



Finance Committee

**Anderson Room, City Hall
6911 No. 3 Road**

Monday, December 2, 2019

Immediately following the General Purposes Committee meeting

Pg. # ITEM

MINUTES

FIN-6 *Motion to adopt the **minutes** of the meeting of the Finance Committee held on November 4, 2019.*



RICHMOND PUBLIC LIBRARY

- 1. 2020 OPERATING AND CAPITAL BUDGETS FOR RICHMOND PUBLIC LIBRARY**
(File Ref. No.) (REDMS No.)

FIN-10

See Page FIN-10 for full report

Designated Speaker: Susan Walters

STAFF RECOMMENDATION

That the 2020 Richmond Public Library budget of \$9,862,500 as presented in Attachment 1 from the Chief Librarian and the Secretary to the Board, be approved.



FINANCE AND CORPORATE SERVICES DIVISION

2. **2020 CAPITAL BUDGET**

(File Ref. No. 03-0985-01) (REDMS No. 6243131 v. 2)

FIN-17

See Page **FIN-17** for full report

Designated Speaker: Melissa Shiau

STAFF RECOMMENDATION

- (1) *That the 2020 Capital Budget as presented in Appendix 3 totalling \$155,651,559 be approved and staff be authorized to commence the 2020 Capital Projects; and*
- (2) *That the 2020 Capital Budget totalling \$155,651,559 and the 2021-2024 Capital Projects be included in the Consolidated 5 Year Financial Plan (2020-2024).*



3. **2020 PROPOSED OPERATING BUDGET**

(File Ref. No. 03-0985-01) (REDMS No. 6243776 v. 9)

FIN-188

See Page **FIN-188** for full report

Designated Speaker: Melissa Shiau

STAFF RECOMMENDATION

That:

- (1) *The 2020 Operating Budget as presented in Budget Option 2 be approved as outlined below, or Council provide staff with direction to approve one of the alternative options presented in this staff report:*
 - (a) *A same level of service budget increase, after tax growth, of \$3,875,707 with a tax increase of 1.69% and non-discretionary external senior government increases of \$300,000 with a tax increase of 0.13%, resulting in a combined increase of 1.82% be approved; and*
 - (b) *Ongoing funding for expenditures previously approved by Council totaling \$984,045 for the following items: Minoru Centre for Active Living operating budget impact phase-in (Year 7 of 7), and the operating budget impact from developer contributed assets, with a tax increase of 0.43% be approved; and*

- (c) *Ongoing funding for expenditures previously approved by Council totaling \$527,500 for the operating budget phase-in impact of City Centre Community Centre North (Year 2 of 4), with a tax increase of 0.23% be approved; and*
- (d) *Ongoing funding for expenditures previously approved pursuant to Council's Safe Community Priority program (Year 2 of 3) in the amount of \$7,433,489 with a tax increase of 3.23% including:*
 - (i) *Amounts which were funded by the rate stabilization account in the 2019 budget totaling \$4,325,868, with a tax increase of 1.88%; and*
 - (ii) *51 additional RCMP officers and 20 additional municipal employees to support the RCMP Detachment with a three-year phase-in plan (Year 2 of 3), totaling \$1,591,821 with a tax increase of 0.69% be approved; and*
 - (iii) *36 additional firefighters with a three-year phase-in plan (Year 2 of 3) in the amount of \$1,515,800 with a tax increase of 0.66% be approved; and*
- (e) *Operating budget impact from the 2020 Capital Budget totaling \$644,794 with a three-year phase-in plan for an annual amount of \$214,931, resulting in a tax increase of 0.09% per year be approved; and*
- (f) *Two new positions, specifically a Regular Full-Time Affordable Housing Planner 1 and Regular Part-Time Child Care Program Planner 1 be approved with 0.00% tax increase as summarized in Attachment 9 and position complement control numbers be assigned; and*
- (g) *Ongoing expenditures for Emerging Organizational Additional Levels with an allowance of \$500,000 resulting in a tax increase of 0.22% be approved (refer to the recommended items from staff in Attachment 10); and*
- (h) *Transfer to reserves for infrastructure replacement needs as per Council's Long Term Financial Management Strategy in the amount of \$2,299,025 with a tax increase of 1.00% be approved; and*
- (i) *The Rate Stabilization Account be used to reduce the overall impact of additional operating costs for a total of \$1,609,318 resulting in a tax decrease of 0.70% be approved; and*

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Pg. # ITEM

- (2) *The 2020 Operating Budget, as approved in item 1 above, be included in the Consolidated 5 Year Financial Plan (2020-2024).*

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4. **2020 ONE-TIME EXPENDITURES**

(File Ref. No. 03-0985-01) (REDMS No. 6243689 v. 3)

FIN-241

See Page FIN-241 for full report

Designated Speaker: Melissa Shiau

STAFF RECOMMENDATION

That the recommended one-time expenditures totaling \$930,869 as outlined in Attachment 1 of the 2020 One-Time Expenditures staff report, be approved with funding from the Rate Stabilization Account and included in the Consolidated 5 Year Financial Plan (2020-2024).

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5. **2020 COUNCIL COMMUNITY INITIATIVES ONE-TIME EXPENDITURES**

(File Ref. No. 03-0985-01) (REDMS No. 6243557 v. 7)

FIN-249

See Page FIN-249 for full report

Designated Speaker: Melissa Shiau

STAFF RECOMMENDATION

That the one-time expenditure request as outlined in Attachment 1 of the 2020 Council Community Initiatives One-Time Expenditures staff report, be received for information and staff be directed if the amount should be funded from the Council Community Initiatives Account and included in the Consolidated 5 Year Financial Plan (2020-2024).

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LULU ISLAND ENERGY COMPANY

6. **LULU ISLAND ENERGY COMPANY – 2020 OPERATING AND CAPITAL BUDGETS**

(File Ref. No. 10-6600-10-01) (REDMS No. 6337657 v. 2)

FIN-254

See Page FIN-254 for full report

Designated Speakers: John Irving and Jerry Chong

STAFF RECOMMENDATION

That the Lulu Island Energy Company report titled “Lulu Island Energy Company- 2020 Operating and Capital Budgets”, dated November 5, from the Chief Executive Officer and Chief Financial Officer, Lulu Island Energy Company be received for information.

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ADJOURNMENT

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Finance Committee

Date: Monday, November 4, 2019

Place: Anderson Room
Richmond City Hall

Present: Mayor Malcolm D. Brodie, Chair
Councillor Chak Au
Councillor Carol Day
Councillor Kelly Greene
Councillor Alexa Loo
Councillor Bill McNulty
Councillor Linda McPhail
Councillor Harold Steves
Councillor Michael Wolfe

Call to Order: The Chair called the meeting to order at 5:57 p.m.

MINUTES

It was moved and seconded

That the minutes of the meeting of the Finance Committee held on October 7, 2019, be adopted as circulated.

CARRIED

DELEGATIONS

1. Representatives from KPMG spoke on the Audit Plan, noting that the Audit Plan is consistent with prior years.

It was moved and seconded

That the verbal report from KPMG on the Audit Plan be received for information.

CARRIED

FINANCE AND CORPORATE SERVICES DIVISION

2. **2020 UTILITY BUDGETS AND RATES**

(File Ref. No. 03-0970-01) (REDMS No. 6308439 v. 6)

Cllr. Steves left the meeting (6:02 p.m.) and returned (6:04 p.m.).

Staff briefed Committee on the proposed 2020 Utility Budget and Rates, and noted the following:

- the proposed increases for the 2020 Water, Sewer and Solid Waste and Recycling Rates are linked to the rate increases by Metro Vancouver;
- the Drainage and Diking rates are based on the rate classes established to reflect the different levels of demand by various property types in the city and the previously established rate of a \$10 increase per property;
- the public consultation conducted has indicated that there is strong support to increase flood protection fees; and
- the proposed increases to the Solid Waste and Recycling rates are partly due to the organics processing odour management costs and the proposed operation extension of the recycling facility to seven days per week.

Discussion ensued with regard to (i) the City's water consumption level, (ii) the timeline to implement the extended operations at the recycling facility, (iii) allocating more funds to flood protection measures, and (iv) utilizing the Fraser River as a fresh water source.

It was moved and seconded

That the 2020 Utility Budgets, as outlined in Option 1 for Water, Option 2 for Sewer, Option 2 for Drainage and Diking, and Option 3 for Solid Waste and Recycling including a new personnel complement control number for a regular full-time Recycling Coordinator position, as outlined in the staff report, dated October 15, 2019 from the General Manager, Finance and Corporate Services and the General Manager, Engineering and Public Works, be approved as the basis for establishing the 2020 utility rates and preparing the Consolidated 5 Year Financial Plan (2020-2024) Bylaw.

The question on the motion was not called as discussion ensued with regard to (i) increasing Flood Protection Rates, (ii) increasing public awareness on flood protection measures implemented by the City, and (iii) comparing the differences between the flood protection rates for residential properties and Industrial Commercial Investment (ICI) properties.

As a result of the discussion, the following **amendment motion** was introduced:

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It was moved and seconded

That Option 3 for Drainage and Diking, as outlined in the staff report, dated October 15, 2019 from the General Manager, Finance and Corporate Services and the General Manager, Engineering and Public Works, be approved as the basis for establishing the 2020 utility rates for Drainage and Diking and for preparing the Consolidated 5 Year Financial Plan (2020-2024) Bylaw.

CARRIED

Opposed: Mayor Brodie

Cllrs. Au

Loo

McPhail

The question on main motion, as amended, which reads as follows:

That the 2020 Utility Budgets, as outlined in Option 1 for Water, Option 2 for Sewer, Option 3 for Drainage and Diking, and Option 3 for Solid Waste and Recycling including a new personnel complement control number for a regular full-time Recycling Coordinator position, as outlined in the staff report, dated October 15, 2019 from the General Manager, Finance and Corporate Services and the General Manager, Engineering and Public Works, be approved as the basis for establishing the 2020 utility rates and preparing the Consolidated 5 Year Financial Plan (2020-2024) Bylaw.

was then called and it was **CARRIED** with Cllr. Au opposed.

Discussion ensued with regard to refining of property rate classes for the Drainage and Diking rates.

As a result of the discussion, the following **referral motion** was introduced:

It was moved and seconded

That staff examine the property rate classes for the Drainage and Diking rates and report back.

CARRIED

ADJOURNMENT

It was moved and seconded

That the meeting adjourn (6:32 p.m.).

CARRIED

Finance Committee
Monday, November 4, 2019

Certified a true and correct copy of the Minutes of the meeting of the Finance Committee of the Council of the City of Richmond held on Monday, November 4, 2019.

Mayor Malcolm D. Brodie
Chair

Evangel Biason
Legislative Services Coordinator



City of Richmond

Report to Committee

To: Finance Committee
From: Serena Lusk
General Manager, Community Services

Date: November 15, 2019
File: 97-RPL
GENERAL/2019-Vol
01

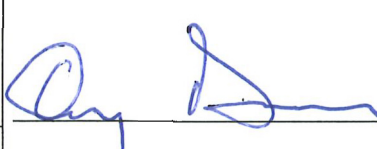

Re: 2020 Operating and Capital Budgets for Richmond Public Library Board

Staff Recommendation

That the 2020 Richmond Public Library budget of \$9,862,500 as presented in Attachment 1 from the Chief Librarian and the Secretary to the Board, be approved.

Serena Lusk
General Manager, Community Services
(604-233-3344)

Att. 1

REPORT CONCURRENCE		
ROUTED TO: Finance Department	CONCURRENCE <input checked="" type="checkbox"/>	APPROVED BY THE CAO 
CONCURRENCE BY SMT	INITIALS: 	



Report to Committee

To: City of Richmond Finance Committee **Date:** November 15, 2019

From: Susan Walters
Chief Librarian and Secretary to the Board
Richmond Public Library

Re: **2020 Operating and Capital Budgets for Richmond Public Library**

Staff Recommendation

1. That the 2020 Richmond Public Library budget of \$9,862,500 as presented in Attachment 1 from the Chief Librarian and the Secretary to the Board, be approved.

A handwritten signature in cursive script that reads "SWalters".

Susan Walters
Chief Librarian and Secretary to the Board
Richmond Public Library
(604-231-6466)

Att. 1

Staff Report

Origin

In accordance with the *Library Act, Section 10(1)*, the Richmond Public Library (RPL) Board must prepare and submit to City Council its annual budget for providing library services on or before March 1, 2020. Council must approve the draft budget with or without amendment. This library staff report details the 2020 Operating and Capital Budgets, which were approved for submission to the City by the Library Board at its September 25, 2019 meeting.

This report supports Council Strategic Plan 2018 – 2022 #5 Sound Financial Management:

Accountable, transparent, and responsible financial management that supports the needs of the community into the future.

5.1 Maintain a strong and robust financial position.

5.2 Clear accountability through transparent budgeting practices and effective public communications.

5.3 Decision-making focuses on sustainability and considers circular economic principles.

5.4 Work cooperatively and respectfully with all levels of government and stakeholders while advocating for the best interest of Richmond.

Analysis

2019 Highlights

In the first year of the library's new Strategic Plan 2019–2021, numerous strategic priorities were implemented to create opportunities for our community to learn, create and belong. Library spaces were enhanced with comfortable and additional seating, improved lighting and better distinction between quiet and active use. Community feedback influenced the purchase of additional copies of popular titles and changes to loan periods, boosting the use of popular collections. The replacement of service point and staff computers is complete with the deployment of new public computers on target for early 2020. To better serve vulnerable residents, the Home Services mobile delivery program was expanded to include volunteer drivers. Digital literacy programs continue to support seniors in building new skills and connecting with others, reducing isolation.

Year two of the strategic plan will be focused on improving customer experiences and continuing to build civic and community connections.

2020 Outlook

The creation of a human resources strategy will assist the library to meet our strategic goal of investing in staff through a variety of programs and development opportunities; supporting staff

in their commitment to providing the best possible library experience for our community. The introduction of a new customer service model will coincide with a review of service points and strategies for removing barriers to service within our facilities. To ensure consistent service across Richmond facilities, the library will be working with City IT to provide core infrastructure services and collaborate on projects; supporting library IT's strategic goal of enhancing customer library experiences with imaginative technologies and the introduction of a new website.

Committed to supporting a healthy and thriving community, library resources will continue to be directed to removing barriers and building new connections. Strengthening our civic relationships, the library is an increasingly active participant at community tables maximizing synergies to deliver services. In 2020, the Inspire Curiosity campaign with the Richmond School District will include Grade 4 students and expand to include private and non-traditional school students. Community service librarians will continue to move beyond library branches to connect with youth, seniors and newcomers; taking the library to where community gathers. The library values diversity, supporting vulnerable populations and will continue to respond to the Truth and Reconciliation Commission's calls to action for libraries.

2020 Operating Budget

The 2020 operating budget report presents the same level of service base budget resulting in 2.20% municipal contribution increase.

Main cost drivers to provide the same level of service are summarized as follows:

Table 1 – Main Cost Drivers

Main Cost Drivers	Amount	Municipal contribution increase
Labour*	\$ 167,900	1.74%
Decrease in revenue	29,700	0.31%
Others	14,400	0.15%
Proposed Municipal Contribution Increase	212,000	2.20%

*Excludes 2019 one-time to transition from Medical Service Plan (MSP) to Employer Health Tax (EHT)

A detailed proposed 2020 operating budget is presented in Attachment 1.

Revenues:

Provincial funding for public libraries was reduced by 20% in 2009 from \$17.6 million to \$14.0 million and since 2010, libraries have received \$14.0 million in annual funding. There is no annual increase in funding support from the province which leads to increased pressure on the City of Richmond and RPL's limited revenue options due to restrictions under the Library Act to address inflationary pressure and demand for new and expanded services. For 2020, the provincial grant is projected to continue to decrease by 3.46% based on the recent trends due to funding reallocation to other library associations.

Non-resident borrowing from other InterLink libraries is expected to decline due to downward trend in physical circulation and the Chinese language collection improvements made by other libraries, resulting in decrease in InterLINK reimbursement revenue of \$14,000.

Overall, revenue is expected to drop by \$29,700 or 4.31% to \$659,700.

Expenditures:

Total salaries and benefits are anticipated to increase by \$167,900 or 1.41% to \$7,766,400. This increase includes an allowance for step increases and for anticipated contract salary increases, which will be under negotiation next year.

Contracts in 2020 have increased by \$24,600 which includes self check-out upgrade for all branches and IT network server migration. Janitorial contract has a minor increase due to contractual obligation.

Leases for the Cambie and Ironwood branches were renewed and are set to increase by \$21,200 mainly due to higher operating costs.

General and Administration expenses have decreased by \$13,900, mostly due to the completion of the telephone system upgrade in 2019. This savings is being reallocated to offset the increases in contracts.

Overall, operating expenses have increased by \$23,500 or 1.28%.

Total expenses have increased by \$122,300 or 1.18% to \$10,522,500.

2020 Capital Budget

Collection:

The transfer to Provision – Collection is \$1,274,400. Approximately \$382,000 is allocated for eBooks and digital collections and the remaining \$892,400 supports print collections.

Additional Level Requests

Expanded Children and Family Services – \$167,150 ongoing:

Two library staff positions focused on children and youth are needed to significantly expand services and programs delivered inside and outside library walls. These positions would also support increased collaboration with city staff, schools and community service agencies to provide city-wide services that meet the needs of vulnerable youth. These two new positions would require professional programming and robust community engagement skills, in addition to deep understanding of child youth development and specific trends in the Richmond community. Additional language skills would be a significant asset in serving Richmond's diverse children and youth.

These positions support RPL's 2019-2021 Strategic Plan to inspire curiosity, transform lives and empower everyone in our community. We are committed to reaching out to vulnerable populations, ensuring every child has a library card, responding to community needs and engaging with our volunteers. This request originates from the *Referral Report on Borrowing Limits, Municipal Library Services and Impact of Increased Per Capita Funding* (Finance Committee, November 14, 2016.)

Automated materials handling system and redesigned book return wall at Brighthouse Branch – \$108,000 one-time:

Introducing customer radio-frequency identification (RFID) self-check-in kiosks will modernize this aspect of library self-service, expedite returns and support the reallocation of staff to public service. A redesigned book return wall and viewing window will support public engagement with the technology.

Note that the total cost will be \$183,000 and the Library Board has approved \$75,000 from Library general operating surplus to support this request.

Financial Impact

In 2019 the approved municipal contribution was \$9,710,500 which included a one-time contribution of \$60,000. The proposed 2020 budget requests a municipal contribution of \$9,862,500, which is a 2.2% increase over 2019's base contribution. The 2020 library budget has a decrease in revenues of \$29,700 (-4.31%) and an increase in expenditures of \$122,600 (1.18%).

Conclusion

This report recommends a same level of service budget with a municipal contribution of \$9,862,500 be approved. An ongoing additional level request for \$167,150 and a one-time additional level request for \$108,000 have been submitted to the City's 2020 Budget Process for consideration.



Susan Walters, Chief Librarian and Secretary to the Board
Richmond Public Library
(604-231-6466)

**Richmond Public Library
2020 Proposed Operating Budget**

	2019 Adjusted Base Budget	2020 Proposed Budget	Difference	% Difference from 2019 Approved Budget
REVENUES				
Provincial Grants	\$390,000	\$376,500	(\$13,500)	(3.46%)
Book Fines	149,900	147,700	(2,200)	(1.47%)
Interlink Reimbursement	44,000	30,000	(14,000)	(31.82%)
Printers & Photocopiers	39,100	39,100	0	0.00%
In House Book Sales	33,400	33,400	0	0.00%
Other Revenue	33,000	33,000	0	0.00%
Total Revenues	689,400	659,700	(29,700)	(4.31%)
EXPENDITURES				
Salaries and Benefits	\$7,598,500	\$7,766,400	\$167,900	2.21%
<i>One-Time Cost of MSP Transition to EHT</i>	60,000	0	(60,000)	(100.00%)
Total Salaries and Benefits	7,658,500	7,766,400	107,900	1.41%
Contracts	\$470,000	\$494,600	\$24,600	5.23%
General and Administration	736,200	722,300	(13,900)	(1.89%)
Leases	257,400	278,600	21,200	8.24%
Utilities	137,900	138,200	300	0.22%
Supplies	114,000	114,300	300	0.26%
Equipment Purchases	87,500	78,500	(9,000)	(10.29%)
Professional Fees and Insurance	36,900	36,900	0	0.00%
Total Operating Expenses	1,839,900	1,863,400	23,500	1.28%
Transfer to Provision - Collection	\$892,400	\$892,400	\$0	0.00%
Transfer to Provision - Enterprise Fund	9,100	0	(9,100)	100.00%
Total Transfer	901,500	892,400	(9,100)	(1.01%)
TOTAL EXPENSES	10,399,900	10,522,200	122,300	1.18%
SUMMARY:				
REVENUE	689,400	659,700	(29,700)	(4.31%)
EXPENDITURE	10,399,900	10,522,200	122,300	1.18%
Net Budget (Municipal Contribution) before adjustment	9,710,500	9,862,500	152,000	1.57%
Remove: One-Time Municipal Contribution Adjustment for Cost of MSP Transition to EHT	(60,000)	0	60,000	
Net Budget (Municipal Contribution)	\$9,650,500	\$9,862,500	\$212,000	2.20%



City of Richmond

Report to Committee

To: Finance Committee
From: Jerry Chong, CPA, CA
Director, Finance
Re: 2020 Capital Budget

Date: November 20, 2019
File: 03-0985-01/2020-Vol
01

Staff Recommendation

1. That the 2020 Capital Budget as presented in Appendix 3 totalling \$155,651,559 be approved and staff be authorized to commence the 2020 Capital Projects; and
2. That the 2020 Capital Budget totalling \$155,651,559 and the 2021-2024 Capital Projects be included in the Consolidated 5 Year Financial Plan (2020-2024).

Jerry Chong, CPA, CA
Director, Finance
(604-276-4064)

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER 	
REVIEWED BY SMT	INITIALS:
APPROVED BY CAO 	

Executive Summary

Funds are directed towards infrastructure and asset management programs ranked on the highest priority projects to respond to Council direction and provide services to the citizens of Richmond. The 2020 Capital Budget totaling \$155.7M includes significant investment in infrastructure renewal to maintain community viability. A more detailed breakdown of each program is included in the appendices to this report.

The following is an overview of selected program areas funded through the capital budget. The complete list of recommended projects are included in Appendix 3 starting on page 15.

Infrastructure – \$92.9M:



The City's Infrastructure Program includes: dikes, roads, drainage and sanitary pump stations, drainage, water, and sanitary mains (pages 15-16).

Building – \$17.6M:



The Building Program includes major building renovation projects as well as minor facility upgrades (page 16).

Parks – \$12.2M:



The Parks program includes development of parks and parkland acquisition (page 17).

Land – \$10.0M:



The Land program includes funding for land acquisition. This amount is to ensure funding is in place to act on opportunities as they arise with Council approval required for each specific acquisition (page 17).

Equipment – \$6.4M:



The Equipment Program includes Information Technology hardware and software, fleet and equipment, as well as fire vehicle and equipment replacement (page 17-18).

Staff Report

Origin

Subsection 165(1) of the *Community Charter* requires the City to adopt a 5 Year Financial Plan (5YFP) Bylaw. The 5YFP Bylaw includes operating, utility and capital budgets for year 2020 and provides estimates for the remaining years of the five-year program. The Consolidated 5YFP (2020-2024) Bylaw provides the City with the authority to proceed with spending as outlined in the Bylaw. The 5YFP must be balanced and therefore includes proposed funding sources. The 5YFP provides authorization for the use of certain funding sources such as Development Cost Charges (DCCs) and Statutory Reserves.

The Capital Budget is one of the main components of the 5YFP. The budget includes all expenditures that improve, replace and extend the useful life of the City's asset inventory, which currently has a net book value of \$2.4 billion as of December 31, 2018. The Capital Budget allows the City to sustain existing civic infrastructure, while also adding new assets and services to serve the growing community.

The Long Term Financial Management Strategy (LTFMS - Policy 3707) is a set of principles created by Council to guide the financial planning process. As per item 5, it is Council policy and a key component of the LTFMS to “*ensure that long term capital funding for infrastructure (e.g. parks, trails, facilities, roads, etc.) is in place in order to maintain community liveability and generate economic development.*”

This report supports Council's Strategic Plan 2018-2022 Strategy #5 Sound Financial Management:

Accountable, transparent, and responsible financial management that supports the needs of the community into the future.

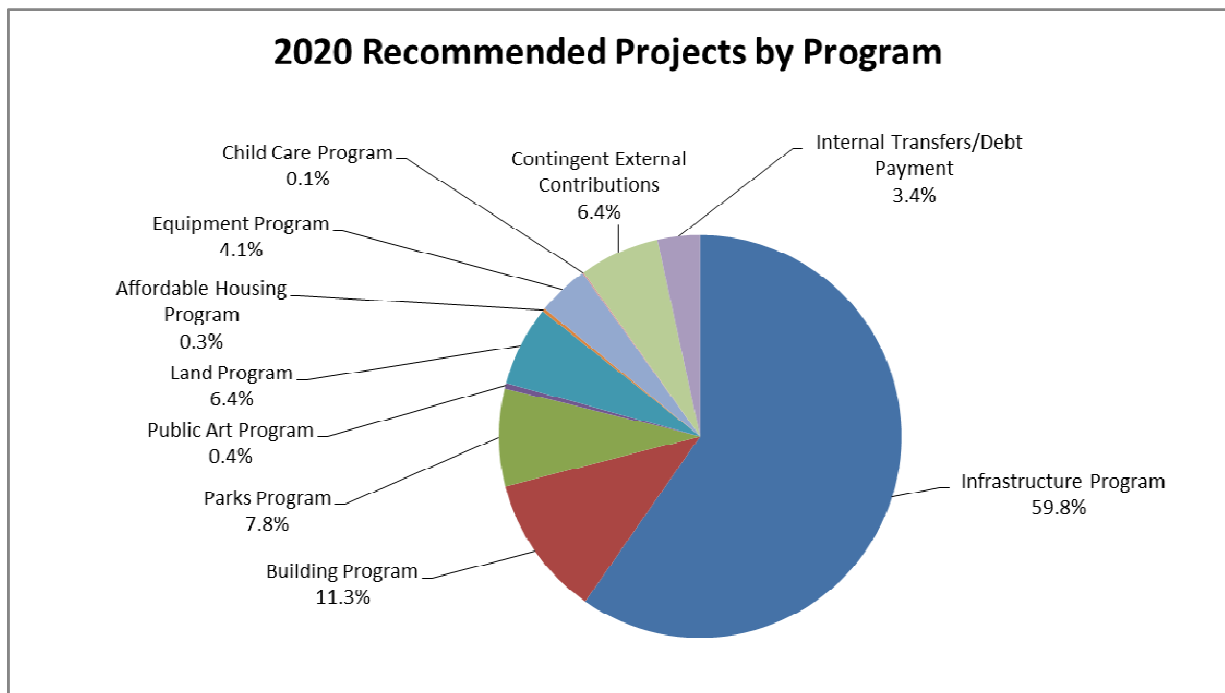
- 5.1. Maintain a strong and robust financial position.*
- 5.2. Clear accountability through transparent budgeting practices and effective public communication.*
- 5.3. Decision-making focuses on sustainability and considers circular economic principles.*
- 5.4. Work cooperatively and respectfully with all levels of government and stakeholders while advocating for the best interests of Richmond.*

Analysis

This report presents the proposed 2020 Capital Budget and seeks Council review and approval on 2020 recommended projects and the operating expenditures associated with each respective project. The proposed Capital Budget for 2020 is \$155.7M. This report also presents the projects currently planned for years 2021-2024 as required; however the projects will be subject to final approval in each subsequent year.

The City's Capital Budget ensures appropriate planning for required projects and their related funding to demonstrate the complete impact of major multi-year projects. Capital requirements are driven by many factors including growth, maintenance of current aging infrastructure and ensuring that the City is consistently meeting industry standards as well as legislated, regulatory and safety requirements.

Figure 1 – 2020 Recommended Projects by Program



The City continues to see sustained population and economic growth. Significant additional growth is projected through 2041 under the Official Community Plan. This new growth requires expansion of City infrastructure in order to maintain the high level of civic services expected by new and current residents. As the City continues to mature, some of the existing infrastructure is nearing the end of its lifespan and/or capacity. Continuous, ongoing investment in replacement and maintenance of aging infrastructure is required to maintain service levels and protect civic assets. Capital investment allows the City to take advantage of new technology and building practices to improve operational efficiency and accrue environmental benefits from the use of more sustainable building practices and equipment. Finally, the Capital Budget also includes internal transfers and debt repayment to replenish reserve accounts used to provide interim funding for various projects.

2020 Capital Process

Each division sets priorities specific to their area of expertise. A project submission is completed detailing the scope of work, review of alternatives, financial impact, and proposed funding sources. In addition, the submission is self-ranked using established criteria summarized in Appendix 1. The process behind the 2020-2024 Capital Budget is illustrated in Appendix 2.

The Capital Review Committee (CRC) which is comprised of Directors from each City division reviewed and ranked each project submission. To ensure consistent application of the established ranking criteria, the CRC determines the final ranking for each submission giving consideration to strategic and master plans, policies and Council priorities.

The ranked projects are consolidated and the projects are recommended based on funding availability. Project funding recommendations are then reviewed by the Senior Management Team (SMT) and the CAO. The final recommendation is consolidated to form the 2020 Capital Budget presented to Finance Committee for review, approval and inclusion in the 5YFP (2020-2024).

Finance Committee Input

Appendix 3 provides a list of the recommended projects for funding in 2020. The details of each recommended project is attached in Appendix 8. Appendix 4 provides a list of those projects not recommended for funding in 2020 due to budget constraints. The details of projects not recommended for funding in 2020 are included in Appendix 9.

At the Finance Committee's discretion, any capital project recommended for funding may be removed from the recommended list. In addition, any capital project that is not recommended for funding may be reconsidered for recommendation, subject to funding availability.

The following is an overview with selected highlights of the recommended Capital program that supports new infrastructure needs compared to the replacement of existing infrastructure.

New 2020 Capital Costs

The new capital costs total \$101.5M (65.2%) of the 2020 Capital Budget, which includes:

- Capstan Station Construction - \$27.5M funded by developer contributions (page 32)
- Steveston Highway Multi-Use Pathway, Mortfield Gate to No. 2 Road - \$6.0M (page 39)
- Disaster Mitigation and Adaptation Fund Infrastructure Upgrades - \$4.5M (page 56)
- Watermain Replacement and Upgrades Program - \$5.8M (page 70)
- Minoru Lakes Renewal and Upgrades – Phase 1 - \$4.1M (page 102)
- Parkland Acquisition - \$4.0M (page 112)
- Strategic Land Acquisition - \$10.0M (page 116)

Replacement 2020 Capital Costs

The replacement capital costs total \$38.3M (24.6%) of the 2020 Capital Budget, which includes:

- Annual Asphalt Re-Paving Program – Non-MRN - \$3.3M (page 28)
- Cambie Overpass Rehabilitation Project - \$1.4M (page 30)
- Steveston Gravity Sewer Replacement and Rehabilitation - \$1.2M (page 81)
- City Hall - Replacement of Mechanical, Life/Safety, and Envelope Components and Associated Works - \$2.6M (page 93)
- Minoru Centre for Active Living - Lap Pool 1 Reconstruction - \$3.0M (page 95)
- Richmond Ice Centre Infrastructure Renewals - Phase 1 - \$6.9M (page 97)
- Minoru Oval - Artificial Turf Replacement - \$1.0M (page 103)
- Vehicle and Equipment Reserve Purchases (Public Works and Corporate Fleet) - \$3.3M (page 121)

Other Items

Other items included in the capital budget amount to \$15.9M (10.2%) and do not fall into the new or replacement infrastructure categories.

Contingent External Contributions

Contingent External Contributions of \$10.0M (6.4%) (page 138) is an estimate of external grants that may be received throughout the year for various projects. Spending will only occur if funds are confirmed. Including an estimate in the Capital Budget will allow staff to request scope changes to existing projects without having to wait until the 5YFP Bylaw Amendment, which is typically in the fall of each year. It is unknown what contingent external contributions will be received and thus, not possible to determine if the project will be for new or replacement costs.

Internal Transfers and Debt Repayment

Internal Transfers and Debt Repayment total \$5.3M (3.4%) of the 2020 Capital Budget, including:

- 12040 Horseshoe Way Repayment - \$0.5M (page 140)
- 7080 River Road Repayment - \$2.3M (page 141)
- Nelson Road Interchange Repayment - \$0.4M (page 142)
- River Road/North Loop (2005) Repayment - \$1.3M (page 143)
- Transfer funding from DCC Parks Development General to DCC Parks Development West Cambie - \$0.7M (page 144)

These are internal payments and therefore are not applicable to be classified as new or replacement.

Childcare Program

The Childcare Program of \$0.2M (0.1%) provides funding for grants and other childcare initiatives funded by statutory reserves and does not necessarily result in City-owned capital infrastructure.

Affordable Housing Program

The Affordable Housing Program of \$0.4M (0.3%) provides funding for housing affordability and homelessness initiatives funded by statutory reserves and does not necessarily result in City-owned capital infrastructure.

2020 Capital Budget Funding Sources

The 2020 capital budget uses a variety of funding sources which include:

- Development Cost Charges (DCCs) – These fees are collected through development and are used for growth related projects.
- External Sources – These include grants awarded from Provincial and Federal Governments, developer contributions (other than DCCs) and other non-City related sources.

- Reserves – These are funds established by bylaws for specific purposes and are funded primarily by budgeted contributions from the Operating and Utility Budgets and developer contributions plus interest earned on fund balances.
- Appropriated Surplus – These are funds set aside for future commitments.

Generally, projects are funded up to the amount approved to be transferred into each reserve from the annual tax contributions.

For information purposes, Appendix 5 summarizes the projects recommended for funding from the Revolving Fund. The Revolving Fund is used to fund a variety of general projects which do not have dedicated sources of funding and also funds the assist factor for Roads DCC and Parks DCC projects.

Appendix 6 summarizes all the 2020 recommended projects funded by DCCs. Under the *Local Government Act*, the City is required to fund the municipal assist factor portion for growth related projects; therefore, a project cannot be fully funded by DCCs.

Appendix 7 summarizes all the 2020 recommended projects funded by the Capital Building and Infrastructure Reserve. The Capital Building and Infrastructure General Fund is used for facility construction and is funded from taxes and gaming revenue. The Capital Building and Infrastructure Special Sports Fund is for construction costs relating to artificial turf fields and is funded from sports field fees and other recoveries.

The funding sources of the 2020 recommended projects are summarized in Table 1.

Table 1 – 2020 Funding Sources (in millions)

Funding Sources	Amount
Reserves	\$99.7
DCCs	28.7
Appropriated Surplus	11.0
<i>Subtotal - Internal</i>	<i>\$139.4</i>
External Sources	16.3
<i>Subtotal - External</i>	<i>\$16.3</i>
Total 2020 Funding	\$155.7

Approximately \$139.4M of this year's capital plan is funded by Reserves, Appropriated Surplus, and DCCs, which are contributed by developers, and \$16.3M through external sources. Funding details of each individual submission are included in Appendix 8.

Recommended 2020 versus Historical (2016 - 2019) Capital Budget Analysis

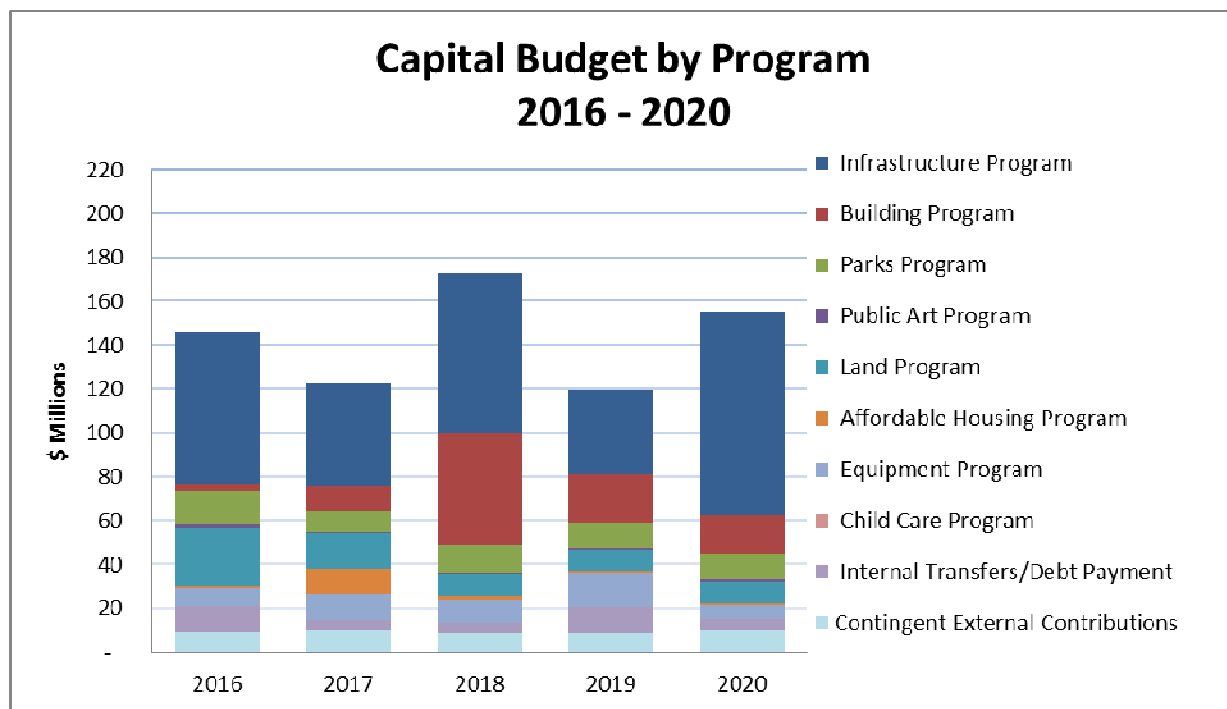
Figure 2 provides analysis of the program types of the capital budget as amended for the past four years compared to the 2020 recommended capital plan. For the years 2016-2019, the Capital Budgets as amended averaged \$140.4M.

Major Facilities Phase 2

Council approved the following projects as part of the Major Facilities Phase 2 Replacement Plan:

- Advanced Planning and Design for Major Facilities Phase 2 (2017: \$2.0M)
- City Centre Community Centre North (2017: Developer Funded)
- Animal Shelter Replacement (2018: \$8.0M)
- Lawn Bowling Clubhouse Replacement (2018: \$4.0M; 2019 \$1.2M)
- Phoenix Net Loft Building Stabilization (2018: \$11.5M)

Figure 2 – Capital Budget by Program 2020 vs. Historical



Proposed 2020 - 2024 Capital Budget

Figure 3 shows the 5 Year Capital Plan from 2020 to 2024, which proposes to continue to invest an average of \$120.1M each year in the City's assets, excluding Major Facilities Phase 2 Projects. In 2021, the Steveston Community Centre and Branch Library project is estimated at \$100.0M.

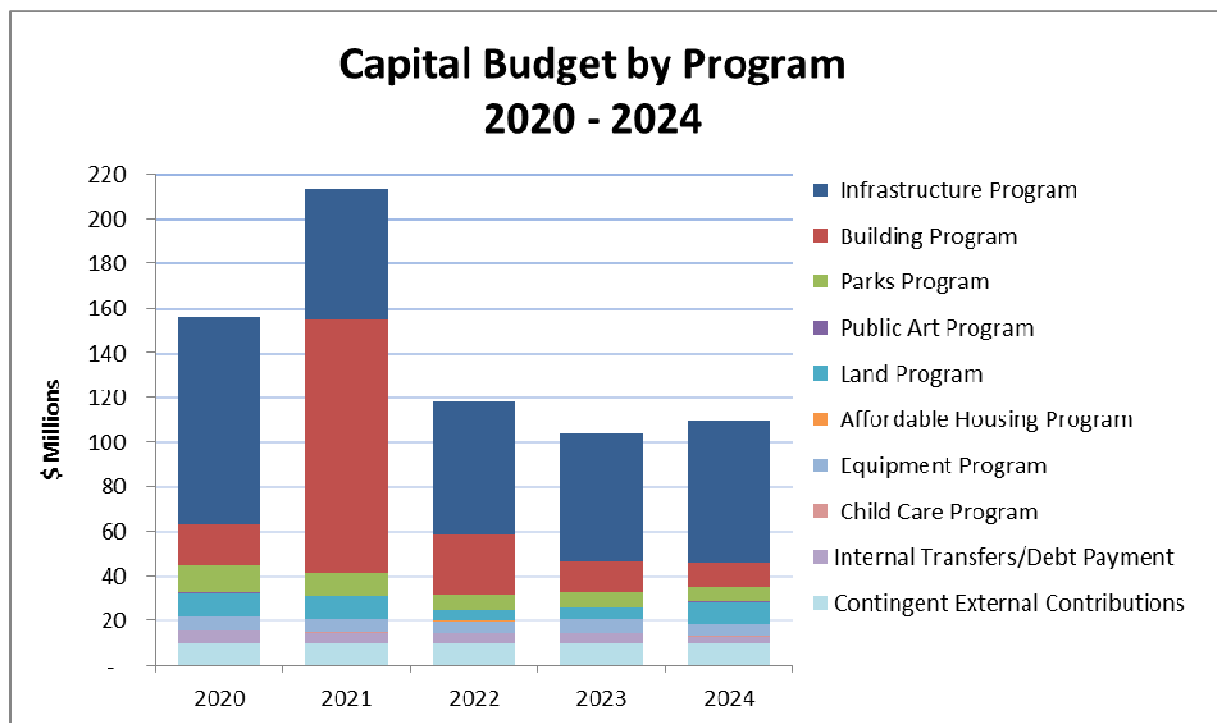
Figure 3 – Proposed 5 Year Capital Plan by Program 2020 to 2024

Table 2 presents a summary of the amount of proposed investment for Capital Projects for 2021-2024. 2021 OBI includes an estimate of \$1.00M OBI for Steveston Community Centre and Branch Library. A listing of the 2020-2024 Capital Projects by program is presented in Appendix 12. A summary of the 5 Year Capital Program presented in Appendix 10 and the Funding Sources are presented in Appendix 11. Highlights of the 2021-2024 projects are summarized in Appendix 13.

Table 2: Proposed 2021 to 2024 Capital Projects (in millions)

Year	Amount	OBI
2021	\$213.3	\$1.78
2022	\$118.4	\$0.70
2023	\$103.8	\$0.51
2024	\$109.6	\$0.42

2020 Operating Budget Impact

Upon completion of capital projects, new assets are added to the City's inventory. There are costs associated with maintaining these new assets. For example, a new building will require staffing, janitorial services, gas and hydro utility costs; a new park will include annual maintenance and labour costs. This ongoing maintenance cost is the Operating Budget Impact (OBI) associated with the new asset which is added to the operating budget.

OBI were reviewed by the Capital Review Committee as part of the Capital submission review process. The total OBI relating to the 2020 recommended projects is \$0.79M. Of this amount, \$0.15M is associated with recycling, water, sewer and drainage utility projects and is included within the infrastructure program. If the respective projects are approved, this amount will be incorporated into the 2021 Utility Budget, and therefore be included in the 2021 utility rates. The 2020 utility rates were previously approved by Council on November 12, 2019. The remaining \$0.64M is included in the operating budget. To align with the expected completion of the new asset, an OBI phase-in plan is adopted each year. For the recommended 2020 Capital Program, the OBI is proposed to be phased in over three years.

The following table summarizes the 2020 recommended Capital Budget by program and the associated OBI, including a breakdown of the labour costs and other expenses.

Table 3: Recommended 2020 Capital and OBI by Program (in millions)

Program (in millions)	Amount	Labour	Other Expenses	Total OBI
Infrastructure Program	\$ 92.9	\$ 0.21	\$ 0.24	\$ 0.45
Building Program	17.6	-	0.04	0.04
Parks Program	12.2	0.05	0.02	0.07
Public Art Program	0.7	-	0.01	0.01
Land Program	10.0	-	-	-
Affordable Housing Program	0.4	-	-	-
Equipment Program	6.4	0.03	0.19	0.22
Child Care Program	0.2	-	-	-
Contingent External Contribution	10.0	-	-	-
Internal Transfers/Debt Payment	5.3	-	-	-
Total 2020 Capital and OBI	\$155.7	\$0.29	\$0.50	\$0.79

Financial Impact

The 2020 Capital Budget with a total value of \$155,651,559 will enable the City to maintain and advance the asset inventory that continues to provide necessities and benefits to the community. The OBI associated with these projects is \$792,765 and will be phased into the 2020-2024 5YFP.

Conclusion

The recommended Capital budget for 2020 is \$155,651,559. The Capital Review Committee worked closely with SMT and the CAO to represent the interests of all stakeholders to ensure that the 2020 capital program addresses Council priorities and meets the needs of the community while effectively utilizing available funding.

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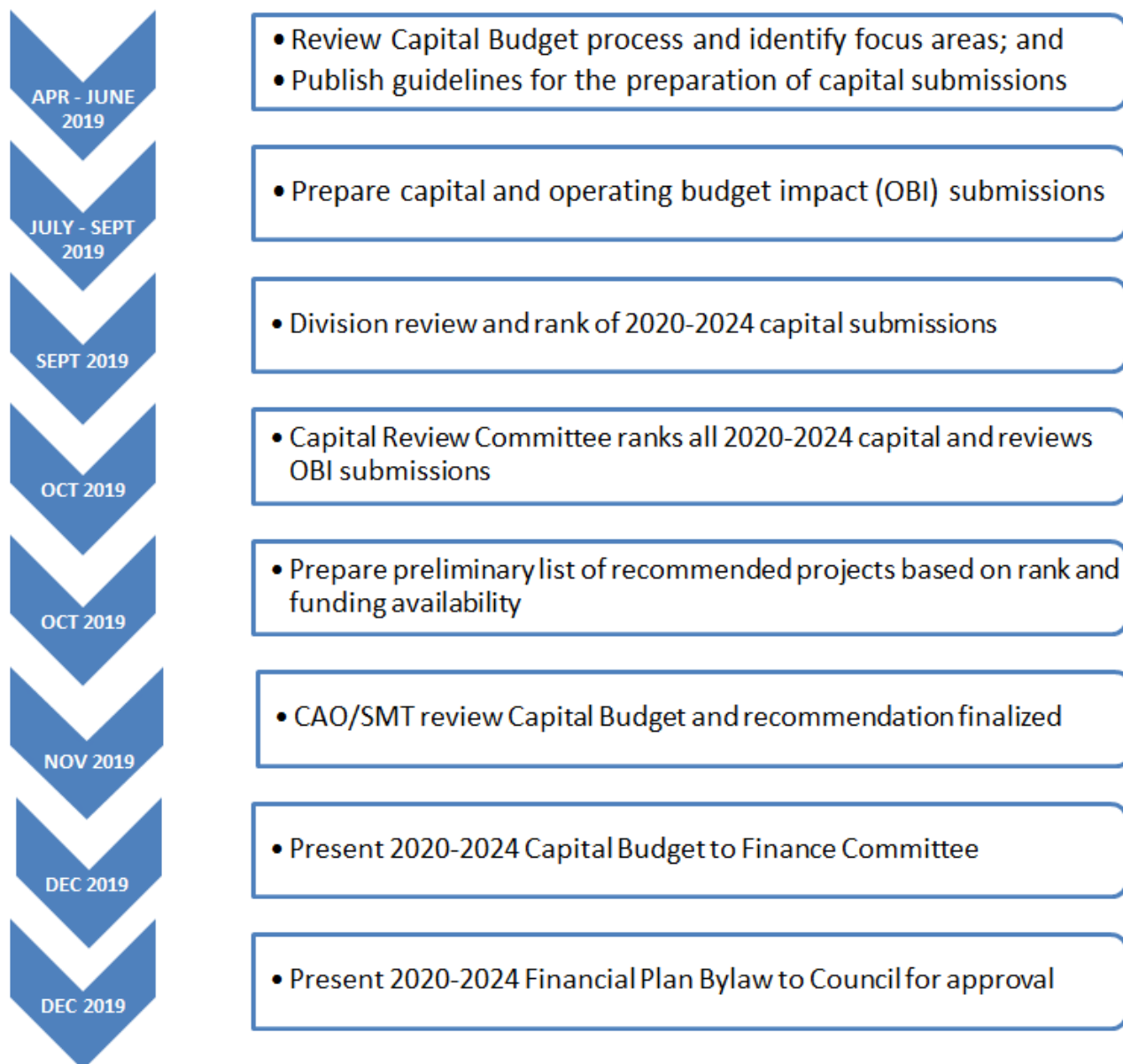
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- Appendix 1: Capital Ranking Criteria
- Appendix 2: 2020 Capital Budget Process
- Appendix 3: Summary of Capital Projects – Recommended for funding in 2020
- Appendix 4: Summary of Capital Projects – Not Recommended for funding in 2020
- Appendix 5: 2020 Summary of Projects Funded by Revolving Fund
- Appendix 6: 2020 Summary of Projects Funded by Development Cost Charges
- Appendix 7: 2020 Summary of Projects Funded by Capital Building and Infrastructure Reserve
- Appendix 8: Details of Projects Recommended for funding in 2020 by Program
- Appendix 9: Details of Projects Not Recommended for funding in 2020 by Program
- Appendix 10: 5 Year Capital Plan Summary (2020 - 2024)
- Appendix 11: 5 Year Capital Plan by Funding Sources (2020 - 2024)
- Appendix 12: 5 Year Capital Plan by Program (2020 - 2024)
- Appendix 13: 2021 - 2024 Capital Plan Highlights
- Appendix 14: Glossary of Terms

Capital Ranking Criteria



2020 Capital Budget Process



Project Name	External Funding	City Funding	Total Investment	Total OBI	Ref
INFRASTRUCTURE PROGRAM					
Roads					
Accessible Pedestrian Signal Program	-	250,000	250,000	13,986	25
Active Transportation Improvement Program	-	600,000	600,000	9,859	26
Annual Asphalt Re-Paving Program - MRN	-	1,558,050	1,558,050	-	27
Annual Asphalt Re-Paving Program - Non-MRN	-	3,287,660	3,287,660	-	28
Arterial Roadway Improvement Program	-	800,000	800,000	28,703	29
Cambie Overpass Rehabilitation Project	677,500	677,500	1,355,000	-	30
Cambie Road/No. 5 Road - Intersection Improvements	690,000	2,070,000	2,760,000	17,361	31
Capstan Station Construction	-	27,500,000	27,500,000	-	32
Capstan Station Integration Design	-	500,000	500,000	-	33
Citywide Connector Walkways Rehabilitation Program	-	250,000	250,000	-	34
Citywide Sidewalk and Street Light Replacement Program	-	500,000	500,000	-	35
LED Street Name Sign Program	-	300,000	300,000	5,355	36
Neighbourhood Walkway Program	-	750,000	750,000	44,171	37
Special Crosswalk Program	-	200,000	200,000	7,468	38
Steveston Highway Multi-Use Pathway, Mortfield Gate to No. 2 Road	3,000,000	3,000,000	6,000,000	33,137	39
Street Light LED Upgrade Program	-	400,000	400,000	(30,000)	40
Top 20 Collision Prone Intersections- Preliminary Designs for Medium/Long-term improvements	-	600,000	600,000	-	41
Top 20 Collision Prone Intersections- Short-term Improvements	-	500,000	500,000	12,484	42
Traffic Calming Program	-	300,000	300,000	24,434	43
Traffic Signal Power Backup System (UPS)	-	100,000	100,000	1,943	44
Traffic Signal Program	-	800,000	800,000	16,176	45
Traffic Video and Communication Program	-	400,000	400,000	3,481	46
Transit-Related Amenity Improvement Program	-	25,000	25,000	1,337	47
Transit-Related Roadway Improvement Program	100,000	400,000	500,000	12,526	48
Transportation Planning, Functional and Preliminary Design	-	257,000	257,000	-	49
West Richmond Sidewalk Rehabilitation Program - Phase 1	-	350,000	350,000	-	50
Total Roads	\$4,467,500	\$46,375,210	\$50,842,710	\$202,421	
Drainage					
Box Culvert Repair	-	1,000,000	1,000,000	-	52
Burkeville Utility Improvements Drainage	-	2,236,000	2,236,000	25,000	53
Canal Stabilization	-	500,000	500,000	10,000	54
Development Coordinated Works - Drainage	-	250,000	250,000	10,000	55
Disaster Mitigation and Adaptation Fund Infrastructure Upgrades	1,806,400	2,709,600	4,516,000	10,000	56
Drainage Network Ecological Enhancement	-	200,000	200,000	-	57
Drainage Pump Station Rehabilitation and Generator Upgrade	-	250,000	250,000	10,000	58
East Richmond Drainage & Irrigation Upgrades	-	1,000,000	1,000,000	3,000	59
Flood Protection & Dike Improvements	-	1,000,000	1,000,000	15,000	60
Invasive Species Management	-	325,000	325,000	-	61
Laneway Drainage Upgrade	-	1,460,000	1,460,000	15,000	62
SCADA System Improvements	-	150,000	150,000	-	63
Storm Main Drainage Upgrade	-	1,020,000	1,020,000	10,000	64
Watercourse Crossing Rehabilitation & Replacement	-	300,000	300,000	-	65
Total Drainage	\$1,806,400	\$12,400,600	\$14,207,000	\$108,000	

Project Name	External Funding	City Funding	Total Investment	Total OBI	Ref
INFRASTRUCTURE PROGRAM					
<i>Water</i>					
Development Coordinated Works - Water	-	250,000	250,000	20,000	67
Thompson Gate Pressure Reducing Valve Station	-	1,500,000	1,500,000	15,000	68
Water Metering Program	-	1,200,000	1,200,000	25,000	69
Watermain Replacement Upgrades Program	-	5,792,500	5,792,500	-	70
Watermain Tie-in and Restoration	-	400,000	400,000	-	71
<i>Total Water</i>	-	<i>\$9,142,500</i>	<i>\$9,142,500</i>	<i>\$60,000</i>	
<i>Sanitary Sewer</i>					
Development Coordinated Works - Sanitary	-	350,000	350,000	10,000	73
Eckersley B Sanitary Pump Station Replacement and Spires	-	5,100,000	5,100,000	-	74
Utility Servicing	-	150,000	150,000	-	75
Gravity Sewer Assessment Program	-	2,800,000	2,800,000	-	76
Hamilton Area Sanitary Sewer and Pump Station	-	2,913,000	2,913,000	25,000	77
Leslie Pump Station Replacement	-	600,000	600,000	5,000	78
Sanitary Pump Station & Forcemain Assessments, Upgrades, and Grease Management	-	300,000	300,000	-	79
Sanitary Pump Station Rehabilitation	-	150,000	150,000	-	80
Sanitary Sewer Tie-in and Restoration	-	1,200,000	1,200,000	35,000	81
<i>Total Sanitary Sewer</i>	-	<i>\$13,563,000</i>	<i>\$13,563,000</i>	<i>\$75,000</i>	
<i>Infrastructure Advanced Design and Minor Public Works</i>					
Fleet Minor Capital	-	280,000	280,000	-	83
Public Works Infrastructure Advanced Design	-	2,550,000	2,550,000	-	84
Public Works Minor Capital - Drainage	-	400,000	400,000	-	85
Public Works Minor Capital - Roads	-	400,000	400,000	-	86
Public Works Minor Capital - Sanitary	-	400,000	400,000	-	87
Public Works Minor Capital - Sanitation & Recycling	-	350,000	350,000	-	88
Public Works Minor Capital - Traffic	-	250,000	250,000	8,106	89
Public Works Minor Capital - Water	-	500,000	500,000	-	90
<i>Total Infrastructure Advanced Design and Minor Public Works</i>	-	<i>\$5,130,000</i>	<i>\$5,130,000</i>	<i>\$8,106</i>	
TOTAL INFRASTRUCTURE PROGRAM	\$6,273,900	\$86,611,310	\$92,885,210	\$453,527	
BUILDING PROGRAM					
<i>Building</i>					
Capital Buildings Project Development Advanced Design	-	500,000	500,000	-	92
City Hall - Replacement of Mechanical, Life/Safety, and Envelope Components and Associated Works	-	2,630,000	2,630,000	-	93
Community Safety Building - Mechanical Component Replacements and Associated Works	-	1,350,000	1,350,000	-	94
Minoru Centre for Active Living - Lap Pool 1 Reconstruction	-	3,000,000	3,000,000	-	95
Richmond Courthouse - Mechanical Components Replacements, Envelope Renewals, Electrical Replacements, Structural Renewals and Associated Works	-	1,601,500	1,601,500	-	96
Richmond Ice Centre Infrastructure Renewals - Phase 1	-	6,850,000	6,850,000	-	97
Works Yard Electrical Service Upgrade and Electrical Vehicle Infrastructure	-	1,688,000	1,688,000	40,960	98
<i>Total Building</i>	-	<i>\$17,619,500</i>	<i>\$17,619,500</i>	<i>\$40,960</i>	
TOTAL BUILDING PROGRAM	-	\$17,619,500	\$17,619,500	\$40,960	

Project Name	External Funding	City Funding	Total Investment	Total OBI	Ref
PARKS PROGRAM					
<i>Parks</i>					
Lang Park Completion	-	250,000	250,000	12,092	100
London Steveston Park Phase 3 Construction	-	400,000	400,000	22,162	101
Minoru Lakes Renewal Upgrades – Phase 1	-	4,060,000	4,060,000	-	102
Minoru Oval - Artificial Turf Replacement	-	1,030,000	1,030,000	-	103
Parks Advance Planning and Design	-	300,000	300,000	-	104
Parks Ageing Infrastructure Replacement Program	-	590,000	590,000	-	105
Parks General Development	-	400,000	400,000	4,383	106
Parks Identity Signage Program - Phase 3	-	100,000	100,000	12,785	107
Playground Improvement Program	-	600,000	600,000	-	108
Railway Granville Bike Park	-	270,000	270,000	13,503	109
Riverport and Cook Community Gardens	-	180,000	180,000	8,017	110
Total Parks	-	\$8,180,000	\$8,180,000	\$72,942	
<i>Parkland</i>					
Parkland Acquisition	-	4,000,000	4,000,000	-	112
Total Parkland	-	\$4,000,000	\$4,000,000	-	
TOTAL PARKS PROGRAM	-	\$12,180,000	\$12,180,000	\$72,942	
PUBLIC ART PROGRAM					
<i>Public Art</i>					
Public Art Program	-	694,764	694,764	10,000	114
TOTAL PUBLIC ART PROGRAM		\$694,764	\$694,764	\$10,000	
LAND PROGRAM					
<i>Land</i>					
Strategic Land Acquisition	-	10,000,000	10,000,000	-	116
TOTAL LAND PROGRAM	-	\$10,000,000	\$10,000,000	-	
AFFORDABLE HOUSING PROGRAM					
<i>Affordable Housing</i>					
Affordable Housing 2020 Operating Initiatives	-	400,000	400,000	-	118
TOTAL AFFORDABLE HOUSING PROGRAM		\$400,000	\$400,000	-	
EQUIPMENT PROGRAM					
<i>Vehicle</i>					
Automatic Vehicle Location/Global Positioning System	-	118,000	118,000	49,870	120
Vehicle and Equipment Reserve Purchases (Public Works and Corporate Fleet)	-	3,322,766	3,322,766	27,160	121
Total Vehicle	-	\$3,440,766	\$3,440,766	\$77,030	
<i>Fire Dept Vehicles and Equipment</i>					
Fire Vehicle Replacement Reserve Purchases	-	416,455	416,455	-	123
Total Fire Dept Vehicles and Equipment	-	\$416,455	\$416,455	-	

Project Name	External Funding	City Funding	Total Investment	Total OBI	Ref
EQUIPMENT PROGRAM					
<i>Information Technology</i>					
Annual Hardware Refresh	-	362,800	362,800	-	125
Data Centre Server Refresh /Update - Phase 1 of 2	-	363,000	363,000	-	126
Network Refresh for City Facilities - Phase 1 of 3	-	557,950	557,950	31,733	127
Office 2016 Licensing - Phase 2 of 2	-	494,909	494,909	6,573	128
PeopleSoft HCM 9.2 Update 2020	-	217,440	217,440	-	129
Total Information Technology	-	\$1,996,099	\$1,996,099	\$38,306	
<i>Equipment</i>					
Fire Equipment Replacement from Reserve	-	258,145	258,145	55,000	131
Richmond Fire Driving Testing/Evaluation Platform	-	280,000	280,000	45,000	132
Total Equipment	-	\$538,145	\$538,145	\$100,000	
TOTAL EQUIPMENT PROGRAM	-	\$6,391,465	\$6,391,465	\$215,336	
CHILD CARE PROGRAM					
<i>Child Care</i>					
Child Care - Administration	-	110,000	110,000	-	134
Child Care Projects - City-wide (Capital Grants)	-	50,000	50,000	-	135
Child Care Projects - City-wide Non-Capital Grants	-	10,000	10,000	-	136
TOTAL CHILD CARE PROGRAM	-	\$170,000	\$170,000	-	
CONTINGENT EXTERNAL CONTRIBUTION					
Contingent External Contribution	10,000,000	-	10,000,000	-	138
TOTAL CONTINGENT EXTERNAL CONTRIBUTION	\$10,000,000	-	\$10,000,000	-	
INTERNAL TRANSFERS/DEBT PAYMENT					
<i>Internal Transfers/Debt Payment</i>					
12040 Horseshoe Way Repayment	-	525,000	525,000	-	140
7080 River Road Repayment	-	2,341,384	2,341,384	-	141
Nelson Road Interchange Repayment	-	385,098	385,098	-	142
River Road/North Loop (2005) Repayment	-	1,334,953	1,334,953	-	143
Transfer funding from DCC Parks Development General to DCC Parks Development West Cambie	-	724,185	724,185	-	144
TOTAL INTERNAL TRANSFERS/DEBT PAYMENT	-	\$5,310,620	\$5,310,620	-	
Total 2020 Capital Program	\$16,273,900	\$139,377,659	\$155,651,559	\$792,765	

OBI Type	
Operating OBI	\$ 644,794
Utility OBI	147,971
Total OBI	\$792,765

Project Name	External Funding	City Funding	Total OBI	Ref
INFRASTRUCTURE PROGRAM				
Roads				
Extending City's Existing Cycling Network by 2 kilometres	-	5,100,000	24,712	146
Extending City's Existing Cycling Network by 3 kilometres	-	6,200,000	39,344	147
Extending City's Existing Cycling Network by 5 kilometres	-	11,100,000	54,364	148
Total Roads	-	\$22,400,000	\$118,420	
TOTAL INFRASTRUCTURE PROGRAM	-	\$22,400,000	\$118,420	
BUILDING PROGRAM				
Community Safety Building Inventory Room and Associated Works	-	402,850	-	150
Fire Hall No. 6 - Mechanical Component Replacements and Associated Works	-	490,000	-	151
Library Cultural Centre - Mechanical Components, Replacements and Interior/Accessibility Renewals and Associated Works	-	5,100,000	-	152
Minoru Arenas - Mechanical Components Replacements and Associated Works	-	715,000	-	153
Steveston Martial Arts - Accessibility, Envelope Renewals	-	400,000	-	154
TOTAL BUILDING PROGRAM	-	\$7,107,850	-	
INFORMATION TECHNOLOGY PROGRAM				
Emergency Notification System Integration to MyRichmond	-	100,850	-	156
Enhanced Online Community Services Program Guide	-	295,000	-	157
Richmond Library Programs Integration with MyRichmond	-	230,000	10,000	158
TOTAL INFORMATION TECHNOLOGY PROGRAM	-	\$625,850	\$10,000	
Total 2020 Capital Program – Not Recommended for funding in 2020	-	\$30,133,700	\$128,420	

2020 Summary of Projects Funded by Revolving Fund

Appendix 5

Each year, the Revolving Fund is utilized to fund various capital projects. This summary shows the 2020 capital projects and the corresponding amounts funded by the Revolving Fund.

Project Name	Revolving Fund	Total Investment	Total OBI	Ref
Roads				
Cambie Overpass Rehabilitation Project	677,500	1,355,000	-	30
Citywide Connector Walkways Rehabilitation Program	250,000	250,000	-	34
Citywide Sidewalk and Street Light Replacement Program	500,000	500,000	-	35
West Richmond Sidewalk Rehabilitation Program - Phase 1	350,000	350,000	-	50
Total Infrastructure	\$1,777,500	\$2,455,000	-	
Parks				
Minoru Oval - Artificial Turf Replacement	680,000	1,030,000	-	103
Parks Ageing Infrastructure Replacement Program	590,000	590,000	-	105
Playground Improvement Program	600,000	600,000	-	108
Total Parks	\$1,870,000	\$2,220,000	-	
Total 2020 Projects Funded by Revolving Fund	\$3,647,500	\$4,675,000	-	

The City Assist Factor on Roads DCC and Parks DCC projects are also funded by the Revolving Fund.

City Assist Factor on Parks Acquisition	\$377,312			
City Assist Factor on Parks Development	\$354,495			
City Assist Factor on Roads DCC	\$699,245			
Total Funding from Revolving Fund	\$5,078,552			

Project Name	DCC Funding	City Assist Factor	Total Investment ¹	Total OBI	Ref
Roads					
Accessible Pedestrian Signal Program	235,125	14,875	250,000	13,986	25
Active Transportation Improvement Program	564,300	35,700	600,000	9,859	26
Arterial Roadway Improvement Program	752,400	47,600	800,000	28,703	29
Cambie Road/No. 5 Road - Intersection Improvements	1,946,835	123,165	2,760,000	17,361	31
LED Street Name Sign Program	282,150	17,850	300,000	5,355	36
Neighbourhood Walkway Program	705,375	44,625	750,000	44,171	37
Special Crosswalk Program	188,100	11,900	200,000	7,468	38
Steveston Highway Multi-Use Pathway, Mortfield Gate to No. 2 Road	2,821,500	178,500	6,000,000	33,137	39
Top 20 Collision Prone Intersections- Preliminary Designs for Medium/Long-term improvements	564,300	35,700	600,000	-	41
Top 20 Collision Prone Intersections- Short-term Improvements	470,250	29,750	500,000	12,484	42
Traffic Calming Program	282,150	17,850	300,000	24,434	43
Traffic Signal Power Backup System (UPS)	94,050	5,950	100,000	1,943	44
Traffic Signal Program	752,400	47,600	800,000	16,176	45
Traffic Video and Communication Program	376,200	23,800	400,000	3,481	46
Transit-Related Amenity Improvement Program	23,512	1,488	25,000	1,337	47
Transit-Related Roadway Improvement Program	376,200	23,800	500,000	12,526	48
Transportation Planning, Functional and Preliminary Design	241,708	15,292	257,000	-	49
Total Roads	\$10,676,555	\$675,445	\$15,142,000	\$232,421	
Water					
Watermain Replacement Upgrades Program	137,899	8,724	5,792,500	-	70
Total Water	\$137,899	\$8,724	\$5,792,500	\$-	
Sanitary Sewer					
Eckersley B Sanitary Pump Station Replacement and Spires Utility Servicing	587,813	5,938	5,100,000	-	74
Hamilton Area Sanitary Sewer and Pump Station	1,763,438	111,563	2,800,000	-	76
Leslie Pump Station Replacement	1,175,625	11,875	2,913,000	25,000	77
Total Sanitary Sewer	\$3,526,876	\$129,376	\$10,813,000	\$25,000	
Infrastructure Advanced Design and Minor Public Works					
Public Works Infrastructure Advanced Design	376,200	23,800	2,550,000	-	84
Total Infrastructure Advanced Design and Minor Public Works	\$376,200	\$23,800	\$2,550,000	\$-	
Parks					
Lang Park Completion	235,250	14,750	250,000	12,092	100
London Steveston Park Phase 3 Construction	376,200	23,800	400,000	22,162	101
Minoru Lakes Renewal Upgrades – Phase 1	3,818,430	241,570	4,060,000	-	102
Parks Advance Planning and Design	282,150	17,850	300,000	-	104
Parks General Development	376,200	23,800	400,000	4,383	106
Parks Identity Signage Program - Phase 3	94,050	5,950	100,000	12,785	107
Railway Granville Bike Park	253,935	16,065	270,000	13,503	109
Riverport and Cook Community Gardens	169,290	10,710	180,000	8,017	110
Total Parks	\$5,605,505	\$354,495	\$5,960,000	\$72,942	
Parkland					
Parkland Acquisition	3,762,000	238,000	4,000,000	-	112
Total Parkland	\$3,762,000	\$238,000	\$4,000,000	\$-	

¹The Total Investment includes all funding sources: External and City Funding, refer to Appendix 3.

Project Name	DCC Funding	City Assist Factor	Total Investment ¹	Total OBI	Ref
<i>Internal Transfers/Debt Payment</i>					
7080 River Road Repayment	2,202,072	139,312	2,341,384	-	141
Nelson Road Interchange Repayment	385,098	-	385,098	-	142
River Road/North Loop (2005) Repayment	1,334,953	-	1,334,953	-	143
Transfer funding from DCC Parks Development General to DCC Parks Development West Cambie	724,185	-	724,185	-	144
Total Internal Transfers/Debt Payment	\$4,646,308	\$139,312	\$4,785,620	\$-	
Grand Total	\$28,731,343	\$1,569,152	\$49,043,120	\$330,363	

¹The Total Investment includes all funding sources: External and City Funding, refer to Appendix 3.

The Capital Building and Infrastructure General Fund is used for facility construction and is funded from taxes and gaming revenue. The Capital Building and Infrastructure Special Sports Fund is for construction costs relating to artificial turf fields and is funded from sports field fees and other recoveries.

General Fund				
Project Name	Capital Building & Infrastructure Fund	Total Investment	Total OBI	Ref
Building				
Capital Buildings Project Development Advanced Design	500,000	500,000	-	92
City Hall - Replacement of Mechanical, Life/Safety, and Envelope Components and Associated Works	2,630,000	2,630,000	-	93
Community Safety Building - Mechanical Component Replacements and Associated Works	1,350,000	1,350,000		94
Minoru Centre for Active Living - Lap Pool 1 Reconstruction	3,000,000	3,000,000	-	95
Richmond Ice Centre Infrastructure Renewals - Phase 1	6,850,000	6,850,000	-	97
Works Yard Electrical Service Upgrade and Electrical Vehicle Infrastructure	1,608,000	1,688,000	40,960	98
Total Building	\$15,938,000	\$16,018,000	\$40,960	
Grand Total	\$15,938,000	\$16,018,000	\$40,960	

Special Sports Fund				
Project Name	Capital Building & Infrastructure Fund	Total Investment	Total OBI	Ref
Parks				
Minoru Oval – Artificial Turf Replacement	350,000	1,030,000	-	103
Total Parks	\$350,000	\$1,030,000	-	
Grand Total	\$350,000	\$1,030,000	-	

Infrastructure Program 2020

The City's Infrastructure Program assets include: road, drainage and sanitary pump stations, drainage, water, and sanitary mains.


2020 Recommended Infrastructure – Roads Program

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Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Accessible Pedestrian Signal Program	Submission ID:	5676


Location:	Various Locations		
Cost:	\$250,000	OBI:	\$13,986
Funding Sources:	Roads DCC: \$235,125 Roads City Assist: \$14,875		
Scope:	<p>General Scope: Installation of accessible pedestrian signal (APS) devices at existing signalized intersections. Proposed funding level and locations would achieve the City’s goal to outfit all existing City-owned traffic signals with APS devices (remaining 36 out of 175) by 2020; this funding will complete all upgrades and will meet the 2020 goal. The standard for all new traffic signals is to include APS.</p> <p>Major Cost Components: APS hardware (including push button, speaker and electrical circuits), push button sign, pedestrian interface module (located within pedestrian heads), communication interface module (located in traffic cabinet), and electrical wiring.</p> <p>Funding: The City will apply for funding from ICBC grants and if successful, the City’s funding sources will be reduced accordingly.</p>		




Program:	Infrastructure Program		Sub-program:	Roads
Project Name:	Active Transportation Improvement Program		Submission ID:	5677
Location:	Various Locations			
Cost:	\$600,000		OBI:	\$9,859
Funding Sources:	Roads DCC:	\$564,300		
	Roads City Assist:	\$35,700		
Scope:	<p>General Scope: Implement cycling and rolling (e.g., wheelchairs and scooters) improvements to support: 1) the expansion of on-street cycling routes and off-street multi-use pathways; and 2) cycling and rolling initiatives and on-going enhancements to existing infrastructure.</p> <p>Major Cost Components: New on-street cycling facilities, off-street multi-use pathways for transportation purposes, bike racks, pavement markings and signage, and associated road geometric improvements.</p> <p>Funding: The City will apply for funding from TransLink and ICBC grants and if successful, the City's funding sources will be reduced accordingly.</p> <p>The list of improvements currently planned for 2020 is:</p> <ul style="list-style-type: none">Westminster Highway (No. 6 Road-No. 8 Road): provision of physical separation from vehicular travel lanes; andRailway Avenue (Steveston Highway-Williams Road): revision of pavement markings to increase the width of the parking lane and bike lane to current standards.			





Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Annual Asphalt Re-Paving Program - MRN	Submission ID:	5615
Location:	Various Locations		
Cost:	\$1,558,050	OBI:	\$ -
Funding Sources:	Others: \$1,558,050		
Scope:	<p>To re-pave MRN roads in alignment with the City's Ageing Infrastructure Report and Pavement Management Plan prepared by WSP Consultants. The project list has been determined for 2020 as listed in the Proposed 2020 Paving Program Report per Council meeting on October 23, 2019.</p> <p>The project costs include any associated ancillary work, including but not limited to, curb and gutter repairs, road base repair, asphalt parking re-paving, manhole and valve box adjustments, line painting, staff inspection time, and similar.</p> <p>The project includes the pavement component of other water, sanitary, and drainage upgrades in the Capital Program that are co-ordinated by the Engineering department as well as consultant/contractor fees related to bridge upgrades and the Pavement Management Plan.</p>		



Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Annual Asphalt Re-Paving Program - Non-MRN	Submission ID:	5616
Location:	City Wide		
Cost:	\$3,287,660	OBI:	\$ -
Funding Sources:	Others: \$3,287,660		
Scope:	<p>To re-pave City-owned Non-MRN roads (major & minor roads and lanes) in alignment with the City's Ageing Infrastructure Report and Pavement Management Plan prepared by WSP Consultants. The project list has been determined for 2020 as listed in the Proposed 2020 Paving Program Report per Council meeting on October 23, 2019.</p> <p>The project costs include any associated ancillary work, including but not limited to, curb and gutter repairs, road base repair, asphalt parking re-paving, manhole and valve box adjustments, line painting, staff inspection time and similar.</p> <p>The project includes the pavement component of other water, sanitary and drainage upgrades in the Capital Program that are co-ordinated by the Engineering department as well as consultant/contractor fees related to bridge upgrades and the Pavement Management Plan.</p>		



Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Arterial Roadway Improvement Program	Submission ID:	5678
Location:	Various Locations		
Cost:	\$800,000	OBI:	\$28,703
Funding Sources:	Roads DCC: \$752,400 Roads City Assist: \$47,600		
Scope:	<p>General Scope: Implement pedestrian and traffic safety improvements along arterial roads and at arterial road intersections to address issues including those identified through requests from the public and/or Council.</p> <p>Major Cost Components: New and/or enhancement of turn lanes, channelization, traffic signage, pedestrian safety measures enhancements and new/upgrade sidewalks/walkways.</p> <p>Funding: The City will apply for funding from TransLink and ICBC grants and if successful, the City's funding sources will be reduced accordingly.</p> <p>Locations for improvements are prioritized based on traffic safety/collision risks and level of pedestrian activities (i.e., schools, neighbourhood service centres, bus stops, recreational service centres, shopping/retail centres, etc.).</p> <p>The list of improvements currently planned for 2020 is:</p> <ul style="list-style-type: none">▪ Upgrade and widen existing sidewalk along east side of St Edwards Drive, from 348m east of Cambie Road to Bird Road; and▪ Remove channelized right-turn islands and reconstruct curb returns at Cooney Road-Westminster Highway (northeast corner) and Garden City Road-Lansdowne Road (northwest corner) intersections.		
			

Program:	Infrastructure Program		Sub-program:	Roads
Project Name:	Cambie Overpass Rehabilitation Project		Submission ID:	6191
Location:	City Wide			
Cost:	\$1,355,000		OBI:	\$ -
Funding Sources:	Capital Revolving: \$677,500 Grant: \$677,500			
Scope:	In 2019, City of Richmond received a grant through the MRN Structures Program to implement structural rehabilitation for the Cambie Road Overpass at Knight Street. This project will include, but is not limited to, geotechnical assessment, design, and structural rehabilitation. This work is critical to maintain a safe transportation network, limit further deterioration of the overpass, and reduce future maintenance costs.			
				

Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Cambie Road/No. 5 Road - Intersection Improvements	Submission ID:	6631

Location:

Cambie Road and No. 5 Road

Cost:

\$2,760,000

OBI:

\$17,361

Funding Sources:

Roads DCC:

\$1,946,835

Roads City Assist:

\$123,165

Grant:

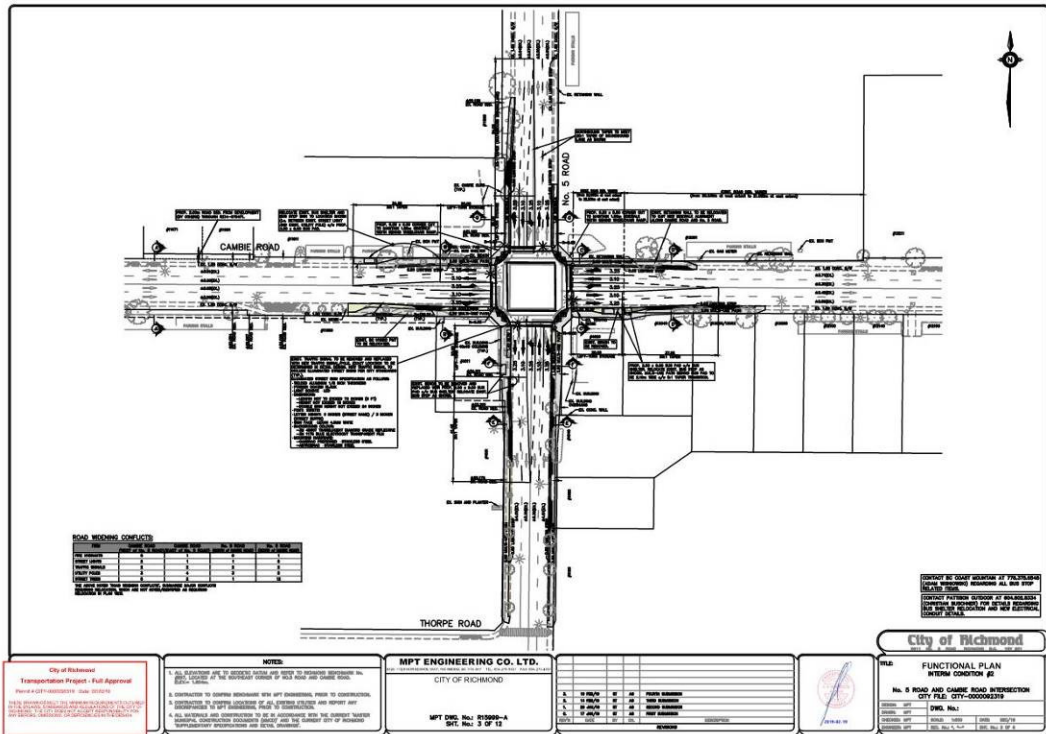
\$690,000

Scope:

General Scope: Provide dedicated left-turn lanes on all four legs of the intersection and multi-use pathways along both sides of Cambie Road at the intersection and along both sides of No. 5 Road from Cambie Road to Thorpe Road to enhance safety of road users, as described in the staff report titled "Proposed Intersection Improvements on Cambie Road at No. 5 Road and Jacombs Road" approved by Council on Monday June 24, 2019.

Major Cost Components: Road widening, relocation of curb and gutter, pavement markings and signage, new landscaped boulevard/lighting strip, street tree removal/relocation, relocation/widening existing sidewalk, new accessible bus stop landing pads and transit shelters, upgrade of existing traffic signals including overhead LED illuminated street name signs, traffic cameras and accessible pedestrian signal features, relocation of existing infrastructure (i.e., hydrants, streetlighting, utility poles, catch basins, private utility kiosks, etc.) and property acquisition.

Funding: The City will apply for funding from TransLink and ICBC grants and if successful, the City's funding sources will be reduced accordingly.



Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Capstan Station Construction	Submission ID:	6821

Location:	No 3 Road, Capstan Way to Sea Island Way		
Cost:	\$27,500,000	OBI:	\$ -
Funding Sources:	Capstan Station:	\$27,500,000	


Scope:


General Scope: Release of funding to TransLink to initiate construction of the base case station design for the Canada Line Capstan Station similar to the Aberdeen Station or the Lansdowne Station. This Station is a critical transportation feature of the City Centre Area Plan and its timely implementation will support transit-oriented development and maximize the use of the Canada Line. As per the Capstan Station Funding Agreement, station construction will be completed within 30 months upon release of the funding.

Major Cost Components: Design and construction.


Architectural cross-section drawing of the Capstan Station platform and track area. The drawing shows a platform with a 50m extension, stairs, and various structural elements. Dimensions are provided for different sections: 12.0m (40 ft) for the platform extension, 12.0m (40 ft) for the main platform, 12.0m (40 ft) for the track area, and 12.0m (40 ft) for the platform extension. The drawing also shows a 50m (164 ft) platform extension and a 12.0m (40 ft) track area. The drawing is labeled "12.0m (40 ft) Platform Extension" and "50m (164 ft) Platform Extension".

Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Capstan Station Integration Design	Submission ID:	6642
Location:	No 3 Road, Capstan Way to Sea Island Way		
Cost:	\$500,000	OBI:	\$ -
Funding Sources:	Capstan Station: \$500,000		
Scope:	<p>General Scope: The development of the conceptual, preliminary and detailed designs of the Capstan Station integration features based on four general directions, i.e., Mobility Belt, Signature Elements, Supportive Infrastructure, and Coordinated Activation Zones. The designs will integrate the public realm, transit plaza, guideway park, City-owned park and neighbourhood park, etc. with the proposed Canada Line Capstan Station. Upon selection of the Capstan Station design option, the project is anticipated to be presented to Council for consideration in Q4 2020.</p> <p>Major Cost Components: Consultant costs for design.</p>		



Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Citywide Connector Walkways Rehabilitation Program	Submission ID:	6764
Location:	Various Locations		
Cost:	\$250,000	OBI:	\$ -
Funding Sources:	Capital Revolving: \$250,000		
Scope:	<p>This project involves the replacement or rehabilitation of connector walkways located in various neighbourhoods around Richmond. The assessments conducted confirm that the walkway surface conditions have deteriorated over time due to tree root ingress, asphalt cracking, etc. The project cost includes, but is not limited to, costs associated with tree root pruning, asphalt re-paving, and other ancillary work.</p> <p>Connector walkways are heavily used by pedestrians and their current condition in certain areas may pose a tripping hazard for the users. This project would allow the City to mitigate potential risks to public safety and promote eco-friendly modes of transportation like walking and biking.</p> <p>This project is being submitted with the support of Risk Management.</p>		
			

Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Citywide Sidewalk and Street Light Replacement Program	Submission ID:	6189
Location:	Various Locations		
Cost:	\$500,000	OBI:	\$ -
Funding Sources:	Capital Revolving: \$500,000		
Scope:	<p>Over time, street lighting infrastructure deteriorates and can become a hazard to residents and traffic without proper maintenance and replacement programs. As per the City's ageing infrastructure assessment program, several of the street lights and street light service panels are at the end of their design life and need to be replaced. Sidewalks that have subsided, are damaged from tree roots, or have become misaligned pose tripping hazards to pedestrians. Replacing these sidewalks will improve pedestrian safety and encourage non-vehicular forms of transportation.</p> <p>This project includes removal and replacement of streetlight poles, service panels, and luminaires that have reached the end of their service life, retrofit of deteriorated concrete bases and the associated ancillary works, inspection of streetlights that are nearing the end of their service life, installation of new streetlights to eliminate gaps in the street lighting network, and repairing deteriorated sidewalks.</p> <p>This project is being submitted with the support of Risk Management.</p>		





Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	LED Street Name Sign Program	Submission ID:	6154
Location:	Various Locations		
Cost:	\$300,000	OBI:	\$5,355
Funding Sources:	Roads DCC: \$282,150 Roads City Assist: \$17,850		
Scope:	<p>General Scope: Installation of overhead LED street name signs at various signalized intersections to enhance visibility and legibility for drivers. Currently, 95 of 175 locations have been upgraded (18 sites were upgraded in 2019) with the remaining intersections to be upgraded over the next 5 to 10 years (i.e. 15-20 per year).</p> <p>Major Cost Components: LED street name sign, mounting hardware and electrical wiring.</p> <p>Funding: The City will apply for funding from TransLink and ICBC grants and if successful, the City's funding sources will be reduced accordingly.</p> <p>Locations are prioritized based on major, gateway and high-volume intersections and in tourist areas.</p> <p>The preliminary list for 2020 includes the following 20 locations:</p> <ol style="list-style-type: none"> 1. Cooney Rd and Westminster Hwy; 2. Gilbert Rd and Westminster Hwy; 3. Buswell St and Granville Ave; 4. Hollybridge Way and Elmbridge Way; 5. Oval Way and River Rd; 6. Russ Baker Way and Inglis Dr; 7. Russ Baker Way and Cessna Dr; 8. Russ Baker Way and Hudson Ave; 9. Garden City Rd and Cambie Rd; 10. Garden City Rd and Capstan Way; 11. Gilbert Rd and Blundell Rd; 12. Gilbert Rd and Francis Rd; 13. Gilbert Rd and Williams Rd; 14. No. 3 Rd and Francis Rd; 15. No. 3 Rd and Williams Rd; 16. No. 3 Rd and Blundell Rd; 17. No. 1 Rd and Chatham St; 18. No. 1 Rd and Williams Rd; 19. No. 1 Rd and Osmond Rd; and 20. No. 1 Rd and Francis Rd. 		




Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Neighbourhood Walkway Program	Submission ID:	5680

Location:	Various Locations		
Cost:	\$750,000	OBI:	\$44,171
Funding Sources:	Roads DCC: \$705,375 Roads City Assist: \$44,625		
Scope:	<p>General Scope: Construction of new and/or enhancement of existing neighbourhood walkways/sidewalks.</p> <p>Major Cost Components: Construction of new or upgrade of existing sidewalks, pathways, wheelchair ramps, minor curb cuts, and boulevard modifications.</p> <p>Funding: The City will apply for funding from TransLink and ICBC grants and if successful, the City's funding sources will be reduced accordingly.</p> <p>Locations are prioritized based on level of pedestrian activities (i.e., proximity to schools, bus stops, recreational centres, parks, shopping/retail centres, etc.), traffic safety/collision risks, and requests from Council and the public.</p> <p>The preliminary list for 2020 includes the following 2 locations:</p> <ol style="list-style-type: none">1. Construct walkway along north side of Westminster Highway North, from Muir Drive to 22411 Westminster Highway; and2. Construct sidewalk along west side of Viking Way, from Cambie Road to Bridgeport Road.		



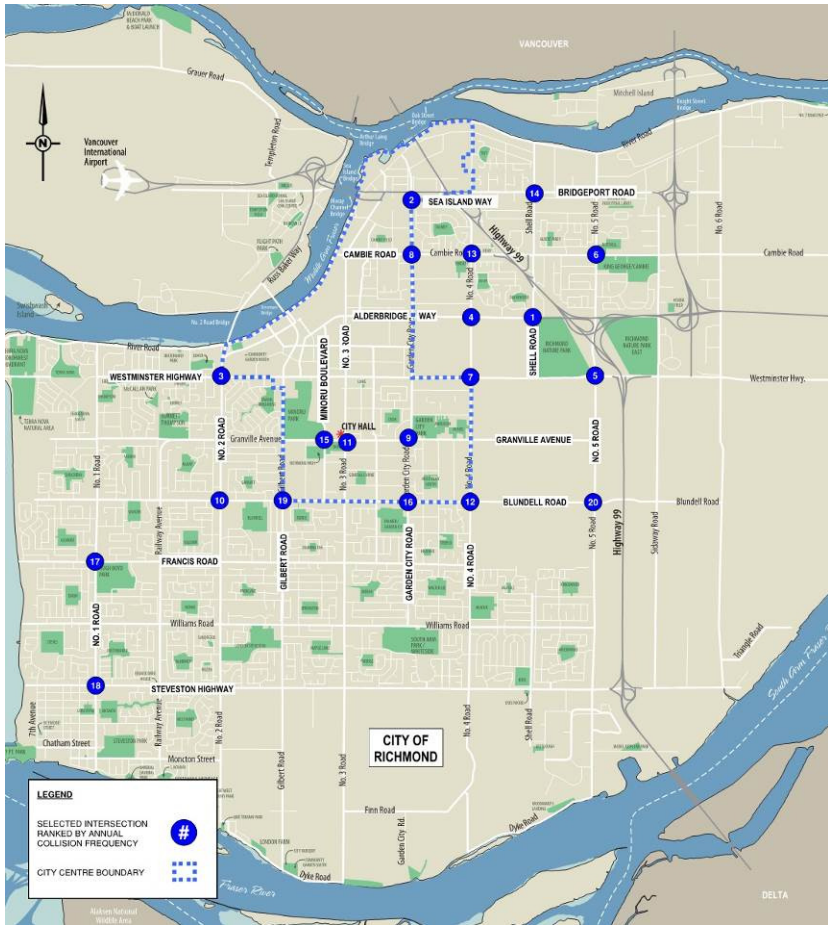
Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Special Crosswalk Program	Submission ID:	5681
Location:	Various Locations		
Cost:	\$200,000	OBI:	\$7,468
Funding Sources:	Roads DCC: \$188,100 Roads City Assist: \$11,900		
Scope:	<p>General Scope: Upgrade of existing crosswalks on arterial roads (typically four-lane) to new traffic control standards that have been endorsed by Council.</p> <p>Major Cost Components: Illuminated overhead crosswalk signs with amber flashers, strobe lights, poles, pole bases, underground conduit, junction boxes, pole-mount cabinet, controller, hydro service panel, APS push buttons, pavement markings, and site restoration.</p> <p>Funding: The City will apply for funding from TransLink and ICBC grants and if successful, the City's funding sources will be reduced accordingly.</p> <p>The preliminary list for 2020 includes the following 4 locations:</p> <ol style="list-style-type: none">1. Shell Rd and Maddocks Rd;2. Van Horne Way and River Rd;3. Shell Road Trail and Granville Ave; and4. Shell Road Trail and Blundell Rd.		
			

Program:	Infrastructure Program		Sub-program:	Roads
Project Name:	Steveston Highway Multi-Use Pathway, Mortfield Gate to No. 2 Road		Submission ID:	6639
Location:	South Side of Steveston Highway from Mortfield Gate to No. 2 Road			
Cost:	\$6,000,000		OBI:	\$33,137
Funding Sources:	Roads DCC: \$2,821,500 Roads City Assist: \$178,500 Grant: \$3,000,000			
Scope:	<p>General Scope: Provision of a 2.5m (minimum) to 3.0m (preferred) wide paved multi-use pathway (MUP) along the south side of Steveston Highway from No. 2 Road to Mortfield Gate. This project will provide a westward extension of the MUP along Steveston Highway from Mortfield Gate to Shell Road (2019 project approved by Council).</p> <p>Upon completion, a new east/west cycling-pedestrian connection will be established linking the existing MUPs along No. 2 Road and Shell Road. The project will add 2.7 km of new active transportation infrastructure. This project is to be carried out in two phases: (1) prepare detailed design and consultation with affected property owners/business operators in 2020 (\$600,000); and (2) MUP construction to start in 2021 (\$5,400,000).</p> <p>Major Cost Components: Phase 1 - Consultant costs for design and associated cost estimate. Phase 2 - Realignment/installation of curb and gutter, modifications to traffic lanes, multi-use pathway, pavement markings and signage, pedestrian crossing enhancements, relocation of above ground infrastructure (i.e., streetlight poles, hydrants, power poles, etc.), bus stops and modifications to private property (i.e., re-grade driveways, landscaping, etc.).</p> <p>Funding: The City will apply for funding from TransLink and ICBC grants and if successful, the City's funding sources will be reduced accordingly.</p>			



Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Street Light LED Upgrade Program	Submission ID:	5663
Location:	City Wide		
Cost:	\$400,000	OBI:	(\$30,000)
Funding Sources:	Enterprise: \$125,000 Gas Tax: \$275,000		
Scope:	<p>This project is phase 4 of 4 to replace high-pressure sodium (HPS) light fixtures that are over 25 years old. A total of 3,780 of these ageing fixtures are part of this four-phase replacement program, and this project will be replacing approximately 1,000 HPS fixtures. Additional capital projects will be requested in subsequent years to replace the remaining 6,100 HPS fixtures.</p> <p>It is estimated that this phase of the project will reduce electricity use by 350,000 kWh, which translates to approximately \$30,000 in cost savings.</p>		
			

Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Top 20 Collision Prone Intersections- Preliminary Designs for Medium/Long-term improvements	Submission ID:	6632
Location:	Various Locations		
Cost:	\$600,000	OBI:	\$ -
Funding Sources:	Roads DCC: \$564,300 Roads City Assist: \$35,700		
Scope:	<p>General Scope: Prepare preliminary design and cost estimates for each of the top 20 collision prone signalized intersections to confirm the scope of medium/long-term improvements, as described in the staff report titled "Review of Collision Prone Intersections" presented to Council on June 24, 2019. Based on the outcome of the project, an implementation strategy to advance the safety improvements at the 20 locations will be developed and presented to Council for consideration.</p> <p>Major Cost Components: Consultant costs for design for each of the top 20 collision prone intersections and associated cost estimate.</p> <p>Funding: The City will apply for funding from TransLink and ICBC grants and if successful, the City's funding sources will be reduced accordingly.</p>		



Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Top 20 Collision Prone Intersections- Short-term Improvements	Submission ID:	6630

Location:

Various Locations

Cost:

\$500,000

OBI:

\$12,484

Funding Sources:

Roads DCC: \$470,250

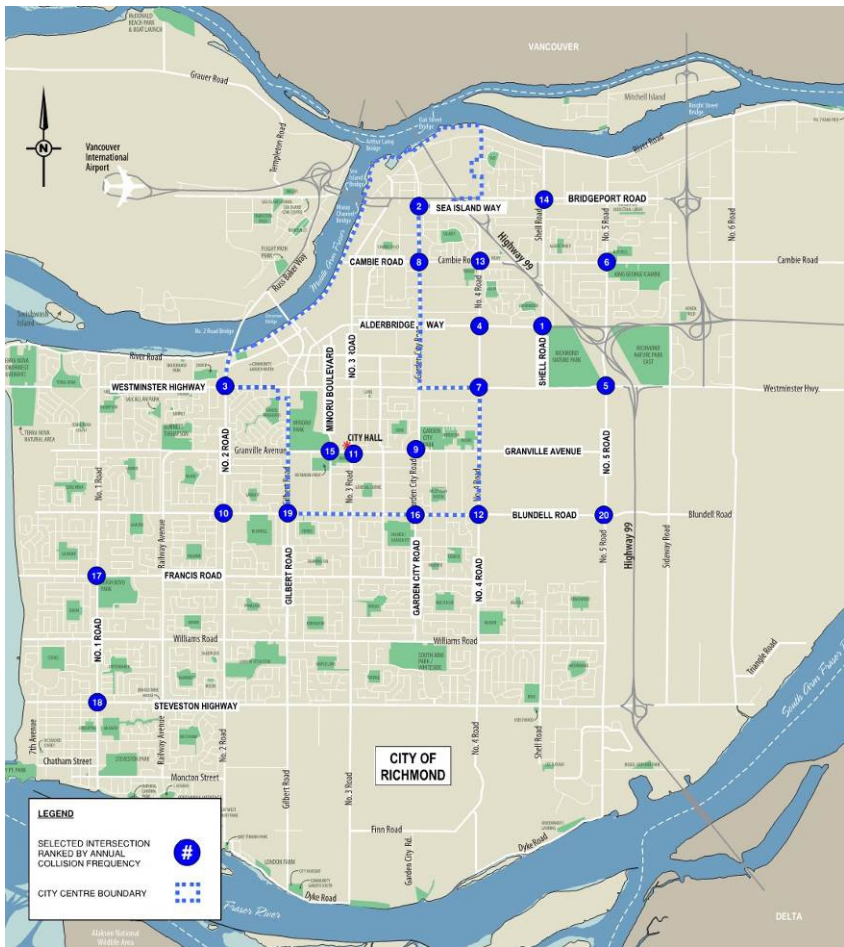
Roads City Assist: \$29,750

Scope:


General Scope: Implement short-term improvements to enhance intersection safety at top 20 collision prone signalized intersections, as described in the staff report titled "Review of Collision Prone Intersections" approved by Council on Monday June 24, 2019.

Major Cost Components: Varying improvements at each of the 20 locations which include some or all of the following: pedestrian crossing enhancements, new traffic/parking signage and pavement markings, provision of barriers, sightline improvement with foliage trimming, larger traffic signal lenses, and design and implementation of change in signal operation to assign priority to vulnerable road users.

Funding: The City will apply for funding from TransLink and ICBC grants and if successful, the City's funding sources will be reduced accordingly.




Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Traffic Calming Program	Submission ID:	5682
Location:	Various Locations		
Cost:	\$300,000	OBI:	\$24,434
Funding Sources:	Roads DCC:	\$282,150	
	Roads City Assist:	\$17,850	
Scope:	<p>General Scope: Retrofitting existing local roads with traffic calming measures to enhance safety for road users and livability for residents by reducing speed and deterring short-cutting traffic within neighbourhoods.</p> <p>Major Cost Components: Road works to construct traffic calming measures such as curb bulges, curb ramps, traffic circles, speed humps, delineated walkways, traffic signage, pavement marking, and streetscape features (i.e., trees and/or other landscaping improvements).</p> <p>Funding: The City will apply for funding from TransLink and ICBC grants and if successful, the City's funding sources will be reduced accordingly.</p> <p>Locations will be prioritized based on Council and/or public request.</p>		




Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Traffic Signal Power Backup System (UPS)	Submission ID:	6444

Location:	Various Locations		
Cost:	\$100,000	OBI:	\$1,943
Funding Sources:	Roads DCC: \$94,050 Roads City Assist: \$5,950		
Scope:	<p>General Scope: Installation of Uninterruptible Power Supply (UPS) system at signalized intersections to provide continual power during disruption. UPS protects electronic hardware from power surges. It is anticipated that the remaining signalized intersections (111 out of 175) can be upgraded over the next 20-25 years (i.e. 3-5 per year).</p> <p>Major Cost Components: UPS cabinet and base, controller, batteries, underground conduit, and site restoration.</p> <p>Funding: The City will apply for funding from TransLink and ICBC grants and if successful, the City's funding sources will be reduced accordingly.</p> <p>The preliminary list for 2020 includes 3 locations as follows:</p> <ol style="list-style-type: none">1. No. 2 Rd and Francis Rd;2. No. 2 Rd and Williams Rd; and3. Gilbert Rd and Westminster Hwy.		



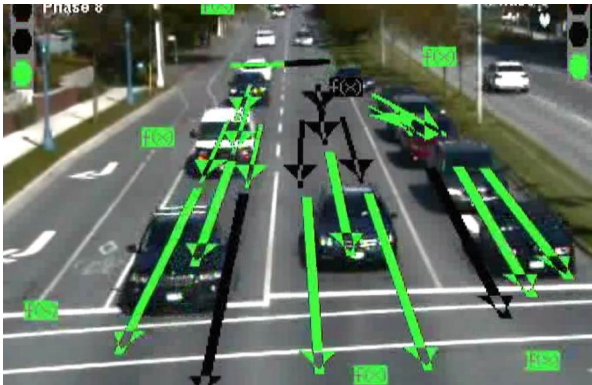
Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Traffic Signal Program	Submission ID:	5683

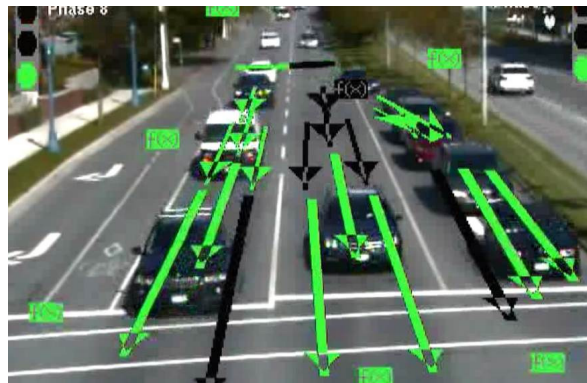
Location:	Various Locations		
Cost:	\$800,000	OBI:	\$16,176
Funding Sources:	Roads DCC: \$752,400 Roads City Assist: \$47,600		
Scope:	<p>General Scope: Installation of new/upgrade of existing traffic signals to accommodate traffic growth, respond to public requests, better manage movements of all road users, and address traffic safety concerns.</p> <p>Major Cost Components: Traffic controller, cabinet, poles, bases, junction boxes, underground conduit, in ground and camera video detection, enhanced accessible pedestrian signals, traffic signal heads, electrical wiring, traffic signal communications, LED street name signs, pavement markings, minor corner property acquisition, minor curb cuts, boulevard modifications, and site restoration.</p> <p>Funding: The City will apply for funding from TransLink and ICBC grants and if successful, the City's funding sources will be reduced accordingly.</p> <p>The preliminary list for 2020 includes 2 locations as follows with a further location to be determined:</p> <ol style="list-style-type: none">1. Moffatt Road and Blundell Road (upgrade from pedestrian to full traffic signal); and2. Lassam Road and Steveston Highway.		



Program:	Infrastructure Program		Sub-program:	Roads
Project Name:	Traffic Video and Communication Program		Submission ID:	5904


Location:	Various Locations		
Cost:	\$400,000	OBI:	\$3,481
Funding Sources:	Roads DCC: \$376,200 Roads City Assist: \$23,800		
Scope:	<p>General Scope:</p> <ol style="list-style-type: none">1. Install video detection cameras at signalized intersections to enhance cyclist and vehicle detection, optimize traffic operations, measure traffic speed, and provide real time video of traffic conditions to the Traffic Management Centre (TMC) for observing and enhancing operations and provide photos (in one minute intervals) of approaching traffic conditions for public access on the City website. This program is separate from the Richmond RCMP security camera program. It is anticipated that the remaining intersections (108 out of 175) can be upgraded over the next 7 to 10 years (i.e. 10-15 per year).2. Upgrade conduit and cable infrastructure to install higher capacity fibre optic cable and electronics for Ethernet (computer networking technology) to communicate with multiple remote programmable devices at traffic signals. It is anticipated that the entire city can be upgraded over the next 15 to 20 years based on the current level of funding. <p>Major Cost Components: Video detection camera hardware and installation, fibre optic cable, fibre splicing and underground enclosures and fibre network switches are required to communicate to the TMC.</p> <p>Funding: The City will apply for funding from TransLink and ICBC grants and if successful, the City's funding sources will be reduced accordingly.</p> <p>The preliminary list for 2020 includes 13 locations as follows:</p> <ol style="list-style-type: none">1. Oval Way and River Rd;2. Hollybridge Way and Elmbridge Way;3. No. 3 Rd and Granville Ave;4. Great Canadian Way and River Rd;5. Great Canadian Way and Bridgeport Transit Exchange;6. No. 3 Rd and Leslie Rd;7. No. 3 Rd and Capstan Way;8. No. 3 Rd and Williams Rd;9. No. 8 Rd and Westminster Hwy;10. No. 6 Rd and Commerce Pkwy;11. Graybar Rd and Westminster Hwy;12. Fraserwood Way and Westminster Hwy; and13. Westminster Hwy, No. 6 Rd to No. 8 Rd (Fibre Optic Cable).		






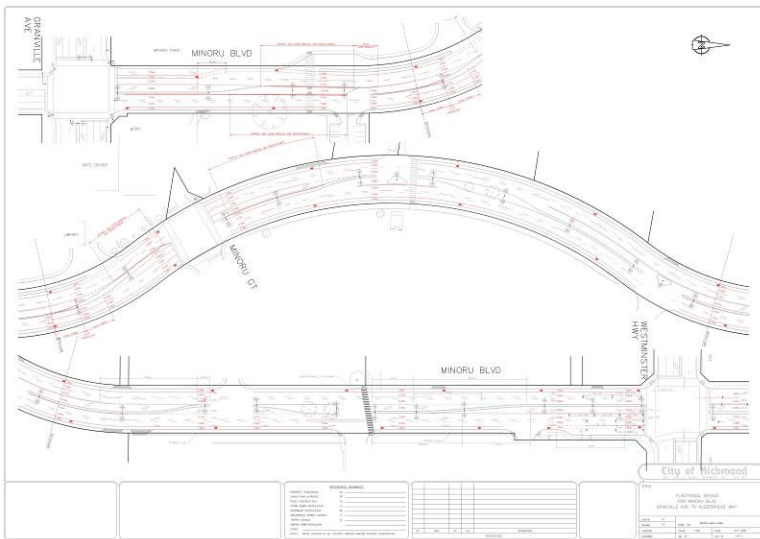
Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Transit-Related Amenity Improvement Program	Submission ID:	5684

Location:	Various Locations		
Cost:	\$25,000	OBI:	\$1,337
Funding Sources:	Roads DCC: \$23,512 Roads City Assist: \$1,488		
Scope:	<p>General Scope: Transit-related amenity improvements within the road right-of-way to support transit service and infrastructure.</p> <p>Major Cost Components: Non-advertising transit shelters and benches, and other supplementary amenity improvements to facilitate transit passengers.</p> <p>Funding: The City will apply for funding from TransLink and ICBC grants and if successful, the City's funding sources will be reduced accordingly.</p> <p>Locations for bus stop shelters are prioritized based on boarding activity, customer requests and availability of right-of-way.</p> <p>For 2020, approximately 15-20 locations are proposed for upgrade. The actual locations will be determined in early 2020 in consultation with Pattison Outdoor, the City's street furniture contractor.</p>		




Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Transit-Related Roadway Improvement Program	Submission ID:	5685
Location:	Various Locations		
Cost:	\$500,000	OBI:	\$12,526
Funding Sources:	Roads DCC: \$376,200 Roads City Assist: \$23,800 Grant: \$100,000		
Scope:	<p>General Scope: Road and traffic improvements to support transit service improvements and existing transit infrastructure. Currently, approximately 80% of 721 existing bus stops are accessible (7 bus stops were upgraded in 2019).</p> <p>Major Cost Components: Bus stop landing pads and ramps for wheelchair accessibility, intersection geometric/corner improvements, sidewalk/walkway construction connecting to bus stops, etc. to facilitate transit passengers.</p> <p>Funding: The City will apply for funding from TransLink and ICBC grants and if successful, the City’s funding sources will be reduced accordingly.</p> <p>Locations for bus stop accessibility improvements are prioritized based on boarding/alighting activity, customer requests and availability of right-of-way.</p> <p>For 2020, approximately 10-15 locations are proposed for upgrade. The actual locations will be determined in early 2020 in consultation with Coast Mountain Bus Company (CMBC) and through public feedback.</p>		



Program:	Infrastructure Program		Sub-program:	Roads
Project Name:	Transportation Planning, Functional and Preliminary Design		Submission ID:	5679
Location:	Various Locations			
Cost:	\$257,000		OBI:	\$ -
Funding Sources:	Roads DCC: \$241,708 Roads City Assist: \$15,292			
Scope:	<p>General Scope:</p> <ol style="list-style-type: none">1. Project Design - Prepare functional/preliminary designs and cost estimates required for transportation capital projects identified within the Capital Program. Design to identify road elements, horizontal alignment, cross-section, property impacts, etc. and high level cost estimates to carry out further detailed engineering design.2. Project Planning and Coordination - Assist in the development, leading, coordinating and administering the planning, engineering, and design work on transportation capital projects approved as part of the Capital Program and off-site improvements for new developments. <p>Cost based on 5% of the cost estimate of capital projects included within annual capital programs that require functional designs; design funds for projects with more significant scope are included separately within those projects.</p> <p>Major Cost Components: Consultant and/or staff costs for Project design and staff costs for Project planning and coordination.</p>			
				

Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	West Richmond Sidewalk Rehabilitation Program - Phase 1	Submission ID:	6729
Location:	Various Locations		
Cost:	\$350,000	OBI:	\$ -
Funding Sources:	Capital Revolving: \$350,000		
Scope:	<p>This project involves the replacement or rehabilitation of sidewalks in West Richmond area that have deteriorated over time due to tree root ingress or settlement. The project includes, but is not limited to, costs associated with sidewalk panel replacement, tree removal and replacement, root pruning, curb and gutter repairs, and other ancillary work.</p> <p>The current condition of sidewalks in certain areas may pose a tripping hazard for pedestrians. This project would allow the City to address these issues and mitigate potential risks to public safety.</p> <p>This project is being submitted with the support of Risk Management.</p>		




Drainage Program 2020


The City's Drainage and Diking Program supports critical improvements for drainage and flood protection infrastructure. In addition to replacing ageing infrastructure, these projects include drainage and diking upgrades to proactively address climate change - induced impacts such as higher intensity storms and sea level rise. Consistent with Council's Strategic Plan, completion of these projects will help the City become safer and more resilient to climate change.


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Program:	Infrastructure Program		Sub-program:	Drainage
Project Name:	Box Culvert Repair		Submission ID:	6499
Location:	City Wide			
Cost:	\$1,000,000		OBI:	\$ -
Funding Sources:	Drainage Utility:		\$1,000,000	
Scope:	<p>The City of Richmond's Box Culvert Inspection Program identifies locations where settlement, cracking, and infiltration occur due to failing box culverts.</p> <p>The scope of work for this project includes the repair and rehabilitation of concrete storm box culverts throughout Richmond. Repair work will include, but is not limited to, patching, grouting, and structural lining. Additionally, this funding will be used to perform point repairs as identified by the City Box Culvert Inspection Program throughout the year.</p>			
				


Program:	Infrastructure Program	Sub-program:	Drainage
Project Name:	Burkeville Utility Improvements Drainage	Submission ID:	5606
Location:	Burkeville Area		
Cost:	\$2,236,000	OBI:	\$25,000
Funding Sources:	Drainage Utility: \$1,000,000 Water Utility: \$736,000 Sanitary Utility: \$500,000		
Scope:	<p>Burkeville's drainage system was designed using shallow ditches and small diameter road cross culverts. As the area redevelops, ditch infills are becoming common. Ditch infills change the nature of the drainage system and reduce drainage capacity. A new, larger drainage system is therefore needed to accommodate these changes.</p> <p>In addition, sanitary and water infrastructure will be upgraded where the scope overlaps with the upgrade of the drainage infrastructure.</p> <p>The current gravity sanitary sewer system is made up of vitrified clay and approaching the end of its service life. Replacing it at the same time as the drainage system upgrade will be more cost-effective for the City. This project will also coordinate the installation of 736 metres of 200mm diameter watermain to replace or rehabilitate existing ageing infrastructure</p> <p>Engineering and construction efficiencies will be achieved, and public disruptions will be minimized by coordinating the utility improvements.</p>		
			


Program:	Infrastructure Program	Sub-program:	Drainage
Project Name:	Canal Stabilization	Submission ID:	6496
Location:	City Wide		
Cost:	\$500,000	OBI:	\$10,000
Funding Sources:	Drainage Utility: \$500,000		
Scope:	<p>The scope of work for this project includes bank stabilization for the 7000 block of No. 9 Road and other priority areas of unstable drainage banks throughout Richmond.</p> <p>This project will stabilize the canal walls to improve drainage, mitigate damage to the roadway, prevent damage to local infrastructure running parallel to the canals and maintain riparian management area conditions.</p> <p>This project involves implementation of one or more canal bank stabilization solutions at various locations throughout Richmond. This will include partial re-profiling of the canal plus construction of a retaining wall or similar stabilization structure.</p>		
			


Program:	Infrastructure Program		Sub-program:	Drainage
Project Name:	Development Coordinated Works - Drainage		Submission ID:	5913
Location:	City Wide			
Cost:	\$250,000		OBI:	\$10,000
Funding Sources:	Drainage Utility:		\$250,000	
Scope:	<p>This project will enable the City to leverage development over the next year to design and construct drainage infrastructure outside of what would be required as part of their development.</p> <p>These are upgrades and replacement of ageing infrastructure that the City would complete separately, but economic and engineering efficiencies can be achieved by having the developer complete this work at the same time the development takes place.</p>			
				


Program:	Infrastructure Program		Sub-program:	Drainage
Project Name:	Disaster Mitigation and Adaptation Fund Infrastructure Upgrades		Submission ID:	6700
Location:	Various Locations			
Cost:	\$4,516,000		OBI:	\$10,000
Funding Sources:	Drainage Utility: \$2,709,600 Grant: \$1,806,400			
Scope:	<p>The City was awarded the Infrastructure Canada Disaster Mitigation and Adaptation Fund in 2019, with grant funding in the amount of \$13,780,000. This project improves flood protection for the City, supporting the Flood Protection Management Strategy, and is required to be completed to receive the grant funding.</p> <p>This project includes the design, construction, contract administration, and project management of drainage pump station upgrades and perimeter dike raising as per the awarded Disaster Mitigation and Adaptation Fund.</p> <p>This project is the first of five phases to complete drainage and dike upgrades.</p>			





Program:	Infrastructure Program	Sub-program:	Drainage
Project Name:	Drainage Network Ecological Enhancement	Submission ID:	6704
Location:	City Wide		
Cost:	\$200,000	OBI:	\$ -
Funding Sources:	Drainage Utility: \$200,000		
Scope:	<p>The main objective of this project is to assess, monitor, enhance and protect the Ecological Network by identifying opportunities on City-owned land to improve ecosystem services. This project aims to increase the environmental resiliency and quality of the City's Ecological Network, closely aligning it with the goals of the City's Ecological Network Management Strategy, the Integrated Rainwater Resource Management Plan, Riparian Response Strategy and various pollution prevention undertakings including the Mitchell Island Environmental Stewardship Initiatives.</p>		
			

Program:	Infrastructure Program	Sub-program:	Drainage
Project Name:	Drainage Pump Station Rehabilitation and Generator Upgrade	Submission ID:	5885
Location:	Miller Road		
Cost:	\$250,000	OBI:	\$10,000
Funding Sources:	Drainage Utility: \$250,000		
Scope:	<p>The hardware of some drainage pump stations is at the end of its life expectancy and continually has numerous breakdowns. This project will improve the reliability and efficiency of our drainage pump stations.</p> <p>The scope of work for this project includes rehabilitation upgrades at Miller Road drainage pump stations. Rehabilitation will include, but is not limited to, the upgrade and installation of a motor control centre, transfer switch, sonar level controls, and the rebuild of the existing two pumps at Miller Road pump station.</p> <p>Additionally, this project will include the purchase and installation of a 200 kW generator. The generator will be connected using a new transfer switch. Construction of a concrete pad with a fenced surround may be undertaken dependant on site conditions.</p>		
			


Program:	Infrastructure Program		Sub-program:	Drainage
Project Name:	East Richmond Drainage & Irrigation Upgrades		Submission ID:	5881
Location:	East Richmond			
Cost:	\$1,000,000		OBI:	\$3,000
Funding Sources:	Drainage Utility:		\$1,000,000	
Scope:	This project will accommodate drainage and irrigation upgrades throughout East Richmond Drainage. Irrigation upgrades include, but are not limited to, culvert pipe upsizing, culvert lowering, headwall replacement, canal re-grading, valve and level sensor installation, and ditch bank stabilization works. This project will also allow staff to conduct required assessments and investigations in East Richmond that will further enhance the drainage and irrigation network.			
				


Program:	Infrastructure Program		Sub-program:	Drainage
Project Name:	Flood Protection & Dike Improvements		Submission ID:	5909
Location:	City Wide			
Cost:	\$1,000,000		OBI:	\$15,000
Funding Sources:	Drainage Utility: \$1,000,000			
Scope:	<p>The City has 49km of perimeter dike and 39 drainage pump stations that provide the City with flood protection from ocean storm surges and freshets. This project will include drainage and dike improvements at priority locations that maintain or increase current flood protection service levels.</p> <p>In particular, this project includes dike improvements adjacent to pump stations that are required to meet medium to long-term flood protection requirements and to accommodate local area needs such as the provision of basic recreation trails. Dike construction work includes, but is not limited to, dike raising, structural rehabilitation, brush cutting, and dike re-armouring at priority locations.</p>			
				


Program:	Infrastructure Program	Sub-program:	Drainage
Project Name:	Invasive Species Management	Submission ID:	6489
Location:	City Wide		
Cost:	\$325,000	OBI:	\$ -
Funding Sources:	Drainage Utility: \$325,000		
Scope:	<p>The general scope includes the identification, mapping, research, removal and/or control of priority invasive species from the City drainage system and City lands, with a view to maintain the required performance of the drainage system. Typical activities will include control techniques to eliminate or minimize the spread of aggressive invasive species such as Parrot's feather and purple loosestrife, mapping and control treatments for knotweed species which pose a threat to City infrastructure (i.e. pump stations) and biodiversity, and removal of wild chervil from roadside right-of-ways and City drainage infrastructure. The intent of this program is to reduce the spread of invasive species in order to reduce the impacts on the City drainage system.</p>		
			

Program:	Infrastructure Program	Sub-program:	Drainage
Project Name:	Laneway Drainage Upgrade	Submission ID:	6655
Location:	Various Locations		
Cost:	\$1,460,000	OBI:	\$15,000
Funding Sources:	Drainage Utility: \$1,460,000		
Scope:	<p>The scope of work for this project includes installation of drainage infrastructure in the following areas:</p> <ul style="list-style-type: none">▪ 203m of laneway drainage east of Greenlees Road between 7651 Bates Road and 7511 Greenlees Road;▪ 480m of laneway drainage east of Bates Road and west of No. 3 Road between 7660 Bates Road and 9640 Bates Road; and▪ 387m of laneway drainage south of Bates Road between 7240 Bates Road and 9951 Greenlees Road. <p>This project does not include the addition of street lighting, curbs, or gutters. Costs may be recovered through City Bylaw 8752 as development occurs.</p>		
			

Program:	Infrastructure Program	Sub-program:	Drainage
Project Name:	SCADA System Improvements	Submission ID:	6705
Location:	Various Locations		
Cost:	\$150,000	OBI:	\$ -
Funding Sources:	Sanitary Utility: \$150,000		
Scope:	<p>Through its SCADA system, the City monitors and controls various equipment over the sanitary sewer, drainage, and water network. This project involves rehabilitating, upgrading, and installing computers, instruments, and electrical systems throughout the SCADA system. This project will maintain and improve the sanitary sewer, drainage, and water network operation, as well as maintain system security and technological viability.</p> <p>Failure to complete the work will result in increased risk of sanitary system and drainage system failure, thereby reducing service levels and increasing cost and disruption of unplanned maintenance and emergency repairs.</p>		



Program:	Infrastructure Program	Sub-program:	Drainage
Project Name:	Storm Main Drainage Upgrade	Submission ID:	6500
Location:	Various Locations		
Cost:	\$1,020,000	OBI:	\$10,000
Funding Sources:	Drainage Utility: \$1,020,000		
Scope:	<p>This project will upgrade storm sewers in the Bath Slough drainage catchment to improve drainage capacity and system performance during higher intensity storm events. Upgrades include, but are not limited to, updating the drainage model, upsizing existing storm sewers and culverts, installing new drainage pipes, and converting existing culvert connections into a twin culvert system to increase drainage capacity.</p> <p>Specific areas include the Aztec, Woodhead, and Montego neighbourhoods.</p>		
			

Program:	Infrastructure Program		Sub-program:	Drainage
Project Name:	Watercourse Crossing Rehabilitation & Replacement		Submission ID:	6498
Location:	City Wide			
Cost:	\$300,000		OBI:	\$ -
Funding Sources:	Drainage Utility:		\$300,000	
Scope:	This project will repair and replace watercourse crossings throughout Richmond that pose safety risks to vehicles and pedestrians. Rehabilitation and replacement work includes, but is not limited to, replacing failed headwalls and culvert crossings. Additionally, this project includes infilling of non-Riparian Management Area watercourses and extending lengths of existing ditch infills that pose safety risks to the public.			
				

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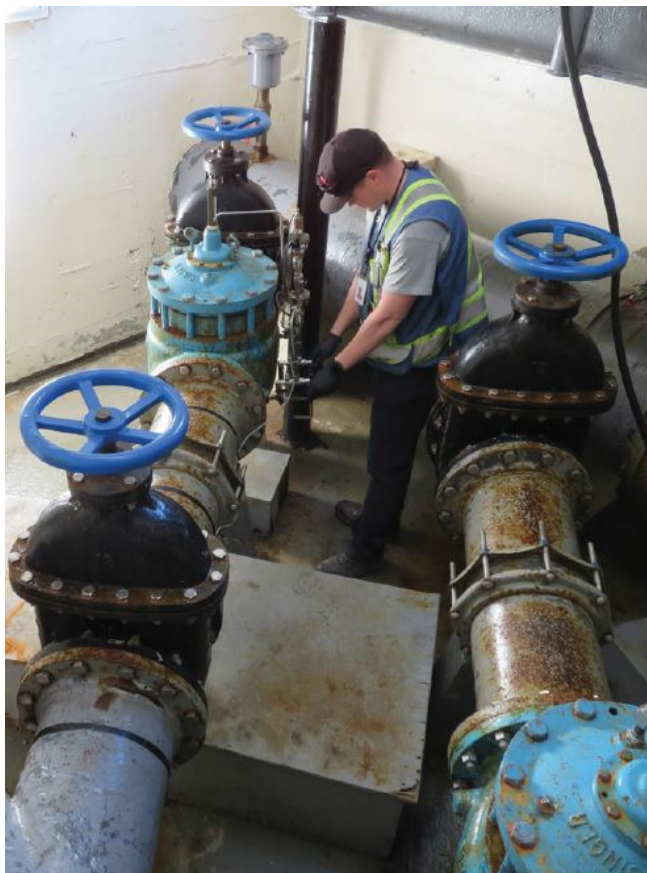
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Program:	Infrastructure Program	Sub-program:	Water
Project Name:	Development Coordinated Works - Water	Submission ID:	5654


Location:	City Wide		
Cost:	\$250,000	OBI:	\$20,000
Funding Sources:	Water Utility: \$250,000		
Scope:	<p>This project will enable the City to leverage development over the next year to design and construct water infrastructure outside of what would be required as part of their development.</p> <p>These are upgrades and replacement of ageing infrastructure that the City would complete separately but economic and engineering efficiencies can be achieved by having the developer complete this work at the same time the development takes place.</p>		




Program:	Infrastructure Program	Sub-program:	Water
Project Name:	Thompson Gate Pressure Reducing Valve Station	Submission ID:	6757
Location:	Thompson Gate and Boundary Road		
Cost:	\$1,500,000	OBI:	\$15,000
Funding Sources:	Water Utility: \$1,500,000		
Scope:	<p>This project involves the installation of a new Pressure Reducing Valve (PRV) station at Thompson Gate and Boundary Road and the associated tie-ins to connect the neighbourhood's watermain system to Metro Vancouver's Annacis No. 4 transmission main. Completion of the project is required to provide adequate flows to support upcoming development.</p> <p>Costs will be recovered through rezoning cash-in-lieu contributions or the Works and Services Cost Recovery Bylaw No. 8752. Costs collected for this purpose shall be returned to the Watermain Replacement Reserve.</p> <p>Land required for the station shall be acquired through development rezoning.</p> <p>Project costs include, but are not limited to, allowance for potential groundwater contamination, a raised structure with pile supports to accommodate for existing ground conditions, and pipe installation aligned with future transmission main upgrades.</p>		




Program:	Infrastructure Program		Sub-program:	Water
Project Name:	Water Metering Program		Submission ID:	6093
Location:	City Wide			
Cost:	\$1,200,000		OBI:	\$25,000
Funding Sources:	Watermain Replacement: \$1,200,000			
Scope:	<p>Water metering enhances user equity by allowing customers to pay for the water and sewer that they use. This project involves the implementation of the volunteer multi-family water meter program.</p> <p>The volunteer multi-family water meter program will target the last sector that is not metered for water. As part of the program, the City offers a subsidy for the actual installation cost of water meters up to the greater of \$1,200 per unit or \$100,000 per complex, as well as a five-year guarantee for water charges for existing multi-family complexes. The program will also involve active outreach by the City to complexes that will benefit from the water meter program.</p>			



Program:	Infrastructure Program	Sub-program:	Water
Project Name:	Watermain Replacement Upgrades Program	Submission ID:	5858
Location:	City Wide		
Cost:	\$5,792,500	OBI:	\$ -
Funding Sources:	Water Utility: \$5,645,877 Water DCC: \$137,899 Water City Assist: \$8,724		
Scope:	<p>This project replaces ageing watermain that are at the end of their service life and is in alignment with the City's Ageing Infrastructure Replacement Strategy. Watermain replacement minimizes unplanned maintenance and improves fire protection.</p> <p>This project includes installation of 1880 metres of 200 mm diameter watermain, and 3081 metres of 300 mm diameter watermain to replace existing ageing infrastructure.</p> <p>The watermain replacement upgrade program is informed by watermain age, material and break history.</p>		



Program:	Infrastructure Program	Sub-program:	Water
Project Name:	Watermain Tie-in and Restoration	Submission ID:	5859
Location:	Various Locations		
Cost:	\$400,000	OBI:	\$ -
Funding Sources:	Water Utility: \$400,000		
Scope:	This project involves tie-in and restoration work for watermain and water service installations, including restoration for watermain replacements completed as part of prior years' capital programs and restoration of water utility cuts.		



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Program:	Infrastructure Program	Sub-program:	Sanitary Sewer
Project Name:	Development Coordinated Works - Sanitary	Submission ID:	5637
Location:	Various Locations		
Cost:	\$350,000	OBI:	\$10,000
Funding Sources:	Sanitary Utility: \$350,000		
Scope:	<p>This project will enable the City to leverage development over the next year to design and construct sanitary infrastructure outside of what would be required as part of their development.</p> <p>These are upgrades and replacement of ageing infrastructure that the City would complete separately, but economic and engineering efficiencies can be achieved by having the developer complete this work at the same time the development takes place.</p>		




Program:	Infrastructure Program	Sub-program:	Sanitary Sewer
Project Name:	Eckersley B Sanitary Pump Station Replacement and Spires Utility Servicing	Submission ID:	6741
Location:	Intersection of Cook Gate and Cook Road		
Cost:	\$5,100,000	OBI:	\$-
Funding Sources:	Sanitary Utility: \$4,506,249 Sewer DCC: \$587,813 Sewer City Assist: \$5,938		
Scope:	<p>The existing Eckersley B sanitary pump station, located on the Cook Elementary School site, serves the rapidly growing City Centre and is currently nearing its design capacity.</p> <p>This project involves construction of a new pump station to replace the existing pump station, including construction of a new wet well, variable frequency drive pumps, electrical kiosk and the associated gravity pipe and forcemain to connect to the existing sanitary system and recent Spires area upgrades.</p> <p>The Richmond School District has recently started school seismic upgrades and building re-construction project on the school site. The City is working closely with the School District to increase efficiencies in the pump station construction where possible, and this involves relocating the pump station within school property. Additional lengths of deep gravity sewer and the forcemain will be installed to accommodate the school’s request of the new location of the pump station. The new pump station location will facilitate safe access to the school, as well as it will provide much improved access to City’s staff for the pump station maintenance.</p> <p>The Eckersley B Pump Station project was previously approved in 2018 at an estimate of \$2.65M. Since that time, costs have increased as a result of market conditions, such as higher bids received when tendering contracts and other drivers including:</p> <ul style="list-style-type: none">▪ School Board requirements resulting in the redesign and extension of deep gravity sewers, forcemain, and pump station in coordination with the school upgrade;▪ Compliance with recently revised soil disposal regulations and deep groundwater management;▪ Additional ground settlement protection measures to minimize impacts to nearby buildings; and▪ Provisions to maintain safe pedestrian and vehicle access, and minimize impacts on the school, residents, and commuters to the area during construction. <p>The previously approved Capital 2018 submission will be closed and funds returned to reserves. This re-submission is based on additional scope, recent procurements and updated construction costs.</p>		
			


Program:	Infrastructure Program	Sub-program:	Sanitary Sewer
Project Name:	Gravity Sewer Assessment Program	Submission ID:	5653
Location:	Various Locations		
Cost:	\$150,000	OBI:	\$ -
Funding Sources:	Sanitary Utility:	\$150,000	
Scope:	<p>This project is part of a multi-year program to assess gravity sewers on a 20-year cycle. The City currently performs grease cutting and flushing on its gravity sewer system as part of its grease management program. The program will complete CCTV inspections following grease cleaning efforts, identify defects in the sanitary system, complete minor repairs identified as part of the assessment, and facilitate the archiving of CCTV inspection videos for record-keeping purposes.</p>		




Program:	Infrastructure Program		Sub-program:	Sanitary Sewer
Project Name:	Hamilton Area Sanitary Sewer and Pump Station		Submission ID:	6875
Location:	Hamilton Area			
Cost:	\$2,800,000		OBI:	\$-
Funding Sources:	Sanitary Utility: \$924,999 Sewer DCC: \$1,763,438 Sewer City Assist: \$111,563			
Scope:	<p>This project includes the construction of a new pump station including wet well, Variable Frequency Drive (VFD) pumps, electrical kiosk, 140 metres of 200 mm forcemain and 12 metres of 300 mm gravity main. This project does not require land acquisition, as it will be constructed on City-owned land.</p> <p>The purpose of the project is to provide sanitary service for the Willett sanitary catchment in order to support population densities projected by the Hamilton Official Community Plan Update. This area does not have an existing City sanitary system and is currently serviced by septic systems.</p> <p>The Willett pump station project was previously approved in 2017 at an estimate of \$1.7M. Since that time, costs have increased as a result of market conditions, such as higher bids received when tendering contracts and other factors including:</p> <ul style="list-style-type: none">▪ The challenging soil and groundwater conditions for deep sanitary installation in East Richmond;▪ Compliance with recently revised soil disposal regulations and deep groundwater management; and▪ The coordination required to minimize impacts to the local residents and commuters due to the numerous concurrent construction projects in the area. <p>The previously approved 2017 Capital submission will be closed and funds returned to reserves. This resubmission is based on recent procurements and updated construction costs.</p> <p>Where possible, costs will be recovered through rezoning cash-in-lieu contributions or the Works and Services Cost Recovery Bylaw No. 8752. Costs collected for this purpose shall be returned to the Sanitary Sewer Reserve.</p>			
				


Program:	Infrastructure Program		Sub-program:	Sanitary Sewer
Project Name:	Leslie Pump Station Replacement		Submission ID:	6278
Location: Leslie Road, East of No. 3 Road				
Cost:	\$2,913,000		OBI:	\$25,000
Funding Sources:	Sanitary Utility: \$1,725,500 Sewer DCC: \$1,175,625 Sewer City Assist: \$11,875			
Scope:	The Leslie sanitary pump station is at the end of its service life and requires replacement. In addition, the existing station does not have sufficient capacity to support local development according to the Official Community Plan and requires an upgrade to support local development. This project involves construction of a new pump station complete with wet well, variable frequency drive pumps, kiosk, back-up generator, antenna, valve chamber, and BC Hydro transformer to replace the existing station. Construction of the pump station will be coordinated with adjacent developments.			




Program:	Infrastructure Program		Sub-program:	Sanitary Sewer
Project Name:	Sanitary Pump Station & Forcemain Assessments, Upgrades, and Grease Management		Submission ID:	4833
Location:	Various Locations			
Cost:	\$600,000		OBI:	\$5,000
Funding Sources:	Sanitary Utility: \$600,000			
Scope:	This project will assess and improve access to the sanitary forcemain system. A critical part of the assessments will be a quantification of fats, oils, and grease (FOG) issues associated with forcemains and pump stations. Improvements include, but are not limited to, the installation of valves, access chambers, bypass receptacles, and replacement sensors.			
				

Program:	Infrastructure Program	Sub-program:	Sanitary Sewer
Project Name:	Sanitary Pump Station Rehabilitation	Submission ID:	5634
Location:	Various Locations		
Cost:	\$300,000	OBI:	\$ -
Funding Sources:	Sanitary Utility: \$300,000		
Scope:	This project involves the rehabilitation of existing sanitary pump stations. Scope of work includes electrical kiosk replacement, power supply upgrade, new motor control centre (MCC) installation, pump rewinding, and concrete slab and aluminum hatch installation.		
			

Program:	Infrastructure Program	Sub-program:	Sanitary Sewer
Project Name:	Sanitary Sewer Tie-in and Restoration	Submission ID:	6106
Location:	Various Locations		
Cost:	\$150,000	OBI:	\$ -
Funding Sources:	Sanitary Utility: \$150,000		
Scope:	This project involves tie-in and restoration work for sanitary sewer projects completed as part of prior years' capital programs.		




Program:	Infrastructure Program		Sub-program:	Sanitary Sewer
Project Name:	Steveston Gravity Sewer Replacement and Rehabilitation		Submission ID:	6739
Location:	Various Locations			
Cost:	\$1,200,000		OBI:	\$35,000
Funding Sources:	Sanitary Utility: \$1,200,000			
Scope:	Several sections of gravity sewers within the City are at the end of their service life. As fibreglass pipes age, they become brittle and have an increased risk of failure. These mains have been prone to breaks in recent years, priority areas include but are not limited to, Steveston and Broadmoor, amongst others. This project will replace sections of such pipes that are at the end of their service life as part of the City's ageing infrastructure replacement program.			



2020 Recommended Infrastructure – Infrastructure Advanced Design and Minor Public Works Program

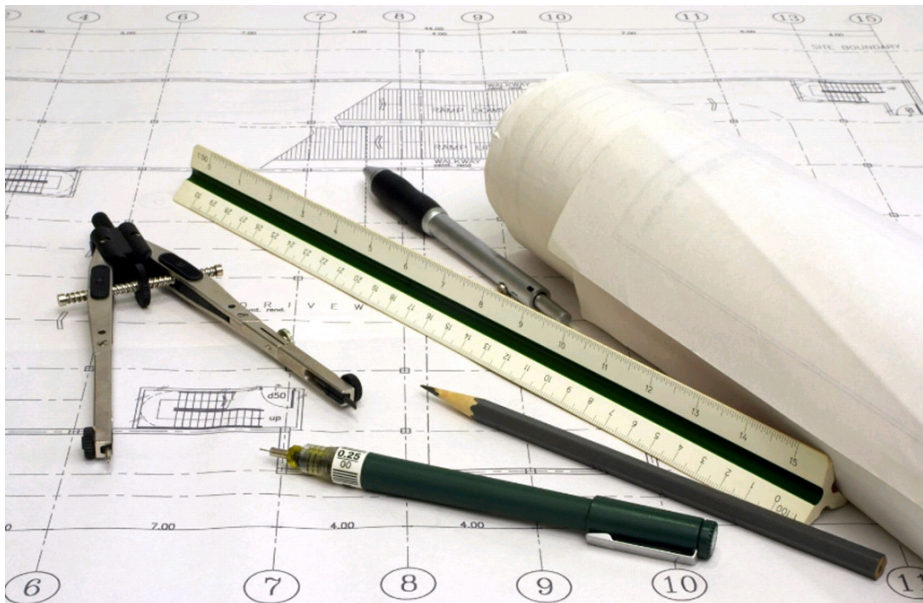
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Program:	Infrastructure Program		Sub-program:	Minor Capital
Project Name:	Fleet Minor Capital		Submission ID:	6694
Location:	City Wide			
Cost:	\$280,000		OBI:	\$ -
Funding Sources:	Public Works Equipment: \$280,000			
Scope:	<p>Minor Capital funding requested to purchase equipment needed for the Fleet department to increase the level of customer service and efficiency with projects required by the welding department and main garage and small equipment area.</p> <p>The following are what will be included in this project:</p> <ul style="list-style-type: none">▪ Welding Equipment - cutting/drilling machine;▪ Lathe & Milling Machine;▪ The storage for equipment repairs and replacements, including lower emissions equipment with Tier 4 rating, and Electric motor units support Council's Green Fleet Policy 2020; and▪ Electric Vehicle Autonomous Renewable Charger (Public Area).			
				

Program:	Infrastructure Program	Sub-program:	Minor Capital
Project Name:	Public Works Infrastructure Advanced Design	Submission ID:	5650

Location:	City Wide												
Cost:	\$2,550,000	OBI:	\$ -										
Funding Sources:	<table><tr><td>Drainage Utility:</td><td>\$1,000,000</td></tr><tr><td>Water Utility:</td><td>\$350,000</td></tr><tr><td>Sanitary Utility:</td><td>\$800,000</td></tr><tr><td>Roads DCC:</td><td>\$376,200</td></tr><tr><td>Roads City Assist:</td><td>\$23,800</td></tr></table>			Drainage Utility:	\$1,000,000	Water Utility:	\$350,000	Sanitary Utility:	\$800,000	Roads DCC:	\$376,200	Roads City Assist:	\$23,800
Drainage Utility:	\$1,000,000												
Water Utility:	\$350,000												
Sanitary Utility:	\$800,000												
Roads DCC:	\$376,200												
Roads City Assist:	\$23,800												
Scope:	<p>The scope of work includes hiring consultants and contractors to plan and design the 2021 Capital Plan and deliver reports that define long-term infrastructure upgrades.</p> <table><tr><td>Sanitary Project Design, Planning and System Modelling</td><td>\$800,000</td></tr><tr><td>Water Project Design, Planning and System Modelling</td><td>\$350,000</td></tr><tr><td>Drainage Project Design, Planning and System Modelling</td><td>\$1,000,000</td></tr><tr><td>Roads</td><td>\$400,000</td></tr><tr><td>Total</td><td>\$2,550,000</td></tr></table>			Sanitary Project Design, Planning and System Modelling	\$800,000	Water Project Design, Planning and System Modelling	\$350,000	Drainage Project Design, Planning and System Modelling	\$1,000,000	Roads	\$400,000	Total	\$2,550,000
Sanitary Project Design, Planning and System Modelling	\$800,000												
Water Project Design, Planning and System Modelling	\$350,000												
Drainage Project Design, Planning and System Modelling	\$1,000,000												
Roads	\$400,000												
Total	\$2,550,000												



Program:	Infrastructure Program	Sub-program:	Minor Capital
Project Name:	Public Works Minor Capital - Drainage	Submission ID:	5608

Location: City Wide

Cost: \$400,000


OBI: \$ -


Funding Sources: Drainage Utility: \$400,000

Scope: This project involves minor work related to drainage infrastructure, including installation of inspection chambers, rehabilitation of sewer pipes and manholes, minor repair of pump stations, installation of monitoring equipment, safety upgrades, testing of new technologies to improve efficiencies, and responding to resident complaints that require site specific repairs. Additionally, this project involves environmental monitoring and restoration for the construction of new drainage infrastructure, and environmental restoration for completed projects as part of prior years capital programs.


Every year, Engineering and Public Works receives a number of requests for minor projects. The Minor Capital program allows the department to respond to these requests in a timely and cost effective manner.




Program:	Infrastructure Program	Sub-program:	Minor Capital
Project Name:	Public Works Minor Capital - Roads	Submission ID:	5617
Location:	City Wide		
Cost:	\$400,000	OBI:	\$ -
Funding Sources:	Others: \$400,000		
Scope:	<p>This project involves minor work related to road infrastructure, including installation of wheelchair ramps, replacement of uneven sidewalks, curbs and small road sections that may have been damaged through tree root ingress or settlement, repair of street lights, and response to resident complaints that require site specific repairs.</p> <p>Every year, Engineering and Public Works receives a number of requests for minor projects. The Minor Capital program allows the department to respond to these requests in a timely and cost effective manner.</p>		
			

Program:	Infrastructure Program	Sub-program:	Minor Capital
Project Name:	Public Works Minor Capital - Sanitary	Submission ID:	5638
Location:	Various Locations		
Cost:	\$400,000	OBI:	\$ -
Funding Sources:	Sanitary Utility: \$400,000		
Scope:	<p>This project involves minor work related to the sanitary infrastructure, including pump station upgrades, sanitary pump replacements, modifications to improve operational efficiency and functionality, testing of new technologies, forcemain repairs, site-specific repairs in response to resident complaints, and manhole and valve box repairs.</p> <p>Every year, Engineering and Public Works receives a number of requests for minor projects. The Minor Capital program allows the department to respond to these requests in a timely and cost effective manner.</p>		
			


Program:	Infrastructure Program	Sub-program:	Minor Capital
Project Name:	Public Works Minor Capital - Sanitation & Recycling	Submission ID:	6002
Location:	City Wide		
Cost:	\$350,000	OBI:	\$ -
Funding Sources:	Solid Waste and Recycling: \$350,000		
Scope:	<p>This project is used to:</p> <ol style="list-style-type: none">1. Replace our city streetscape recycling containers that lose functionality, become damaged and worn due to exposure to weather conditions. Our goal is to replace on a 3-year cycle.2. Undertake repairs or minor upgrades at the Recycling Depot. This could include building or acquiring small sheds, cages or structures to hold hazardous materials. Acquire new container types, etc. to ensure compliance with hazardous waste storage requirements. Undertake improvements to comply with safety — prepare and post signs, replace concrete blocks that become damaged from equipment used to move large items as part of regular operations, etc.3. Acquire various equipment items that may be needed to support operations, including stairs to assist safe drop off of items into taller recycling bins. May also include items to support illegal dumping clean ups and clean-up of homeless camps, including carrying aids (dolly's, cutting tools, etc.).		



Program:	Infrastructure Program	Sub-program:	Minor Capital
Project Name:	Public Works Minor Capital - Traffic	Submission ID:	5688
Location:	Various Locations		
Cost:	\$250,000	OBI:	\$8,106
Funding Sources:	Others: \$250,000		
Scope:	<p>General Scope: Minor work related to traffic operations and traffic signals infrastructure including installation, repairs, or replacement of traffic/parking signage, pavement marking, traffic measure and signal device, upgrades to meet changes in safety requirements, testing of new technologies to improve efficiencies, and response to unforeseen public requests for minor upgrades. These are separate from DCC programs which fund specific projects/locations.</p> <p>Transportation receives public requests throughout the year for minor transportation projects. The Minor Capital program allows the department to respond to these requests in a timely and cost effective manner.</p> <p>Funding: The City will apply for funding from TransLink and ICBC grants and if successful, the City's funding sources will be reduced accordingly.</p>		



Program:	Infrastructure Program	Sub-program:	Minor Capital
Project Name:	Public Works Minor Capital - Water	Submission ID:	5655
Location:	Various Locations		
Cost:	\$500,000	OBI:	\$ -
Funding Sources:	Water Utility: \$500,000		
Scope:	<p>This project involves minor work related to the water infrastructure, including minor watermain repairs and replacements, operational efficiencies, changes to safety requirements, testing of new technologies, and response to resident complaints that require minor upgrades.</p> <p>Every year, Engineering and Public Works receives a number of requests for minor projects. The Minor Capital program allows the department to respond to these requests in a timely and cost effective manner.</p>		



Building Program 2020

The Building Program includes major building construction and renovation projects as well as minor facility upgrades and repairs. The City’s building assets include: arenas, pools, community centres, libraries, heritage buildings, police stations, fire halls and other government facilities.


2020 Recommended Building – Building Program


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Program:	Building Program	Sub-program:	Building
Project Name:	Capital Buildings Project Development Advanced Design	Submission ID:	6654
Location:	City Wide		
Cost:	\$500,000	OBI:	\$ -
Funding Sources:	Building and Infrastructure: \$500,000		
Scope:	<p>This funding will be used to provide feasibility and concept level consulting service required to complete the following:</p> <ul style="list-style-type: none"> ▪ To respond to requests for feasibility and concept level design and costing services added to the 2020 work plan. Throughout the course of 2018 and 2019 there were approximately 43 such requests, examples of which include Rod & Gun Club relocation investigation, Minoru Place Activity Centre re-purposing feasibility/concept level design, and the Richmond Centre for Disability (RCD) program and design specification development. The same level of requests are anticipated for 2020; and ▪ Building and feasibility assessments required to develop the 2021 Capital Plan. Staff receive on average approximately 150 projects from User Groups on an annual basis by May of each year that require feasibility level review and costing in time for the Capital project process. Examples for the 2020 program include feasibility and costing for London Farm House Envelope Renewals, Library Cultural Centre Conveyance Renewals and the East Richmond Community Hall Envelope and Mechanical System Renewals, etc. <p>Without this funding, consulting on the feasibility and concept level design work could not be provided and project estimations would be impacted.</p>		




Program:	Building Program	Sub-program:	Building
Project Name:	City Hall - Replacement of Mechanical, Life/Safety, and Envelope Components and Associated Works	Submission ID:	6257
Location:	6911 No. 3 Road		
Cost:	\$2,630,000	OBI:	\$ -
Funding Sources:	Building and Infrastructure: \$2,630,000		
Scope:	<p>Multiple building components in this facility constructed in 2000 have reached the end of their life expectancy and will be replaced with modern energy efficient systems (where possible). These system renewals will also include associated miscellaneous items that will serve to prolong the life of the building and ensure the health and safety of its users/inhabitants.</p> <p>All of these works are planned to be completed at the same time to maximize savings in schedule and costs for mobilization and demobilization.</p> <p>Life/Safety (\$640,000):</p> <p>The fire system devices and parkade carbon monoxide monitoring systems have reached the end of their serviceable life spans and will be replaced. Both systems were installed in the year 2000 with the anticipated life span of 10 years; they were assessed in 2018 and recommended for replacement in 2020 to ensure continued reliability of these life/safety systems.</p> <p>Mechanical (\$1,360,000):</p> <p>Air cooled condensing units, piping distribution systems, sewage ejector pumps, and split AC systems serving various areas of City Hall have exceeded their serviceable life span and will be replaced. All units were installed in the year 2000 with the anticipated life spans ranging from 15 - 20 years; they were assessed in 2018 and recommended for replacement in 2020 to ensure reliable continuity of service.</p> <p>Envelope (\$530,000):</p> <p>Multiple roof systems have prematurely deteriorated as confirmed by building condition assessments and will be renewed/replaced as needed. The waterproof roofing membrane was installed in the year 2000 with the anticipated life span of 20 years; it was assessed in 2018 and recommended for replacement in 2020 to ensure a watertight envelope that prevents leaks and interior water damage.</p> <p>Interior (\$100,000):</p> <p>Painted surfaces will be renewed to continue protecting concrete structures. The painted concrete surfaces are original to the building with the anticipated life span of 20 years. Assessed in 2018 it was recommended to re-paint these surfaces to ensure visibility and protection.</p> <p>By proactively replacing/renewing the aforementioned assets we are ensuring continued service and functionality of the building.</p>		
			


Program:	Building Program	Sub-program:	Building
Project Name:	Community Safety Building - Mechanical Component Replacements and Associated Works	Submission ID:	6567
Location:	11411 No.5 Road		
Cost:	\$1,350,000	OBI:	\$ -
Funding Sources:	Building and Infrastructure: \$1,350,000		
Scope:	<p>The heat pump system, in this building, has reached the end of its life expectancy.</p> <p>The system is unreliable with frequent repairs, and replacement of parts are becoming obsolete and/or some components are not available locally.</p> <p>To date, two of the four heat pumps have been replaced, heat pump #4 was replaced with emergency funding and heat pump #1 was replaced with Capital funding.</p> <p>Heat pump #3 has failed with heat pump #2 expected to follow suit in short order. This is the last phase of heat pump replacements works, which also requires additional piping, and associated ancillary mechanical works to support the system.</p> <p>All of these works are planned to be completed at the same time to maximize savings in schedule and costs for mobilization and demobilization.</p> <p>The RCMP operates every day of the year, as such; there is increased risk of unit failure due to constant use. If not addressed, there is a high risk of unit failure causing service disruptions and potential closures.</p> <p>The system renewals and associated miscellaneous equipment will be replaced with modern, energy-efficient systems (where feasible), which will prolong the life of the building and ensure the health and safety of its occupants.</p>		
			

Program:	Building Program	Sub-program:	Building
Project Name:	Minoru Centre for Active Living - Lap Pool 1 Reconstruction	Submission ID:	6809
Location:	7191 Granville Ave.		
Cost:	\$3,000,000	OBI:	\$ -
Funding Sources:	Building and Infrastructure: \$3,000,000		
Scope:	Temporary funding allocation for the reconstruction of Lap Pool #1. It is anticipated that these funds will be repaid to the City from the project's insurers.		



Program:	Building Program	Sub-program:	Building
Project Name:	Richmond Courthouse - Mechanical Components Replacements, Envelope Renewals, Electrical Replacements, Structural Renewals and Associated Works	Submission ID:	6606
Location:	7577 Elmbridge Way		
Cost:	\$1,601,500	OBI:	\$ -
Funding Sources:	Others: \$1,601,500		
Scope:	<p>Multiple building components in this facility constructed in 1975 have reached the end of their life expectancy and will be replaced with modern energy efficient systems (where possible). These system renewals will also include associated miscellaneous items that will serve to prolong the life of the building and ensure the health and safety of its users/inhabitants.</p> <p>All of these works are planned to be completed at the same time to maximize savings in schedule and costs for mobilization and demobilization.</p> <p>By completing these system renewals, the City will be inline with the B.C. Environmental Management Act - Ozone Depleting Substances and Other Halocarbons Regulations which state the production and importation of R22 refrigerant will continually be reduced by law until 2020, when all production and importation will be banned.</p> <p>\$2.035M was approved by Council on July 22, 2019 for building improvements, repairs, and maintenance in a Closed Report to Council regarding Lease Renewals of Office/Courthouse Premises to the Province of BC. \$433,500 was allocated through the 2019 Budget amendment and the rest is being sought through this capital submission.</p>		



Program:	Building Program	Sub-program:	Building
Project Name:	Richmond Ice Centre Infrastructure Renewals - Phase 1	Submission ID:	6264
Location:	14140 Triangle Road		
Cost:	\$6,850,000	OBI:	\$-
Funding Sources:	Building and Infrastructure: \$6,850,000		
Scope:	<p>Multiple building components in this facility constructed in 1994 have reached the end of their life expectancy and will be replaced with modern energy efficient systems (where possible). These system renewals will also include associated miscellaneous items that will service to prolong the life of the building and ensure the health and safety of its users/inhabitants.</p> <p>This project is estimated at a total of \$13.7M, comprising of \$6.85M expenditure in 2020 and an additional \$6.85M expenditure in 2021. All of these works are planned to be completed at the same time to maximize savings in schedule and costs for mobilization and demobilization.</p> <p>Life/Safety (\$1,215,000):</p> <p>The fire system has reached the end of its serviceable life span and will be replaced with new. This system is original to the building, dating back to 1994 with the anticipated life expectancy of 10 years. Assessed in 2018, this system was recommended for replacement as soon as possible.</p> <p>Additionally, due to unavoidable condensation issues, a vapor barrier wall will be constructed throughout the facility to prevent potential mold growth and eliminate related health concerns.</p> <p>Envelope (\$3,527,000):</p> <p>The roof system is original to the building, dating back to 1994 and has reached the end of its serviceable life span of 25 years, it will be renewed/replaced as needed. This system was assessed in 2018 and recommended for replacement as soon as possible to prevent any further leaks and envelope damage.</p> <p>Refrigeration Systems (\$2,108,000):</p> <p>Multiple Mechanical Systems such as: compressors, control panels, oil separators, storage tanks and piping systems are original to the building, dating back to 1994 and have all reached the end of their serviceable life span of 25 years. These units will be replaced with new ones to ensure reliable continuity and efficiency of service.</p>		
			

Program:	Building Program	Sub-program:	Building
Project Name:	Works Yard Electrical Service Upgrade and Electrical Vehicle Infrastructure	Submission ID:	6697
Location:	Works Yard 5599 Lynas Lane		
Cost:	\$1,688,000	OBI:	\$40,960
Funding Sources:	Public Works Equipment: \$80,000 Building and Infrastructure: \$1,608,000		
Scope:	Upgrade the Works Yard's current electrical infrastructure with the installation of a 2MVA BC Hydro unit substation on site. Work includes construction of a new electrical room or building to house the new distribution, kiosks and other electrical infrastructure, also to make an allowance to install 10 Level 2 EV Charging Stations.		




Parks Program 2020

Richmond is renowned for its high quality parks, trails, natural areas and its vibrant urban realm. The City's park system consists of 133 parks that total approximately 1,950 acres serving the wellness and recreation needs of a diverse and growing community. More than 70 kilometres of trails support walking, rolling and cycling, bringing people to the city's many iconic parks and waterfront destinations. New parks and trails along with new amenities will ensure that Richmond residents continue to receive excellent service and that Richmond continues to be a regional and tourism destination.

2020 Recommended Parks – Parks Program

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Program:	Parks Program	Sub-program:	Parks
Project Name:	Lang Park Completion	Submission ID:	6173
Location:	Saba Road and Buswell Street		
Cost:	\$250,000	OBI:	\$12,092
Funding Sources:	Parks Development DCC: \$235,250 Parks Development City Assist: \$14,750		
Scope:	<p>This capital submission is for Phase 3 park elements that are part of the Lang Park Redevelopment Plan, which include an overhead shelter, table tennis tables and a book kiosk. The recent redevelopment of Lang Park was completed and officially reopened to the public in July 2017. The park was redeveloped based upon public consultation in 2015/2016 which highlighted the need for a covered area for use of the park during inclement weather and a desire for more opportunities for interaction.</p>		
			

Program:	Parks Program	Sub-program:	Parks
Project Name:	London Steveston Park Phase 3 Construction	Submission ID:	6610

Location:

London Steveston Park

Cost:

\$400,000

OBI:

\$22,162

Funding Sources:

Parks Development DCC: \$376,200

Parks Development City Assist: \$23,800


Scope:

This is the final phase of the park enhancement works of the London/Steveston Park Phase 3 construction project and includes an off-leash dog park, covered plaza, basketball court and site furnishings.


The concept plan for London/Steveston Park, which was developed based on feedback received at a series of public open houses, was approved by Council in May 2015. The park plan has been implemented in phases. Phase One Construction, which is nearing completion, includes site grading, new trails and tree planting. Phase Two Construction, which is well underway, includes expansion of the playground and will address a strong desire by local residents to increase the range of play offered in this growing and densifying neighbourhood. Phase 3 Construction will be the final phase towards implementation of the concept plan that will increase in park level service in in response to the growing neighbourhood.







Program:	Parks Program	Sub-program:	Parks
Project Name:	Minoru Lakes Renewal Upgrades – Phase 1 of 2	Submission ID:	6663
Location:	Minoru Park		
Cost:	\$4,060,000	OBI:	\$ -
Funding Sources:	Parks Development DCC: \$3,818,430 Parks Development City Assist: \$241,570		
Scope:	<p>The scope of work for Minoru Lakes Renewal Phase 1 of 2: includes site preparation works (e.g. tree protection, demolition, dewatering, excavation and treatment of hazardous materials) and replacement of lakes infrastructure including the pump, liner, waterfall, weir and mechanical system. These works are required because the infrastructure that currently services Minoru Lakes including the pump, liner and mechanical system have failed and are in need of replacement. Failure to replace the Minoru Lakes infrastructure will result in continued degradation of water quality, posing health and safety concerns, and increased allocation of resources, such as staff time and use of potable water. Via the Minoru Park Vision Plan process, the community expressed a strong desire to retain Minoru Lakes as a key park feature that is similar to its current size and character. The new lakes infrastructure will improve water quality, be more robust, longer lasting, easier to service and result in decreased reliance on potable water and staff time.</p>		





Program:	Parks Program	Sub-program:	Parks
Project Name:	Minoru Oval - Artificial Turf Replacement	Submission ID:	6352
Location:	7191 Granville Avenue		
Cost:	\$1,030,000	OBI:	\$ -
Funding Sources:	Capital Revolving: \$680,000 Special Sports: \$350,000		
Scope:	<p>The purpose of this project is to replace the artificial turf field at Minoru Park originally installed in 2008. The projected lifespan of synthetic sports fields is between 8 to 12 years depending on the usage and maintenance. Minoru Oval field, one of the busiest artificial turf fields, is booked for up to 38 hours per week during the peak fall/winter season. The field is tested annually for shock attenuation performance, known as the G-Max rating, and is currently reaching the limit of what is acceptable for safe operation of an artificial turf field. Prior to replacement, staff will review environmentally friendly products and technology available within the industry. The operating and replacement costs of the field are partially offset by the user fees collected through the Sports User Fee program and there is no increase in operating costs generated by this request.</p> <p>Minoru Park field serves as a multi-use open space that accommodates sports, special events and tournaments. Its location between the Minoru Ice Arena, the Minoru Centre for Active Living, and the running track makes it one of the most active destinations in the City.</p>		




Program:	Parks Program	Sub-program:	Parks
Project Name:	Parks Advance Planning and Design	Submission ID:	5578
Location:	Various Locations		
Cost:	\$300,000	OBI:	\$ -
Funding Sources:	Parks Development DCC: \$282,150 Parks Development City Assist: \$17,850		
Scope:	<p>This annual project submission for Parks Advance Planning and Design will provide resources for planning, research, public and stakeholder consultation, design and project management for a range of purposes, strategic planning projects, reports to City Council, meeting regulatory agency requirements (e.g. Vancouver Coastal Health, Provincial ministries), conceptual park design and technical reports for projects that require particular areas of expertise (e.g. environmental assessments).</p> <p>2020 Projects include:</p> <ul style="list-style-type: none"> researching best practices; collecting data, topographical surveys and geographical information; and securing consultation for landscape architectural and engineering services as part of a planning and design process. <p>The design process includes preparing and producing concept designs, reports, presentations and detailed construction drawings for upcoming Major Capital projects. Projects may be community initiated or support a redeveloping area of the City.</p> <p>Why are we here today?</p> <p>This workshop is the first step towards developing a Terra Nova Resource Management Plan.</p> <div> <div> <p>The goals of the workshop are to:</p> <ul style="list-style-type: none"> Share knowledge and background information about Terra Nova; Revisit the 2004 park Vision and Goals; Identify existing issues and opportunities; and Identify goals for the management of Terra Nova moving forward. </div> <div> <p>The outcomes of this workshop will inform the direction of the Terra Nova Resource Management Plan and ultimately how this unique and complex park site is managed in the future.</p> </div> </div> <p>Terra Nova =</p> <div>   </div> <div>   </div>		


Program:	Parks Program	Sub-program:	Parks
Project Name:	Parks Ageing Infrastructure Replacement Program	Submission ID:	5581
Location:	Various Locations		
Cost:	\$590,000	OBI:	\$ -
Funding Sources:	Capital Revolving: \$590,000		
Scope:	<p>This program targets the replacement of ageing parks and open space infrastructure. The types of infrastructure include waterparks, waterfront assets, trails and pathways, drainage systems, outdoor sport courts, sports field fencing and equipment (e.g. lighting, bleachers) as well as the replacement of other assets which cannot be funded through the Parks Development Cost Charges program. Assets have been identified that have surpassed their respective life cycles resulting in the loss of structural and/or functional integrity due to wear and age and may present public safety issues. If not addressed these issues may lead to closure of some parks or park amenities, and an increase in service requests to address safety concerns from the public and sports groups.</p> <p>At the July 24, 2017 Council Meeting, the Parks Ageing Infrastructure Plan - 2017 Update Report was presented. The report outlined the high priority assets that require immediate attention and proposed the development of an Infrastructure Replacement Strategy and Financial Plan, which is underway. The recommendations of the report were endorsed by Council.</p> <p>2020 Projects include:</p> <ul style="list-style-type: none">▪ sandfield upgrades;▪ sport court surfacing repairs (tennis, basketball, lacrosse, etc.);▪ fencing replacement; and▪ drainage system replacement.		





Program:	Parks Program	Sub-program:	Parks
Project Name:	Parks General Development	Submission ID:	5580
Location:	Various Locations		
Cost:	\$400,000	OBI:	\$4,383
Funding Sources:	Parks Development DCC: \$376,200 Parks Development City Assist: \$23,800		
Scope:	<p>Upgrades to existing parks are required to respond to ongoing growth in the community. This program funds improvements of existing park amenities and facilities which are not part of other park capital programs, yet are required to support the increased use as a result of an increasing resident population. This funding allows the City the ability to be responsive to Council direction and appropriate public requests which align with existing strategic plans. These discrete, site-specific park enhancements will address our community's needs for ongoing park improvements to infrastructure, equipment and landscape amenities.</p> <p>Examples of projects that have been funded by the Parks Development DCC program include new community gardens, new off-leash dog areas, walkways and pathways, benches, picnic tables and new drainage systems.</p> <p>For 2020, some of the projects will include:</p> <ul style="list-style-type: none">▪ construction of pickleball courts at South Arm Park;▪ drinking fountain at the Skatepark on River Road; and▪ upgrade the entrance into London Farm.		
			

Program:	Parks Program	Sub-program:	Parks
Project Name:	Parks Identity Signage Program - Phase 3	Submission ID:	6662
Location:	Various Locations		
Cost:	\$100,000	OBI:	\$12,785
Funding Sources:	Parks Development DCC: \$94,050 Parks Development City Assist: \$5,950		
Scope:	<p>This project is a continuation of the initiative to inform the public of the name of the park they are visiting, amenities within the park, and wayfinding in parks.</p> <p>In order to adequately provide park identity, regulatory information and wayfinding for the public and community, Phase 3 of the signage fabrication and installation program needs to be completed to ensure an ongoing, coordinated approach to site identity. Phase 3 of the fabrication and installation plan includes up to 30 neighbourhood parks and wayfinding routes as needed. Request for funding for this program is from the Parks Development DCC program.</p> <p>A cost estimate on the material costs for fabrication and labour has been completed based on the design for identity and wayfinding signage. The estimate for this next phase is \$100,000.</p> <p>The scope of work includes:</p> <ul style="list-style-type: none">▪ Designing and completing an analysis per park identification and wayfinding location;▪ Developing site plans for park ID deployment;▪ Coordinating with signage vendor and/or in-house services for the fabrications of the signs;▪ Coodinating installation deployment of Phase 3 with in-house services; and▪ Preparing a resource management plan for the OBI.		
			

Program:	Parks Program	Sub-program:	Parks
Project Name:	Playground Improvement Program	Submission ID:	5465
Location:	Various Locations		
Cost:	\$600,000	OBI:	\$ -
Funding Sources:	Capital Revolving: \$600,000		
Scope:	<p>This recurring Capital Project addresses playgrounds which are at the end of their useful life and do not meet the current safety guidelines (according to the industry standard, the Canadian Standards Association's "Children's Playspaces and Equipment"), or can no longer be maintained to meet the guidelines due to obsolescence or vandalism. The program is directed towards replacing all or part of a playground and includes replacement of playground equipment, playground infrastructure (e.g., resilient surfacing, borders, drainage) and landscape features.</p> <p>Replacement of the playgrounds at Talmey Neighbourhood School Park, Garnet Neighbourhood Park, as well as portions of the playground at Steveston Community Park are a priority in 2020.</p>		




Program:	Parks Program	Sub-program:	Parks
Project Name:	Railway Granville Bike Park	Submission ID:	6646
Location:	Railway and Granville Avenues		
Cost:	\$270,000	OBI:	\$13,503
Funding Sources:	Parks Development DCC: \$253,935 Parks Development City Assist: \$16,065		
Scope:	<p>This project is proposed to be located in a vacant open space on the west side of Railway Avenue at Granville Avenue. A bike park was identified in the original greenway concept plan at this location. The project will focus on beginner and intermediate riders, thus complementing the more advanced terrain at the Garden City Bike Terrain Park. The scope of construction will include the relocation of existing infrastructure, site preparation, site grading, bike park features (both timber and landforms including a pump track, ramps, teeter-totters and other features which teach and enhance essential skills), perimeter fencing, a drinking fountain, signage, plantings and importation of natural features such as boulders, logs and stumps.</p> <p>Located immediately adjacent to the Railway Greenway at Granville Avenue, potential park users can easily access the Bike Park using the existing Greenway. It is also located near Burnett High School and Thompson Community Centre. Construction of this bike park supports goals and objectives set out in the Community Wellness and Parks and Open Space Strategies by providing outdoor physical activity spaces connected to existing trail networks and located near existing recreation facilities.</p> <p>Mountain and BMX biking is an ongoing popular sport for young people. Current trends in the sport dictate that in order to safely enjoy the sport, regularly practicing essential bike handling techniques and skills are important to develop one's abilities. As the sport grows, additional bike parks are required to respond to community demand.</p>		
			

Program:	Parks Program	Sub-program:	Parks
Project Name:	Riverport and Cook Community Gardens	Submission ID:	6647
Location:	Riverport Dike and Cook Neighbourhood Park		
Cost:	\$180,000	OBI:	\$8,017
Funding Sources:	Parks Development DCC: \$169,290 Parks Development City Assist: \$10,710		
Scope:	<p>In March 2019, Council supported the creation of new community garden plots to address the demand by Richmond residents for access to space for food production and gardening. Cook Neighbourhood Park will see 35 new plots and Riverport Waterfront will see 15 new plots. The infrastructure for the gardens, including site preparation, a water connection, perimeter fencing and gate, garden shed, pathway surface materials and signage will be provided by the City. The Richmond Food Security Society will administer the community garden sites as well as construct the garden beds, provide soil and garden tools through their own funding efforts.</p> <p>Community gardens are a shared green space with individual and group garden plots which are maintained by community garden members to grow food, flowers, and other plants. The gardens provide low-barrier opportunities for residents of all ages and abilities to not only cultivate plants, but also meet new friends, share knowledge, and build a sense of community. The food, flowers, and other plants grown in each plot belong to the registered gardeners, and cannot be used or sold for any commercial purposes.</p>		
			

2020 Recommended Parks – Parkland Program

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Parkland Acquisition..... 112

Program:	Parks Program	Sub-program:	Parkland
Project Name:	Parkland Acquisition	Submission ID:	5641
Location:	As per Parks DCC Land Acquisition Plan		
Cost:	\$4,000,000	OBI:	\$ -
Funding Sources:	Parks Acquisition DCC: \$3,762,000 Parks Acquisition City Assist: \$238,000		
Scope:	<p>The purpose of the Parkland Acquisition program is for the City to acquire land for park requirements to address development and population growth. The program is based on the City's population projections as per the OCP with the objective of maintaining the parks provision standard of 7.66 acres per 1000 population. The program is funded through Parkland Acquisition Developer Cost Charges (DCCs) and is guided by the Council-approved 2009 Park Land Acquisition Strategy which provides the criteria for evaluating proposed acquisitions. Funding is required each year to allow the City to be strategic and responsive as properties become available, thus avoiding the need to borrow the funding from other City sources or pass bylaws to release the funds for each acquisition.</p>		
			

Public Art Program 2020

The Public Art Program is a self-sustaining project funded by private development contributions to the Public Art Reserve. Council approved the updated policy (Policy 8703, adopted July 27, 2010). The Program is supported by a Council appointed Public Art Advisory Committee. The Public Art Program also supports the initiatives expressed in the Richmond Art Strategy 2019 - 2024, which was approved by Council in July 2019. The above proposal assists in its annual implementation, which is necessary to its success. Private sector, private donations and community contributions are successfully sought and received.

The Public Art Program contributes to Council's Strategic Plan 2018 – 2022. It supports One Community Together: Vibrant and diverse arts and cultural activities and opportunities for community engagement and connection. It also supports An Active and Thriving Richmond: An active and thriving community characterized by diverse social and wellness programs, services and spaces that foster health and well-being for all.

2020 Recommended Public Art Program

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Program:	Public Art Program	Sub-program:	Public Art
Project Name:	Public Art Program	Submission ID:	5620
Location:	Various Locations		
Cost:	\$694,764	OBI:	\$10,000
Funding Sources:	Public Art Program: \$694,764		
Scope:	<p>The scope of work consists of a variety of public art projects. The following are proposed projects (with estimated costs) which may change during the project's duration based on the Public Art Program's consideration of public art opportunities and priorities and private development funding.</p> <p>Contributions by private developers totalling \$160,000, have been deposited to the Public Art Reserve and allocated as follows:</p> <p>Community public art projects (\$40,000):</p> <ul style="list-style-type: none"> ▪ No. 3 Road art columns; ▪ Art wraps; ▪ Cultural Centre Annex public art contribution; ▪ Capture Photography Festival; and ▪ Children's Art Festival. <p>Community education and promotion of the public art program (\$20,000):</p> <ul style="list-style-type: none"> ▪ Culture Days; ▪ Pianos on the Streets; ▪ Public Art Bus Tours; and ▪ Art at Work Workshop Series. <ul style="list-style-type: none"> ▪ Collaboration on educational opportunities with other City cultural facilities and programs, such as the Richmond Art Gallery, Media Lab, Cultural Centre and Richmond Museum \$20,000; ▪ Engaging Artists in Community Program: \$30,000; ▪ Community Mural Program: \$30,000; and ▪ Youth Mentorship Public Art Program: \$20,000. <p>Through the Private Development Program, developer contributions were received and deposited to the Public Art Reserve for implementation of projects integrated with new development, on either private lands or City-controlled land, with the expectation that the majority will be on City-controlled sites (parks, streets, greenways) in the city centre. The cost determined based on contributions received in 2018-2019, net of transfers to the Public Art Provision Reserve for program administration, totalling \$545,357, has been allocated as follows:</p> <ul style="list-style-type: none"> ▪ Landa Elmbridge Holdings - 7100 Elmbridge Way: \$201,267; and ▪ Keltic Development - 6340 No. 3 Road \$344,090. 		




Land Program 2020

The land acquisition program relates to the acquisition and disposition of real property for the City, as approved by Council.

2020 Recommended Land – Land Acquisition Program

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Program:	Land Program	Sub-program:	Land
Project Name:	Strategic Land Acquisition	Submission ID:	5732
Location:	Various		
Cost:	\$10,000,000	OBI:	\$ -
Funding Sources:	Capital Industrial: \$10,000,000		
Scope:	<p>Funds for land acquisition to meet the Council Approved Strategic Real Estate Investment Plan, other than DCC and other special reserve funded projects, are set aside in the Capital Reserve under the Industrial Use Fund. This capital budget submission is to use land acquisition monies from this fund as well as additional general funds approved by Council.</p> <p>\$10M to be invested in investment class real estate.</p>		
			

Affordable Housing Program 2020


The City recognizes that a diverse range of housing choices for individuals and families of different incomes and circumstances is essential in creating a liveable community in Richmond. The purpose of the City’s Affordable Housing program is to address housing affordability concerns in partnership with senior governments, the private sector, and non-profit organizations. Through various programs and policies, the City has been successful in securing over 1,400 affordable housing units, including the following highlighted developments:

- The Kiwanis Towers, which provides 296 affordable rental units for low-income seniors;
- The Storeys, which provides 129 affordable rental units for Richmond residents at risk of homelessness; and
- The Richmond Temporary Modular Housing Project, which will provide 40 supportive housing units for residents experiencing homelessness.

2020 Recommended Affordable Housing Program

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Program:	Affordable Housing Project	Sub-program:	Affordable Housing
Project Name:	Affordable Housing 2020 Operating Initiatives	Submission ID:	6652
Location:	City Wide		
Cost:	\$400,000	OBI:	\$ -
Funding Sources:	Affordable Housing: \$400,000		
Scope:	<p>The City's Affordable Housing Strategy 2017-2027 and Homelessness Strategy 2019-2029 guide the City's actions regarding housing affordability and homelessness service provision to meet the needs of Richmond residents. Six operating areas have been identified to provide staff with the necessary resources to advance the implementation of these strategies. Examples include administration, data management and research, consultation and economic analysis.</p> <ol style="list-style-type: none">1. Homelessness Support (\$15,000) - Continue supporting homelessness initiatives in the community.2. Strategy Administration (\$250,000) - Support the implementation of short-term actions identified in the Council-adopted Affordable Housing Strategy and Homelessness Strategy. <p>This project also includes funding for an Affordable Housing Planner 1 position, which plays an important role in managing the City's Low-End Market Rental program, supporting policy development initiatives, and liaising with key stakeholders. The Planner 1 position sustains staff capacity to achieve City Council's affordable housing priorities, and enables the Affordable Housing section to provide excellent customer service to the public, development industry representatives, and other stakeholders.</p> <ol style="list-style-type: none">3. Legal Fees (\$50,000) - Offset costs associated with legal services required with respect to affordable housing developments. All external legal services will be at the direction of the City's Law Department.4. Printing, Publication, Media and Advertising (\$15,000) - Offset costs associated with education regarding affordable housing and homelessness, including meeting traditional and social media needs as they arise.5. Economic Analysis (\$20,000) - Provide economic analysis to support policy development and the review of complex development applications. Currently, staff do not have the necessary skill set to undertake detailed economic analyses.6. Communications and Public Engagement (\$50,000) - Support communications and community engagement (i.e., translation, professional facilitation, engagement consultants) for projects that require extensive and complex engagement and education.		
			


Equipment Program 2020

The equipment program includes machinery and vehicles for Public Works (PW), Fire Rescue Services, City Hall computer hardware, software, and other miscellaneous equipment.

2020 Recommended Equipment – Vehicle Program

Automatic Vehicle Location/Global Positioning System	120
Vehicle and Equipment Reserve Purchases (Public Works and Corporate Fleet)	121

Program:	Equipment Program	Sub-program:	Vehicle
Project Name:	Automatic Vehicle Location/Global Positioning System	Submission ID:	6682
Location:	Public Works - Fleet Operations		
Cost:	\$118,000	OBI:	\$49,870
Funding Sources:	Public Works Equipment: \$118,000		
Scope:	<p>Working with business units, Fleet and I.T. staff to:</p> <ul style="list-style-type: none">▪ establish required features of different levels of reporting;▪ refine system specifications requirements for Power Take Off (PTO) and additional sensor capabilities;▪ establish resource requirements for implementation and administration;▪ prepare a Request for Proposal (RFP) and issue to the marketplace for services;▪ evaluate submissions to prepare award documentation; and▪ work with business units to implement.		
			


Program:	Equipment Program	Sub-program:	Vehicle
Project Name:	Vehicle and Equipment Reserve Purchases (Public Works and Corporate Fleet)	Submission ID:	5736
Location:	Works Yard and Various City Departments		
Cost:	\$3,322,766	OBI:	\$27,160
Funding Sources:	Public Works Equipment: \$2,222,766 Solid Waste and Recycling: \$100,000 Sewer Levy: \$350,000 Water Levy: \$650,000		
Scope:	<p>Vehicle and equipment purchases to replace existing units due to age and condition.</p> <p>Items in the identified scope require replacement in the year noted due to vehicles reaching the end of their life cycle and increasing maintenance costs associated with their current condition. Vehicles/equipment which present safety concerns are also included in the scope.</p> <p>This project supports Council's Green Fleet Policy 2020 which seeks to manage the corporate fleet according to green fleet objectives and performance standards. It also supports operating departments by providing the resources they require to meet their established mandates.</p> <p>Involves meeting with user groups to establish needs and develop specifications for vehicle/equipment replacements. Bid documentation is then issued to the marketplace, with purchases combined where possible to achieve best value. Submissions are evaluated with user input, and awards are made accordingly. Scope also includes vehicle outfitting as required to coincide with individual user department needs. The work commences upon receiving Council approval, with timing dependent on delivery timeframes/availability of product from successful vendors.</p> <p>This project involves replacement of the following:</p> <p>6 Parks Equipment attachments, 2 Pickup Trucks, 2 Mobile Pumps, 3 Heavy Duty Vans, 8 Electric Cars, 1 Compressor, 1 trailer, 1 Skid Steer Loader, 1 Single Axle Dump Truck with snow removal equipment, 1 Street Sweeper, 3 Vans, 1 Excavator, 2 Tractors, 1 Tractor Mower, Propane Conversions for 5 Litter Trucks , Auto Idle for 10 units, 2 additional Tandem Dump Trucks (not enough units available for hire to complete all work), 1 Forklift for Recycle Depot and unallocated allowance for unplanned replacements.</p>		
			

2020 Recommended Equipment – Fire Vehicle Program

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Fire Vehicle Replacement Reserve Purchases 123

Program:	Equipment Program	Sub-program:	Fire vehicle
Project Name:	Fire Vehicle Replacement Reserve Purchases	Submission ID:	5740
Location:	Fire-Rescue		
Cost:	\$416,455	OBI:	\$ -
Funding Sources:	Fire Equipment: \$416,455		
Scope:	<p>Front line Fire apparatus replacement follows a life cycle replacement schedule based on best practices and industry standards. In addition, a condition inspection is conducted annually to evaluate the mechanical status of the vehicles to determine replacement need. To ensure we are able to provide fire services to the community, Richmond Fire-Rescue (RFR) has a designated "Vehicle & Equipment Reserve". The replacement plan for all apparatus is funded through the reserve.</p> <p>This replacement plan for 2020 are:</p> <ul style="list-style-type: none">• Battalion Chief Vehicle;• Specialized vehicle able to provide fire fighting ability in wildland situations;• Chief of Fire Prevention Officer vehicle; and• RFR pool fleet vehicle.		




2020 Recommended Information Technology Program

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Data Centre Server Refresh/Update - Phase 1 of 2	126
Network Refresh for City Facilities - Phase 1 of 3	127
Office 2016 Licensing - Phase 2 of 2	128
PeopleSoft HCM 9.2 Update 2020.....	129

Program:	Equipment Program	Sub-program:	Information Technology
Project Name:	Annual Hardware Refresh	Submission ID:	5729
Location:	City Hall		
Cost:	\$362,800	OBI:	\$ -
Funding Sources:	Hardware Upgrade: \$362,800		
Scope:	This project scope is to perform the scheduled replacement of end-of-life cycle City computer hardware, which includes computer desktops, laptops, backup printers, monitors, cellular phones and iPads.		
			

Program:	Equipment Program	Sub-program:	Information Technology
Project Name:	Data Centre Server Refresh/Update - Phase 1 of 2	Submission ID:	6678
Location:	City Hall and Works Yard Data Centres		
Cost:	\$363,000	OBI:	\$ -
Funding Sources:	Hardware Upgrade: \$363,000		
Scope:	Data Centre equipment is replaced on a seven year schedule to ensure that users do not experience system downtime and reduced productivity due to unplanned outages and impacts. Keeping equipment maintained and up to date reduces cyber security risks and operating costs.		



Program:	Equipment Program		Sub-program:	Information Technology
Project Name:	Network Refresh for City Facilities - Phase 1 of 3		Submission ID:	6670
Location:	All City Buildings and Facilities			
Cost:	\$557,950		OBI:	\$31,733
Funding Sources:	Hardware Upgrade: \$557,950			
Scope:	The network refresh project will replace the legacy/outdated system with a new reliable wired and wireless infrastructure based on the selection of a new City network vendor standard, Cisco Systems. This will enable the City to provide employees and public with dependable access to the network services, including public access to Internet.			




Program:	Equipment Program	Sub-program:	Information Technology
Project Name:	Office 2016 Licensing - Phase 2 of 2	Submission ID:	6564
Location:	City Hall		
Cost:	\$494,909	OBI:	\$6,573
Funding Sources:	Software: \$494,909		
Scope:	<p>As part of the deployment of the new Windows 10 Corporate Desktop, Office 2016 is included as an upgrade. In order to ensure license compliancy this phase is required to support the full rollout of Office 2016 for the organization.</p> <p>The first phase capital project submission was approved by Council for 2019.</p>		
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Program:	Equipment Program	Sub-program:	Information Technology
Project Name:	PeopleSoft HCM 9.2 Update 2020	Submission ID:	6653
Location:	City Hall		
Cost:	\$217,440	OBI:	\$ -
Funding Sources:	Corporate: \$217,440		
Scope:	<p>This project supports the update of the Peoplesoft Human Capital System (HCM) 9.2 to the latest release with new and enhanced features. This project enables the internal team to leverage knowledge of a consultant in order to develop an ongoing, sustainable process for future updates.</p> <p>With this update, a full review of existing customizations will be conducted to assess whether these customizations are still required in the new version. New capabilities such as dynamic online Organization Charts and mobile friendly pages will be enabled.</p>		
			

2020 Recommended Equipment Program

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Fire Equipment Replacement from Reserve	131
Richmond Fire Driving Testing/Evaluation Platform	132

Program:	Equipment Program	Sub-program:	Equipment
Project Name:	Fire Equipment Replacement from Reserve	Submission ID:	6756
Location:	Fire-Rescue		
Cost:	\$258,145	OBI:	\$55,000
Funding Sources:	Fire Equipment: \$258,145		
Scope:	<p>Richmond Fire-Rescue (RFR) provides specialized core services to the community. They include the following services:</p> <ul style="list-style-type: none">▪ Hazmat services are provided by RFR staff and supported by specialized equipment. This equipment was supplied by a JEPP (Joint Emergency Preparedness Program) Grant in 2009. Currently many components have come to the end of their useful life. RFR will begin a phased in program to replace this equipment over a term of 3 years and will increase the transfer to Fire equipment reserve, so that the reserve funding would be able to replace these components as they come to the end of their useful life in the future;▪ Emergency road rescue includes a component known as auto extrication. This service requires equipment capable of cutting the metal components of a vehicle damaged in a traffic accident away from a person who is trapped within a vehicle. RFR has used equipment that requires hydraulic pumps, hoses and cord reels which are replaced on a seven year rotation. This request represents Phase 2 of the Replacement Plan, there are 3 sets of hydraulic equipment that require replacement; they are several years past their normal end of life and due to the fact that this equipment works at high pressure, failure is a significant safety risk. RFR will replace the current equipment with the new industry standard which is battery powered (opposed to hydraulic) which is cost effective, operationally efficient and safer for both the public and responders; and▪ RFR maintains an inventory of fire hose. Fire hose is replaced annually using a multi-faceted consideration criterion. The age of the hose, the use of the hose as well as testing results are used to determine the replacement of deteriorating fire hose. Hose replacement planned and funded by the Fire Equipment Reserve for 2020 is 30 lengths of hose. The objective is to maintain an adequate inventory of fire hose to effectively maintain the services. RFR expects to continue with replacing 30 lengths of hose per year to maintain the hose inventory.		
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Program:	Equipment Program	Sub-program:	Equipment
Project Name:	Richmond Fire Driving Testing/Evaluation Platform	Submission ID:	6749
Location:	Fire Hall No. 1/Fire Hall No. 3		
Cost:	\$280,000	OBI:	\$45,000
Funding Sources:	Fire Equipment: \$280,000		
Scope:	<p>Driving Testing/Evaluation Platform: A technology based driver testing platform that delivers a driving experience in accurate driving situations within a realistic geographical environment. This allows trainees to accelerate their skill base in a risk free setting and safeguard the front line vehicles which are valued in excess of \$1M each. It will also reduce costs associated with fuel, maintenance, and overall wear on these vehicles.</p> <p>The purchase of a driver testing/evaluation program would improve decision making and thereby reduce collisions through the use of cognitive based learning techniques, proven driving practises, and state of the art simulation. This technology based training allows for continual reinforcement of the training curriculum and consistent repetition of key training areas.</p> <p>Richmond Fire-Rescue (RFR) recommends that specific best driving curriculum be adopted with this system.</p> <p>The integrated curriculum and driver practice on this system is intended to successfully reduce collision incidents. Trainees using this platform would focus on the following training objectives:</p> <ul style="list-style-type: none">▪ strengthen overall driving awareness by enhancing visual acuity and engagement of multiple senses;▪ engage active thinking to move to proactive versus reactive driving;▪ create an environment that allows experimentation with multiple strategies and plans to deal with complex driving challenges; and▪ create time efficient practice sessions to maximize cycle time and positive reinforcement of correct actions.		
			

Child Care Program 2020


Child care is an important service for Richmond residents and an essential need for many parents. The 2017-2022 Richmond Child Care Needs Assessment and Strategy was adopted by City Council on July 24, 2017 and outlines the City’s commitment to child care through the establishment and maintenance of a comprehensive child care system to help children and families thrive and to address the need for quality, affordable, accessible child care spaces in Richmond.


The City supports the creation of child care spaces by accepting voluntary contributions from developers in the form of built child care facilities or cash-in-lieu contributions to the Child Care Statutory Reserves. The City manages and maintains nine existing City-owned child care facilities and is in the process of developing two additional City-owned child care facilities and two Early Childhood Development Hubs. Dedicated City staff resources help to develop, maintain and support the child care system in Richmond. Child Care grants support the work of non-profit child care providers seeking to improve the quality or capacity of care in their facility, or non-profit societies supporting quality programming and/or providing professional development opportunities for the broader child care community in Richmond.

2020 Recommended Child Care Program


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Program:	Child Care Program	Sub-program:	Child Care
Project Name:	Child Care - Administration	Submission ID:	6677
Location:	City Hall		
Cost:	\$110,000	OBI:	\$ -
Funding Sources:	Child Care Operating: \$110,000		
Scope:	<p>A source of funding is required to support the City's Child Care section and to assist in the implementation of specific actions adopted by Council in the 2017-2022 Richmond Child Care Needs Assessment and Strategy.</p> <p>The Child Care Planner 1 position, which has existed as an auxillary position since 2017 and funded through the Child Care Operating Reserve, plays an important role in supporting the ongoing work to plan, design and build new child care facilities secured as community amenity contributions. Specific job duties include working with developers, and assisting with regular review of these City facilities to ensure they meet health and safety standards. Further work includes assisting with the planning and development of four new child cares (including two Early Childhood Development Hubs), research, developing and updating City publications and working documents, and responding to requests for information from the community, parents and child care providers.</p> <p>In addition, these funds will be used to pay for costs related to: expenses to support the child care work program, research, production of reports, creation of developer resources, and to support the ongoing development of three new amenities under development including two Early Childhood Development (ECD) Hubs and one child care facility as necessary.</p> <p>The Child Care Operating Reserve is an appropriate source of funding for such expenses. It was established to support grants, conduct research and fund expenses to support the development of quality child care within the City.</p>		
			

Program:	Child Care Program	Sub-program:	Child Care
Project Name:	Child Care Projects - City-wide (Capital Grants)	Submission ID:	5704
Location:	Various Locations		
Cost:	\$50,000	OBI:	\$ -
Funding Sources:	Child Care Development Reserve: \$50,000		
Scope:	To provide sufficient funding to administer the City's Child Care Capital Grants Program. These grants support non-profit child care operators with capital improvements to enhance their child care programs (e.g., minor renovations, upgrades to outdoor play areas and the purchase of equipment and furnishings).		
			

Program:	Child Care Program	Sub-program:	Child Care
Project Name:	Child Care Projects - City-wide Non-Capital Grants	Submission ID:	6143
Location:	Various Locations		
Cost:	\$10,000	OBI:	\$ -
Funding Sources:	Child Care Operating: \$10,000		
Scope:	To ensure there is sufficient funding to support the 2020 Child Care Professional and Program Development Grants (non-capital). Grants are advertised in September 2019 and then with Council approval will be awarded in February 2020.		



Contingent External Contributions 2020

Contingent external contributions is an estimate of external grants that may be received throughout the year for a variety of approved capital projects.

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Program:	Contingent External Contributions	Sub-program:	Contingent External Contributions
Project Name:	Contingent External Contribution	Submission ID:	5812
Location:	City Wide		
Cost:	\$10,000,000	OBI:	\$ -
Funding Sources:	Grant: \$10,000,000		
Scope:	The Financial Plan includes an estimate for external grants that may be received throughout the year for various projects. Spending will only be incurred if the funds are confirmed. Including an estimate in the Financial Plan will allow staff to request scope changes to existing projects without having to wait until the Bylaw Amendment, which is typically adopted in the fall.		

Internal Transfers/Debt Payment Program 2020

The internal transfers/debt program relates to the use of capital funding for repayment of capital funds borrowed from other internal sources of funding.

2020 Recommended Internal Transfers/Debt Payment Program

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Transfer funding from DCC Parks Development General to DCC Parks Development West Cambie	144

Program:	Internal Transfers/Debt Payment		Sub-program:	Internal Transfers/Debt Payment		
Project Name:	12040 Horseshoe Way Repayment		Submission ID:	6323		
Location:	12040 Horseshoe Way					
Cost:	\$525,000		OBI:	\$ -		
Funding Sources:	Affordable Housing: \$525,000					
Scope:	The purpose of this submission is to repay the Capital Reserve - Industrial Use Fund for the previous Affordable Housing acquisition of 12040 Horseshoe Way from the Affordable Housing Reserve.					
	The 2020 payment of \$525,000 is the third of 15 payments.					
	Payments	Year	Balance	Payment	Interest	Principal
	1	2018	\$6,250,000	\$(525,000)	\$187,500	\$337,500
	2	2019	5,912,500	(525,000)	177,375	347,625
	3	2020	5,564,875	(525,000)	166,946	358,054
	4	2021	5,206,821	(525,000)	156,205	368,795
	5	2022	4,838,026	(525,000)	145,141	379,859
	6	2023	4,458,167	(525,000)	133,745	391,255
	7	2024	4,066,912	(525,000)	122,007	402,993
	8	2025	3,663,919	(525,000)	109,918	415,082
	9	2026	3,248,837	(525,000)	97,465	427,535
	10	2027	2,821,302	(525,000)	84,639	440,361
	11	2028	2,380,941	(525,000)	71,428	453,572
	12	2029	1,927,369	(525,000)	57,821	467,179
	13	2030	1,460,190	(525,000)	43,806	481,194
	14	2031	978,996	(525,000)	29,370	495,630
	15	2032	483,366	(497,867)	14,501	483,366

Program:	Internal Transfers/Debt Payment				Sub-program:	Internal Transfers/Debt Payment
Project Name:	7080 River Road Repayment				Submission ID:	6017
Location:	7080 River Road					
Cost:	\$2,341,384				OBI:	\$ -
Funding Sources:	Parks Acquisition DCC: \$2,202,072 Parks Acquisition City Assist: \$139,312					
Scope:	The purpose of this submission is to repay the Capital Reserve - Industrial Use Fund for previous Parkland Acquisitions from Parkland Acquisition Developer Cost Charges (DCC's).					
	The 2020 payment of \$2,341,384 is the fourth of 8 payments.					
	Payments	Year	Balance	Payment	Interest	Principal
	1	2017	\$15,763,942	\$(2,341,384)	\$630,558	\$1,710,826
	2	2018	14,053,116	(2,341,384)	562,125	1,779,259
	3	2019	12,273,857	(2,341,384)	490,954	1,850,430
	4	2020	10,423,427	(2,341,384)	416,937	1,924,447
	5	2021	8,498,980	(2,341,384)	339,959	2,001,425
	6	2022	6,497,555	(2,341,384)	259,902	2,081,482
	7	2023	4,416,073	(2,341,384)	176,643	2,164,741
	8	2024	2,251,332	(2,341,384)	90,052	2,251,332

Program:	Internal Transfers/Debt Payment	Sub-program:	Internal Transfers/Debt Payment			
Project Name:	Nelson Road Interchange Repayment	Submission ID:	5745			
Location:	Nelson Reoad Interchange					
Cost:	\$385,098	OBI:	\$ -			
Funding Sources:	Roads DCC: \$385,098					
Scope:	A total of \$2.54M is to be repaid from Roads DCC to Surplus over 8 years.					
	The 2020 payment of \$385,098 is the seventh of 8 equal payments.					
	Payment	Year	Balance	Payment	Interest	Principal
	1	2014	\$2,540,065	\$(385,098)	\$114,303	\$270,795
	2	2015	2,269,270	(385,098)	102,117	282,981
	3	2016	1,986,289	(385,098)	89,383	295,715
	4	2017	1,690,574	(385,098)	76,076	309,022
	5	2018	1,381,552	(385,098)	62,170	322,928
	6	2019	1,058,624	(385,098)	47,638	337,460
	7	2020	721,164	(385,098)	32,452	352,646
	8	2021	368,518	(385,098)	16,583	368,515

Program:	Internal Transfers/Debt Payment	Sub-program:	Internal Transfers/Debt Payment																																																																																																																		
Project Name:	River Road/North Loop (2005) Repayment	Submission ID:	5746																																																																																																																		
Location:	River Road/North Loop																																																																																																																				
Cost:	\$1,334,953	OBI:	\$ -																																																																																																																		
Funding Sources:	Roads DCC: \$1,334,953																																																																																																																				
Scope:	<p>In 2005, \$18.2M was borrowed from surplus for the acquisition of the CP Rail land between No. 2 and No. 3 Road and for the re-alignment of River Road.</p> <p>\$17.1M was borrowed in 2005 with repayments commencing in 2006. An additional amount of \$950,000 was also borrowed with repayment starting in 2008.</p> <p>The 2020 payment of \$1,334,953 is the fifteenth of 18 payments.</p> <table><tr><td>Payments</td><td>Year</td><td>Balance</td><td>Payment</td><td>Interest</td><td>Principal</td></tr><tr><td>1</td><td>2006</td><td>\$17,100,000</td><td>\$(1,769,576)</td><td>\$598,500</td><td>\$1,171,076</td></tr><tr><td>2</td><td>2007</td><td>15,928,924</td><td>(1,200,000)</td><td>557,512</td><td>642,488</td></tr><tr><td>3</td><td>2008</td><td>16,236,436</td><td>(1,867,000)</td><td>568,275</td><td>1,298,725</td></tr><tr><td>4</td><td>2009</td><td>14,937,712</td><td>(1,867,000)</td><td>522,820</td><td>1,344,180</td></tr><tr><td>5</td><td>2010</td><td>13,593,532</td><td>(468,210)</td><td>475,774</td><td>(7,564)</td></tr><tr><td>6</td><td>2011</td><td>13,601,095</td><td>(300,000)</td><td>476,038</td><td>(176,038)</td></tr><tr><td>7</td><td>2012</td><td>13,777,133</td><td>(200,000)</td><td>482,200</td><td>(282,200)</td></tr><tr><td>8</td><td>2013</td><td>14,059,333</td><td>(1,939,202)</td><td>492,077</td><td>1,447,125</td></tr><tr><td>9</td><td>2014</td><td>12,612,208</td><td>(1,317,000)</td><td>441,427</td><td>875,573</td></tr><tr><td>10</td><td>2015</td><td>11,736,635</td><td>(1,685,056)</td><td>410,782</td><td>1,274,274</td></tr><tr><td>11</td><td>2016</td><td>10,462,361</td><td>(1,685,056)</td><td>366,183</td><td>1,318,873</td></tr><tr><td>12</td><td>2017</td><td>9,143,488</td><td>(1,685,056)</td><td>320,022</td><td>1,365,034</td></tr><tr><td>13</td><td>2018</td><td>7,778,454</td><td>(1,685,056)</td><td>272,246</td><td>1,412,810</td></tr><tr><td>14</td><td>2019</td><td>6,365,644</td><td>(1,685,056)</td><td>222,798</td><td>1,462,258</td></tr><tr><td>15</td><td>2020</td><td>4,903,386</td><td>(1,334,953)</td><td>171,618</td><td>1,163,335</td></tr><tr><td>16</td><td>2021</td><td>3,740,051</td><td>(1,334,953)</td><td>130,902</td><td>1,204,051</td></tr><tr><td>17</td><td>2022</td><td>2,536,000</td><td>(1,334,953)</td><td>88,760</td><td>1,246,193</td></tr><tr><td>18</td><td>2023</td><td>1,289,807</td><td>(1,334,950)</td><td>45,143</td><td>1,289,807</td></tr></table>			Payments	Year	Balance	Payment	Interest	Principal	1	2006	\$17,100,000	\$(1,769,576)	\$598,500	\$1,171,076	2	2007	15,928,924	(1,200,000)	557,512	642,488	3	2008	16,236,436	(1,867,000)	568,275	1,298,725	4	2009	14,937,712	(1,867,000)	522,820	1,344,180	5	2010	13,593,532	(468,210)	475,774	(7,564)	6	2011	13,601,095	(300,000)	476,038	(176,038)	7	2012	13,777,133	(200,000)	482,200	(282,200)	8	2013	14,059,333	(1,939,202)	492,077	1,447,125	9	2014	12,612,208	(1,317,000)	441,427	875,573	10	2015	11,736,635	(1,685,056)	410,782	1,274,274	11	2016	10,462,361	(1,685,056)	366,183	1,318,873	12	2017	9,143,488	(1,685,056)	320,022	1,365,034	13	2018	7,778,454	(1,685,056)	272,246	1,412,810	14	2019	6,365,644	(1,685,056)	222,798	1,462,258	15	2020	4,903,386	(1,334,953)	171,618	1,163,335	16	2021	3,740,051	(1,334,953)	130,902	1,204,051	17	2022	2,536,000	(1,334,953)	88,760	1,246,193	18	2023	1,289,807	(1,334,950)	45,143	1,289,807
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Program:	Internal Transfers/Debt Payment	Sub-program:	Internal Transfers/Debt Payment
Project Name:	Transfer funding from DCC Parks Development General to DCC Parks Development West Cambie	Submission ID:	6876
Location:	West Cambie		
Cost:	\$724,185	OBI:	\$ -
Funding Sources:	Parks Development DCC: \$724,185		
Scope:	Transfer funding from DCC Parks Development General to DCC Parks Development West Cambie to provide funding for West Cambie Park Development.		

Infrastructure Program 2020 – Not Recommended

Due to funding constraints and higher priority projects, the following infrastructure projects are not recommended for funding.

2020 Not Recommended Infrastructure – Roads Program

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NOT RECOMMENDED
FOR FUNDING IN 2020

Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Extending City's Existing Cycling Network by 2 kilometres	Submission ID:	6637

Location:

City Centre Area and Steveston Area

Cost:

\$5,100,000

OBI:

\$24,712

Funding Sources:

Capital Revolving: \$5,100,000

Scope:

General Scope: Provision of a 2.5m (min.) to 3.0m (preferred) wide paved multi-use pathway (MUP) or directional bike lane with a buffer to provide physical protection at various locations within the City to support the expansion and provide greater coverage & connectivity of the existing cycling routes as per the Cycling Network Plan contained in the OCP. This project is to be carried out in two phases: (1) prepare detailed design and consultation with affected property owners/business operators; and (2) MUP and/or directional bike lane construction.

Three separate projects (Capital Submission ID 6637, 6673 and 6674) are submitted for consideration, which would result in expanding the existing cycling network by 2km, 3km, 5km, or up to a total of 10km combined.

Major Cost Components: Phase 1 - Consultant costs for design and cost estimate. Phase 2 - Realignment/installation of curb and gutter, modifications to traffic lanes, traffic signals, MUP, pavement markings and signage, pedestrian crossing enhancements, relocation of above ground infrastructure (i.e., streetlight poles, hydrants, power poles, etc.), bus stops, removal of parking, delineators, concrete median and modifications to private property (i.e., re-grade driveways, landscaping, etc.).


Funding: General Revenue

The preliminary list for 2020 includes 3 potential locations at:

1. Cook Rd (No. 3 Rd - Garden City Rd): Directional 2.0 m bike lanes with 0.3 m buffer for protection of either concrete median or delineators (800m);
2. No. 2 Rd (Steveston Hwy to Williams Rd): Northern extension of minimum 3.0 m MUP on east side (800m); and
3. Capstan Way (River Rd to Sexsmith Rd): 1.5 m bike lane along south side with 0.3 m buffer for protection of either concrete median or delineators (600m). Sexsmith Rd to Garden City Rd to be completed by development.

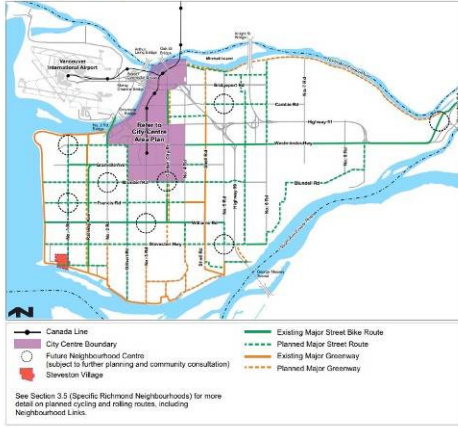
Cycling Network Map (2031)

20190312



Cycling Network Map

20190312



Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Extending City's Existing Cycling Network by 3 kilometres	Submission ID:	6673

Location:

Cost:

Funding Sources:

Scope:

Bridgeport Area, East Cambie Area, Broadmoor Area and City Centre Area

\$6,200,000

OBI:

\$39,344

Capital Revolving: \$6,200,000

General Scope: Provision of a 2.5m (min.) to 3.0m (preferred) wide paved multi-use pathway (MUP) or directional bike lane with a buffer to provide physical protection at various locations within the City to support the expansion and provide greater coverage & connectivity of the existing cycling routes as per the Cycling Network Plan contained in the OCP. This project is to be carried out in two phases: (1) prepare detailed design and consultation with affected property owners/business operators; and (2) MUP and/or directional bike lane construction.

Three separate projects (Capital Submission ID 6637, 6673 and 6674) are submitted for consideration, which would result in expanding the existing cycling network by 2km, 3km, 5km, or up to a total of 10km combined.


Major Cost Components: Phase 1 - Consultant costs for design and cost estimate. Phase 2 - Realignment/installation of curb and gutter, modifications to traffic lanes, traffic signals, MUP, pavement markings and signage, pedestrian crossing enhancements, relocation of above ground infrastructure (i.e., streetlight poles, hydrants, power poles, etc.), bus stops, removal of parking, delineators, concrete median and modifications to private property (i.e., re-grade driveways, landscaping, etc.).

Funding: General Revenue

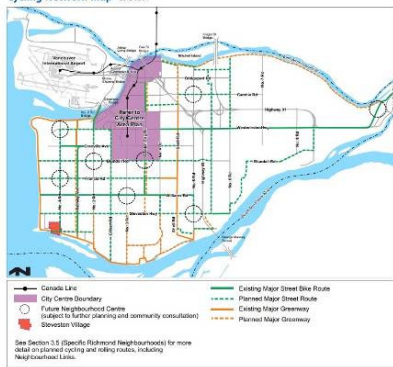
The preliminary list for 2020 includes 4 potential locations at:

- No. 6 Rd (Commerce Pwy-Cambie Rd): Northern extension of existing 3.0 m MUP on west side (1.0km);
- Bridgeport Rd (No. 6 Rd to Knight St Bridge): Widening of existing path & sidewalk on north side to 3.0 m MUP (450m);
- Garden City Rd (Francis Rd-Granville Ave): Directional 1.5 m bike lanes with 0.3 m buffer for protection of either concrete median or delineators (1.6km); and
- Browngate Rd (No. 3 Rd to Hazelbridge Way): 1.5 m bike lane along south side with 0.3 m buffer for protection of either concrete median or delineators (200m).

Cycling Network Map (2031)



Cycling Network Map



Program:	Infrastructure Program	Sub-program:	Roads
Project Name:	Extending City's Existing Cycling Network by 5 kilometres	Submission ID:	6674

Location:

East Cambie Area, Bridgeport Area, Steveston Area, Thompson Area and City Centre Area

Cost:

\$11,100,000

OBI:

\$54,364

Funding Sources:

Capital Revolving: \$11,100,000

Scope:

General Scope: Provision of a 2.5m (min.) to 3.0m (preferred) wide paved multi-use pathway (MUP) or directional bike lane with a buffer to provide physical protection at various locations within the City to support the expansion and provide greater coverage & connectivity of the existing cycling routes as per the Cycling Network Plan contained in the OCP. This project is to be carried out in two phases: (1) prepare detailed design and consultation with affected property owners/business operators; and (2) MUP and/or directional bike lane construction.

Three separate projects (Capital Submission ID 6637, 6673 and 6674) are submitted for consideration, which would result in expanding the existing cycling network by 2km, 3km, 5km, or up to a total of 10km combined.


Major Cost Components: Phase 1 - Consultant costs for design and cost estimate. Phase 2 - Realignment/installation of curb and gutter, modifications to traffic lanes, traffic signals, MUP, pavement markings and signage, pedestrian crossing enhancements, relocation of above ground infrastructure (i.e., streetlight poles, hydrants, power poles, etc.), bus stops, removal of parking, delineators, concrete median and modifications to private property (i.e., re-grade driveways, landscaping, etc.).

Funding: General Revenue

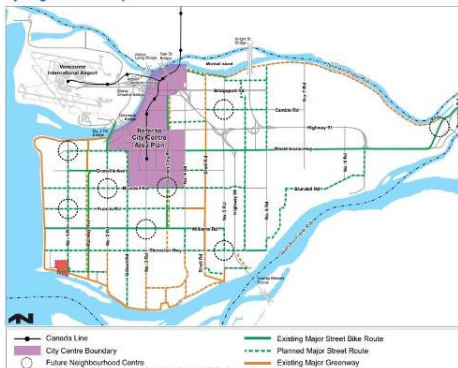
The preliminary list for 2020 includes 4 potential locations at:

1. Shell Rd (from Hwy 99-River Rd): Northern extension of 3.0 m MUP on east side from Hwy 99 to Caithcart Road, then on west side from Caithcart Road to River Road (2km);
2. Steveston Hwy (No. 2 Rd-Railway Ave): Western extension of minimum 3.0 m MUP on south side with up to 1.5 m blvd where feasible (800m);
3. River Rd (McCallan Rd-No. 2 Rd): Widening of existing path on south side to 4.0 m MUP (800m); and
4. Gilbert Rd (Granville Ave to Elmbridge Way): Directional 2.0 m bike lane (west side).

Cycling Network Map (2031)



Cycling Network Map




Building Program 2020 – Not Recommended

Due to funding constraints and higher priority projects, the following building projects are not recommended for funding.

2020 Not Recommended Building – Building Program


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Steveston Martial Arts - Accessibility, Envelope Renewals	154

Program:	Building Program	Sub-program:	Building
Project Name:	Community Safety Building Inventory Room and Associated Works	Submission ID:	6629
Location:	11411 No. 5 Road		
Cost:	\$402,850	OBI:	\$ -
Funding Sources:	Others: \$402,850		
Scope:	<p>The RCMP detachment has grown as a result of resource increases and an inventory management system is required.</p> <p>The current system does not align with current RCMP departmental security policies.</p> <p>This new system would provide a safe and secure method for storage, accountability and readily accessible deployment of costly policing equipment such as radios and mobile work stations. This would also fulfill a legal requirement on the storage of firearms, tasers, pepper spray and ammunition etc.</p> <p>This would also improve productivity by providing access to required equipment in a timely manner.</p>		
			


Program:	Building Program	Sub-program:	Building
Project Name:	Fire Hall No. 6 - Mechanical Component Replacements and Associated Works	Submission ID:	6686
Location:	9400 No. 4 Road		
Cost:	\$490,000	OBI:	\$ -
Funding Sources:	Building and Infrastructure: \$490,000		
Scope:	<p>Multiple building components in this facility constructed in 1977 have reached the end of their life expectancy and will be replaced with modern energy efficient systems (where possible). These system renewals will also include associated miscellaneous items that will serve to prolong the life of the building and ensure the health and safety of its users/inhabitants.</p> <p>All of these works are planned to be completed at the same time to maximize savings in schedule and costs for mobilization and demobilization.</p> <p>Mechanical</p> <p>The HVAC system has reached the end of its serviceable life span. This system was installed in 2009 with the anticipated life span of 15 years, however based on an assessment conducted in 2018 this system is showing significant wear and tear due to constant usage. Without replacement this system will continue to deteriorate causing increased maintenance costs and potential failure due to unavailable parts.</p>		

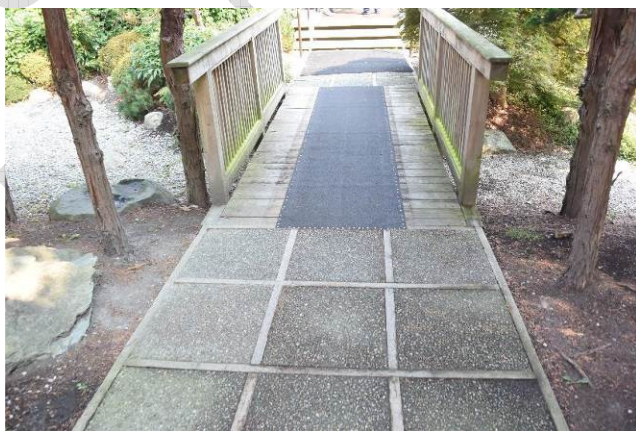


Program:	Building Program	Sub-program:	Building
Project Name:	Library Cultural Centre - Mechanical Components, Replacements and Interior/Accessibiility Renewals and Associated Works	Submission ID:	6262
Location:	7700 Minoru Gate		
Cost:	\$5,100,000	OBI:	\$ -
Funding Sources:	Building and Infrastructure: \$5,100,000		
Scope:	<p>Multiple building components in this facility constructed in 1992 have reached the end of their life expectancy and will be replaced with modern energy efficient systems (where possible). These system renewals will also include associated miscellaneous items that will serve to prolong the life of the building and ensure the health and safety of its users/inhabitants.</p> <p>All of these works are planned to be completed at the same time to maximize savings in schedule and costs for mobilization and demobilization.</p> <p>Fire Alarm System and Exit Signs (\$415,000):</p> <p>The fire alarm system and exit signs have reached the end of the serviceable life span and will be replaced with new. Both systems were installed in 2005 with the anticipated life span of 10 years; they were assessed in 2018 and recommended for replacement in 2020 to ensure continued reliability of these building systems.</p> <p>Mechanical (\$4,235,000):</p> <p>Multiple HVAC systems have exceeded their serviceable life span and will be renewed/replaced as needed. All units are original to the building dating back to 1992 with anticipated life spans ranging from 15 - 25 years, they were assessed in 2018 and recommended for replacement in 2020 to ensure reliable continuity of service.</p> <p>Interior and Accessibility (\$450,000):</p> <p>Multiple flooring systems have exceeded their serviceable life span and will be replaced. Additionally the level 2 door leading to classrooms will be converted to a power assist accessible door. The flooring systems are original to the building dating back to 1992 with the anticipated life span of 25 years. Assessed in 2018, these systems showed significant wear and tear and were recommended for replacement in 2020.</p>		
			

Program:	Building Program	Sub-program:	Building
Project Name:	Minoru Arenas - Mechanical Components Replacements and Associated Works	Submission ID:	6607

Location:	7551 Minoru Gate		
Cost:	\$715,000	OBI:	\$ -
Funding Sources:	Building and Infrastructure: \$715,000		
Scope:	<p>The hot water storage tanks and associated water distribution systems in this facility, constructed in 1984, have reached the end of their life expectancy and will be replaced with modern energy efficient systems (where possible). These system renewals will also include associated miscellaneous items that will serve to prolong the life of the building and ensure the health and safety of its users/inhabitants.</p> <p>All of these works are planned to be completed at the same time to maximize savings in schedule and costs for mobilization and demobilization.</p> <p>The two (2) hot water storage tanks provide hot water to the dressing rooms and zambonis.</p> <p>If not addressed, there is a high risk of unit failure, causing service interruptions and potential closures.</p>		



Program:	Building Program	Sub-program:	Building
Project Name:	Steveston Martial Arts - Accessibility, Envelope Renewals	Submission ID:	6608
Location:	4251 Moncton Street		
Cost:	\$400,000	OBI:	\$ -
Funding Sources:	Building and Infrastructure: \$400,000		
Scope:	<p>Multiple building components in this facility constructed in 1971 have reached the end of their life expectancy and will be replaced with modern energy efficient systems (where possible). These system renewals will also include associated miscellaneous items that will service to prolong the life of the building and ensure the health and safety of its users/inhabitants.</p> <p>All of these works are planned to be completed at the same time to maximize savings in schedule and costs for mobilization and demobilization.</p> <p>Fire and Security Systems (\$105,000):</p> <p>The fire and security systems have reached their serviceable lifespan and will be replaced. The fire system is original to the building, dating back to 1971 while the security system was installed in 2003, both with the anticipated life span of 10 years. They were assessed in 2018 and recommended for replacement.</p> <p>Envelope (\$65,000):</p> <p>The wooden stairs and siding are splitting/cracking and will be renewed with new pieces to protect against water penetration. Additionally, the doors, soffits and roof drainage systems will be repaired/replaced as needed.</p> <p>Accessibility/Interior (\$210,000):</p> <p>The washrooms will be refreshed and upgraded to be fully accessible inclusive of flooring, doors, equipment and casework. Flooring and doors will also be repaired/replaced throughout the facility as needed.</p> <p>Grounds/Exterior (\$20,000):</p> <p>The wooden bridge leading to the main entrance is showing signs of deterioration and will be repaired/refurbished to ensure continued usage and aesthetics to the facility.</p>		
			

Information Technology Program 2020 – Not Recommended


Due to funding constraints and higher priority projects, the following information technology projects are not recommended for funding.


2020 Not Recommended Information Technology – Information Technology Program


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NOT RECOMMENDED
FOR FUNDING IN 2020

Program:	Equipment Program	Sub-program:	Information Technology
Project Name:	Emergency Notification System Integration to MyRichmond	Submission ID:	6651
Location:	City Hall		
Cost:	\$100,850	OBI:	\$ -
Funding Sources:	Capital Revolving: \$100,850		
Scope:	The City's current Emergency Notification system is out of support. The scope of work of this request includes integrating the new Emergency notification system to MyRichmond, by providing a single profile for the public to sign up for emergency notifications and blockwatch newsletter/alerts. The MyRichmond platform will be enhanced to promote sign ups through online advertisements, and a consent journey will be enabled for users to accept the new Privacy Information agreement.		
			

Program:	Equipment Program	Sub-program:	Information Technology
Project Name:	Enhanced Online Community Services Program Guide	Submission ID:	6726
Location:	City Wide		
Cost:	\$295,000	OBI:	\$ -
Funding Sources:	Capital Revolving: \$295,000		
Scope:	<p>The scope of work consists of the implementation of a customizable digital program guide on the City of Richmond website. This new enhanced online program guide would allow customers to set criteria for Community Services programs and produce a customizable and personalized PDF. It will be a customer-centric online catalogue that offers an intuitive, real-time and personalized browsing experience for residents to access programs and services. This enhanced online program guide would not only promote registration and participation, but also encourage the decommissioning of existing tools (e.g., printed copies) and allow for the reallocation of ongoing costs and staff-time to more innovative marketing strategies. Implementation includes public and stakeholder consultation to ensure the new enhanced online program guide meets the needs of the public and aligns with marketing and communication strategies and best practices.</p> <ol style="list-style-type: none">1. Intuitive digital program guide that is more in-line with the industry's common features: product catalogue, thorough and flexible filters, sort and prioritization, predictive search, and downloading.2. Tool to allow clients to plan their registration, such as the ability to highlight, save or pre-select programs.3. Anonymous browsing and use of online guide (e.g., no login or account required).4. Integration with online program registration system (e.g., click to navigate directly to program and register and buy).5. Ability for customers to create a personalized program guide by enabling download and/or print search results in a visually appealing, organized and user-friendly format.6. Ability for staff to develop and customize seasonal templates for the personalized program guide. Staff should be able to customize guide covers and add additional materials such as seasonal features or sections.7. Easy, streamlined and cohesive client experience.8. Responsive to various browsers and hardware.		
			

Program:	Equipment Program	Sub-program:	Information Technology
Project Name:	Richmond Library Programs Integration with MyRichmond	Submission ID:	6727
Location:	City Wide		
Cost:	\$230,000	OBI:	\$10,000
Funding Sources:	Capital Revolving: \$230,000		
Scope:	<p>Richmond Public Library (RPL) Programs are not searchable within MyRichmond. Residents has to go to MyRichmond website for community programs and RPL website for Library programs.</p> <p>1) Richmond Public Library (RPL) Customers browse and register for Library programs and events in RPL BiblioEvents application which is integrated with the Library catalogue system. While this is effective, we are seeking ways of marketing programs to those who are unaware of them and don't use library services otherwise. Having Library programs appear alongside City programs in the MyRichmond portal would improve their visibility and potentially their registration.</p> <p>2) MyRichmond to add a "My Library" section to link to RPL online services. Customers will benefit by not having to remember a separate login id and password for RPL online services to their library accounts. Customers will still be able to access RPL online services directly through their library card number and personal identification number.</p> <p>3) RPL's website will include a link to MyRichmond to allow customers to easily navigate back and forth between both applications.</p>		
			

CITY OF RICHMOND
5 YEAR CAPITAL PLAN SUMMARY (2020 - 2024)
(in \$000s)

	2020	2021	2022	2023	2024
Infrastructure Program					
Roads	50,843	14,821	14,867	14,527	13,480
Drainage	14,207	18,934	17,859	18,228	27,201
Water	9,143	7,779	7,792	6,906	7,751
Sanitary Sewer	13,563	11,300	15,450	13,370	10,950
Infrastructure Advanced Design and Minor Public Works	5,130	5,700	4,049	4,080	3,980
Total Infrastructure Program	\$92,886	\$58,534	\$60,017	\$57,111	\$63,362
Building Program					
Building	17,620	113,610	26,800	13,700	11,160
Total Building Program	\$17,620	\$113,610	\$26,800	\$13,700	\$11,160
Parks Program					
Parks	8,180	6,144	2,780	2,860	2,700
Parkland	4,000	4,000	4,000	4,000	4,000
Total Parks Program	\$12,180	\$10,144	\$6,780	\$6,860	\$6,700
Public Art Program	\$695	\$150	\$150	\$150	\$150
Land Program	\$10,000	\$10,000	\$5,000	\$5,000	\$10,000
Affordable Housing	\$400	\$200	\$200	\$200	\$200
Equipment Program					
Vehicle	3,441	2,528	2,334	3,995	4,434
Fire Vehicle	416	1,186	1,221	1,258	-
Information Technology	1,996	1,386	913	526	548
Equipment	538	779	580	581	32
Total Equipment Program	\$6,391	\$5,879	\$5,048	\$6,360	\$5,014
Child Care Program	\$170	\$172	\$174	\$177	\$179
Internal Transfers/Debt Payment	\$5,310	\$4,586	\$4,201	\$4,201	\$2,866
Contingent External Contributions	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Total Capital Program	\$155,652	\$213,275	\$118,370	\$103,759	\$109,631

CITY OF RICHMOND
5 YEAR CAPITAL PLAN BY FUNDING SOURCES (2020 - 2024)
(in \$000s)

	2020	2021	2022	2023	2024
DCC Reserves					
Drainage DCC	-	1,510	-	-	2,144
Park Development DCC	6,330	3,907	1,647	1,787	1,740
Park Land Acquisition DCC	5,964	5,964	5,964	5,964	5,964
Roads DCC	12,773	8,478	8,047	8,051	5,731
Sanitary DCC	3,527	-	1,428	-	658
Water DCC	138	634	898	-	673
Total DCC	\$28,732	\$20,493	\$17,984	\$15,802	\$16,910
Statutory Reserves					
Affordable Housing	925	725	725	725	725
Capital Building and Infrastructure	16,288	72,527	6,800	13,700	10,550
Capital Reserve	15,079	45,691	28,979	8,575	14,010
Capstan Station	28,000	-	-	-	-
Child Care	170	172	174	177	179
Drainage Improvement	12,415	13,552	14,577	15,603	23,286
Equipment Replacement	3,655	3,392	3,310	4,833	4,066
Leisure Facilities	-	4,934	-	-	-
Public Art Program	694	150	150	150	150
Rate Stabilization	-	1,320	-	-	-
Sanitary Sewer	11,886	12,850	14,641	14,620	11,542
Watermain Replacement	10,591	8,820	8,466	8,407	8,480
Total Statutory Reserves	\$99,703	\$164,133	\$77,822	\$66,790	\$72,988
Other Sources					
Enterprise Fund	125	550	550	550	-
Grant and Developer Contribution	16,274	15,028	15,191	14,005	13,150
Other Sources	9,368	12,221	6,248	5,862	5,883
Sewer Levy	350	100	-	50	50
Solid Waste and Recycling	450	300	300	300	300
Water Levy	650	450	275	400	350
Total Other Sources	\$27,217	\$28,649	\$22,564	\$21,167	\$19,733
Total Capital Program	\$155,652	\$213,275	\$118,370	\$103,759	\$109,631

CITY OF RICHMOND
5 YEAR CAPITAL PLAN BY PROGRAM (2020 - 2024)
(in \$000s)

	2020	2021	2022	2023	2024
Infrastructure Program					
Roads					
Accessible Pedestrian Signal Program	250	-	-	-	-
Active Transportation Improvement Program	600	600	600	600	600
Annual Asphalt Re-Paving Program - MRN	1,558	1,558	1,558	1,558	1,558
Annual Asphalt Re-Paving Program - Non-MRN	3,288	3,288	3,288	3,288	3,288
Arterial Roadway Improvement Program	800	800	800	800	400
Bridge Rehabilitation Program		300	643	300	300
Cambie Overpass Rehabilitation Project	1,355	-	-	-	-
Cambie Road/No. 5 Road- Intersection Improvements	2,760	-	-	-	-
Capstan Station Construction	27,500	-	-	-	-
Capstan Station Integration Design	500	-	-	-	-
Citywide Connector Walkways Rehabilitation Program	250	250	250	250	250
Citywide Sidewalk and Street Light Replacement Program	500	500	500	500	500
LED Street Name Sign Program	300	300	300	300	300
Neighbourhood Walkway Program	750	750	750	750	500
Special Crosswalk Program	200	350	350	350	350
Steveston Highway Multi-Use Pathway, Mortfield Gate to No. 2 Road	6,000	-	-	-	-
Street Light LED Upgrade Program	400	490	490	490	490
Top 20 Collision Prone Intersections- Implementation of Medium-/Long-term Improvements	-	2,500	2,500	2,500	2,500
Top 20 Collision Prone Intersections- Preliminary Designs for Medium/Long-term improvements	600	-	-	-	-
Top 20 Collision Prone Intersections- Short-term Improvements	500	-	-	-	-
Traffic Calming Program	300	300	300	300	150
Traffic Signal Power Backup System (UPS)	100	200	200	200	200
Traffic Signal Program	800	1,050	1,050	1,050	800
Traffic Video and Communication Program	400	500	500	500	500
Transit-Related Amenity Improvement Program	25	25	25	25	25
Transit-Related Roadway Improvement Program	500	500	500	500	500
Transportation Planning, Functional and Preliminary Design	257	260	263	266	269
West Richmond Sidewalk Rehabilitation Program - Phase 1	350	-	-	-	-
West Richmond Sidewalk Rehabilitation Program - Phase 2	-	300	-	-	-
Total Roads	\$50,843	\$14,821	\$14,867	\$14,527	\$13,480
Drainage					
Box Culvert Repair	1,000		1,000		1,000
Burkeville Utility Improvements Drainage	2,236	2,495	1,741	2,271	2,271
Canal Stabilization	500	-	-	-	-

	2020	2021	2022	2023	2024
Development Coordinated Works - Drainage	250	250	250	250	250
Disaster Mitigation and Adaptation Fund Infrastructure Upgrades	4,516	9,194	9,603	6,637	4,500
Drainage Network Ecological Enhancement	200	150	150	150	150
Drainage Pump Station Rehabilitation and Generator Upgrade	250	250	250	250	250
East Richmond Drainage & Irrigation Upgrades	1,000	500	500	-	-
Flood Protection & Dike Improvements	1,000	3,000	1,000	7,000	5,000
Invasive Species Management	325	250	250	200	200
Laneway Drainage Upgrade	1,460	1,270	1,260	970	1,090
No. 3 Road South Pump Station Upgrade	-	-	-	-	9,140
SCADA System Improvements	150	-	-	-	-
Storm Main Drainage Upgrade	1,020	1,575	1,855	500	3,350
Watercourse Crossing Rehabilitation & Replacement	300	-	-	-	-
Total Drainage	\$14,207	\$18,934	\$17,859	\$18,228	\$27,201
Water					
Development Coordinated Works - Water	250	250	250	250	250
Pressure Reducing Valve Upgrades	-	-	1,000	-	-
Thompson Gate Pressure Reducing Valve Station	1,500	-	-	-	-
Water Metering Program	1,200	1,200	1,200	1,200	1,200
Watermain Replacement Upgrades Program	5,793	6,029	5,042	5,156	6,001
Watermain Tie-in and Restoration	400	300	300	300	300
Total Water	\$9,143	\$7,779	\$7,792	\$6,906	\$7,751
Sanitary Sewer					
Bennett West Pump Station Replacement	-	-	-	2,190	-
Development Coordinated Works - Sanitary	350	250	250	250	250
Eckersley B Sanitary Pump Station Replacement and Spires Utility Servicing	5,100	-	-	-	-
Gravity Sanitary Sewer Upgrade on River Road/ Beckwith Road/Charles Street	-	-	2,500	-	-
Gravity Sewer Assessment Program	150	150	150	150	150
Gravity Sewer Replacement and Rehabilitation	-	-	7,000	7,000	1,800
Hamilton Area Sanitary Sewer and Pump Station	2,800	-	-	-	-
Leslie Pump Station Replacement	2,913	-	-	-	-
Manhole and Inspection Chamber Replacement Program	-	250	-	250	-
Sanitary Pump Station and Forcemain Assessments, Upgrades and Grease Management	600	3,200	2,300	3,080	1,800
Sanitary Pump Station Rehabilitation	300	300	300	300	300
Sanitary Sewer Tie-in and Restoration	150	150	150	150	150
Steveston Gravity Sewer Replacement and Rehabilitation	1,200	7,000	-	-	-
Steveston Pump Station Replacement and Forcemain on 4th Avenue	-	-	-	-	6,500
Van Horne Pump Station Replacement	-	-	2,800	-	-
Total Sanitary Sewer	\$13,563	\$11,300	\$15,450	\$13,370	\$10,950
Infrastructure Advanced Design and Minor Public Works					

	2020	2021	2022	2023	2024
City Centre Community Centre North - Furniture, Fixtures and Equipment (FF&E) and OBI	-	1,320	-	-	-
Fleet Minor Capital	280	-	-	-	-
Public Works Infrastructure Advanced Design	2,550	2,330	1,999	1,930	1,930
Public Works Minor Capital - Drainage	400	300	300	300	300
Public Works Minor Capital - Roads	400	400	400	400	400
Public Works Minor Capital - Sanitary	400	400	400	400	400
Public Works Minor Capital - Sanitation & Recycling	350	300	300	300	300
Public Works Minor Capital - Traffic	250	250	250	250	250
Public Works Minor Capital - Water	500	400	400	500	400
Total Infrastructure Advanced Design and Minor Public Works	\$5,130	\$5,700	\$4,049	\$4,080	\$3,980
Total Infrastructure Program	\$92,886	\$58,534	\$60,017	\$57,111	\$63,362
Building Program					
Building					
Britannia Shipyards Complex System Renewals	-	-	2,200	-	-
Capital Buildings Project Development Advanced Design	500	-	-	-	-
City Hall - Replacement of Mechanical, Life/Safety, and Envelope Components and Associated Works	2,630	-	-	-	-
City Hall Annex Infrastructure Replacements	-	-	-	-	800
Citywide Caretaker Suite Renewals	-	-	-	2,500	-
Community Safety Building - Mechanical Component Replacements and Associated Works	1,350	-	-	-	-
Fire Hall Renewals	-	-	-	3,000	-
Japanese Duplex and First Nations Bunkhouse Reconstruction and Exhibit Development	-	4,150	-	-	-
Minoru Centre for Active Living - Lap Pool 1 Reconstruction	3,000	-	-	-	-
Outdoor Pool Renewals	-	-	-	-	610
Richmond Courthouse - Mechanical Components Replacements, Envelope Renewals, Electrical Replacements, Structural Renewals and Associated Works	1,602	-	-	-	-
Richmond Courthouse Roof Replacement	-	-	-	-	1,150
Richmond Ice Centre Infrastructure Renewals - Phase 1	6,850	-	-	-	-
Richmond Ice Centre Infrastructure Renewals - Phase 2	-	6,850	-	-	-
Richmond Ice Centre Infrastructure Renewals - Phase 3	-	-	1,700	-	-
Richmond Ice Centre Infrastructure Renewals - Phase 4	-	-	-	3,700	-
South Arm Community Centre - Envelope and Interior Finish Renewals	-	-	800	-	-
South Arm Hall Infrastructure Renewal	-	-	-	700	-
Steveston Community Centre and Branch Library	-	100,000	-	-	-
Thompson Community Centre - Interior Finish Renewals	-	-	-	1,800	-
Watermania Infrastructure Renewals	-	-	-	2,000	-
Watermania Mechanical and Pool Equipment Renewals	-	-	2,100	-	-
West Richmond Community Centre - Envelope and Life Safety Renewals	-	2,610	-	-	-

	2020	2021	2022	2023	2024
Works Yard Electrical Service Upgrade and EV Infrastructure	1,688	-	-	-	-
Works Yard Infrastructure Renewals - Phase 1	-	-	20,000	-	-
Works Yard Infrastructure Renewals - Phase 2	-	-	-	-	8,600
Total Building Program	\$17,620	\$113,610	\$26,800	\$13,700	\$11,160
Parks Program					
Parkland					
Parkland Acquisition	4,000	4,000	4,000	4,000	4,000
Total Parkland	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000
Parks					
Alexandra Park	-	1,154	-	-	-
Garden City Lands - Phase 4	-	-	500	-	-
Garden City Lands - Phase 5	-	-	-	500	-
Garden City Lands - Phase 6	-	-	-	-	500
King George Artificial Turf Sports Fields – Turf Replacement	-	790	-	-	-
Lang Park Completion	250	-	-	-	-
London Steveston Park Phase Three Construction	400	-	-	-	-
Lulu Island Park	-	-	250	500	-
Minoru Lakes Renewal Upgrades - Phase 1	4,060	-	-	-	-
Minoru Lakes Renewal Upgrades - Phase 2	-	2,000	-	-	-
Minoru Oval - Artificial Turf Replacement	1,030	-	-	-	-
Minoru Park Central Amenity Space - Playground Expansion	-	-	300	-	-
Minoru Park Central Amenity Space Detailed Design	-	-	-	-	200
Parks Advance Planning and Design	300	300	300	300	300
Parks Ageing Infrastructure Replacement Program	590	500	530	560	350
Parks General Development	400	400	300	400	400
Parks Identity Signage Program - Phase 3	100	-	-	-	-
Parks Interpretive Signage Program - Phase 1	-	-	100	-	-
Parks Interpretive Signage Program - Phase 2	-	-	-	-	100
Playground Improvement Program	600	700	500	400	500
Railway Granville Bike Park	270	-	-	-	-
Riverport and Cook Community Gardens	180	-	-	-	-
Steveston Community Park Playground Expansion	-	300	-	-	-
Trails Network Enhancements	-	-	-	200	350
Total Parks	\$8,180	\$6,144	\$2,780	\$2,860	\$2,700
Total Parks Program	\$12,180	\$10,144	\$6,780	\$6,860	\$6,700
Public Art Program					
Public Art					
Public Art Program	695	150	150	150	150
Total Public Art Program	\$695	\$150	\$150	\$150	\$150
Land Program					

	2020	2021	2022	2023	2024
Land					
Strategic Land Acquisition	10,000	10,000	5,000	5,000	10,000
Total Land Program	\$10,000	\$10,000	\$5,000	\$5,000	\$10,000
Affordable Housing					
Affordable Housing Operating Initiatives	400	200	200	200	200
Total Affordable Housing	\$400	\$200	\$200	\$200	\$200
Equipment Program					
Vehicle Replacement					
Automatic Vehicle Location/Global Positioning System	118	-	-	-	-
Vehicle and Equipment Reserve Purchases (PW and Corporate Fleet)	3,323	2,528	2,334	3,995	4,434
Total Vehicle Replacement	\$3,441	\$2,528	\$2,334	\$3,995	\$4,434
Fire Vehicle					
Fire Vehicle Replacement Reserve Purchases	416	1,186	1,221	1,258	-
Total Fire Vehicle	\$416	\$1,186	\$1,221	\$1,258	-
Information Technology					
Annual Hardware Refresh	363	405	522	526	548
Data Centre Server Refresh/Update - Phase 1 of 2	363	-	-	-	-
Data Centre Server Refresh/Update - Phase 2 of 2	-	360	-	-	-
Network Refresh for City Facilities - Phase 1 of 3	558	-	-	-	-
Network Refresh for City Facilities - Phase 2 of 3	-	621	-	-	-
Network Refresh for City Facilities - Phase 3 of 3			391		
Office 2016 Licensing - Phase 2 of 2	495	-	-	-	-
PeopleSoft HCM 9.2 Update 2020	217	-	-	-	-
Total Information Technology	\$1,996	\$1,386	\$913	\$526	\$548
Equipment					
Energy Management Projects	-	550	550	550	-
Fire Equipment Replacement from Reserve	258	229	30	31	32
Richmond Fire Driving Testing/Evaluation Platform	280	-	-	-	-
Total Equipment	\$538	\$779	\$580	\$581	\$32
Total Equipment Program	\$6,391	\$5,879	\$5,048	\$6,360	\$5,014
Child Care Program					
Child Care					
Child Care - Administration	110	112	114	117	119
Child Care Projects - City-wide (Capital Grants)	50	50	50	50	50
Child Care Projects - City-wide Non-Capital Grants	10	10	10	10	10
Total Child Care Program	\$170	\$172	\$174	\$177	\$179
Internal Transfers/Debt Payment					
Internal Transfers/Debt Payment					
12040 Horseshoe Way Repayment	525	525	525	525	525

5 Year Capital Plan by Program (2020 - 2024)
Appendix 12

	2020	2021	2022	2023	2024
7080 River Road Repayment	2,341	2,341	2,341	2,341	2,341
Nelson Road Interchange Repayment	385	385	-	-	-
River Road/North Loop (2005) Repayment	1,335	1,335	1,335	1,335	-
Transfer funding from DCC Parks Development General to DCC Parks Development West Cambie	724	-	-	-	-
Total Internal Transfers/Debt Payment	\$5,310	\$4,586	\$4,201	\$4,201	\$2,866
Contingent External Contribution					
Contingent External Contribution					
Contingent External Contribution	10,000	10,000	10,000	10,000	10,000
Total Contingent External Contribution	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Grand Total	\$155,652	\$213,275	\$118,370	\$103,759	\$109,631

The following is an overview of the major Capital programs proposed for the years 2021 to 2024.

INFRASTRUCTURE PROGRAM

- **Disaster Mitigation and Adaptation Fund Infrastructure Upgrades Phases 2-5 of 5 (2021-2024: \$29,934,000)**

The City of Richmond invests in major disaster mitigation infrastructure to contribute to the Province of British Columbia and Canada's economic growth, public safety, and ability to build a community more resilient to climate change.

This project includes the design and construction of 5 drainage pump station upgrades and perimeter dike raising within the Disaster Mitigation and Adaptation Fund. The grant funded projects include:

- Steveston Highway and Gilbert Road Drainage Pump Station Upgrade,
- No. 6 Road South Drainage Pump Station Upgrade,
- Ewen Road Pump Station Upgrade,
- No. 9 Road and Westminster Highway Pump Station Upgrade,
- McCallan Road Pump Station Upgrade, and
- Dike Upgrades.

- **No. 3 Road South Pump Station Upgrade (2024: \$9,140,000)**

This project includes demolishing the existing pump station at (No. 3 Road South) and rebuilding it to a modern standard. The project will increase pumping capacity, increase station resilience, make local dike upgrades and landscape the construction area. This project is part of a larger strategy to increase the City's drainage capacity, increase pump station reliability and reduce flooding in order to accommodate climate change and growth as outlined in the City's Official Community Plan.

The project is estimated to take 12-16 months. Construction will be scheduled for spring 2025.

Major Cost Components:

Civil (65%)	\$5,941,000
Mechanical (19%)	\$1,736,600
Electrical (16%)	<u>\$1,462,400</u>
Total	<u><u>\$9,140,000</u></u>

- **Steveston Gravity Sewer Replacement and Rehabilitation (2021: \$7,000,000)**

Several sections of gravity sewers within the City are at the end of their service life. As fibreglass pipes age, they become brittle and have an increased risk of failure. These mains have been prone to breaks in recent years, priority areas include but are not limited to Steveston and Broadmoor, amongst others. This project will replace sections of such pipes that are at the end of their service life as part of the City's ageing infrastructure replacement program.

- **Steveston Pump Station Replacement and Forcemain on 4th Avenue (2024: \$6,500,000)**

This project involves replacement of the Steveston sanitary sewer pump station and a new forcemain on 4th Avenue as part of the Steveston sanitary servicing plan. The Steveston sanitary pump station is at the end of its service life and requires replacement. This project involves the construction of a new sanitary pump station complete with wet well, pumps, kiosk, back-up generator, antenna, valve chamber, and BC Hydro transformer to replace the existing station.

BUILDING PROGRAM

- **Richmond Ice Centre Infrastructure Renewals Phase 2 to 4 (2021 - 2023: \$12,250,000)**

Multiple systems in the Richmond Ice Centre facility, constructed in 1994, have reached the end of their life expectancy and will be replaced with modern energy efficient systems (where possible). These system renewals will also include associated miscellaneous items that will serve to prolong the life of the building and ensure the health and safety of its users/inhabitants.

Interior:

The interior flooring systems will be replaced to prevent a tripping hazard and ensure safe mobility for all occupants throughout the facility. Washroom accessories have all exceeded their serviceable life span and will be replaced/renewed as needed.

Envelope:

The exterior paint and window seals have reached the end of their serviceable life span and will be renewed/replaced as needed.

Mechanical:

The boilers, dehumidifiers, bay heaters and water distribution system have reached the end of their serviceable life span and will be replaced/renewed as needed. Potential risk of no hot water as well as temperature controls are at risk.

Electrical:

Main electrical service systems throughout the facility have reached the end of their serviceable life cycle and require renewal. If units are not replaced, there is potential for unit failure causing fire/electrocution/power failure.

- **Works Yard Infrastructure Renewals (2022 - 2024: \$28,600,000)**

Multiple systems in multiple buildings at the works yard complex constructed in 1980 have reached the end of their life expectancy and will be replaced with modern energy efficient systems (where possible). These system renewals will also include associated miscellaneous items that will serve to prolong the life of the building and ensure the health and safety of its users. All of these works are planned to be completed at the same time to maximize savings in schedule and costs for mobilization and demobilization.

Interior:

Flooring, lighting, wall and restroom systems throughout the administration, garage workshop, stores, sanitation office, survey and dispersal buildings have all reached the end of their serviceable life span and will be renewed or replaced as needed.

Envelope:

Roofing systems inclusive of hatches, skylights and access ladders; as well as aluminum framed glass wall/window systems at the administration, garage workshop, stores, sanitation office, survey and dispersal building have all reached the end of their serviceable life span and will be replaced.

Mechanical:

Heating/cooling, water distribution, exhaust ventilation, and gas supply systems throughout the administration, garage workshop, stores, sanitation office, survey and dispersal buildings have all reached the end of their serviceable life span and will be renewed or replaced as needed.

- **Steveston Community Centre and Branch Library (2021: \$100,000,000)**

An estimated cost range for the new Steveston Community Centre and Branch Library was presented to Council on September 16, 2019. This submission will be revised accordingly in the Consolidated 5 Year Financial Plan (2021-2025).

PARKS PROGRAM

- **Alexandra Park (2021: \$1,154,000)**

This project supports further improvements and upgrades to Alexandra Neighbourhood Park (formerly West Cambie). This development will see the addition of several amenities, including a central gathering space with seating, a lawn area for active and passive recreation, and ecological enhancements to improve habitat quality. The park is being developed according to a Council-approved plan (West Cambie Neighbourhood Park Master Plan) and will expand upon its range of opportunities for social interaction and recreational activities. The final phase of the park is being constructed in coordination with the expansion of the Alexandra District Energy Utility.

- **Garden City Lands Phase 4 to 6 (2022 - 2024: \$1,500,000)**

The continuation of the development of the Garden City Lands will increase public access to the site and add a greater diversity of activities and experiences. Boardwalks and interpretive signage are planned to provide greater access and opportunities for interaction with the bog ecosystem while a network of trails, community gardens and gathering areas are planned to allow more people to access the western side of the site along with expansion of farm related uses and programs. All planned works will be subject to Council and Agricultural Land Commission approval and are consistent with the Council approved Legacy Landscape Plan.

- **Minoru Lakes Renewal Upgrades - Phase 2 (2021: \$2,000,000)**

The scope of work for Minoru Lakes Renewal: Phase 2 includes more accommodating trails, a range of seating, more robust bridges, wayfinding, lighting, native and adaptive planting, and irrigation. These works are required because the trails, furnishings, lighting and bridges within the Minoru Lakes area are nearing the end of their life cycle and do not meet the current recreational health and wellness needs of the rapidly growing population living within a five minute walking distance (400 metres) of Minoru Park. Via the Minoru Park Vision Plan process, the community noted that the Minoru Lakes area is challenging to navigate, generally unwelcoming and viewed as unsafe. Renewed trails, seating, wayfinding, lighting, irrigation and planting in the Minoru Lakes area will help to address community concerns, better meet the needs of the surrounding densifying neighbourhood while also reducing maintenance requirements and enhancing ecological benefits.

- **Playground Improvement Program (2021 - 2024: \$2,100,000)**

This capital program addresses playgrounds that are at the end of their useful life and do not meet the current safety guidelines (according to the industry standard, the Canadian Standards Association's "Children's Playspaces and Equipment"), or can no longer be maintained to meet the guidelines due to obsolescence or vandalism. The program is directed towards replacing all or part of a playground and includes replacement of playground equipment, playground infrastructure (e.g., resilient surfacing, borders, drainage) and landscape features.

LAND PROGRAM

- **Strategic Land Acquisition (2021 - 2024: \$30,000,000)**

Funds for land acquisition to meet the Council Approved Strategic Real Estate Investment Plan. Availability of funds in the capital budget provides the ability to act quickly when necessary and avoid costs incurred to repay the Revolving Fund.

EQUIPMENT PROGRAM

- **Vehicle and Equipment Reserve Purchases (Public Works and Corporate Fleet) (2021-2024: \$13,291,210)**

Annual replacement of vehicles eligible due to age and condition in accordance with Sustainable Green Fleet Policy 2020.

Process for replacement of aging fleet is to establish needs and develop specifications for vehicle/equipment replacements. Send bid information out to the marketplace, evaluate submissions and award accordingly.

2MVA	2 Mega-Volt Ampere
5YFP	5 Year Financial Plan
AC	Air Conditioning
APS	Accessible Pedestrian Signal
CCTV	Closed Circuit Television
CLCM	Contract Life-Cycle Management
CMBC	Coast Mountain Bus Company
CPI	Consumer Price Index
DCC	Development Cost Charges
EV	Electrical Vehicle
GCL	Garden City Lands
GHG	Greenhouse Gas
GPS	Global Positioning System
HPS	High Pressure Sodium
HVAC	Heating, Ventilation, and Air Conditioning
ICBC	Insurance Corporation of British Columbia
IPS	Infor Public Sector
KPI	Key Performance Indicator
LED	Light-Emitting Diodes
MPI	Municipal Price Index
MRN	Major Road Network
MUP	Multi-Use Pathway
NIC	Neighbourhood Improvement Charges
OBI	Operating Budget Impact
OCP	Official Community Plan
PDF	Portable Document Format
PRV	Pressure Reducing Valve
PW	Public Works
RCMP	Royal Canadian Mounted Police
RFP	Request for Proposal
RFR	Richmond Fire-Rescue
RPL	Richmond Public Library
RSA	Rate Stabilization Account
RWIS	Road Weather Information System
SCADA	Supervisory Control and Data Acquisition
TMC	Traffic Management Centre
UPS	Uninterruptable Power Supply



To: Finance Committee

Date: November 22, 2019

From: Jerry Chong, CPA, CA
Director, Finance

File: 03-0985-01/2020-Vol
01


Re: 2020 Proposed Operating Budget

Staff Recommendation

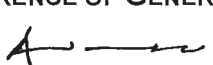
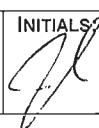
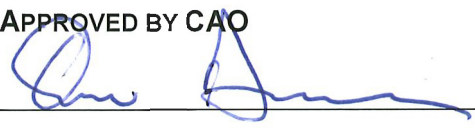
That:

1. The 2020 Operating Budget as presented in Budget Option 2 be approved as outlined below, or Council provide staff with direction to approve one of the alternative options presented in this staff report:
 - a. A same level of service budget increase, after tax growth, of \$3,875,707 with a tax increase of 1.69% and non-discretionary external senior government increases of \$300,000 with a tax increase of 0.13%, resulting in a combined increase of 1.82% be approved; and
 - b. Ongoing funding for expenditures previously approved by Council totaling \$984,045 for the following items: Minoru Centre for Active Living operating budget impact phase-in (Year 7 of 7), and the operating budget impact from developer contributed assets, with a tax increase of 0.43% be approved; and
 - c. Ongoing funding for expenditures previously approved by Council totaling \$527,500 for the operating budget phase-in impact of City Centre Community Centre North (Year 2 of 4), with a tax increase of 0.23% be approved; and
 - d. Ongoing funding for expenditures previously approved pursuant to Council's Safe Community Priority program (Year 2 of 3) in the amount of \$7,433,489 with a tax increase of 3.23% including:
 - i. Amounts which were funded by the rate stabilization account in the 2019 budget totaling \$4,325,868, with a tax increase of 1.88%; and
 - ii. 51 additional RCMP officers and 20 additional municipal employees to support the RCMP Detachment with a three-year phase-in plan (Year 2 of 3), totaling \$1,591,821 with a tax increase of 0.69% be approved; and
 - iii. 36 additional firefighters with a three-year phase-in plan (Year 2 of 3) in the amount of \$1,515,800 with a tax increase of 0.66% be approved; and

- e. Operating budget impact from the 2020 Capital Budget totaling \$644,794 with a three-year phase-in plan for an annual amount of \$214,931, resulting in a tax increase of 0.09% per year be approved; and
 - f. Two new positions, specifically a Regular Full-Time Affordable Housing Planner 1 and Regular Part-Time Child Care Program Planner 1 be approved with 0.00% tax increase as summarized in Attachment 9 and position complement control numbers be assigned; and
 - g. Ongoing expenditures for Emerging Organizational Additional Levels with an allowance of \$500,000 resulting in a tax increase of 0.22% be approved (refer to the recommended items from staff in Attachment 10); and
 - h. Transfer to reserves for infrastructure replacement needs as per Council's Long Term Financial Management Strategy in the amount of \$2,299,025 with a tax increase of 1.00% be approved; and
 - i. The Rate Stabilization Account be used to reduce the overall impact of additional operating costs for a total of \$1,609,318 resulting in a tax decrease of 0.70% be approved; and
2. The 2020 Operating Budget, as approved in item 1 above, be included in the Consolidated 5 Year Financial Plan (2020-2024).



Jerry Chong, CPA, CA
Director, Finance
(604-276-4064)

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER 	
REVIEWED BY SMT	INITIALS 
APPROVED BY CAO 	

Executive Summary

With the 2019 operating budget, Council approved an accelerated implementation of the Safe Community Priority Program which included funding for 107 safe community positions over three years (2019-2021) and directed staff to prepare the Consolidated 5 Year Financial Plan (2019-2023) with specific tax impacts approved for 2021 and 2022.

The 107 positions approved in Council's Safe Community Priority Program are:

- 36 Fire Rescue positions, phased-in over 3 year (2019-2021)
- 51 RCMP Officers over 3 years (2019-2021)
- 20 municipal employees to support the RCMP Detachment over 3 years (2019-2021)

At Council's direction, rate stabilization funding was utilized to reduce the 2019 tax increase to 4.82%, deferring part of the impact of the approved 2019 increase to future budgets. The Consolidated 5 Year Financial Plan incorporated a plan to gradually reduce the utilization of rate stabilization funding each year, until the increases from the Safe Community Priority Program are fully funded by 2022.

This multi-year budget approval approach provided staff with a degree of certainty in projecting the future year increases. It was projected that the tax increase for 2020 would be 6.69%.

SMT and the CAO have done considerable work including conducting a significant number of reviews to achieve a same level of service budget of 1.69% which is below the CPI target of 2.00%, and to provide a recommendation on the proposed tax increase for this five-year planning period.

2020 Proposed Budget

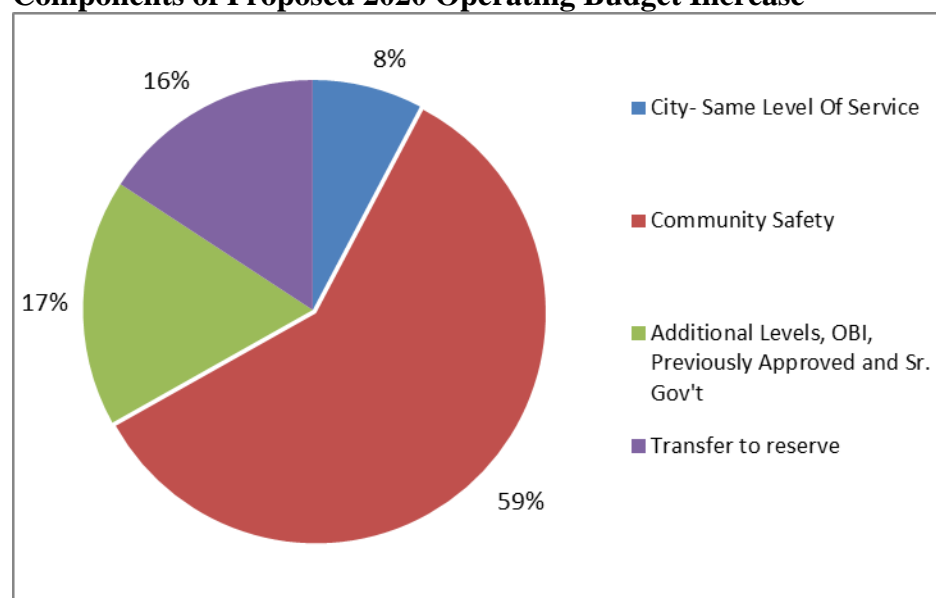
The outcome of the 2020 budget process results in a proposed tax increase of 6.32%, which is lower than the originally projected amount of 6.69%.

The 2020 budget increase includes Council's Safe Community Priority Program (Year 2 of 3), which includes the following new positions:

- 12 Fire Rescue positions
- 12 RCMP Officers
- 5 municipal employees to support the RCMP Detachment

59% of the 2020 budget increase is attributable to enhancing community safety as shown in the following graph.

Components of Proposed 2020 Operating Budget Increase



The components of the budget are summarized in the following table. For discussion on the budget components, refer to the corresponding reference number in the 2020 Proposed Operating Budget section on pages 10-16.

Ref	Budget Component	Amount (in \$'000s)	Tax Impact
1	Same Level of Service Increase (meets LTFMS target of 2.00%)	\$3,876	1.69%
2	External Senior Government Related Increases: Canada Pension Plan Enhancements	300	0.13%
3	Previously Approved Expenditures: Major Facilities OBI Phase-in (Year 7 of 7), Developer Contributed Assets OBI In Service in 2020	984	0.43%
4	Operating Budget Impact of the Previously Approved Developer Funded Community Centre: City Centre Community Centre North (Year 2 of 4)	527	0.23%
5	Safe Community Priority Program – 107 policing and fire rescue positions:		
	Deferrals from previous budget	4,326	1.88%
	36 fire rescue positions phased-in over three years (Year 2 of 3)	1,515	0.66%
	51 RCMP officers and 20 municipal employees to support the RCMP Detachment phased-in over three years (Year 2 of 3)	1,592	0.69%
	Total 107 Positions - Safe Community Priority Program (Year 2 of 3)	7,433	3.23%
6	Operating Budget Impact from the 2020 Capital Budget (Year 1 of 3)	215	0.09%
7	No Tax Impact Positions (Attachment 8)	-	-%
8	Emerging Organizational Additional Levels (Attachment 9)	500	0.22%
9	Less: Rate stabilization	(1,609)	(0.70%)
Proposed 2020 Operating Budget Increase		\$12,226	5.32%
10	Investment in Infrastructure Replacement Needs (Transfer to Reserves)	2,299	1.00%
Proposed 2020 Operating Budget Increase		\$14,525	6.32%

Should Council wish to consider an option that differs from what has already been approved as part of the 2019 Budget, SMT and the CAO have provided an alternative option which utilizes a combination of strategies to reduce the budget impact.

Option		2020	2021	2022	2023	2024
Option 1	Previously Approved Financial Plan	6.69%	5.20%	3.91%	5.36%	3.89%
Option 2 (recommended)	Minor Improvements to the Previously Approved Financial Plan	6.32%	5.18%	3.84%	4.19%	3.89%
Option 3	Corporate Reset and Rate Stabilization	4.82%	3.92%	3.73%	4.24%	3.95%

For discussion of other budget options, refer to pages 16 to 22.

Staff Report

Origin

Subsection 165(1) of the *Community Charter* requires the City to adopt a 5 Year Financial Plan (5YFP) Bylaw. The 2020 Operating Budget forms the basis of the City's 5YFP. Under the *Community Charter*, the City is prohibited from incurring any expenditure unless the expenditures have been included for that year in its financial plan, and the City is required to provide a balanced budget, with no projection of a deficit.

The proposed 2020 Operating Budget ("Budget") applies the principles of Council's Long Term Financial Management Strategy (LTFMS) (Policy 3707), which was originally adopted in 2003, "*Tax increases will be at Vancouver CPI rate (to maintain current programs and maintain existing infrastructure at the same level of service) plus 1% towards infrastructure replacement needs.*"

At the Special Finance Committee meeting on January 14, 2019, staff were provided with the following direction:

- 1) *That 36 additional firefighters with 12 in 2019, 12 in 2020, 12 in 2021 and zero in 2022 be approved; and*
- 2) *That 51 RCMP officers and 20 municipal employees over three years (2019, 2020, 2021) with 19 RCMP officers designated for 2019 be approved.*

The 2020- budget has been prepared accordingly, adding 12 firefighters, 12 RCMP officers and 5 municipal employees to support the RCMP Detachments, as outlined in the RCMP's Three-Year Resource Plan (2019-2021).

This report supports Council's 2018-2022 Strategic Plan #5 Sound Financial Management:

Accountable, transparent, and responsible financial management that supports the needs of the community into the future.

- 5.1. *Maintain a strong and robust financial position.*
- 5.2. *Clear accountability through transparent budgeting practices and effective public communication.*
- 5.3. *Decision-making focuses on sustainability and considers circular economic principles.*
- 5.4. *Work cooperatively and respectfully with all levels of government and stakeholders while advocating for the best interests of Richmond.*

This report also supports Council's 2018-2022 Strategic Plan #1 A Safe and Resilient City:

Enhance and protect the safety and well-being of Richmond.

- 1.1. Enhance safety services and strategies to meet community needs.*
- 1.2. Future-proof and maintain city infrastructure to keep the community safe.*
- 1.3. Ensure Richmond is prepared for emergencies, both human-made and natural disasters*
- 1.4. Foster a safe, caring and resilient environment.*

Council's 2018-2022 Strategic Plan is summarized in Attachment 1.

Analysis

Environmental Scan

Economic Outlook

New home construction, as measured by housing starts, has remained relatively steady since the decline in 2016 and shows signs of improving. Year to date to Q3 2019, housing starts in Richmond have increased by 12% over the same period last year.

Led by multi-family residential construction in the City Centre, building activity reached an all-time high in 2015. 2019 is on track for another strong year of building activity with year-to-date values to Q3 2019 up by 27% over the same period last year. The number of building permits, meanwhile, has declined by 15% over the same period in 2018. Fewer permits with higher values is indicative of continued multi-family development as the implementation of the City Centre Area Plan continues.

Please refer to Attachment 2 for further information on the Economic Outlook.

Taxation

When compared to the 21 municipalities in Metro Vancouver, the 2019 average residential home in Richmond ranks as the 9th highest in average assessment value of \$1.13M while having the 4th lowest average municipal taxes (from 5th lowest the previous year) of \$1,745. Approximately 50% of the tax bill is comprised of levies collected for other taxing jurisdictions including Translink, School Board, Metro Vancouver, BC Assessment and Municipal Finance Authority. City Council has no control over the rate of increase of levies. Within the comparator group of Vancouver, Coquitlam, Burnaby and Surrey, Richmond continues to have the 2nd lowest municipal tax for the average residential assessment. Please refer to Attachment 3 for a comparison of all Metro Vancouver municipalities.

With significant increases in business assessments in comparison to residential assessments in the region, overall residential tax rates across the Metro Vancouver municipalities increased greater than business tax rates. As a result, business to residential tax ratios for 2019 are lower than the prior year. Richmond's business to residential tax ratio decreased from 3.19 in 2018 to 2.76 in 2019. Richmond's ranking improved by dropping from the 13th highest position in 2018

to the 15th highest in 2019, aligning with Council's goal of being in the middle in comparison to other municipalities in this regard. However, Richmond continues to be the lowest in business to residential tax ratio when compared to our comparator group.

Long Term Financial Management Strategy (LTFMS)

On March 23, 2015 Council approved a new Casino funding allocation model which took effect starting with the 2016 budget. At that time budgeted casino revenue was \$18.10M. In 2018, budgeted casino revenue was reduced to \$16.50M to align with the actual revenues received. For the 2020 budget, it is projected to further decrease to approximately \$14.50M. Table 1 summarizes the allocation of gaming revenue in comparison to the 2019 allocation.

Staff will continue to monitor the trend of casino revenue received and will prepare a revised allocation model for Council's consideration when it is confirmed whether this budget estimate appears to be a stable level of funding expected to be received.

Table 1 – Casino Funding Allocation (in \$000s)

Casino Funding	Allocation	2020 Preliminary Budget	2019 Approved Budget	Amount Change
Capital Reserve	30%	\$4,350	\$4,950	(\$600)
Grants*	15%	2,175	2,475	(300)
Council Community Initiatives Account	2%	290	330	(40)
Debt Servicing	Fixed	5,000	5,000	-
Operating (RCMP)	4 Officers	730	706	24
Capital Building Infrastructure Reserve	Remainder	1,955	3,039	(1,084)
Total		\$14,500	\$16,500	(\$2,000)

* The amount required for all grants funded by casino revenue is \$2.52M, including the recently approved contribution to a not-for-profit organization approved in Closed meetings. The difference of \$0.34M is to be funded from the Grants Provision which has accumulated a balance of \$1.29M since established in 2016 to hold surplus funds when the allocation from gaming revenue exceeded the annual grant expenditures.

Grants funded by gaming revenue include:

- Gateway Theatre contribution
- Health, Social and Safety grants
- Arts, Culture and Heritage grants
- Parks and Recreation grants
- Richmond Centre for Disability contribution
- Richmond Therapeutic Equestrian Society contribution
- Various Youth Grants

The Council Community Initiatives Account provides funding for one-time expenditures that address social, environmental, recreation and sports, heritage, arts and culture, safety and security, or infrastructure needs.

Debt servicing relates to the \$50M debt to fund the Minoru Centre for Active Living, part of the Major Facilities Replacement Plan – Phase 1, which will be repaid over a 10 year term (2015 through 2024).

Budget Challenges

The Operating Budget provides funding for a vast array of municipal operations, which include: funding police services; operation of fire halls; community centres; arenas; pools; parks; libraries; financial management and other corporate services; facility maintenance and development; maintenance of roads; technology services; corporate administration; traffic lights; planning for the transportation network; land use; building and development approvals; storm drainage flood protection; arts, culture, and heritage, etc.

Richmond has additional complexities with the diking system that is unique to our island city. Dikes along with watermains, pump stations, and sanitary sewers, as well as garbage and recycling services are funded through the City's Utility Budget which was approved by Council on November 12, 2019. Note that storm drainage operating costs are currently funded by the Operating Budget and investment in storm drainage infrastructure replacement (which is transferred into the reserves to fund capital projects) is funded by the Utility Budget.

The Operating Budget also includes funding for capital reserves which is required to maintain aging facilities, replacement of major facilities, and to fund various other capital projects funded by the Revolving Fund, including the assist factor portion (i.e. the portion required to be funded by the City) for projects funded by Roads Development Cost Charges and Parks Development Cost Charges. In addition, for expanded or repurposed facilities, and upgraded infrastructure, there is a tax impact from the associated Operating Budget Impact (OBI) which may include additional heat and electricity to operate the building as well as additional staff to expand the current programs offered within the new facility.

Attachment 4 presents the Municipal Breakdown of \$1 (before the OBI from the 2020 Capital Budget and 2020 recommended additional levels of service, which are subject to Council approval), which depicts how the budget is allocated to deliver all of the services funded by the Operating Budget. Over 38 cents of each dollar collected goes toward the provision of policing and fire rescue services.

Budget Process

The proposed 2020 Budget presents a same level of service budget, with only non-discretionary increases that can be clearly identified and supported. Enhanced or new levels of service are identified separately as ongoing additional expenditure requests by the respective divisions for Council's consideration in accordance with Council's Budget & 5-Year Financial Plan Preparation Policy. Please refer to Attachment 5 for the 2020 Budget Cycle.

The City undergoes a continuous review of its programs and services in order to identify further service improvements and cost reductions. Staff continually look for efficiencies and innovative

ways to deliver services that would streamline business processes, contain costs and leverage the increased use of technology.

2020 Proposed Operating Budget

This section of the report discusses each component of the 2020 Proposed Operating Budget as presented in the Executive Summary table on page 4.

The proposed 2020 Budget presents a same level of service budget, with only non-discretionary increases that can be clearly identified and supported. Enhanced or new levels of service are identified separately as ongoing additional expenditure requests by the respective divisions for Council's consideration in accordance with Council's Budget & 5-Year Financial Plan Preparation Policy.

1. Same Level of Service Increase

Council's Long Term Financial Management Strategy (LTFMS) policy is that the tax increase to maintain current programs and maintain existing infrastructure at the same level of service will be at Vancouver's CPI rate. Preliminary Vancouver CPI forecasts from the Conference Board of Canada is estimated at 2.0% for 2020. In comparison, the Municipal Price Index is estimated at 4.7%.

The same level of service increase as shown in Attachment 6 is 1.69%, therefore this policy target is met. Attachment 6 presents the net base budget by department/division for 2019 and the proposed net base budget to deliver the same levels of service in 2020, before external senior government related increases. This includes non-discretionary increases only as supported by contracts and agreements and does not include any additional levels of service.

Organization Profile

The City's six corporate divisions include:

- Community Safety
- Community Services
- Engineering and Public Works
- Finance and Corporate Services
- Corporate Administration
- Planning and Development

The All Divisions summary included in Attachment 7 shows the City's base operating budget to deliver the same level of services as last year, which totals \$340.89M. Since the City delivers many services and programs, labour is a significant component of the budget (48%). Contracts represent 23% of the base operating budget, which is largely due to the RCMP contract for policing services.

The base operating budget is primarily funded by property tax (69%). Community User Fees were increased by 2.00%, where possible through the Consolidated Fees Bylaw, effective January 1, 2020.

Attachment 7 also includes further details on each Division's same level of service budget.

Key Financial Drivers

The key financial drivers of the 2020 budget increase are summarized in Table 2.

Table 2 – 2020 Key Financial Drivers

Cost Breakdown	Amount (in 000's)
RCMP – Contract Increase	\$2,173
Salaries and Benefits Increase – City-wide	2,704
Salaries and Benefits – Fire Rescue and Policing support for RCMP Detachment	1,407
2019 OBI Phase-in Year 2 of 3	402
Snow and Ice Control Expenditures	447
Project Development Cost Escalation	377
Richmond Ice Centre Transfer of Maintenance Responsibilities	157
E-Comm Contract Increase	90
Other contracts – City wide	205
Revenue increase	(1,452)
Net Budget Increase	\$6,510

The largest cost driver of the 2020 budget which impacts all City divisions is the estimated salary and step increases in accordance with collective agreements, which are currently under negotiation.

The next largest cost driver of the same level of service budget is the RCMP contract increase to maintain the existing complement of RCMP officers, before the addition of 12 new officers.

The combined cost increases related to policing and fire rescue, including the RCMP contract increase, salaries and benefits for fire rescue and policing support for the RCMP detachment, and the E-Comm contract increase is \$3.67M which accounts for 56% of the net budget increase.

The budget for snow and ice removal has been based on a 6 year rolling average to account for fluctuations from year to year. Over the last several years actual costs have exceeded the 6 year rolling average, therefore the proposed budget for snow and ice control is based on a 4 year rolling average which results in an increase of \$447K.

Project Development has experienced cost increases with repairs and maintenance of building and is increasing their budget to ensure adequate funds are in place to address ageing infrastructure needs. The projected cost escalation amount is \$377K.

The recent acquisition of the Richmond Ice Centre resulted in additional budget impacts of \$157K for facility operations maintenance and snow and ice removal for the parking lot which the previous owner maintained.

Increases to revenue includes CPI increases in accordance with the Consolidated Fees Bylaw, increases to investment income and increase in payments in lieu of taxes.

Tax Growth

New tax growth projections are based on “non-market change” figures provided by BC Assessment Authority. Non-market change is the term BC Assessment Authority uses for changes to the municipal roll value that is not a result of market conditions. Non-market change could include: changes in assessment class, exempt properties that become taxable in the following year or taxable properties that become exempt in the following year and developments under construction. With respect to developments under construction, assessors at BC Assessment Authority determine the value of all new developments under construction by the percentage of completion as of November 30th each calendar year. Increases in a property’s market value are not included in the non-market change figure. Therefore the development applications received during the year should have no impact on new growth for the coming year as actual construction on the property would not have taken place. The reported project value of the development may take up to three years to be fully reflected in the municipality’s assessment roll.

New tax growth for 2020 is estimated at \$2.63M.

2. External Senior Government Related Increases

Council Policy 3707 item 2 states:

“Any additional costs imposed on the City as a result of mandatory senior government policy changes should be identified and added to that particular year’s taxes above and beyond the CPI and infrastructure percentage contribution.”

In accordance with Council policy, these items are identified and included in the tax increase above and beyond the CPI target.

Canada Pension Plan Enhancement

Effective 2019, the Canada Pension Plan (CPP) will be gradually enhanced. This means the employee will receive higher benefits in exchange for making higher contributions.

Employers will pay the same increase in contributions as their employees. The estimated budget impact in 2020 is \$0.30M or a 0.13% tax impact. Future year impacts of this enhancement will continue through 2025 estimated to \$0.30M to \$0.40M per year.

3. Previously Approved Expenditures

There are two types of previously approved amounts that are included in the 2020 budget:

- i. Amounts gradually phased-in to the budget
- ii. OBI of Developer Contributed Assets negotiated through development that will be operational in 2020

Previously Approved Operating Budget Impacts of Major Facilities Phase 1

In the 2014 Budget, a Major Facilities Phase 1 Operating Budget Impact (OBI) phase-in plan was approved, resulting in approximately \$656K incremental budget added each year until 2020 to provide funding for:

- the new City Centre Community Centre;
- expanded Fire Hall No. 1;
- the expanded replacement of the Older Adults Centre; and
- the expanded replacement of the Minoru Aquatics Centre.

This OBI phase-in plan was amended on November 14, 2016 through the Minoru Centre for Active Living service levels. The final years of this OBI phase-in plan relates to funding for expanded programming at the Minoru Centre for Active Living.

The 2020 amount for the Major Facilities OBI phase-in is \$656K for a 0.29% tax impact.

Previously Approved Operating Budget Impact Associated With Other Developer Contributed Assets City-wide

Developer contributed assets that were previously approved by Council as part of development applications or rezoning approvals will be placed in service in 2020 and will require funding for ongoing operation and maintenance. These assets include road, water, sanitary and sewer infrastructure, traffic lights, and parks. As these assets become part of the City's inventory of assets to manage, additional operating budget funds are required to ensure the same level of service is maintained for the City's growing infrastructure.

2020 Developer Contributed Assets OBI amounts to \$328K or a 0.14% tax impact as detailed in Attachment 8.

The total previously approved expenditures have a total tax impact of 0.43%.

4. Operating Budget Impact of the Previously Approved Developer Funded Community Centre

On September 26, 2016 Council endorsed the City Centre Community Centre North facility which would require additional funds to be added to the operating budget. This facility is anticipated to open in 2022.

As part of the 2017 budget, the preliminary OBI estimate of \$1.42M with a four year phase-in plan commenced to align with the originally expected opening date. \$355K has been phased-in in 2017. In 2018 and 2019, the remainder of the phase-in plan was deferred due to changes in the anticipated opening date. The remainder of the phase-in plan could be completed over the years 2020-2022 to align with the anticipated opening of the new facility, with an estimated total OBI of \$1.94M over three years resulting in an increase of \$527K per year, or a tax impact of 0.23% in 2020. It is recommended to continue phasing-in this OBI over the years 2020-2022.

5. Council's Safe Community Priority Program - 107 Policing and Fire Rescue Positions (2019-2021)

On February 11, 2019, Council approved the following expenditures related to the Safe Community Priority Program to provide 51 RCMP Officers, 20 Municipal Employees to support the RCMP Detachment and 36 Fire Rescue positions phased-in over three years (2019-2021). The 2020 operating budget impacts are as follows:

Table 3 – Council's Safe Community Priority Program (Year 2 of 3) (in \$000s)

Previously Approved Expenditures	Amount	Tax Impact
Deferrals from the 2019 budget	\$4,326	1.88%
51 RCMP officers and 20 municipal employees to support the RCMP Detachment phased-in over three years (Year 2 of 3)	1,592	0.69%
36 fire rescue positions phased-in over three years (Year 2 of 3)	1,516	0.66%
Total Safe Community Priority Program (Year 2 of 3)	\$7,434	3.23%

Deferrals from the 2019 Budget

On February 11, 2019, Council approved the 2019 Operating Budget using the Rate Stabilization Account to reduce the overall impact of additional operating costs. In 2019, 2.00% impact was deferred to the 2020 budget. The impact of \$4.33M deferred from the 2019 budget is a tax impact of 1.88%, a lower percentage than was originally deferred due to the approved increase to the tax base. Refer to section 9 Rate Stabilization below for the portion that will be deferred to future budgets.

Policing

In 2019, 51 RCMP Officers were approved with 35 in 2019 (16 approved in 2018 and 19 more approved in 2019); 12 additional officers approved for 2020 and 4 additional officers in 2021. The 16 approved for 2020 and 2021 are phased-in equally over two years, with a tax impact of 0.51% per year.

In 2019, 20 municipal employees to support the RCMP detachment were approved with 13 funded in 2019, 5 additional municipal employees to support the RCMP detachment in 2020 and 2 more in 2021. The 20 positions are being phased-in to the budget over three years (2019-2021) with a tax impact of 0.18% per year.

Fire Rescue

In 2019, 36 firefighters were approved with 12 in 2019, 12 in 2020 and 12 in 2021. The 2020 budget includes 12 additional firefighters with a tax impact of 0.66%.

6. Operating Budget Impact from the 2020 Capital Budget

The 2020 Capital Plan includes new and expanded infrastructure and equipment which also requires operating funds to maintain. The 2020 Capital Budget total is \$155.65M. The OBI associated with the 2020 Capital program is \$793K. Of this amount \$148K is associated with utility projects and will be included in future utility budgets.

The operating budget impact from the 2020 Capital Budget in the amount of \$645K is proposed to be phased-in over three years, which amounts to \$215K or a 0.09% tax impact.

7. No Tax Impact Positions

Only high priority items which have funding sources are recommended to be added to the base budget with no tax impact. For 2020, 2 positions, namely, new Regular Full-Time Affordable Housing Planner 1 and Regular Part-Time Child Care Program Planner 1 are recommended with position complement control numbers requested to be assigned. These positions are funded through statutory reserves which hold the contributions received from developers to deliver specific programs.

Please refer to Attachment 9 for the list of recommended positions with no tax impact.

8. Emerging Organizational Additional Levels

The proposed 2020 budget includes an estimate of \$500K, or a tax impact of 0.22% to provide funding for new or expanded programs and services that Council may wish to approve.

In order to assist Council with their evaluation, the Senior Management Team (SMT) and the CAO have reviewed the emerging organizational additional level submissions. Only high priority items are recommended to be added to the base budget. For 2020, 17 additional level submissions have been received totaling \$1.90M. After reviews and discussions, four submissions totaling \$456K as outlined in Attachment 10 are suggested to be recommended and funded from the \$500K estimate. Refer to Attachment 11 for the list of emerging organizational additional level requests that are not recommended for funding due to budget constraints.

At the Finance Committee's discretion, any of the items recommended for funding may be removed from the recommended list. In addition, any item that is not recommended for funding may be reconsidered for recommendation. Should Council wish to approve a different amount from the \$500K estimate for emerging additional organizational levels, the proposed tax increase would increase or decrease accordingly.

If Council approves the items recommended for funding as presented in Attachment 10 totaling \$456K with a tax impact of 0.20%, the proposed tax increase would be reduced by 0.02% since the proposed tax increase already includes the \$500K estimate. If Attachment 10 is approved by Council as presented, this would result in three additional positions created: Regular Full-Time Tax Clerk, Regular Full-Time Homelessness Coordinator, and Regular Full-Time Planner 3, and three position complement control numbers would be assigned.

9. Rate Stabilization

Council established a Rate Stabilization Account (RSA) to accumulate surplus and use it to fund one-time costs and to offset any large spikes in the City's annual tax increase allowing for a smoothing of the tax rate when required. Rate Stabilization is a temporary funding solution to stabilize the tax increase and therefore, defers the tax increase to future years.

The Consolidated 5 Year Financial Plan (2019-2023), was structured to reduce the amount of rate stabilization funding until it would gradually be phased-out. The approved plan projected to utilize rate stabilization funding to reduce the impact by 0.7% in 2020 which amounts to \$1.61M, 0.3% in 2021, and none for years 2022 or 2023.

10. Investment in Infrastructure Replacement Needs (Transfer to Reserves)

Civic buildings, including recreation facilities, fire halls, community centres and other public amenities are important to ensure the safety, upkeep and well-being of the community.

Council's Long Term Financial Management Strategy (LTFMS) has a policy to increase 1% transfer to reserves to fund community infrastructure replacement needs. This reserve funds the replacement of buildings, such as Fire Hall 1 which opened in 2018. The Minoru Centre for Active Living which partially opened in 2019. The Fitness Centre is scheduled to open to the public in January 2020 with full opening of the entire facility expected in the fall of 2020. In 2018, Council approved Major Facilities Phase 2 which includes the Animal Shelter, Lawn Bowling Clubhouse, Phoenix Net Loft, and Steveston Community Centre and Branch Library. This reserve fund is also largely utilized to fund major repairs for all City owned buildings to ensure community buildings remains safe and operational.

It is recommended to continue with Council's LTFMS and transfer an additional 1% into the capital reserves to replenish the funds spent on completed projects, as well as to replenish the funds that are committed to approved capital projects which are in progress. It is important to recognize that a significant portion of reserve balances are committed to active projects. The reserve balances are drawn down on a cash basis, not as projects are approved. Therefore it is prudent to ensure funding is in place for future investments, such as the Steveston Community Centre and Branch Library.

Budget Options

SMT and the CAO have done considerable work including conducting a significant number of reviews to achieve a same level of service budget of 1.69% which is below the CPI target of 2.00%, and to provide a recommendation on the proposed tax increase for this five-year planning period.

Various scenarios were evaluated to determine the 2020 proposed budget and projected 5 Year Financial Plan as summarized in Table 4 below.

Table 4 – 5 Year Financial Plan (2020-2024) Options Summary

Option		2020	2021	2022	2023	2024
Option 1	Previously Approved Financial Plan	6.69%	5.20%	3.91%	5.36%	3.89%
Option 2 (recommended)	Minor Improvements to the Previously Approved Financial Plan	6.32%	5.18%	3.84%	4.19%	3.89%
Option 3	Corporate Reset and Rate Stabilization	4.82%	3.92%	3.73%	4.24%	3.95%

All budget options proposed for the 2020-2024 5 Year Financial Plan include the following:

- 51 RCMP Officers, 20 Municipal Employees to support the RCMP detachment, phased-in over 3 years 2019-2021 (Year 2 of 3)
- 36 Firefighters including 12 for Steveston/Seafair and 24 for City Centre/Brighthouse, phased-in over 3 years (2019-2021) (Year 2 of 3)
- An increased investment in infrastructure replacement pursuant to Council's Long Term Financial Management Strategy.
- Rate stabilization funding is utilized to decrease the current year tax impact, deferring a portion to years 2021 and 2022.

Budget Option 1 – Previously Approved Financial Plan

This option was approved by Council through the 2019 Budget and 5 Year Financial Plan (2019-2023). Since Council took a multi-year approval approach to the 2019 budget, a viable option is to continue with the current plan, with the addition of projections for the 2024 year.

Table 5 – 5 Year Financial Plan (2024-2024) – Budget Option 1

Budget Component	2020	2021	2022	2023	2024
Same Level of Service Increase (meets LTFMS target of 2.00%)	1.68%	1.12%	1.49%	1.91%	1.95%
External Senior Government Related Increases: Canada Pension Plan Enhancements	0.16%	0.16%	0.18%	0.18%	0.12%
Previously Approved Expenditures	0.26%	0.05%	0.08%	0.09%	0.07%
City Centre Community Centre North OBI (Year 2 of 4)	0.21%	0.21%	0.20%	-%	-%
Safe Community Priority Program:					
Deferrals from previous budget	2.00%	0.70%	0.30%	-%	-%
36 fire rescue positions	0.93%	0.93%	-%	-%	-%
51 RCMP officers and 20 municipal employees to support the RCMP Detachment	0.73%	0.73%	-%	-%	-%
Total 107 Positions - Safe Community Priority Program	3.66%	2.36%	0.30%	-%	-%
Operating Budget Impact from Capital Budget	0.19%	0.37%	0.43%	0.56%	0.23%
City-Wide Additional Levels	0.23%	0.23%	0.23%	1.62%	0.52%
Less: Rate stabilization	(0.70%)	(0.30%)	-%	-%	-%
Proposed Tax Increase – including 107 positions – Safe Community Program (2019-2021)	5.69%	4.20%	2.91%	4.36%	2.89%
51 RCMP officers, 20 municipal employees to support the RCMP Detachment, and 36 fire rescue positions					
Investment in Infrastructure Replacement	1.00%	1.00%	1.00%	1.00%	1.00%
Proposed Tax Increase with LTFMS Transfer to Reserves	6.69%	5.20%	3.91%	5.36%	3.89%

Budget Option 2 (Recommended) – Minor Improvements to the Previously Approved Financial Plan

This option is based on Option 1, which was approved by Council through the 2019 Budget and 5 Year Financial Plan (2019-2023) with revisions based on updated information. In addition, staff have reallocated existing budgets to continue to deliver services most effectively, gaining efficiencies through leveraging technology and streamlining current processes. This is the recommended option because it is closely aligned with the option Council already approved, with minor improvements.

Options 2 proposes to follow the rate stabilization plan established in the 2019-2023 5 Year Financial Plan to utilize rate stabilization funding to reduce the tax impact in 2020 by 0.70%. This means that a portion of the increase approved in the 2019 budget is being deferred again to the 2021 budget. Under this option, the plan is to further defer 0.30% impact to 2022, and then no other deferrals are planned thereafter.

Table 6 – 5 Year Financial Plan (2020-2024) – Budget Option 2 (Recommended)

Budget Component	2020	2021	2022	2023	2024
Same Level of Service Increase (meets LTFMS target of 2.00%)	1.69%	1.32%	1.62%	1.98%	1.95%
External Senior Government Related Increases: Canada Pension Plan Enhancements	0.13%	0.14%	0.15%	0.15%	0.12%
Previously Approved Expenditures: Major Facilities OBI Phase-in (Year 7 of 7), Developer Contributed Assets OBI In Service in 2020	0.43%	0.12%	0.11%	0.07%	0.07%
Previously Approved Expenditures: Developer Contributed Assets OBI Phase-in for City Centre Community Centre North (Year 2 of 4)	0.23%	0.21%	0.20%	-%	-%
Safe Community Priority Program:					
Deferrals from previous budget	1.88%	0.65%	0.28%	-%	-%
36 fire rescue positions	0.66%	0.81%	-%	-%	-%
51 RCMP officers and 20 municipal employees to support the RCMP Detachment	0.69%	0.64%	-%	-%	-%
Total 107 Positions - Safe Community Priority Program (Year 2 of 3)	3.23%	2.10%	0.28%	-%	-%
Operating Budget Impact from the Capital Budget	0.09%	0.39%	0.29%	0.26%	0.23%
Emerging Organizational Additional Levels	0.22%	0.20%	0.19%	0.73%	0.52%
Less: Rate stabilization	(0.70%)	(0.30%)	-%	-%	-%
Proposed Tax Increase – including 107 positions – Safe Community Program (2019-2021)	5.32%	4.18%	2.84%	3.19%	2.89%
51 RCMP officers, 20 municipal employees to support the RCMP Detachment, and 36 fire rescue positions					
Investment in Infrastructure Replacement	1.00%	1.00%	1.00%	1.00%	1.00%
Proposed Tax Increase with LTFMS Transfer to Reserves	6.32%	5.18%	3.84%	4.19%	3.89%

Budget Option 3 – Utilize Corporate Reset and Rate Stabilization

Should Council wish to consider an option that differs from what has already been approved as part of the 2019 budget, SMT and the CAO have provided an alternative option which utilizes a combination of strategies to reduce the budget impact.

Staff must make numerous assumptions in developing the annual Operating Budget based on best information available during the budget preparation cycle. Under the *Community Charter*, municipalities cannot budget a deficit but rather, must present a balanced budget. In order to ensure a deficit is not incurred, staff use conservative estimates – lower revenue projections and conventional expenditures. While this conservative approach ensures the City is protected against incurring a deficit, this usually results in an annual operating surplus. The annual operating surplus is transferred to the RSA. The rate stabilization account prevents fluctuations in tax rate increases as the rate stabilization funding could be used to fund requests that are one-time or temporary in nature or to smooth out years with higher tax rate increases, such as in years of significant external senior government downloading. The rate stabilization account also affords Council the luxury in funding different one-time initiatives.

It is important to understand that this less conservative option would only provide initial, one-time budget relief. Over the long-term, this approach could also increase the risk of requiring higher property tax increases in order to achieve balanced budgets and may impact Council's flexibility to fund selected one-time projects through use of surplus allocations.

Budget for Anticipated Higher Revenue

The risk associated with higher forecasts is that revenues (other than taxation revenue) are subject to uncontrollable external factors which may fluctuate from year to year. If budgeted revenues do not materialize, then cost reductions would be required to avoid a deficit. In subsequent budgets, if revenue estimates need to be reduced due to changing external conditions, this shortfall would need to be made up through higher property taxes or by services cuts to reduce spending. Development fees and gaming revenue are examples that can significantly fluctuate from year to year and are beyond the City's control.

In addition, if budgeted revenue assumptions are increased, it would be expected that surplus would be lower, which would reduce the flexibility to fund one-time expenditures or reduce future tax increases.

Taking a riskier approach to budgeting revenues means that it is possible the revenue targets will not be met. In the past, this has reflected on the performance of the department even though it may be due to factors completely beyond their control.

Budget Lower Expenses Due to Delayed Replacements

Similar to any other employer, the city experiences staff turnover due to retirements and other staff departures.

Hiring new employees consumes a significant amount of time based on due diligence required in recruiting and selecting candidates for roles within the City and due to the tight labour market. The posting of a vacant position requires approval from the Employment Review Committee (ERC). The ERC ensures that the position and duties are aligned with the levels of service required. The combination of recruitment, tight labour market and ERC review increase the amount of time in order to fill a vacant position. Therefore, vacancy rates have increased over historic norms. By factoring the higher vacancy rates, staff could reduce the budgeted salary in 2020.

There are risks in reducing budgeted salaries since most of the City's programs and services are dependent upon labour. If actual expenditures are projected to exceed the budget estimate, a budget amendment would be required. This strategy would need to be reviewed annually.

2020 Corporate Reset

This option would reduce the same level of service budget by \$3.45M, through a combination of increased revenue and expense reductions, with a resulting permanent tax decrease of 1.50%.

It is unknown which area of the City's budget this reduction should be applied to; however an estimate would be required to prepare the 5 Year Financial Plan. Staff will require the flexibility to update the allocation of the corporate reset amounts as the year progresses and this will be reviewed annually during the budget process.

The same level of service tax impact as shown in Attachment 6 is 1.69%. If this revised budget approach is adopted, the same level of service increase for 2020 would be reduced to 0.19%. This budget option would reduce the 2020 tax increase from 6.32% to 4.82%.

Offset Using Rate Stabilization

Additional funding from the Rate Stabilization Account could be used to help balance the Operating Budget, thereby reducing the property tax impact. This would allow all levels of service to be maintained and keep the budget balanced, but would need to be reviewed annually, subject to funding available in the Rate Stabilization Account. If there are insufficient funds in future years to balance the budget, this could result in a tax increase in future years related to the ongoing approved expenditures which were funded by a one-time source of funding.

This option could utilize rate stabilization funding to reduce the 2021 tax impact by 1.60% and the 2022-2024 tax impact by 1.40%.

Table 7 – 5 Year Financial Plan (2020-2024) – Budget Option 3

Budget Component	2020	2021	2022	2023	2024
Same Level of Service Increase	1.69%	1.31%	1.62%	2.00%	1.96%
Less: 2020 Corporate Reset	(1.50%)				
Same Level of Service Increase with Corporate Reset	0.19%				
External Senior Government Related Increases: Canada Pension Plan Enhancements	0.13%	0.14%	0.16%	0.15%	0.13%
Previously Approved Expenditures: Major Facilities OBI Phase-in (Year 7 of 7), Developer Contributed Assets OBI In Service in 2020	0.43%	0.12%	0.12%	0.07%	0.07%
Previously Approved Expenditures: Developer Contributed Assets OBI Phase-in for City Centre Community Centre North (Year 2 of 4)	0.23%	0.22%	0.21%	-%	-%
Safe Community Priority Program:					
Deferrals from previous budget	1.88%	0.66%	1.53%	1.40%	1.40%
36 fire rescue positions	0.66%	0.82%	-%	-%	-%
51 RCMP officers and 20 municipal employees to support the RCMP Detachment	0.69%	0.65%	-%	-%	-%
Total 107 Positions - Safe Community Priority Program	3.23%	2.13%	1.53%	1.40%	1.40%
Operating Budget Impact from Capital Budget	0.09%	0.40%	0.29%	0.27%	0.24%
City-Wide Additional Levels	0.22%	0.20%	0.20%	0.75%	0.54%
Less: Rate stabilization	(0.70%)	(1.60%)	(1.40%)	(1.40%)	(1.40%)
Proposed Tax Increase – including 107 positions – Safe Community Program	3.82%	2.92%	2.73%	3.24%	2.95%
Investment in Infrastructure Replacement	1.00%	1.00%	1.00%	1.00%	1.00%
Proposed Tax Increase with LTFMS Transfer to Reserves	4.82%	3.92%	3.73%	4.24%	3.95%

Financial Impact

SMT and the CAO have done considerable work including conducting a significant number of reviews to achieve a same level of service budget of 1.69% which is below the CPI target of 2.00%. The proposed budget of 6.32% as presented in Budget Option 2 has been reduced from the original projection of 6.69%.

The 6.32% increase would result in an average residential property with a value of \$1.13M paying an additional \$110 in municipal taxes, of which 59% (approximately \$65) goes toward enhancing community safety.

Table 8 – Proposed 2020 Budget Increase (in \$000s)

Budget Component	Amount (in \$'000s)	Tax Impact
Same Level of Service Increase (meets LTFMS target of 2.00%)	\$3,876	1.69%
External Senior Government Related Increases: Canada Pension Plan Enhancements	300	0.13%
Previously Approved Expenditures: Major Facilities OBI Phase-in (Year 7 of 7), Developer Contributed Assets OBI In Service in 2020	984	0.43%
Operating Budget Impact of the Previously Approved Developer Funded Community Centre: City Centre Community Centre North (Year 2 of 4)	527	0.23%
Safe Community Priority Program – 107 policing and fire rescue positions:		
Deferrals from previous budget	4,326	1.88%
36 fire rescue positions phased-in over three years (Year 2 of 3)	1,515	0.66%
51 RCMP officers and 20 municipal employees to support the RCMP Detachment phased-in over three years (Year 2 of 3)	1,592	0.69%
Total 107 Positions - Safe Community Priority Program (Year 2 of 3)	7,433	3.23%
Operating Budget Impact from the 2020 Capital Budget (Year 1 of 3)	215	0.09%
No Tax Impact Positions (Attachment 8)	-	-%
Emerging Organizational Additional Levels (Attachment 9)	500	0.22%
Less: Rate stabilization	(1,609)	(0.70%)
Proposed 2020 Operating Budget Increase	\$12,226	5.32%
Investment in Infrastructure Replacement Needs (Transfer to Reserves)	2,299	1.00%
Proposed 2020 Operating Budget Increase	\$14,525	6.32%

Conclusion

The proposed operating budget for 2020 incorporates all items previously approved by Council including Council's Safe Community Priority program (Year 2 of 3) which provides funding for 107 safe community positions over three years. Staff will prepare the Consolidated 5 Year Financial Plan (2020-2024) according to the budget option approved by Council.

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1. Council Strategic Plan (2018-2022)



2. Economic Outlook

Businesses contribute over 40 per cent of the City's property tax revenues, resulting in a healthy local economy and providing families and residents exceptional levels of municipal services while ensuring a reasonable allocation of taxation among property classes. Richmond's economy is subject to constantly changing global, regional and local trends. As part of its budget planning process, the City examines the current economic context and available forecasts to manage short-term risks and advance long-term financial sustainability.

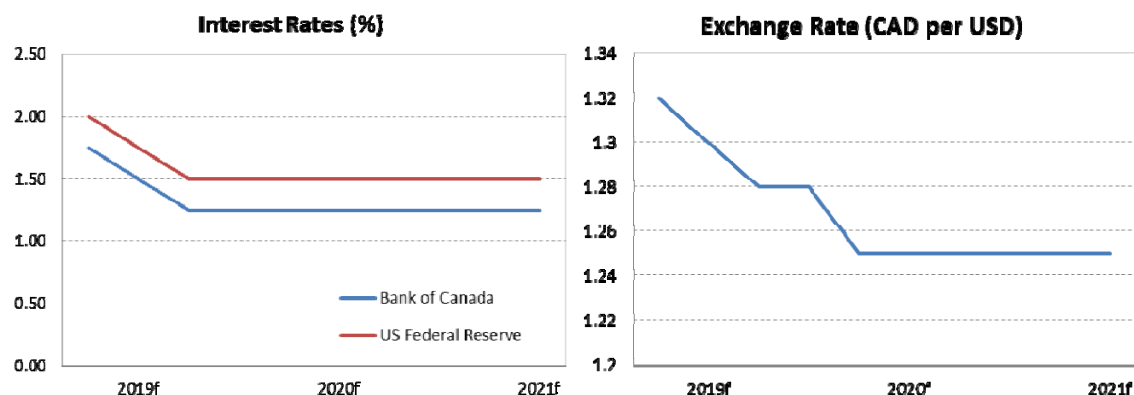
Global, National and Provincial Forecasts

With Richmond's advantageous location for international trade, market conditions in the world's major economies and the overall global trade climate have a significant impact on the local economy.

1. Global Forecast¹

Global gross domestic product (GDP) growth for 2019 is projected at 3%, its slowest pace since the global financial crisis in 2008 and down from 3.8% in 2017. This subdued forecast is largely the result of elevated uncertainty surrounding trade policy, higher import tariffs and geopolitical tensions. The global growth forecast of 3.4% for 2020 remains precarious despite a resilient services sector and strong employment growth in major economies.

2. Canadian Forecast²



Central banks, including the US Federal Reserve and the Bank of Canada, are expected to respond to these uncertainties by lowering interest rates to reduce downside risks and spur investment.

The value of the Canadian currency has remained competitively low for the last few years which, along with investments in trade infrastructure, have resulted in the growth of tourism and export sectors. The Canadian dollar is expected to appreciate slightly against the US dollar over the course of 2020 and remain stable over the forecast period.

Canadian Economic Indicators	2018	2019f	2020f	2021f
Real GDP	1.9	1.6	1.8	1.9
Consumer Price Index	2.3	1.9	2.0	2.2
Residential Investment	-1.5	-1.7	3.1	2.5

¹ Source: International Monetary Fund, World Economic Outlook (October 15, 2019)

² Source: Scotiabank Global Outlook (October 10, 2019)

Business Investment	2.2	-2.3	3.0	2.3
Unemployment Rate (%)	5.8	5.7	5.9	5.9
Housing Starts (000s)	213	210	206	202

Modest Canadian economic growth of 1.6% in 2019, 1.8% in 2020 and 1.9% in 2021 is forecast as a result of continued uncertainty surrounding global trade. As the new US-Mexico-Canada trade deal is expected to be ratified, growth in business investment is forecasted to pick up in 2020 and 2021 and will continue to drive job creation. The unemployment rate is expected to remain under 6% over the forecast period, resulting in persistent upward pressure on wages.

Government housing policy measures will continue to impact annual housing starts and nation-wide levels will trend downward over the forecast period from their elevated levels in 2017, stabilizing at around 200,000 which is in line with long-run averages.

3. British Columbia Forecast³

British Columbia Indicators	2018	2019f	2020f	2021f
Real GDP	2.4	2.2	2.6	2.1
Consumer Price Index	2.7	2.5	1.8	2
Residential Investment	0.3	0.4	-3.9	-0.5
Business Investment ⁴	-1.0	10.4	28.7	9.4
Unemployment Rate (%)	4.7	4.6	4.1	3.8
Housing Starts (000s)	40.9	39.4	33.2	34.8

Economic growth in B.C. is forecast to slow to 2.2% this year and rebound in 2020 to 2.6% as major project construction picks up. Labour availability continues to be a constraint for employers, with the unemployment rate expected to continue its steady decline to a very low 3.8% in 2021. As a result, employee compensation continues to grow at a robust pace as companies compete for skilled workers.

Province-wide housing starts are past their peak, reflecting a drag from mortgage lending requirements, interest rates and government tax measures. A continuous decline is forecast through 2020 marking the end of the current development cycle that is fulfilling pre-sale activity from previous years.

Local Trends⁵

As in all of Metro Vancouver, a large share of Richmond's jobs (40%) are community-oriented, representing jobs dependent on population and business growth. The remaining jobs are in sectors that serve national and international markets and drive the Richmond economy. Nearly 70% of these economic base jobs are in sectors linked to the city's role as a people and goods movement gateway, including transportation, warehousing and logistics, manufacturing, wholesale, and tourism⁶. Richmond has a regional advantage in the above industries, due to the presence of the port and airport.

After a tepid increase of 1.7% between 2006 and 2011, Richmond job growth heated up over the next five year census period and, at 7.8%, Richmond outpaced job growth in the region's major cities, with the exception of Surrey⁷.

³ Source: Central 1 Credit Union, Economic Analysis of British Columbia (August 2019)

⁴ Includes both non-residential construction and machinery and equipment

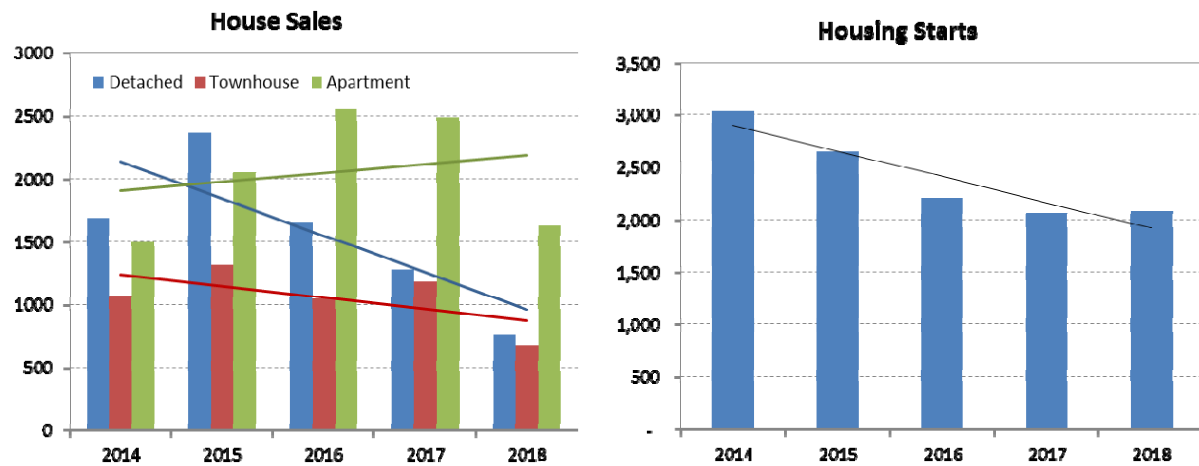
⁵ Source: Interactive Data, <http://www.businessinrichmond.ca/data-centre/> (unless stated otherwise)

⁶ Source: City of Richmond – Resilient Economy Strategy

⁷ Source: Statistics Canada, Census 2016

The following key local economic performance indicators, including Housing & Development, Commercial Space, Business Growth and Tourism & Trade are monitored on a quarterly and annual basis.

Housing Market

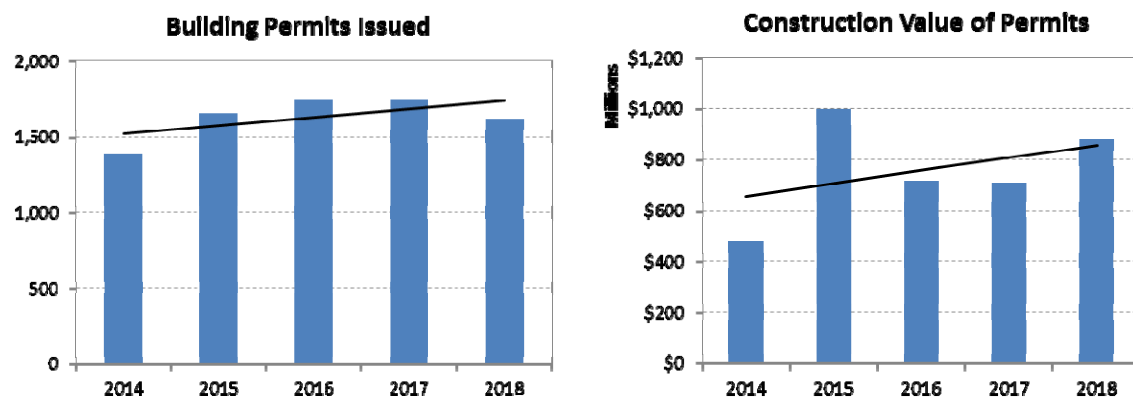


The decline in Richmond home sales and housing starts in recent years is a result of multiple policy interventions introduced since mid-2016. Tougher mortgage qualifications, rising interest rates and government tax measures have been implemented to cool the housing market in overheated regions including Metro Vancouver.

Due to ongoing development in the City Centre, apartment sales have outperformed all other categories, yet tightening market conditions have caught up with this indicator which began slowing down in 2017 and 2018. The first three quarters of 2019 has registered another decline in home sales compared to the same period in 2018 (-11% for detached, -21% for townhouses and -27% for apartments) indicating continued downward pressure on real estate sales.

New home construction, as measured by housing starts, has remained relatively steady since the decline in 2016 and shows signs of improving. Year to date to Q3 2019, housing starts in Richmond have increased by 12% over the same period last year.

Construction Activity

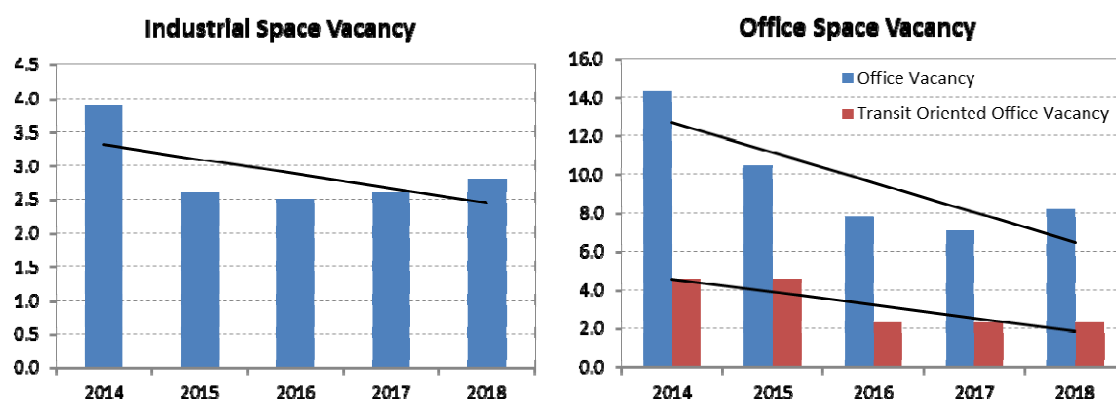


Led by multi-family residential construction in the City Centre, building activity reached an all-time high in 2015. The total construction value of building permits issued was nearly \$1 billion, more than double the

value in 2014. In both 2016 and 2017 construction value was upwards of \$700 million annually and reached another high of \$880 million in 2018.

2019 is on track for another strong year of building activity with year-to-date values to Q3 2019 up by 27% over the same period last year. The number of building permits, meanwhile, has declined by 15% over the same period in 2018. Fewer permits with higher values is indicative of continued multi-family development as the implementation of the City Centre Area Plan continues.

Commercial Space



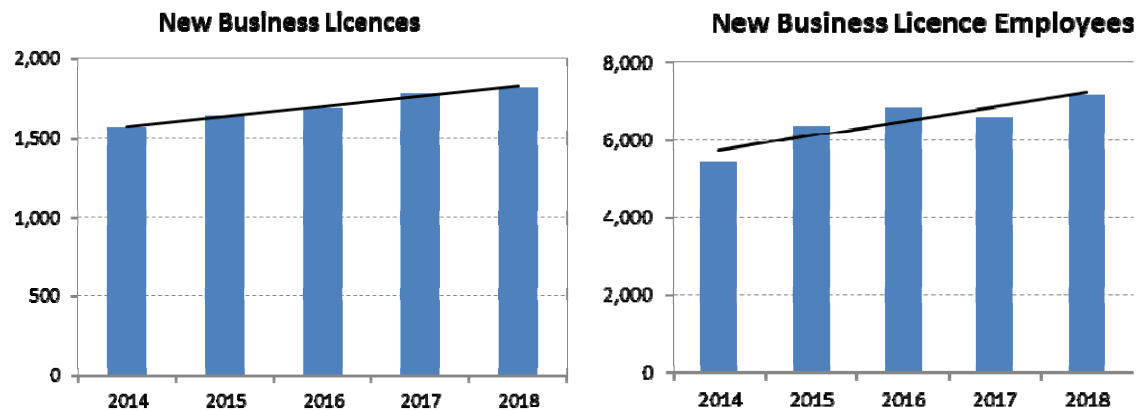
Both the industrial and office space vacancy rates Richmond have registered a sharp overall decline in the last five years, suggesting substantial business growth and expansion.

Richmond has over 38.9 million square feet of industrial space, which, at 18%, represents the largest share of Metro Vancouver's regional industrial inventory. For the last three years, the industrial vacancy rate has hovered at an unhealthy 2.5% mark, despite a 3% inventory growth over the period.

Severe industrial land supply shortages in Richmond and the region remains the number one obstacle for business expansion in the people and goods movement industries, which are sectors of competitive advantage for Richmond. As a result, Richmond has led the Metro Vancouver region by initiating an industrial land intensification policy project, targeting better utilization and higher productivity of its existing industrial lands for industrial purposes.

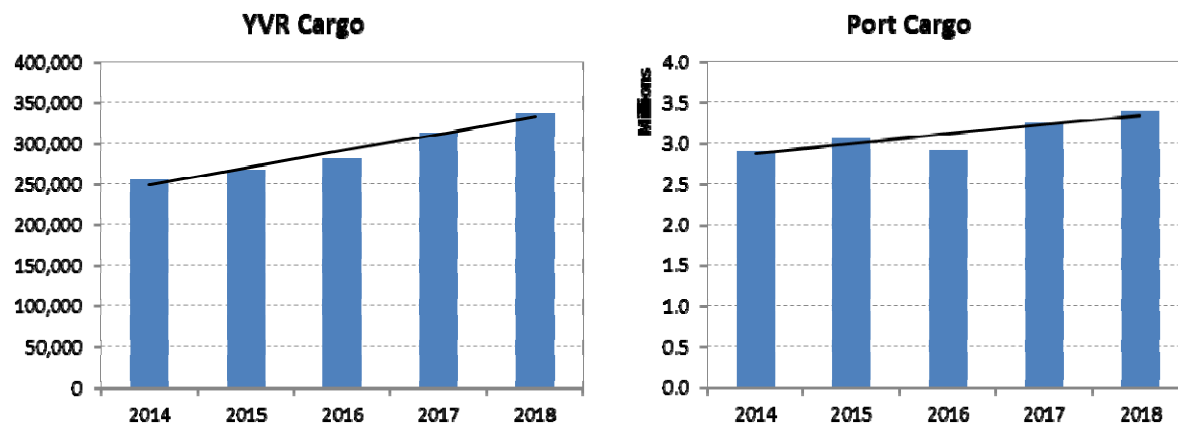
At 4.5 million square feet, Richmond's share of the regional office inventory is 8%, which is the fourth largest after Vancouver, Burnaby and Surrey. Increased leasing activity over the last five years has resulted in a 42% drop in Richmond's office vacancy rate, which now sits around 8%. Meanwhile, at 2.3% availability, transit-oriented office space in Richmond is virtually non-existent while demand for high quality office space around rapid transit stations is increasing as companies seek amenity rich locations that aid their talent attraction and retention efforts amidst a constrained labour market.

Business Growth



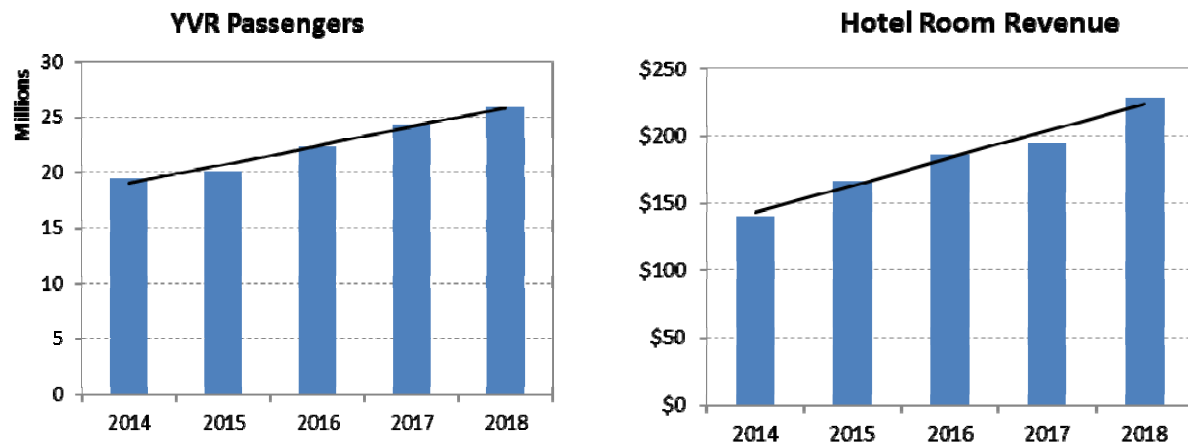
The number of new business licences, and associated employment have grown on average by 3.2% and 6.6% respectively over the last five years. At between 13,000 and 14,000, growth in total business licences has remained nominal in the last five years, registering an average annual growth rate of 1.8%. These two indicators combined reveal that a portion of Richmond's business growth is occurring through attrition (new businesses displacing businesses closing or leaving).

Trade



Responding to growth in global trade volumes, both Port of Vancouver and YVR cargo volumes registered sustained growth over the last five years. Ongoing expansion of services at YVR's Cargo Village in cargo flights and ground distribution facilities led to a healthy 6% average annual growth rate in cargo tonnes. Port of Vancouver cargo growth, as measured by twenty-foot-equivalent container movements, registered a 3% annual average growth rate in the last five years.

However, uncertainties around global trade present downside risks to growth in international trade volumes in the short term. Year to date air cargo volumes to August declined by 9% over the same period last year while container volumes maintained their average growth rate at 3%.

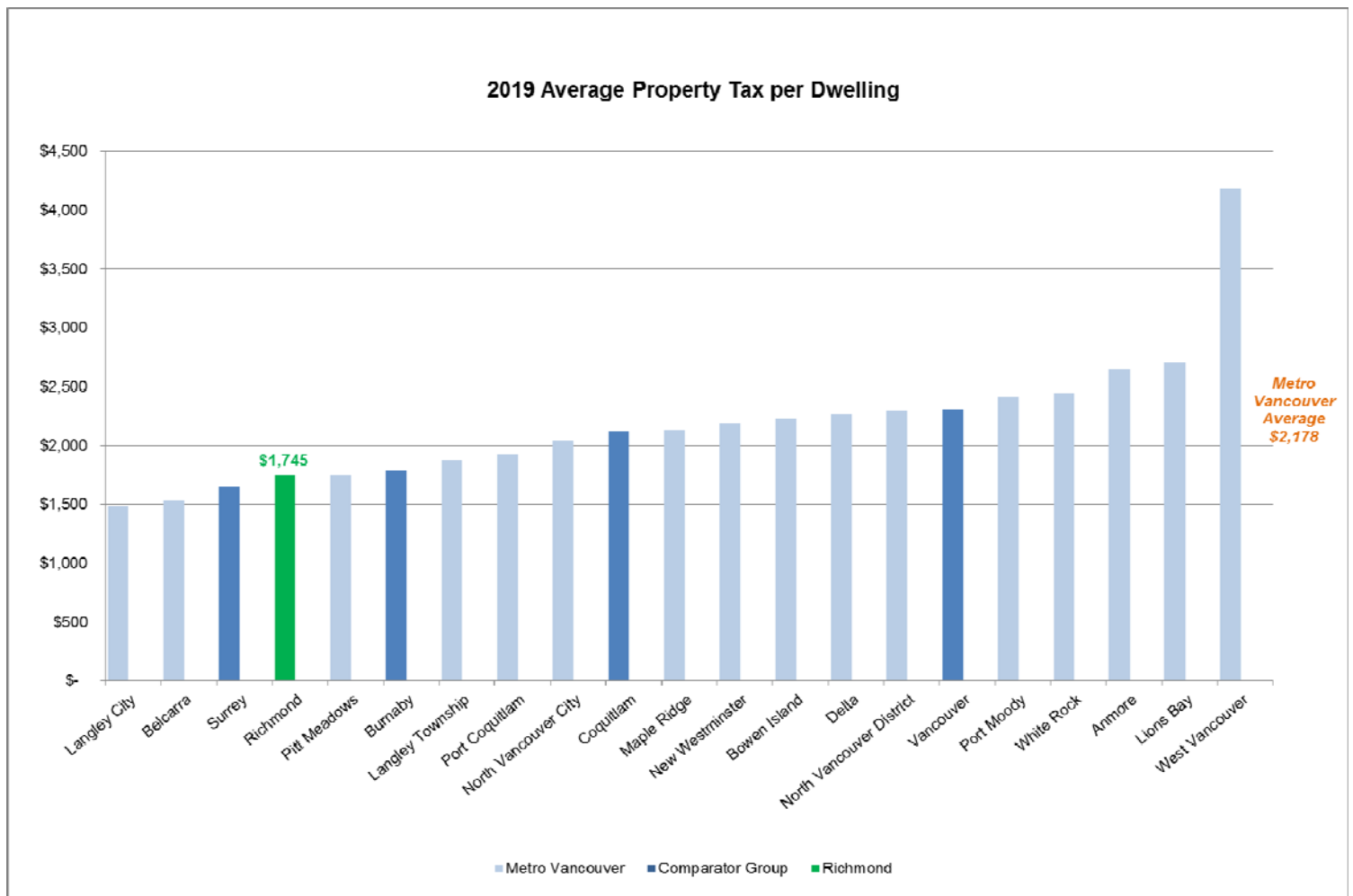
Tourism

A low Canadian dollar and growth of global travel have created opportunities for tourism in Canada, BC and the region. In 2017 overnight visitation to Metro Vancouver was 10.35 million, with about one third of these visitors staying in Richmond.

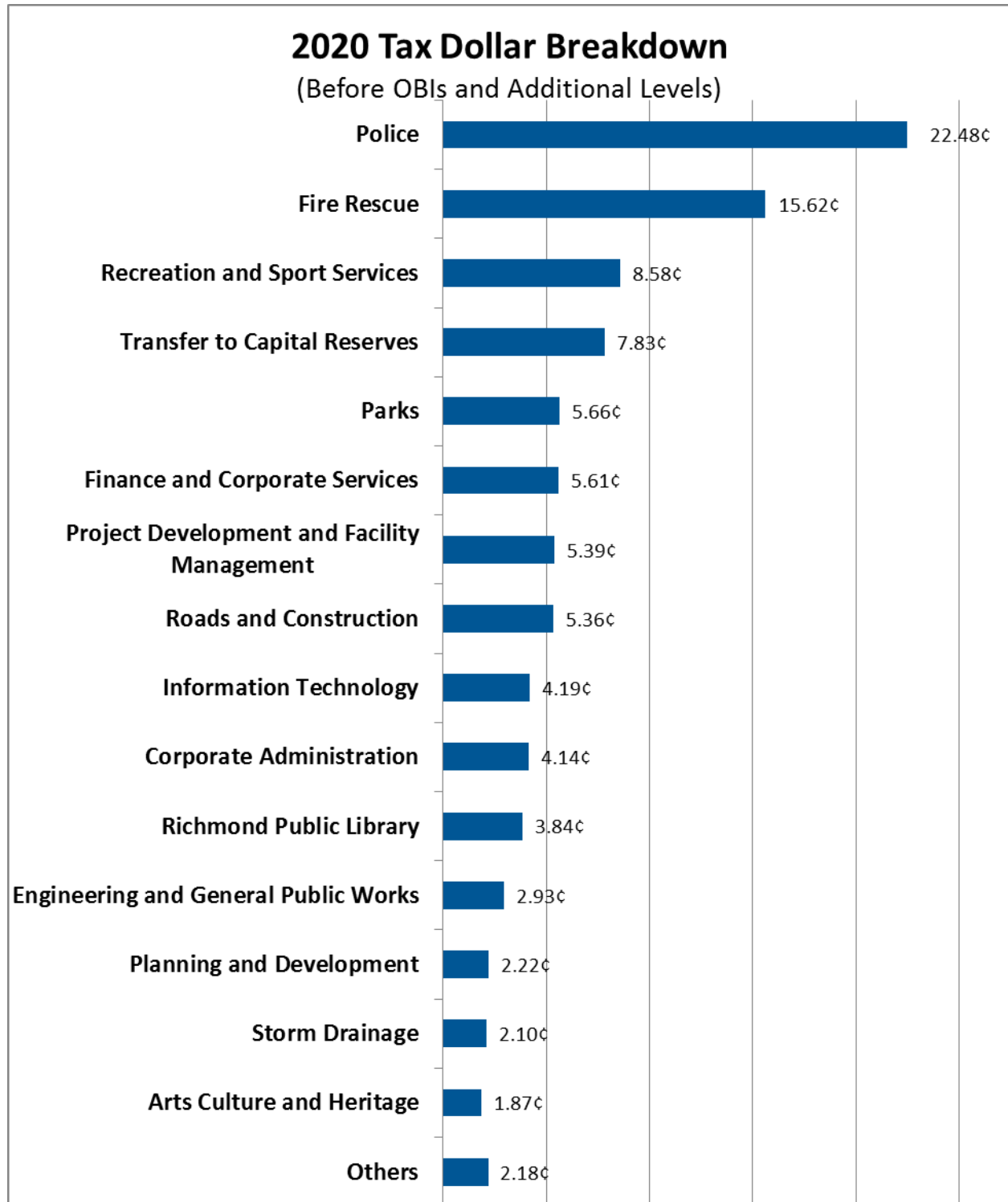
Tourism has been one of the fastest growing sectors of the Richmond economy, registering 12% average annual growth, as measured by local hotel revenues, over the five-year period from 2014 to 2018. YVR passenger growth over the period (7% annually on average) is another strong indicator for the sector, suggesting sustained and significant growth in travellers to the region.

Both Richmond hotel room revenue and YVR passenger indicators are expected to grow at a slower pace in 2019. As of August 2019, the number of YVR passengers has grown by only 2% over the same period last year. Subdued growth in air passengers can be attributed partially to cancelled flights as a result of the unrest in Hong Kong as well as the grounding of Boeing 737 Max aircrafts. Hotel room revenue as of July 2019 has grown by 5% over the same period in 2018.

3. 2019 Average Property Tax per Dwelling

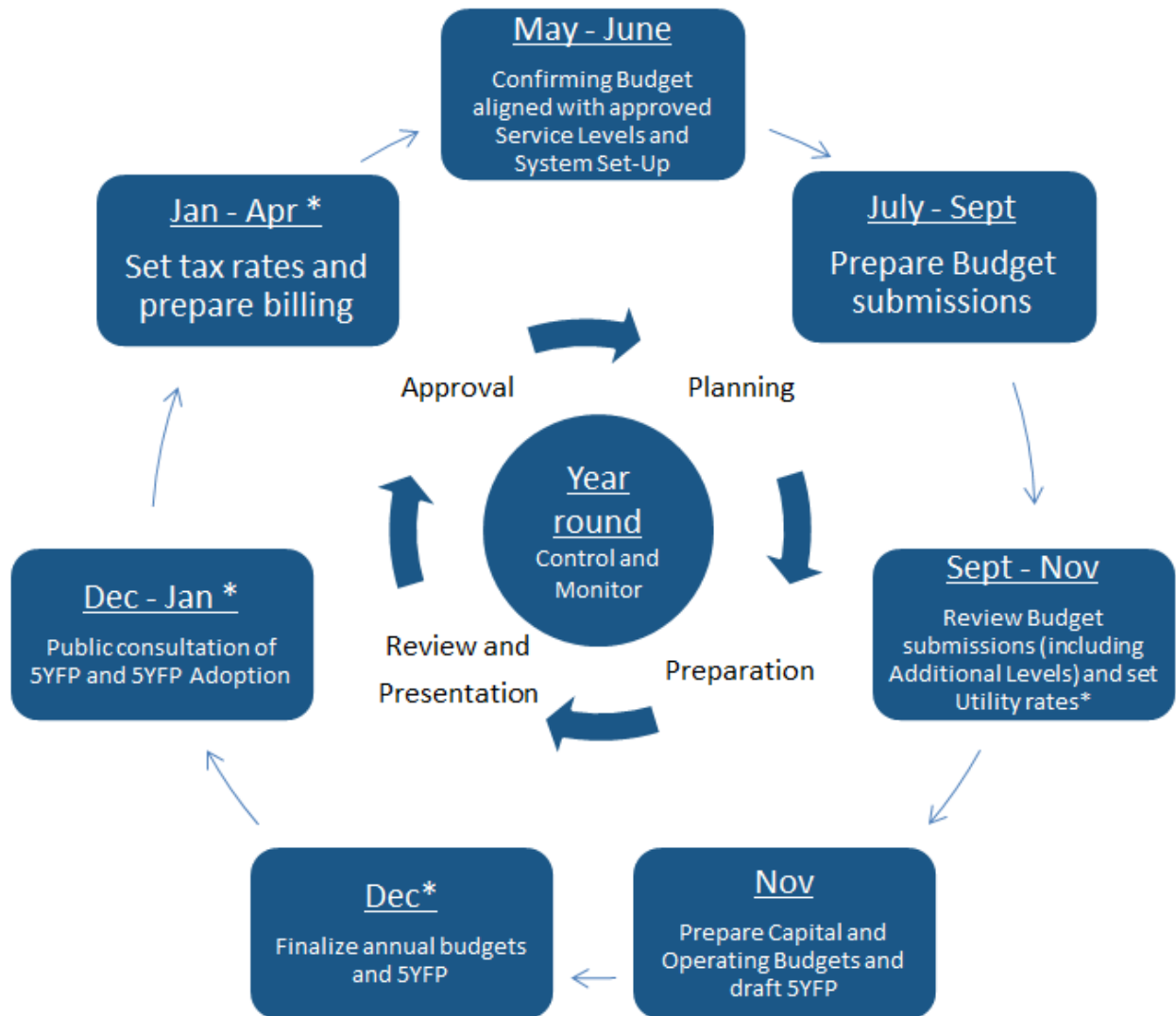


4. 2020 Municipal Tax Dollar



5. 2020 Budget Cycle

2020 Budget Cycle



* Council Involvement

6. 2020 Same Level of Service Base Net Budget

Department/Division	2019 Adjusted Base Budget (Restated for Comparison)	2020 Proposed Net Base Budget	Amount Change	Per Cent Change	Tax Impact
Policing	\$55,067	\$57,696	\$2,629	4.77%	1.15%
Fire Rescue	39,210	40,097	887	2.26%	0.39%
Community Safety - Other	(1,065)	(830)	235	(22.08%)	0.10%
Community Safety Total	\$93,212	\$96,963	\$3,751	4.02%	1.64%
Community Services	41,594	42,515	921	2.21%	0.40%
Library	9,651	9,863	212	2.19%	0.09%
Community Services including Library	\$51,245	\$52,378	\$1,133	2.21%	0.49%
Engineering and Public Works	38,828	40,483	1,655	4.26%	0.72%
Finance and Corporate Services	21,251	21,760	509	2.40%	0.22%
Corporate Administration	13,790	14,002	212	1.54%	0.09%
Planning and Development	7,474	7,779	305	4.08%	0.13%
Fiscal	(225,800)	(226,855)	(\$1,055)	0.47%	(0.45%)
Same Level of Service Increase	\$-	\$6,510	\$6,510		2.84%
Less: Estimated 2020 New Tax Growth		(2,634)	(2,634)		(1.15%)
Same Level of Service Increase After Growth		\$3,876	\$3,876		1.69%

7. 2020 Same Level of Service Base Budget Details

All Divisions

Community Safety, Community Services (including Library), Engineering and Public Works (excluding Utilities), Finance and Corporate Services, Corporate Administration, Planning and Development, and Fiscal.

	2019 Adjusted Base Budget (Restated for Comparison)	2020 Proposed Base Budget	Change 2020 \$	Change 2020 %
Revenues	(329,811,000)	(334,384,300)	(4,573,300)	1.39%
Expenditures				
Labour	157,083,800	162,521,000	5,437,200	3.46%
Contract Services	77,320,000	78,224,600	904,600	1.17%
Operating Expenses	43,223,800	43,133,200	(90,600)	(0.21%)
Total Expenditures	277,627,600	283,878,800	6,251,200	2.25%
Fiscal Expenses	59,791,100	71,635,000	11,843,900	19.81%
Transfers	(7,607,700)	(14,619,500)	(7,011,800)	92.15%
Grand Total¹	\$-	\$6,510,000	\$6,510,000	

¹ 2020 Proposed Base Budget increase represents the same level of service before tax growth.

FTE Change

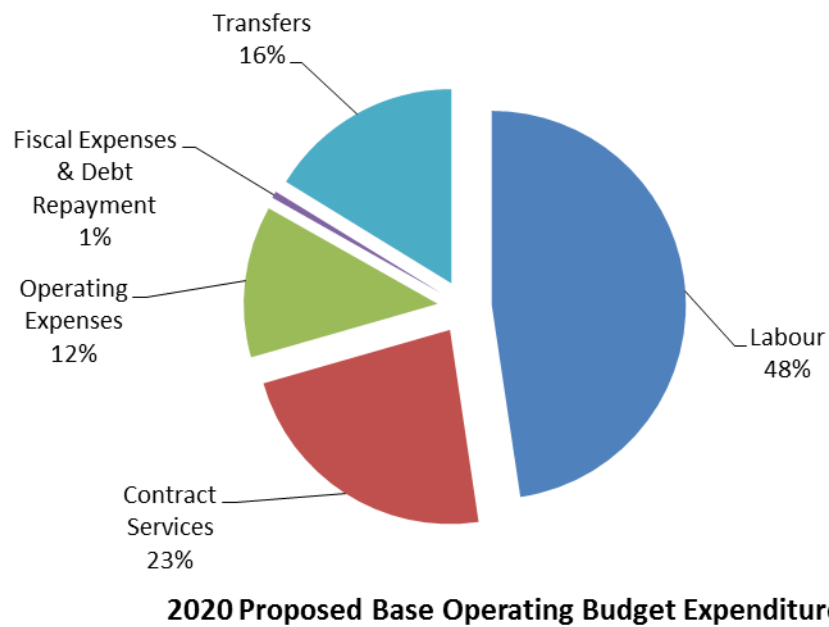
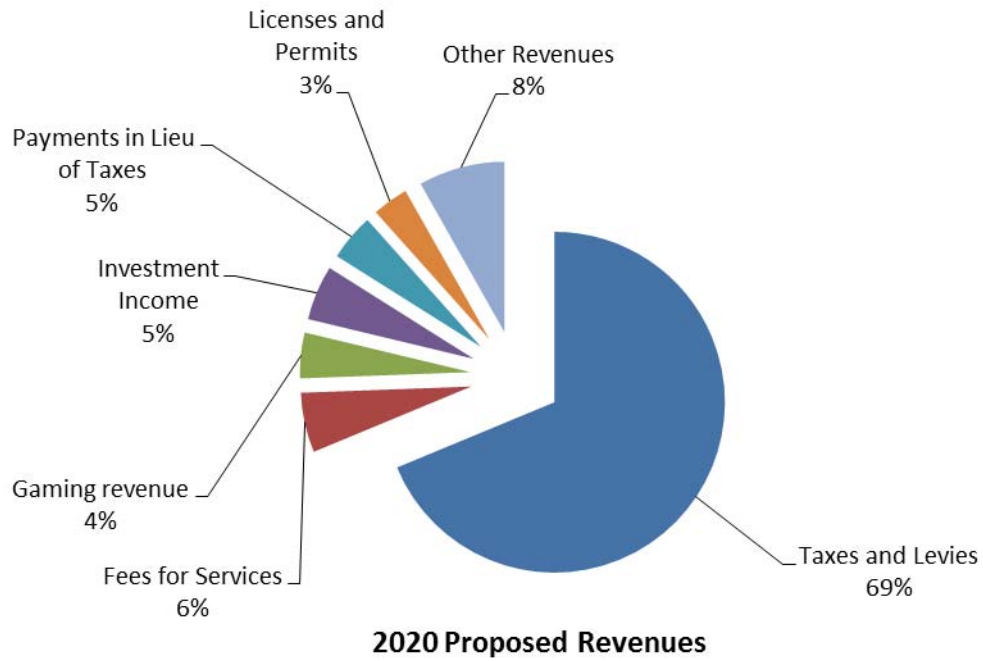
	2019 FTE ²	2020 FTE ³	Change 2020	Change 2020 %
Total	1,426.6	1,460.6	34.0	2.38%

² 2019 Full-Time Equivalent (FTE) includes same level of service base budget, additional levels approved in 2019, the operating budget impact (OBI) relating to previously approved capital submissions, 2019 budget amendments, and positions funded by Capital or one-time expenditures.

³ 2020 FTE includes same level of service base budget, additional levels previously approved in 2019, the operating budget impact (OBI) relating to previously approved capital submissions, positions funded by Capital or One-Time funding, including recommended 2020 One-Time Expenditures, and 2020 recommended one-time expenditures.

FTE Change - Library

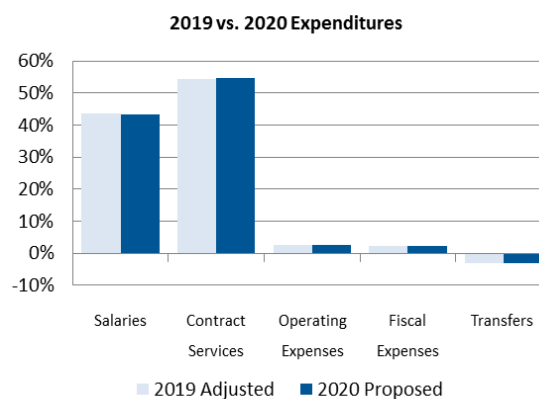
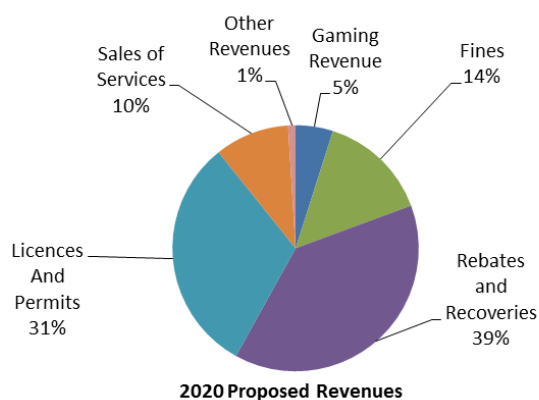
	2019 FTE	2020 FTE	Change 2020	Change 2020 %
Total	93.7	93.7	-	-%



Community Safety

The City's primary community safety providers are Police (RCMP), Fire-Rescue, Emergency Programs, Business Licences, and Community Bylaws. The role of the Community Bylaws Department is to lead, assist or partner with others to ensure that the City's various bylaws are complied with for the overall benefit of the community.

	2019 Adjusted Base Budget (Restated for Comparison)	2020 Proposed Base Budget	Change 2020 \$	Change 2020 %
Revenues	(14,296,300)	(14,530,900)	(234,600)	1.64%
Expenditures				
Labour	46,991,000	48,558,300	1,567,300	3.34%
Contract Services	58,562,800	60,931,800	2,369,000	4.05%
Operating Expenses	2,698,700	2,729,500	30,800	1.14%
Total Expenditures	108,252,500	112,219,600	3,967,100	3.66%
Fiscal Expenses	2,607,400	2,660,700	53,300	2.04%
Transfers	(3,351,600)	(3,386,700)	(35,100)	1.05%
Grand Total	\$93,212,000	\$96,962,700	\$3,750,700	4.02%



FTE Change

	2019 FTE ⁴	2020 FTE	Change 2020 ⁵
Total	387.0	406.7	19.7

⁴A Business License Inspector Regular Full-Time position was approved by Council on November 12, 2019 and already included in the 2019 FTE count.

⁵FTE change due to 5 Municipal Employees & 12 firefighters pre-approved in the 2019 Budget for 2020, 0.3 FTE reduction for OBI reallocation to Facility Services and 2020 recommended one-time expenditure requests for 2 Bylaw Officers and 1 Licensing Clerk.

RCMP Contract Complement (Funded)

	2019 FTE	2020 FTE	Change 2020 ⁵
Officers	258.0	270.0	12.0
Civilian Members	2.0	2.0	-
Less: Non-Budgeted	(11.0)	(11.0)	-
Municipal Policing	249.0	261.0	12.0
Integrated Teams including RTIC	17.7	17.7	-
Total	266.7	278.7	12.0

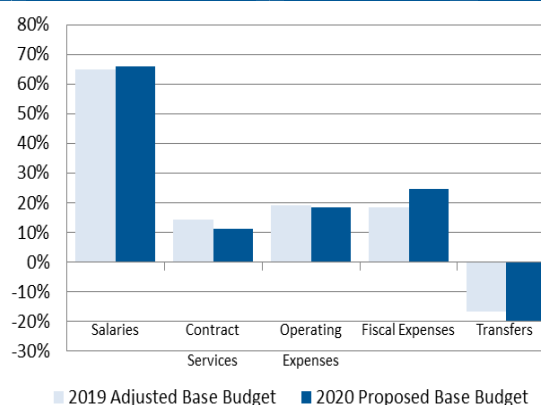
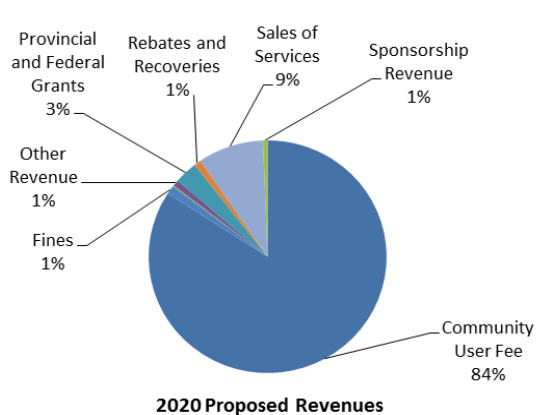
⁵FTE change due to 12 officers pre-approved in the 2019 Budget for 2020.

Community Services

Coordinates, supports and develops Richmond's community services including recreation, library, arts, heritage and sports. Oversees City owned public facilities and the design, construction and maintenance of City parks, trails and green spaces. Works with community partners and coordinates events and filming in the City.

During the 2019 year, community social development, including social planning, affordable housing, diversity, youth, childcare and older adult services were transferred to the Planning and Development Division. The 2019 budget has been restated for comparison purposes.

	2019 Adjusted Base Budget (Restated for Comparison)	2020 Proposed Base Budget	Change 2020 \$	Change 2020 %
Revenues	(11,767,500)	(12,027,500)	(260,000)	2.21%
Expenditures				
Labour	40,923,800	42,458,900	1,535,100	3.75%
Contract Services	8,976,200	7,156,500	(1,819,700)	(20.27%)
Operating Expenses	12,006,800	11,835,900	(170,900)	(1.42%)
Total Expenditures	61,906,800	61,451,300	(455,500)	(0.74%)
Fiscal Expenses	11,564,800	15,784,400	4,219,600	36.49%
Transfers	(10,458,700)	(12,829,800)	(2,371,100)	22.67%
Grand Total	\$51,245,400	\$52,378,400	\$1,133,000	2.21%



FTE Change

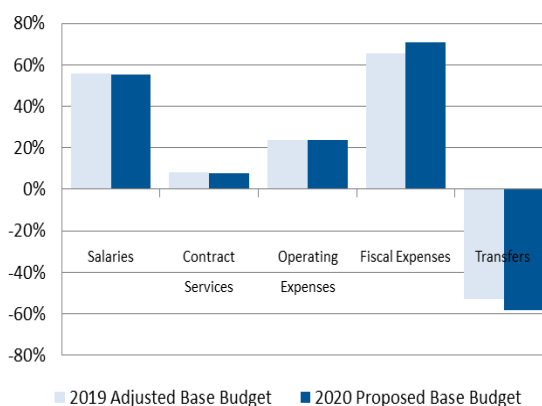
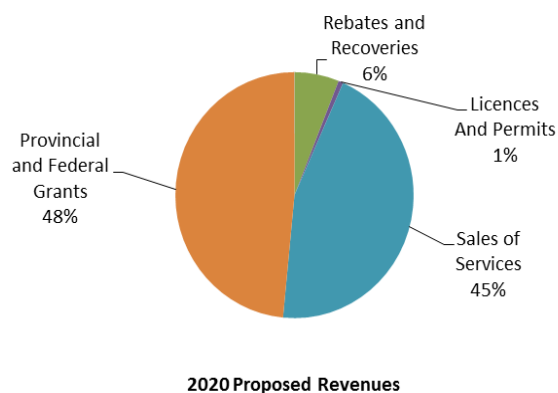
	2019 FTE	2020 FTE	Change 2020 ⁶
Community Services	421.6	433.0	11.4.0
Library	93.7	93.7	-
Total	515.3	526.7	11.4

⁶FTE change due to OBI phase-in of Minoru Place Activity Centre Program Implementation of 2.3 additional FTE, 1.4 FTE due to new auxiliary BSW previously completed by contractor, 0.4 FTE Parks Labour OBI phase-in and Richmond Ice Centre acquisition, and 9.4 FTE relate to 2020 one-time expenditure requests for Enhanced Programming for Steveston Heritage Sites (8.9) and Sustainability Community Event Initiatives (0.5) offset by elimination of 2.1 FTE under Major Events.

Engineering and Public Works (excluding Utilities)

Comprises engineering planning, design, construction and maintenance services for all utility and City building infrastructure. Responsible for dikes and irrigation system, roads and construction services, street lighting, corporate sustainability, corporate and community energy programs.

	2019 Adjusted Base Budget (Restated for Comparison)	2020 Proposed Base Budget	Change 2020 \$	Change 2020 %
Revenues	(6,792,900)	(7,719,100)	(926,200)	13.63%
Expenditures				
Labour	25,359,400	26,709,100	1,349,700	5.32%
Contract Services	3,787,700	3,819,200	31,500	0.83%
Operating Expenses	10,753,400	11,519,300	765,900	7.12%
Total Expenditures	39,900,500	42,047,600	2,147,100	5.38%
Fiscal Expenses	29,961,500	34,151,700	4,190,200	13.99%
Transfers	(24,241,300)	(27,997,000)	(3,755,700)	15.49%
Grand Total	\$38,827,800	\$40,483,200	\$1,655,400	4.26%



FTE Change

	2019 FTE	2020 FTE	Change 2020 ⁷
Total	262.8	267.1	4.3

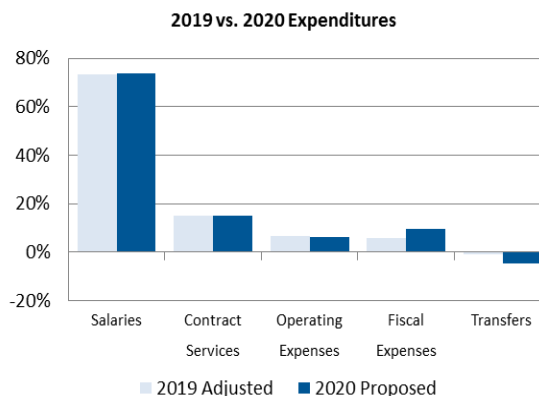
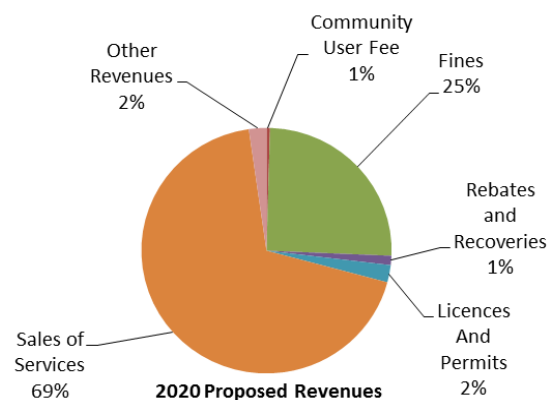
⁷FTE change due to 2.0 FTE for Snow & Ice control maintenance, 0.8 FTE OBI phase-in (including 0.3 FTE OBI reallocation from Community Safety), 400 hours for commercial vehicle inspections of 0.5 FTE and MRN Knight Street maintenance previously completed by contractor of 1.0 FTE.

Finance and Corporate Services

Responsible for the financial well-being of the City, through the provision of financial advice, services and information to Council, staff and the public, as well as through the support and fostering of a viable business community. This division includes customer service, information technology, finance, economic development, real estate services, and corporate business service solutions.

During the 2019 year, Legal and Legislative Services were transferred to Corporate Administration. The 2019 budget has been restated for comparison purposes.

	2019 Adjusted Base Budget (Restated for Comparison)	2020 Proposed Base Budget	Change 2020 \$	Change 2020 %
Revenues	(660,300)	(660,300)	-	-
Expenditures				
Labour	15,674,800	16,066,400	391,600	2.50%
Contract Services	3,701,400	3,842,600	141,200	3.81%
Operating Expenses	1,430,600	1,406,300	(24,300)	(1.70%)
Total Expenditures	20,806,800	21,315,300	508,500	2.44%
Fiscal Expenses	1,448,000	2,447,500	999,500	69.03%
Transfers	(343,100)	(1,342,600)	(999,500)	291.31%
Grand Total	\$21,251,400	\$21,759,900	\$508,500	2.40%



FTE Change

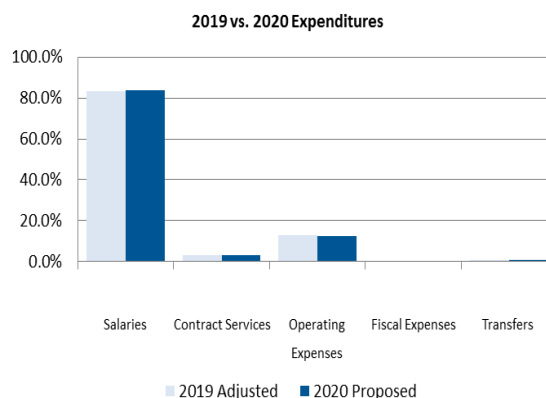
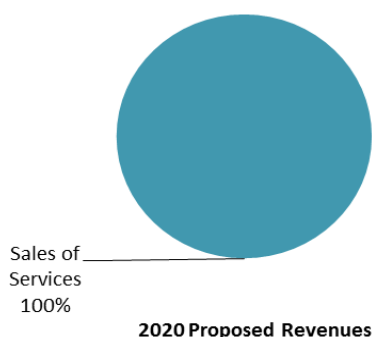
	2019 FTE	2020 FTE	Change 2020
Total	144.0	144.0	-

Corporate Administration

The CAO's Office oversees the overall administration of the corporate body (business units/operations) of the City and employees. It is also home to the Corporate Planning and Programs Management Group (CPMG) and Legal and Legislative Services. CPMG and Intergovernmental Relations are responsible for research and development of corporate policy, strategic and corporate planning, intergovernmental relations, human resources, corporate communications, protocol, business advisory services, special projects and coordination of interdivisional projects and initiatives. This is also where the budget for Mayor and Councillors resides. The Legal and Legislative Services department is responsible for providing advice to City Council and staff regarding the City's legal rights and obligations and records keeping.

During the 2019 year, Legal and Legislative Services were transferred from Finance and Corporate Services. The 2019 budget has been restated for comparison purposes.

	2019 Adjusted Base Budget (Restated for Comparison)	2020 Proposed Base Budget	Change 2020 \$	Change 2020 %
Revenues	(7,100)	(7,100)	-	-
Expenditures				
Labour	11,511,200	11,724,000	212,800	1.85%
Contract Services	402,100	402,100	-	-
Operating Expenses	1,765,500	1,765,500	-	-
Total Expenditures	13,678,800	13,891,600	212,800	1.56%
Transfers	117,800	117,800	-	-
Grand Total	\$13,789,500	\$14,002,300	\$212,800	1.54%



FTE Change

	2019 FTE	2020 FTE	Change 2020 ⁸
Total	92.4	89.4	(3.0)

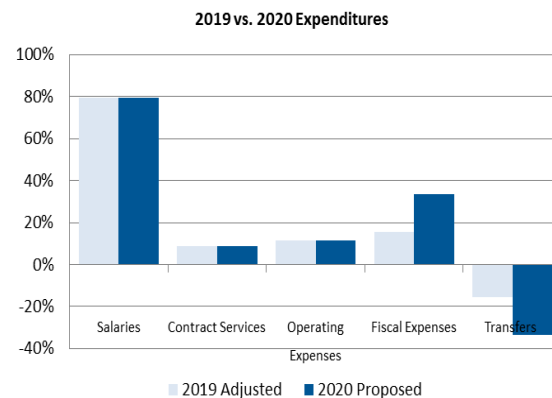
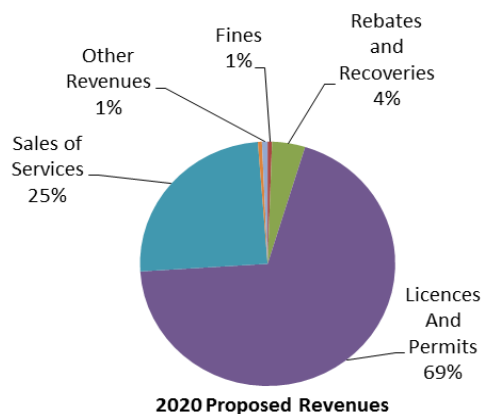
⁸FTE change due to temporary full-time positions for Smart Cities Challenge of 2.0 FTE and Organization Development Program Initiatives of 1.0 FTE.

Planning and Development

Incorporates policy planning, transportation planning, development applications, building approvals, and community social development, which includes social planning, affordable housing, diversity, youth, childcare and older adult services. This division provides policy directions that guide growth and change in Richmond with emphasis on land use planning, development regulations, environmental protection, heritage and livability. These planning functions play a vital part in the City's life cycle and involve the development of community plans and policies, zoning bylaws, as well as development related approvals and permits.

During the 2019 year, community social development, including social planning, affordable housing, diversity, youth, childcare and older adult services were transferred from Community Services. The 2019 budget has been restated for comparison purposes.

	2019 Adjusted Base Budget (Restated for Comparison)	2020 Proposed Base Budget	Change 2020 \$	Change 2020 %
Revenues	(9,678,400)	(9,810,300)	(131,900)	1.36%
Expenditures				
Labour	13,638,000	13,966,800	328,800	2.41%
Contract Services	1,533,500	1,566,100	32,600	2.13%
Operating Expenses	1,967,900	2,043,000	75,100	3.82%
Total Expenditures	17,139,400	17,575,900	436,500	2.55%
Fiscal Expenses	2,691,500	5,905,700	3,214,200	119.42%
Transfers	(2,678,400)	(5,892,600)	(3,214,200)	120.00%
Grand Total	\$7,474,100	\$7,778,700	\$304,600	4.08%



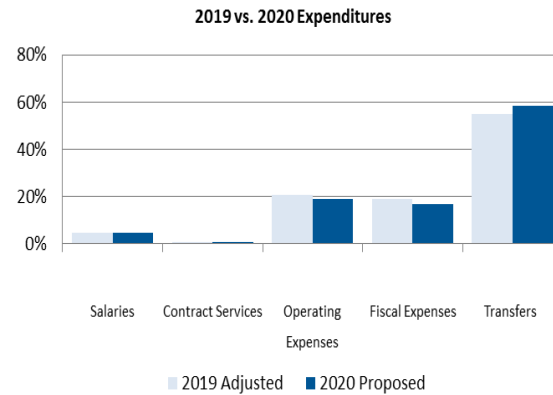
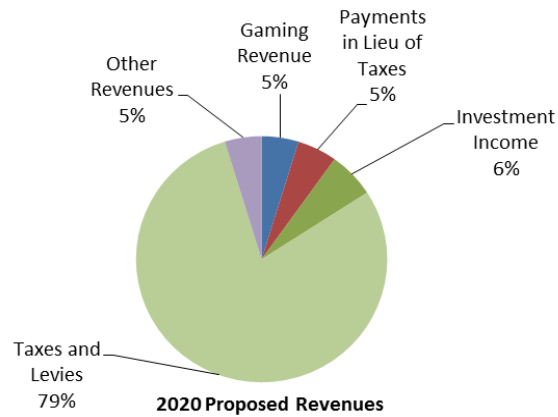
FTE Change

	2019 FTE	2020 FTE	Change 2020 ⁹
Total	118.8	120.4	1.6

⁹ FTE change due to recommended 2020 one-time expenditure for Recreation Fee Subsidy Program Administrative Support of 1.6 FTE.

Fiscal

	2019 Adjusted Base Budget (Restated for Comparison)	2020 Proposed Base Budget	Change 2020 \$	Change 2020 %
Revenues	(286,608,500)	(289,629,100)	(3,020,600)	1.05%
Expenditures				
Labour	2,985,600	3,037,500	51,900	1.74%
Contract Services	356,300	506,300	150,000	42.10%
Operating Expenses	12,600,900	11,833,700	(767,200)	(6.09%)
Total Expenditures	15,942,800	15,377,500	(565,300)	(3.55%)
Fiscal Expenses	11,517,900	10,685,000	(832,900)	(7.23%)
Transfers	33,347,600	36,711,400	3,363,800	10.09%
Grand Total	(\$225,800,200)	(\$226,855,200)	(\$1,055,000)	0.47%



8. OBI From Developer Contributed Assets

2020 OBI From Developer Contributed Assets				
Ref	Description	RZ/DP Number	Address	OBI
1	AM-PRI Developments (2013) Ltd. On July 27, 2015, Council approved an application from AM-PRI Developments (2013) Ltd. to rezone 5460, 5480, 5500, 5520, 5540 & 5560 Moncton Street from the "Single Detached (RS1/C & RS1/E)" zones to a new site specific single-family residential zone, the "Single Detached (ZS23) – Steveston" zone to permit subdivision into thirty (30) smaller residential lots, including the creation of two (2) new roads, a new rear lane system and a new pedestrian walkway.	RZ 14-674749	5460-5560 Moncton St.	\$7,044
2	Ecowaste Industries Ltd. On January 23, 2017, Council approved an application from Ecowaste Industries Ltd. Ecowaste Industries Ltd. has applied for permission to develop a 65.22 ha (161.14 acres) industrial site at 15111 Williams Road and Richmond Key 1095.	DP 11-566011	15111 Williams Rd. and Richmond Key 1095	\$154,036
3	Keltic (Brighthouse) Development Ltd. On June 11, 2018, Council approved an application from Keltic (Brighthouse) Development Ltd. Keltic (Brighthouse) Development Ltd., has applied to the City of Richmond to create the "High Density Mixed Use and ECD Hub (ZMU37) – Brighthouse Village (City Centre)" zone, and to rezone the property at 6340 No. 3 Road from "Land Use Contract 062" to a new site-specific zone, "High Density Mixed Use and ECD Hub (ZMU37) – Brighthouse Village (City Centre)", in order to permit the development of a commercial, office, residential and institutional use development in the City Centre's Brighthouse Village.	RZ 17-773703	6340 No. 3 Rd.	\$16,620
4	1056023 Holdings Limited Partnership On April 18, 2017, Council approved an application from 1056023 Holdings Limited Partnership to rezone 12320 Trites Road (Attachment 1) from the "Light Industrial (IL)" zone to the "Single Detached (ZS23) – Steveston" zone to permit subdivision into 30 single-family residential lots. The development would also result in the creation of two new roads, a new rear lane system and a new pedestrian walkway. The site previously contained two industrial buildings.	RZ 16-723761	12320 Trites Rd.	\$11,485
5	Westmark Developments Ltd. On January 29, 2018, Council approved an application from Westmark Developments Ltd. to rezone the property at 5400 Granville Avenue from the "Single Detached (RS1/E)" zone to the "Single Detached (RS2/B)" zone, to permit the property to be subdivided into nine lots, with vehicle access from the new road under construction. The subject site is currently occupied by a single-family dwelling, which will be demolished. The applicant advises that the single-family dwelling currently contains a one-bedroom secondary suite. No Building Permits have been issued by the City in relation to the secondary suite.	RZ 13-644768	5400 Granville Ave.	\$5,880

2020 OBI From Developer Contributed Assets				
Ref	Description	RZ/DP Number	Address	OBI
6	S-8135 Holdings Ltd. On July 28, 2014, Council approved an application from S-8135 Holdings Ltd. to rezone 9191 and 9231 Alexandra Road from "Single-Detached (RS1/F)" to a new site-specific zone, "Residential/Limited Commercial (ZMU28) - Alexandra Neighbourhood (West Cambie)", in order to develop 49 three-storey townhouses; including nine (9) live/work units, with an overall floor area ratio (FAR) of 0.9. Amendments of the West Cambie Area Plan (WCAP) are also required.	RZ 14-656219	9191 and 9231 Alexandra Rd.	\$4,604
7	0989705 BC Ltd. On June 25, 2018, Council approved an application from 0989705 BC Ltd. to rezone the properties at 7960 Alderbridge Way and 5333 & 5411 No. 3 Road from "Auto-Oriented Commercial (CA)" to a new site-specific zone; "City Centre High Density Mixed Use (ZMU34) – Lansdowne Village" (Attachment 1), in order to permit the development of a high-density commercial, office and residential use development in the City Centre's Lansdowne Village.	RZ 15-692485	7960 Alderbridge Way and 5333 & 5411 No. 3 Rd.	\$27,941
8	Westmark Developments (Camosun) Ltd. On October 11, 2016, Council approved an application from Westmark Developments (Camosun) Ltd. to rezone 9240, 9248, 9260 Cambie Road from Single Detached (RS1/F) to a site specific zone in order to develop a 59-unit townhouse project. The site is located in the Alexandra neighbourhood.	RZ 15-692812	9240, 9248, 9260 Cambie Rd.	\$5,730
9	Yamamoto Architecture Inc. On March 23, 2015, Council approved an application from Yamamoto Architecture Inc. to rezone 5320, 5340 and 5360 Granville Avenue and 7260 Lynnwood Drive in order to construct a townhouse development with approximately 43 two and three-storey townhouse units. The application includes rezoning the properties from the "Single Detached (RS1/E)" zone to: the "School & Institutional Use (SI)" zone for a 9 m wide expansion to McKay neighbourhood park over a portion of 5320 Granville Avenue and 7260 Lynnwood Drive; and to the "Medium Density Townhouses (RTM3)" zone for the remainder of the subject site.	RZ 12-610630	5320, 5340, 5360 Granville Ave. and Lynnwood Dr.	\$6,894
10	Brighthouse Bus Mall On November 13, 2018, Council approved an application from Brighthouse Bus Mall. At the time of the planning and design of the Canada Line, TransLink acquired sufficient property to enable construction of the Richmond-Brighthouse Station as well as a small off-street bus exchange immediately south of the station. In July 2006, the City and TransLink signed a Memorandum of Understanding (MOU) regarding the design, construction and funding of a bus mall adjacent to the Richmond-Brighthouse Canada Line Station between No. 3 Road and Buswell Street with each party contributing funding towards the bus mall.	DP 11-593871	6300 No. 3 Rd. and 6411 Buswell St.	\$23,503

2020 OBI From Developer Contributed Assets				
Ref	Description	RZ/DP Number	Address	OBI
11	New Tree Asset Infrastructure Through the City's development and permit process, 1,269 new trees have been planted and now require funding to support ongoing asset maintenance (pruning, watering, mulching, pest management, vandalism, infrastructure management, inspection and leaf control). These trees have been planted throughout the community within the following neighbourhood planning areas (Blundell 46, Bridgeport 73, Broadmoor 98, City Centre 398, East Cambie 16, East Richmond 42, Fraser Lands 280, Gilmore 9, Hamilton 5, Sea Fair 18, Sea Island 6, Shellmond 12, Shellmont 7, Steveston 54, Thompson 122, and West Cambie 83). Trees provide many social (calming, lower stress and fatigue), communal (provide privacy, screening and shade) and environmental (moderate climate, improve air quality, reduce storm water runoff, and harbour wildlife) benefits, while also supporting action strategies towards the Climate Emergency and preservation of our community and planet.	Various	Various	\$71,120
12	Patterson Road End A new park located in the road right-of-way of Patterson Road was constructed for the City by a developer (Concord Pacific) as per Park Servicing Agreement #13-650553 and delivered to the City in 2018. The purpose of this submission is to request the funding required to maintain this park. Permanent park features include pedestrian level lighting, asphalt and concrete walkways, seating, picnic tables, a basketball hoop situated on a half court, a drinking fountain, extensive tree and shrub plantings and open lawn areas. The park was approved by Council on various dates as per the Rezoning Considerations (RZ 06-349722).	RZ 06-349722	Patterson Rd.	\$8,924
Total OBI From Developer Contributed Assets				\$343,781
Less: Utility OBI				16,136
Total OBI From Developer Contributed Assets, net of Utility				\$327,645

9. 2020 No Tax Impact Positions

2020 No Tax Impact Positions				
Ref	Requested By	Description	Amount	Tax Impact
1	Planning and Development – Community Social Development	Affordable Housing - Planner 1 - Regular Full-Time (RFT) A RFT Planner 1 is required to support the implementation of the Affordable Housing Strategy. Position duties will include managing the Low-End Market Rental program, policy development, and liaising with stakeholders. To be funded through the Affordable Housing Reserve with no base budget impact.	\$0	-%
2	Planning and Development – Community Social Development	Child Care Program - Planner 1 - Regular Part-Time (RPT) A RPT Planner 1 position is required to continue to support the Child Care section, implement actions in the 2017-2022 Child Care Needs Assessment and Strategy adopted by Council on July 24, 2017, and support planning and design of child care facilities secured as community amenity contributions. To be funded through the Child Care Operating Reserve with no base budget impact.	\$0	-%
Total 2020 No Tax Impact Positions			\$0	-%

10. Emerging Organizational Additional Levels - Recommended for Funding in 2020

Emerging Organizational Additional Levels – Recommended for Funding in 2020				
Ref	Requested By	Description	Amount	Tax Impact
1	Community Services - Parks	City Centre Landscape Maintenance – Public Works Labour and Materials This funding request is to cover increased landscape horticultural service costs for the grounds in our City Centre due to enhanced densification, use and draught/climate change adaptation (irrigation, plant replacement, etc.).	\$98,749	0.04%
2	Finance and Corporate Services - Finance	Tax Clerk - Regular Full-Time (RFT) Since 2000, the number of properties in Richmond have increased by over 38% or almost 23,000 properties while staffing levels in the Tax Section have remained constant. A new Tax Clerk is needed to improve the current level of customer service to the growing number of taxpayers.	\$78,278	0.04%
3	Planning and Development - Community Social Development	Homelessness Coordinator - Regular Full-Time (RFT) The City's Homelessness Strategy identifies the need for a dedicated City position to lead City initiatives related to homelessness. The Homelessness Coordinator position would lead policy development, coordination with external stakeholders, and homelessness outreach activities in the community.	\$131,990	0.06%
4	Planning and Development - Policy Planning	Planner 3 - Regular Full-Time (RFT) This proposed Planner 3 position will play a significant role in the initiation of the proposed update to the Official Community Plan (beginning in early 2020), with a focus on housing choice and affordability, Neighbourhood Service Centre redevelopment, and climate change response; and will advance the update of the 2003 Agricultural Viability Strategy.	\$146,819	0.06%
Total Emerging Organizational Additional Levels – Recommended for Funding in 2020			\$455,836	0.20%

11. Emerging Organizational Additional Levels - Not Recommended for Funding in 2020

Emerging Organizational Additional Levels – Not Recommended for Funding in 2020				
Ref	Requested By	Description	Amount	Potential Tax Impact
1	Community Services - Arts, Culture, and Heritage	Art Truck Leader – Increased Level of Service The Art Truck is a low-barrier after-school program offering arts education, physical activity and healthy snacks. Scaling up this program is an action identified in the Council-approved Arts Strategy and Community Wellness Strategy, and supports the Youth Service Plan.	\$37,477	0.02%
2	Community Services - Parks	Environmental Management and Mitigation Resources are required to manage the increase of pests such as rabbits, chafer beetle, knotweed and hogweed. To comply with federal regulation, the City is also required to ensure that regular operations do not impact or disturb migratory birds.	\$178,776	0.08%
3	Community Safety - Fire Rescue	Communication and Program Development Coordinator - Regular Full-Time (RFT) Richmond Fire Rescue Community & Public Education Plan (COPEP) 2018-23 (endorsed by Council Jan. 29, 2018) was to strategically communicate & deliver safety education. Time required to develop communication tools by current staff reduced public engagements by 58%. Additional staffing is needed to fulfill the plan.	\$100,877	0.04%
4	Community Safety - Fire Rescue	Fire & Life Safety Educator - Regular Full-Time (RFT) Richmond Fire Rescue Community & Public Education Plan (COPEP) 2018-2023 (endorsed by Council Jan 29, 2018) is to deliver fire & life safety education to public schools & at risk community groups. Current staffing levels are unable to fulfill the mandate, 19 presentations last year compared to 30 annually (2013-17).	\$149,743	0.07%
5	Corporate Administration - Legislative Services	Election Reserve – Increase Annual Transfer To adequately fund civic elections, an increase of \$45K for the annual transfer to the Election Reserve is required (\$117K to \$162K annually). The amount will be accumulated through the election reserve and used every 4th year for election costs. \$670K was spent on the 2018 election, which was funded through a one-time additional expenditure in 2018.	\$45,000	0.02%
6	Engineering and Public Works - Facilities	Facilities Services Maintenance Planner - Regular Full-Time (RFT) This position develops all facilities preventative maintenance programs, contracts, equipment repair and replacement, janitorial program. A large number of City facilities have entered into the accelerated ageing category this position is critical to maintain current service levels and reduce costs.	\$87,187	0.04%

Emerging Organizational Additional Levels – Not Recommended for Funding in 2020				
Ref	Requested By	Description	Amount	Potential Tax Impact
7	Engineering and Public Works - Facilities	Facilities Services Project Coordinator - Regular Full-Time (RFT) Coordinates and assists in the planning, procurement and implementation of maintenance projects. A large number of City facilities have entered into the accelerated ageing category this position is critical to maintain current service levels and reduce costs.	\$87,187	0.04%
8	Engineering and Public Works - Fleet	Fleet Technical Analyst - Regular Full-Time (RFT) A Global Positioning System (GPS) pilot program was undertaken on key City vehicles. This initiative proved that a permanent program is required to support routing efficiencies, investigations, and in defense of legal claims and complaints. To support a permanent program, a full-time technical analyst position is required.	\$103,705	0.05%
9	Finance and Corporate Services - Finance	Financial Systems Analyst - Regular Full-Time (RFT) Emerging technologies (middleware, Software as a Service) have increased the complexities of data being consolidated into PeopleSoft. Functionality enhancements, modern systems, and increased focus on internal controls elevate the need to resolve system issues, review best practices, and oversee regression testing.	\$125,000	0.05%
10	Finance and Corporate Services - Finance	Payroll Analyst - Regular Full-Time (RFT) As recommended by the Service Level Review Team, the Payroll Analyst will act as a back up to the Payroll Manager to ensure the timely and accurate payroll processing of Council, Executive and Exempt Groups. The Payroll Analyst will deliver accurate and timely processing of City, Library and Lulu Island Energy Company payroll. The Payroll Analyst will also assist in various PeopleSoft HCM projects such as tax updates and other continuous improvement initiatives.	\$125,590	0.06%
11	Planning and Development - Policy Planning	Policy Program Manager Existing work items and new referrals are leading Policy Planning to examine the need for an Official Community Plan update and Agricultural Strategy update. This will take a substantial amount of existing staff resources, other policy items will be delayed.	\$164,481	0.07%
12	Planning and Development - Transportation	HUB Annual Cycling Education Program in Elementary Schools in Richmond Provision of cycling skills education courses by HUB Cycling to Grade 6 and 7 students in all 38 elementary schools over a revolving two-year period (19 schools per year). Current funding supports cycling education courses at 4 elementary schools per year.	\$75,000	0.03%

Emerging Organizational Additional Levels – Not Recommended for Funding in 2020				
Ref	Requested By	Description	Amount	Potential Tax Impact
13	Richmond Public Library	Two Librarian Positions - Specializing in Youth Would Expand Services and Programs for Richmond Families - Regular Full-Time (RFT) Two specialized librarian positions for children/youth are needed to significantly expand services delivered in and outside library walls and to build new and strengthen existing relationships with City departments, community partners and Richmond families.	\$167,150	0.07%
Total Emerging Organizational Additional Levels - Not Recommended for Funding in 2020			\$1,447,173	0.64%



City of Richmond

Report to Committee




To: Finance Committee
From: Jerry Chong, CPA, CA
Director, Finance
Re: 2020 One-Time Expenditures

Date: November 18, 2019
File: 03-0985-01/2020-Vol
01

Staff Recommendation

That the recommended one-time expenditures totaling \$930,869 as outlined in Attachment 1 of the 2020 One-Time Expenditures staff report, be approved with funding from the Rate Stabilization Account and included in the Consolidated 5 Year Financial Plan (2020-2024).

Jerry Chong, CPA, CA
Director, Finance
(604-276-4064)

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER 	
REVIEWED BY SMT	INITIALS: 
APPROVED BY CAO 	

Staff Report

Origin

One-time expenditure requests are typically non-recurring items for consideration over and above the base annual budget or for items that are recurring in nature but are not required on an annual basis. Council established a Rate Stabilization Account (RSA) to provide funding for such requests. Each year, once the City's accounts from the prior year are finalized, any arising annual surplus is transferred into the RSA. The funds can be used to help balance the budget in order to defer any tax increases or to offset any one-time expenditure requests.

Any approved one-time expenditure requests will be included in the 2020-2024 Consolidated 5 Year Financial Plan (5YFP).

This report supports Council's Strategic Plan 2018-2022 #5 Sound Financial Management:

Accountable, transparent, and responsible financial management that supports the needs of the community into the future.

- 5.1. Maintain a strong and robust financial position.*
- 5.2. Clear accountability through transparent budgeting practices and effective public communication.*
- 5.3. Decision-making focuses on sustainability and considers circular economic principles.*
- 5.4. Work cooperatively and respectfully with all levels of government and stakeholders while advocating for the best interests of Richmond.*

Analysis

For 2020, there are 12 one-time expenditure requests totalling \$2,140,869. The Senior Management Team (SMT) appointed a Review Committee to review and prioritize each request using established ranking criteria. The prioritized requests were also reviewed by SMT and the CAO to finalize a recommendation for Council's approval. There is no tax impact from any of the proposed requests as they will be funded from the RSA which has a balance of \$8,818,511 as of October 31, 2019.

One-Time Expenditure Requests

Table 1 shows the summary of the one-time expenditure requests:

Table 1 – One-Time Expenditure Requests Summary

# of One-Time Expenditures Requested	Recommended Amount (In \$000s)	Under Consideration Amount (In \$000s)	Not Recommended Amount (In \$000s)	Total (In \$000s)
12	\$931	\$1,040	\$170	\$2,141

Attachments 1, 2, and 3 provide a brief description of all one-time expenditure requests with recommendations and non-recommendations respectively provided by SMT and the CAO. Council may change any of the recommendations or may choose to address other one-time funding needs. The Consolidated 5 Year Financial Plan (2020-2024) will be revised for any changes from the staff recommendation.

Table 2 – Rate Stabilization Funding Summary

Council's Strategic Plan	Recommended Amount (In \$000s)	Attachment 1 Reference No.
A Safe and Resilient City	\$276	8, 9
A Sustainable and Environmentally Conscious City	\$50	7
One Community Together	\$120	5
An Active and Thriving Richmond	\$355	2, 3, 4
Strategic and Well-Planned Growth	\$100	1
An Engaged and Informed Community	\$30	6
Total Funding Recommended from Rate Stabilization	\$931	

Table 3 summarizes how the RSA balance is proposed to be utilized as a result of the 2020 Budget Process.

Table 3 – Proposed RSA Utilization

RSA Balance as of October 31, 2019	\$8,818,511
2020 One-Time Expenditures – Recommended (Attachment 1)	(930,869)
2020 One-Time Expenditures – Under Consideration (Attachment 2)	(1,040,000)
Proposed Rate Stabilization of the 2020 Budget	(1,609,318)
Total 2020 Proposed RSA Utilization	(3,580,187)
Balance After Proposed 2020 Utilization	\$5,238,324

A total of \$1,609,318 from the RSA is proposed to be utilized to reduce the tax impact of the proposed 2020 Operating Budget.

Financial Impact

The recommended \$930,869 one-time expenditures requests as outlined in Attachment 1 are proposed to be funded from the Rate Stabilization Account with no tax impact. This recommended amount will be included in the Consolidated 5 Year Financial Plan (2020-2024), should it be approved by Council.

The \$1,040,000 one-time expenditure for 2020 Major Events Funding is under consideration as outlined in Attachment 2. This amount will be included in the Consolidated 5 Year Financial Plan (2020-2024), should it be approved by the General Purposes Committee on December 2, 2019.

As summarized in Table 3, if all amounts are approved, a total of \$3,580,187 is recommended to be funded from RSA as a result of the 2020 Budget Process, which would leave a remaining balance of \$5,238,324.

Conclusion

One-time expenditure requests were prioritized and reviewed by SMT and the CAO. The high priority requests in the amount of \$930,869 as summarized in Attachment 1 are recommended to be approved and included in the Consolidated 5 Year Financial Plan (2020-2024). All amounts approved by Council will be included in the Consolidated 5 Year Financial Plan (2020-2024).

Melissa Shiao, CPA, CA
 Manager, Financial Planning and Analysis
 (604-276-4231)

MS:jy

- Att. 1: One-Time Expenditure Requests – RECOMMENDED
 2: One-Time Expenditure Requests – NOT RECOMMENDED

2020 One-Time Expenditure Requests - RECOMMENDED

Ref	Requested By	Description	Amount
1	Finance and Corporate Services	Development Cost Charges (DCC) Bylaw Major Update The next major DCC update is required by May 2022. Due to the amount of estimates and projections involved in the update of the City's DCC program, staff will need to begin the necessary background and consultation work starting in 2020.	\$100,000
2	Planning and Development	Update Fee Subsidy Program – Administrative Support The Fee Subsidy Program requires both a full-time and a part-time staff position to administer the program as the administrative load is beyond what was originally anticipated. Funding is also required due to Central Fund postponement. Ongoing funding will be requested in 2021.	\$205,378
3	Planning and Development	Update the Youth Service Plan 2021-2031 An updated Youth Service Plan for 2021-2031 will guide the City's programs and services for youth and aid in a unified approach to working with young people across the community. This will ensure that the City is responsive to the needs of youth including the expanded scope of youth 19-24 years.	\$75,000
4	Planning and Development	Update the Seniors Service Plan 2021-2031 An updated Seniors Service Plan for 2021-2031 will guide the Division's programs and services for seniors, ensuring the City is strategic in the allocation of resources and that residents have opportunities to remain active and well across their lifespan.	\$75,000
5	Community Services	Enhanced Hours and Programming for Steveston Heritage Sites In 2017, Council approved funding to increase levels of service at the Steveston Heritage Sites. This level of service continued in 2018 and 2019 and has resulted in a significant increase in visitation across all three sites.	\$119,671
6	Finance and Corporate Services	Upgrade of Live Streaming Video Production Equipment for Council Chambers The current video recording equipment is out of date and an upgrade is required to bring the system up to date. This will ensure less downtime of the live streaming of Council Meetings.	\$30,000

2020 One-Time Expenditure Requests - RECOMMENDED			
Ref	Requested By	Description	Amount
7	Community Services	Sustainable Community Event Initiatives (Wheel Watch and Community Events) Funding is required to continue the momentum on numerous sustainable event programs developed from the City of Richmond Sustainable Event Toolkit. These programs focus on reducing the carbon footprint of event transportation, as well as the decrease of single-use plastic food service materials.	\$50,320
8	Community Safety	Property Use - 2 Bylaw Officer Positions - Temporary Full-Time (TFT) Dedicated to Short term rental Licensing and Enforcement Two additional property use officers are required to provide dedicated enforcement of illegal short-term rentals.	\$200,000
9	Community Safety	Business Licenses - Licensing Clerk - Temporary Full-Time (TFT) - 12 Month Trial This resource will administer a licensing program specific to short-term boarding and lodging. A licensing program would enable the City to pursue agreements with internet providers, to publish business licence numbers to confirm legal operations and not allow listings of illegal operations.	\$75,500
2020 One-Time Expenditures Total - RECOMMENDED			\$930,869

2020 One-Time Expenditure Requests – UNDER CONSIDERATION			
Ref	Requested By	Description	Amount
1	Community Services	2020 Major Events Funding Funding for major events to be held in 2020 is under consideration from the Rate Stabilization Account. If approved by the General Purposes Committee on December 2, 2019, the approved amount will be included in the Consolidated 5 Year Financial Plan (2020-2024).	\$1,040,000
2020 One-Time Expenditures Total – UNDER CONSIDERATION			\$1,040,000

2020 One-Time Expenditure Requests - NOT RECOMMENDED

Ref	Requested By	Description	Amount
1	Richmond Public Library	Automated Materials Handling System and Redesigned Book Return Wall for Brighthouse Branch Introducing customer RFID self check-in kiosks will modernize this aspect of library service, expedite returns and support the reallocation of staff to public service. A redesigned book return wall and viewing window will support public engagement with the technology.	\$108,000
2	Community Safety	Emergency Program Additional Vehicle Emergency Programs requires a dedicated vehicle to provide Community Emergency Preparedness Programs & Community Resilience initiatives, a best practice identified by the BC Auditor General (2018). Staff & volunteers provide education at public events and presentations throughout the City.	\$62,000
2020 One-Time Expenditures Total - NOT RECOMMENDED			\$170,000



City of Richmond

Report to Committee

To: Finance Committee

Date: November 19, 2019

From: Jerry Chong, CPA, CA
Director, Finance

File: 03-0985-01/2020-Vol
01

Re: 2020 Council Community Initiatives One-Time Expenditures

Staff Recommendation

That the one-time expenditure request as outlined in Attachment 1 of the 2020 Council Community Initiatives One-Time Expenditures staff report, be received for information and staff be directed if the amount should be funded from the Council Community Initiatives Account and included in the Consolidated 5 Year Financial Plan (2020-2024).

Jerry Chong, CPA, CA
Director, Finance
(604-276-4064)

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER 	
REVIEWED BY SMT	INITIALS
APPROVED BY CAO 	

Staff Report

Origin

On July 13, 2015, Council established a Council Community Initiatives Account with an initial balance of \$3.0M transferred from the Gaming provision. The purpose of the account is to enable Council to utilize a portion of gaming revenue towards one-time initiatives that address social, environmental, recreation and sports, heritage, arts and culture, safety and security, or infrastructure needs in accordance with the established Terms of Reference. One-time expenditure requests are typically non-recurring items for consideration over and above the base annual budget.

Council also approved a gaming revenue allocation model with 2% of budgeted gaming revenue toward the Council Community Initiatives Account.

All expenditures from this account are at Council's discretion. Any approved one-time expenditure requests will be included in the 2020-2024 5-Year Financial Plan (5YFP).

This report supports Council's Strategic Plan 2018-2022 #5 Sound Financial Management:

Accountable, transparent, and responsible financial management that supports the needs of the community into the future.

- 5.1. *Maintain a strong and robust financial position.*
- 5.2. *Clear accountability through transparent budgeting practices and effective public communication.*
- 5.3. *Decision-making focuses on sustainability and considers circular economic principles.*
- 5.4. *Work cooperatively and respectfully with all levels of government and stakeholders while advocating for the best interests of Richmond.*

Analysis

Approved Expenditures

At the Council meeting on October 15, 2019, Council approved the following:

- (8) *That Council approve funding of \$241,000 from the Council Community Initiative Account, to the Richmond Tennis Club, and that the expenditure be included in the Consolidated 5 Year Financial Plan (2020-2024), as outlined in the staff report titled, "Replacement of the Richmond Tennis Club Bubble," dated August 29, 2019, from the Director, Recreation and Sport Services.*

2020 Projected Funding

The Terms of Reference for this account suggests the maximum annual distribution should not exceed 50% of prior year's ending account balance in order to ensure funding availability for future years; however, Council has the discretion to waive this limitation.

The balance in the Council Community Initiatives Account at October 31, 2019 is \$1,000,849, after providing funding for the replacement of the Richmond Tennis Club Bubble grant. Any unallocated amount will remain in the Council Community Initiatives Account for distribution in future years.

The estimated annual gaming revenue budget for 2019 is \$14.5M; therefore \$290,000 (2% as part of the gaming revenue allocation model) is budgeted to be allocated toward the Council Community Initiatives Account.

2020 Request for Funding

There is one Council Community Initiative expenditure request received to date as presented in Attachment 1.

Table 1 summarizes the Council Community Initiatives Account should the proposed request be approved by Council.

Table 1 – Proposed CCIA Utilization

CCIA Balance as of October 31, 2019*	\$1,000,849
2020 Proposed CCIA Expenditures – Pending Decision	(50,000)
Balance After 2020 Proposed CCIA Expenditures	\$950,849

*After the approved funding of the Replacement of the Richmond Tennis Club Bubble.

Financial Impact

The one-time expenditure request as outlined in Attachment 1 will be funded from the Council Community Initiatives Account with no tax impact and included in the Consolidated 5 Year Financial Plan (2020-2024).

Conclusion

This report summarizes a one-time expenditure request initiated by members of Council to be funded by the Council Community Initiatives Account. The amount approved by Council will be included in the Consolidated 5 Year Financial Plan (2020-2024).

Melissa Shiao, CPA, CA
Manager, Financial Planning and Analysis
(604-276-4231)

MS:jy

Att. 1: 2020 Council Community Initiatives Account Requests

2020 Council Community Initiatives Account Requests

Ref	Division	Description	Requested Amount	Status
1	Community Services	Steveston Harbour Authority Archway Sign The Steveston Harbour Authority (SHA) is requesting funding of \$50,000 to place a new archway on City property at Sixth Avenue. The SHA and Musqueam Indian Band is providing \$100,000 toward the total cost of \$150,000.	\$50,000	Pending Committee Resolution on Nov. 26, 2019



City of Richmond

Report to Committee

To: Finance Committee

Date: November 5, 2019

From: John Irving, P.Eng., MPA
General Manager, Engineering and Public Works
Chief Executive Officer, Lulu Island Energy
Company

File: 10-6600-10-01/2019-Vol 01

Jerry Chong, CPA, CA
Director, Finance
Chief Financial Officer, Lulu Island Energy
Company

Re: Lulu Island Energy Company – 2020 Operating and Capital Budgets

Staff Recommendation

That the Lulu Island Energy Company report titled “Lulu Island Energy Company- 2020 Operating and Capital Budgets”, dated November 5, from the Chief Executive Officer and Chief Financial Officer, Lulu Island Energy Company be received for information.

John Irving, P.Eng., MPA
General Manager, Engineering and Public Works
Chief Executive Officer,
Lulu Island Energy Company
(604-276-4140)

Jerry Chong, CPA, CA
Director, Finance and
Chief Financial Officer,
Lulu Island Energy Company
(604-276-4064)

Att 1:

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER 	
REVIEWED BY SMT	INITIALS:
APPROVED BY CAO 	

Report

DATE: November 5, 2019

TO: LIEC Board of Directors

FROM: Alen Postolka, P.Eng, Manager, District Energy

Re: **Lulu Island Energy Company – 2020 Operating and Capital Budgets**

Background

The City incorporated Lulu Island Energy Company Ltd. (LIEC) in 2013 for the purposes of carrying out the City's district energy initiatives. Currently, LIEC owns and operates the Oval Village District Energy (OVDEU) and Alexandra District Energy (ADEU) Utilities while concurrently advancing new district energy opportunities and completing the due diligence planning process for the City Center District Energy Utilities (CCDEU) project.

The purpose of this report is to present the 2020 Operating and Capital Budgets to the Board for their approval. If approved by the Board, staff will present LIEC's 2020 Operating and Capital Budgets to Council for information in order to follow the City's reporting process.

2020 Operating Budget

The ADEU and OVDEU service areas and the associated operations, assets and liabilities are administered by LIEC. All capital and operating costs are recovered through revenues from metered billings, ensuring that the business is financially sustainable.

Both the OVDEU and ADEU are still new utilities in the early stages of operation, and even though some of the actual utility (electricity and natural gas), operation and maintenance past costs have been used for budgeting, the majority of these costs are still largely based on projections.

Customers' energy use (building performance) is estimated based on the historical metered energy consumption, average building performance in the region and energy modeling reports prepared by the buildings' designers. The 2020 Operating Budget incorporates estimated revenues and expenses from the ADEU and OVDEU based on the current projections, development activity and timing of connections for the year.

LIEC is classified as a Government Business Enterprise (GBE). As a GBE, LIEC is required to apply International Financial Reporting Standards (IFRS) in the preparation of its financial statements. Staff have prepared the 2020 Operating Budget below under IFRS:

2020 Operating Budget under IFRS

	2020 Budget	2019 Budget	\$ Changes	% Change
Revenues				
Metered Billings (Quarterly)	\$4,719,042	\$3,805,116	\$913,926	24%
Service fee	981,486	962,241	19,245	2%
	5,700,528	4,767,357	933,171	20%
Cost of Sales				
Contracts	792,325	751,809	40,516	5%
Utilities	1,030,750	896,938	133,812	15%
Amortization	1,258,025	1,163,066	94,959	8%
	3,081,100	2,811,813	269,287	10%
Gross margin	2,619,428	1,955,544	663,884	34%
General and Administration Expenses				
Salaries and benefits	732,835	669,053	63,782	10%
Administration expenses	149,900	136,121	13,779	10%
Insurance	95,000	70,000	25,000	36%
Professional Fees	69,815	65,000	4,815	7%
	1,047,550	940,174	107,376	11%
Net income before other items	1,571,878	1,015,370	566,508	55%
Contributions and Financing expense				
Developer contributions	169,888	106,760	63,128	59%
Energy modeling review fee	51,000	16,000	35,000	219%
Net financing expense	(481,423)	(429,339)	(52,084)	12%
	(260,535)	(306,579)	46,044	(15%)
Net Income	\$1,311,343	\$708,791	\$602,552	85%
Earnings before interest, taxes and amortization (EBITA)				
Net income per above	1,311,343	708,791	602,552	85%
Net financing expense	481,423	429,339	52,084	12%
Amortization expense	1,258,025	1,163,066	94,959	8%
EBITA	3,050,791	2,301,196	749,595	33%

Revenues

The metered billings reflect full year energy sales to four buildings which were connected partway through 2019 and partial year of energy sales for two new buildings connected in 2020. The budgeted sales are based on the best estimate of buildings connections timing, and customers' energy usage. The metered billings are expected to increase in 2020 by \$913,926 to \$4,719,042 (2019 – 3,805,116) due to:

- An increase of \$758,271 in metered billing due to additional energy use as a result of full-year service of four buildings that were connected for only parts of 2019 (Trafalgar, Spark, Westmark and Intracorp River Park Place 2) and partial 2020 connections of two new buildings (Polygon Berkeley House and ASPAC 12); and
- An increase of \$155,655 in metered billings due to the annual utility rate increase.

The service fee of \$981,486 (2019 - \$962,241) is for LIEC services of advancing district energy opportunities in the City, which results in numerous benefits to the City and the Richmond community. Staff and specialty consultants working on low carbon district energy initiatives are covered by the Service Fee. With or without LIEC, the City would need to fund these costs in order to successfully implement district energy initiatives for the City and position itself at the forefront of tackling local and global environmental challenges our world faces. The City identified district energy utilities (DEUs) as a leading strategy to achieve City's GHG reduction goals. To date, it is estimated LIEC District Energy system have resulted in a reduction of over 5,000 tonnes of GHG emissions. The proposed service fee amount for 2020 has been increased by 2% (Consumer Price Index).

The overall budgeted revenue is expected to increase by \$933,171 to \$5,700,528 (2019 – \$4,767,357).

Cost of Sales

The cost of sales is the accumulated total of expenses attributable to the metered billing revenue, which includes contract services, utilities (electricity and natural gas), and amortization expenses. The total contract expense is increased by \$40,516 to \$792,325 (2019 - \$751,809). The increase of this expense is due to additional operation and maintenance activities needed to service additional buildings.

Utility expenses are projected to increase by \$133,812 to \$1,030,750 (2019 - \$896,938). This increase is due to utility rates increases and increased energy sales to customers. Additional energy demand will result in increased use of distribution pumps, geo-field pumps, cooling towers, and natural gas boilers which are used to generate and circulate energy through the distribution piping system to the customer buildings.

The amortization expense increased due to capital asset additions. Overall, the cost of sales is expected to increase by \$269,287 to \$3,081,100 (2019 - \$2,811,813).

The gross margin percentage has increased by 5% to 46% (2019 – 41%) due to economies of scale. The ADEU service area is utilizing more renewable energy sources to meet heating demand while consuming less conventional energy sources.

General and Administration Expenses

The general and administration expenses are expenditures that LIEC incurs to support business activities, such as salaries and benefits, administration, professional fees, insurance, etc.

Table 1: General and Administration Expense Percentage of Revenue

	2020	2019
Percentage of Revenue		
Salaries and benefits	13%	14%
Administration expense	3%	3%
Professional fees	1%	1%
Total General and Administration Expense percentage	18%	20%

The budgeted general and administration expenses are projected to increase by \$107,376 to \$1,047,550 (2019 – \$940,174) due to:

- Salaries and benefits - The increase of \$63,782 is due to the addition of two students, as well as adjustments to existing salaries and fringe benefits based on the City's forecasted annual increases.
- Insurance – The premium is expected to be higher due to a general insurance rate increase and the additional capital assets being insured.
- Administration expense – the administration expense is increased by \$13,779 to \$149,900 (2019 - \$136,121). The administration expense includes telephone, supplies, professional dues, memberships and printing expenses. This increase is mainly due to the growth of the business. The administration expense also includes overhead allocation paid to the City of Richmond for the day-to-day support that LIEC receives from City staff. Specifically, the overhead allocation paid by LIEC to the City of Richmond in 2020 is estimated at \$69,500 (2019 – 65,408).

Overall, G&A expenses as a percentage of revenues are at 18% for 2020 versus 20% for 2019.

Contributions and Financing Costs

The contributions and financing costs section represents other sources of revenue and financing costs for the business, which include:

- Developers contributions (energy transfer station fee) – This revenue refers to all the distribution piping systems, energy transfer stations and construction costs inside the development property line. These costs are paid by developers. LIEC owns these capital assets, and recognizes a contribution from developers for the amount reimbursed.

- The current energy modeling review fee is based on 2% of building permit fees. It is estimated that an additional 17 permits will be reviewed in 2020.
- Net financing expense – It is the net result of the finance cost of concession liabilities in the year, offset by interest income and other recoveries. The financing expense represents the financing costs incurred by LIEC through the OVDEU concession agreement with Corix. The funding through concession agreement is used to finance the construction of the capital assets which will result in an increase in the total amount of fixed assets appearing on the LIEC balance sheet. The net financing cost is expected to increase by \$52,084 to \$481,423 (2019 – \$429,339). The increase is due to the addition of LIEC acquired assets through the concession agreement and concession obligations on funding used to build those assets in the OVDEU service area.

Net Income and Earnings Before Interest, Taxes and Amortization (EBITA)

The net income is expected to be \$1,311,343 in 2020. EBITA, used to evaluate LIEC's financial performance, is expected to increase by \$749,595 to \$3,050,791 for the budgeted year. EBITA as a percentage of revenue is 54% for 2020 compared to 48% in 2019.

LIEC's financial sustainability and future growth must be taken into consideration when reviewing its EBITA and net income. LIEC's success is dependent upon developing in-house expertise and placing earnings in provision account for the future capital replacement as the existing infrastructure components reach end of life. Other important factors are the planning of future projects, which includes research and development, and exploratory reviews of future technology and opportunities. Consistent with the corporation's financial plan objectives, net income will be maintained in LIEC's equity in order to fund future capital replacements and to ensure long term rate stability for rate payers.

2020 Capital Budget

Richmond continues to see sustained growth through development activity. Table 1 below represents anticipated development timelines in the current DEU service areas over the next five years.

Table 1: Estimated Development Timing for Future Connections (floor area in ft²):

Square Footage	2020	2021	2022	2023	2024
Current Service Areas					
Alexandra DEU (ft²)	456,681	290,520	250,000	250,000	250,000
Oval Village DEU (ft²)	368,459	760,669	310,540	736,000	-
City Centre DEU (ft²)*	-	944,279	3,011,294	250,863	767,396
Total (ft²)	825,140	1,995,468	3,571,834	1,236,863	1,017,396
Cumulative (ft²)	4,988,578	6,984,046	10,555,880	11,792,743	12,810,139

*Assume the building connections under the interim city centre serving strategy; first connection expected in 2021

By 2024, it is estimated that LIEC will be servicing 12,810,139 ft² of floor area if development proceeds as planned. This figure is up 308% from the area currently serviced in 2019. In established service areas, this growth requires expansion of the existing district energy infrastructure in order to service new developments. Continuous, ongoing investment in the optimization of the existing infrastructure is required to maintain service levels and protect the assets. This growth also requires advanced planning of new district energy networks. Investment in advanced planning allows LIEC to look at, and take advantage of, new technologies and practices to improve operational efficiencies and accrue additional financial and environmental benefits. LIEC's capital budget ensures that appropriate funding is secured to deliver this work.

Alexandra DEU

There are currently ten buildings connected to the system, with three more residential buildings will be commissioned in late 2019 and early 2020. Some of the work relating to these new connections will be carried over in to 2020. Additionally, some of the system improvements included in the 2019 Capital Budget are still in progress and work will also be carried over in to 2020.

New Connections

In 2020, the design and construction of an energy transfer stations (ETS) for one new development (Primstone Gardens - 4008 Stolberg) within the ADEU service area is required. The estimated cost for this project is \$530,000, which will be funded from Service Connection Installation Fees contributed by the developer. Initial funding will come from the LIEC provision account and will be repaid after the contribution from the developer is received.

System Upgrades and Feasibility Studies

The capital projects includes upgrading the pipe support frame structure at the energy plant to make it more robust and ready for the Phase 5 expansion, as well as conducting a feasibility study to look at several electrical backup capacity options, including solar panels with batteries. The estimated cost of this work is \$55,000.

City Centre DEU

Eight developments, comprising of approximately 4.5 million square feet of residential, commercial, and hotel uses, have committed to construct and transfer ownership of low carbon energy plants to LIEC at no cost to LIEC. LIEC will operate and maintain these energy plants to provide heating and cooling services to these developments. As part of 2019 approved capital projects, Staff continue to engage with an outside engineering consultant to provide support to the developers' design teams, and to peer review the designs on behalf of LIEC during the detailed design of these energy plants. This work will continue in 2020.

When the construction of the energy plants begin, LIEC will need to engage an outside engineering consultant to provide inspections during construction and sign off after the commissioning of the low carbon centralized energy plants to ensure the infrastructure meets LIEC standards. As staff continue to secure commitment from upcoming developments within the City Centre area to provide low carbon energy plants, additional engineering support will be needed to work with the developers on their designs. Based on the estimated pace of development in the City Centre area, the estimated cost of this work in 2020 is \$525,000.

Advanced Design

Due to the continued fast pace of development in the City Centre area, advanced design activities are required in 2020 to support development and execution of plans to provide district energy services throughout the City Centre Area. The scope of work includes, but is not limited to:

- Advanced design for new and upcoming developments including DEU corridors and servicing plans;
- Professional fees to develop and secure DEU-ready building base;
- Professional fees to support negotiation and implementation of contracts to deliver future district energy services in the City Centre area (i.e. due diligence with Corix);
- Professional fees to support new business development such as alternative servicing models and strategies (i.e. financing options with Canada Infrastructure Bank);
- Professional fees to evaluate new technologies and practices to ensure existing and future systems are optimized; and

The cost for the above work will be funded from the approved 2019 Advanced Design capital budget.

Oval Village DEU

Currently the OVDEU services nine buildings, containing over 1,990 residential units and 2.2 million square feet. All capital funding for the OVDEU will be financed by Corix Utilities through the OVDEU concessional agreement. As defined by the terms of the concession agreement, the OVDEU 2020 capital plan is under review by Staff. Once the review has been completed, Staff will submit it to the Board for their approval.

The following funding sources are recommended to finance the 2020 Capital Projects:

Developer Contributions

Within the existing DEU service areas, Developers are responsible to fund the design and construction of ETS (energy transfer station) and onsite piping infrastructure which is located within their property.

LIEC Provision Account

Staff have completed financial analysis of the projected cash flow. The analysis shows that LIEC can fund the 2020 capital projects internally through the provision account while maintaining a positive cash balance.

The summary of the 2020 LIEC Capital Projects and recommended funding are presented in Table 2 below.

Table 2: 2020 Capital Projects and Funding Summary

	Total Capital Budget	LIEC Provision Account	Developer Contribution
<i>Alexandra DEU</i>			
<i>New Connection</i>			
• Primstone Gardens (4008 Stolberg)	\$530,000	-	\$530,000
• LIEC PM costs			
<i>System Upgrades and Feasibility Studies</i>			
• Upgrade the pipe support frame structure at energy plant	\$55,000	\$55,000	-
• Feasibility study of several electrical backup capacity options			
<i>Interim City Centre DEU</i>			
<i>Centralized Energy Plant Developments</i>			
• Engineering consultant for design support and peer reviews	\$525,000	\$525,000	-
• Inspections and construction support			
• LIEC PM costs			
Total	\$1,110,000	\$580,000	\$530,000

Conclusion

The 2020 Operating and Capital Budgets are presented based on staff's best estimates and assumptions available at the time of writing. The recommended capital budget for 2020 is \$1,110,000. In order to move ahead with the delivery of the 2020 capital projects, staff recommend that the 2020 capital projects be approved with funding secured from the developer contributions (\$530,000) and the LIEC Provision Account (\$580,000).



Helen Zhao, CPA, CA
Controller

- Att. 1: District Energy Utility Services
- Att. 2: Alexandra DEU Service Area map
- Att. 3: Oval Village DEU Service Area map

Attachment 1 – District Energy Utility Services

The City incorporated Lulu Island Energy Company Ltd. (LIEC) in 2013 for the purposes of carrying out the City's district energy initiatives. LIEC owns and operates the Alexandra District Energy (ADEU) and Oval Village District Energy (OVDEU) Utilities and advances new district energy opportunities. Table 1 below provides a summary of the developments connected under the DEU service areas to-date.

Table 1 – District Energy Utility Service Areas

	Buildings To-Date	Residential Units To-Date	Floor Area	
			To-Date	Build-out
Alexandra District Energy Utility	10	1,736	1.9M ft ²	4.4M ft ²
Oval Village District Energy Utility	9	1,990	2.2M ft ²	6.4M ft ²
City Centre District Energy Utility	8 ⁽¹⁾	3,239 ⁽¹⁾	4.5M ft ² ⁽¹⁾	48M ft ²
DEU-Ready Developments ⁽²⁾	17	4,524	5.3M ft ²	N/A
Total Connected Floor Area			4.1M ft² ⁽³⁾	58.8M ft²

(1) Commitments secured from upcoming developments in the City Centre; first connection expected in 2021.

(2) DEU-Ready developments are designed to connect to the City Centre district energy system at a future point.

(3) The "To-Date Connected Floor Area" figure corresponds to constructed developments currently served by a DEU.

Both the West Cambie and the Oval Village neighbourhoods are experiencing rapid redevelopment. LIEC has been growing to meet this increased energy demand, while maintaining exceptional reliability and quality of service.

Alexandra District Energy Utility (ADEU)

ADEU provides heating and cooling services to seven residential buildings in the ADEU service area, the large commercial development at "Central at Garden City", the Richmond Jamatkhana temple and Fire Hall No. 3, comprising over 1,735 residential units and over 1.9 million square feet of floor area (See Attachment 2). While some electricity is consumed for pumping and equipment operations, almost 100% of this energy is currently produced locally from the geo-exchange fields in the greenway corridor and West Cambie Park, and highly efficient air source heat pumps.

The following table represents anticipated development connection timelines for the next three years:

Table 2: Development Timing in ADEU Service Area

	Anticipated Occupancy
Westmark (Phase 2)	2020
Polygon West (Berkley House)	2020
Primstone Gardens (4008 Stolberg)	2021
Ex-Jingon	2021
Alexandra Gate (Mandarin)	2022

Oval Village District Energy Utility (OVDEU)

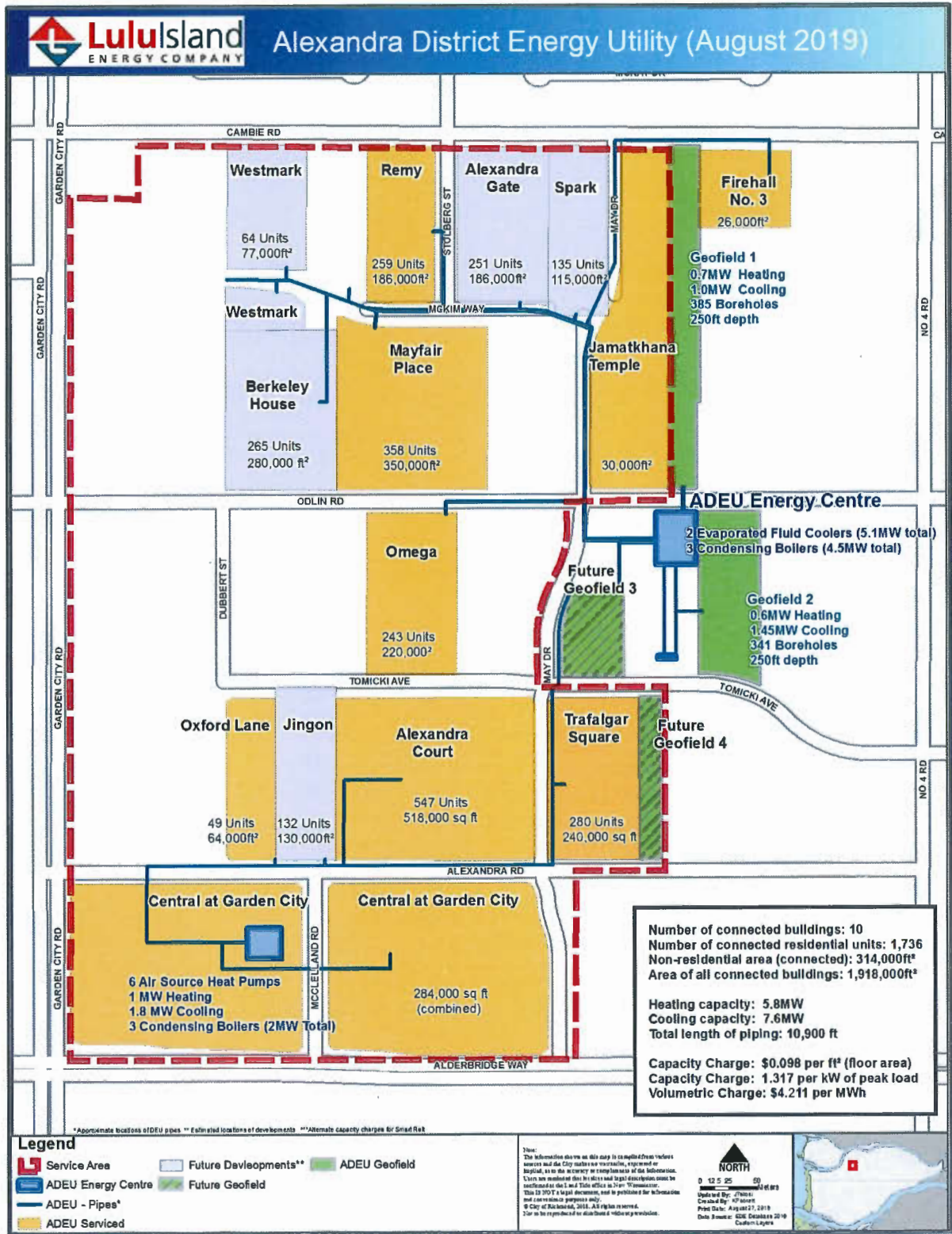
In 2014, LIEC and Corix Utilities (Corix) entered into a 30 year concession agreement, with LIEC maintaining the ownership of the utility. OVDEU services nine buildings in the OVDEU service area, containing over 1,990 residential units (see Attachment 3). Energy is currently supplied from the two interim energy centres with natural gas boilers which combined provide 11 MW of heating capacity. When enough buildings are connected to the system, a permanent energy centre will be built which will produce low-carbon energy. OVDEU is planned to harness energy from the Gilbert Trunk sanitary force main sewer through the implementation of the permanent energy centre in 2025.

The following table represents anticipated development connection timelines for the next three years:

Table 3: Development Timing in OVDEU Service Area

	Anticipated Occupancy
ASPAC Lot 12	2020
Landa – 7100 Elmbridge Way	2021
Onni Riva Ph3 Bldg 4	2021
Onni Alderbridge (Onni Riva 5)	2021
Park Residence - 6333 Mah Bing	2022
ASPAC 13	2022

Attachment 2 – Alexandra Neighbourhood and ADEU Service Area Informational Map



R:\Engineering\Planning\Shared\ArcMap\ArcMap Projects\DEU_Maps\ADEU Updated Maps\ADEU_Proposed_Letter_August_2019.pdf

Lululand
ENERGY COMPANY

Oval Village District Energy Utility (August 2019)

Legend

- OVDEU - Piping
- OVDEU Service Area
- OVDEU Service
- Future Developments
- OVDEU Energy Centres

Interim Energy Centre 3 Boilers (12MW total)

- Riva 3: 165 units, 195,000 ft²
- Riva 2: 139 units, 197,000 ft²
- Riva 1: 170 units, 164,000 ft²
- Tempo: 240 units, 215,000 ft²
- River Park Place 1: 200 units, 192,000 ft²
- River Park Place 2: 260 units, 342,000 ft²
- 2 River Green: 174 units, 323,000 ft²
- Cadence: 245 units, 298,000 ft²

Interim Energy Centre 2 Boilers (3MW total)

- Carrera: 335 units, 377,000 ft²

Map Statistics:

- Number of connected developments: 9
- Number of connected residential units: 1,990
- Area of all connected buildings: 2,242,000ft²
- Heating Capacity: 15MW
- Total length of piping: 5,000ft
- Capacity Charge (2019): \$0.0536 per ft² (floor area)
- Volumetric Charge (2019): \$32.950 per MWh

Map Notes:

- * Approximate location of OVDEU piping
- ** Estimated location of development
- This information is for informational purposes only. It is not intended to be used for any other purpose. The information is provided as a guide only and is not intended to be used for any other purpose. The information is provided as a guide only and is not intended to be used for any other purpose.

Map Details:

- Map Date: August 27, 2019
- Map Scale: 1 inch = 100 feet
- Map Author: Lululand Energy Company
- Map Reviewer: Lululand Energy Company
- Map Version: 1.0