

MEMORANDUM

May 25, 2020

TO: Mayor and Council

CC: Sadhu Johnston, City Manager
Paul Mochrie, Deputy City Manager
Karen Levitt, Deputy City Manager
Gil Kelley, General Manager, Planning, Urban Design & Sustainability
Lon LaClaire, General Manager, Engineering Services
Malcolm Bromley, General Manager, Vancouver Park Board
Nick Kassam, General Manager, Real Estate and Facilities Management
Sandra Singh, General Manager, Arts, Culture and Community Services
Christina de Castell, General Manager, Vancouver Public Library
Grace Cheng, Director, Long-Term Financial Strategy & Planning
Colin Knight, Director, City-wide Financial Planning & Analysis
Michel Desrochers, Manager, Capital Planning & Strategy
Katrina Leckovic, City Clerk
Rena Kendall-Craden, Director, Civic Engagement and Communications
Neil Monckton, Chief of Staff, Mayor's Office
Anita Zaenker, Chief of Staff, Mayor's Office
Alvin Singh, Director of Communications, Mayor's Office

FROM: Patrice Impey, General Manager, Finance, Risk and Supply Chain Management

SUBJECT: COVID-19 Pandemic Response & Recovery: 2019-2022 Capital Plan
Recalibration

Dear Mayor and Council,

The purpose of this memorandum is to provide Council with background information and approach on the Capital Plan recalibration as part of the COVID-19 Pandemic Response & Recovery. This work will conclude in Q3 2020, with regular briefings for Council, Park Board, Library Board and Police Board over the next few months. The memo also responds to Council's resolutions on April 14 and 28 related to Capital projects.

On April 14th, Council approved:

THAT, in response to the unique circumstances created by the COVID-19 pandemic including uncertainty about the ability to secure Provincial operating grants, decreased revenues the City is currently experiencing on a weekly basis, and the potential for property tax delinquency due to economic hardship, Council direct staff to prepare and bring forward to Council by as soon as possible by May 2020 (in public or in camera as necessary), options for consideration that will enable the City of Vancouver to achieve a balanced 2020 Operating Budget, and mitigate anticipated reduced revenue and include the following:

- i. that such options take into account information from the Federal Government that COVID-19 related restrictions will continue at least through to the end of Summer, and that some level of COVID-19 response measures are likely to be in place for the remainder of 2020.
- ii. that the report include and provide Council with **a summary of Capital Projects** including funding source identification of restricted or unrestricted funds, and which projects impact the Operating Budget through debt servicing.

Subsequently, on April 28th, Council approved:

THAT Council direct staff to include in the mitigation plan deferral of service level increments, **deferral of capital projects** and reduction of the operating budget in order to achieve a balanced budget in 2020.

Part 1 – Context on Capital Planning and Budgeting

The City and its partners deliver a broad range of services and programs to residents, workers, businesses and visitors. The scale and breadth of our infrastructure and amenities that support the delivery of these services is expansive: the replacement value of **City-owned capital assets** (excluding land value) is approximately \$25 billion¹ and encompasses:

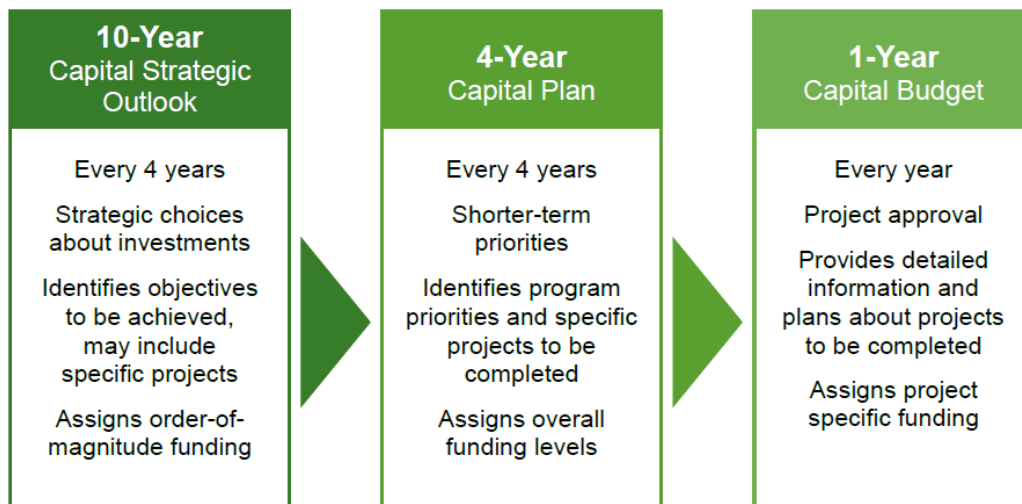
- 7.7 million sq. ft. of facilities providing a broad range of childcare, community, social, cultural and recreation programs and services, affordable housing, public safety, and civic administration
- 1,370 hectares of parks and open spaces
- 4,550 km of sidewalks, streets and lanes
- 3,600 km of underground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

¹ The infrastructure and amenities located within Vancouver's municipal boundaries but owned by non-City agencies is likely equal in scale to that owned by the City. This includes capital assets owned by other local governments (e.g. Vancouver School Board, Metro Vancouver and TransLink) and non-profit partners in the areas of affordable housing, childcare and community services.

There are three **overarching goals** associated with the City's Capital Plan:

- Maintaining the City's critical infrastructure and amenities in a state of good repair;
- Optimizing the City's network of infrastructure and amenities to support growth and economic development; and
- Advancing Council, Board and community priorities in a financially sustainable and resilient manner.

The City uses the following **framework** for Capital Planning, starting with a longer-term strategy, followed by a medium-term plan and implemented with short-term budgets:



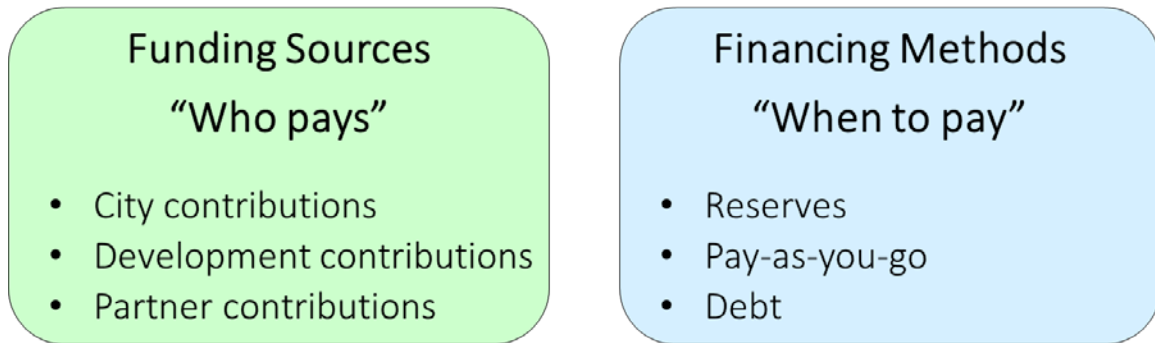
The City uses **service categories** (not departments) for the purpose of Capital Planning:

- Affordable housing
- Childcare
- Parks & open spaces
- Arts & culture
- Community facilities
- Public safety
- Civic facilities and equipment
- Transportation & street use
- One water
- Solid waste
- Renewable energy
- Technology

Included in the 4-year Capital Plan and annual Budget is a mix of:

- **one-time projects** (typically larger-scale, distinct projects, e.g. renewing and expanding Marpole-Oakridge Community Centre) and
- **ongoing programs** (typically a collection of small/medium, like-kind projects, e.g. renewing and upgrading curb ramps along sidewalks).

The City **funds capital investments** from a range of sources (“who pays”) using a balanced mix of payment methods (“when to pay”):



- **City contributions** are primarily used to maintain and renew existing assets
- **Development contributions** are primarily used to provide new/expanded amenities & infrastructure to support growth
- **Partnership contributions** can be used for renewal or new assets
- **Reserves** are like savings accounts used to accumulate funding in advance of a capital project
- **'Pay-as-you-go'** is funding from the current year's operating revenue; grants to non-profits & most technology projects rely on this method
- **Debt** financing is typically for City assets with anticipated lifespan of ten years or longer

For transparency and completeness, the City's Capital Plan and Budget includes both:

- **City-led projects** (i.e. City funding is deployed to plan, design and construct the capital project) and
- **development-led projects** (i.e. capital projects approved through the rezoning/development process, then planned, designed and constructed by developers and transferred to the City when completed).

To enhance oversight of our capital investments, staff has developed a **framework for capital project delivery** that includes specific phase gates to guide the implementation of the Capital Plan through the annual budget process.



Having a robust Capital Planning & Budgeting framework and a prudent financial strategy is crucial in maintaining the **City's strong credit ratings**. In November 2019, Moody's reaffirmed our credit rating of "Aaa stable", citing the City's multi-year financial planning and conservative debt and investment management policies as key strengths in their evaluation.

Part 2 – 2019-2022 Capital Plan and 2020 Capital Budget

The 2019-2022 Capital Plan was approved by Council and Park Board in July 2018, and the required borrowing authorities were approved by voters in October 2018. There were three **primary objectives** identified when the Capital Plan was prepared:

- Increase funding to renew aging infrastructure
- Preserve & create affordable housing and childcare
- Advance priorities from city-wide strategies and community plans

The 2019-2022 Capital Plan contemplated **\$2.8 billion of investment**: \$2.2 billion worth of City-led capital investments and \$0.6 billion worth on in-kind contributions achieved through development. Appendix A provides more detailed information on the major programs and programs for each service category.

<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	-

The 2019-2022 Capital Plan is intended to **evolve over the 4-year period** to incorporate emerging priorities and opportunities as they arise. To date, **\$97 million has been added** to the Capital Plan, with about half allocated to Affordable Housing and Childcare programs:

- \$23 M of Empty Homes Tax (City contribution) allocated to Affordable Housing
- \$28 M of Provincial funding (Partner contribution) allocated to Childcare

Appendix B provides more detailed information Capital Plan adjustments since January 2019.

Appendix C is a listing of **major projects and programs** included in the 2019-2022 Capital Plan. Details include outcomes, current status, phasing schedule, planned public engagement, total investment and individual annual budget allocations.

The **2020 Capital Budget** (including the adjustments approved on May 12, 2020) allocated \$514 million of City-led investment from the 2019-2022 Capital Plan (which represents 22% of the 4-year total):

<i>\$ millions</i>	Total	City	Devt.	Partner
Affordable housing	74	18	53	3
Childcare	8	1	-	7
Parks & open spaces	44	7	36	0.2
Arts & culture	13	13	1	-
Community facilities	43	17	15	10
Public safety	10	10	-	-
Civic facilities and equipment	30	30	-	-
Transportation & street use	79	32	31	17
One water (water, sewer & green infrastructure)	147	89	58	-
Solid waste	25	25	-	0.1
Renewable energy	8	5	2	1
Technology	26	26	-	-
Overhead	8	8	-	-
Emerging priorities	-	-	-	-
Total	514	280	195	39

Appendix D provides more detailed information on the 2020 Capital Budget approved in December 2019 including funding sources for individual projects and programs.

Part 3 – COVID-19 Pandemic Response & Recovery

In April, staff conducted an initial assessment of **how capital projects would be impacted by physical distancing requirements mandated by the Province** to reduce the propagation of the virus for the April to June period. The assessment indicated that the majority of projects would be able to proceed as planned. Projects identified as either **pausing or slowing down** included:

Projects currently in planning/scoping phase:	<ul style="list-style-type: none"> • West End Community Centre/Joe Fortes Library project • Bute Greenway project • Robson/Alberni public space project • Chinatown Cultural Partnership project • Chinatown Memorial Square project • City Hall campus renewal project • Marpole Civic Centre project at Granville St. & 67th Ave.
Projects currently in the detailed design phase:	<ul style="list-style-type: none"> • Chinese Society Buildings renewal project • Archive renewal & relocation project
Projects currently in the construction phase:	<ul style="list-style-type: none"> • Nanaimo Street upgrade project • Richards Complete Street project

Aside from the physical distancing requirements, the COVID-19 pandemic has posed significant strain on the City's finance. In May, staff conducted an additional review of the impacts on the City's capital plan funding. Based on information available to date, **all capital funding sources** (City, Development and Partner contributions) **are expected to decrease**. Staff is currently

estimating the reductions expected with Development Cost Levies (DCLs), cash Community Amenity Contributions (CACs) and TransLink funding, and will share results with Council when available. At this point, **the only funding source that may increase is infrastructure funding from senior levels of government** as part of an economic stimulus package. The table below provides a summary:

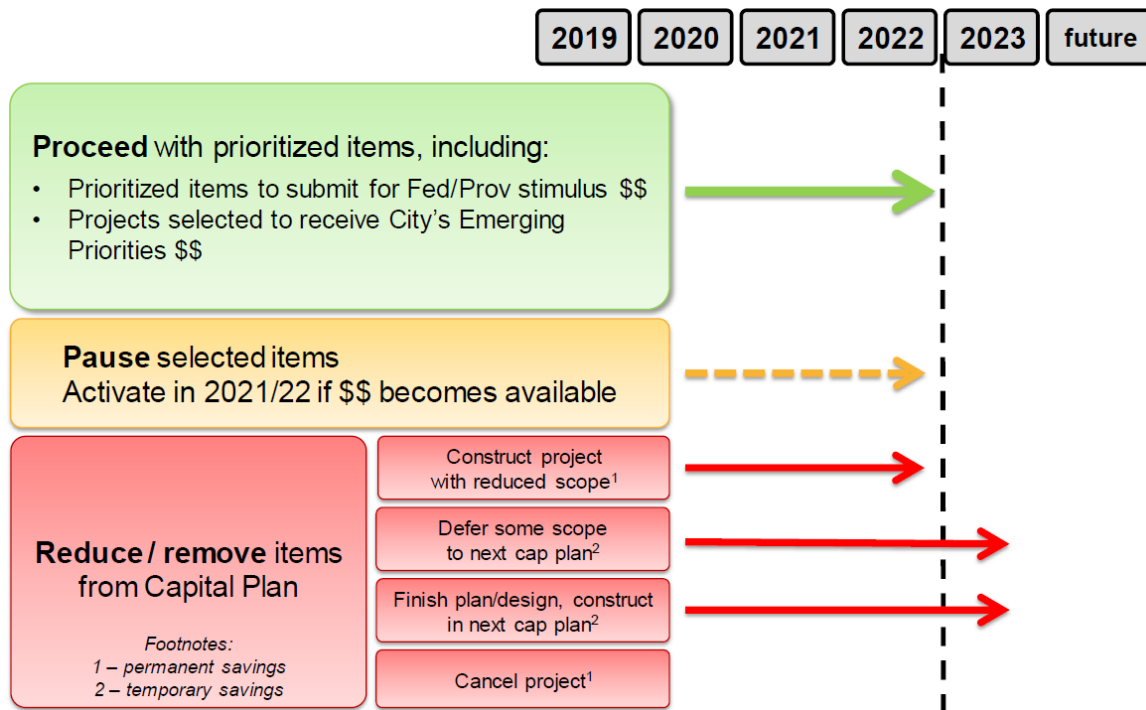
Funding source		Pre-COVID funding assumptions	Updated funding assumptions	Summary
City	Debt	\$495 M	\$483 M	~\$26 M reduction
	Pay-as-you-go	\$417 M	\$405 M	
	Reserve	\$188 M	\$186 M	
Development	DCLs	\$672 M	TBD	Likely decrease from DCLs/CACs
	CACs in-kind	\$570 M	\$570 M	
	CACs cash	\$266 M	TBD	
	Water/sewer connection fees	\$110 M	\$110 M	
Partner	Federal gov't	\$20 M	TBD	Anticipating significant increase
	Provincial gov't	\$37 M	TBD	
	Regional gov't	\$79 M	TBD	Likely decrease from TransLink
	Non-profits	\$15 M	\$15 M	
TOTAL		\$2,869 M	TBD	

Part 4 – Capital Plan Recalibration

The recalibration is an opportunity to make **adjustments** to the Capital Plan to reflect the City's fiscal reality while contributing towards post-COVID recovery efforts, and to guide the 2021 and 2022 Capital Budgets. Because of the funding reductions caused by the COVID-19 pandemic, there will be a **sizeable reduction** in the Capital Plan investment commitments. As well, there will likely be some shifting of commitments in the Capital Plan to **accommodate emerging needs** such as Pandemic Recovery, Resilience initiatives, Climate Emergency Response and Equity initiatives.

Included in the recalibration work is the identification of strong candidate projects for the Federal and/or Provincial **infrastructure stimulus program(s)** anticipated to start later in 2020, and the allocation of the **City's Emerging Priorities** funding in the Capital Plan to advance priority projects.

A **framework** has been developed to guide decisions on projects/programs currently included in the Capital Plan:



Staff has developed a preliminary list of **considerations to assist with evaluation and inform decision:**

- **Broader considerations** include project status and delivery timeline, potential for phasing, and the City's commitment to maintain our infrastructure and amenities in 'state of good repair';
- **COVID-19 specific considerations** include the project's role in supporting recovery efforts, "shovel readiness" and potential for Federal/Provincial stimulus funding; and
- **Considerations involving both areas** include project priority and urgency, potential to drive cost savings or revenue generation, and projects that enhance City and/or community resilience.

Initial work has identified approximately \$3 million in savings from projects funded by Capital from Revenue (an annual transfer from the Operating Budget to the Capital Budget) to help address the gap in the 2020 Operating Budget. These savings are primarily achieved by pausing on the delivery of Technology projects from 2020 to 2021 and include:

Deferring projects	<ul style="list-style-type: none"> • Council meeting management project • small to medium projects identified and prioritized by service groups
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Deferring the scope of some projects	<ul style="list-style-type: none">• E-sourcing project (application supporting Supply Chain Management)• Lagan upgrade project (application supporting 311 call centre)• Citywire replacement project (internal website for City staff)
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Staff have begun the more **comprehensive review** of projects/programs in the Capital Plan and will review options using the above-noted framework and formulate recommendations in June/July. There will be **ongoing dialogue with Council and Boards** as staff move through this process, and the work will conclude in Q3 2020.

Please contact me at Patrice.Impey@vancouver.ca or (604) 873-7610 should you have any questions.

Best Regards,



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General Manager of Finance, Risk and Supply Chain Management

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GC/MD/md

Appendix A



2019-2022 CAPITAL PLAN



Approved by City Council on July 25, 2018

**2019-2022 CAPITAL PLAN
SUMMARY**

July 2018

Overall

<i>\$ millions</i>	Existing assets	New assets	Total	City	Devt.	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	-

**2019-2022 CAPITAL PLAN
SUMMARY**

July 2018

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**

July 2018

Park and open spaces

<i>\$ millions</i>	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Dev't.*	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**

July 2018

Arts & culture

<i>\$ millions</i>	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
	Cultural facilities	New performance space at Oakridge Centre (\$15.0M est. in-kind)						
		New cultural hub at 801 Pacific (\$16.0M est. in-kind)	14.1	33.0	47.1	13.9	33.2	-
		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)						
		Renovations to keep facilities functional & efficient (\$250K)	12.0	5.0	17.0	17.0	-	-
		Capital maintenance program (\$6.8M)						
	Public art	New public art on private property (\$10.0M est. in-kind)						
		New public art on public property (\$10.0M)	2.0	20.0	22.0	1.0	21.0	-
		Maintenance of existing public art (\$2.0M)						
	Heritage	Heritage incentive programs (\$74.4M)						
		Chinese Society Legacy Program (\$10.0M)	87.9	-	87.9	2.4	76.5	9.0
		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	-

**2019-2022 CAPITAL PLAN
SUMMARY**

July 2018

Community facilities

<i>\$ millions</i>	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Dev.	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
		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)						
	Rinks & pools	New Oakridge community centre (\$40.0M est. in-kind)	1.5	16.0	17.5	-	17.5	-
	Continued design for 1st phase of Britannia renewal (\$2.5M)	1.5	-	1.5	-	-	-	
	Programs	New Marpole outdoor pool (\$15.0M)	15.1	-	15.1	14.6	0.5	-
		Renovations to keep facilities functional & efficient (\$2.3M)	15.1	-	15.1	14.6	0.5	-
		Capital maintenance program (\$12.8M)	15.1	-	15.1	14.6	0.5	-
	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)						
	Non-city	Capital maintenance program (\$1.3M)	5.5	-	5.5	5.0	0.5	-
		Social capital grant programs (\$1.5M)	5.5	-	5.5	5.0	0.5	-
	All social	Downtown Eastside capital grant programs (\$4.0M)	1.8	-	1.8	1.8	-	-
		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	-

**2019-2022 CAPITAL PLAN
SUMMARY**

July 2018

Public safety

<i>\$ millions</i>	Subcategory	Program / Major projects	Existing assets	New assets	Total	City	Devt.	Partner
	Fire & rescue	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)						
		Capital maintenance program (\$1.7M)		11.2	-	11.2	10.2	1.0
	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	Renovations to keep facilities functional & efficient (\$1.5M)						
		Capital maintenance program (\$1.3M)						
		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)						
		Capital maintenance program (\$175K)		0.2	-	0.2	0.2	-
	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 Hall campus renewal - planning & design (\$5.0M)						
		Renovations to keep facilities functional & efficient (\$4.5M)						
		Capital maintenance program (\$3.0M)		12.5	-	12.5	12.5	-
	Service yards, vehicles & equipment	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)						
		Capital maintenance program (\$7.3M)		21.2	-	21.2	21.2	-
	Vehicles & equipment	Renewal of public works, water and sewers vehicle & equipment (\$39.9M)						
		Renewal of other vehicles & equipment (\$9.9M)		49.8	-	49.8	49.8	-
	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
	Planning & research (\$5.3M)						
	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**

July 2018

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**

July 2018

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**

July 2018

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	-	-

**2019-2022 Capital Plan adjustments
approved since January 2019**

Service category	Details	Total \$ millions	City \$ millions	Devt. \$ millions	Partner \$ millions
Affordable housing	Allocation of Empty Homes Tax funding to support land acquisition and granting programs	23	23	-	-
	Federal grants to support Temporary Modular Housing program (replacing City's DCL funding)	-	-	(4)	4
	Sub-total	23	23	(4)	4
Childcare	Provincial contribution to City's childcare program (increasing it from \$5 M to \$33 M)	28	-	-	28
	Additional funding to support City's childcare project in Gastown (project from 2015-2018 Capital Plan)	5	-	5	-
	Sub-total	33	-	5	28
Parks & open spaces	Additional funding to support new park at Smithe & Richards in Downtown South (project from 2015-2018 Capital Plan)	4	-	4	-
	Smaller scale grants and donations to support park projects	0.4	-	-	0.4
	Sub-total	4.4	-	4	0.4
Arts & culture	Allocation of Civic Theatres Reserve funding to support renovation program	5	5	-	-
	Sub-total	5	5	-	-
Community facilities	Allocation of cash CACs to support Indigenous Social Enterprise Centre in Grandview-Woodland	2	-	2	-
	Arbutus Centre Neighbourhood House: adjustment of the value of this in-kind project because the size of was facility was increased	1.4	-	1.4	-
	Smaller scale grants and donations to support community facility projects	0.1	-	-	0.1
	Sub-total	3.5	-	3.4	0.1
Public safety	Additional allocation for Police vehicles	0.3	0.3	-	-
	Sub-total	0.3	0.3	-	-
Civic facilities & equipment	Additional allocation for City's Administrative Buildings program	4	4	-	-
	Sub-total	4	4	-	-
Transportation & street use	External contribution from Broadway Subway project to complete Trolley Route Rerouting prior to subway construction	4	-	-	4
	TransLink contribution toward street improvements related to implementation of 41st Ave B-line	3	-	-	3

**2019-2022 Capital Plan adjustments
approved since January 2019**

Service category	Details	Total \$ millions	City \$ millions	Devt. \$ millions	Partner \$ millions
	Allocation of funding from City reserve to advance program to convert street lighting from HPS to LED	3	3	-	-
	Allocation of City and Development funding to advance Curbside Electrical Power Supply program	1.8	0.4	1.4	-
	Allocation of Development funding to remove the existing tunnel connecting the Oakridge Centre parkade with 41st Avenue.	1.5	-	1.5	-
	Other smaller scale transportation projects and studies	1.3	0.7	0.6	-
	Sub-total	15	4	4	7
One water (water, sewer & green infrastructure)	Additional City funding for the water-sewer connection program	0.4	0.4	-	-
	Federal grants to support One Water Planning project	0.2	-	-	0.2
	Sub-total	0.6	0.4	-	0.2
Solid waste	Additional contribution from Metro Vancouver for Landfill Gas Collection project (replacing City's funding)	-	(2.5)	-	2.5
	Additional City funding to fabricate and install ~300 additional higher capacity litter and recycling receptacles	1	1	-	-
	Additional City funding to support Zero Waste Strategy (Single-Use Item By-Law Communications and Food Waste Prevention and Diversion)	0.9	0.9	-	-
	Additional City funding to support the sanitation fleet	0.6	0.6	-	-
	Sub-total	2.5	-	-	2.5
Renewable energy	Additional City funding to support the Deep Emission Building Retrofits Program	5.6	5.6	-	-
	Allocation of Federal funding (Gas Tax Fund) to advance implementation of Electric Vehicle Infrastructure Strategy	0.5	-	-	0.5
	Sub-total	6	5.6	-	0.5
Technology	Additional City funding to support technology infrastructure program for Police Department	0.4	0.4	-	-
	Sub-total	0.4	0.4	-	-
Total		97	43	12	43

2019-2022 Capital Plan & 2020 Capital Budget

Major Projects & Programs



Dec. 2019

Service category	Name of project/program	Capital Plan outcome	Current status	Public engagement in 2020?	Project phasing & anticipated schedule					2019-2022 Capital Plan (\$M)	Planned allocations (\$M)			
					2019	2020	2021	2022	2023		2019 actual	2020 proposed	2021 forecast	2022 forecast
Affordable Housing	New non-market rental housing delivered through development	Construction of 1,200-1,600 units of non-market rental housing over the 4-year period.	530 units under construction: - West End (237 units): 1488 Robson, 1345 Davie, 969 Burrard, 1810 Alberni - Pearson-Dogwood I (138 units) - Arbutus Centre (125 units) - Main & 2nd (30 units)	-	[Gantt chart showing construction from 2019 to 2021]					\$400	Projects to be delivered by developer as a requirement of rezoning or development permit.			
			~600 units at development-building permit stage: - Pearson-Dogwood II (223 units) - Oakridge Centre I (188 units) - West End (4 projects, 157 units) - Downtown Eastside (2 projects, 34 units)	-	[Gantt chart showing construction from 2020 to 2022]									
Childcare	New childcare for 0-4 years old - delivered by development	Construction of ~250 new childcare spaces over the 4-year period.	37 spaces under construction: - Fraser St. & Marine Dr. (37 spaces)	-	[Gantt chart showing construction from 2019 to 2021]					\$38	Projects to be delivered by developer as a requirement of rezoning.			
			200+ spaces at development-building permit stage: - Oakridge Centre (69 spaces) - Little Mountain (69 spaces) - Pearson-Dogwood (69 spaces)	-	[Gantt chart showing construction from 2020 to 2022]									
	New childcare for 0-4 years old - delivered by City or partners	Construction of ~1,000 new childcare spaces over the 4-year period.	300+ spaces have been scoped out to date at the following sites: - Marpole Community Centre - Marpole Library - West Fraser Lands - Coal Harbour Continuing to explore opportunities, including with VSB.	yes for projects that have been scoped out	[Gantt chart showing construction from 2019 to 2023]					\$104	\$23	\$6	\$37	\$37
Parks & Open Spaces	East Fraser Lands - Area 2 (west): new parks	Design & construction of Foreshore, Kinross and Neighbourhood Park South (3.3 hectares). Design Playfield Park (1.0 hectares).	Currently in construction phase which is anticipated to continue into 2022.	-	[Gantt chart showing construction from 2019 to 2022]					\$16	\$0.9	-	\$7.0	\$8.1
	East Fraser Lands - Area 1 (centre): new parks	Design & construction of Promontory Park and Avalon Channel (0.6 hectares). Design Playfield Park (1.2 hectares).	Currently in scoping/planning phase; proceeding to detailed design phase in 2020.	yes	[Gantt chart showing construction from 2020 to 2022]									
	West End Waterfront Parks: renewal & upgrade	Preparation of master plan and design & construction of project's first phase.	Currently in scoping/planning phase which is anticipated to continue until end of 2020.	yes	[Gantt chart showing construction from 2019 to 2022]					\$10.5	\$0.8	\$0.2	\$6.0	\$3.5
	Queen Elizabeth Park: renewal & upgrade	Preparation of master plan and design & construction of project's first phase.	Currently in scoping/planning phase which is anticipated to continue until end of 2020.	yes	[Gantt chart showing construction from 2019 to 2022]					\$6	\$0.8	\$0.4	\$2.4	\$2.5
	Burrard Slopes Park (Fir & 5th): park expansion	Preparation of concept plan and design & construction of park's next phase (0.63 hectares), including integration with Arbutus Greenway.	Currently in scoping/planning phase which is anticipated to continue until end of 2020.	yes	[Gantt chart showing construction from 2019 to 2022]					\$8.4	\$0.2	\$1.0	\$1.0	\$6.3

2019-2022 Capital Plan & 2020 Capital Budget

Major Projects & Programs



Dec. 2019

Service category	Name of project/program	Capital Plan outcome	Current status	Public engagement in 2020?	Project phasing & anticipated schedule					2019-2022 Capital Plan (\$M)	Planned allocations (\$M)			
					2019	2020	2021	2022	2023		2019 actual	2020 proposed	2021 forecast	2022 forecast
	"East Park" in South East False Creek (Ontario & 1st): new park	Preparation of concept plan and design & construction of project's first phase.	Currently in scoping/planning phase which is anticipated to continue until end of 2020.	yes						\$12	\$1.5	-	\$5.0	\$5.5
	Track & Field facilities	Preparation of city-wide strategy, followed by design & construction of facilities at VanTech Secondary School and possible other sites.	City-wide strategy completed; proceeding to scoping/planning phase for each site in 2020.	yes						\$10	-	\$0.5	\$9.5	-
Arts & Culture	Cultural Facility @ Main & 2nd Ave.	Building of new cultural facility (~4,000 sq.ft.).	Currently in construction phase which is anticipated to continue into 2021.	-						\$2	Project to be delivered by developer as a requirement of rezoning.			
	Cultural Facility @ Pacific & Howe	Building of new cultural facility (~21,000 sq.ft.).	Currently in detailed design phase; proceeding to construction phase in 2020.	-						\$16	Project to be delivered by developer as a requirement of rezoning.			
	Cultural Facility @ Oakridge Centre	Building of new cultural facility (~10,000 sq.ft.).	Currently in detailed design phase which is anticipated to continue into 2021.	-						\$15	Project to be delivered by developer as a requirement of rezoning.			
Community Facilities	Arbutus Village Neighbourhood House	Building of a new neighbourhood house (~11,000 sq.ft.) and adult day centre (~9,000 sq.ft.).	Currently in detailed design phase; proceeding to construction phase in 2020.	-						\$7.1	Project to be delivered by developer as a requirement of rezoning.			
	City Archives	Renewal of existing archives & relocation to Level 7 @ Central Library (~28,000 sq.ft.).	Currently in detailed design phase; proceeding to construction phase in 2020.	-						\$18	\$2.0	\$16.0	-	-
	Little Mountain Neighbourhood House	Renewal of existing neighbourhood house (6,000 sq.ft.), expansion to 12,000 sq.ft., and relocation from Main & 24th to Main & 36th.	Currently in detailed design phase which is anticipated to continue into 2020.	-						\$7.4	Project to be delivered by developer as a requirement of rezoning.			
	Oakridge Library & Community Centre	Renewal of existing library (12,000 sq.ft.) & expansion to 25,000 sq.ft., and building of new community centre (~34,000 sq.ft.).	Currently in detailed design phase which is anticipated to continue into 2021.	-						\$77.4	Project to be delivered by developer as a requirement of rezoning (est. value \$75 M). The City will make a \$2.4 M contribution in 2022 toward library component.			
	Marpole Library	Renewal of existing library (3,500 sq.ft.) & expansion to 17,000 sq.ft.	Currently in scoping/planning phase; proceeding to detailed design phase in 2020.	yes						\$23.8	\$1.0	\$6.5	-	\$16.3
	Marpole Community Centre & Marpole Outdoor Pool	Renewal of existing community centre (29,000 sq.ft.) & expansion to 40,000 sq.ft., and building of new outdoor pool.	Currently in scoping/planning phase; proceeding to detailed design phase in 2020.	yes						\$53.6	\$0.2	\$8.0	\$45.4	-
	Britannia Centre	Rezoning of site (with School Board) & preparation of detailed design for project's first phase (community centre & indoor pool).	Currently in scoping/planning phase which is anticipated to continue until end of 2020.	yes						\$5	-	-	-	\$5.0
	West End Community Centre & Joe Fortes Library	Master plan to renew & expand community facilities (with School Board) & preparation of detailed design for project's first phase.	Currently in scoping/planning phase which is anticipated to continue into 2021.	yes						\$10	\$1.0	-	\$9.0	-
	RayCam Community Centre	Rezoning of site (with BC Housing) & preparation of detailed design.	Project let by BC Housing; currently in scoping/planning phase which is anticipated to continue into 2021.	yes						\$2	\$0.5	-	\$1.5	-

2019-2022 Capital Plan & 2020 Capital Budget

Major Projects & Programs



Dec. 2019

Service category	Name of project/program	Capital Plan outcome	Current status	Public engagement in 2020?	Project phasing & anticipated schedule					2019-2022 Capital Plan (\$M)	Planned allocations (\$M)				
					2019	2020	2021	2022	2023		2019 actual	2020 proposed	2021 forecast	2022 forecast	
Public Safety	Kitsilano Fire hall (8th Ave. & Balaclava St.)	Seismic upgrade of facility (built in 1989).	Currently in detailed design phase which is anticipated to continue into 2021.	-						\$6	\$1.0	-	\$5.0	-	
Civic Facilities & Equipment	Sunset Service Yard (51st Ave. & Sophia St.)	Preparation of master plan to renew site and construction of project's first phase.	Currently in scoping/planning phase; proceeding to detailed design phase in 2020.	yes						\$9	\$0.5	\$1.5	\$7.0	-	
	City Hall campus	Preparation of master plan, rezoning of site, and preparation of detailed design for project's first phase.	Currently in scoping/planning phase which is anticipated to continue into 2021.	yes						\$5	\$2.0	\$3.0	-	-	
Transportation & Street Use	Major Road Rehabilitation	Repave 23 km of major roads.	Repaved 12 km in 2019 and planning to repave 8 km in 2020.	-						\$37.4	\$9.1	\$9.4	\$9.4	\$9.4	
	Granville Bridge Rehabilitation	Seismic improvements: replacement of bearings and strengthening of steel cross bracing.	Currently in construction phase which is anticipated to continue into 2021.	-						\$23.5	\$19.5	-	\$4.0	-	
	800 Robson Street Permanent Plaza	Phase 1 - 800 block (Robson Square): design and construction of permanent plaza.	Currently in construction phase which will continue into 2020.	-							\$8	\$5.4	-	\$2.6	-
		Phase 2 - 700 & 900 blocks: public space improvements (in conjunction and to integrate with Robson-Alberni Public Space project).	Currently in scoping/planning phase which is anticipated to continue into 2020.	yes							\$8	\$5.4	-	\$2.6	-
	Robson & Alberni Streets Public Space project	Public space improvements on Robson & Alberni Streets (1000 to 1200 blocks) and permanent Bute-Robson plaza.	Currently in scoping/planning phase which is anticipated to continue into 2020.	yes						\$8	\$1	-	\$7	-	
	Richards Green Complete Street Improvements	Design and construction of ~1.5 km of green street rehabilitation, and walking and cycling facilities, coordinated with green infrastructure.	Currently in detailed design phase; proceeding to construction phase in 2020.	-						\$10	\$3	\$5.5	\$1.5	-	
	10th Avenue Street Improvements – Health Precinct Phase II	Design and construction of ~0.5 km to improve safety and comfort for patients and all road users.	Currently in detailed design phase; proceeding to construction phase in 2020.	-						\$7.9	\$0.2	\$7.7	-	-	
	Arbutus Greenway	Construction of one zone of the blue greenway.	Currently in detailed design phase for portions of the greenway, which is anticipated to continue until end of 2020.	yes						\$2.5	\$2.5	-	-	-	
	Cambie Complete Street (King Edward to 37th Ave.)	Walking and cycling improvements.	Currently in detailed design phase which is anticipated to continue until end of 2020.	yes						\$2.8	-	\$1.0	\$0.9	\$0.9	
	Bute Street Greenway	Design and construction of ~1 km of greenway.	Currently in scoping/planning phase; proceeding to detailed design phase in 2020.	yes						\$3	-	\$0.2	\$1.4	\$1.4	
Drake Green Complete Street Improvements	Design and construction of ~0.6 km of green street rehabilitation, and walking and cycling facilities, coordinated with green infrastructure.	Currently in scoping/planning phase; proceeding to detailed design phase in 2020.	yes						\$6.9	-	\$3.9	\$3.0	-		

2019-2022 Capital Plan & 2020 Capital Budget

Major Projects & Programs



Dec. 2019

Service category	Name of project/program	Capital Plan outcome	Current status	Public engagement in 2020?	Project phasing & anticipated schedule					2019-2022 Capital Plan (\$M)	Planned allocations (\$M)			
					2019	2020	2021	2022	2023		2019 actual	2020 proposed	2021 forecast	2022 forecast
	Granville Bridge Connector	Improved walking, rolling, and cycling path across Granville Bridge.	Currently in scoping/planning phase; proceeding to detailed design phase in 2020.	yes	Scoping & Planning	Detailed Design	Construction			\$25	\$2.0	-	\$23.0	-
	Gastown Complete Streets	Potentially Vancouver's first car-light/pedestrian priority district, with improved transit and cycling service.	Currently in scoping/planning phase; proceeding to detailed design phase in 2020.	yes	Scoping & Planning	Detailed Design	Construction			\$10	\$0.2	\$1.7	\$2.0	\$6.2
	Georgia Gateway West Complete Street	Increase people moving capacity of West Georgia including walking, cycling and transit improvements.	Currently in scoping/planning phase; proceeding to detailed design phase in 2020.	yes	Scoping & Planning	Detailed Design	Construction			\$7	\$0.2	\$0.3	\$2.1	\$4.5
One Water	Water Main Renewals & Upgrades	Replace 35-45 km of water mains plus upgrades.	Replaced 9.6 km in 2019 and planning to replace 13.4 km in 2020.	-	Construction	Detailed Design	Construction			\$84	\$19	\$26	\$17	\$21
	Sewer Main Renewals & Upgrades	Replace 30-40 km of sewer mains plus upgrades.	Replaced 4 km in 2019 and planning to replace 6 km in 2020.	-	Construction	Detailed Design	Construction			\$245	\$35	\$55	\$75	\$80
	Green Infrastructure implementation	~400 new public realm GI assets and ~20 pilot projects on City property & at schools.	Completed 12 GI assets in 2019 and planning to complete 151 GI assets in 2020.	-	Construction	Detailed Design	Construction			\$52.5	\$2.3	\$11.8	\$13.2	\$25.3
Renewable Energy	Southeast False Creek Energy Centre Expansion	Increase low-carbon energy capacity by 5 to 6 megawatts.	Currently in detailed design phase; proceeding to construction phase in 2020.	-	Detailed Design	Construction			\$14.4	\$12.1	-	\$0.9	\$1.4	

2020 Capital Budget approved in Dec. 2019

Appendix D

Category	Project/Program Name	Project/Program Description	2020 Multi-Year Budget	City				Development		Partner
				Borrowing Authority	Operating Revenue that funds Capital	Special Purpose Reserves	Reallocation of Existing Project Budget	Developer Contributions	User Fees and Levies	External
Affordable Housing										
Supportive Housing	Temporary Modular Housing program	Proposed temporary modular housing project at Vanness Avenue (total capital costs, excluding City land contribution, funded by BC Housing and CMHC).	3.2	-	-	-	-	-	-	3.2
	Subtotal		3.2	-	-	-	-	-	-	3.2
Non-Market Rental	2019-2022 Community Housing Incentive Program	Increase the City's grant contribution towards non-profit and co-op housing projects offering deeper levels of affordability; e.g., more homes renting at income assistance and at BC Housing Income Limits, where the rent is geared to income.	17.0	-	-	17.0	-	-	-	-
	2019-2022 Housing Land Acquisition	Funding for the acquisition of additional sites to deliver social/supporting housing.	40.0	-	-	-	-	40.0	-	-
	2020 Capital Maintenance - Non-Market Housing Facilities	Ongoing maintenance of building components such as roof, mechanical, electrical, plumbing, etc. Projects will be prioritized based on condition assessment.	0.4	0.4	-	-	-	-	-	-
	2020 Furniture, Fixtures and Equipment for Non-Market Housing	Ongoing program for replacement of furniture, fixtures, and equipment at various non-market housing facilities	0.7	0.7	-	-	-	-	-	-
	Co-op Lease Grant Program	Grant program to assist with affordability and minimize the displacement of tenants as result of lease negotiations.	4.0	-	-	-	-	4.0	-	-
	Replacement of City-Operated Housing Residences	Grants to support tenants relocated from City-operated residences and to subsidize housing units to keep them affordable.	6.5	-	-	-	-	6.5	-	-
	Subtotal		68.6	1.1	-	17.0	-	50.5	-	-
Implementation and Research	Affordable Housing Staff Research	Staff resources to support implementation and delivery of affordable housing capital projects	0.6	-	-	-	-	0.6	-	-
	Subtotal		0.6	-	-	-	-	0.6	-	-
Total Affordable Housing			\$ 72.3	\$ 1.1	\$ -	\$ 17.0	\$ -	\$ 51.1	\$ -	\$ 3.2
Childcare										
Infant, Toddler and Preschool (0-4 Yrs)	2020 Renovations - Childcare Facilities (0-4 Yrs)	Renovations program to keep facilities functional and efficient for childcare facilities for preschool children (ages 0-4 years)	0.2	0.2	-	-	-	-	-	-
	Childcare at Marpole Library - Design	Consulting services for the renewal and expansion of the childcare component of the Marpole branch library	3.5	-	-	-	-	-	-	3.5
	New Childcare at Marpole-Oakridge - Design	Consulting services for the renewal and expansion of the 45-space daycare and preschool childcare component of the community centre at Oak Park	0.4	-	-	-	-	-	-	0.4
	Renewal of Marpole Oakridge Childcare - Planning	Consulting services for the renewal and expansion of the childcare component of the community centre at Oak Park. The Centre will be expanded to 40,000 sq ft with 45 spaces of daycare. Preschool currently on site will be expanded to 60 spaces	0.8	0.8	-	-	-	-	-	-
	West Fraser Lands Childcare	Creation of 74 new childcare spaces West Fraser Lands (WFL)	2.5	-	-	-	-	-	-	2.5
	Subtotal		7.4	1.0	-	-	-	-	-	6.4
Implementation & Research	2019-2022 Planning & Overhead - Childcare Facilities	Staff support for the delivery of childcare projects and social infrastructure plan.	0.8	-	0.3	-	-	-	-	0.5
	Subtotal		0.8	-	0.3	-	-	-	-	0.5
Total Childcare			\$ 8.2	\$ 1.0	\$ 0.3	\$ -	\$ -	\$ -	\$ -	\$ 6.9
Parks and Open Spaces										
Park Land	2019-2022 Park Land Acquisition	New park land acquisitions, with locations to be determined and subject to purchase agreements. There is a continued focus on an acquisition on the Fraser River Waterfront, expanding the functionality of existing parks and adding natural areas.	20.0	-	-	-	-	20.0	-	-

2020 Capital Budget approved in Dec. 2019

Category	Project/Program Name	Project/Program Description	2020 Multi-Year Budget	City				Development		Partner
				Borrowing Authority	Operating Revenue that funds Capital	Special Purpose Reserves	Reallocation of Existing Project Budget	Developer Contributions	User Fees and Levies	External
	Subtotal		20.0	-	-	-	-	20.0	-	-
	2019-2022 Dog Parks - New/Upgrades	This program is for the ongoing implementation of the People, Parks and Dogs Strategy. Coopers' Park, Crab Park at Portside, Musqueam Park, and Charleson Park are priority locations for work beginning in 2020.	0.6	-	0.1	-	-	0.5	-	-
	2019-2022 Neighbourhood Areas - Emerging Park Board Priorities	This program is for new park improvement projects that are determined through the Park Board's on-line park improvement request program and emerging Board priorities. Examples include basketball court upgrades, park benches, Neighbourhood Matching Fund, and picnic tables.	0.2	-	-	-	-	0.2	-	-
	2019-2022 Park Capital Project Management	Staffing to support Parks and Open Spaces capital project delivery.	4.0	-	0.4	-	-	3.6	-	-
	2019-2022 Park Universal Access Improvements	Park staff will be undertaking an accessibility audit of parks to determine priority areas for new improvements in 2020. New park amenities like accessible beach mats are included in this budget.	0.2	-	-	-	-	0.2	-	-
	2019-2022 Parks and Recreation Studies	VanPlay indicates priorities to address growth for 2020 including ongoing work on the Stanley Park Comprehensive Plan, a community centre facility strategy, and other policies and park master plans.	1.2	-	0.2	-	-	1.0	-	-
	2019-2022 Skate and Bike Parks - New/Upgrades	This program supports the pending Skateboard Strategy that will assess current conditions, identify gaps, determine a 10 year vision and develop an implementation plan, including design for at least one new skateboard park. The consulting scope will include public engagement.	0.5	-	-	-	-	0.5	-	-
Park Amenities	Barclay Square Park Renewal - Design	In 2020 an engagement and design process about new amenities in Barclay Square Park is scheduled to begin.	0.2	-	-	-	-	0.2	-	-
	Burrard Slopes - New Park Planning	Public engagement about plans for a new park in the Burrard Slopes neighbourhood will begin in 2020.	1.0	-	-	-	-	1.0	-	-
	Master Plan for John Hendry Park	Subject to Park Board approval of a new plan for John Hendry Park, this budget is to initiate construction drawings for new park amenities in 2020.	0.5	0.1	-	-	-	0.4	-	-
	Neighbourhood Areas - General Brock Park	General Brock Park is expanding to support parks and recreation needs of new residents on the Kingsway Corridor. Public engagement about a park renewal plan is targeted to begin in 2020.	0.2	-	-	-	-	0.2	-	-
	Oak Park Master Plan	Continuing work on the Oak Park Master Plan related to the new Marpole Community Centre and Outdoor Pool.	0.4	-	-	-	-	0.4	-	-
	Queen Elizabeth Master Plan - Cambie Corridor Park Development	Development of Queen Elizabeth Park Master Plan and new park amenities in this destination park, including design of a new commemorative garden area in 2020.	0.4	-	-	-	-	0.4	-	-
	Renewal - Quilchena Park/Riverside Park	This budget is to address increasing park uses adjacent to the Arbutus Greenway. In 2020, Park Board staff efforts will focus on engagement about the related renewal of William Mackie Park. This budget funds consulting and engagement work.	0.1	-	-	-	-	0.1	-	-
	Renewal of Jonathan Rogers Park	Jonathan Rogers Park in Mount Pleasant is in need of renewal. A new dog off-leash area, skateboarding facility and playground are priorities. Community engagement will begin in 2020.	0.2	0.1	-	-	-	0.2	-	-
	West End Park Redevelopment	This budget includes planning and engagement work for the West End waterfront park master plan (Sunset Beach to English Bay).	0.2	-	-	-	-	0.2	-	-
	Subtotal		9.8	0.2	0.8	-	-	8.8	-	-

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Category	Project/Program Name	Project/Program Description	2020 Multi-Year Budget	City				Development		Partner
				Borrowing Authority	Operating Revenue that funds Capital	Special Purpose Reserves	Reallocation of Existing Project Budget	Developer Contributions	User Fees and Levies	External
Programmed Activity Areas	2019-2022 Running Tracks Renewals	Funds to upgrade and expand track and field amenities at the Templeton and Kerrisdale Park sites in alignment with the Track and Field Strategy recommendations.	0.2	-	0.1	-	-	0.1	-	-
	Competitive Track and Field Training Facility	Vancouver's Track and Field Strategy guides the planning, programming, operations and maintenance of track and field facilities: this project will upgrade an existing track and field facility at Vancouver Technical School including a 400 meter competition level track surface with field events and spectator seating. Design of the new facility is scheduled to begin in 2020.	0.5	-	-	-	-	0.5	-	-
	Renewal/Upgrades of Baseball and Softball Diamonds	Sports fields across the city are in need of upgrade, expansion and renewal, and this program provides funds for new ball diamond backstops and grass field surface upgrades.	0.1	-	0.0	-	-	0.1	-	-
	Subtotal		0.8	-	0.1	-	-	0.7	-	-
Seawall and Waterfront	2019-2020 Shoreline Maintenance	This program funds shoreline work necessary at Fraser River, Riverfront, Kitsilano, Hadden and Vanier Parks. The repairs include repairing/rebuilding revetments damaged by storms and erosion, as well as stabilizing slopes to ensure pathway user safety adjacent to shorelines.	0.2	-	0.2	-	-	-	-	-
	2019-2022 Marine Structures (Piers, Docks, Boardwalk)	This program funds the replacement, upgrade and expansion of marine structures, piers, decks, swimming rafts and boardwalks. The Alder Bay Dock at the False Creek Community Centre is a priority project as is a condition assessment of the Jericho Beach Park Pier. Boardwalks in Fraser River Park, John Hendry Park, the New Brighton and Kerr Street piers also need to be addressed.	1.0	1.0	-	-	-	-	-	-
	2020 Seawall Maintenance Program	Seawall inspections and erosion repairs to Olympic Village granite steps.	0.5	0.5	-	-	-	-	-	-
	Subtotal		1.7	1.5	0.2	-	-	-	-	-
Urban Forest and Natural Features	2019-2022 Park and Street Trees	Planting of trees on parks, streets and other locations to meet the Greenest City Action Plan target of an additional 150,000 trees planted by 2020. This includes Streets and Boulevards, Parks, Reforestation areas and the Public Tree Sale program to support the growth of the urban forest canopy: estimate 15,000 trees to be planted in 2020 to complete this goal.	3.2	-	0.2	-	-	3.0	-	-
	2019-2022 Stanley Park Cliff Scaling	Annual capital maintenance program for the sandstone cliffs in Stanley Park above the seawall between 3rd Beach and the Lion's Gate bridge. Cliff scaling improves safety for seawall users by reducing the likelihood of falling rocks.	0.1	-	0.1	-	-	-	-	-
	Biodiversity Projects	The City's Greenest City Action Plan and Park Board Biodiversity Strategy call for new natural areas in parks to provide more people with access to nature. Priority projects for 2020 include furthering work on Tatlow/Volunteer Park and completing the first phase of the Beaver Lake and Beaver Creek restoration in Stanley Park. This program also provides funding for environmental programs including work with stewardship groups, the Neighbourhood Matching Fund, urban wildlife management, environmental education, pollinator and bird enhancement landscape projects, native plant projects and species at risk support.	0.8	-	-	-	-	0.8	-	-
	Subtotal		4.0	-	0.3	-	-	3.8	-	-

2020 Capital Budget approved in Dec. 2019

Category	Project/Program Name	Project/Program Description	2020 Multi-Year Budget	City				Development		Partner
				Borrowing Authority	Operating Revenue that funds Capital	Special Purpose Reserves	Reallocation of Existing Project Budget	Developer Contributions	User Fees and Levies	External
General Features & Infrastructure	2019-2022 Community Gardens	New community gardens and community garden features in parks, with locations to be determined.	0.1	-	-	-	-	0.1	-	-
	2019-2022 Irrigation Systems & Water Conservation	Irrigation systems are important features that reduce the use of potable water in parks. Completing designs and starting construction of new irrigation systems for Queen Elizabeth and Stanley Park are the priorities for 2020.	0.5	-	0.3	-	-	0.3	-	-
	2019-2022 Park Bridges	This budget is for design and construction of repairs to the Stanley Park overpass located near the Rowing Club at the Georgia Street entry to the park.	0.4	0.4	-	-	-	-	-	-
	2019-2022 Park Drainage Systems	Upgrades and replacements of green drainage systems in parks, including Kitsilano Beach Park in 2020.	0.3	-	0.3	-	-	-	-	-
	2019-2022 Park Pathways	Funds for new and renewed pathways in parks, such as Prospect Point and VanPlay recommendations for new pathway circuits to provide links to and through park spaces to recreation destinations.	0.1	-	-	-	-	0.1	-	-
	2019-2022 Paving Park Roads/Parking Lots	Pavement and parking lot upgrades with continued work anticipated in Stanley and Devonian Harbor Parks.	0.6	0.6	-	-	-	-	-	-
	2020 Green Infrastructure	For the implementation of the rainwater strategy in parks – new green infrastructure and drainage projects to support the city -wide initiative. This fund is for planning and design of new infrastructure with locations to be determined by Park Board in collaboration with Engineering.	0.4	-	-	-	-	0.4	-	-
	Mountainview Cemetery Road Repair	Critical repairs to the Mountainview Cemetery road network	0.3	0.3	-	-	-	-	-	-
	Subtotal		2.6	1.3	0.5	-	-	0.8	-	-
Park Buildings	2020 Capital Maintenance - Park Buildings	Ongoing maintenance of building components such as roof, mechanical, electrical, plumbing, etc. Projects will be prioritized based on condition assessment.	2.0	2.0	-	-	-	-	-	-
	Subtotal		2.0	2.0	-	-	-	-	-	-
Total Parks and Open Spaces			\$ 40.9	\$ 5.0	\$ 1.9	\$ -	\$ -	\$ 34.1	\$ -	\$ -
Arts and Culture										
Cultural Facilities	2020 Capital Maintenance - Cultural Facilities	Ongoing maintenance of building components such as roof, mechanical, electrical, plumbing, etc. Projects will be prioritized based on condition assessment.	3.5	3.5	-	-	-	-	-	-
	2020 Cultural Infrastructure Grant Program	This grant program supports Vancouver-based cultural non-profits, charities and First Nations Bands with planning, renovating, expanding and acquiring cultural facilities including preservation of existing and creation of new spaces.	1.5	-	1.5	-	-	-	-	-
	2020 Renovations - Cultural Facilities	Minor renovations/upgrades to cultural facilities including furniture, fixtures, and equipment replacement.	0.4	0.4	-	-	-	-	-	-
	Orpheum Theatre - Digital Bar Signs	Customer service and facility improvements to retain customer base and increase theatre utilization	0.1	-	-	0.1	-	-	-	-
	Queen Elizabeth Theatre - Office Renovations	Customer service and facility improvements to retain customer base and increase theatre utilization	0.1	-	-	0.1	-	-	-	-
	Queen Elizabeth Theatre Audio & Lighting Package	Customer service and facility improvements to retain customer base and increase theatre utilization.	0.7	-	-	0.7	-	-	-	-
	Queen Elizabeth Theatre Furniture	Customer service and facility improvements to retain customer base and increase theatre utilization	0.1	-	-	0.1	-	-	-	-
	Queen Elizabeth Theatre/Vancouver Playhouse - Video Package	Customer service and facility improvements to retain customer base and increase theatre utilization	0.4	-	-	0.4	-	-	-	-
	Vancouver Civic Theatres - Electronic Booking System	Customer service and facility improvements to retain customer base and increase theatre utilization	0.1	-	-	0.1	-	-	-	-
	Vancouver Civic Theatres - Marquee Signs	Customer service and facility improvements to retain customer base and increase theatre utilization	0.4	-	-	0.4	-	-	-	-

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Category	Project/Program Name	Project/Program Description	2020 Multi-Year Budget	City				Development		Partner
				Borrowing Authority	Operating Revenue that funds Capital	Special Purpose Reserves	Reallocation of Existing Project Budget	Developer Contributions	User Fees and Levies	External
	Vancouver Civic Theatres - Theatre Lighting Upgrades	Customer service and facility improvements to retain customer base and increase theatre utilization	0.2	-	-	0.2	-	-	-	-
	Vancouver Playhouse - Future Study and Renovation Planning	Customer service and facility improvements to retain customer base and increase theatre utilization	0.1	-	-	0.1	-	-	-	-
	Vancouver Playhouse Capital Maintenance	Customer service and facility improvements to retain customer base and increase theatre utilization	0.2	-	-	0.2	-	-	-	-
	Subtotal		7.7	3.9	1.5	2.4	-	-	-	-
Entertainment & Exhibition Facilities	2020 Capital Maintenance - Entertainment and Exhibition Facilities	Ongoing maintenance of building components such as roof, mechanical, electrical, plumbing, etc. Projects will be prioritized based on condition assessment.	1.8	1.8	-	-	-	-	-	-
	HP-PNE Master Plan: Infrastructure Implementation	Replace end-of-life infrastructure assets at Hastings Park	2.2	-	-	2.2	-	-	-	-
	Subtotal		4.0	1.8	-	2.2	-	-	-	-
Public Art	2019-2022 Maintenance of Existing Public Art	Projects for 2020 include routine maintenance and repairs for 12 - 15 artworks and major restoration of 3-5 artworks	0.0	-	-	0.0	-	-	-	-
	2019-2022 New Public Art on Public Property	Projects for 2020 include 5-6 artist-initiated commissions, 5-6 Indigenous murals, launch of a new grant program, temporary artworks for Arbutus Greenway and professional development for Indigenous and underrepresented artists.	0.4	-	-	0.4	-	-	-	-
	Subtotal		0.4	-	-	0.4	-	-	-	-
Heritage	2020 Chinese Society Legacy Grant Program	To build capacity for the rehabilitation of important heritage and cultural assets in Chinatown	0.9	-	-	-	-	0.9	-	-
	Heritage Façade Rehabilitation Program (HFRP)	To provide grants for the rehabilitation of heritage building facades or seismic stabilization of the heritage façade. This is citywide for buildings that are listed on the VHR.	0.1	-	0.1	-	-	-	-	-
	Heritage Incentive Program - Vancouver Heritage Foundation (VHF)	Grant to the Vancouver Heritage Foundation (VHF) to implement the Heritage House Conservation Program (HHCP)	0.3	-	0.3	-	-	-	-	-
	Subtotal		1.3	-	0.4	-	-	0.9	-	-
Total Arts and Culture			\$ 13.4	\$ 5.7	\$ 1.9	\$ 5.0	\$ -	\$ 0.9	\$ -	\$ -
Community Facilities										
Libraries and Archives	2020 Capital Maintenance - Libraries	Ongoing maintenance of building components such as roof, mechanical, electrical, plumbing, etc. Projects will be prioritized based on condition assessment.	1.5	1.5	-	-	-	-	-	-
	2020 Renovations - Libraries	Minor renovations and upgrades to various library branches to meet operations needs	0.2	0.2	-	-	-	-	-	-
	Archives Relocation to Central Library	Renewal and relocation of the existing Vancouver Archives from its current location in Vanier Park to Level 7 of the Central Library downtown.	16.0	2.0	-	-	-	4.0	-	10.0
	Planning/Design for renewal and expansion of Marpole Library	Consulting services for the renewal and expansion of the Marpole branch library located near Granville & 67th.	6.5	-	-	-	-	6.5	-	-
	Subtotal		24.2	3.7	-	-	-	10.5	-	10.0
Recreation facilities	2020 Capital Maintenance - Recreation Facilities	Ongoing maintenance of building components such as roof, mechanical, electrical, plumbing, etc. Projects will be prioritized based on condition assessment.	3.0	3.0	-	-	-	-	-	-
	2020 Renovations - Recreation Facilities	Minor renovations and upgrades to recreation facilities, including replacement of related furniture, fixtures, and equipment.	0.5	0.5	-	-	-	-	-	-
	Marpole Oakridge Outdoor Pool - Planning & Design	Detailed design for construction of an outdoor pool in the Marpole area.	2.0	-	-	-	-	2.0	-	-
	Renewal/Expansion of Marpole-Oakridge Community Centre - Design	Design phase for the renewal and expansion of the Marpole-Oakridge Community Centre	6.0	6.0	-	-	-	-	-	-
	Subtotal		11.5	9.5	-	-	-	2.0	-	-

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Category	Project/Program Name	Project/Program Description	2020 Multi-Year Budget	City				Development		Partner
				Borrowing Authority	Operating Revenue that funds Capital	Special Purpose Reserves	Reallocation of Existing Project Budget	Developer Contributions	User Fees and Levies	External
Social facilities	2019-2022 Planning & Overhead - Social Facilities	Staff resources and consultants for facility feasibility research and planning studies.	0.4	-	0.4	-	-	-	-	-
	2020 Capital Maintenance - Social Facilities	Ongoing maintenance of building components such as roof, mechanical, electrical, plumbing, etc. Projects will be prioritized based on condition assessment.	0.5	0.5	-	-	-	-	-	-
	2020 Downtown Eastside Capital Grant program	Matching grant allocation program to Downtown Eastside (DTES) non-profit organizations to strategically advance the social, economic and environmental objectives of the approved DTES Plan.	1.3	-	1.3	-	-	-	-	-
	2020 Renovations - Social Facilities	Minor renovations and upgrades to social facilities, including replacement of related furniture, fixtures and equipment	0.3	0.3	-	-	-	-	-	-
	2020 Social Policy Capital Grants	Capital grants to non-profit organizations to support critical community services.	1.1	-	0.6	-	-	0.5	-	-
	Indigenous Social Enterprise	To provide space for use by a non-profit organization to hire and support people with barriers of employment.	2.0	-	-	-	-	2.0	-	-
Subtotal			5.6	0.8	2.3	-	-	2.5	-	-
Total Community Facilities			\$ 42.6	\$ 14.0	\$ 2.7	\$ -	\$ -	\$ 15.9	\$ -	\$ 10.0
Public Safety										
Fire & Rescue	2020 Renovations - Fire Halls	Minor renovations and upgrades to fire halls	0.4	0.4	-	-	-	-	-	-
	Renewal of Vancouver Fire & Rescue Services Vehicles & Equipment	Replacement of nine end-of-life Vancouver Fire & Rescue Services equipment and vehicles, including fire apparatus and wildlands trucks; procurement in 2020 and deliveries in 2020 and 2021.	6.7	-	-	6.7	-	-	-	-
	Subtotal		7.1	0.4	-	6.7	-	-	-	-
Police	2020 Capital Maintenance - Vancouver Police Department Facilities	Ongoing maintenance of building components such as roof, mechanical, electrical, plumbing, etc. Projects will be prioritized based on condition assessment.	0.3	0.3	-	-	-	-	-	-
	2020 Renovations - Vancouver Police Department (VPD) Facilities	Minor renovations and upgrades to various Vancouver Police Department facilities to meet operations needs	0.4	0.4	-	-	-	-	-	-
	Renewal of Vancouver Police Department Vehicles & Equipment	Replacement of 36 end-of-life Vancouver Police Department equipment and vehicles, including a marine unit boat and light duty vehicles; procurement in 2020 and deliveries in 2020 and 2021.	2.0	-	-	2.0	-	-	-	-
Subtotal			2.6	0.6	-	2.0	-	-	-	-
Animal Control	2020 Capital Maintenance - Animal Control Facilities	Ongoing maintenance of building components such as roof, mechanical, electrical, plumbing, etc. Projects will be prioritized based on condition assessment.	0.1	0.1	-	-	-	-	-	-
Subtotal			0.1	0.1	-	-	-	-	-	-
Total Public Safety			\$ 9.8	\$ 1.1	\$ -	\$ 8.7	\$ -	\$ -	\$ -	\$ -
Civic Facilities and Equipment										
Administrative Facilities	2019-2022 Renovations of Administrative Facilities	Renovations to the City's administrative facilities. Scope of work for 2020 includes renovations to the City Hall building to optimize space utilization.	3.8	2.2	1.6	-	-	-	-	-
	2020 Capital Maintenance - Administration Facilities	Ongoing maintenance of building components such as roof, mechanical, electrical, plumbing, etc. Projects will be prioritized based on condition assessment.	1.0	1.0	-	-	-	-	-	-
	Renewal of City Hall Campus - Planning & Design	Developing a master plan and rezoning for the City Hall Precinct lands as part of a phased long-term development strategy for consolidating City offices and staff locations.	3.0	1.5	1.5	-	-	-	-	-
	Subtotal		7.8	4.7	3.1	-	-	-	-	-
	2020 Capital Maintenance - Service Yards	Ongoing maintenance of building components such as roof, mechanical, electrical, plumbing, etc. Projects will be prioritized based on condition assessment.	2.0	2.0	-	-	-	-	-	-
	2020 Renovations - Service Yards	Minor renovations and upgrades of Service Yards to keep the facilities functional and efficient	0.5	0.5	-	-	-	-	-	-

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				Borrowing Authority	Operating Revenue that funds Capital	Special Purpose Reserves	Reallocation of Existing Project Budget	Developer Contributions	User Fees and Levies	External
Service Yards, Vehicles & Equipment	Renewal of Engineering Vehicles & Equipment	Replacement of 50 end-of-life Public Works and sewer/water equipment and vehicles, including tandem dump trucks, paving equipment, pickups, and vans; procurement in 2020 and deliveries in 2020 and 2021.	10.1	-	-	10.1	-	-	-	-
	Renewal of Manitoba Service Yard - Planning	Planning and design for the future renewal of Manitoba Yard facility, including development of a master plan for the organization of the service yard.	1.0	-	1.0	-	-	-	-	-
	Renewal of Other Vehicles & Equipment	Replacement of five end-of-life City equipment and vehicles, including Emergency Management, Real Estate & Facilities Management (REFM), and Licensing and Inspections; procurement in 2020 and deliveries in 2020 and 2021.	0.2	-	-	0.2	-	-	-	-
	Renewal of Parks Vehicles & Equipment	Replacement of 20 end-of-life park equipment and vehicles, including aerial, chip box trucks and tractor loaders; procurement in 2020 and deliveries in 2020 and 2021.	2.1	-	-	2.1	-	-	-	-
	Sunset Service Yard Renewal - Planning	Phase 1 of renewal of Sunset Yard, including consulting services for replacement of the current staff facilities with a new facility.	1.5	1.5	-	-	-	-	-	-
	Subtotal		17.5	4.0	1.0	12.5	-	-	-	-
All City Facilities	2020 Accessibility Program	City-wide program to improve accessibility in civic facilities, particularly for highly utilized public venues.	0.5	0.5	-	-	-	-	-	-
	2020 Civic Facility Security Program	City-wide program to improve security design and systems in civic facilities	0.3	0.3	-	-	-	-	-	-
	2020 Civic Facility Seismic Program	Ongoing program for structural and non-structural seismic assessment and upgrades of City-owned buildings	0.1	0.1	-	-	-	-	-	-
	2020 Environmental Program	City-wide program for environmental improvements to City facilities, including hazardous material abatement, air quality assessments, assessment of City owned sites, contaminated site remediation, etc.	0.3	0.3	-	-	-	-	-	-
	2020 Ergonomic Furniture Program	City-wide program to replace end-of-life chairs and desks with ergonomic furniture. Priority will be to provide stand-sit desks for staff with medical concerns.	0.3	0.3	-	-	-	-	-	-
	2020 Planning and Research - Administration Facilities	Feasibility studies for Administrative facilities	0.1	-	0.1	-	-	-	-	-
	2020 Planning and Research - Childcare Facilities	Feasibility studies for Childcare facilities	0.0	-	0.0	-	-	-	-	-
	2020 Planning and Research - Cultural Facilities	Feasibility studies for Cultural facilities	0.5	-	0.5	-	-	-	-	-
	2020 Planning and Research - Non-Market Housing Facilities	Feasibility studies for Non-Market Housing facilities	0.1	-	0.1	-	-	-	-	-
	2020 Planning and Research - Service Yards	Feasibility studies for Service Yards	0.1	-	0.1	-	-	-	-	-
	2020 Planning and Research - Social Facilities	Feasibility studies for Social facilities	0.1	-	0.1	-	-	-	-	-
	2020 Real Estate and Facilities Management (REFM) Capital Planning	For City-wide facilities planning and strategic City land/site planning, and coordinating with Planning staff in negotiations with developers for public benefits and/or community amenities for rezoning and building development applications	2.4	-	2.4	-	-	-	-	-
	Programing/Site Fit Test for VPD Headquarters	Consulting services for the appraisal and testing of potential sites to be considered for a consolidated Vancouver Police Department headquarters.	0.1	-	0.1	-	-	-	-	-
	Subtotal		4.6	1.4	3.2	-	-	-	-	-
Total Civic Facilities and Equipment			\$ 29.8	\$ 10.1	\$ 7.3	\$ 12.5	\$ -	\$ -	\$ -	\$ -
Transportation & Street Use										

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				Borrowing Authority	Operating Revenue that funds Capital	Special Purpose Reserves	Reallocation of Existing Project Budget	Developer Contributions	User Fees and Levies	External
	2019-2022 Dock Replacement	The privately operated ferry services in False Creek are an extension of the transit system and help to encourage walking and cycling. The service is delivered by Aquabus and False Creek Ferries. The City owns and is responsible for the ongoing operations and maintenance of these 6 docks: Aquatic Centre, Hornby, David Lam, Stamps Landing, Spyglass, and The Village. Deliverables for 2020 include a detailed condition assessment that will shape the replacement plan in future years.	0.5	0.5	-	-	-	-	-	
	2020 Design Investigation for Transportation	This program provides for the investigation of new design standards, design procedures, and asset management assessments and processes for related streets infrastructure. The objective is to generate economic and infrastructure benefits to the City through the implementation of designed construction products, technology, and increased use of sustainable materials.	0.3	-	0.3	-	-	-	-	
	2020 H-Frame Replacement	This program is for the replacement of power supplies to signalized intersections and streetlights, the replacement of lane lights originally installed through the Local Improvements program, and for the addition of poles and conduits as BC Hydro removes their H-Frames structures in downtown lanes. This program also funds the City's share of joint trenching. The 2020 program funding will provide for the installation of 6 kiosks and lane lighting upgrades for 6 blocks.	1.5	1.5	-	-	-	-	-	
	2020 Local Roads Rehabilitation	This program provides for the rehabilitation of the City's local streets where major capital restoration work is required to maintain the integrity of the street asset and extend the service life of the entire road structure. This year's funding is expected to provide for the rehabilitation of approximately 8 kilometers of local street pavements.	2.0	1.8	-	-	0.2	-	-	
	2020 Major Bridge Maintenance	This funding provides for the capital rehabilitation and maintenance of 25 vehicular bridges. Typical repairs completed under this program include the major repairs and replacement of expansion joints, drainage systems, detailed investigations and concrete and/or steel repairs. 2020 deliverables of this program include the continuation of the bridge inspection program, 4-year Granville gantry inspection and maintenance program, repairs to drainage, railing and expansion joints, and the seismic upgrade design for two bridges over Boundary Road and the Clark Drive Overpass.	0.9	0.9	-	-	-	-	-	
	2020 Major Bridges - Coating	This program will provide funding for the paint phasing and implementation strategy. With other work underway for the Granville Bridge, there is an opportunity to complete focused coating renewal on select bridge components of the bridge.	0.9	0.9	-	-	-	-	-	
	2020 Neighbourhood Safety Improvements	Minor improvements on local streets to address neighbourhood safety and comfort concerns.	0.3	0.3	-	-	-	-	-	
	2020 New Pedestrian & Bicycle Signals	This program provides funding to construct new pedestrian/bicycle traffic signals. Detailed studies are undertaken each year to determine locations that require pedestrian/cyclist actuated traffic signal controls. The 2020 Pedestrian/Bicycle Signals Program will provide funding for the installation of five new pedestrian/bicycle signals.	1.0	-	-	-	0.8	-	0.2	

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	2020 Pedestrian & Bike Signal Rehabilitation	This program provides funding to rehabilitate and modify existing pedestrian/bicycle traffic signals. Activities typically include the replacement or upgrade of aging equipment to bring signals up to current electrical code standards, replacement of rusty poles, as well as modifications (installation of countdown timers, cyclist push buttons, etc.). The scope of work planned for the 2020 program is full rehabilitation of approximately three pedestrian/bicycle signals.	1.0	0.8	-	-	-	-	-	0.2
	2020 Pedestrian Curb Ramp Program	This program funds the installation/reconstruction of curb ramps at street and lane intersections to provide easier access to the sidewalks. This program benefits many pedestrians including persons with disabilities, persons who use mobility aids and persons with strollers and shopping trolleys. The 2020 program will fund approximately 230 curb ramp installations.	1.3	0.4	-	-	-	0.8	-	-
	2020 Rehabilitation of Electrical Service Panels & Kiosks	Safety and reliability are key requirements of a power distribution network. Service panels provide a reliable means of isolation for lockouts and faults clearance; most service panels in the city are nearing the end of their service life. The 2020 program funding will provide for the replacement of approximately 20 service panels.	0.2	0.2	-	-	-	-	-	-
	2020 Rehabilitation of Major Roads - City	This program provides for the rehabilitation of the City's arterial streets where major capital restoration work is required to maintain the integrity of the street asset and extend the service life of the entire road structure. This year's funding is expected to provide for the rehabilitation of approximately 2.3 kilometers of arterial City pavements, including MacDonald Street (1st to 4th Avenue), Nanaimo Street (Hastings to 1st Avenue), and Homer Street (Pender to Cordova).	4.2	3.6	-	-	-	0.6	-	-
	2020 Rehabilitation of Major Roads - MRN (Major Road Network)	This program provides the rehabilitation of the City's arterial streets that are part of the region's Major Road Network (MRN) and must be maintained to a regional standard. The 2020 program is expected to provide for the rehabilitation of approximately 3 kilometers of arterial MRN pavements, including Knight Street (41st Avenue to 53rd Ave), Nanaimo Street (McGill Street to Hastings Street) and Oak Street (64th Avenue to 71st Avenue)	5.2	-	-	-	-	-	-	5.2
	2020 Rehabilitation of Street Lighting & Poles	The program objectives are to ensure that the existing plant is upgraded and maintained to a level that provides safe and effective operation to meet the needs of the City of Vancouver and its residents. The City currently has 2,000 rusty poles which require replacement. In 2020, this program is expected to replace a minimum of 1,500 poles.	2.7	1.9	-	-	-	-	-	0.8
	2020 Rehabilitation of Street Pole Bases	The program objectives are to ensure that the existing plant is upgraded and maintained to a level that provides safe and effective operation to meet the needs of the City of Vancouver and its residents. There are areas in the city where underground conductors are directly buried (no conduit) and pole bases are sunken. In 2020, this program it is expected to pour 170 new bases.	0.4	0.4	-	-	-	-	-	-

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				Borrowing Authority	Operating Revenue that funds Capital	Special Purpose Reserves	Reallocation of Existing Project Budget	Developer Contributions	User Fees and Levies	External
Managing Transportation Network	2020 School Safety & Active Routes Improvements	Address safety needs at schools and undertake safety improvements (e.g., improved lighting technology for pedestrian crossings, pedestrian bulges, crosswalks, etc.) and improve active routes planning at schools.	0.6	-	-	-	-	0.6	-	-
	2020 Sidewalk Rehabilitation	This program provides funding to rehabilitate sidewalks where major reconstruction of the sidewalk is required to provide a safe and functional pedestrian area. Priority will be given to reconstructing sidewalks where there are higher levels of pedestrian activity. The 2020 program is expected to provide rehabilitation of sidewalk infrastructure on Richards Street (Hastings Street to Drake Street), Drake St (Burrard Street to Richards Street) and MacDonald St (1st Avenue to 4th Avenue) amongst others.	1.4	1.4	-	-	-	-	-	-
	2020 Signal Communication Rehabilitation	This program provides funding to rehabilitate existing copper and fiber communications network infrastructure, upgrade and expand the network for new industry standard signal controller technology, and update traffic signal system software and hardware.	0.5	0.5	-	-	-	-	-	-
	2020 Street Light Fixture Arm Rehabilitation	In conjunction with the replacement of rusty street light poles and other streetlight pole rehabilitation work, light fixture arms are replaced at the same time. There are non-standard fixture arms on non-standard street light poles and BC Hydro poles. The 2020 program funding will provide for the installation of approximately 500 light fixture arms.	0.4	0.4	-	-	-	-	-	-
	2020 Street Light Fixtures – Decorative/Pedestrian	The program objectives are to ensure that the existing plant is upgraded and maintained to a level that provides safe and effective operation to meet the needs of the City of Vancouver and its residents. The City has multiple decorative lighting fixtures, which are replaced by LED lighting when the existing fixtures fail. In 2020, decorative fixtures will be installed along Cambie Bridge and in certain Downtown areas.	1.2	1.2	-	-	-	-	-	-
	2020 Street Lighting - Infill	During roadway construction an opportunity is created to add additional lighting in areas which are below recommended guidelines. In addition, this program funds lighting requests by the Vancouver Police Department for areas where they feel lighting would improve safety and security. This program also funds requests from the public through the 311 service request process. The 2020 program funding will provide for upgrading approximately 25 intersections with new lighting fixtures to enhance public safety.	0.7	-	-	-	-	0.7	-	-
	2020 Traffic Signal Controller Replacement	This program provides funding to replace and upgrade existing traffic signal controllers, these devices control the sequence of traffic lights. In 2020, this program is expected to replace 10 controllers.	0.5	0.5	-	-	-	-	-	-
	2020 Traffic Signal LED Replacement	The City of Vancouver currently manages 870 signalized intersections. In the early 2000's, an arrangement was established with BC Hydro to retrofit the entire traffic signal infrastructure of incandescent bulbs to more efficient LED. The program was intended to fund re-lamping the entire city on an ongoing basis (approximately every 7-10 years). The 2020 Traffic Signal LED Replacement program will provide funding to replace LED signal head lenses at approximately 125 intersections.	0.5	-	-	0.5	-	-	-	-

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				Borrowing Authority	Operating Revenue that funds Capital	Special Purpose Reserves	Reallocation of Existing Project Budget	Developer Contributions	User Fees and Levies	External
	2020 Traffic Signal Rehabilitation	Traffic Signal Rehabilitation addresses the renovation and replacement of traffic signal equipment, modification of existing signals, and enhancements to operational reliability through Uninterruptable Power Supplies and Traffic Signal Management System upgrades. Deliverables for 2020 include the substantial rehabilitation of 5-6 traffic signals and components and subcomponents at various traffic signals, as well as upgrades to and rehabilitation of the Traffic Signal Management System (TSMS) software, hardware, and associated field infrastructure.	2.5	1.2	-	-	-	-	-	1.3
	2020 Transportation Monitoring and ITS (Intelligence Transportation Systems) - Planning	There is an increased need to collect transportation-related data to help guide decisions in planning and design. This data will help to track the City's progress in meeting sustainable transportation targets. Scope of work for the 2020 program will include data collection and monitoring of streets, including travel time monitoring on corridors and expanding pedestrian/bike counters.	1.0	-	-	-	-	1.0	-	-
	2020 Transportation Monitoring and ITS (Intelligence Transportation Systems) Replacement	There is an increased need to collect transportation-related data to help guide decisions in transportation planning and design. This data will help to track the City's progress in meeting sustainable transportation targets. Scope of work for the 2020 program includes replacing/rehabilitating permanent count stations and traffic monitoring cameras as failures occur.	0.2	-	0.2	-	-	-	-	-
	2020 Transportation Planning Studies	Planning studies and analysis to manage effective use of the City's transportation network and plan for future outcomes.	1.1	-	0.5	-	-	0.6	-	-
	2020 Trolley Pole Replacement	This program is for the replacement of aging Coast Mountain Bus Company (CMBC) trolley poles and the transfer of City infrastructure from the existing poles to the new ones. CMBC has a program to replace these poles based on inspections; the City cost-shares 50% of cost to replace the poles. In 2020 this program is expected to deliver 100 new poles and its associated electrical work.	1.2	1.2	-	-	-	-	-	-
	2020 Underground Street Lighting Conduits	This program's objectives are to ensure that the existing plant is upgraded and maintained to a level that provides safe and effective operation to meet the needs of the City of Vancouver and its residents. The 2020 program funding will provide for the installation of two kilometers of underground conduits.	2.0	1.8	-	-	-	0.2	-	-
	2020 Zero Fatalities & Serious Injuries Program	This program provides funding to implement safety spot improvements prioritized for collision hot spots.	1.0	-	-	-	-	0.8	-	0.2
	Arterial Improvement, Congestion & Transit Reliability	This program provides funding for minor arterial improvements, prioritized for congestion management and transit reliability, as well as construction of various corridor improvements to better manage congestion, including signage and signal optimization. The funding will enable the improvement of two arterial corridors.	1.0	-	-	-	-	0.8	-	0.3
	At-Grade Rail Crossing Upgrades	Upgrades to at-grade rail crossings.	1.5	1.5	-	-	-	-	-	-

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	Bridgeway Slope Stabilization	Bridgeway east of Skeena forms part of the Trans Canada Trail. Remnants of the old 2nd Narrows bridge were found supporting the pedestrian trail. The remnants are in poor condition and the slope is in a perceived unstable condition which led to a closure of the roadway to vehicular traffic and the monitoring of the slope. The 2020 program will fund the shoring of the existing structure.	0.8	0.5	-	-	-	0.4	-	-
	City Wide Street Lighting LED Replacement	Most of the current Street Lighting infrastructure operates under high pressure sodium (HPS) technology. The objective in 2020 is to replace 5,500 fixtures with LED.	3.0	-	-	3.0	-	-	-	-
	Curbside Electrical Power Supply	This program supports the construction of infrastructure that enables continuous power supply at the curbside for the benefit of communities and businesses. The program supports power access for film and special events as well as food trucks, EV charging stations, e-bikes, digital advertising and 5G networks . This program is part of the City's response to Climate Emergency by enabling clean sources of power that translate into a reduction in fossil fuel use.	1.8	-	0.4	-	-	1.4	-	-
	Subtotal		45.2	23.4	1.4	3.5	-	8.8	-	8.1
Expand Sustainable Capacity	Georgia Gateway West Complete Street Improvements	Complete Street improvements to Georgia and adjacent streets to improve active transportation facilities, normalizing the Pender/Georgia intersection, and support redevelopment. The Complete Streets program will help the City achieve its Transportation 2040 targets on mode share and safety, supports the Renewable City Strategy, and will deliver better streets for all users and promote sustainable transportation.	0.3	-	-	-	-	0.3	-	-
	2020 Active Transportation Design Staffing	Transportation Design staffing supporting delivery of Active Transportation projects.	1.0	-	-	-	-	1.0	-	-
	2020 Active Transportation Planning Staffing	Transportation Planning staffing supporting delivery of Active Transportation projects.	1.0	-	-	-	-	1.0	-	-
	2020 New Sidewalks	This program provides funding for the installation of new sidewalks to facilitate the completion of the City's sidewalk network. There are over 250 kilometers of sidewalks remaining to be constructed in the City. Sidewalks will be selected for construction based on network priorities. New sidewalks may also be selected through resident requests as part of the Local Improvement petition process.	1.8	-	-	-	-	0.9	-	0.9
	2020 Transit-Related Improvements	This program includes transit-related improvements that provide additional operational and passenger user benefits, accessibility upgrades, and enhanced public realm. There is also ongoing need to upgrade passenger landing areas at bus stops due to ongoing transit service changes. A key deliverable for 2020 will be the completion of upgrades related to the implementation of the new B-Line service along 41st Avenue from UBC to Joyce Collingwood Station.	0.5	-	0.5	-	-	-	-	-
	Active Transportation Corridors & Spot Improvements	Expansion and improvement of walking, cycling, and greenways networks to enhance safety and comfort for people of all ages and abilities and for all road users in support of climate emergency goals. The 2020 program will be focused on major green, complete street improvement projects.	21.4	-	-	-	-	13.2	-	8.2

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	Broadway Subway Project Office	Establishment of a Project Office to facilitate and manage the design and construction of Millennium Line Broadway Extension.	1.1	-	-	-	-	1.1	-	-
	Cambie Corridor Complete Street Improvements - King Edward to 37th	This project supports the implementation of a complete street concept, as approved in 3rd Phase of the Cambie Corridor Plan. This project includes improvements to walking and cycling facilities, as well as opportunities to incorporate green infrastructure.	1.0	-	-	-	-	1.0	-	-
	Gastown Complete Street Improvements	Street improvements in the Gastown area, as part of the Gastown Complete Streets program, including street rehabilitation. The Complete Streets program will help the City achieve its Transportation 2040 targets on mode share and safety, supports the Renewable City Strategy, and will deliver better streets for all users and promote sustainable transportation. In 2020, this project includes the redesign of the Blood Alley public space.	1.7	-	-	-	-	1.7	-	-
	West End Active Transportation Improvements	This project supports the Greenway improvements to Bute Street as part of the West End Plan. In 2020, the budget will help to define the future plan through public and stakeholder engagement.	0.2	-	-	-	-	0.2	-	-
	Subtotal		30.0	-	0.5	-	-	20.4	-	9.1
Public Space & Street Use	2020 Street Activities (New)	Street Activities improvement capital contributes to a variety of public realm activations and public space improvements that contribute to a vibrant and connected city. New 2020 activities include public space pilots and innovation, such as parklets, pilot plazas, and curbside seating.	0.7	-	-	-	-	0.7	-	-
	2020 Street Activities (Renewal)	Street Activities renewal capital contributes to the renewal of a variety of public realm activations and public space improvements that contribute to a vibrant and connected city. The 2020 renewal program will fund horticulture renewal, wayfinding renewal, street use and street furniture planning and policy, and bike racks.	0.5	-	0.5	-	-	-	-	-
	Vancouver Art Gallery Plaza Extension	This project will complete the work that connects the North Plaza of the Vancouver Art Gallery with the 800 block of Robson Street. Completion of this project will provide a unified look and feel to the entire Robson Square. The City is committed to upgrading this public space in coordination with our Provincial, UBC and VAG partners.	0.6	-	-	-	-	0.6	-	-
	Subtotal		1.8	-	0.5	-	-	1.3	-	-
Total Transportation & Street Use			\$ 77.0	\$ 23.4	\$ 2.4	\$ 3.5	\$ -	\$ 30.5	\$ -	\$ 17.2
One Water										
	2019-2022 Access to Water	As part of the regional goal and Greenest City Action Plan (GCAP) goal of promoting the quality of filtered tap water, more access to water was identified as a goal. This program will increase the number of fountains and water access locations within the City and provide funding to build temporary fountains for extreme heat events.	0.1	-	0.1	-	-	-	-	-
	2019-2022 Aging Hydrant Replacement	This program provides for the replacement of fire hydrants at the end of their useful life and targets failing hydrants. Generally, hydrants are replaced when the water main is replaced; however, hydrants have a shorter lifespan than the main (75 vs 120 years) and require more frequent replacement to keep up with deterioration.	0.4	-	0.4	-	-	-	-	-

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Potable Water	2019-2022 Aging Water Meter Replacement	This program provides funding for the replacement of aging water meters. The City has nearly 21,000 meters that provide volumetric measurement for revenue collection. Over time, the accuracy of meters gradually declines, causing the meters to under read consumption. This program will replace meters that are found to be deteriorating in condition and/or accuracy. Approximately 250 meters of various sizes are expected to be replaced in 2020.	0.7	-	0.7	-	-	-	-	
	2019-2022 Aging Water Service Replacement	This program provides funding for reactive replacement of leaking water services. Leaking services are assessed on a case by case basis to determine repair versus replacement. Funding will provide for the reactive replacement of approximately 350 water services.	2.3	-	2.3	-	-	-	-	
	2019-2022 Dedicated Fire Protection System	The Dedicated Fire Protection System (DFPS) is approaching 25 years in age and key mechanical, electrical and control systems within the pumping stations are at end-of-life. This program provides capital funding to support the replacement of aging components to ensure the consistent performance of the DFPS system. Work planned for 2020 includes instrumentation and system security upgrades.	0.3	-	0.3	-	-	-	-	
	2019-2022 Engineering and Site Investigation	This program provides funding for engineering, geotechnical, environmental, etc. work prior to the construction of major assets as well as innovation research. Funding will support the condition assessments and field investigations to support the design and consultancy work to support optimizing capital investments.	0.5	-	0.5	-	-	-	-	
	2019-2022 Growth Related Utility Upgrades - Water	This program provides funding for the design and construction of new water mains or upgrades related to growth within the City. Planned scope of work for 2020 is construction of 2.4 kilometers of distribution mains.	3.8	-	-	-	3.8	-	-	
	2019-2022 Telemetry System - New and Replacement	This program provides funding to replace the remote monitoring infrastructure for both the potable water system and the dedicated fire protection system (DFPS). The existing telemetry system needs replacements or upgrades to the Supervisory Control and Data Acquisition (SCADA) system components that are obsolete due to technological advancements and/or at end-of-life.	0.4	-	0.4	-	-	-	-	
	2019-2022 Water Conservation Capital Project	A key component in the Greenest City Action Plan (GCAP) water strategy recommends that the City demonstrate water conservation leadership within its own facilities. Funding under this program will be used to focus on upgrades in civic facilities that promote water conservation.	0.1	-	0.1	-	-	-	-	
	2019-2022 Water Pressure and Loss Management	The program supports operational improvements to reduce system leakage and the hiring of consultants to assess the feasibility of implementing pressure management systems to reduce leakage.	0.2	-	0.2	-	-	-	-	
	2019-2022 Water Quality Capital	This program provides funding for projects aimed at improving water quality and supports Greenest City Action Plan (GCAP) related initiatives. In 2020, funding in this program will be used for infrastructure renewals to improve and maintain water quality in areas of the system where low demands contribute to reduced water quality.	0.1	-	0.1	-	-	-	-	

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	2019-2022 Water Transmission Main Replacement	Transmission mains pipes are designed to move large quantities of water from the source of supply. Funding for 2020 will support the replacement of 1.4 kilometers of transmission mains pipes that are at the end of their service life.	7.5	-	7.5	-	-	-	-	-
	2020 Distribution Main Replacement	This program provides funding for the replacement of aging and deteriorating mains within the City's water distribution system. For 2020, the goal is to replace approximately 9.6 kilometers of the total distribution main system.	14.3	-	14.3	-	-	-	-	-
	2020 Integrated Water Management	This program supports the review of new development applications for necessary upgrades to water, sewer and drainage infrastructure, including guidelines/requirements for groundwater and rainwater management. It also administers the Utilities Development Cost Levy revenues and provides oversight for the design and construction of growth-triggered upgrades.	1.3	-	1.3	-	-	-	-	-
	2020 New Water Meters	This program involves the installation of new commercial water meters required for all new developments and for major renovations to existing commercial or multi-family properties. The program is fully cost recovered from permit fees. The quantity of work under this program is driven by development. Approximately 120 new commercial/multifamily water meters are installed each year.	0.0	-	-	-	-	0.0	-	-
	2020 PRV Replacement and Refurbishment	Pressure Reducing Valves (PRV) are used to regulate pressure in the water system in stations around the city. Work planned for 2020 includes planning and design for the replacement of three PRV stations by 2022.	0.8	-	0.8	-	-	-	-	-
	2020 System Extension & Minor Improvements (One Water)	Increase seismic resiliency of key portions of the City's water network ("hardened grid").	0.3	-	0.3	-	-	-	-	-
	2020 Water Commercial Connections	This program involves the installation of new commercial water meters required for all new developments and for major renovations to existing commercial or multi-family properties. The program is fully cost recovered from permit fees. The quantity of work under this program is driven by development.	0.7	-	-	-	-	0.7	-	-
	Emergency Preparedness (One Water)	A report prepared by Metro Vancouver and REAC (Metro Vancouver Regional Engineers Advisory Committee) Water Sub-Committee provides guidelines for municipalities on how to strategically prepare for providing water to customers in an emergency event such as an earthquake that renders portions of the water system unusable. The 2020 program scope includes developing a Temporary Provision of Water Strategy for the City and procurement of the services and materials to support it.	0.1	-	0.1	-	-	-	-	-
	Residential Water Metering Acceleration	Installation of 500 water meters on single family dwellings as part of construction projects. The budget also includes installation of 250 meters on properties 0.4 acres and larger, starting in 2020 as previously approved by Council. Anticipating to install 125 in 2020 and remaining 125 in 2021.	1.1	-	1.1	-	-	-	-	-
	Subtotal		35.0	-	30.5	-	-	3.8	0.7	-

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				Borrowing Authority	Operating Revenue that funds Capital	Special Purpose Reserves	Reallocation of Existing Project Budget	Developer Contributions	User Fees and Levies	External
	2019-2022 Aging Sewer Connections	This program consists of the repair and rehabilitation of sewer connections in cases where pipes have deteriorated to the point where maintenance is no longer cost effective. Funding for 2020 will support the repair, rehabilitation or replacement of approximately 100 sewer connections.	2.0	2.0	-	-	-	-	-	-
	2019-2022 Catch Basin and Lead Renewals	This program is to prevent failure of catch basins and spurs which maintain drainage service. There are about 45,000 catch basins in the City and about 300 kilometers of spur sewers that connect them to the mains. The target for 2020 is to renew approximately 75 catch basins, leads and spurs.	0.6	0.6	-	-	-	-	-	-
	2019-2022 Flood Management - Drainage Studies/Outfalls	This program supports the drainage planning for areas of the City subject to frequent flooding potential and provides strategic investigation and rehabilitation planning for sewer outfalls.	1.7		1.7	-	-	-	-	-
	2019-2022 Forcemain Rehabilitation/Renewal	The forcemain rehabilitation and renewal program ensures continued sewer service linking the City's sanitary pump station to Metro Vancouver's regional gravity sewer system. The program investigates and inspects the condition rating of sanitary forcemains, repairs failing segments and renews aging forcemains as part of the lifecycle. The program will complete inspection programs on a number of forcemains in the City and replace the forcemain at the entrance to Granville Island.	0.9	0.9	-	-	-	-	-	-
	2019-2022 Investigation for Design (One Water)	This program includes studies, plans and design standards related to capital planning, sewer separation investigations, system management and climate adaptation. The program includes the Southlands drainage study, process improvements, Locarno drainage strategy and the shoreline design guidelines.	0.5		0.5	-	-	-	-	-
	2019-2022 Sewer Main and Manhole Rehabilitation	Repair of sewer mains, manholes and special structures to reduce the impacts of service disruptions. Target for 2020 is reconstruction/rehabilitation of five mainlines and prioritized manhole repairs/rehabilitations.	0.2	0.2	-	-	-	-	-	-
	2019-2022 Sewer Pump Station Upgrades/Replacements	This programs upgrades and replaces sewer pump stations that are at the end their useful economic lives thereby increasing capacity, controlling maintenance costs, and reducing the risk of sewage overflows into the environment. Planned scope of work for 2020 includes planning and construction procurement for three pump stations.	15.1	10.4	-	-	-	4.7	-	-
	2019-2022 Sewer Separation on Private Property	This program allows for a maximum \$1,000 reimbursement towards the cost of plumbing alterations on private property and the provision for a separated sewer connection to serve the property. The program will fund the renewal of 30 separated service lines, 30 switch overs and resolve 20 cross connections.	1.6	1.6	-	-	-	-	-	-
	2019-2022 Sewer TV Inspection	The Sewer TV inspection program provides visual inspection and assessment of the condition of sewers from the inside. The data is used to evaluate the condition of a main and is essential in prioritizing replacements. It is anticipated that in 2020, approximately 120 kilometers of sewer mains will be TV inspected.	0.6		0.6	-	-	-	-	-

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Sewerage & Drainage	2020 East Fraser Lands Shoreline Protection - Design/Construction	Detailed design and partial construction of structural protection measures along the Fraser River foreshore at East Fraser Lands.	2.4		2.4	-	-	-	-	-
	2020 Growth-Related Utility Upgrades - Sewer	This program funds the co-creation of water management plans alongside land use plans including staff and consultancies. Major outcomes are Integrated Water Management Plans for Cambie Corridor (phase 2), Broadway, East Fraser Lands sewer design and catchment studies, Alberta St & Columbia Park master planning and Charleson Drainage area Plan.	22.0	-	-	-	-	22.0	-	-
	2020 Sewer & Water Combined Connections	All new construction or major redevelopment to residential properties require a permit to connect to the sewer system. This is a demand driven program and deliverables depend on the number of permits taken. Approximately 1,000 residential water/sewer connections are installed each year.	2.5	-	-	-	-	-	2.5	-
	2020 Sewer Commercial Connections	Construction of new public sewer connections for commercial properties which are 100% paid for by the permit applicant. In 2020, an estimated 200 sewer commercial connections will be installed.	0.6	-	-	-	-	-	0.6	-
	2020 Sewer Main Reconstruction (Separation)	This program changes the sewer infrastructure from a combined system (single pipes which carry storm water and sewage mixed together) to a separated system (separate storm pipes and sanitary pipes). In 2020, a minimum of 6 kilometers of mains will be delivered, with main projects being Vancouver West 2020 (3.2 kilometers) and Macdonald 28th to 34th (1.7 kilometers), and finalizing construction on Nanaimo and 10th Ave.	33.2	33.2	-	-	-	-	-	-
	2020 Sewer Residential & At-cost Connections	The majority of residential sewer connections are combined with a water connection. This program is for the construction of new public sewer connections in special circumstances when they are done separately, or in the circumstance that the connection is "at cost" pursuant to the Sewer & Watercourse By-law (rather than a set rate set out in the By-law).	0.1	-	-	-	-	-	0.1	-
	2020 Utility Modeling	This program is used develop City-wide modeling standards and a City-wide modelling strategy, purchase hydrologic and hydraulic modelling software, and to develop a City-wide hydrologic and hydraulic model that will inform City-wide plan, area and watershed plans and operations, including staff resources.	4.9	-	-	-	-	4.9	-	-
	2020 Utility Planning - Sewer	This program funds the detailed design and construction of Utility DCL Projects. 2020 plans include 230 meter sewer construction on West 41st (developer delivered), East Broadway trunk study and detailed design, and detailed design for West Cambie stage 1, Little Mountain, Beach Ave, Willow Trunk and projects identified through analysis of development applications.	2.5		2.5	-	-	-	-	-
	Tidal Gates	Protect private property and public health from damage/stagnant water related to storm events, tidal cycles and sea level rise associated with climate change. Capital budget includes SCADA (control/monitoring system) upgrades, consulting for asset condition assessment, Tidal Gates major maintenance, sandbagging and bypass pumping for Locarno Beach and Coastal and Inland flood risk planning	1.7	-	1.7	-	-	-	-	-

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Subtotal			93.0	48.9	9.3	-	-	31.6	3.2	-
Green Infrastructure	2020 Green Infrastructure Asset Renewal	Green Infrastructure (GI) asset rehabilitation and renewal program for failing and poorly functioning assets. 2020 scope includes 15 GI Assets renewal, upgrading failing level of service (LOS) "D" GI assets to current design standards and a LOS "A".	0.3	0.3	-	-	-	-	-	-
	2020 Green Infrastructure implementation - Public Realm	Rain City Strategy and Green Rainwater Infrastructure (GRI) planning and design initiatives including citywide public and private realm programs and pilots. Outcomes: 61 GI Assets, treating an area of 17.8 sq kms and diverting 18.7 cubic meters of rainwater from pipe system.	3.4	-	-	-	-	3.4	-	-
	2020 Green Infrastructure Monitoring Program	GRI asset management and performance monitoring programs. Outcomes: Monitoring performance of 10 GI assets to support compliance, improve designs, and develop efficient operation and maintenance schedules.	0.1	0.1	-	-	-	-	-	-
	2020 Growth-Related Utility Upgrades - Green Infrastructure	GRI capital projects delivery in partnership with Streets, Transportation and Sewers to support high growth areas. Outcomes: 90 GI Assets, treating an area of 256 sq kms and diverting 30 cubic meters of water from pipe system.	8.3	0.1	-	-	-	8.2	-	-
	2020 Water Quality Monitoring	This project will conduct storm water quality sampling and reporting, as part of the City's obligation under the Integrated Liquid Waste and Resource Management Plan.	0.2	0.2	-	-	-	-	-	-
	2020 Watershed Planning & Hydrogeology	This project is to initiate the development of the City-wide groundwater strategy in order to facilitate a better understanding of the groundwater resource and potential risks, complete the hydrogeological reviews as part to the development process, and to improve and maintain the City's groundwater model, including staff resources.	0.4	-	-	-	-	0.4	-	-
	Clean Water Planning	The purpose of this project is to develop a plan to address sanitary sewage and storm-water runoff pollution which negatively impact aquatic ecosystems and recreational uses. The development of this plan will take an integrated approach, to identify an optimal application of green and traditional infrastructure investments, as well as supporting policy and regulations	1.3	-	-	-	0.4	0.9	-	-
	Subtotal			14.0	0.6	-	-	0.4	13.0	-
Total One Water			\$ 142.0	\$ 49.5	\$ 39.8	\$ -	\$ 0.4	\$ 48.4	\$ 3.9	\$ -
Solid Waste										
	2019-2022 Vancouver Landfill Closure Maintenance	Installation of replacement vertical wells and maintenance of surface water and leachate systems associated with Landfill progressive closure.	1.0	-	-	-	1.0	-	-	-
	2019-2022 Vancouver Landfill Hydrogeological Monitoring	Hydrogeological monitoring at the Vancouver Landfill is currently done manually once per week. This project is to upgrade the monitoring system to an electronic version that will allow for continuous and more extensive data collection.	0.9	-	0.9	-	-	-	-	-
	Renewal of Disposal Vehicles & Equipment	Replacement of 20 end-of-life solid waste disposal-related equipment and vehicles, including a refuse transfer tractor truck, a bulldozer, and a water truck; procurement in 2020 and deliveries in 2020 and 2021.	10.5	-	-	10.5	-	-	-	-
	Vancouver Landfill - Compost Facility Upgrade	Paving and other related upgrades in and around the Vancouver Landfill's composting facility.	0.5	-	0.5	-	-	-	-	-

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Disposal	Vancouver Landfill - Routine Gas Works (non-closure)	The installation of landfill gas (LFG) collection infrastructure minimizes the environmental impact of the landfill by maximizing LFG capture and minimizing leachate generation. This funding supports the installation of LFG collection infrastructure in Phases 4/5 of the Landfill as filling progresses.	2.8	-	2.8	-	-	-	-	-
	Vancouver Landfill Building Renovations/Upgrades	Expansion of the meeting room in the Landfill's technical building to accommodate meetings and training.	0.5	-	0.5	-	-	-	-	-
	Vancouver Landfill Closure - New Phase Preparation and High Traffic Improvements	Fencing and access to the Landfill Closure Phase 5.	0.8	-	0.8	-	-	-	-	-
	Vancouver Landfill Vegetation Plan (Closure)	Planning of a vegetation plan for closed areas of the Vancouver Landfill.	0.5	-	-	0.4	-	-	-	0.1
	Vancouver South Transfer Station Structural Repairs	Asphalt repairs in the Vancouver South Transfer Station pit.	0.2	-	0.2	-	-	-	-	-
	Subtotal		17.6	-	5.6	10.9	1.0	-	-	0.1
Sanitation	Litter & Streetscape Recycling Cart Enclosures	Fabrication and installation of approximately 300 additional higher capacity litter and recycling receptacles.	1.0	-	1.0	-	-	-	-	-
	Renewal of Sanitation Vehicles & Equipment	Replacement of 20 end-of-life sanitation equipment and vehicles, including street sweepers, and 10-yard and 20-yard CNG (compressed natural gas) side-loader refuse trucks; procurement in 2020 and deliveries in 2020 and 2021.	5.7	-	-	5.7	-	-	-	-
	Sanitation Camera Solutions - Pilot Program for Contamination Documentation	Pilot on-board sanitation vehicle cameras to support operational and customer service improvements	0.2	-	0.2	-	-	-	-	-
	Sanitation Operations Management System (SOMS) and Business intelligence	Replace end-of-life sanitation vehicle routing system and integration with operational technologies, such as GPS and driver display.	0.3	-	0.3	-	-	-	-	-
		Subtotal		7.2	-	1.5	5.7	-	-	-
Zero Waste	Single-Use Item By-Law Communications, Outreach and Education	Supports Vancouver businesses in complying with five new City by-laws to restrict foam cups/containers, plastic straws, cups, utensils and shopping bags. This will reduce millions of these items from being littered and landfilled each week.	0.6	-	0.6	-	-	-	-	-
	Zero Waste Efforts - Food Waste Prevention and Diversion	Programs to engage and communicate with businesses and residents and pilot new initiatives to prevent food waste, and divert surpluses to the highest and best use, for the purpose of addressing the thousands of tons of wasted food disposed to landfill annually.	0.3	-	0.3	-	-	-	-	-
		Subtotal		0.9	-	0.9	-	-	-	-
Total Solid Waste			\$ 25.6	\$ -	\$ 7.9	\$ 16.6	\$ 1.0	\$ -	\$ -	\$ 0.1
Renewable Energy										
	2019-2022 Neighbourhood Energy Utility (NEU) - New Satellite Energy Generation	The Neighbourhood Energy Utility (NEU) needs to increase its backup and peaking energy production capacity as new customers are added to the system. These facilities are capable of utilizing renewable and conventional natural gas, as appropriate, to achieve greenhouse gas (GHG) reduction performance targets. In 2020, construction of a 5 MW boiler plant which will support NEU system expansion and increase overall system resiliency.	0.3	0.3	-	-	-	-	-	-

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SEFC NEU	2019-2022 Neighbourhood Energy Utility (NEU) - New Service Connections & Energy Transfer Stations	This program includes design and construction of pipe connections and energy transfer stations (ETS) to new customer buildings, as well as technical review of customer building mechanical designs to ensure optimal integration with the utility. Anticipating installation of five energy transfer stations in 2020 and initiation of a multi-year ETS supply agreement	1.4	-	-	-	-	-	1.4	-
	Neighbourhood Energy Utility (NEU) Flood-Related Repairs/Upgrades	Additional flood repairs and upgrades not covered by insurance, including upgrading the air supply to the Energy Centre plant, upgrading the HVAC and potential structural upgrades.	0.7	0.4	-	-	-	-	0.3	-
	Neighbourhood Energy Utility (NEU) System Planning	Staff resources supporting system expansion of the Neighbourhood Energy Utility (NEU).	0.3	0.3	-	-	-	-	-	-
	Renewable Energy Supply Strategy	The 2020 budget is to do a preliminary analysis to develop a strategy for transitioning the Neighbourhood Energy Utility (NEU) to 100% renewable energy supply before 2030 and exploring opportunities for expanding the NEU service area.	0.2	-	-	-	0.2	-	-	-
Subtotal			2.9	1.0	-	-	0.2	-	1.7	-
EV Infrastructure	Electric Vehicle Infrastructure	The purpose of this project is to increase awareness, availability and use of lower carbon vehicles and fuels in Canada by supporting the installation of over twenty charging stations across the City.	1.4	-	-	-	-	-	-	1.4
	Subtotal			1.4	-	-	-	-	-	1.4
Building Retrofits	Deep Emission Building Retrofits Program	This program will enable the City to enter into multi-year agreements with other agencies to provide heat pump incentives and support zero carbon demonstration projects for new and existing homes; support the development of zero carbon building educational installations at public facilities; and to initiate additional research required for future zero carbon capital initiatives. Particular emphasis for the zero carbon demonstration projects is to partner with or support non-market, rental, and co-op housing providers and associations in this work.	4.1	-	4.1	-	-	-	-	-
	Subtotal			4.1	-	4.1	-	-	-	-
Total Renewable Energy			\$ 8.4	\$ 1.0	\$ 4.1	\$ -	\$ 0.2	\$ -	\$ 1.7	\$ 1.4
Technology										
	2019-2022 Application Renewal Program	Implementation of regular upgrades on City-developed applications. There are over 200 custom built applications, each with life expectancy of 10-15 years.	0.1	-	0.1	-	-	-	-	-
	2019-2022 Digital Strategy - Service Channel	Implementation of regular digital strategy upgrades and enhancements to infrastructure and usability of digital channels which include the City website, mobile applications, and web applications.	0.2	-	0.2	-	-	-	-	-
	2019-2022 Enterprise Data & Analytics	Implementation of various business intelligence and analytics tools, processes and practices, including Agile Analytics and BizTalk upgrades.	1.6	-	1.6	-	-	-	-	-
	2019-2022 Enterprise Search Strategy	Implementation of enterprise search strategy to optimize the indexing of City documents.	0.1	-	0.1	-	-	-	-	-
	2019-2022 GIS Strategic Roadmap Implementation	Implementation of various Geographic Information System (GIS) initiatives, including GIS platform upgrades, roadmap completion, expanding GIS server analytic/geoprocessing capabilities, etc.	0.9	-	0.9	-	-	-	-	-
	2019-2022 Lagan Upgrade	Implementation of regular Lagan system upgrades (a performance solution for 311 Call Centre).	1.1	-	1.1	-	-	-	-	-

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Technology	2019-2022 Parking Enforcement System Upgrades	Implementation of regular Parking Enforcement System upgrades.	0.1	-	0.1	-	-	-	-	-
	2019-2022 POSSE Upgrade	Implementation of regular POSSE (online permits) upgrades	0.9	-	0.9	-	-	-	-	-
	2019-2022 Remote Agent Program	Implementation of a remote agent program to enable 311 Call Centre agents to work remotely as part of Business Continuity planning.	0.0	-	0.0	-	-	-	-	-
	2019-2022 SAP Upgrades/Enhancements	Implementation of regular SAP upgrades and enhancements, including SAP Fiori development to make SAP more user friendly.	0.3	-	0.3	-	-	-	-	-
	2019-2022 Technology Services Capital Overhead	Resources to support delivery of Technology Services capital work, including continuously improving the processes and technology for centralized intake, portfolio, and resource management.	0.8	-	0.8	-	-	-	-	-
	2019-2022 Technology Services Capital Resource Pool	Technology Services staff resources to be assigned based on Annual Technology Plan with a focus on software development, providing a smooth transition of resourcing from one capital project to another with appropriate scheduling and planning.	0.3	-	0.3	-	-	-	-	-
	2019-2022 Tempest Upgrades & Database/Server Work	Implementations of regular Tempest (revenue management system) upgrades, and work related to database capacity increase/migration to SQL server.	0.1	-	0.1	-	-	-	-	-
	2019-2022 Upgrades for Small IT Applications	Implementations of regular upgrades to various small COTS (commercial off the shelf) applications such as ActiveNet, Club Prophet, EBMS, Stone Orchard, Kronos, etc.	0.1	-	0.1	-	-	-	-	-
	2019-2022 VanDocs Upgrades	Implementation of regular VanDocs (enterprise wide document management system) upgrades	0.1	-	0.1	-	-	-	-	-
	2020 AMANDA Upgrade	AMANDA system enhancement (on-line permit and license services) to support additional business requests.	0.0	-	0.0	-	-	-	-	-
	2020 Asset Works (Fleet) Upgrades	Fleet Information Management System (FIMS) enhancement to support additional business requests.	0.0	-	0.0	-	-	-	-	-
	2020 Client Hardware Refresh Program	Lifecycle replacement of tablet devices, desktop/laptop computers, and display devices.	3.2	-	3.2	-	-	-	-	-
	2020 CTO (Chief Technology Officer) Strategic Initiatives	Funding for various CTO (Chief Technical Officer) strategic initiatives including best practices for Technology Services PMO	0.5	-	0.5	-	-	-	-	-
	2020 Digital Infrastructure & Assets	Expand, maintain, and support City digital infrastructure, including fibre infrastructure costs and Wi-Fi.	0.3	-	0.3	-	-	-	-	-
	2020 Hansen Upgrades	Upgrade to Hansen asset management system, as currently supported database version will no longer be supported after the second quarter of 2020.	0.2	-	0.2	-	-	-	-	-
	2020 IT Infrastructure Maintenance, Upgrades & Expansion - City	Implement various technology infrastructure maintenance, upgrade, and expansion initiatives, including infrastructure growth to accommodate unplanned requests, end-of-life replacements, and cybersecurity initiatives.	4.6	-	4.6	-	-	-	-	-
	2020 IT Infrastructure Maintenance, Upgrades & Expansion - Vancouver Police Department	Implement various technology infrastructure maintenance, upgrade, and expansion initiatives for Vancouver Police Department, including infrastructure growth to accommodate unplanned requests, end-of-life replacements, and cybersecurity initiatives.	2.5	-	2.5	-	-	-	-	-
2020 IT Infrastructure Maintenance, Upgrades & Expansion - Vancouver Public Library	Implement various technology infrastructure maintenance, upgrade, and expansion initiatives for Vancouver Public Library, including infrastructure growth to accommodate unplanned requests, end-of-life replacements, and cybersecurity initiatives.	0.7	-	0.7	-	-	-	-	-	

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	2020 Technology Services Business Projects	Delivery of various business project requests, prioritized via a rolling intake process.	5.0	-	5.0	-	-	-	-	-
	Content Management System (CMS) Replacement	Replace end-of-life Content Management System (CMS), technology that supports the City's public facing vancouver.ca website.	0.1	-	0.1	-	-	-	-	-
	Data Centre Modernization	Implement data centre modernization initiatives including setting up a hybrid data centre and the cloud on-ramp.	1.2	1.2	-	-	-	-	-	-
	Enterprise Agreement Implementation	Implementation of various Microsoft applications including Identify and Access Management (IAM) operations, Office Pro Plus, and Windows Enterprise E3.	0.2	-	0.2	-	-	-	-	-
	Enterprise Service Management	Implementation of various Enterprise Service Management phases, modules, integrations and enhancements.	0.4	-	0.4	-	-	-	-	-
	Hardware/Software - Vancouver Police Department	Technology support costs in conjunction with recommendations in the Vancouver Police Department Operations Review.	0.1	-	0.1	-	-	-	-	-
	Microsoft Enterprise Agreement	Year 3 cost of Microsoft Enterprise Agreement (final year of three-year agreement)	0.4	-	0.4	-	-	-	-	-
	Subtotal		25.9	1.2	24.8	-	-	-	-	-
Total Technology			\$ 25.9	\$ 1.2	\$ 24.8	\$ -	\$ -	\$ -	\$ -	\$ -
Overhead										
	2019-2022 City-Wide Overhead - Capital Administration	Covers the cost of City staff providing procurement/purchasing support for the capital program.	3.1	-	3.1	-	-	-	-	-
	2019-2022 City-Wide Overhead - Communications	Covers the cost of City staff providing communications support for the capital program.	0.4	-	0.4	-	-	-	-	-
	2019-2022 City-Wide Overhead - Human Resources	Covers the cost of City staff providing staff resourcing support for the capital program.	0.3	-	0.3	-	-	-	-	-
	2019-2022 City-Wide Overhead - Legal	Covers the cost of City staff providing legal support for the capital program.	2.0	-	2.0	-	-	-	-	-
	2019-2022 Debenture Discount	Covers the cost of financing fees that the City incurs as part of the debenture program (does not include interest costs associated with debenture borrowing, which is funded from the Operating Budget).	1.0	-	1.0	-	-	-	-	-
	2019-2022 Finance Project Management Office (PMO)	Management of projects involving combination of People, Process & Technology changes; enables pre-project involvement and delivery of the following throughout the year <ul style="list-style-type: none"> • business cases • benefits realization plans • project implementation estimates for business cases (including budget & timeline) 	0.8	-	0.8	-	-	-	-	-
	Subtotal		7.6	-	7.6	-	-	-	-	-
Total Overhead			\$ 7.6	\$ -	\$ 7.6	\$ -	\$ -	\$ -	\$ -	\$ -
Total Citywide			\$ 502.3	\$ 112.9	\$ 100.1	\$ 63.2	\$ 1.6	\$ 180.0	\$ 5.6	\$ 38.8