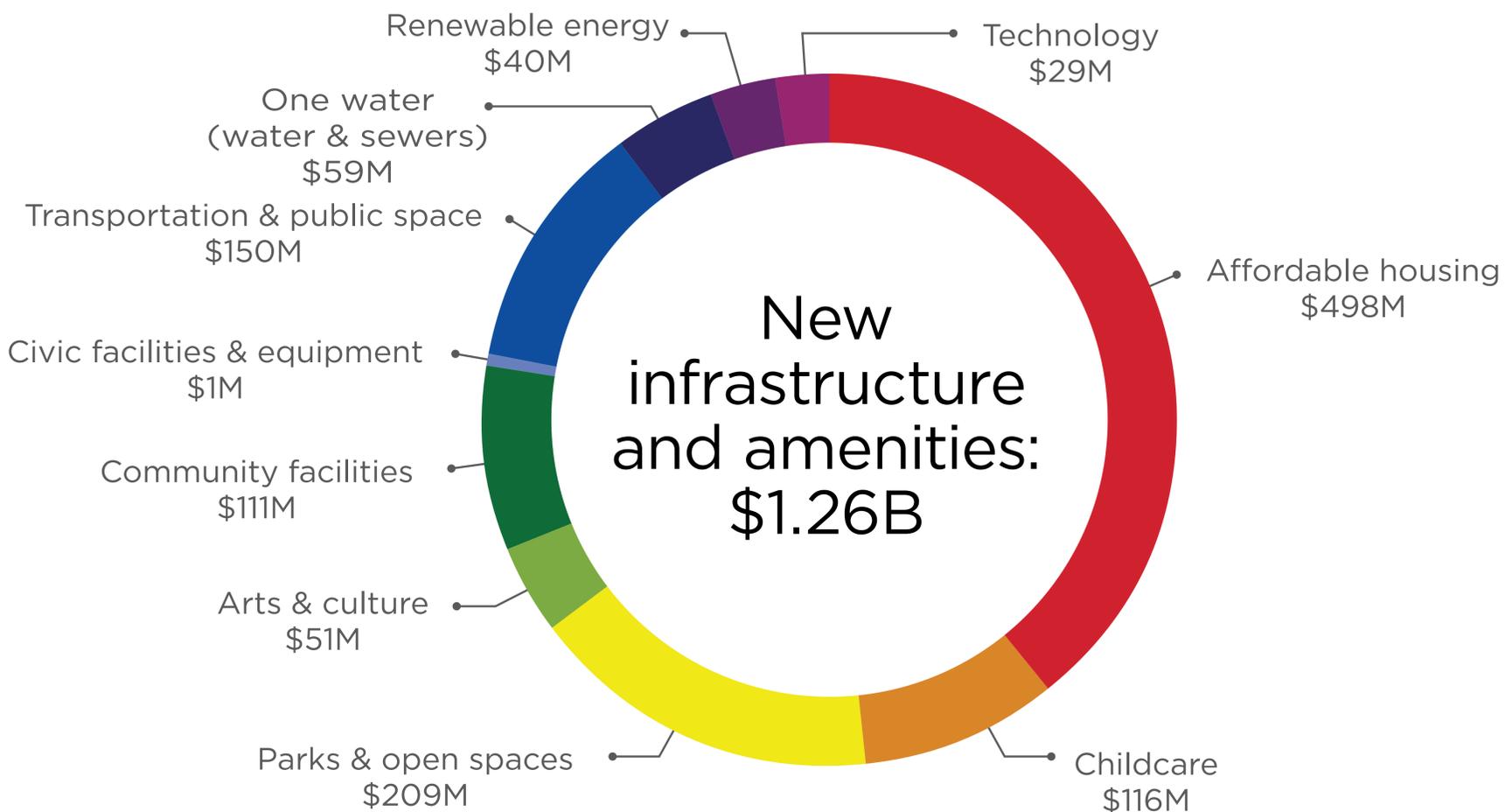


Proposed Investments: \$2.6 Billion

City of Today



City of Tomorrow

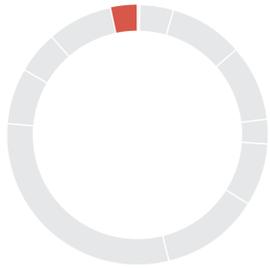




Affordable Housing

PROPOSED INVESTMENT: \$539M

Investments in existing housing: \$41M



Investments in new housing: \$498M



GUIDING PRINCIPLES:

- The 'right supply': retain and create housing that is truly affordable to local incomes and suits the needs of people who live and work in Vancouver
- Preserve and expand non-market rental housing on City-owned land
- Expand rental housing supply along the frequent transit network
- Establish strategic partnerships with other levels of government

GUIDING INITIATIVES:

- Housing Vancouver Strategy (approved 2017)

INVENTORY OF AFFORDABLE HOUSING

TYPES OF HOUSING	CITY ASSETS	REPLACEMENT VALUE	% IN GOOD OR FAIR CONDITION	PARTNER ASSETS
SHELTERS (YEAR-ROUND)	5 parcels of City-owned land leased to partners	—	—	300 beds on City-owned land and 700 beds on non-City land
SINGLE ROOM OCCUPANCY HOTELS (SROS) (PRIVATELY-OWNED)	N/A	—	—	4,200 SRO rooms owned by private sector
SUPPORTIVE HOUSING & NON-MARKET RENTAL	750 units in City buildings 200 parcels of City-owned land leased to partners	\$190 M	65%	10,200 units on City-owned land and 14,700 units on non-City land
PURPOSE-BUILT RENTAL	100 units (#1 Kingsway)	\$30 M	100%	58,000 units

WHAT WE PROPOSE INVESTING FOR 2019 - 2022

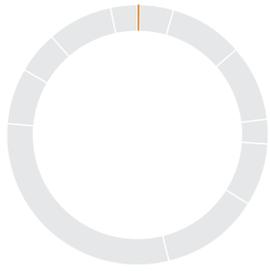
AREA	THE CITY OF TODAY (existing assets) \$41 M	THE CITY OF TOMORROW (new assets) \$498 M
SINGLE ROOM OCCUPANCY HOTELS (SROS)	\$6 M for capital grant program to assist with the upgrading of existing SROs owned and/or managed by non-profit agencies.	—
SUPPORTIVE HOUSING	\$0.9 M for granting program.	—
NON-MARKET RENTAL HOUSING: CITY-OWNED & OPERATED	\$12 M for the replacement of aging buildings. \$3 M for ongoing capital maintenance and renovations. \$0.5 M for seismic assessments.	—
NON-MARKET RENTAL HOUSING: CITY-OWNED & PARTNER OPERATED	No projects anticipated. If needs arise, they will be addressed as emerging priorities.	1,200 to 1,600 units secured through voluntary in-kind Community Amenity Contributions and inclusionary zoning (estimated value of \$400 million).
NON-MARKET RENTAL HOUSING: NON-CITY-OWNED ON CITY LAND	\$15 M toward the preservation of existing non-market & co-op housing on City-owned land (in partnership with senior governments).	\$75 M for housing site acquisition to enable senior governments and non-profit housing partners to design, build, finance, operate and maintain housing projects on City land.
NON-MARKET RENTAL HOUSING: NON-CITY-OWNED ON NON-CITY LAND	\$1.6 M toward the preservation of existing non-market & co-op housing (in partnership with senior governments).	\$20 M for capital grants to enable housing projects to be delivered through community partners.
PURPOSE-BUILT RENTAL	\$1.5 M for rental protection and relocation programs.	—
PLANNING & STUDIES	\$0.5 M	\$3 M



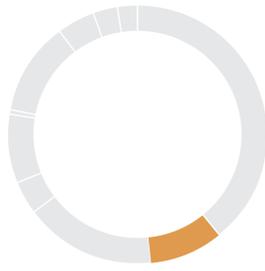
Childcare

PROPOSED INVESTMENT: \$117M

Investments in existing childcare: \$1M



Investments in new childcare: \$116M



GUIDING PRINCIPLES:

- Maintain existing childcare facilities in a state of good repair
- Ensure no net loss of childcare spaces by retaining, replacing, or expanding existing childcare facilities
- Increase the supply of childcare with the Federal and Provincial governments, the Vancouver School Board and non-profit operators
- Locate new childcare facilities in convenient and accessible locations

GUIDING INITIATIVES:

- Healthy City Strategy – A Good Start (2014)
- Vancouver Economic Action Strategy – Attracting and Retaining Human Talent (2011)

INVENTORY OF CHILDCARE

TYPES OF CHILDCARE	CITY ASSETS	REPLACEMENT VALUE	% IN GOOD OR FAIR CONDITION	PARTNER ASSETS
INFANT, TODDLER & PRESCHOOL (0-4 YEARS OLD)	<ul style="list-style-type: none"> • 66 facilities with 2,240 spaces 	\$230M	80%	5,200 spaces provided by VSB, nonprofit agencies, and private sector
SCHOOL AGE (5-12 YEARS OLD)	<ul style="list-style-type: none"> • 17 facilities with 824 spaces 	N/A	—	4,000 spaces provided by VSB, nonprofit agencies, and private sector

WHAT WE PROPOSE INVESTING FOR 2019 – 2022

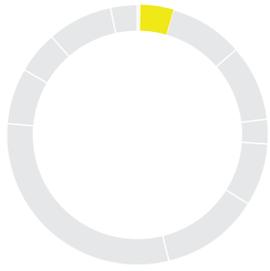
AREA	THE CITY OF TODAY (existing assets) \$1 M	THE CITY OF TOMORROW (new assets) \$116 M
INFANT, TODDLER & PRESCHOOL (0-4 YEARS OLD)	\$1.1 M for ongoing capital maintenance and renovations Note: \$6-7 million is included in the recreation section to renew the daycare at Marpole-Oakridge Community Centre (45 spaces)	\$112.5 M toward the creation of 750 new childcare spaces
SCHOOL AGE (5-12 YEARS OLD)	—	\$2.5 M toward the creation of 250 new childcare spaces
PLANNING & STUDIES	—	\$0.6M



Parks & Open Spaces

PROPOSED INVESTMENT: \$264M

Investments in existing parks & open spaces: \$56M



Investments in new parks & open spaces: \$209M



GUIDING PRINCIPLES:

- Maintain and renew existing parks to meet today's needs
- Increase the resilience of the park system
- Address service gaps to improve equity across Vancouver
- Meet the needs of a growing population through a combination of adding features to existing parks and building new parks

GUIDING INITIATIVES:

- Greenest City Action Plan - Access to Nature (2011, updated 2015)
- VanPlay - Parks & Recreation Strategy (currently being developed)

INVENTORY OF PARKS & OPEN SPACES

TYPES OF PARKS & OPEN SPACES	CITY ASSETS	REPLACEMENT VALUE	% IN GOOD OR FAIR CONDITION	PARTNER ASSETS
PARKS & OPEN SPACES	<ul style="list-style-type: none"> • 1,370 hectares of parks & open spaces • 215,000 trees • 32 km of seawall • 180 sport fields • 229 sport courts • 160 playgrounds • 36 dog off-leash areas • 6 golf courses • 1 cemetery • 149 park buildings 	\$1.8B	65%	<ul style="list-style-type: none"> • Playgrounds, playfields and sport courts at VSB schools • Open spaces on Granville Island • Open spaces at Canada Place and Convention Centre • Open spaces at hospitals and post-secondary schools

WHAT WE PROPOSE INVESTING FOR 2019 - 2022

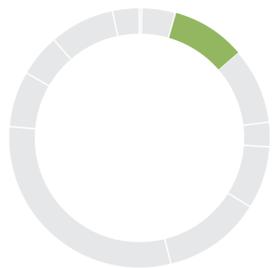
AREA	THE CITY OF TODAY (existing assets) \$56 M	THE CITY OF TOMORROW (new assets) \$209 M
PARK LAND	-	\$80 M to acquire land for future parks, including along the Fraser River waterfront
PARK AMENITIES	<ul style="list-style-type: none"> \$6 M toward park renewal program \$9 M to renew children's playgrounds, wading pools and water parks \$0.6 M toward universal access improvements \$0.4 M to maintain and renew dog parks \$2.1 M toward planning and project management 	<ul style="list-style-type: none"> \$51 M to construct new parks, including new East Park in Southeast False Creek and expansion of 'Burrard Slopes' park \$2.4 M to build new skateboard and bike parks \$1.6 M to build new dog parks \$16.6 M toward planning and project management
PROGRAMMED ACTIVITY AREAS	<ul style="list-style-type: none"> \$6.2 M to renew and upgrade playfields and ball diamonds \$1.3 M to renew and upgrade running tracks \$1.0 M to renew and upgrade sport courts \$0.5 M to renew and upgrade golf courses 	<ul style="list-style-type: none"> \$10 M to build a new competitive track and field training facility \$5.4 M to build new synthetic turf playfields
SEAWALL AND WATERFRONT	\$6.4 M to maintain and renew shorelines, seawalls, piers and boardwalks.	<ul style="list-style-type: none"> \$16 M to construct new waterfront parks in East Fraser Lands \$2 M to improve portions of Seaside Greenway located in parks
URBAN FORESTS AND NATURAL AREAS	<ul style="list-style-type: none"> \$1.6 M to extend the stream, pond and wetland at Hastings Park \$0.5 M to replace 4,000 trees that are forecast to die or become diseased \$0.5 M to maintain cliffs located above the Stanley Park seawall \$0.5 M to renew and upgrade golf courses 	<ul style="list-style-type: none"> \$8.2 M to plant 67,000 new trees \$3.7 M to implement biodiversity projects
GENERAL FEATURES AND INFRASTRUCTURE	<ul style="list-style-type: none"> \$3.5 M to maintain and renew pedestrian bridges \$1.9 M to maintain and renew park roadways and parking lots \$1.6 M to maintain and renew park infrastructure (water, electrical, etc.) \$0.4 M to maintain and renew community gardens 	<ul style="list-style-type: none"> \$1.5 M to build new pathways or improve existing pathways \$1.5 M to build rainwater infrastructure projects \$0.7 M to build new park infrastructure (water, electrical, etc.)
PARK BUILDINGS	\$12.3 M to maintain, renovate and renew washrooms, fieldhouses and concessions	\$8.7 M to build new washrooms and fieldhouses



Arts & Culture

PROPOSED INVESTMENT: \$173M

Investments in existing arts & culture: \$122M



Investments in new arts & culture: \$51M



GUIDING PRINCIPLES:

- Preserve, enhance and develop arts and cultural space
- Support community initiatives to build capacity in the arts and cultural sector
- Renew and revitalize aging cultural and entertainment facilities owned by the City

GUIDING INITIATIVES:

- Creative City Strategy (currently being developed)
- Making Space for Arts and Culture: Cultural Infrastructure Plan (currently being developed)
- Hastings Park/Pacific National Exhibition Master Plan (2011)
- Public Art Program (2014 update)

INVENTORY OF ARTS & CULTURE

TYPES OF ARTS & CULTURE	CITY ASSETS	REPLACEMENT VALUE	% IN GOOD OR FAIR CONDITION	PARTNER ASSETS
CULTURAL FACILITIES	55 facilities (1,310,000 sq.ft.)	\$230M	55%	Non-profit cultural facilities
ENTERTAINMENT AND EXHIBITION FACILITIES	5 facilities (380,000 sq.ft.) Playland amusement park	\$320M	<25%	B.C. Place Stadium Rogers Arena Convention Centre
PUBLIC ART	300 art installations	\$50M	75%	100 art installations on private land

WHAT WE PROPOSE INVESTING FOR 2019 - 2022

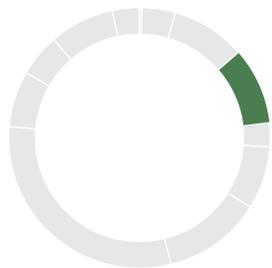
AREA	THE CITY OF TODAY (existing assets) \$122 M	THE CITY OF TOMORROW (new assets) \$51 M
CULTURAL FACILITIES	\$14 M for ongoing capital maintenance and renovations of City-owned facilities \$6 M for capital grant program to support facilities operated by non-profits \$5 M toward Chinatown cultural partnerships	\$16 M for new cultural facility at Pacific and Howe \$15 M for new cultural facility at Oakridge Community Centre \$2 M for new cultural facility at Main and 2nd Ave.
ENTERTAINMENT AND EXHIBITION FACILITIES	\$7 M for ongoing capital maintenance and renovations	—
PUBLIC ART	\$2 M to maintain existing public art	\$10 M for new public art on private sites \$8 M for new public art on public land
HERITAGE	\$74 M toward Heritage Incentive Program \$10 M for Chinatown Society Legacy Program \$3.5 M for redesign of Chinatown Memorial Plaza	—



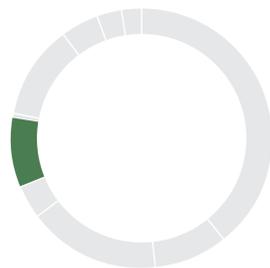
Community Facilities

PROPOSED INVESTMENT: \$232M

Investments in existing community facilities: \$121M



Investments in new community facilities: \$111M



GUIDING PRINCIPLES:

- Create a healthy city for all by supporting healthy people and healthy communities
- Maintain and renew community facilities to meet today's needs
- Accommodate community needs as Vancouver grows

GUIDING INITIATIVES:

- Vancouver Public Library Strategic Plan (2017)
- VanPlay - Parks & Recreation Strategy (currently being developed)
- VanSplash - Aquatics Strategy (currently being developed)
- Healthy City Strategy - Healthy Human Services (2014)
- Social Infrastructure Plan (currently being developed)

INVENTORY OF COMMUNITY FACILITIES

TYPES OF FACILITIES	CITY ASSETS	REPLACEMENT VALUE	% IN GOOD OR FAIR CONDITION	PARTNER ASSETS
LIBRARIES AND ARCHIVES	22 facilities (575,000 sq.ft.)	\$670M	85%	—
RECREATION FACILITIES (COMMUNITY CENTRES, POOLS AND RINKS)	55 facilities (1,680,000 sq.ft.)	\$1.51B	40%	YMCA, YWCA
SOCIAL FACILITIES (E.G. NEIGHBOURHOOD HOUSE)	41 facilities (570,000 sq.ft.)	\$400M	60%	Non-profit social facilities

WHAT WE PROPOSE INVESTING FOR 2019 - 2022

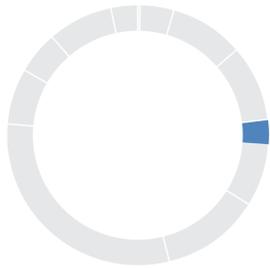
AREA	THE CITY OF TODAY (existing assets) \$121 M	THE CITY OF TOMORROW (new assets) \$111 M
LIBRARIES AND ARCHIVES	<ul style="list-style-type: none"> \$25 M to renew and relocate City archives to Central Library \$23 M to renew Marpole and Oakridge libraries \$6 M for ongoing capital maintenance and renovations 	\$36 M to expand Marpole and Oakridge libraries
RECREATION FACILITIES (COMMUNITY CENTRES, POOLS AND RINKS)	<ul style="list-style-type: none"> \$33 M to renew Marpole-Oakridge Community Centre \$3 M to design first phase of Britannia Centre renewal (note: unused funding from the 2015-2018 Plan will be carried forward into 2019-2022 Plan) \$2 M to plan for the renewal of RayCam Centre \$15 M for ongoing capital maintenance and renovations 	<ul style="list-style-type: none"> \$3.5 M to expand Marpole-Oakridge Community Centre \$2 M to design first phase of Britannia Centre expansion \$15 M for new Marpole Outdoor Pool \$40 M for new Oakridge Community Centre
SOCIAL FACILITIES (E.G. NEIGHBOURHOOD HOUSE)	<ul style="list-style-type: none"> \$4 M for Downtown Eastside capital program \$3.7 M to renew Little Mountain Neighbourhood House \$2.8 M for ongoing capital maintenance and renovations \$1.5 M for capital grant program to support facilities operated by non-profits \$1.8 M for planning & project management 	<ul style="list-style-type: none"> \$11 M for new Arbutus Centre Neighbourhood House \$3.7 M to expand Little Mountain Neighbourhood House



Public Safety

PROPOSED INVESTMENT: \$43M

Investments in existing public safety: \$43M



Investments in new public safety: none anticipated



GUIDING PRINCIPLES:

- Maintain public safety facilities & equipment in a state of good repair, as they provide core public services on a daily basis
- Ensure sufficient capacity for future expansion to support growth
- Increase the resilience of public safety facilities, as a significant portion of the portfolio will likely be inoperable after a major event

GUIDING INITIATIVES:

- Police Department Strategic Plan (2017)
- Fire and Rescue Strategic Plan (currently being developed)
- Resilient City Strategy (currently being developed)

INVENTORY OF PUBLIC SAFETY

TYPES OF PUBLIC SAFETY	CITY ASSETS	REPLACEMENT VALUE	% IN GOOD OR FAIR CONDITION	PARTNER ASSETS
POLICE	3 police stations 8 other police buildings 465 vehicles and equipment	\$705M	75%	N/A
FIRE & RESCUE	19 fire halls 3 other fire buildings 110 vehicles and equipment	\$340M	45%	N/A
ANIMAL CONTROL	1 animal control shelter	\$10 -15M	0%	N/A

WHAT WE PROPOSE INVESTING FOR 2019 – 2022

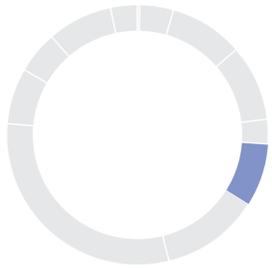
AREA	THE CITY OF TODAY (existing assets) \$43 M	THE CITY OF TOMORROW (new assets) none anticipated
POLICE	\$17.5 M to renew police vehicles and equipment \$2.8 M for ongoing capital maintenance and renovations	—
FIRE & RESCUE	\$11.4 M to renew fire trucks \$6 M to seismically upgrade Fire Hall #12 in Kitsilano \$3 M to design next fire hall to be renewed (location TBD) \$2.2 M for ongoing capital maintenance and renovations	—
ANIMAL CONTROL	\$0.2 M for ongoing capital maintenance and renovations	—



Civic Facilities

PROPOSED INVESTMENT: \$101M

Investments in existing civic facilities: \$100 M



Investments in new civic facilities: \$1 M



GUIDING PRINCIPLES:

- Maintain civic facilities and equipment in a state of good repair, as they provide core public services on a daily basis
- Ensure sufficient capacity for future expansion to support growth
- Increase the resilience of civic facilities, as a significant portion of the portfolio will likely be inoperable after a major event

GUIDING INITIATIVES:

- Resilient City Strategy (currently being developed)

INVENTORY OF CIVIC FACILITIES

TYPES OF FACILITIES	CITY ASSETS	REPLACEMENT VALUE	% IN GOOD OR FAIR CONDITION	PARTNER ASSETS
ADMINISTRATIVE FACILITIES	12 facilities	\$360M	70%	N/A
SERVICE YARDS	21 service yards 830 vehicles and equipment	\$515 M	35%	N/A

WHAT WE PROPOSE INVESTING FOR 2019 – 2022

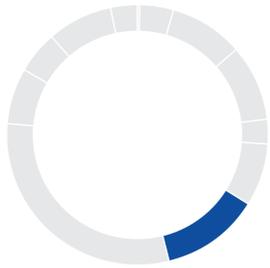
AREA	THE CITY OF TODAY (existing assets) \$100 M	THE CITY OF TOMORROW (new assets) \$1 M
ADMINISTRATIVE FACILITIES	\$5 M for planning and design of City Hall campus renewal \$7.5 M for ongoing capital maintenance and renovations	—
SERVICE YARDS	\$9 M for first phase of Sunset Yard renewal \$3.7 M for planning and design of Manitoba Yard renewal \$8.6 M for ongoing capital maintenance and renovations \$42 M to renew public works and parks vehicles and equipment	—
ALL CITY FACILITIES	\$9.5 M for city-wide renovation programs (e.g. accessibility program) \$5.3 M for planning and studies \$9.5 M for city-wide project management	\$0.5 M for city-wide project management



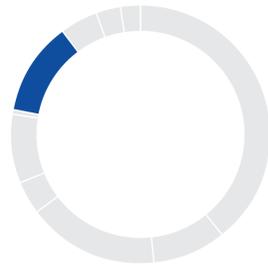
Transportation and Public Space

PROPOSED INVESTMENT: \$311M

Investments in existing transportation: \$160M



Investments in new transportation: \$150M



GUIDING PRINCIPLES:

- Maintain and repair critical transportation infrastructure
- Prioritize sustainable modes of travel: walking, cycling and transit
- Prioritize safety in transportation planning and design

GUIDING INITIATIVES:

- Transportation 2040 (2012)
- Greenest City Action Plan – Green Transportation (2011, updated 2015)

INVENTORY OF TRANSPORTATION INFRASTRUCTURE

TYPES OF TRANSPORTATION	CITY ASSETS	REPLACEMENT VALUE	% IN GOOD OR FAIR CONDITION	PARTNER ASSETS
WALKING AND CYCLING	<ul style="list-style-type: none"> • 2,165 km of sidewalk • 320 km of bikeways • 381 pedestrian-bike signals 	\$1.25 B	80%	Sidewalks & paths at Granville Island, Canada Place and Convention Centre
TRANSIT	<ul style="list-style-type: none"> • 18 km of bus lanes • 2,000 bus stops 	N/A	90%	3 rapid transit lines with 20 stations and 25 km of track
MAJOR ROADS	<ul style="list-style-type: none"> • 358 km of arterial roads • 29 bridges • 486 traffic signals • 8,000 street light poles 	\$4.34 B	75%	6 km of highways 4 km within Port 9 bridges
LOCAL ROADS	<ul style="list-style-type: none"> • 1,058 km of roads • 650 km of lanes • 24,000 street light poles 	\$3.21 B	75%	Local roads on Granville Island and within Port of Vancouver
PARKING	<ul style="list-style-type: none"> • 10,000 parking meters 	\$12 M	85%	N/A
PUBLIC SPACES	<ul style="list-style-type: none"> • 23 community gardens, 4 plazas & 20 parklets and curbside patios • 2 public washrooms 	\$70 M	80%	Automated public toilets, benches and litter cans managed through Street Furniture contract

WHAT WE PROPOSE INVESTING FOR 2019 – 2022

AREA	THE CITY OF TODAY (existing assets) \$160 M	THE CITY OF TOMORROW (new assets) \$150 M
MANAGE TRANSPORTATION NETWORK	<ul style="list-style-type: none"> • \$55.5 M to maintain and renew surfaces, including \$37.4 M for major roads, \$9 M for local roads and \$9 M for sidewalks • \$36.5 M to maintain and upgrade structures, including \$24 M for Granville Bridge rehabilitation and seismic work • \$26.7 M to maintain and renew street lighting • \$20.9 M to maintain and renew traffic signals • \$6 M to maintain and renew parking meters • \$3.5 M to improve safety at rail crossings • \$5.9 M for planning and monitoring 	<ul style="list-style-type: none"> • \$6.5 M for safety improvement projects • \$4 M for congestion management projects • \$4 M for new traffic signals • \$1.5 M for new street lighting • \$2.5 M for planning and monitoring
EXPAND SUSTAINABLE TRANSPORTATION CAPACITY	<ul style="list-style-type: none"> • \$2 M for transit improvement projects 	<ul style="list-style-type: none"> • \$89.8 M for active transportation projects, including \$25 M for Granville Bridge greenway, \$5 M for first phase of Arbutus Greenway, \$3 M for Bute greenway and Helmcken-Comox greenway extension • \$19.8 M for complete street projects, including \$10 M for Gastown, \$7 M for Georgia Gateway and \$2.8 M for Cambie Corridor • \$4.4 M for the City's rapid transit office to provide support to the Millennium Line Broadway Extension to Arbutus Street
PUBLIC SPACE & STREET USE	<ul style="list-style-type: none"> • \$2.3 M to renew public space assets and amenities • \$1.2 M to renew public washrooms in the Downtown Eastside 	<ul style="list-style-type: none"> • \$17.9 M for new or improved public spaces, including \$8 M for the 800 Robson project and \$8 M for Robson-Alberni projects in the West End



One Water (Water & Sewers)

PROPOSED INVESTMENT: \$458M

Investments in existing one water infrastructure: \$399 M Investments in new one water infrastructure: \$59 M



GUIDING PRINCIPLES:

- Unify the planning and management of drinking water, ground water, surface water, rainwater and wastewater
- Ensure that existing assets are well managed and robust to support community resiliency
- Implement policies to manage water, in all its forms, to optimize investments to achieve City objectives for the long term

GUIDING INITIATIVES:

- Greenest City Action Plan - Clean Water (2011, updated 2015)
- Metro Vancouver's Integrated Liquid Waste and Resource Management Plan (2011)
- Integrated Rainwater Management Plan (2016)
- Rain City Strategy (underway)

INVENTORY OF ONE WATER INFRASTRUCTURE

TYPES OF INFRASTRUCTURE	CITY ASSETS	REPLACEMENT VALUE	% IN GOOD OR FAIR CONDITION	PARTNER ASSETS
WATER	<ul style="list-style-type: none"> • 1,474 km of water mains • 12 km of pipes and 2 pump stations for dedicated fire protection system • 27 pressure reducing valve stations • 100,000 water connections • 20,000 water meters • 6,600 fire hydrants 	\$2.4 B	75%	103 km of water mains and 3 reservoirs (Metro Vancouver)
SEWERS & DRAINAGE	<ul style="list-style-type: none"> • 2,117 km of sewer & drainage mains • 24 pump stations • 90,000 sewer connections • 200 green infrastructure features 	\$6.1 B	65%	125 km of sewer pipes (Metro Vancouver)

WHAT WE PROPOSE INVESTING FOR 2019 - 2022

AREA	THE CITY OF TODAY (existing assets) \$399 M	THE CITY OF TOMORROW (new assets) \$59 M
WATER	<ul style="list-style-type: none"> \$71.7 M to renew 35-45 km of water mains \$26.4 M to renew water connections and meters \$12.8 M to renew other water infrastructure (e.g. fire hydrants) \$1.9 M for planning 	<ul style="list-style-type: none"> \$4.3 M for new water mains \$2 M for new water meters \$7.7 M for resilience and demand management \$6.3 M for planning
SEWERS & DRAINAGE	<ul style="list-style-type: none"> \$137.2 M to renew 30-40 km of sewer mains \$98 M to renew sewer connections \$25.4 M to refurbish or replace up to 4 sewer pump stations \$14.3 M to renew other sewer & drainage infrastructure \$10.1 M for planning 	<ul style="list-style-type: none"> \$9.7 M for shoreline protection: construction of a dike in East Fraser Lands \$6.8 M for planning
GREEN INFRASTRUCTURE	<ul style="list-style-type: none"> \$1.1 M to renew 30 green infrastructure features 	<ul style="list-style-type: none"> \$13.4 M to construct 140 new green infrastructure features \$8.4 M for planning

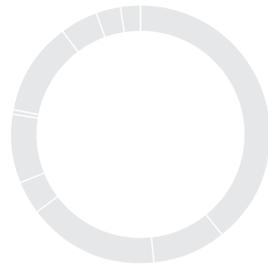
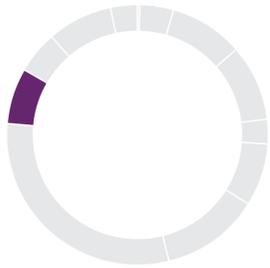


Solid Waste

PROPOSED INVESTMENT: \$90M

Investments in existing solid waste infrastructure: \$90 M

Investments in new solid waste infrastructure: none anticipated



GUIDING PRINCIPLES:

- Reduce the amount of waste we dispose and recover the value from materials in the waste stream
- Ensure compliance with regulatory requirements and minimize negative environmental impacts and risks associated with the landfill in Delta

GUIDING INITIATIVES:

- Greenest City Action Plan – Zero Waste (2011, updated 2015)
- Zero Waste 2040 (2018)

INVENTORY OF SOLID WASTE INFRASTRUCTURE

TYPES OF INFRASTRUCTURE	CITY ASSETS	REPLACEMENT VALUE	% IN GOOD OR FAIR CONDITION	PARTNER ASSETS
SOLID WASTE	<ul style="list-style-type: none"> • Landfill in Delta • Transfer station • 2 recycling centres • 140 vehicles and equipment 	\$85 M Landfill: N/A	Transfer station: poor to fair Landfill: N/A	Village Farms landfill gas beneficial use facility

WHAT WE PROPOSE INVESTING FOR 2019 – 2022

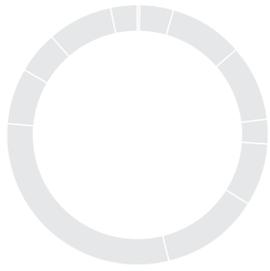
AREA	THE CITY OF TODAY (existing assets) \$90 M	THE CITY OF TOMORROW (new assets) none anticipated
DISPOSAL	\$61.7 M to close sections of the Delta landfill, including installation of gas collection infrastructure \$14.3 M to renew vehicles and equipment \$5.5 M to maintain transfer station in state of good repair	—
SANITATION	\$8.1 M to renew vehicles and equipment	—



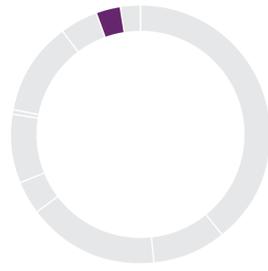
Renewable Energy

PROPOSED INVESTMENT: \$40M

Investments in existing renewable energy: none anticipated



Investments in new renewable energy: \$40 M



GUIDING PRINCIPLES:

- Improve energy efficiency and increase the supply and use of renewable energy
- Support low-carbon neighbourhood energy systems that provide heating and hot water in compact mixed-use communities

GUIDING INITIATIVES:

- Greenest City Action Plan - Green Buildings (2011, updated 2015)
- Renewable City Strategy (2015)
- Zero Emissions Buildings Plan (2016)
- Strategic Approach to Neighbourhood Energy (2012)

INVENTORY OF RENEWABLE ENERGY INFRASTRUCTURE

TYPES OF INFRASTRUCTURE	CITY ASSETS	REPLACEMENT VALUE	% IN GOOD OR FAIR CONDITION	PARTNER ASSETS
NEIGHBOURHOOD ENERGY	<ul style="list-style-type: none"> • 1 energy centre • 6 km of pipes • 33 transfer stations 	\$45 M	100%	<ul style="list-style-type: none"> • 2 systems owned by other governments • 2 systems owned by private utility providers

WHAT WE PROPOSE INVESTING FOR 2019 - 2022

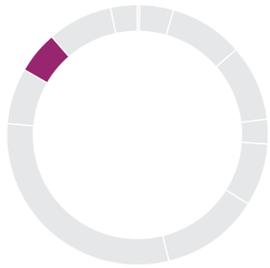
AREA	THE CITY OF TODAY (existing assets) none anticipated	THE CITY OF TOMORROW (new assets) \$40 M
NEIGHBOURHOOD ENERGY	-	<ul style="list-style-type: none"> • \$17.1 M to increase the capacity of renewable energy generation at the existing False Creek energy centre and by building a satellite energy centre • \$20.4 M to expand the distribution network to serve new buildings in the False Creek area • \$2.2 M for planning



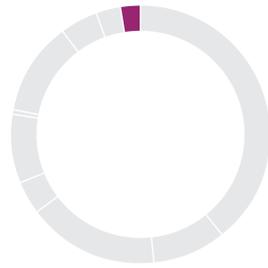
Technology

PROPOSED INVESTMENT: \$100M

Investments in existing technology: \$71 M



Investments in new technology: \$29 M



GUIDING PRINCIPLES:

- Ensure the smooth running and maintenance of critical technology infrastructure
- Establish Vancouver as a leader in effectively leveraging digital technologies and supporting a vibrant digital economy
- Enhance the City's data and analytics capabilities with a corporate enterprise data strategy
- Adapt to the multiple emerging technologies on the horizon

GUIDING INITIATIVES:

- Digital Strategy (2012)

INVENTORY OF TECHNOLOGY INFRASTRUCTURE

TYPES OF INFRASTRUCTURE	CITY ASSETS	REPLACEMENT VALUE	% IN GOOD OR FAIR CONDITION	PARTNER ASSETS
TECHNOLOGY	<ul style="list-style-type: none"> • 4,700 computers & laptops • 850 infrastructure components • 400+ software applications • 230+ km of fibre optic cable 	\$0.4 B	75%	#VanWiFi free public WiFi network at 550 locations throughout the city is comprised of assets deployed by our partners, Telus & Shaw

WHAT WE PROPOSE INVESTING FOR 2019 – 2022

AREA	THE CITY OF TODAY (existing assets) \$71 M	THE CITY OF TOMORROW (new assets) \$29 M
TECHNOLOGY	\$71 M for maintenance and renewal of existing IT systems & infrastructure	\$25 M for technology transformation \$4 M for upgrades to IT systems & infrastructure



Emerging Priorities and Overhead

PROPOSED INVESTMENT: \$105M

GUIDING PRINCIPLES:

Retain some financial capacity to address emerging priorities and cost escalations that surface over the course of the 4-year capital plan

PROPOSED INVESTMENT FOR 2019 - 2022

EMERGING PRIORITIES	CITY-WIDE OVERHEAD
<p>\$85 M earmarked to address emerging priorities and cost escalation, with priority given to projects related to existing infrastructure.</p> <p>Examples include projects where the City can partner with other agencies such as the Federal and/or Provincial governments, TransLink, Vancouver School Board and non-profit organizations.</p>	<p>\$20 m earmarked to cover capital-related corporate overhead (e.g. finance and legal support) and cost associated with debt issuance</p>

Funding the Capital Plan

The City uses two perspectives to help describe the way capital programs and projects are funded: the funding source and the financing method.

Funding sources

The proposed funding sources for the Draft Capital Plan vary by program. This is most evident when comparing planned investments in existing assets and planned investments in new assets.

- **City contributions**

These include property tax, user fees such as utility fees (water and sewer fees) and parking revenue, and other operating revenue funds. The maintenance and renewal of existing infrastructure and amenities are funded primarily from City contributions.

- **Development contributions**

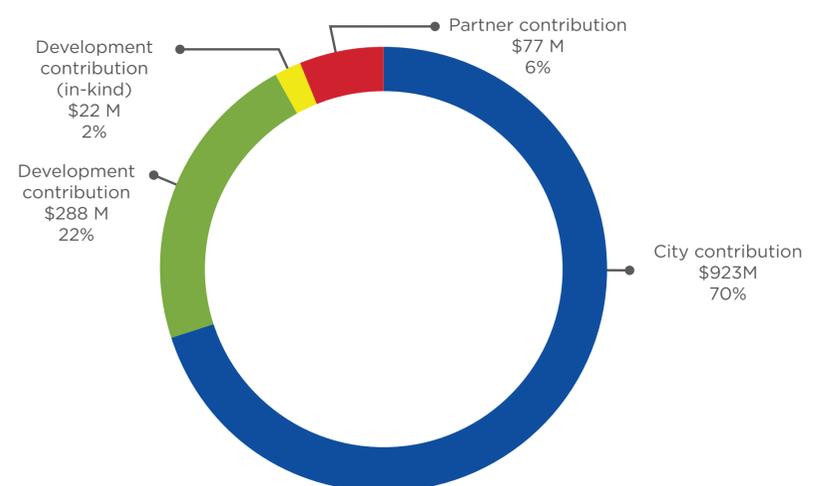
These include development cost levies (DCLs), community amenity contributions (CACs), connection fees and other conditions of development. These can be cash or in-kind contributions to the City. The provision of new, expanded or upgraded infrastructure and amenities is funded primarily from Development contributions.

Note: the 2019 – 2022 Capital Plan is the first plan to include in-kind facility contributions expected to be delivered over the course of the plan.

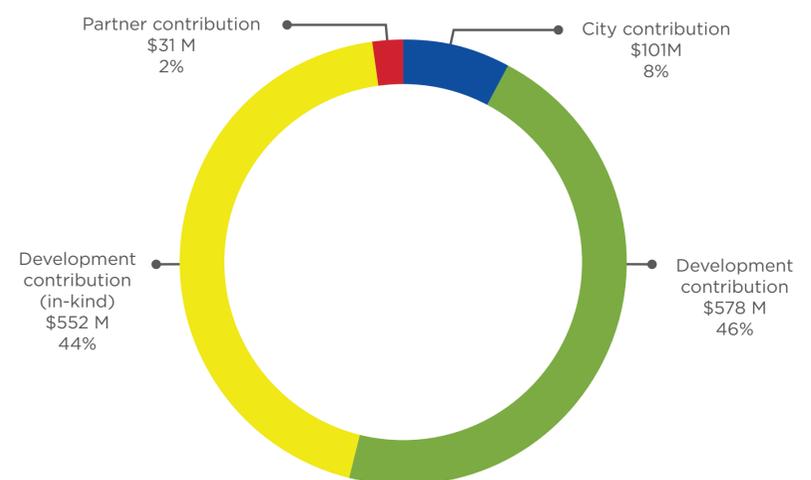
- **Partner contributions**

These include cash contributions from other governments (federal, provincial and regional), non-profit agencies, foundations and philanthropists. Partner contributions can fund existing or new infrastructure and amenities.

Funding Sources for Existing Infrastructure & Amenities



Funding Sources for New Infrastructure & Amenities



Financing Methods

Funding for the Draft Capital Plan is provided through a mix of financing methods, with debt comprising less than 20% of the overall financing mix.

- **Capital Reserves**

Capital reserves are like savings accounts used to accumulate funding in advance of a capital project.

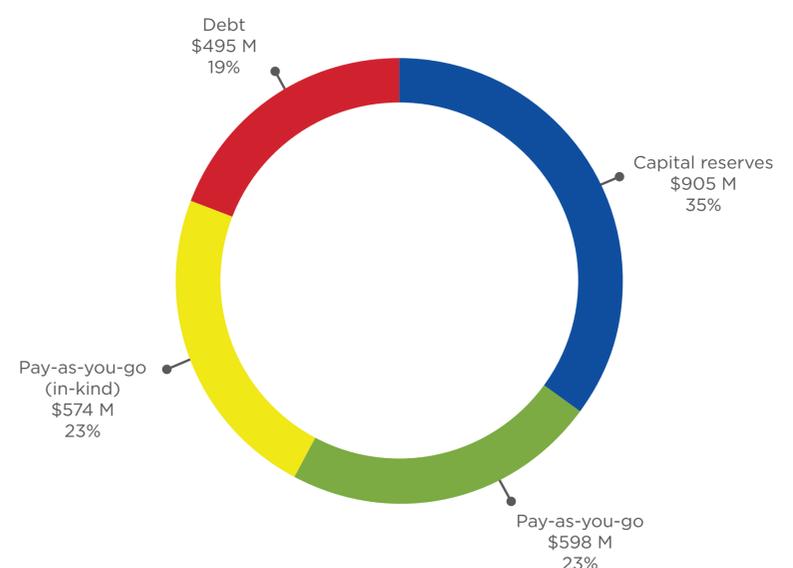
- **Pay-as-you-go**

Pay-as-you-go provides funds for capital projects using current revenue and/or fees or other sources. Pay-as-you-go includes in-kind contributions.

- **Debt**

Debt provides funds for capital projects and uses future revenues (typically over a 10 year period) to pay back the borrowed amount.

Financing Methods





Please fill out our questionnaire.

Also available online at:

vancouver.ca/capitalplan

**THANKS FOR YOUR
FEEDBACK TODAY!**

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