City of Vancouver

Consulting services for baseline financial review

Phase A – Financial Review
Final Report
November 2019

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Introduction

- EY has been engaged by the City of Vancouver to undertake an external review of the City's baseline financial position and identify modernization initiatives to build financial capacity for the future through improvements in service delivery and revenue models.
- This report is for Phase A of the engagement and is meant to provide Council with a baseline knowledge of the City's current financial health and key financial challenges by providing the following:
    - a) Summary of the City's financial status and health and key financial challenges over the next years to inform decision-making in the 2020 budget process
    - b) Review of Staff's financial sustainability and capacity analysis including financial health metrics and targets
    - c) Feedback, insights, and perspectives on risks and opportunities in key financial sustainability and capacity metrics
    - d) Review of the sources and amounts of funds allocated over the past 10 years to City and Council priorities
    - e) Recommendations on incorporation of a gender lens when reviewing the budget
- The findings and resulting analysis is driven by financial information that was provided by the City's Finance team, a review of relevant documents and reports, and a series of interviews with stakeholders across the City of Vancouver, including four sessions with City Councillors. EY also conducted research around other leading practices in the municipal space in Canada, and leveraged what we have learned in previous similar engagements
- Items (a), (b) and (c) above were completed using a financial review framework tailored for the City which was developed in consultation with Council and Staff. This framework is meant to be a tool that can guide financial decision making and evaluate options/trade-offs related to funding decisions in the future – both by staff and council
- The financial metrics used to assess financial health were developed using a combination of metrics currently measured by the City, metrics employed by other leading Canadian municipalities (AAA rated), and metrics used by credit rating agencies. A scorecard was developed using these metrics and a 5 year historical trend analysis was done to gauge the City's performance between 2014-18 and identify strengths and challenges

Introduction (cont'd)

- The financial health review and trend analysis of the City's expenditures and revenues shows the City to be in a fiscally stable position with the ability to meet its obligations through revenue generated from its own sources and without over-reliance on debt. An analysis of the scorecard finds that in 2018 the City saw positive or stable trends in 8 of the 11 indicators, compared to the preceding 4 year period (2014-17) which points to sound financial management practices and fiscal discipline, particularly in the areas of financial vulnerability and flexibility. These findings have also been corroborated by credit-rating agencies (Moody's/Standard & Poor) which have provided the City with the highest possible credit rating
- As illustrated through the Financial Condition Scorecard, in line with Council priorities and item (e) above, an "Equity" pillar, which is unique to Vancouver, was added to the financial review framework along with recommendations for responsive budgeting that applies an intersectional lens to equity-seeking groups and the removal of barriers they face to equal participation in society
- For item (d) above, a 10 year expenditure and revenue trend analysis is focussed entirely to identify Y-o-Y increases or decreases in the City's expenditures and revenues. This includes the City's operating and capital budgets, and the Property Endowment Fund (PEF) In areas where exceptions were identified to historical trends, City staff were engaged to assist in identifying factors which these were attributed to, and have been provided in this report
- EY did not independently review the operations, management, or results or individual services, and did not assess service levels or their appropriateness. Factors that have been identified in the analysis that relate to services have been provided by City staff

1. Review of Baseline Financial Health

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Our Approach

1 Creation of a draft financial health review framework (May 3rd week - June 1st Week)

Review of City's financial policies, plans, and strategies → Review of financial health evaluation frameworks of other jurisdictions → Review of financial health evaluation methodology of credit rating agencies → Creation of an indicative financial health review framework

2 Validation and finalization of financial health review framework (June 1st Week - June 3rd Week)

Obtain Council input on financial pillars → Working sessions on financial principles and metrics with Finance stakeholders → Finalization of metrics and evaluation methodology → Issue data request for financial health scorecard

3 Creation and analysis of financial health scorecard (June 3rd Week - July 3rd Week)

Collect and analyze data → Consult with Finance stakeholders to understand variances in metrics → Develop financial condition scorecard and trend analysis → Present findings on baseline financial health

Financial Health Evaluation Framework – Financial Pillars

After consultations with Council and Finance stakeholders, the following pillars were selected to set the foundation for a baseline financial review of the City of Vancouver. Together, these pillars encompass the existing and new financial principles/polices listed in the City's fiscal plan and financial priorities of the new Council.

These pillars are common ones that are recognized by other municipal organizations, and encompass the factors that are tracked by credit rating agencies (particularly Vulnerability and Flexibilty). The exception is Equity, which is specific to Vancouver, reflecting its priorities. Each addresses certain components of financial health that are tracked by the City and by credit rating agencies.

Pillar	Description	Financial Components Covered
Sustainability	The ability to deliver services in a financially sustainable manner, maintain services at desired and regulated levels, and maintain assets in a state of good repair, through appropriate tax or rate hikes, and without disruptive cuts to services	• Tax and utility rates • Capital reserves • Asset Health
Vulnerability	The volume and predictability of own-revenue sources, reliance on external funding, and the resultant risk to meet financial obligations in the event of external "shocks"	• Development cost levies • Own source revenue • Operating balance
Flexibility	The ability to change debt levels or leverage liquidity to meet financial obligations in a sustainable manner without undue pressure on residents	• Debt • Liquidity • Operating reserves
Equity	The ability to ensure that the City's financial decisions are having a positive impact on the advancement of equity-seeking groups and the removal of the barriers they face to equal participation in society.	• This pillar is not restricted to individual financial components, but measures equity of impact of financial decisions

Financial Health Evaluation Framework – Financial Principles (1/2)

Financial principles, each governing a certain aspect of financial health, were developed under each of the four pillars to guide financial decision making at the City. The principles were derived from the City's existing financial principles, objectives of the City's budget process, and strengths and challenges of the City identified by credit rating agencies.

No attempt has been made to prioritize the principles, rather they are intended to be used in an integrated fashion to achieve a balance amongst the 4 financial pillars. The objective is to provide decision makers with a frame of reference to evaluate the financial impacts of decisions and support conversations around trade-offs.

Principle	Description
Pillar 1: Sustainability	
Maintain appropriate and responsible taxes and utility rates	The City will strive to deliver its desired and mandated service outcomes through reasonable and responsible tax and utility rates, without placing undue financial pressures on its residents and businesses
Ensure capital spending is sustainable and affordable	The capital plan and capital expenditures shall be continually reviewed to ensure that the outlay is affordable, and that the subsequent operating impact of capital can be borne by the City in a sustainable manner
Manage capital assets in a state of good repair	The City's capital assets shall be maintained in a state of good repair and replaced in a timely manner over their lifecycle to ensure they are able to perform at the level required to deliver Council's desired service outcomes
Build resiliency towards climate change	The City will ensure that necessary financial investments and safeguards are in place to protect the City's assets against climate change and build financial resilience against events that could cause shocks or stresses to the City's finances

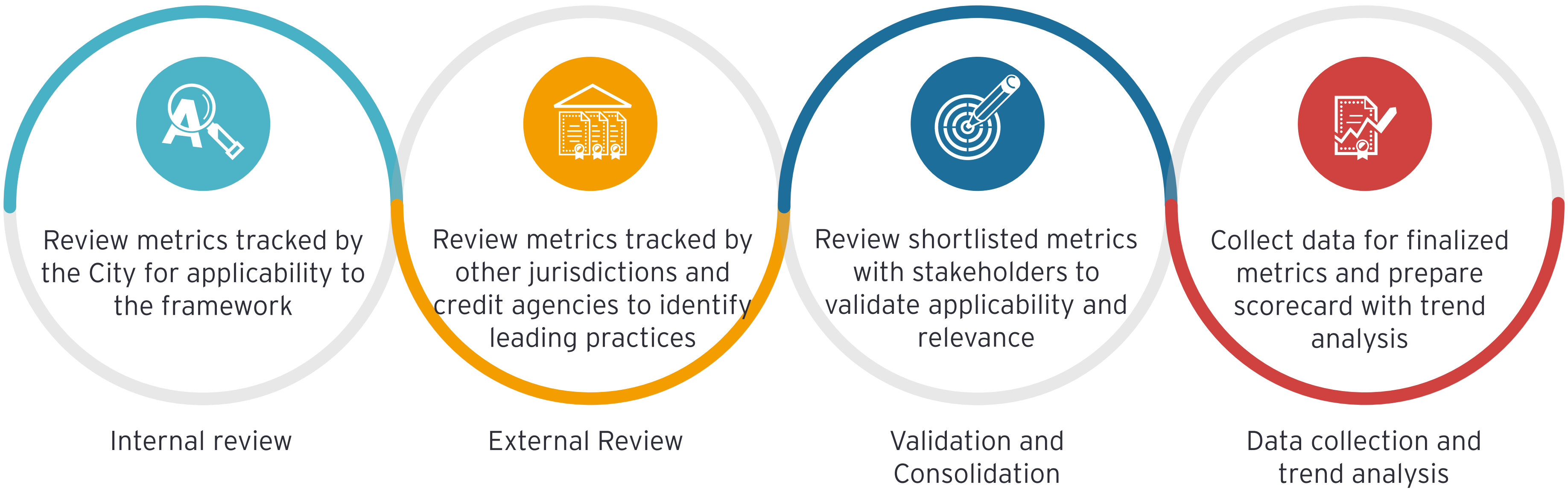
Financial Health Evaluation Framework – Financial Principles (2/2)

Principle	Description
Pillar 2: Vulnerability	
Balance growth-related investments with growth-related revenues	The City will ensure that growth pays for growth, and that the existing generation of tax payers are not burdened to finance growth-related capital investments
Maintain stable and predictable revenue streams	The City will build and maintain stable streams of own-source revenue that are within its control to ensure it can meet its obligations even in the event of external economic shocks and uncertainties
Understand long-term impact of financial decisions	The City will evaluate the long-term impact of all financial commitments to ensure financial decisions related to expenditure and trade-offs are made with adequate line-of-sight into affordability and the City is not financially vulnerable in the future due to decisions made today
Pillar 3: Flexibility	
Maintain budgetary flexibility to manage opportunities and priorities	The City's budget shall be flexible enough to adjust revenues or expenditures in the face of external or internal economic shocks, without impacting its essential/mandatory services
Build adequate liquidity to manage obligations	The City will ensure it maintains adequate liquidity and cash flow from its operations to be able to meet its obligations
Maintain affordable levels of debt	The City will maintain an affordable and manageable level of debt required to achieve desired service outcomes, while minimizing the impact of borrowing to the tax payer
Mitigate fluctuations in tax and rate revenue	The City will ensure it builds the capacity to meet its obligations even in the event of a loss of tax or rate revenue
Pillar 4: Equity	
Ensure equity is a key consideration in City financial decision making	The City will apply an equity lens to ensure that all funding decisions are made based on an understanding of their impact on equity seeking groups and are prioritizing and supporting investments that help remove the long-standing barriers to opportunity for everyone

Development of Financial Health Metrics and Scorecard

To evaluate compliance with the financial principles, and to help guide decision making that adheres to these principles, it is necessary to have metrics associated with each principle, to extent that they can be evaluated quantitatively.

Through a collaborative exercise with Finance stakeholders at the City, metrics were developed for 7 of the 12 principles of the financial health evaluation framework. The process followed is illustrated below:



The scorecard displays the City's performance in each metric in 2018 and compares that performance to the prior year and a 4 year average. Targets have not yet been set by Council. Targets must be set to extract maximum utility from the scorecard, so the City can measure progress against these targets and implement corrective measures if it does not meet them.

Financial Health Evaluation Framework – Financial Metrics and Financial Condition Scorecard (1/3)

Financial Principle	Indicator	How it is calculated	Target	2018 performance	Prior Year	4 year* average
Financial Sustainability						
Maintain appropriate and responsible taxes and utility rates	Property tax increase (%)	Compare property tax increase to previous year	TBD (5 year avg. of Metro Vancouver municipalities as been 3.0%)	4.27%	3.87% ↓	2.49% ↓
	Utility rate increase (%)	Compare utility rate increase to previous year	TBD	7.87%	6.09% ↓	6.44% ↓
Manage assets in a state of good repair	Asset renewal funding ratio	Operating budget supporting asset renewal as a % of asset replacement cost	TBD	~0.8%	<1 % ↔	<1% ↔
Financial Vulnerability						
Maintain stable and predictable revenue streams	Own source revenue ratio	Operating revenue generated by the City (excl. operating grants and transfers) as a % of total revenue	TBD	93.4%	93.0% ↔	93.1% ↔
	Gross operating balance ratio	Operating balance as a % of operating revenue	TBD (Moody's target is >10%)	18.5%	14.2% ↑	14.1% ↑

↑ Trending positively ↓ Trending negatively ↔ Stable Trends

* 4 year average from 2014 to 2017

Financial Health Evaluation Framework – Financial Metrics and Financial Condition Scorecard (2/3)

Financial Principle	Indicator	How it is calculated	Target	2018 performance	Prior Year	4 year* average
Financial Flexibility						
Maintain affordable levels of debt	Debt burden	Net debt as a % of operating revenue**	TBD (Moody's target is <35%)	38.6%	43% ⬆	47% ⬆
	Interest burden	Interest expense as a % of operating revenue**	TBD (Moody's target is <1%)	2.4%	2.8% ⬌	2.8% ⬌
	Debt per capita (in $)	Net debt divided by population of City	TBD	$876	$898 ⬆	$934 ⬆
	Debt service coverage ratio	Total debt service costs (principal + interest) as a % of total operating revenue	<=10%	8.5%	9.1% ⬌	9.2% ⬌

⬆ Trending positively ⬇ Trending negatively ⬌ Stable Trends

* 4 year average from 2014 to 2017

** Excludes development cost levies

Financial Health Evaluation Framework – Financial Metrics and Financial Condition Scorecard (3/3)

Financial Principle	Indicator	How it is calculated	Target	2018 performance	Prior Year	4 year* average
Financial Flexibility						
Maintain budgetary flexibility to manage opportunities and priorities	Operating budgetary flexibility ratio	Capital expenditure as a % of total expenditure	TBD (S&P target is >10%)	30.3%	36.7% ↓	27.9% ↑
Build adequate liquidity to manage obligations	Cash flow generation ratio	Net cash flow from operations as a % of operating revenue**	TBD	21.8%	21.8% ↔	22.5% ↔
Mitigate fluctuations in tax and rate revenue	Stabilization reserves ratio	Total of tax and rate stabilization reserves as a % of operating budget	8%-16%	9.9%	7.7% ↑	6.8% ↑

↑ Trending positively

↓ Trending negatively

↔ Stable Trends

* 4 year average from 2014 to 2017

** Excludes development cost levies

Financial Health Evaluation Framework – Principles excluded from scorecard (1/2)

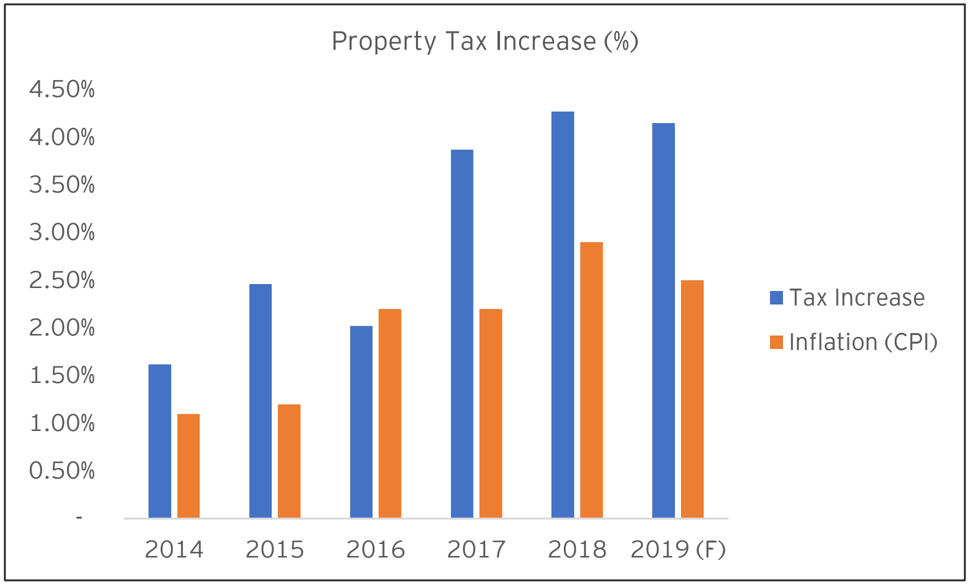
The following principles are not measured in the scorecard as quantitative indicators are not currently available to evaluate them. These principles would be tracked from a compliance perspective as opposed to a measurement and performance perspective.

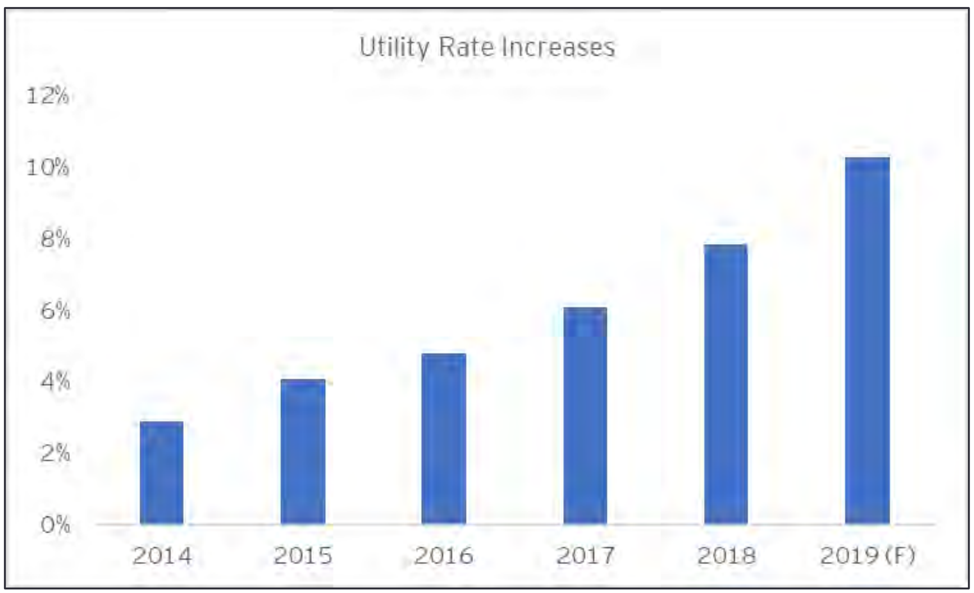
Principle	Recommendation
Sustainability	
Ensure capital spending is sustainable and affordable	The City periodically updates its capital financing strategy to maintain a balance between reserves, pay-as-you go, debt, and other contributions (development cost levies, CACs, etc.) Affordability targets would need to be set by Council, considering the impact on debt indicators and subsequent operating impact of capital
Build resiliency towards climate change	The City is currently in the process of adopting the recommendations of the Task Force for Climate Related Financial Disclosures. The % implementation of these recommendations may be tracked and measured in the future
Vulnerability	
Balance growth related investments with growth related revenues	The City's policy of "growth-pays-for-growth" mandates that growth related investments are to be funded from growth related revenues only (e.g., development cost levies), and no debt or contribution from pay-as-you-go reserves are to be utilized for the same. Hence it is sufficient to ensure if the City enforces this policy and maintains a development cost levy cost-revenue gap of zero, or places a limit on the maximum tax assist that may be used to support growth beyond Development Cost Levies
Understand long-term impact of financial decisions	As part of the budget exercise, decisions should be evaluated to test their impact on each of the indicators in the financial condition scorecard. If a decision causes any of the indicators to miss its target, corrective action required to bring the indicator back to target in the subsequent years should be presented to Council

Financial Health Evaluation Framework – Principles excluded from scorecard (2/2)

Principle	Recommendation
Equity	
Ensure equity of financial decisions across genders and socio-economic classes	As part of equity and gender responsive budgeting, the City should mandate that budget submissions are to include an equity impact analysis component to ensure decisions do not place any section of society in a position of disadvantage. Example: Equity responsive budgeting was implemented at the City of Toronto during the 2018 Budget. As part of this process, all City divisions and agencies were to include an equity impact analysis on budget proposals that contained the following: • Service level reductions • New and enhanced services (new programs/services, expansion of existing programs and services) • Revenue changes (E.g. changes in user fees beyond inflation) • Efficiency savings that either save money or improve service levels for the same cost of The City of Vancouver has steadily worked towards ensuring gender equality, the most recent step being the "A City for All Women, Women's Equity Strategy 2018-2028". Similar strategies for all identified equity-seeking groups in the City would be critical towards ensuring that decisions taken during the budgeting exercise factor in the impact on outcomes. Indicative steps include: • Identifying the City's equity-seeking groups • Devising strategies and plans to deliver desired outcomes for those groups • Developing metrics and targets to measure effectiveness • Identify service areas/programs within the City that have a direct/indirect impact on the equity-seeking groups (E.g. Indicative priority services include public safety, childcare, affordable housing, etc.) • Develop a suitable equity impact analysis approach tailored for the needs of the City (based on feasibility of analysis, materiality of impact, etc.) • Provide Council with information related to impact of the decisions on the outcomes of the strategies/plans to facilitate conversations related to priorities/trade-offs

Sustainability Metrics

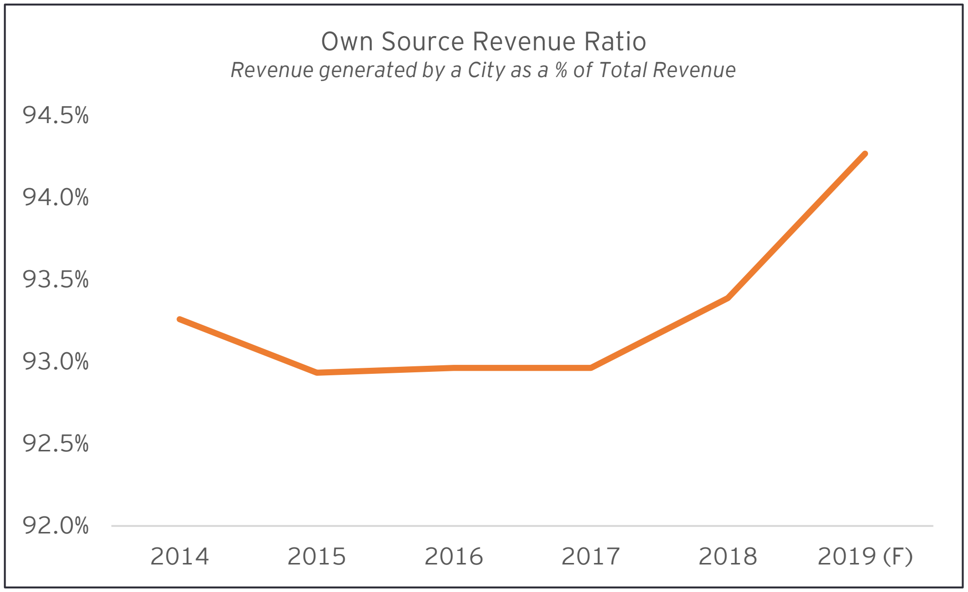


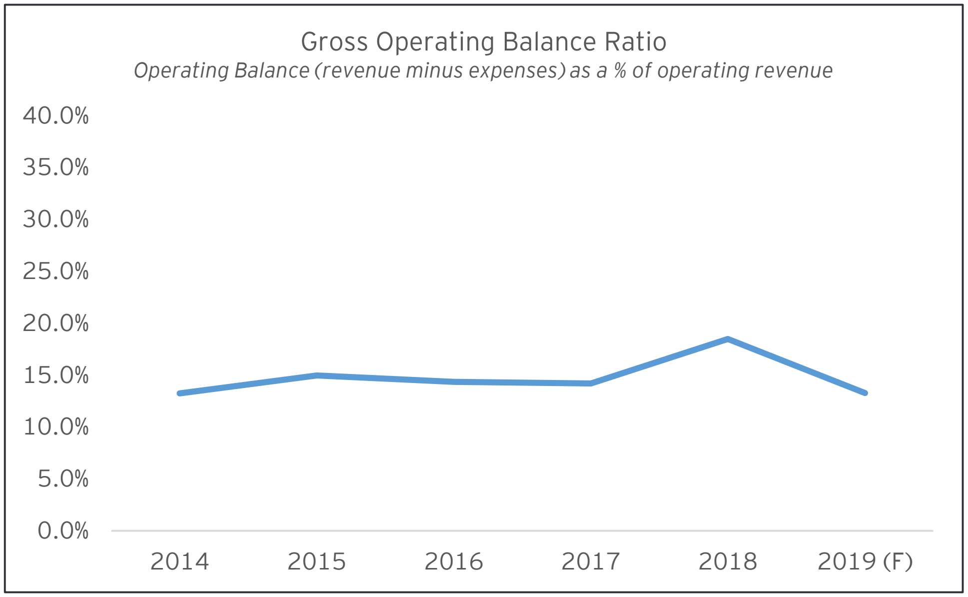


Property Tax and Utility Rate Increases

- Property and utility tax increases have increased steadily over the last 5 years
- Both tax and rate increases were driven by the need for revenue to fund services at the level mandated by Councils and that meet regulatory and compliance requirements. The primary cost driver for services were wages, investments in infrastructure, expansion of community services due to volume and pressures on existing facilities, and transition to a pay-as-you-go model for capital expenditures
- While certain Canadian municipalities set targets/thresholds for tax or rate increases (e.g., maintaining tax increase below rate of inflation), the City's Council does not maintain such targets
- Tax and utility rate targets are set based on multi-year plans that include service targets, meeting regulatory requirements and managing the City's overall risk profile. This provides transparency for residents and businesses and also ensures that the City continues to make spending decisions with an affordability threshold in mind
- This would ensure the creation of a "budget envelope" within which budget decisions and trade-offs would need to be made so that the City sticks to its principle of "living within our means" while meeting service targets, as well as regulatory and compliance requirements

Vulnerability Metrics





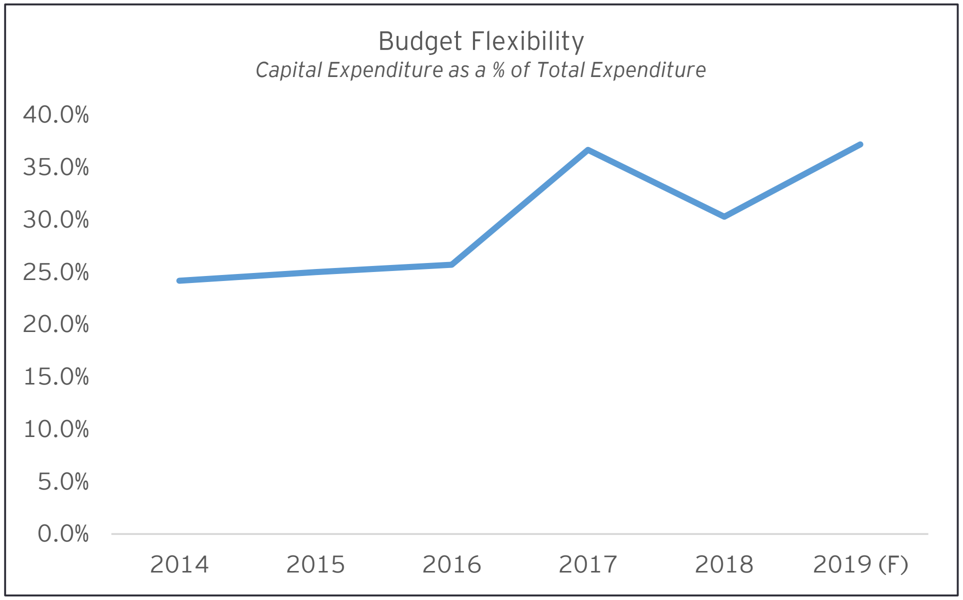
Own Source Revenue Ratio

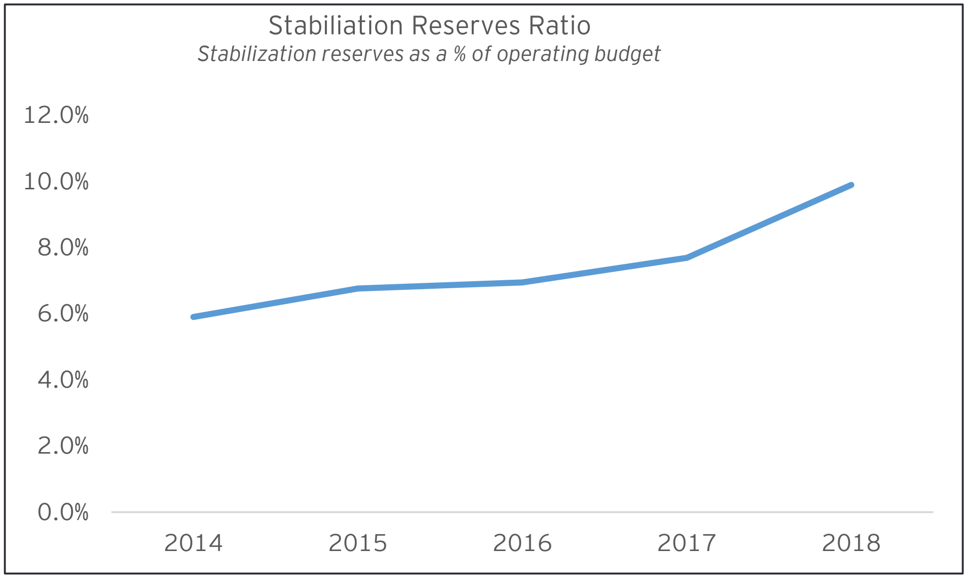
- A higher ratio implies the City is less vulnerable to external economic shocks and uncertainties at other levels of government
- The City has consistently maintained a ratio higher than 90% and has gradually increased over the last 5 years. The increase in 2019 is driven by a 20% and 10% growth in development and utility fees respectively
- The City's own source revenue ratio is substantially higher than those of other large Canadian municipalities such as Toronto (<80%) and Peel (<75%), and comparable to municipalities such as Calgary (>96%)

Gross Operating Balance Ratio

- A higher ratio implies that the City is able to maintain expenditures below that of revenue
- Operating balance has remained above 10% throughout the 5 year period which points to effective expenditure management practices
- Ongoing continuous process improvement (CPI) initiatives at the City may help in further increasing the operating balance
- Maintaining a good operating balance would help the City sustain healthy contributions to reserves

Flexibility Metrics





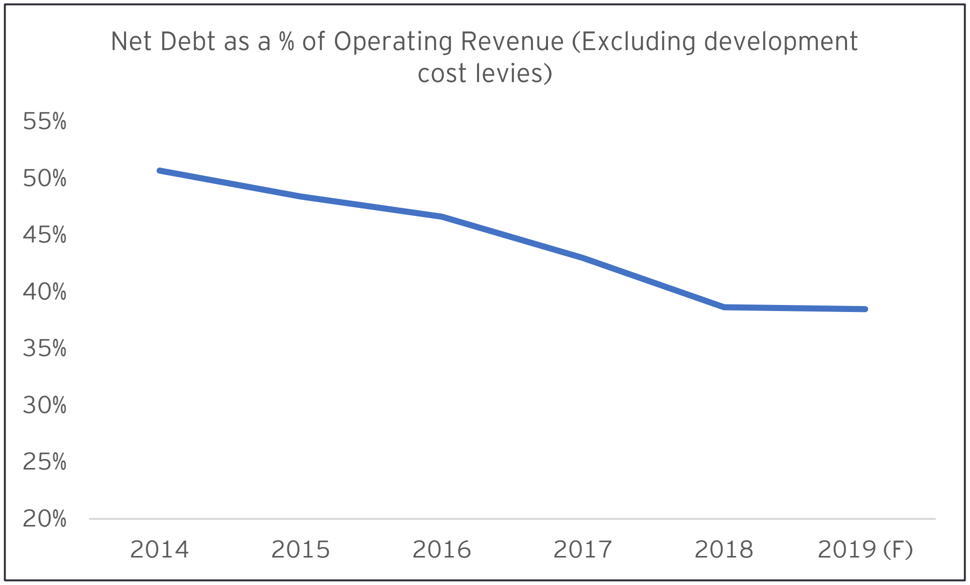
Budgetary Flexibility

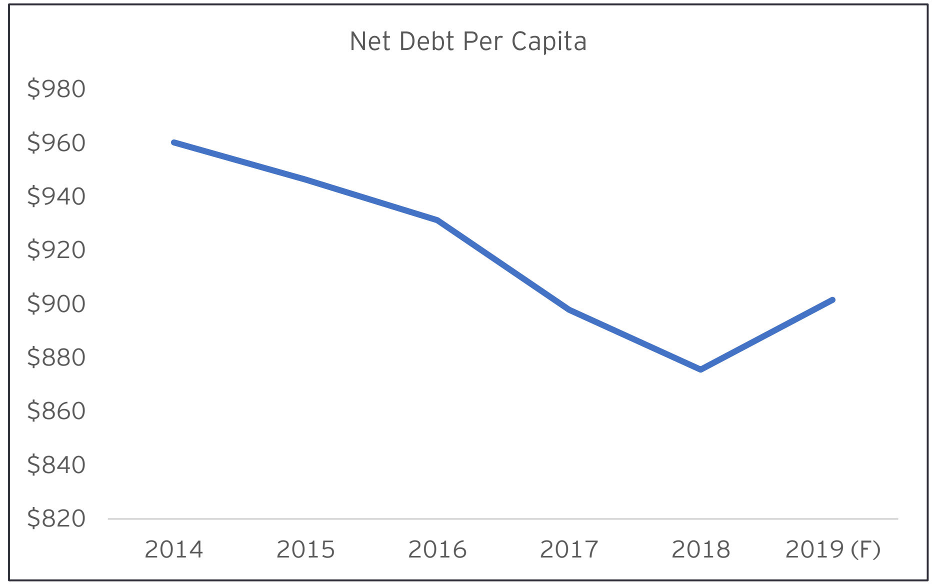
- A higher budgetary flexibility ratio implies the City is better equipped to revise spending plans in the event of a downturn in revenue, as capital projects are, in principle, easier to delay than operating expenditures
- The City's budgetary flexibility is well above the 15% mark mandated by Standard & Poor to obtain the highest score in this sub-factor of their methodology
- The City maintains a policy of requiring two years worth of DCL contributions in reserve before initiating DCL-funded projects, to reduce the risk of downturns in revenue impacting projects that have already been committed.
- Higher investment in capital projects, combined with the City's balanced capital financing strategy, has a positive impact on other financial indicators

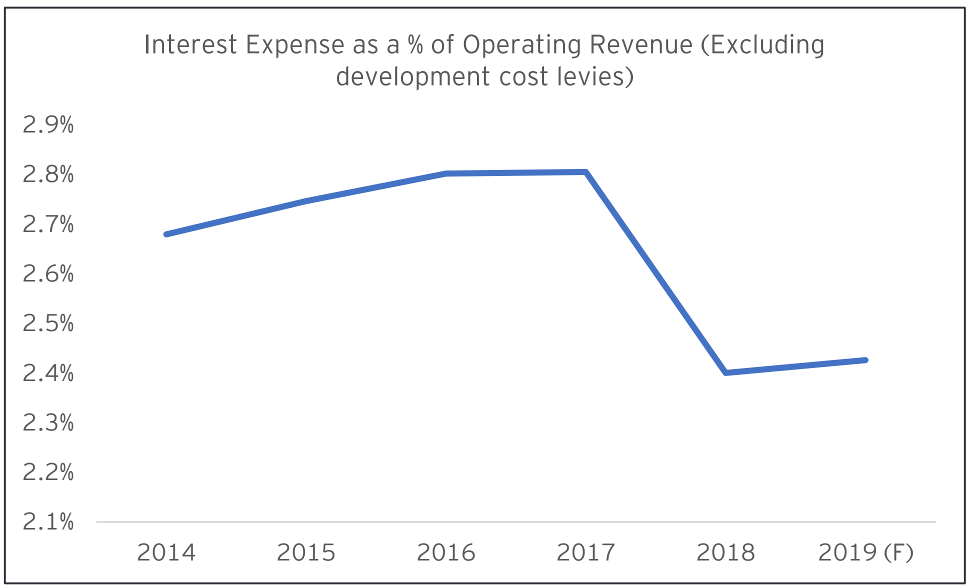
Stabilization Reserves Ratio

- A higher ratio implies the City would be able to sustain its operations for longer in the event of a loss of revenue
- While the City's stabilization reserves have climbed steadily over the 5 year period, they are still lower than the 16% threshold set by GFOA. However, this threshold is a "one-size-fits-all" target which may be revised based on local economic conditions and risk assessment

Flexibility Metrics



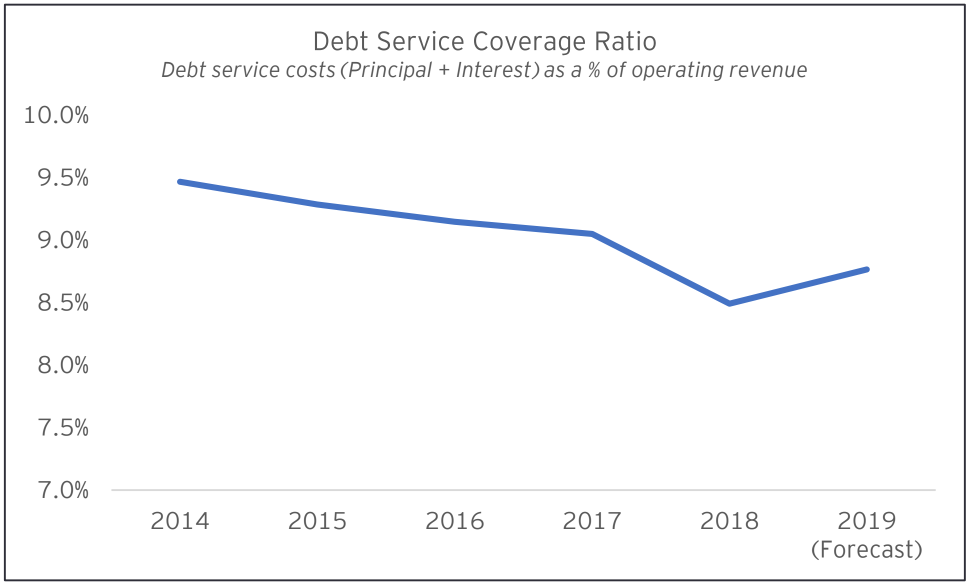


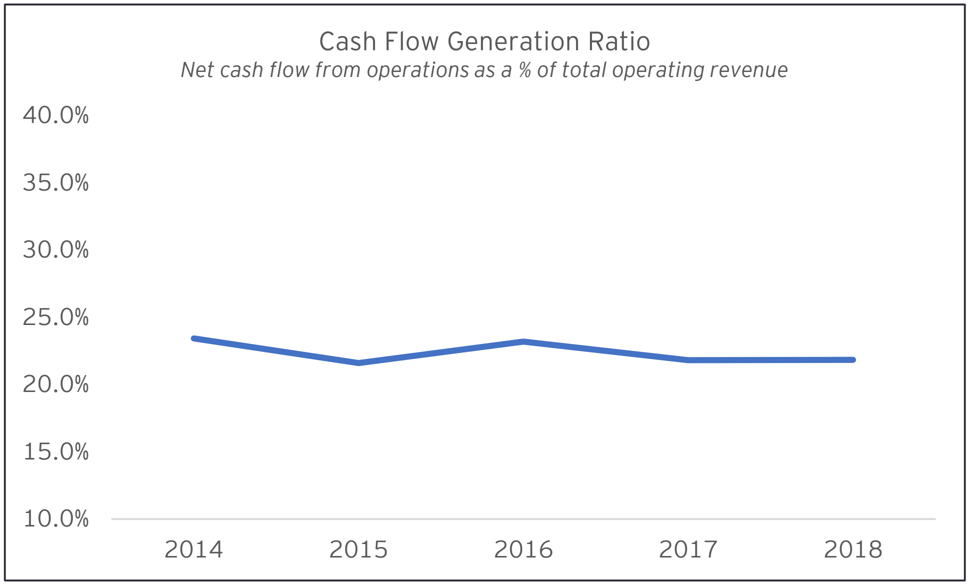


Debt Burden

- A lower ratio implies lower debt related risks for the City
- Debt burden has undergone a steady decline over the 5-year period, however a minor increase is forecasted in 2019, due to investments in asset renewals as per the 2019-22 Capital Plan
- The ratio of interest and net debt as a % of operating revenue in 2019 is 2.4% and 38% respectively which are marginally higher than Moody's benchmarks of 1% and 35%, as the City does not include development cost levies as part of operating revenues the way Moody's does

Flexibility Metrics





Debt service coverage ratio

- A lower ratio implies lower debt related risks for the City
- The City mandates that debt servicing should be below 10% of operating revenue and it has consistently met that target
- The target is well below the threshold set by other municipalities in Canada (E.g. Ontario municipalities can spend up to 25% of operating revenues towards debt servicing costs)
- The City's conservative approach towards debt and internal policies such as not issuing debt to fund growth has helped it maintain debt at a manageable level

Cash Flow Generation Ratio

- A higher ratio implies that the City is able to meet its obligations using revenue generated from its own operations without relying on other sources such as investments or financing
- The ratio has witnessed a marginal decline over the five year period. However, this is not due to a reduction in the net cash flow from operations, but an increase in the total operating revenue (i.e., revenue from all sources)

2. Financial Health Evaluation - Findings

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Financial Health Evaluation – Findings (1/2)

As illustrated through the Financial Condition Scorecard, in 2018 the City has seen positive or stable trends in 8 of the 11 indicators of the scorecard in slides 9-11, compared to the preceding 4 year period (2014-17) which points to sound financial management practices and fiscal discipline. This has also been corroborated by third party entities such as credit rating agencies. While Moody's has provided the City with the highest possible rating (Aaa) for the entire 5 year period, Standard & Poor has upgraded the City to its highest possible rating (AAA) in 2017 after assigning it an AA rating in 2014. This points to improving credit-worthiness and financial well-being of the City through a strong institutional and governance framework (as noted by the credit rating agencies)

Key findings related to financial health under each of the pillars are given below

Sustainability

- Property and utility tax increases have increased steadily over the last 5 years. This was primarily to support increased expenditure driven by Police (rise In staffing costs), Fire (rise in wages, increase in facility maintenance costs), Utilities (increase in Metro Vancouver rates and per-capita consumption volumes, and transition to a pay-as-you-go capital funding model), Parks and Community Services (increased service levels), and Corporate Support (shared services consolidation, increases in staffing related costs, IT expenditure, office space)
- In order to quantitatively measure the City's performance under this pillar, thresholds/targets may be assigned for tax and rate increases to provide transparency to tax and rate payers, as is done in other large municipalities. The city currently benchmarks these rates against other Metro Vancouver municipalities.
- Targets for tax and rate increases may be set by considering the following components and would reflect Council's priorities and the City's short and long term strategies and plans.
  - Funding required to maintain desired and legislatively mandated service levels
  - Investments required to maintain capital in state of good repair
  - Affordability for residents and their ability to pay their tax and utility bills
  - Risk profile of the City in terms of borrowing capacity
- It is understood that operating and capital decisions by Council related to service levels may lead to instances where tax or rate increases would be above the target. In these cases, the impact of these decisions, trade-offs, plans to bring the tax/rate increases back to within the target in the subsequent years, or business cases to justify revision of the target should be presented to Council to aid decision making.

Financial Health Evaluation – Findings (2/2)

Vulnerability	• The City's strong and stable own-source revenue base and minimal reliance on external funding from other levels of government implies that it would be able to withstand external economic shocks arising from circumstances beyond its control • Over the last 5 years, revenues from property tax and utility fees have contributed to over 75% of the City's revenue. As both these revenue streams are within the control of the City, vulnerability to external shocks is not expected as long as expenditures are kept within control • Developer contributions in 2018 and 2019 (forecast) are well above the four year average and would help in funding the City's growth investments • The City's operating balance, boosted to a 5 year high in 2018 due to increased revenue from the Empty Homes tax, remains well above the target set by credit rating agencies, pointing to healthy expenditure management practices
Flexibility	• Owing to a conservative approach towards debt, the City has managed to maintain debt and interest burden at a very low level compared to other large Canadian municipalities (E.g. Toronto, Peel, Calgary, York, etc.) • Debt financing also accounts only for 18% of the City's 2019-22 Capital plan, with a majority of the funding coming from capital reserves and pay-as-you-go. This is consistent with the City's budget objectives of "spending only what the City can afford" • The City also strives to maintain intergenerational equity by not burdening existing tax-payers with debt to fund future capital growth

Equity	• To support the Council's priorities related to equity, it is recommended that from 2020, the City incorporates an equity and gender analysis component in the budget process to support decision making related to equity priorities and resource allocation.
	• To implement equity responsive budgeting, all budget proposals should include a section that contains the following:
	    • Evaluate the proposal's impact on equity (negative, positive, or no impact) and the level of impact (if any)
	    • Identify affected equity seeking group(s)
	    • Illustrate how the proposal decreases or increases barriers to equity

3. Review of 10 year revenue and expenditure trends

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Ten Year Expenditure and Revenue Trend Analysis – Scope and Approach

SCOPE

- Conduct a 10-year expenditure and revenue trend analysis for capital and operating spend, and the property endowment fund (PEF)
- Identify areas with significant Y-o-Y increase/decrease in expenditure and revenue beyond a defined materiality threshold
- Provide context for the above by identifying the corresponding reasons to which growth or decline in expenditure or revenue can be attributed

APPROACH

1. Identify categories* for grouping expenditures and revenue to facilitate historical analysis

   Categories were finalized based on the classifications in the City's 2019 budget book

2. Submit data request and test for availability of historical data in those categories

   11 year data (2008-18) was available for operating expenditure and 7 year data (2012-18) was available for capital. Capital data prior to 2012 is not readily available in SAP

3. Collect and analyze trends of growth and decline in revenue/expenditure streams

   Calculated Y-o-Y % trends to identify spikes or dips

4. Identifying and validating a materiality threshold for analysis of growth or decline

   A +/-5% materiality threshold was applied and explanations were sought on category-wise Y-o-Y revenue and expenditure growth or decline beyond this threshold

5. Submit information request to understand context behind outlay/inflow beyond materiality threshold

   Obtained information on division/service area-wise factors that contributed to a growth or decline in Y-o-Y expenditure and revenue

6. Review cost/revenue drivers to identify how funds have been allocated to Council/City priorities

   Identify major themes which have guided the City's investments over the years

* - Categories are illustrated in Appendix C

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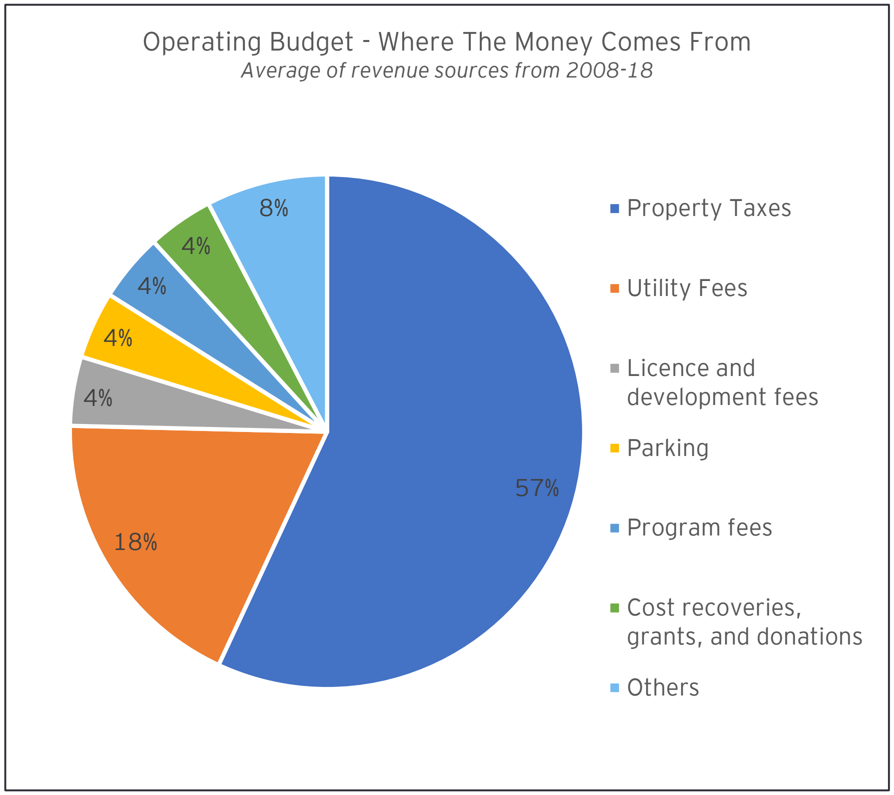
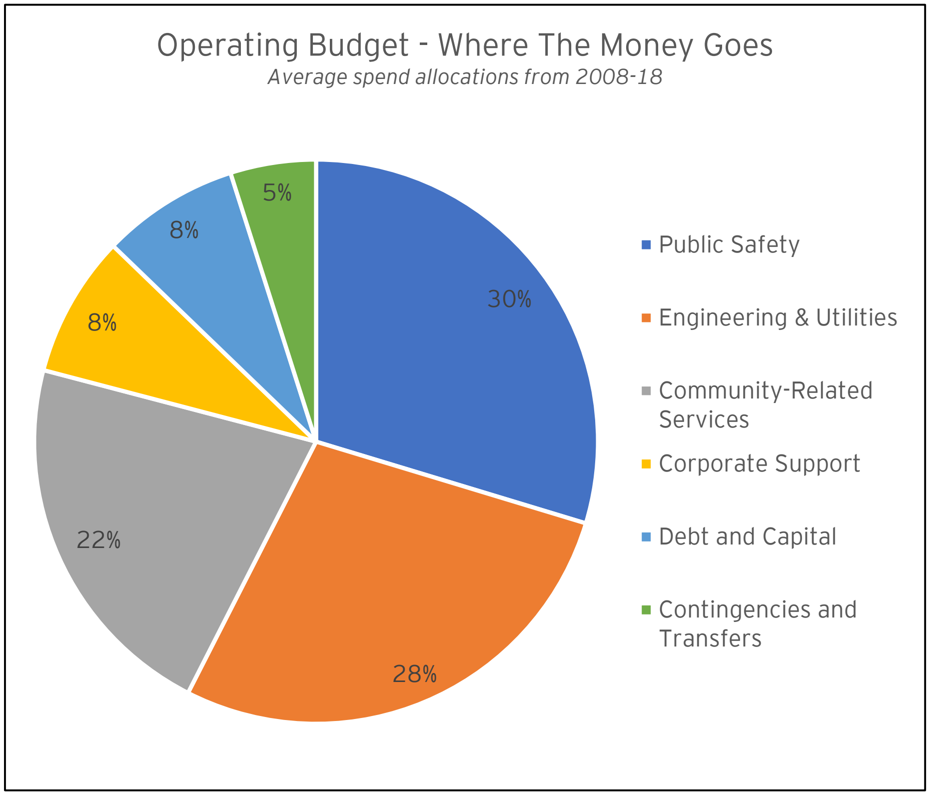
Operating Budget Trend Analysis (2008-18) - Summary

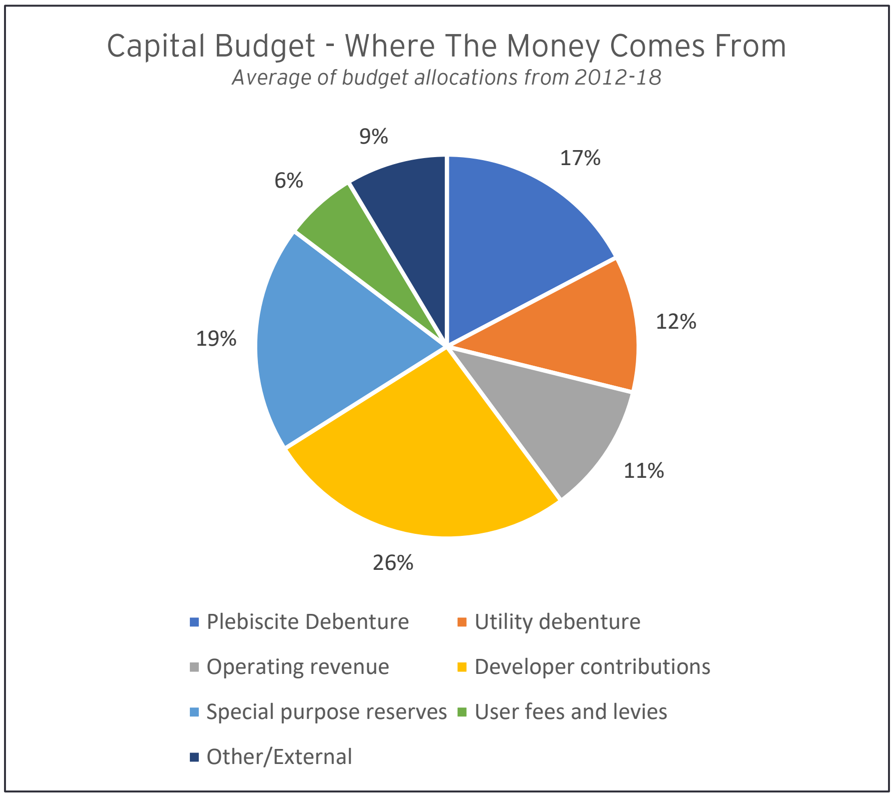
- Public safety (Police, Fire), Engineering (including Public Works) and Utilities, and Community-Related Services (Parks and Recreation, Library, Community Services, Development, Licensing etc.) comprise over 80% of the City's operating expenditure (average of spending from 2008-18)
- Cost pressures, growing population, and increased demand for services were the key drivers for operating expenditure. However, the City has a number of on-going continuous improvement programs aimed at rationalizing expenditure and boosting revenue streams which could yield results for the City in the coming years
- The City should consider implementing equity-responsive budgeting to ensure that equity seeking groups (based on gender, race, class etc.) are not excluded from the benefits of financial decisions or negatively impacted by the same
- Major categories of operating expenditure and revenue sources are illustrated below

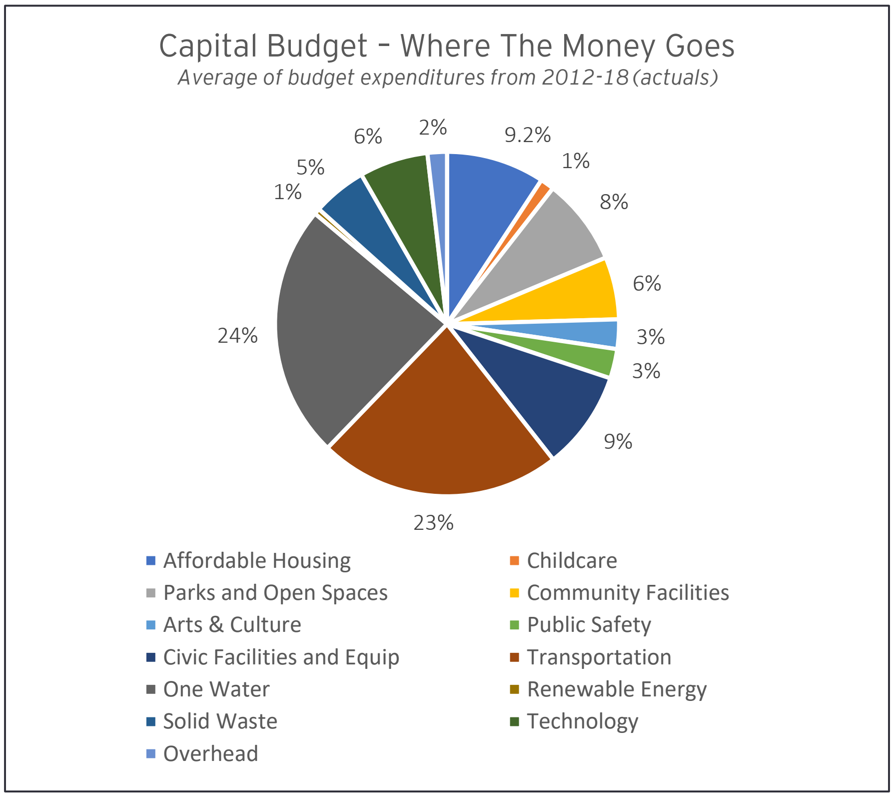




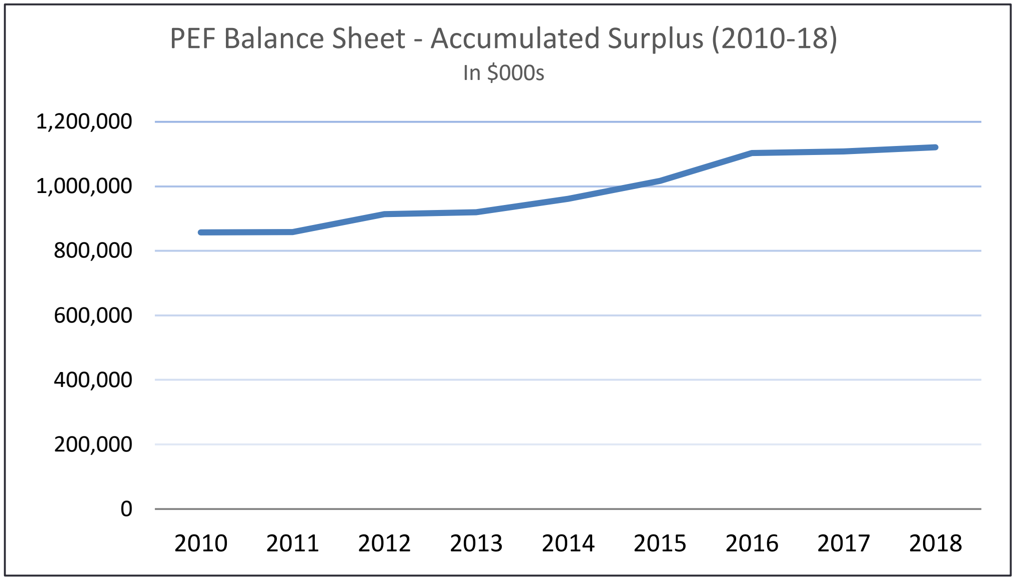
Capital Budget Trend Analysis (2012-18) - Summary

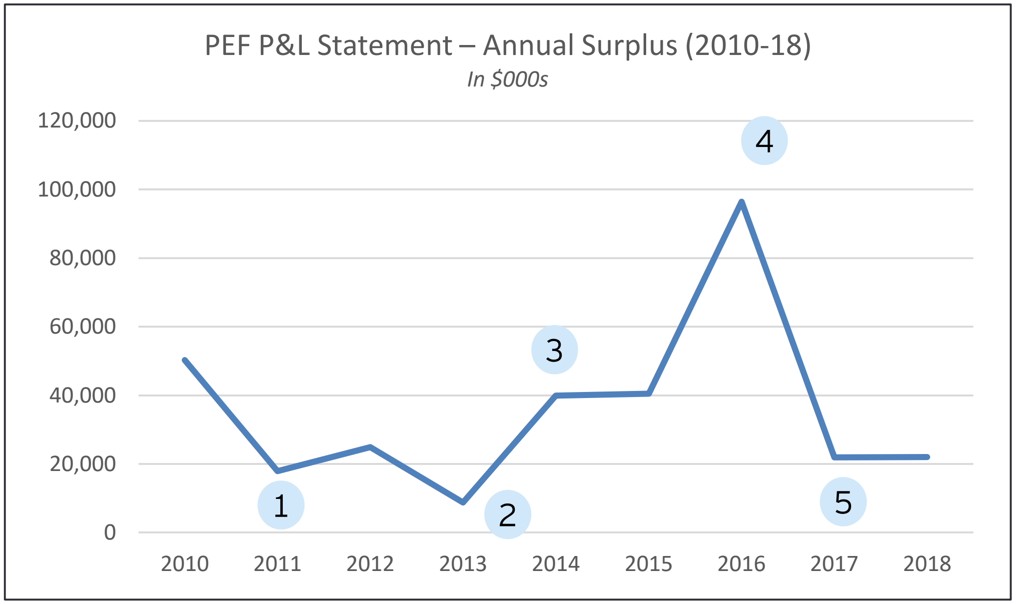
- The capital budget at the City has grown at a faster annual rate than the operating budget (7.7% vs 4.1%)
- Capital expenditure is driven primarily by the need to renew and replace assets in a timely manner so that they are able to perform to the standards mandated by Council, and build new assets to support the growth in the City. Rise in inflation (the construction cost index grew at 4% annually from 2012-18) also attributed to increased capital expenditure
- Over the past 7 years, Transportation, One Water, and Affordable Housing make up over 50% of the capital budget outlay
- Now, capital investments would need to be aimed at ensuring the City's assets are resilient towards climate-change related events. Earlier this year, EY conducted a Financial Resilience study for the City which proposed a financial model that helps the City quantify impacts of events, assess preparedness, and conduct cost-benefit analyses is areas of investment to obtain maximum benefits of resiliency. This may be used as a guiding factor to evaluate capital budgets in the future.
- Major categories of capital expenditure budget and funding sources are illustrated below





Property Endowment Fund Summary (2010-18)





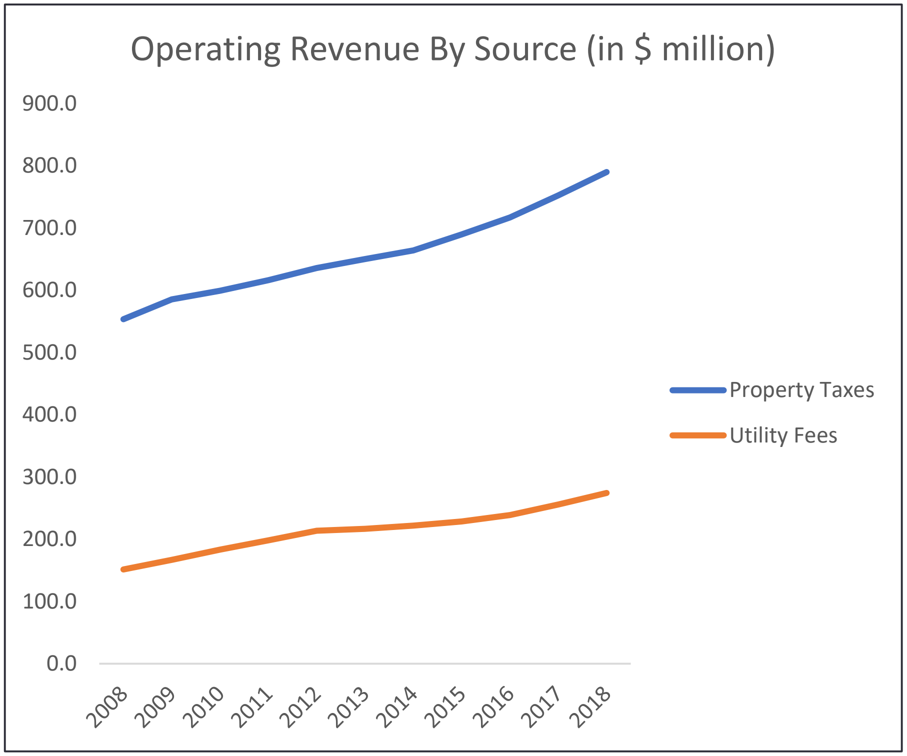
- Accumulated surplus of the PEF portfolio has witnessed stable growth between 2010-18 registering a 3.4% CAGR during that period
- An analysis of the annual surplus trends between 2010-18 shows a series of fluctuations which have been numbered from 1 to 5. The drivers behind these increases/decreases are listed below:

1. Annual surplus shows a decrease in 2011 as a gain of $34.2M on the condo sales in South East False Creek (SEFC) is recorded in 2010 which creates a higher baseline amount in that year
2. Annual surplus shows a decrease in 2013 as there were no significant gains in that year while a $18.6M net proceeds was received the previous year (2012) from the sale of 520 W Georgia Parkade to Telus
3. Annual surplus rose in 2014 due to a $31.2M net increase in proceeds from the sale of 1412-1450 Howe Street, 1410 Granville Street, and 1429 Granville Street
4. Annual surplus rose in 2016 due to the following:
    - $48.8M in developers contribution and gain on the land exchange from the Brenhill transaction
    - $16.9M gain on sale of 2102 Keith Drive
    - $17.6M gain on sale of 601 Beach Crescent
5. Annual surplus declined in 2017 as there were no developer contribution received in 2016 and lower gains on the sale of property compared to 2016 (2017 gains on sales were only $7.5M compared to $61.1M in 2016). Of the $7.5M gains in 2017, $5.2M was received in compensation from the capital fund on the sale of ¼th interest in land located at 2221 Main Street.

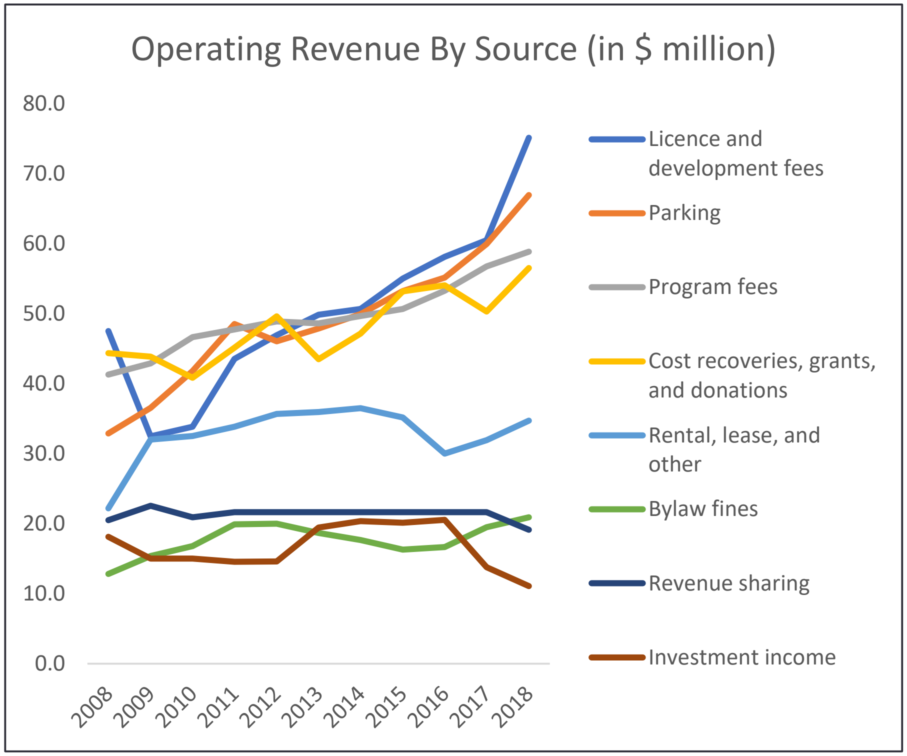
Operating Revenue

Property tax and utility rates are the biggest contributor to the City's revenue which has steadily grown over the 10 year period. Details of trends in revenue sources is available in Appendix C.

MAJOR SOURCES



OTHER SOURCES



CAGR OF REVENUE SOURCES (2008-18)

Property tax	Utility rates	Licence and development	Parking	Program fees	Cost recoveries & grants	Rental & lease	Bylaw fines	Revenue sharing	Investment income
4.0%	6.8%	5.2%	8.2%	4.0%	2.7%	5.1%	5.6%	(0.8%)	(5.3%)

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Operating Revenue - Drivers

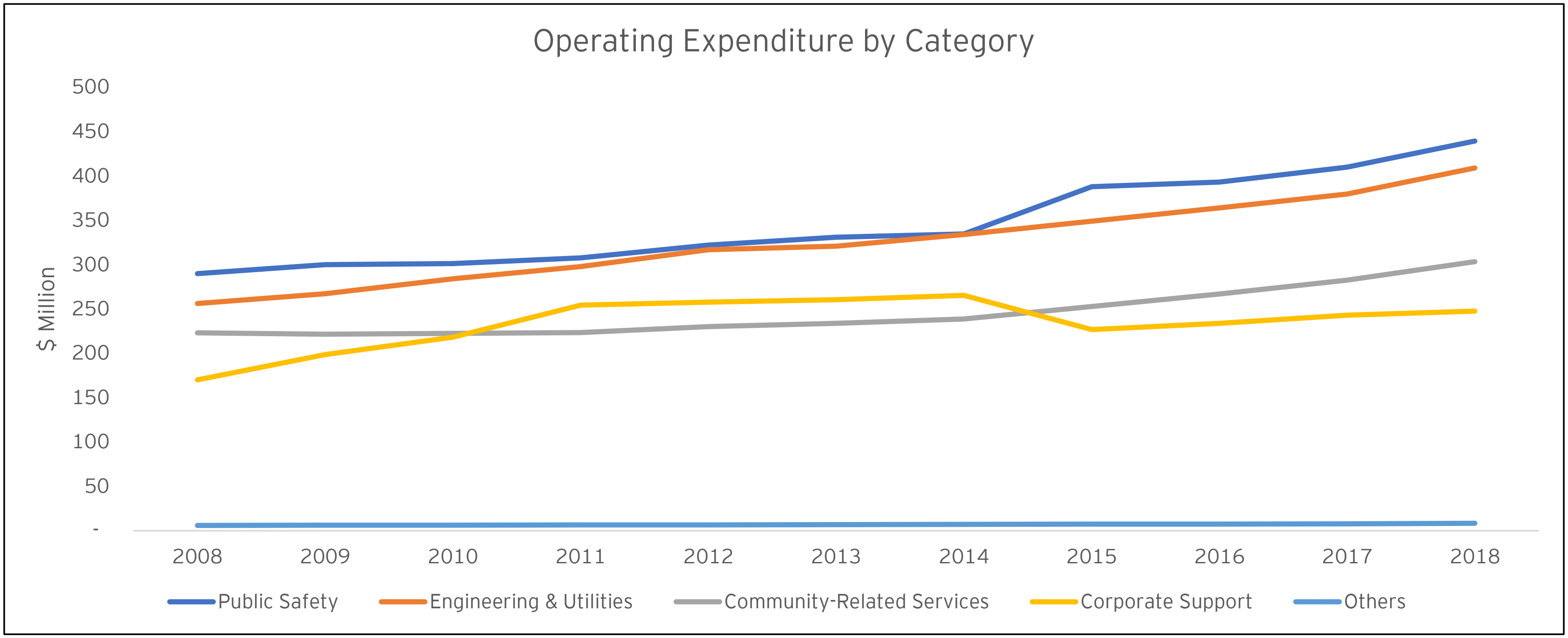
The major operating revenue drivers under each of the categories are highlighted below along with inputs provided by Staff on the underlying factors behind these drivers. Details of inflow under each revenue source is available in Appendix C

Category	Observations
Property tax and utility rate increases	• Over the last 10 years, property tax and utility rates contributed to over 75% of the City's operating revenue, with property taxes alone contributing around 57% on average. This is due to above-inflation tax increases approved by Council to offset major expense drivers including wages and utility costs, changes to service levels, and investments in initiatives • Revenue from utility rates were driven by an increases in Metro Levy rates, metered and flat fee rates and changes in volume of utility service consumption
Higher volume of permits and licenses	The City's growth and housing market changes led to increased volume and complexity of development permit applications which drove revenues in this category as follows: • Licensing and development revenue grew at a CAGR of 5.2% as a result of increased volumes and rates of permits for development, building, trades, rezoning, street parking, and other licenses • Fees for permitting were increased to cover increased program costs including staffing (to meet higher demand volumes)
Increased demand for City Services	Driven by population growth, demand for City's services rose which led to higher revenue as follows: • Revenue from parking grew at the highest CAGR of 8.2% driven by increases to parking rates and high demand for parking services • Higher use of City's facilities also helped drive the revenue from rentals
Increased fees and higher utilization	• Higher costs which necessitated fee increases, reflecting higher revenue from other City programs • Higher utilization rate of City's facilities (e.g. community centres) due to population growth also helped drive greater revenues

Note: Inflow from revenue sharing and investments have declined by 0.8% and 5.3% respectively due to changes in sharing of traffic fines and casino gaming revenue with the Province, and fluctuations in interest rate. However, the volume of the reduction is not material enough to cause a pressure in the City's earnings

Operating Expenditure

Overall operating expenditure grew from $945 million in 2008 to $1.4 billion in 2018 – A compound annual growth rate (CAGR) of 4.1%



CAGR OF EXPENDITURE CATEGORIES (2008-18)

Public Safety	Engineering and Utilities	Community-related services	Corporate Support	Others (Debt, capital, contingencies, transfers)
4.2%	4.8%	3.1%	5.4%	2.4% - 4.0%

Operating Expenditure - Drivers

City of Vancouver Staff submitted a report to Council on February 26 2019 comparing the 2008 and 2018 budget and illustrating the key drivers behind budget growth in this period (Drivers identified were utilities, wages and headcount, licence and development volume, and downloading of provincial costs).

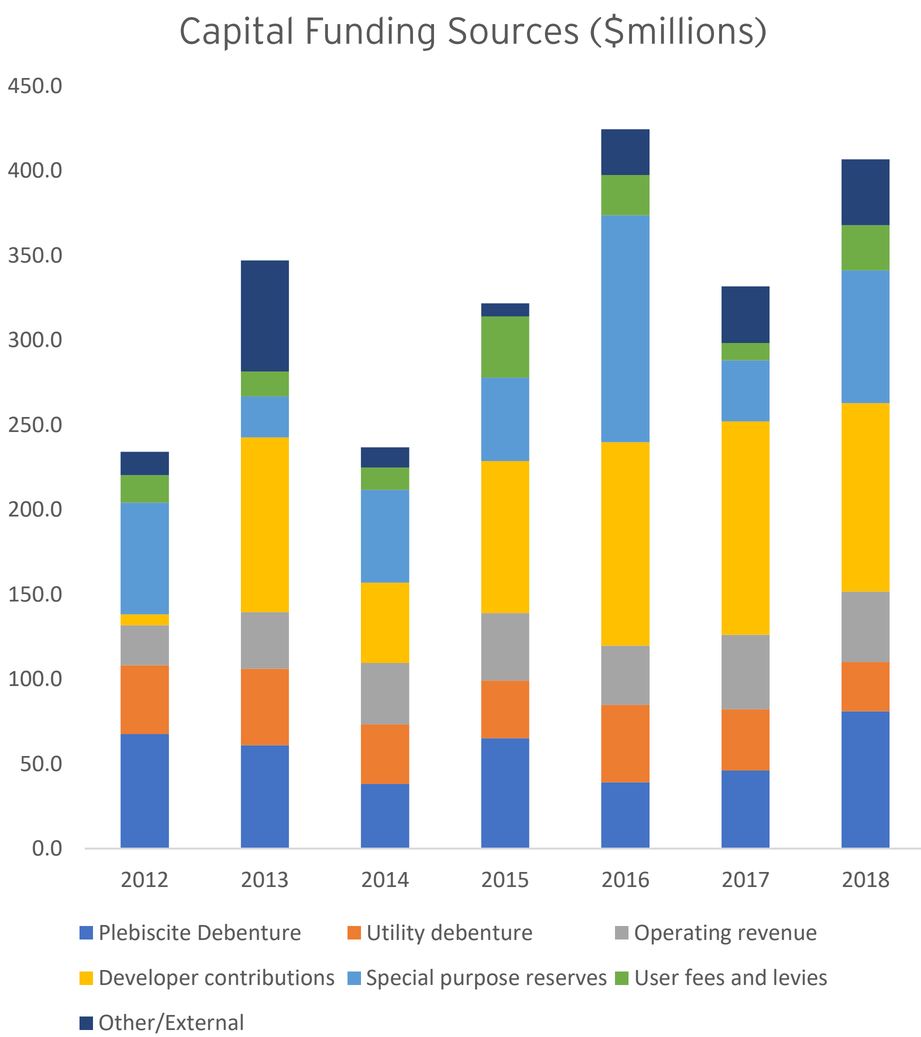
EY's objective is to identify the category-wise drivers and factors that contributed to Y-o-Y cost increases beyond the materiality threshold in each year between 2008 and 2018. Details of these drivers are provided below and spending under each category is available in Appendix C

Category	Observations
Salaries, wages, and benefits – including arbitrated settlements	Staffing costs (increase in headcount and wages/benefits) and arbitrated settlements contributed to a rise in operating expenditures to support service levels. E.g. Police (collective agreement renewals, increase in sanctioned strength), fire (enhancement to health and wellness programs), parks (staffing-related costs), licensing (increased staff to deal with higher volumes), and corporate support (staffing-related costs related to facilities and new programs including Empty homes Tax, consolidation of shared corporate services business model)
Above inflation increases on metro rates	Increase in rates charged by Metro Vancouver and BC Hydro for water, sewer, and other utility services provided to the City led to an increase in operating costs (Note: increases are beyond the control of the City)
Investments in new initiatives	Downloading of services from other levels of government and resulting pressure for municipalities to increase service levels led to Council investing in new initiatives. These include: • Enforcement and expansion of parking meters (fully offset by revenue) • New investments in interim housing and Downtown East Side (DTES) social initiatives, and increases for social, cultural, and childcare grants and supports • Funding to support implementation of Empty Homes Tax program • 2010 Winter Olympic games • Office space, security, and support services (e.g. fleet) • Investments in modernization/ transformation to mitigate cost increases and yield future savings (E.g. IT projects, GIS upgrades, fleet system etc.)

Operating Expenditure – Drivers (cont'd)

Category	Observations
Rising operating and maintenance costs of facilities	Increase in facility and equipment operation and maintenance costs (fire), increase in costs for operating facilities and maintaining engineering yards (engineering and utilities), and costs of operating new City facilities (E.g. Hillcrest Community Centre, VPD Property Forensic Storage facility, Park Board facilities), contributed to cost increases in this category
Changes in specific service levels and usage volumes	Areas of Council approved service increases include street cleaning, park operations (washroom cleaning, tree planting etc.) amongst others which led to an increase in operating costs to support service levels. Increases in street use due to contract with MOBI public bike share was also a factor for rising costs
Others	Other factors that contributed to cost increases include: • Transition to a pay-as-you-go model for funding capital expenditure • Complex procurement such as Electric Vehicles and Composting Services • Increased regulatory review related to affordable housing, permit processing, and development

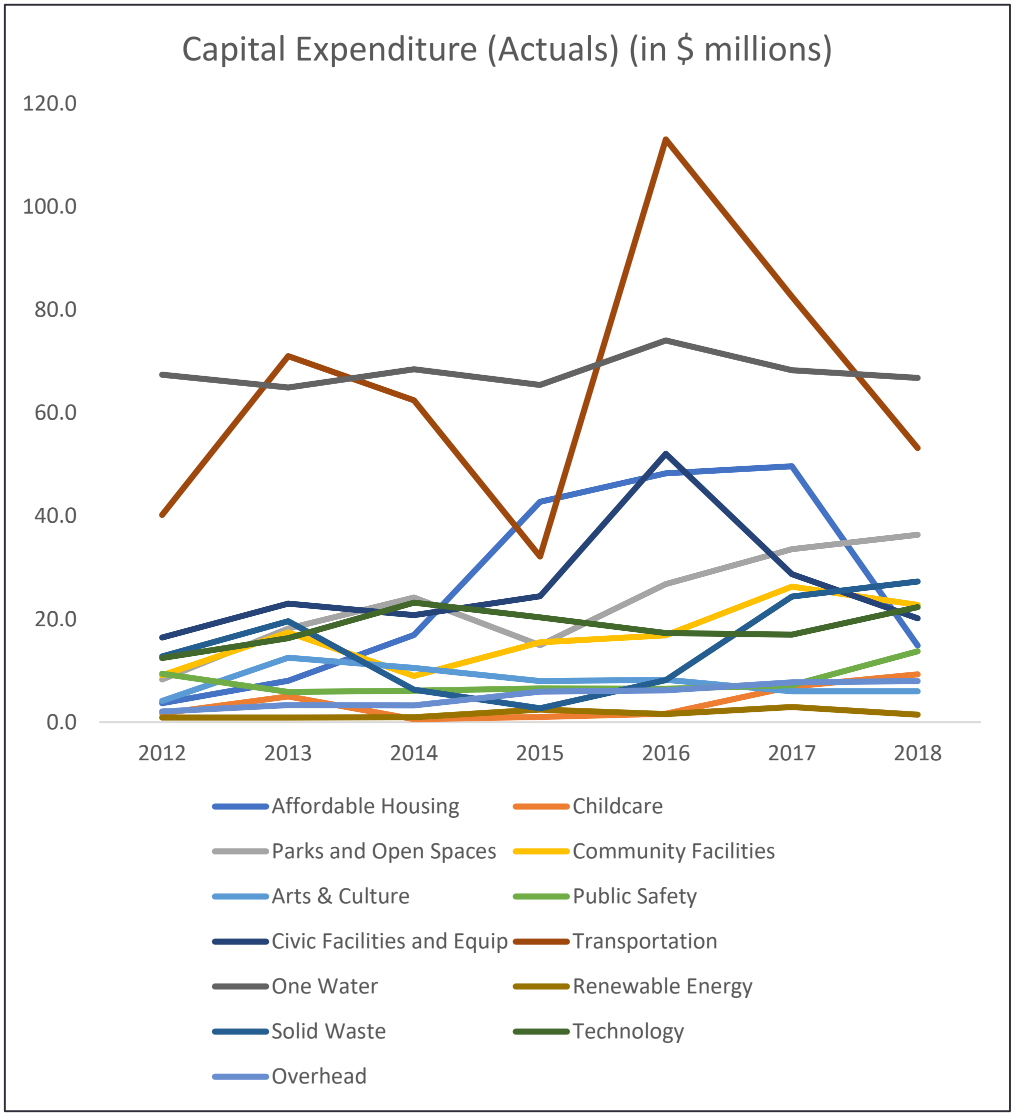
Capital Funding Sources



Funding Source Highlights

- As opposed to operating expenditure which relies on 2 major sources (property tax and utility fees), capital expenditure is funded from a more diverse portfolio
- Since 2013, developer contributions have been a major source of funding for the capital budget and has held the highest share over the last three years (touching 38% in 2017). These contributions are used to fund growth related capital investments and include development cost levies (growth related charge on new development) and community amenity contributions (cash or in-kind contributions as a result of council approved re-zonings)
- Plebiscite debentures and utility debentures contribute to a sizeable portion of the funding sources (approx. 30%). Plebiscite debentures reached a 7 year high of $81 million in 2018 to support the growth anticipated in the long term as well as the renewal required to maintain the capital assets in a state of good repair. (Renewal/redevelopment of Roddan Lodge, Evelyne Saller Center, renewal of Fire Halls etc.)
- Operating revenue set aside for capital projects help support the City's "pay-as-you-go" strategy for renewals/replacements

Capital Expenditure



Expenditure Highlights

- Budgeted spend for capital has grown at a CAGR of 7.7% between 2012-18, while actual spend has grown at 8.2%
- The City has an average capital spend rate of 79.3% with the highest spend in 2013 (92%) and the lowest spend in 2012 (66%). Spend rate has been declining over the last 2 years down to 68% in 2018. This is also lower than the average historical spend rate between 2012-17
- Transportation and One Water, collectively, have held the major share of capital expenditure ranging from 40-57% of the actual capital expenditures between 2012-18.
- Actual expenditures for Affordable Housing, Childcare, Parks & Open Spaces, and Community Facilities have the highest CAGR of 26%, 33%, 28%, 16% respectively and are in line with the City's objectives of investing in areas to benefit women and other equity-seeking groups

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Capital Expenditure - Drivers

The capital expenditure cost drivers under major categories are highlighted below. Further details of spending trends are available in Appendix C.

Category	Observations
Transportation	• Expenditure has been guided by investments proposed for transportation infrastructure upgrades and the Green City Action Plan, approved in 2011 • These predominantly include maintaining existing transportation infrastructure in a state of good repair and reconstruction/repavement/replacement of assets • Major projects include the Powell Street Overpass, Active Transportation Corridors Improvement, Arbutus Corridor, and Burrard Bridge Upgrades
One Water, Solid Waste, and Renewable Energy	• Capital investments have been driven by maintenance of existing utility infrastructure and upgrades/development of new infrastructure to support future needs • This includes replacement of water mains and combined/separated sewers, building and maintenance of solid waste management infrastructure, and investments in neighbourhood energy
Affordable Housing	• Expenditure has been guided by the Housing and Homelessness Strategy approved in 2011 • Drivers include investments in renewal of City-owned non-market rental housing and adding new units through various partnerships (includes land acquisition costs)
Parks & Open Spaces, and Recreation Facilities	• Capital spending has been based on the Park Board Strategic Framework (2012) and the Greenest City Action Plan (2011) • Major cost drivers are renewal of parks and open spaces, creation of new parks, addition and expansion of sport facilities, and renewal of community centres
Technology	• Technology investments are guided by the City's Digital Strategy adopted in 2012 • Expenditures were driven by technology upgrades and replacements, implementation of major applications such as SAFARI recreation system, and fleet management system
Others	• Other areas of investment include civic facilities (majorly driven by the Fire Truck Replacement Program), public safety facilities, and childcare (renewal of existing child care centres and adding new spaces for children of various ages)

4. Conclusion and Next Steps

Conclusion

As seen in the financial health review and trend analysis of the City's expenditures and revenues, the City is in a fiscally stable position and is able to meet its obligations through revenue generated from its own sources and without over-reliance on debt. While there aren't any major financial health challenges at present, the City should consider the following observations as part of its future budgeting in order to ensure that it remains financially sustainable.

Observation	Description
Reducing reliance on property tax and utility rates	Close to three-quarters of the City's operating revenue is funded from property taxes and utility fees. In order to diversify its revenue portfolio, the City may explore other revenue options through new business models, enhance existing revenue streams through full-cost recovery and means testing, and explore cost sharing options through partnerships
Building financial resiliency to climate change and natural disasters	Due to its geographic location, the City of Vancouver is prone to climate change related events such as floods and other natural disasters such as earthquakes which could cause shocks and stresses to the City's financial situation. The City may consider building resiliency in the City's capital assets to withstand adverse effects of climate change and natural disasters, and ensuring adequate investments are made to develop financial capacity to respond to these events
Ensuring affordability for residents and businesses	Housing affordability is a key challenge in Vancouver. Above inflation tax rates and utility rate hikes will continue to apply affordability pressures on the residents and businesses of the City. Along with affordable housing programs and investments, the City may consider ensuring budget decisions continue to be made with affordability perspective by placing targets on tax and rate increases, as many other municipalities do, and managing expenditures within the resultant budget "envelope" – in line with its current principle of keeping taxes and fees affordable and competitive
Balancing service pressures and rising costs due to population growth	The City's growing population and cost increases especially in areas beyond the City's control (e.g. Metro rates for water and sewer) will continue to place pressures on its capital and operating expenditures. Continuous improvement initiatives to rationalize costs, and a value-based outcomes driven approach to funding decisions would be crucial to manage rising costs while ensuring Council priorities are implemented
Improving capital spend rate	The City's capital spend rate has declined over the last 2 years and is currently lower than the 6 year average. Consider reviewing the City's ability to spend on capital to ensure that it is able to spend its allotted budget and essential capital investments are not delayed

Next Steps

Next steps for the City of Vancouver include:

Adopting formal targets and benchmarks for the financial health framework indicators

Develop and implement forward-looking and innovative modernization initiatives to build capacity for the future

(Phase B of this engagement)

Institutionalizing the financial health framework as a tool for decision making

Adopting strategies to implement recommendations such as equity-responsive budgeting

Appendix A: Financial Health Review Framework and Components

Building a better working world

Logical Framework - Three Layers of a Baseline Financial Review

1 SETTING THE FOUNDATION

Financial Pillars

Select 3-4 pillars that collectively provide a holistic perspective of the City's financial condition	Pillars to align with aspects of financial health that are important to both the City and to third parties (E.g. Credit rating agencies)	Broadly encompass all financial components tracked and monitored by the City (E.g. assets, reserves etc.) without being service-area specific

2 SETTING DIRECTION

Financial Principles

2-4 principles grouped under each of the pillars above	Each govern a specific financial aspect (E.g. debt, tax, revenue etc.) and collectively address fiscal health	Intended to guide staff and council on long term financial planning and budgetary decision making

3 MEASUREMENT AND REPORTING

Financial Metrics & Targets

Quantifiably evaluate performance under each principle	Provides guidance and rationale for implementing corrective measures	Reported as an annual scorecard in a way that is consumable for Council, staff, and the public

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1. Setting the Foundation – Selecting Financial Pillars

- The following indicative pillars are proposed to encompass the existing financial principles/polices listed in the City's fiscal plan, objectives of the City's budget process, and strengths and challenges of the City identified by credit rating agencies. Each pillar addresses certain components of financial health that are tracked by the City and by credit rating agencies. Together, the pillars address 5 finance related items generated from the City's recent priority setting exercise.

Pillar	Description	Financial Components Covered	Alignment with City's Fiscal Priorities
Sustainability	The ability to deliver services in a financially sustainable manner and maintain services and assets at desired levels through appropriate tax or rate hikes, and without disruptive cuts to services	• Tax and utility rates • Capital reserves • Asset Health	• Building financial sustainability and transparency • Increasing public trust and transparency • Balancing affordability of service vs revenue generation • Driving economic development • Managing City assets and infrastructure in a state of good repair
Vulnerability	The volume and predictability of own-revenue sources, reliance on external funding, and the resultant risk to meet financial obligations in the event of external "shocks"	• Development cost levies • Own source revenue	
Flexibility	The ability to change debt levels or leverage liquidity to meet financial obligations in a sustainable manner without undue pressure on residents	• Debt • Liquidity • Operating reserves	
Equity	The ability to ensure that financial decisions benefit all residents irrespective of gender and socio-economic class	• N/A	

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2. Setting Direction – Selecting Financial Principles

- To determine financial principles relevant to the City of Vancouver, the principles and financial polices that currently guide the development of the City's service plans, annual budgets, and medium- to long-term financial and capital plans were reviewed. In addition to this credit analysis reports of the City conducted by credit rating agencies (Moody's and Standard & Poor) were reviewed. These are categorized below:

Principles and Policies in 2019 Fiscal Plan

Fiscal Prudence

P1. Live within our means

P2. Consider long-term implications in all decisions

P3. Maintain a stable and predictable revenue stream

P4. Keep debt at a manageable level

P5. Build in flexibility and contingencies for emerging opportunities and priorities

Affordability and Cost Effectiveness

P6. Deliver services that are relevant and result in desired public outcomes

P7. Ensure value for money

P8. Keep property taxes and fees affordable and competitive

Asset Management

P9. Maintain assets in a state of good repair

P10. Optimize capital investments to meet public and economic needs while achieving value for investment

Objectives of 2019 Budget Process

B1. Spend only what the city can afford

B2. Create value for money

B3. Track results and measure goals set out in plans

Credit Reports 2019 – City's Strengths

S1. Fiscal surpluses

S2. Liquidity Cushion

S3. Low Debt

S4. Stable Revenue Sources

Credit Reports 2019 – City's Potential Challenges

C1. Housing affordability pressures

C2. Pressures on capital spending from population growth

EY

2. Setting Direction – Selecting Financial Principles

- High level financial principles to guide financial decision making are listed below. These principles are derived from the financial pillars and each principle governs a certain aspect of financial health. The alignment of these principles to the City's existing principles and policies as well as priorities flagged by credit rating agencies is also illustrated

MAPPING TO EXISTING PRINCIPLES, POLICIES, AND OBJECTIVES

Fiscal Pillar	Existing Principles, Policies, and Objectives	Proposed Principles
Sustainability	Keep property taxes and fees affordable and competitive	Maintain appropriate and responsible tax rates and fees
	Optimize capital investments to meet public and economic needs while achieving value for investment	Ensure capital spending is sustainable and affordable
	Pressures on capital spending from population growth	
	Maintain assets in a state of good repair	Manage assets to maintain a state of good repair
		Build resiliency towards climate change
Vulnerability	Stable Revenue Sources	Maintain stable and predictable revenue streams
	Maintain a stable and predictable revenue stream	
	Spend only what the city can afford	Ensure long-term financial impact of committments are evaluated to facilitate decisions about affordability and trade-offs
Flexibility	Build in flexibility and contingencies for emerging opportunities and priorities	Maintain budgetary flexibility to manage opportunities and priorities
	Liquidity Cushion	Build adequate liquidity to manage debt obligations
	Live within our means	Maintain affordable levels of debt
	Keep debt at a manageable level	
	Low Debt	
Equitability	N/A	Ensure equity is a key consideration in City financial decision making

Fiscal Principles	Budget Objectives	Credit Rating Strengths	Credit Rating Challenges

PRINCIPLES ALIGNING WITH OTHER EXISTING FISCAL OBJECTIVES

Vulnerability	Balance growth-related investments with growth-related revenues
Flexibility	Build reserves to mitigate fluctuations in tax and rate revenue

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3. Measurement and Reporting – Indicators Currently Measured (1/3)

#	Indicator	Observation	Included in Framework?	Proposed Modifications
1	# of tax folios	These are volume/quantity metrics that measure activities and outputs. The objective of the framework is to measure outcomes and bring in an additional level of rigor in evaluating components of fiscal health. Hence these are not recommended for inclusion in the framework		N/A
2	% of all net tickets issued paid or collected by all processes			N/A
3	% of current taxes outstanding			N/A
4	% of tickets net issued paid during discount period			N/A
5	Unqualified audit			N/A
6	Operating expenditure budget	Can be included in the framework with a modification that shows the affordability of the operating budget with regard to the stabilization reserve levels		Flexibility indicator - Stabilization reserves as a % of operating budget
7	Debt service as % of operating revenue	Included in the framework as a measure of debt burden		Retained as-is as a flexibility indicator

Included in framework	Included in framework with modifications	Not included in framework

3. Measurement and Reporting – Indicators Currently Measured (2/3)

#	Indicator	Observation	Included in Framework?	Proposed Modifications
8	Net debt per capita	Included in the framework as a measure of debt burden		Retained as-is as a flexibility indicator
9	Property tax increase	Can be included in the framework with a modification that enables comparison of actual property tax increases to pre-defined targets		Sustainability indicator - Property tax (target vs actual) comparison
10	% of contracts competitively bid	These are volume/quantity metrics that measure activities and outputs. The objective of the framework is to measure outcomes and bring in an additional level of rigor in evaluating components of fiscal health. Hence these are not recommended for inclusion in the framework		N/A
11	Value of contracts awarded			N/A

Included in framework	Included in framework with modifications	Not included in framework

3. Measurement and Reporting – Indicators Currently Measured (3/3)

#	Indicator	Observation	Included in Framework?	Proposed Modifications
12	Average rate of return on investments	Cannot be included in the framework as investment returns are not measured against a target		N/A
13	City of Vancouver credit rating	Can be included in the framework as a third-party evaluation of fiscal heath		Retained as-is as an indicator of overall financial health
14	Total investment and cash balance	Can be included in the framework with a modification that compares liquidity level with outstanding obligations to measure the City's ability to remain solvent in the event of loss of revenue		Flexibility Indicator - Cash Generation Ratio : Cash flow from operations as a percentage of total operating revenue (excluding development cost levies)

It was observed that the City does not publicly report on indicators related to asset health, affordability of the capital plan, readiness towards climate change, ability to balance growth related investments with growth related revenue, and ability to maintain expenditures below revenue.

Included in framework	Included in framework with modifications	Not included in framework

3. Measurement and Reporting – Sustainability Indicators

Below are some measurement indicators evaluated by other comparable municipalities in Canada and around the globe, and by credit rating agencies, which could provide an objective evaluation of fiscal health. These can provide a starting point for developing metrics and targets at the City

Principles	Indicator	Calculation Methodology	Description	Source
Maintain appropriate and responsible tax rates	Property tax increases (Target vs Actual)	Compare property tax increases (%) to a pre-defined target range (%) set by Council	Maintaining tax and utility rate increases with a target % reduces unpredictability in the tax and rate setting process, and ensures decisions are taken with a tax/rate target in mind. Targets may be set by balancing service targets, regulatory requirements, City's risk profile, and affordability for residents/businesses	
	Utility rate increases (Target vs Actual)	Compare utility rate increases (%) to a pre-defined target range (%) set by Council		
Manage assets to maintain a state of good repair	Asset renewal ratio	Operating budget supporting asset renewal as a % of asset replacement cost	Measures if the City is able to renew assets at an adequate rate to maintain desired service levels	

Indicator measured by the City
Indicator measured by other municipalities
Indicator measured by credit rating agencies
New indicator

3. Measurement and Reporting – Vulnerability Indicators

Principles	Indicator	Calculation Methodology	Description	Source
Balance growth-related investments with growth-related revenues	Development cost levies cost-revenue gap	Gap between growth infrastructure capital investments and growth related revenues (Development cost levies and CACs) – Target is to maintain the gap as zero as per the "growth pays for growth" policy and minimize the tax assist for development	A smaller gap implies that the City is able to fund its growth infrastructure capital requirements through growth related revenue, without external borrowing	
Maintain stable and predictable revenue streams	Own Source Revenue Ratio (Reliance on external funding)	Revenue generated by the City as a % of total revenue	A higher ratio implies the City is less reliant on external funding sources (e.g. grants and transfers) and is therefore less susceptible to service disruption in the event of an external economic shock	
	Gross Operating Balance as a % of operating revenue	Gross operating balance (operating revenue minus operating expenditure) as a % of operating revenue	A higher ratio implies the City is able to contain expenditures below revenues and generate surpluses needed for capital spending or debt amortizations	

Indicator measured by the City | Indicator measured by other municipalities | Indicator measured by credit rating agencies | New indicator

EY

3. Measurement and Reporting – Flexibility Indicators (1/2)

Principles	Indicator	Calculation Methodology	Description	Source
Maintain affordable levels of debt	Debt Burden	• Net debt/interest as a % of operating revenue • Net debt per capita	A lower ratio implies lesser risk for the City	
	Debt service coverage ratio	Total debt service costs (principal + interest) as a % of total operating revenue (excluding development cost levies)	A lower ratio implies the City has sufficient cash flow to cover its debt service costs	
Build adequate liquidity to manage obligations	Cash flow generation ratio	Measures cash flow from operations as a percentage of total operating revenue (excluding development cost levies)	A higher % ratio implies that the City raises more revenue from its own operations in order to meet its obligations	

Indicator measured by the City

Indicator measured by other municipalities

Indicator measured by credit rating agencies

New indicator

EY

3. Measurement and Reporting – Flexibility Indicators (2/2)

Principles	Indicator	Calculation Methodology	Description	Source
Maintain budgetary flexibility to manage opportunities and priorities	Budgetary flexibility	Measures capital expenditure as a % of total expenditure in a year	A higher % implies higher expenditure on capital programs which can be scaled down more easily in comparison to operating budget in the event of budgetary constraints	
Maintain reserves to mitigate fluctuations in tax and rate revenue	Stabilization reserves ratio	Measures the balance of stabilization reserves as a % of operating budget	A higher ratio implies the City can sustain operations for a longer period in the event of loss of revenue	

- In addition to these indicators, the City's credit rating will be used as a third-party, overall measure of fiscal health that encompasses all the financial pillars
- Indicators related to capital budget affordability, resilience to climate change, and gender based budgeting may be implemented over the long-terms based on Council targets and directions

Indicator measured by the City | Indicator measured by other municipalities | Indicator measured by credit rating agencies | New indicator

Appendix B: Financial Health Review Results

Building a better working world

Scorecard Overview

- Below is a snapshot of the City's performance from 2014 to 2018 in selected metrics for which historical data is available for comparison and analysis
- As illustrated, the City has seen positive or stable trends in 8 of the 11 indicators over the 5 year period which points to sound financial management practices and fiscal discipline
- This has also been corroborated by third party entities such as credit rating agencies. While Moody's has provided the City with the highest possible rating (Aaa) for the entire 5 year period, Standard & Poor has upgraded the City to its highest possible rating (AAA) in 2017 after assigning it an AA rating in 2014. This points to continuous improvement of credit-worthiness and financial well-being of the City through a strong institutional and governance framework (as noted by the credit rating agencies)

Metric	2014	2015	2016	2017	2018
Property tax increases	1.62%	2.46%	2.02%	3.87%	4.27%
Utility rate increases	2.91%	4.10%	4.81%	6.09%	7.87%
Own source revenue ratio	93.3%	92.9%	93.0%	93.0%	93.4%
Gross operating balance ratio	13.2%	15.0%	14.3%	14.2%	18.5%
Debt Burden - Net debt as a % of operating revenue	51%	48%	47%	43%	39%
Debt Burden - Interest expense as a % of operating revenue	2.7%	2.7%	2.8%	2.8%	2.4%
Debt Burden - Net debt per capita	$960	$947	$931	$898	$876
Debt service coverage ratio	9.5%	9.3%	9.1%	9.1%	8.5%
Cash flow generation ratio	23.4%	21.6%	23.2%	21.8%	21.8%
Budgetary flexibility	24.2%	25.0%	25.7%	36.7%	30.3%
Stabilization reserves ratio	5.9%	6.8%	6.9%	7.7%	9.9%

Trending positively | Stable trends | Trending negatively

Appendix C: Detailed 10-year revenue and expenditure trends

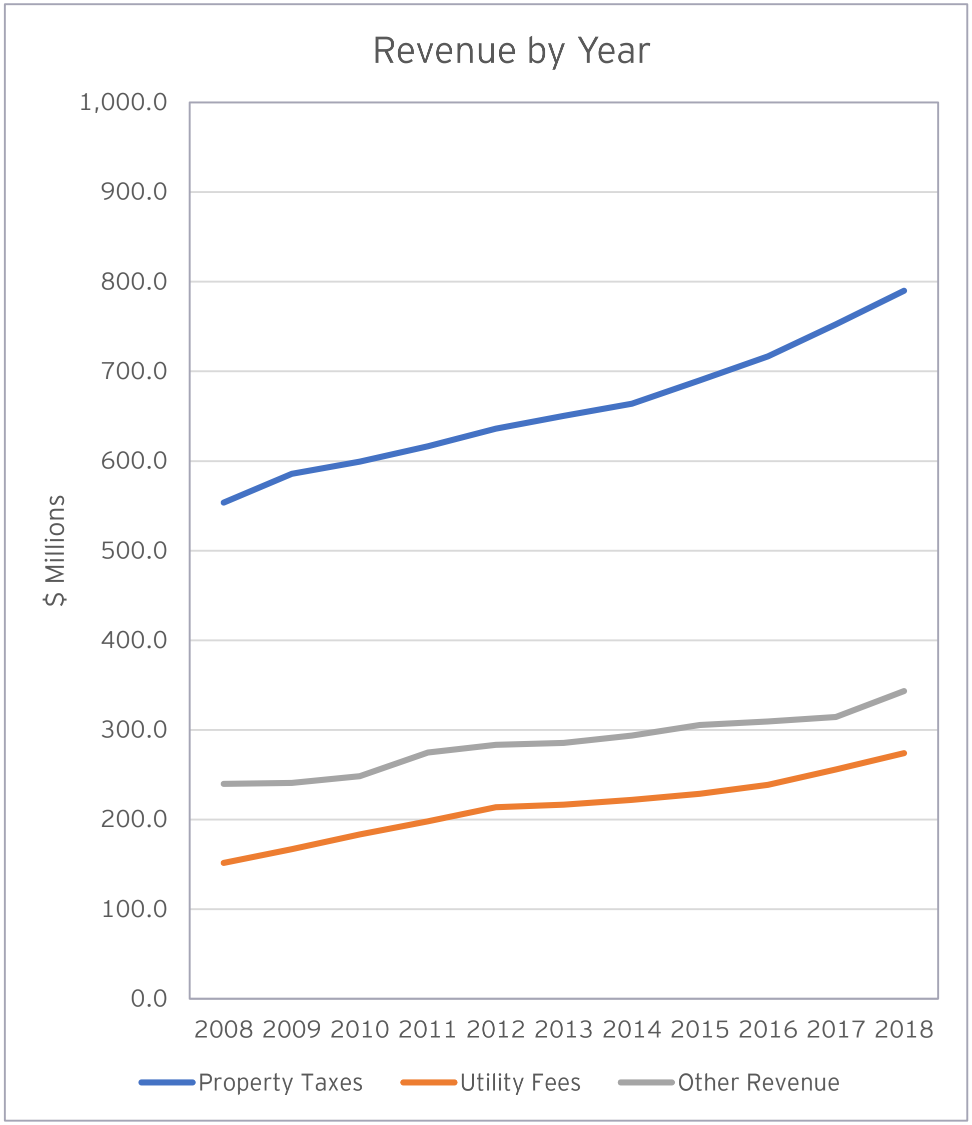
Building a better working world

Operating Budget Categories

Operating expenditure trends were analyzed based on the categories below as per the 2019 Budget Book.

Category	Service Area
Public Safety	Police
	Fire
Engineering & Utilities	Utilities
	Engineering Public Works
Community-Related Services	Parks and Recreation
	Community Services
	Library
	Development, Buildings and Licensing
	Planning, Urban Design, and Sustainability
	Others
Corporate Support	Corporate Support
	Debt and Capital (Non-Utility)
	Contingencies and Transfers

Operating Budget - Revenue



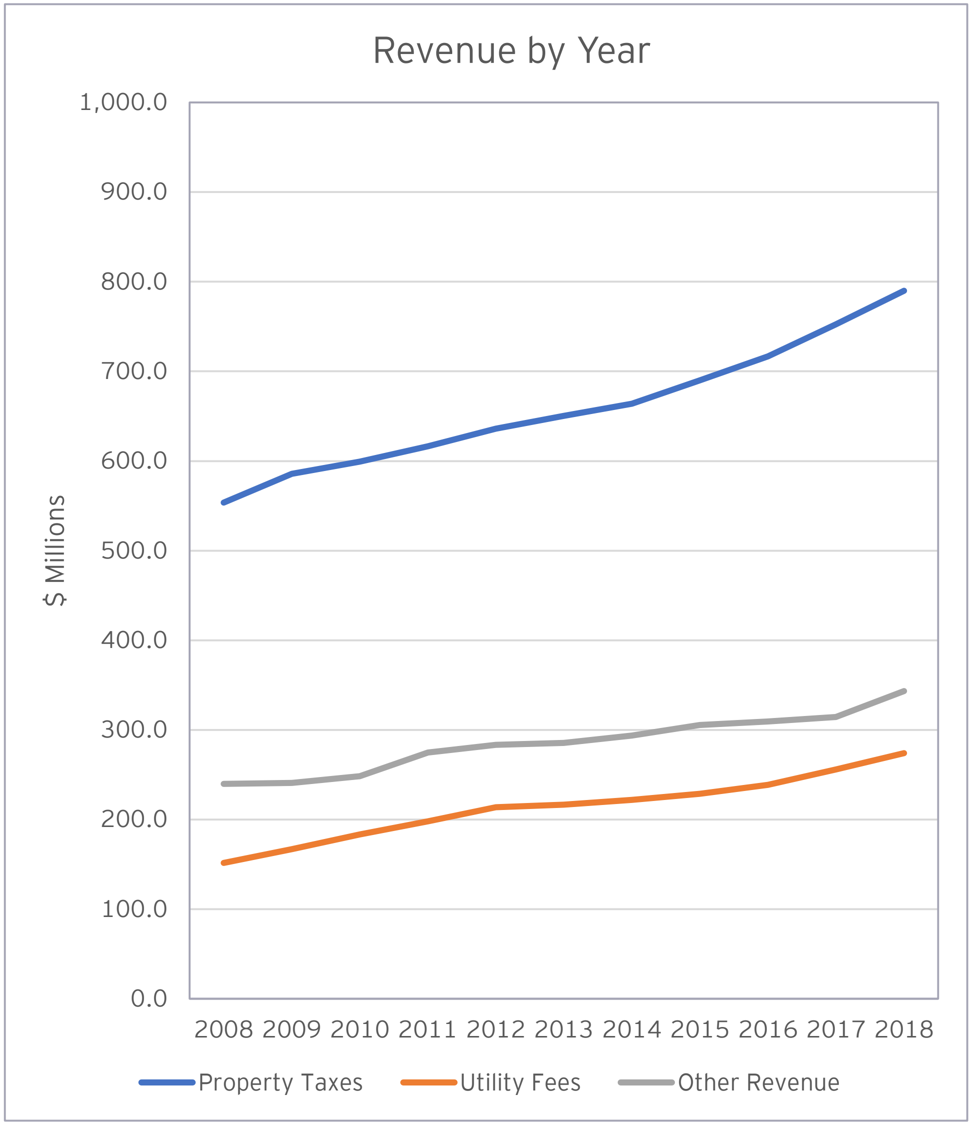
Property Tax

- Property tax experienced a steady annual increase of 2% - 6%. The cumulative annual growth rate over the past 10 years is 4% driven by property tax increases approved by Council to support service levels

Utility Fees

- Utility fees experienced a higher increase (above 5% per annum) during 2009 - 2012 and 2017 to 2019. The cumulative annual growth rate over the past 10 years is 6%.
- The increase is a direct result from a combination of the following:
    - Increase in volume of utility usage; and
    - Increase in metro levy rates, metered rates and flat fee rates.
    - Transition to pay-as-you-go funding

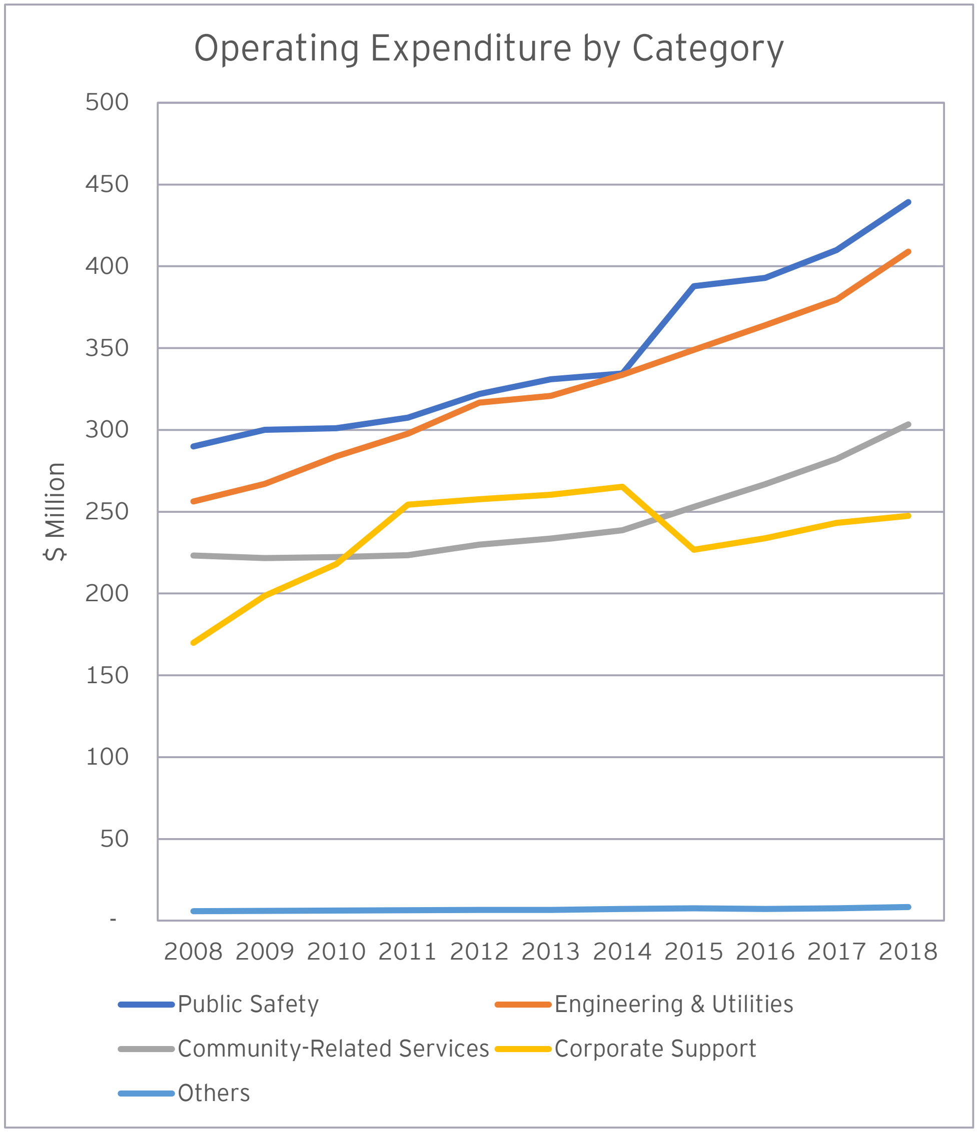
Operating Budget - Revenue



Other Revenue

- Other revenue is comprised of license and development fees, Parking, Program fees, Cost recoveries, grants and donations, Rental, lease, and others, Bylaw fines, Revenue sharing, and investment income – with license and development fees being the major contributor
- Volumes for development, building, rezoning, trades and related permits increased by 24% from 2008 to 2016 while staff increased 6%. In 2017, Council approved a 2 year plan to bring in 85 new staff to support this service.
- In addition, a number of development related costs were not being recovered by fees prior to 2017. The movement of these costs from taxes to fees was built into the 2 year plan approved in 2017 with the key principle that costs be allocated to users that most directly benefit from these services.
- The increase in parking resulted from both an increase in parking occupancy as well as an increase in rates at high demand parking areas.

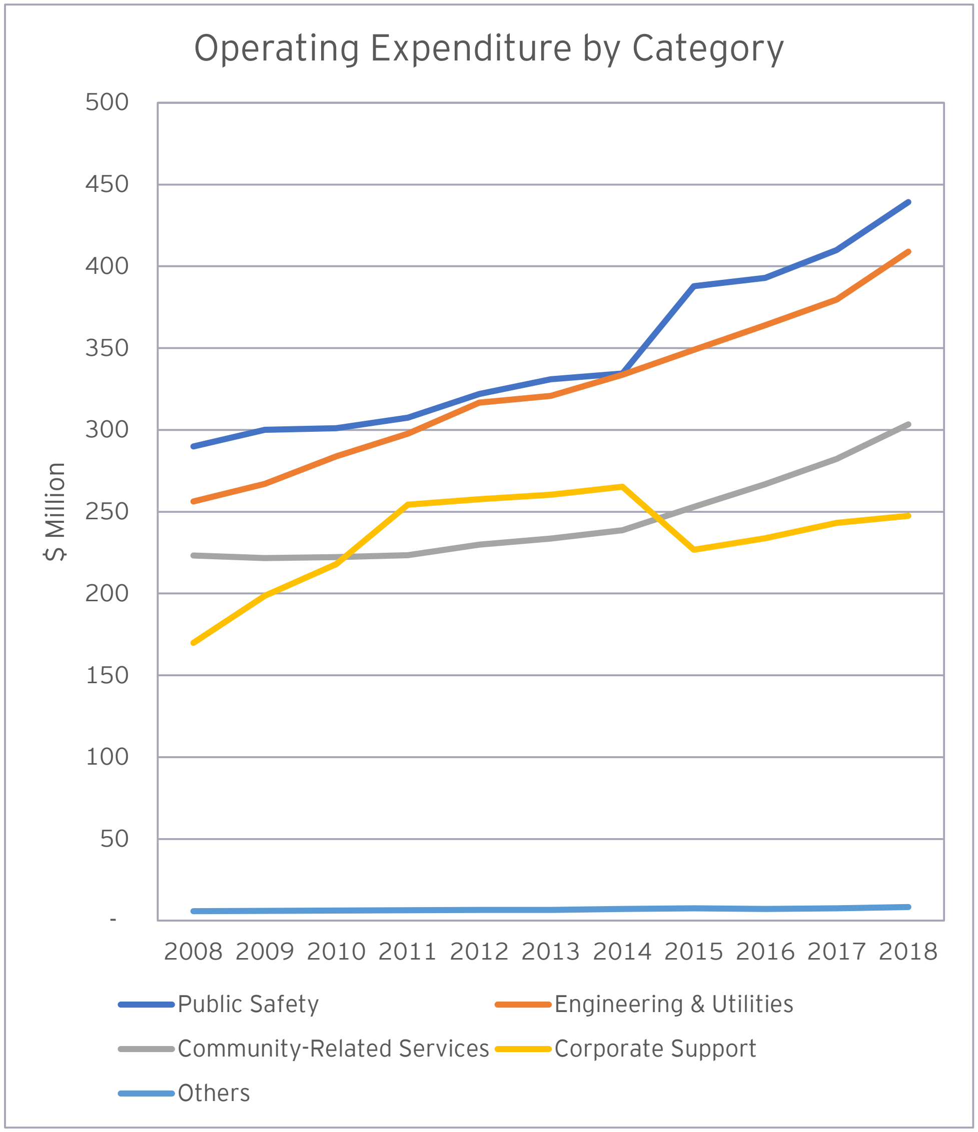
Operating Expenditure



Public Safety

- Public Safety is comprised of Police and Fire Department expenditures. The CAGR of Public Safety expenses is 4.2% over the last 10 years, with Police contributing 4.4% and Fire 3.8%.
- Police expenditures are wages and benefits for the Vancouver Police Department. The VPD contract agreements are negotiated every 3 years, which causes an increase in police expenditures after the year of negotiation.
- Enhanced strength of police force in 2018 also attributed to an increase in costs
- Fire department experienced a significant increase in cost during 2015, which resulted from an arbitrated settlement between the Vancouver Fire Fighters Union and City of Vancouver. The Fire department also increased the wages per their collective agreement in 2018, which resulted in a 9% annual increase year over year.
- Additional expenditure was incurred in 2017 for Fire to fund operating impacts and maintenance costs of new fire trucks

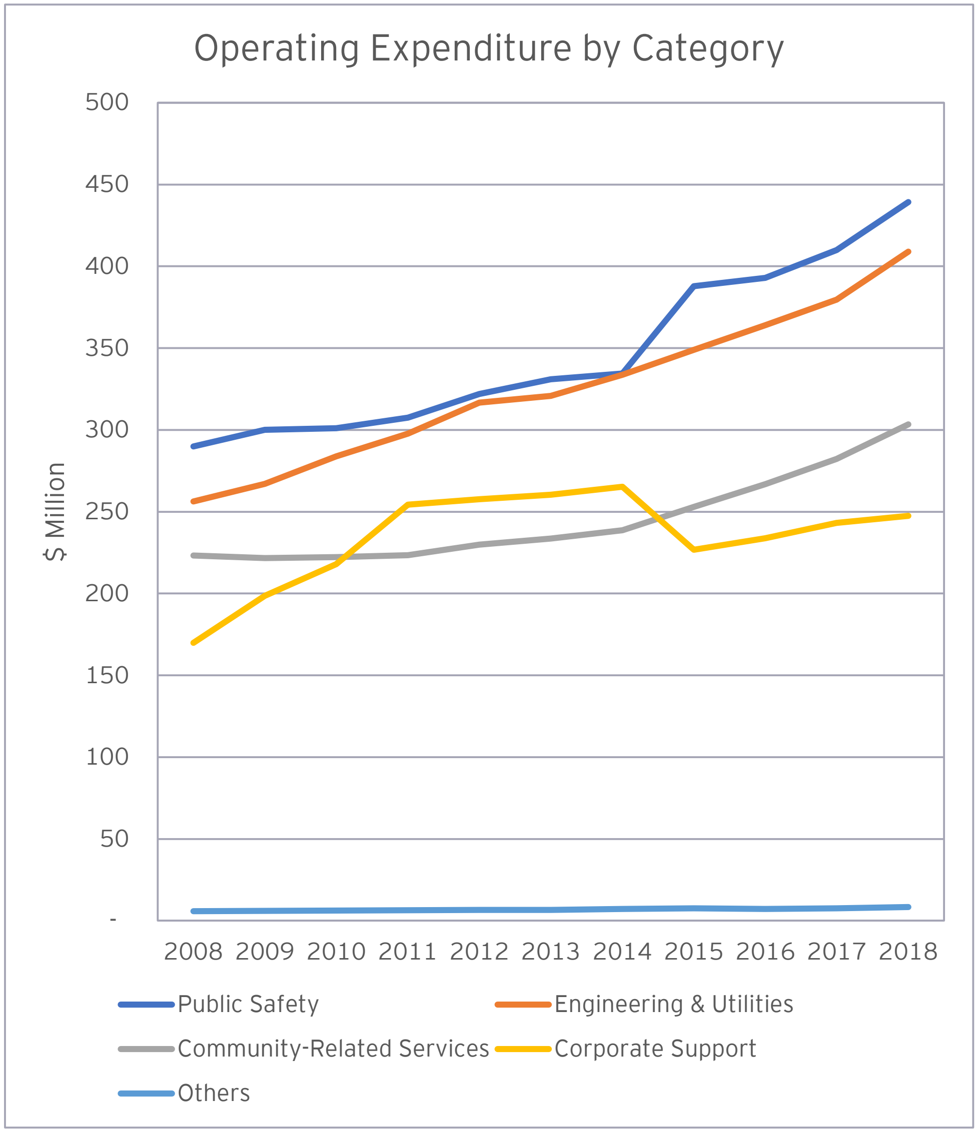
Operating Expenditure



Engineering & Utilities

- Engineering & Utilities is comprised of Engineering public works department and Utilities Department expenditures. The CAGR of Engineering & Utilities expenditures is 4.8% over the past 10 years (5.3% for Utilities and 3.3% for Engineering Public Works)
- Engineering public works experienced an above-normal increase in 2017/2018. The increase resulted from an increase in street activities, which included introduction of public bike share programs, and enforcement of public parking meters.
- The increase in Utilities Department expenditures directly mirrors the utilities department's increase in revenue over the past 10 years; which resulted from increase in general consumption.

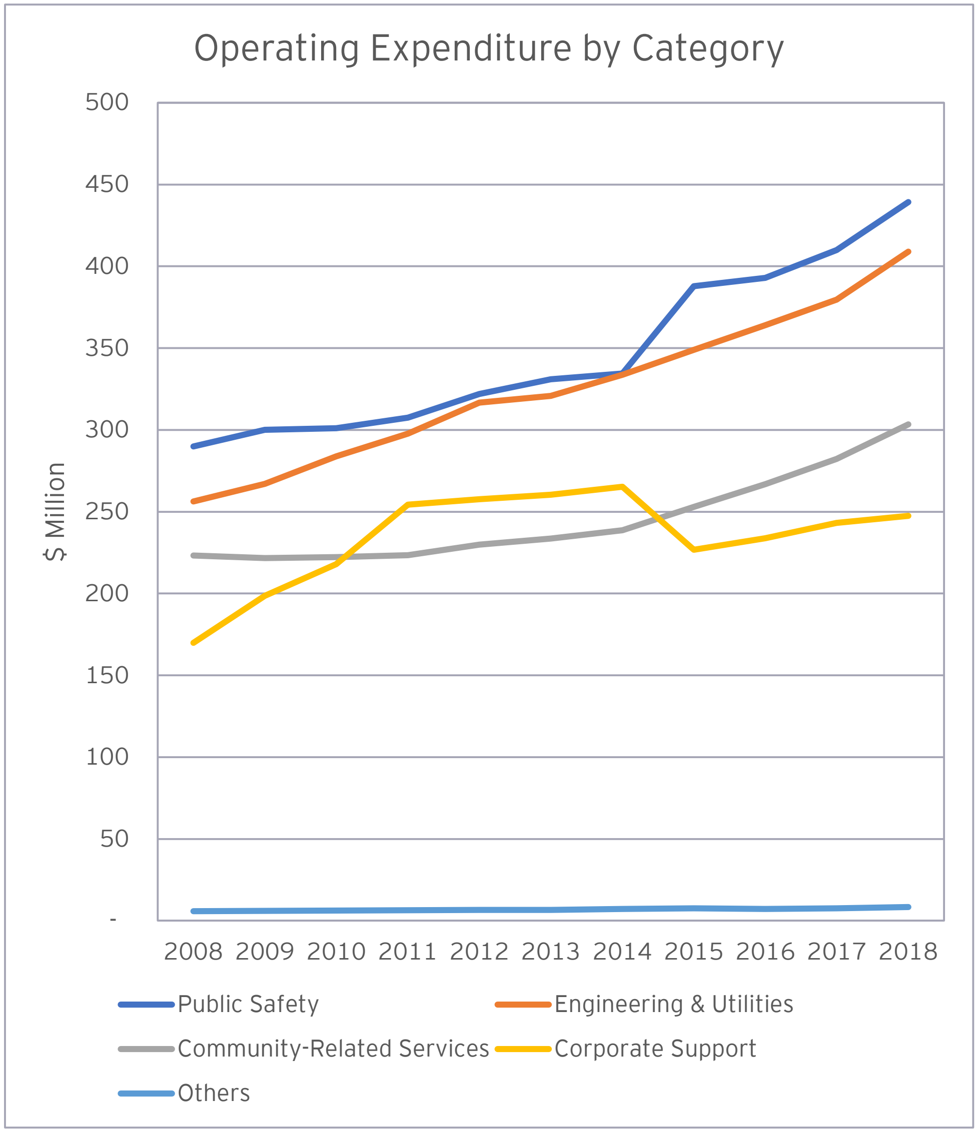
Operating Expenditure



Community Related Services

- Community-related services is comprised of Parks & Recreation, Community services, Library, Development, Buildings & Licensing, and Planning, Urban Design and Sustainability. The CAGR of Community-related services expenses is 3.1% between 2008-18rs. Although majority of the expenses relate to Parks & Recreation and Community Services, the highest growing expense categories are Development, Buildings & Licensing and Planning, Design and Sustainability with CAGR of 9.9% and 14.7% respectively.
- Development, Buildings & Licensing had a significant increase in 2015 (77% annual increase), as a result of reallocating the inspection services group from Corporate Support to Community-Related Services.
- Planning, Urban Design and Sustainability had a significant increase in 2018 (49%). The increase resulted from increase of consultation, regulatory review related to affordable housing and permitting for development activities, and the zero-emission building strategy

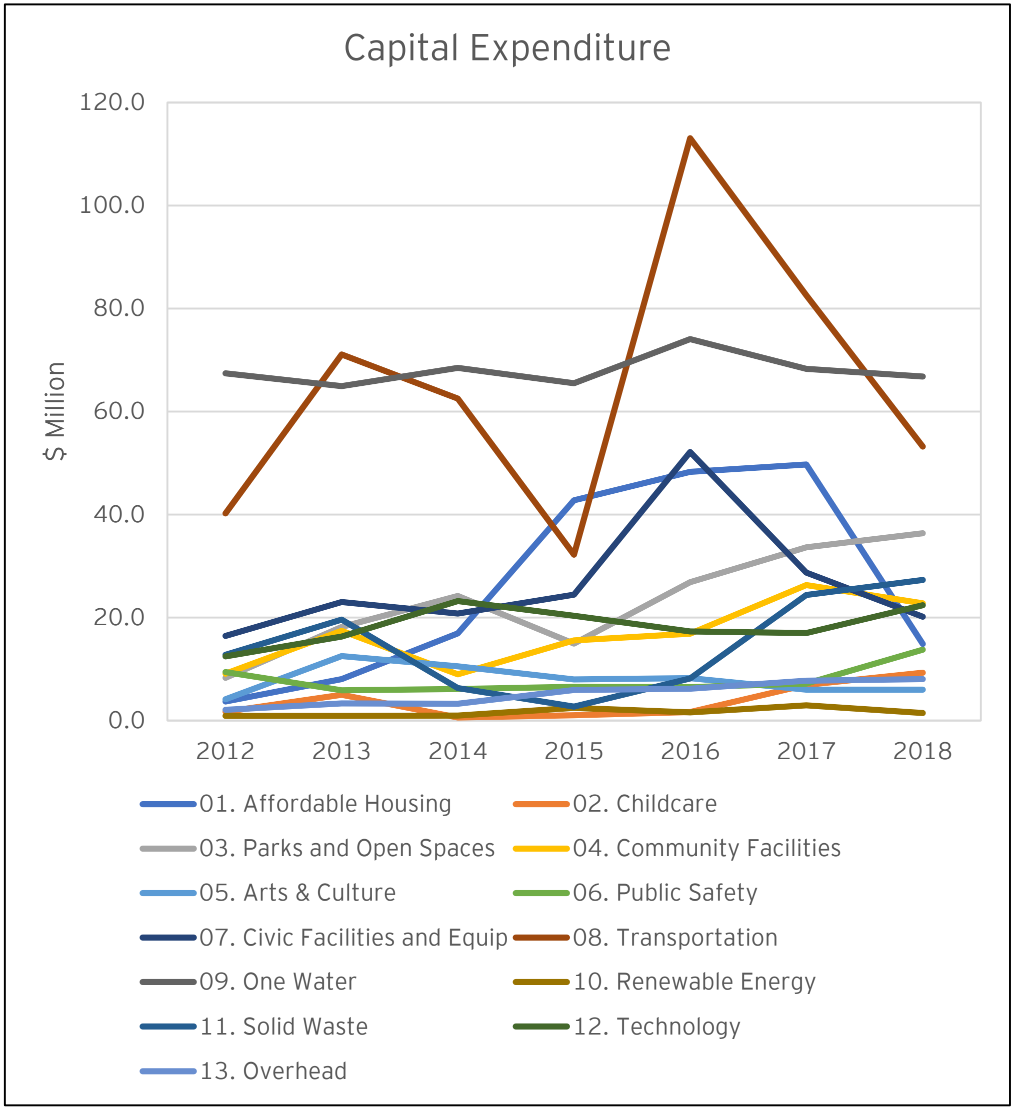
Operating Expenditure



Corporate Support

- Corporate Support services is comprised of Corporate Support, Debt & Capital (non-utility), and Contingencies and Transfers. The CAGR of Corporate Support expenses is 3.6% over the past 10 years. Corporate Support cost experienced an above normal increase in 2011 and decrease in 2015.
- The 2011 increase was contributed by an increase in operating costs from new facilities, such as Hillcrest Community Centers and Library and new park board facilities. The increase was also contributed by an increase in wage provision for VPD & Vancouver Fire Fighters Union.
- The 2015 decrease was contributed by productivity saving from staff members and budget re-alignment to wage provisions after the arbitration settlement between City of Vancouver and VPD & Vancouver Fire Fighters Union.
- Increase in corporate support costs is attributable to the consolidation of corporate services across departments to a shared services business model

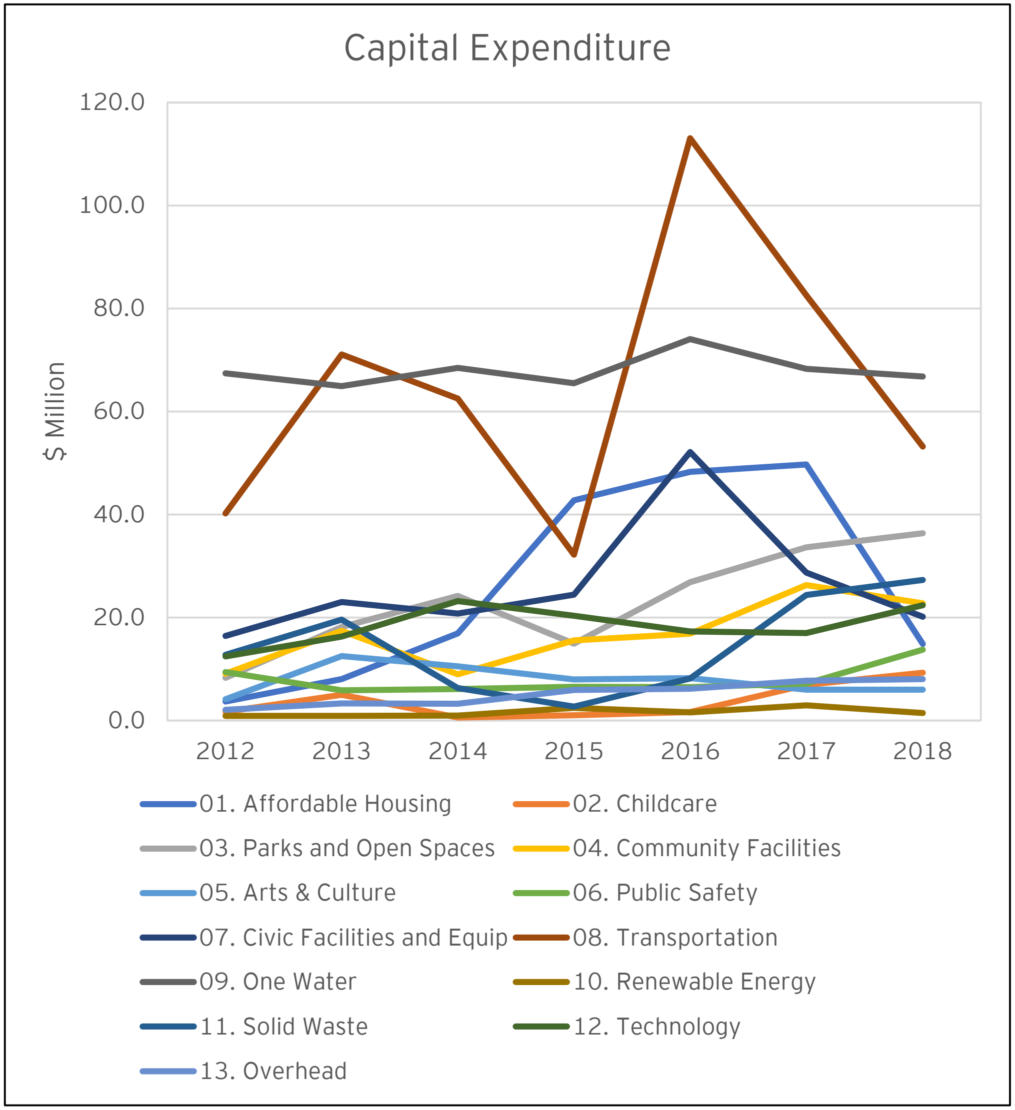
Capital Expenditure



Transportation

- 2013: Expenditures were high primarily because three major multi-year projects, due to their progress, had higher spend in 2013 compared to 2012:
  - Powell Street Overpass ($24.4M in 2013 vs. $2.9M in 2012). Granville Bridge - Bearing Replace ($6.9M in 2013 vs. $0.5M in 2012).
  - Active Transportation Corridors & Improvement ($5.2M in 2013 vs. $1.2M in 2012).
- 2016: The high expenditures were primarily due to the $55M land acquisition for the Arbutus Corridor project and due to the higher spend for the Burrard Bridge Upgrades as the project progressed ($15.3M in 2016 vs. $1.6M in 2015).
- 2013/2016 are extraordinary spikes. Normalizing for those years, the Transportation capital expenditure did not fluctuate significantly.

Capital Expenditure



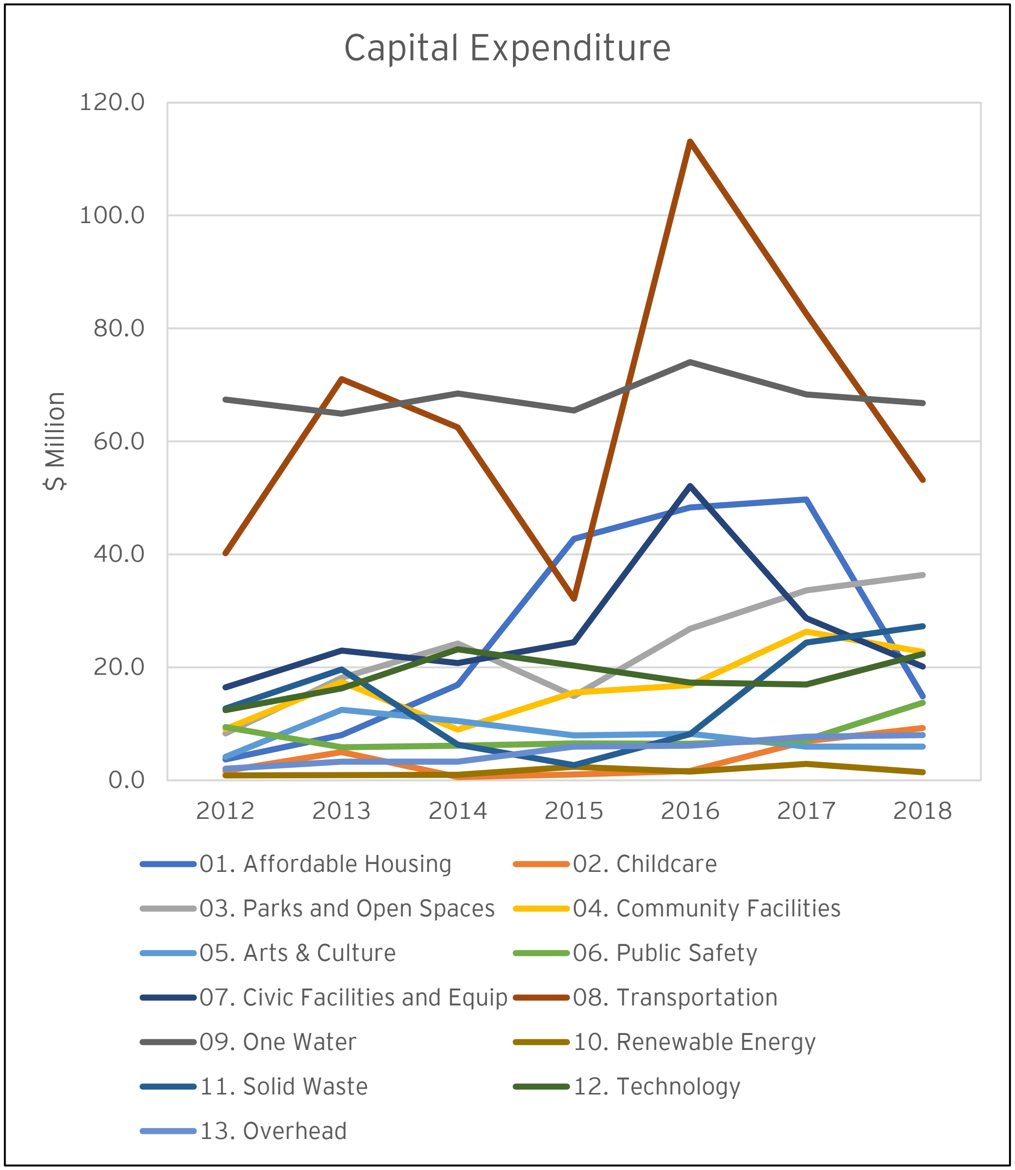
Affordable Housing

- The City allocated higher funding for the service category for affordable housing in the 2015-2018 Capital Plan of $125M, compared to $60M in the 2012-2014 Capital Plan. The two major affordable housing related projects in 2015 were:
  - Cash-flow Contribution to Property Endowment Fund for Land Trust Sites was $19.8M; and
  - Non-market Housing Land Acquisition

Civic Facilities

- The increase in 2016 was resulted from a $32.5M disbursement in 2016 relating to the 2014 Fire Truck Replacement program. The project had a total multi-year project budget of $35.2M but only small amount was disbursed prior to 2016 (2015: $2.5M, 2014: $0M).

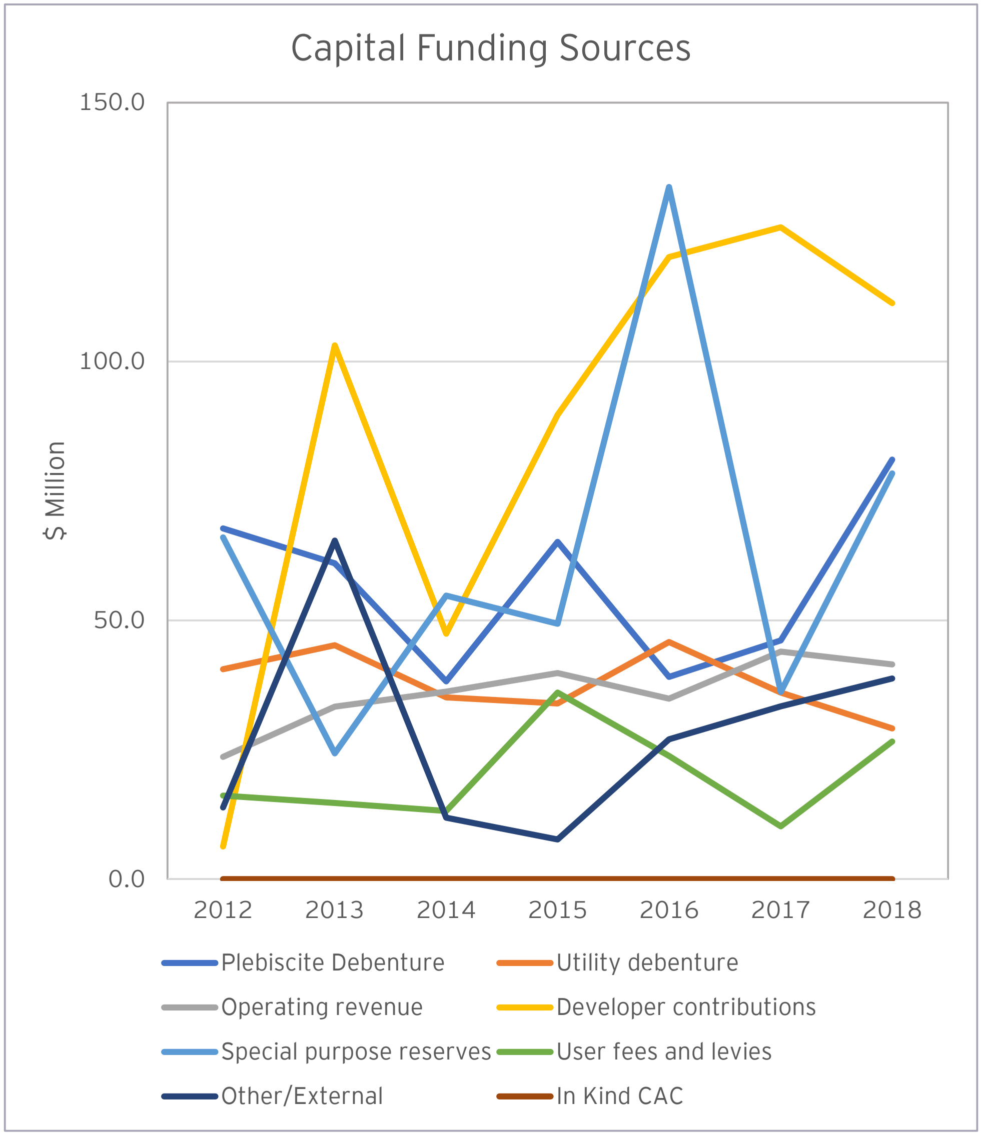
Capital Expenditure



Childcare

- The expenditures in 2013 and 2017 were high as the major multi-year projects made progress and as a result, increased expenditures.
- Major projects in 2013:
  - Seymour Child Care Spend in 2013: $2.08M); and
  - CityGate II Childcare Capital Spend in 2013: $1.5M
- Major projects in 2017:
  - Kits Montessori Daycare (2001 W 10th Av) Spend in 2017: $2.5M; and
  - Lord Nelson Elementary Child Care Spend in 2017: $3.1M

Capital Funding Sources



Special purpose reserves

- The City has amounted a special purpose reserves which it uses to fund specific capital programs on an annual basis (e.g. Equipment and Vehicle replacement reserve, parking meter reserve, Civic Theater reserve, Solid Waste reserve for landfill, etc.). The City also has other reserves which it uses to fund emerging needs such as Capital Facilities Reserves.
- In 2016, the City invested in the following 2 major capital projects which led to a spike in the withdrawal from special purpose reserves:
  - Arbutus Corridor – land acquisition; and
  - Vancouver Landfill Western 40 Hectare Closure.

Developer contributions

- Developer Contributions are used to fund only growth related capital investments.

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