AGENDA

STRATEGIC MEETING OF COUNCIL

April 25, 2018, 9:30 AM
IN THE COUNCIL CHAMBER

1. CALL TO ORDER

2. OPENING REMARKS

3. QUESTION PERIOD

4. CONFIRMATION OF AGENDA

5. CONFIRMATION OF MINUTES
   (None)

6. PRESENTATION(S) AND RECOGNITION(S)
   (None)

7. CONSENT AGENDA
   (None)

8. POSTPONED REPORTS
   (includes related/supplemental reports)

   (None)

9. ITEMS FROM OFFICERS, ADMINISTRATION AND COMMITTEES

   9.1 OFFICER OF COUNCIL REPORTS
   (None)

   9.2 ADMINISTRATION REPORTS

   9.2.1 One Calgary: Setting Indicative Rates for 2019-2022, C2018-0489

   9.3 COMMITTEE REPORTS
   (None)

10. ITEMS DIRECTLY TO COUNCIL

   10.1 NOTICE(S) OF MOTION
   (None)

10.2 BYLAW TABULATIONS
(None)

10.3 MISCELLANEOUS BUSINESS
(None)

11. URGENT BUSINESS

12. CONFIDENTIAL ITEMS

12.1 CONSENT AGENDA
(None)

12.2 ITEMS FROM OFFICERS, ADMINISTRATION AND COMMITTEES
(None)

12.3 URGENT BUSINESS

13. ADMINISTRATIVE INQUIRIES

13.1 Response to Administrative Inquiry 2018 March 21 - Property Tax, AI2018-02

14. ADJOURNMENT

One Calgary: Setting Indicative Rates for 2019-2022

EXECUTIVE SUMMARY

Making life better every day for Calgarians is our common purpose. The City of Calgary delivers on this purpose by being a service and results-driven, accountable and resilient municipal government, placing citizens, customers and communities at the forefront of our plans, decisions and actions. Three Conversations, One Calgary: The City's Strategic Plan for 2019-2022 will deliver on Council's direction through service plans and budgets that will be presented to Council in November. Ultimately, the work ahead is about better service delivery, demonstrating value for tax dollars, building resilience and contributing to quality of life today and for generations to come. This report and the discussion with Council on April 25 is an important milestone in the process to develop service plans and budgets as it sets the investment parameters within which Administration will plan and budget.

ADMINISTRATION RECOMMENDATION:

That Council:

1. Approve indicative tax rates as presented to Council through the presentation delivered on April 25, 2018 as part of this report;
2. Approve 2019-2022 indicative rates for Water, Wastewater and Stormwater services as outlined in Attachment 1, page 3, table 1; and
3. Approve 2019-2022 indicative rates for Waste & Recycling services as outlined in Attachment 2, page 3, table 1.

PREVIOUS COUNCIL DIRECTION / POLICY

On 2005 January 31, Council approved the Multi-Year Business Planning and Budgeting Policy (CFO004). This policy was amended on 2008 January 14 and on 2012 April 9.

On 2011 April 5, Council approved principles for setting indicative tax rates (C2011-31). These were updated on 2018 March 21 (C2018-0304).

On 2014 September 15, Council approved the City Manager's Leadership Strategic Plan: Contract with Council (C2014-0703), which identified service plans and budgets as a key component of The City of Calgary's performance management system intended to support better delivery of services to communities, customers and Calgarians.

On 2015 November 25, the Capital Infrastructure Investment Strategy was approved by Council (C2015-0855) and on 2017 March 6, Council directed that Infrastructure Calgary update this strategy as part of the capital planning for the 2018 budget process (C2017-0214).

On 2017 December 4 (C2017-1213), Council received "Setting your Council Directives for 2019-2022 (One Calgary)". The materials gathered in that document utilized data from multiple citizen engagements and surveys and was an input into setting Council's Directives for 2019-2022.

On 2018 January 31 (C2018-0115), Council adopted the "Council Directives to Administration for 2019-2022 One Calgary Service Plans and Budgets". Further, Council adopted a motion arising to direct Administration to bring forward amendments to the Council Priorities.

On 2018 February 28, Council:

- Adopted the additional amendments to the “2019-2022 Council Directives for One Calgary” (C2018-0201).
- Approved “Three Conversations, One Calgary” as the framework that will guide the development of The City’s Strategic Plan for 2019-2022 (C2018-0224).

On 2018 March 19 (PFC2018-0200), Council directed Administration to report back to Council, through the Priorities and Finance Committee, in Q2 2018 with strategic growth recommendations that increase the level of City commitment and investment in new communities. Beginning with the 2019 – 2022 budget cycle (One Calgary service lines and budgets) Administration was further directed to prioritize future growth areas, including financial implications for the 2019-2022 budget cycle, future budget cycles, and how any funding gaps for operating and capital would be funded using the property tax.

On 2018 March 19 (UCS2018-0223), Council approved Financial Plan 2019-2022 for Water and Wastewater Lines of Service.

Also on 2018 March 19, Council approved Financial Plan 2019-2022 for Stormwater Management Line of Service (UCS2018-0230), and Waste & Recycling Services Financial Plan 2019-2022 (UCS2018-0150)

On 2018 March 21 (C2018-0304), Council approved the updated principles for setting indicative tax rates and the updated Capital Infrastructure Investment Strategy. With respect to report C2018-0304 Council adopted the Motion Arising to direct Administration to return to the April 10 Priorities and Finance Committee with updated principles reflecting the incorporation of elements of value to citizens.

On 2018 April 10 (PFC2018-0445), Priorities and Finance Committee approved The City’s Strategic Plan Principles, which introduce a set of five overarching principles and associated value dimensions for One Calgary which will guide the development of the 2019-2022 service plans and budgets. These principles will be presented to Council on 2018 April 23 for approval.

BACKGROUND

As noted in the March 21 One Calgary report (C2018-0304), the following items are outlined in this report:

1. Indicative tax rates that provide a financial envelope within which Council will direct Administration to develop the 2019-2022 service plans and budgets. Direction from Council on 2018 March 21 provides the basis for the work that will return to Council on 2018 April 25.

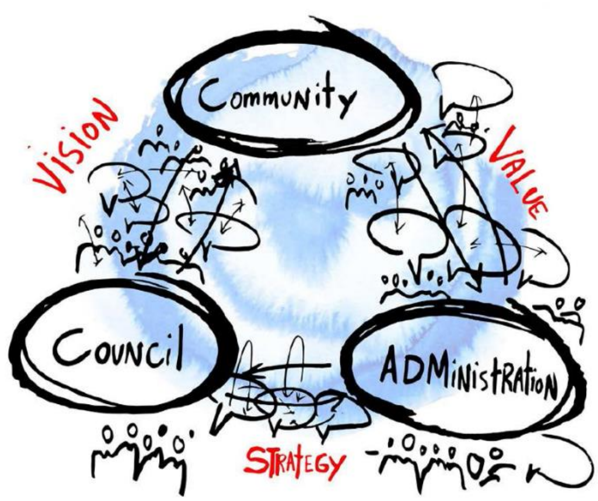
2. Indicative rates for utility services (Waste & Recycling, Wastewater Collection & Treatment, Water Treatment & Supply, and Stormwater Management).

It will be noticeable that this report contains more detailed information on indicative rates for Water Utility and Waste & Recycling Services than on indicative tax rates. This is the result of a timing and sequencing issue. Council directed Administration only on 2019 March 19 to identify

One Calgary: Setting Indicative Rates for 2019-2022

implications of commitment and investment in new communities for the 2019-2022 budget cycle, future budget cycles, and how any funding gaps for operating and capital would be funded using the property tax. Administration has been working on these implications and will present first results of this work to Council during the Strategic Meeting on April 25, 2018. At the time of this report the resulting indicative tax rate ranges where not yet available. They will be presented to Council on 2018 April 25 including implications of new community growth on the property tax. The number will, however, be preliminary and will be finalized as directed by Council for the 2018 June 20 meeting of the Priority and Finance Committee.

On 2018 February 28, City Manager, Jeff Fielding presented 'Three Conversations, One Calgary' as the framework to guide the development of The City's Strategic Plan for 2019-2022 including service plans and budgets. As shown in the conceptual drawing of that framework below, there are three sets of relationships, conversations and results.



The development of 2019-2022 service plans and budgets is guided by a set of five principles that correspond with the relationships and conversations as illustrated above. In essence, The City strives to address citizen needs and long-term quality of life aspirations by using a Council-directed and integrated strategic approach to maximise service value for citizens. The City will be accountable for delivering on these expectations by monitoring the value it generates through service delivery and using performance measures to report on any progress that is made. The City is also committed to continuously adjust and improve its services to respond to citizen needs and expectations.

Striking the right balance between delivering on Council Priorities and Directives, service needs and expectations relating to what Calgarians value, and affordability, budget realities and long-term financial sustainability and resilience will be the overarching goal for the development of 2019-2022 service lines and budgets. Finding this balance will create service value for citizens throughout the next four budget years.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

It is important to put the development of the next four-year budget cycle in context with past commitments, as well as significant challenges, shocks and opportunities the city of Calgary was impacted by in recent years. The City is faced with a world that is increasingly volatile and uncertain. Calgary is influenced by highly complex interdependencies and external influencing factors that reach far beyond the city limits, or the province of Alberta. Ambiguity results in multiple plausible scenarios for the immediate and longer-term future which makes practices of learning from the past and forecasting into the future less and less likely to meet the reality.

Calgary experienced several of these volatilities and uncertainties in the current plan and budget cycle – Action Plan 2015-2018. Our organization proved resilient by responding to highly fluctuating population growth, and a severe drop in oil prices, that led to an economic recession and an unemployment rate above the national average. The City had to find solutions to respond to a resulting revenue shortfall and an increasing budget gap.

Administration responded with an increased emphasis on service efficiency, and established a budget savings account to incentivize cost savings. The organization managed the costs of delivering services to citizens by, for instance, intentionally managing workforce and reducing Action Plan approved increases to selected rates and fees. Furthermore, The City reduced selected service levels, prioritizing the reductions using an approach that considered the least harm to citizens, and realized targeted investments to especially support those Calgarians that are most impacted by the economic downturn.

In total, these efforts led to $523 million in cost reductions and enabled The City to maintain affordability of services for citizens. Despite some service reductions, citizens maintained a high level of satisfaction with the services provided as shown by the results of the most recent citizen satisfaction survey.

The development of the 2019-2022 service plans and budgets will continue with these efforts. Putting what matters to citizens at the core of the next four-year plan and budget cycle will allow for a strong citizen focus, and will make it more transparent for citizens to understand where and how their tax dollars are invested. Administration is currently engaging citizens through an in-depth online survey about 43 externally-facing service lines. Citizens are asked to provide input about what they value about City services and how they rank these values. Results of this engagement will be presented to Council at the 2018 May 16 Strategic Meeting.

While The City is committed to continuously improving service value, it needs to be highlighted that finding efficiencies will become increasingly difficult and complex as the more straightforward opportunities have already been implemented. Further cost reduction, therefore, may not be feasible without cutting service levels and/or service scope.

The biggest challenge to maintain service delivery at the current levels throughout the 2019-2022 cycle is that The City's non-tax revenues are not keeping pace with the rate of inflation and growth of City expenditures. Specific revenue streams such as ENMAX dividends and franchise fees have fluctuated over time, but maintained a level over the last 10 years that sits at roughly 2008 revenues. They are projected to slowly recover; however per capita revenue will likely remain below historical levels. Additionally, the increasing costs of goods and services, influenced by factors such as inflation or the provincial carbon tax, make it costlier for The City to deliver the same services at the same levels.

The only stream of revenue that is entirely within the control of The City – property taxes – makes up less than 50% of the overall revenue available to The City. When non-property tax revenue does not grow at a rate consistent with expenditure growth, the pressure on property tax revenue becomes significant.

On 2018 February 22 (PFC2018-0200), the Priorities and Finance Committee recommended that Council direct Administration to report back with "recommendations that increase the level of City commitment and investment in new communities" in Q2 2018. Included in this recommendation is direction to include "financial implications for the 2019-2022 budget cycle, future budget cycles, and how any funding gaps for operating and capital would be funded using property tax." Administration will deliver on these recommendations by prioritizing the new growth community business cases submitted by developers, and identifying the required financial commitment for new community growth in the next and future planning and budgeting cycles. As Council's decisions on this matter will need to be integrated into the 2019-2022 service plans and budgets, Administration is working together to ensure the capital and operating implications (including indicative rates) are aligned and integrated. It is expected that any infrastructure, including utility investment, that would be required in new communities will have to be funded using property tax.

Considering that The City is facing challenges regarding revenue sources for 2019-2022, Administration is actively developing a set of tools and strategies that will be suitable to address the resulting budget gap. These strategies will not necessarily focus on revenue sources, but will also include complementary measures such as efficiencies and service level choices across the organization. The identified solutions will be aligned with the Strategic Plan Principles as outlined above and follow the goal of "least harm" to services.

Setting indicative tax rates, and indicative rates for Water Utility and Waste & Recycling Services is one of these solution strategies and marks one of the most important milestones in the journey to develop 2019-2022 service plans and budgets. If approved on 2018 April 25, Administration will have indicative rates one month earlier than in the preparation of Action Plan (2015-2018). This extra time is important for several reasons. First, it provides additional time in May, June and July for Council to discuss key topics or issues that will inform deliberations in 2018 November including topics such as the new community growth strategy. Second, it provides additional time for Administration to build the service plans and budgets in a cohesive and integrated way such that they collectively will propose an affordable way to respond to and deliver on Council's Priorities and Directives for 2019-2022. Setting indicative rates will also determine the extent and depth of other solution strategies Administration will develop and present to Council between now and July 2018.

Indicative Tax Rates

On March 21, 2018, Council was provided the financial outlook with the most recent information available at that time with a commitment from Administration to provide an update based on the Spring outlook information that is available in early 2018 April. Based on the latest Spring Economic Outlook information there is still a projected revenue shortfall if the tax rate is maintained at 0% throughout the 2019-2022 business cycle.

The indicative tax rate proposal aligns to the Strategic Plan Principles approved at PFC on 2018 April 10 (PFC2018-0445). The proposed indicative tax rate for Council's approval ensures that Administration continues to identify and implement efficiency and effectiveness improvements, to generate cost savings while allowing some capacity for investment decisions by Council regarding service levels and growth direction. The proposed tax rate is given in a range to allow further refinements on the growth impacts that is going to Council in Q2 2018. Council's approval of the indicative tax rate range on April 25, 2018 will allow Administration time to build the 2019-2022 service plans and budgets in a cohesive and integrated way and to come back in May, June and July for Council to discuss key topics or issues that will inform the deliberations in 2018 November.

Indicative Rates for Water Utility

Provided in this report are Administration's recommendations for the 2019-2022 indicative rates for Calgary's Water Treatment and Supply (Water), Wastewater Collection and Treatment (Wastewater) and Stormwater Management (Stormwater) lines of service, collectively known as the Water Utility. In development of the 2019-2022 indicative rates, the Water Utility considered drivers and priorities related to operating and capital expenditures, expectations of customers around availability, quality, reliability and responsiveness of services, requirements to meet financial plan compliance to improve financial sustainability, and supporting the needs of a growing city.

The indicative rates as outlined in Attachment 2 are the annual percentage rate increases, proposed for the 2019-2022 timeframe. A range is indicated at this time in order to allow Administration time to refine the analysis and assumptions.

These increases will enable the delivery of capital investments identified in the Water Infrastructure Investment Plan (WIIP), and accommodate increases in operating expenditures that are necessary for the Water Utility to continue to deliver high quality services to Calgarians, while meeting regulatory requirements and providing infrastructure that supports the needs of a growing city. The proposed indicative rates will also guide the Water Utility in preparing for the 2019-2022 service plans and budgets which will be presented to Council as part of One Calgary. Additionally, the indicative rates will support compliance with the Council approved 2019-2022 financial plans for the Water, Wastewater and Stormwater lines of service (UCS2018-0223 and UCS2018-0230).

Indicative Rates for Waste & Recycling Services

Council approval of the ranges for the five charges/rates in this report, combined with The Corporate indicative tax rate, determines the majority of WRS' sources of revenue for the next business cycle. The rates for Council approval include: Black Cart Program charge, Blue Cart Program charge, Green Cart Program charge, Basic Sanitary rate and Minimum Load charge for waste disposal at Waste Management Facilities and are detailed in Attachment 2.

WRS' financial model objective for 2019-2022 is to align revenue with customer classes and their services, while reducing WRS' dependency on tax support for specific residential services. Creating a cost structure for residential services that are more transparent to the customer; with better equity among customer classes; and facilitates variable levels of service which support customer choice in the future.

The indicative rates and charges were developed to ensure that: WRS is able to continue next steps towards the 70 by 2025 diversion goal; maintain services levels for existing customers; extend those services to new communities; maintain capacity and efficiency of its infrastructure; and respond to inflationary impacts. A range is indicated at this time in order to allow Administration time to refine the analysis and assumptions. WRS will monitor costs; customer activity; and economic recovery and may adjust rates and charges for 2021 and 2022 through the Mid-Cycle Adjustment process, if necessary.

It is important to note that the recommended rates for the Water Utility lines of service, as well as the proposed WRS rates and charges, do not include any new community commitment and investment.

Looking Ahead to the 2018 May 16 Strategic Meeting of Council

The previous Strategic Council Meeting on 2018 March 21 provided important information for the decision on indicative rates on April 25. Both meetings are important parts of the 'Three Conversations, One Calgary' framework as they are key discussions between Council and Administration.

Going forward, the decision for indicative rates will inform the depth and extent of other solution strategies Administration is currently developing. In order to provide an integrated picture of all those strategies the following items will be provided for Council during the 2018 May 16 Strategic Meeting:

1. A report on engagement results from citizen engagement during April 2-22, 2018 and information how these results will be used to inform the development of the 2019-2022 service plans and budgets;
2. Long-term user fee and tax support rates for services that are funded in part through user fees. The Council-approved User Fees & Subsidies Policy (CFO010) is a key component of service plans and budgets. User fees form part of the overall revenue picture for 2019-2022 but, as per the policy, user fees are also influenced by considerations of equity and market influences. Similar to past business planning and budgeting cycles, a two-step approach will be used where, long-term user fee / tax support ratio will be proposed in May, followed by detailed user fee schedules being

provided in November as part of the deliberations on the 2019-2022 service plans and budgets

3. An update on Administration's strategy for the continuous improvement of service efficiency and effectiveness. Becoming an organization that continually identifies and delivers substantial service improvements requires the coordination of multiple levers for change, which together create an integrated system for managing the performance of the corporation. This includes setting targets, including savings targets, within the business plans and budgets. The strategy will describe how targets will be set, and the tools and approaches that will be used to achieve, report and implement the improvements driven by these targets.
4. An update on capital.

Developing the service plans and budgets is an iterative process, and City Council will be provided with a number of opportunities for input, both up until November 2018 and beyond, throughout 2019-2022. Strategies that will be part of this process include for instance:

- Providing Council with additional tools and strategies to address the revenue challenges as outlined above.
- A coordinated approach to the continuous improvement of service efficiency and effectiveness, including continuing to set savings targets as part of the planning and budgeting process, and maintaining the focus on managing costs.
- A One Calgary approach to prioritizing service investments and divestments (for both operating and capital).
- Explicitly linking Council's decisions around growth with the impact on costs in 2019-2022 and beyond to ensure the costs of growth are well understood and funded.
- Supporting the organization and service owners (one for each of The City's 62 services) to work across service lines and prioritize strategies for responding to Council Directives that maximize limited resources.

Stakeholder Engagement, Research and Communication

Citizen engagement for One Calgary took place from April 2 to 22, 2018. Citizens were asked to provide their input about what they value most about the services The City provides.

Additionally, research was launched through the Citizens' View Panel. The questions mirrored those used in the citizen online engagement, but had a more focused research and analysis approach to understand citizen expectations and priorities for service value. The online panel survey was open for one week (which is standard for these types of surveys), from April 12 to 19, 2018.

Administration is currently developing a strategy for another citizen engagement prior to September 2018 to allow for a "check-in" with citizens and businesses to validate service values and what matters most to citizens. This additional engagement would not only enhance the opportunities for citizens to get involved with the development of 2019-2022 service lines and budgets; it will also help to ensure that seasonal influencing factors regarding what citizens value about City services are minimized.

One Calgary: Setting Indicative Rates for 2019-2022

Strategic Alignment

The development of Three Conversations, One Calgary: The City's Strategic Plan for 2019-2022, including service plans and budgets, is one of the most significant pieces of work that The City undertakes as it advances our common purpose and helps to deliver on Calgary's vision for the future. The work aligns with Council policy and long-term planning and demonstrates where The City will focus over the next four years.

Social, Environmental, Economic (External)

Service plans and budgets are a tool that allows consideration of the social, environmental and economic environment during the business planning and budgeting process. The plans and budgets will be developed using a results-based performance framework. This includes information on how each City service contributes to quality of life for Calgarians and their aspirations for the community.

Financial Capacity

Current and Future Operating Budget:

As mentioned above setting indicative tax rates and indicative rates for utility services is one the most important milestones in the journey to develop 2019-2022 service plans and budgets and will determine the financial envelope within which The City will develop its service plans and budgets.

Current and Future Capital Budget:

As noted earlier in this report, this is a key point in the process to develop 2019-2022 service plans and budgets. An update on the capital outlook will be provided to Council at the 2018 May 16 Strategic Meeting.

Risk Assessment

As with previous business planning and budgeting cycles, consideration of risks is a key factor informing the development of plans and budgets. Given the city's current economic context, risk will need to be considered in a different way, including re-thinking assumptions, and placing considerably more emphasis on weighing the costs as well as the benefits of risk mitigation strategies, to ensure that they provide good value. In other words, the organization may want to consider higher levels of tolerance for some types of risks, where the trade-offs between risk reduction and cost indicate that this is warranted. This resilience mindset builds on recent developments where decisions have been made to embrace or accept some risk to improve service value.

REASON(S) FOR RECOMMENDATION(S):

Setting indicative tax rates, and indicative rates for Water Utility and Waste & Recycling services is one the most important milestones in the journey to develop 2019-2022 service plans and budgets. If approved on 2018 April 25 Administration will have indicative rates one month earlier than in the preparation of Action Plan (2015-2018). This extra time provides additional opportunity in May, June and July for Council to discuss key issues that will inform deliberations in 2018 November, including topics such as the new community growth strategy. It provides additional time for Administration to build the service plans and budgets in a cohesive and integrated way such that they collectively will propose an affordable way to respond to and deliver on Council's Priorities and Directives for 2019-2022.

ATTACHMENT(S)

1. Attachment 1 – 2019-2022 Indicative Rates for Water, Wastewater and Stormwater Services
2. Attachment 2 – 2019-2022 Indicative Rates for Waste & Recycling Services

C2018-0489
Attachment 1

2019-2022 INDICATIVE RATES:
WATER, WASTEWATER AND STORMWATER LINES OF SERVICE

2018 APRIL 25

MAKING LIFE BETTER EVERY DAY

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1.0 EXECUTIVE SUMMARY

Provided in this report are Administration's recommendations for the 2019-2022 indicative rates for Calgary's Water Treatment and Supply (Water), Wastewater Collection and Treatment (Wastewater) and Stormwater Management (Stormwater) lines of service, collectively known as the Water Utility. In development of the 2019-2022 indicative rates, the Water Utility considered drivers and priorities related to operating and capital expenditures, expectations of customers around availability, quality, reliability and responsiveness of services, requirements to meet financial plan compliance to improve financial sustainability, and supporting the needs of a growing city.

The indicative rates in this report are the annual percentage rate increases, proposed for the 2019-2022 timeframe. The table below summarizes the proposed indicative rate increases for 2019-2022.

Table 1: 2019-2022 indicative rates summary for the Water, Wastewater and Stormwater lines of service

Line of Service	Indicative Rates 2019-2022
Water Treatment and Supply	0% per year
Wastewater Collection and Treatment	4.5% - 5.5% per year
Stormwater Management	3.5% - 5.0% per year

These indicative rates align with what has been shared with Council previously and are, in fact, a touch lower. Achieving this outcome has been possible due to operational efficiencies and operating budget reductions. These increases will enable the delivery of capital investments identified in the Water Infrastructure Investment Plan (WIIP), and accommodate increases in operating expenditures that are necessary for the Water Utility to continue to deliver high quality services to Calgarians, while meeting regulatory requirements and providing infrastructure that supports the needs of a growing city. The proposed indicative rates will also guide the Water Utility in preparing for the 2019-2022 service plans and budgets which will be presented to Council as part of One Calgary. Additionally, the indicative rates will support compliance with the Council approved 2019-2022 financial plans for the Water, Wastewater and Stormwater lines of service (UCS2018-0223 and UCS2018-0230).

2.0 SERVICES PROVIDED BY THE WATER UTILITY

The City of Calgary (The City) is focused on providing services that are of value to citizens. For 2019-2022 service plans and budgets, the Water Utility will work with partners within The City to provide service value for citizens, customers and communities. The Water Utility provides services to 1.25 million Calgarians, as well as to municipalities outside of Calgary. Common expectations of customers include availability, quality, reliability and responsiveness of the services they receive.

The Water Utility, as part of One Calgary, has defined three lines of service – Water, Wastewater, and Stormwater. The service plans and budgets for each line of service will be developed through 2018 for Council consideration in November. Preliminary overviews of anticipated initiatives and strategies, as well as operating and capital investment are provided in the following sections. The strategies and investments identified below will be funded by the range of indicative rates proposed. These investments will be further developed and refined as part of developing the One Calgary service plans and budgets and will be informed by the indicative rates endorsed by Council.

The Water Treatment and Supply Line of Service

The Water Treatment and Supply line of service treats and delivers water to customers. It protects public health and ensures long-term sustainability of water resources. The following characteristics outline what customers expect / value from this service:

- Reliability: Drinking water is available easily and with few disruptions
- Responsiveness: The City responds quickly to any interruptions to water service
- Quality: Drinking water is of high quality and safe to drink
- Sustainability: The City works to protect the water supply

To facilitate future growth and long-term sustainability, the Water Utility models and manages source (raw) water and treated water storage, optimizes water treatment plant production and continues to work with the community to reduce per capita water demands through water conservation programs. These initiatives have made Calgary more resistant to the impacts of drought and allow for the population to continue to grow without drawing additional water from the rivers.

The Wastewater Collection and Treatment Line of Service

The Wastewater Collection and Treatment line of service collects wastewater from customers, treats it, and returns it to the river. This service protects public health, property and the environment.

The following characteristics outline what customers expect / value from this service:

- Reliability: The City works to reduce sanitary sewer backups in homes, businesses and the community
- Responsiveness: The City responds quickly to a sanitary sewer back-up in homes, businesses and the community
- Public Health: The City protects public health for Calgarians and other river users through wastewater treatment
- Environmental: The City manages wastewater from toilets, sinks and drains in a way that protects the environment

The Stormwater Management Line of Service

The Stormwater Management line of service collects and manages stormwater and surface water that originates during periods of rain or snow / ice melt to protect public safety, reduce damage to property and ensure our watersheds are healthy. The following value characteristics outline what customers expect from this service:

- Reduces risk / resilient: The City works to reduce flooding from rain and snow melt that impacts homes, businesses and the community
- Reduces risk / resilient: Calgary is prepared for flooding and recovers quickly
- Environmental: The City works to keep our rivers and surrounding natural areas healthy by reducing the impact of urban activities and development

For 2019-2022, the Stormwater line of service will set a new direction for how the Water Utility approaches stormwater management, engages with citizens and stakeholders and establishes priority investment areas for stormwater. Work will also be required to support the assessment of a variable rate funding model for stormwater services which will increase equity and fairness, while also connecting customer and citizen behaviors with outcomes.

3.0 FINANCIAL MODEL

The Water, Wastewater and Stormwater lines of service are provided under a self-sustaining, public utility model. All costs are recovered through user rates, levies, fees and sources other than the municipal tax base.

The key components of the self-supported utility business model include:

- ***Revenues*** **–** Revenues for Water and Wastewater lines of service consist primarily of rate revenue approved by Council, which is generated through basic service charges and volumetric rates that are applied by customer class and are calculated to reflect the cost of providing services to customers. Revenue for the Stormwater line of service is generated from the Council approved flat stormwater drainage service charge.
- ***Off-site levy revenue*** **–** Off-site levies on development of new and existing areas are charged based on water, wastewater and stormwater system investments required for growth. Current levies are collected based on the revised Off-Site Levy (OSL) Bylaw and rates for 2016-2020 (2016 January C2016-0023). These revenues are intended to pay 100 per cent of the principal and interest charges for infrastructure to service new growth. There are significant risks and uncertainty with the current model of recovering growth related costs through levies, especially in volatile economic conditions.
- ***Cost of Service basis*** – This is a process, by which the cost of providing a service is distributed in a fair and equitable manner, in proportion to the demand on the systems derived by each customer class. Implementation means that different customer classes will pay their fair share in using the services. This ensures costs are being recovered appropriately from each customer class and that the right mix of fixed and volumetric charges are in place to balance the interests of fairness and equity, financial sustainability and water resource management.
  In providing Water, Wastewater and Stormwater services to customers, The City incurs ongoing operating and capital expenses, which are subject to the combined effects of growth, inflation, and the need to repair, replace and extend existing service facilities to deliver services to customers and meet regulatory requirements. It is critical for the Water Utility to recover all the costs of providing these services for customers. The Cost of Service Study recommendations will be presented to Council in 2018 June.
- ***Financial policies*** – 2018 March 19, Council endorsed financial plans 2019-2022 for the Water and Wastewater lines of service (UCS 2018-0223) and the Stormwater line of service (UCS 2018-0230), and approved the recommended financial plan policies, measures and targets. As part of their respective financial plans, the Water, Wastewater and Stormwater lines of service have financial policies, measures and targets that specifically focus on cash and debt financing, as well as the use of debt for long-term assets. These financial policies help to manage obligations and mitigate financial risks, especially in the area of financing long-term assets. For the Water and Wastewater lines of service, financial policies also direct a fixed return on equity and franchise fee on revenues. Compliance to each policy,

measure and target in the financial plans by the end of 2022 will set the foundation for indicative rate scenarios articulated in this report.

4.0 DRIVERS

The indicative rate scenarios incorporate funds needed to deliver and maintain service levels to customers. The scenarios leverage efficiencies and service reductions while maintaining capital investment required to build, upgrade, and maintain infrastructure to provide Water, Wastewater and Stormwater lines of service to customers.

4.1 OPERATING

Operating Priorities in the Next Business Cycle

Building on operational efficiencies identified and implemented through the current business cycle, Administration has continued to identify efficiencies and service reductions that can be achieved to reduce operating expenditures. These are predominately efficiencies that have a limited impact to the services delivered to customers.

Specific to each of the three services the Water Utility provides, operating drivers have been identified that will be considered as the 2019-2022 plan is developed. There are also operating drivers identified that span all lines of service.

The Water Treatment and Supply Line of Service

Reliable, secure, high quality water supplies are essential for Calgary and the region. The Water Utility continues to focus on delivering high quality and safe drinking water to customers through improvements in restoring service to customers, working on water efficiency programs to reduce peak day demands, evaluating the feasibility of employing Advanced Meter Infrastructure, and exploring opportunities to find energy savings by changing operational practices, or through spend to save initiatives. Additional actions include source water protection planning, increasing water supply certainty and enhancing regional relationships, drought management, and maintaining safe reliable drinking water. Work continues with various watershed stakeholders to ensure a focus on source water protection to ease pressures on water treatment. The Water Utility continues to produce high quality drinking water that complies with all water quality regulations, which is reflected in the rates customers pay.

In support of the quality and reliability service characteristics that citizens value, the Water Utility has updated operating practices and processes to reduce the number of annual main breaks, defer costly water treatment plant upgrades, and improve electrical efficiency at treatment plants. This has allowed the Water Utility to reduce service interruptions to customers and has played a role in maintaining the zero per cent increase in water rates for 2017 and 2018.

The Wastewater Collection and Treatment Line of Service

Wastewater treatment plants continue to be a significant investment focus to ensure regulatory requirements are met and to support population growth. Enhanced relationships with major customers to develop innovative, cost effective solutions to ensure regulatory compliance and service value will be imperative to addressing wastewater loading at the treatment plants. In addition, the Water Utility will continue to work on: wastewater loading management program, changing the approach to working with customers on service back-ups, continuing to advance the use of trenchless technologies in repairing and maintaining aging infrastructure, and exploring changes to how we work with customers that produce high strength wastewater. How The City recovers the costs to treat high strength wastewater, and deliver plant upgrades and optimization to ensure sufficient capacity to respond to customer needs, economic activity and growth will also be a focus.

The collection network will also be expanded to accommodate the servicing of new communities and densification of established communities. Investments are also planned to improve the treatment of un-ionized ammonia found in wastewater from toilets, sinks and drains, to continue to protect the ecological integrity of the Bow River.

The Stormwater Management Line of Service

Within the next business cycle, investments will continue to support community drainage improvements so that targeted communities will become more resilient to flooding. As stormwater management practices and standards evolve and new issues emerge, the Water Utility must progress on stormwater management to continue to meet water quality regulations. Over the next cycle, customer and stakeholder engagement, including with the development industry, will be crucial to inform new stormwater strategies in order to protect Calgary's rivers today and into the future.

Improving stormpond design and maintenance, continued implementation of the Riparian Action Program and advancing innovative approaches to stormwater management such as Green Stormwater Infrastructure (e.g. green roofs, rain gardens, etc.) help to prevent pollutants from entering the rivers. Understanding how citizens interact with naturalized (e.g. wetlands, ponds, rain gardens, etc.) and gray infrastructure in public spaces (e.g. catch basins in roadways) will improve coordinated efforts for operational and maintenance practices.

Cross Lines of Service Operating Drivers

Service priorities that cross three lines of service include:

- ***Increased opportunities to integrate customer input into service planning*****:** Over the next four-year cycle, the Water Utility will enhance customer focus by gaining a better understanding of customer needs and priorities, as well as improving the customer experience. Through improved customer insights and advancing our levels of service understanding, the Water Utility will be better positioned to make informed choices on future investments to deliver utility services.

- ***Changes in regulatory expectations:*** The City has a Water Approval to Operate and a Wastewater Approval to Operate that specify regulatory requirements under the Government of Alberta's Environmental Protection and Enhancement Act (EPEA). Ongoing investments will be required to ensure continued compliance to this and other regulations. As well, increasing attention to changing expectations and interpretations of regulations and policies requires operational attention.
- ***Acting on climate change:*** Climate change will alter how and when we receive precipitation in Calgary's watershed, affecting both water quantity and water quality. The intensity and volume of extreme precipitation events will increase beyond the current design capacity of many of Calgary's drainage systems, leading to increased risk of localized flooding. Water management practices, land use planning and storage capacity for both extreme flood and drought are priorities in preparing for climate change. Implementing and updating various strategies and plans is essential to plan for climate change. Some of the specific actions include:
  - Incorporation of future climate parameters into new stormwater management infrastructure design to proactively manage future conditions.
  - Priorities over the next business cycle will include further technical analysis on climate impacts including collaboration with the Province to analyze long term river flows in the Bow and Elbow Rivers to support changes to how water infrastructure and programs are designed and prioritized.
- ***The Calgary Metropolitan Region Growth Board (CMRB):*** CMRB has been established to develop long term plans for managed, sustainable regional growth and servicing. Over the next three years, the Utility will participate in developing the regional servicing plans for water, wastewater and stormwater management. The development of these plans will likely require the Water Utility to divert staff and consultant resources with respect to CMRB engagement, infrastructure planning, and water resource management. One of the CMRB's mandates is to develop and implement policies for the sharing of costs for regional projects in the Calgary region. What impacts this will have on The City's operating expenditures, capital plans and rate setting for regional customers has yet to be determined.
- ***Improvements to data and analytics:*** In the next business cycle, the Water Utility will improve access to and the quality of various data sources and analyses. The focus will be on migrating from crucial aging and obsolete systems to a modern integrated system of tools and databases. This will result in better ability to prioritize operations, improve decision making and the customer experience. Integral to this improvement is the prioritization of cost controls for technology used throughout our operations. A strong data and technology foundation will enable revenue assurance, proactive customer communications, accurate service delivery performance analytics, access to cost of service information, as well as service consumption and delivery information.

- ***Operating cost of capital:*** The operating cost of capital investments will continue to be considered as part of planning for 2019-2022. There will be continued focus on maintenance planning and asset lifecycle planning with additional pressure expected in the Wastewater Collection and Treatment line of service to operate the growing inventory of infrastructure.

4.2 CAPITAL

The Water Infrastructure Investment Plan (WIIP) is a strategic, long range capital plan that underpins the delivery of Water, Wastewater, and Stormwater lines of service. Capital investments are needed to maintain assets, meet increasingly stringent regulatory requirements, provide reliable and high quality services, and keep pace with growth.

The Water Utility operates in a dynamic environment and the factors on which the WIIP is built (e.g. Council priorities, population forecasts, regulatory changes, level of service objectives) need to be revisited from time to time. The capital investments are reprioritized regularly through a rigorous capital portfolio management process (stage gating) to ensure the overall capital budget is maintained within the approved rates.

Service Delivered via Infrastructure

The Water Utility manages and operates infrastructure with a current replacement value of approximately $52 billion across three lines of service: Water, Wastewater and Stormwater. The infrastructure takes water from river to tap and back again within an integrated system that includes the Water, Wastewater and Stormwater lines of service.

Capital investments in each of the three lines of service are required to address various needs and requirements primarily driven by:

- **Aging infrastructure,** which impacts the ability to operate efficiently and effectively without service interruptions**;**
- **Changes to regulatory and environmental requirements,** which necessitate infrastructure upgrades or the construction of additional infrastructure;
- **Introduction of new services or service levels,** which require new or upgraded infrastructure; and
- **Continued population growth**, which triggers capacity upgrades and expansions.

The proposed capital investment plan for the 2019-2022 business cycle averages $350 million in investments in projects and programs annually for all three lines of service.

A large proportion of investments in these utility systems are required to meet the needs of growth. These growth investments are funded from developer paid off-site levies. Based on the revised OSL bylaw (C2016-0023) in 2016 January, OSL revenue is intended to cover 100 per cent of principal and interest related to growth projects, however, the revenue varies based on hectares of development as well as timing of capital investment to support growth. Since the new bylaw was approved, actual land development and current forecasts have been lower than the historical average. The forecasts indicate there will be a sizeable shortfall in OSL revenue relative to the cost of growth investments to be funded by Utility rate revenues from Utility customers.

The Water Treatment and Supply Line of Service

The proposed 2019-2022 capital budget for the Water line of service includes an average investment of approximately $90 million annually in projects and programs for both the Water Treatment Plants and Water Distribution Network:

- ***Water Treatment Plants:*** the Water Utility supports making life better every day through convenience, reliability and availability of drinking water. Investments in this program include the completion of the Glenmore Dam Infrastructure Improvements to improve communities' resiliency to flooding and drought; annual capital maintenance programs to maintain aging infrastructure upgrades to pump stations; energy efficiency and plants capacity optimization to optimize the use of existing infrastructure.
- ***Water Distribution Network:*** water availability is critical to support a growing and prosperous city. Investments in this program are primarily focused on annual programs for ongoing maintenance, replacement and expansion of water pipes and valves, hydrants, and pump stations to distribute high quality drinking water with few disruptions, as well as to support growth in new communities. The Water Utility continues to employ and advance the use of technology to monitor, access and repair damaged infrastructure. For example, the Water Utility uses new trenchless technology for watermain repairs has led to significant cost savings and resulted in far less intrusive watermain repairs.

The Wastewater Collection and Treatment Line of Service

The proposed 2019-2022 capital budget for the Wastewater line of service includes an average of approximately $200 million annually in projects and programs for both the Wastewater Treatment Plants and Wastewater Collection Network programs:

- ***Wastewater Treatment Plants:*** Wastewater treatment is critical in protecting public health and safety and the health of the river and the environment. Two-thirds of the planned investments are driven by growth. This includes the continuation of the capacity expansion program at the Bonnybrook Wastewater Treatment Plant (Plant D and associated projects), and planning for additional capacity for the Fish and Pine Creek Wastewater Treatment Plants (south catchment). Other investments in this program address capital maintenance needs and projects to meet regulatory requirements.
- ***Wastewater Collection Network:*** The majority of the investments in this program are driven by major trunk upgrades required to accommodate growth. This includes the

Inglewood and Nose Creek sanitary trunks. The reminder of the investments are dedicated to capital maintenance programs and infrastructure upgrades.

The Stormwater Management Line of Service

The proposed 2019-2022 capital budget for the Stormwater line of service includes an average of approximately $65 million annually in projects and programs for the Drainage Facilities and Network Program, of which a large portion is funded through external grants such as the Provincial Alberta Community Resiliency Program (ACRP). Investments in this program can be categorized as follows:

- ***Community Drainage Improvements (CDI):*** this program delivers stormwater infrastructure upgrades in older communities that were built prior to the use of modern drainage techniques and standards.
- ***Flood resiliency:*** these investments are required to reduce impacts of future flood events, and include flood barriers in the low-lying areas along the river.
- Additional investments are required to address capital maintenance needs, monitor water flow and quality, and rehabilitate or upgrade wetlands, ponds, and stormwater outfalls.

The capital investments within the WIIP are categorized using four investment drivers as shown in the table below. Each driver addresses one of the factors identified as placing additional pressure on the infrastructure programs.

Table 2: Investment Drivers

Investment Driver	Objective	Percentage of WIIP
Maintain assets	Maintaining, protecting and extending the life of infrastructure investments.	20% - 25%
Regulatory & Environmental Protection	Continuing to meet increasingly stringent regulatory and environmental protection requirements.	15% - 20%
Service	Continuing to provide reliable and high quality services to meet the needs of citizens.	10% - 20%
Growth	Providing infrastructure to meet the needs of a growing city.	45% - 60%

5.0 PROPOSED INDICATIVE RATES

The indicative rates in this report are the annual percentage rate increases, proposed for the 2019-2022 timeframe. These increases will enable the delivery of priority capital investments and accommodate increases in operating expenditures that are necessary to deliver high quality services to Calgarians, while meeting regulatory requirements and providing infrastructure that meets the needs of a growing city.

The magnitude of utility rate increases is determined by the level of service provided for Calgarians, priority initiatives for 2019-2022, capital investments to maintain services, operating cost of capital, and operating cost escalation. The recommendations for the 2019-2022 indicative rates for these three lines of service are at or below forecasts that have been shared with Council previously.

Additional factors include the following:

- ***Growth and off-site levy revenue***: The offsite levy methodology and rate calculation intends to recover 100 per cent of growth related infrastructure costs through levies. However, when this is not possible, due to fluctuations in the pace of development, the utility rates absorb shortfalls. A shortfall is expected to occur through the 2019-2022 business cycle.
- ***The off-site levy shortfall in 2017*** *(from 2016 growth)* was partially absorbed in the utility rates through efficiencies and service reductions that resulted in a nine per cent reduction in the Water Utility's operating budget, but also put pressure on 2019-2022 rate increases.
- ***Revised rate increases in 2017 and 2018:*** The reductions of rate increases for these lines of service in 2017 and 2018 from their Action Plan approved rate increases put pressure on 2019-2022 rate increases.
- ***Compliance with financial plans:*** In addition to new measures, targets and timelines in the financial plans, and the steps being taken to achieve financial sustainability, a key driver is meeting the sustainment reserve balance for each line of service by the end of 2022.

Indicative Rates for the Water Treatment and Supply Line of Service

The rate increase for the Water line of service has been maintained at zero per cent since 2017 and is proposed to continue at zero per cent per year for 2019-2022. This is in line with previous forecasts. Overall, the Water line of service is able to absorb inflationary pressures and adverse fluctuations in off-site levies for growth related costs due to a moderate capital program and declining debt, which translates to decreasing interest expense in 2019-2022.

Indicative rates for the Wastewater Collection and Treatment Line of Service

The effect of growth is substantial and compounding in the Wastewater line of service due to new facilities, capacity expansions, and more stringent regulatory requirements. It also means the Wastewater line of service is more at risk to adverse fluctuations in levies for growth related costs. All this has a significant impact on wastewater rates. In an effort to maintain wastewater rates at reasonable and affordable levels, the Water Utility continues to work on efficiencies and enhanced levels of service to partially offset a substantial capital program and growing debt, inflationary pressures, and shortfalls in levies for growth related costs.

When the Action Plan approved wastewater rate increases for 2017 and 2018 were reduced to around 5.0 per cent per year at Mid-Cycle Adjustments (MCA), the indicative rate increases for 2019-2022 were expected to extend at approximately the same magnitude of 4.0 to 5.0 per cent per year. The off-site levy shortfall in 2017 based on slower than anticipated development occurred was partly mitigated in the utility rates. As such, the wastewater rate increases for 2019-2022 were expected to be higher, in the range of 6.0 to 7.0 per cent per year.

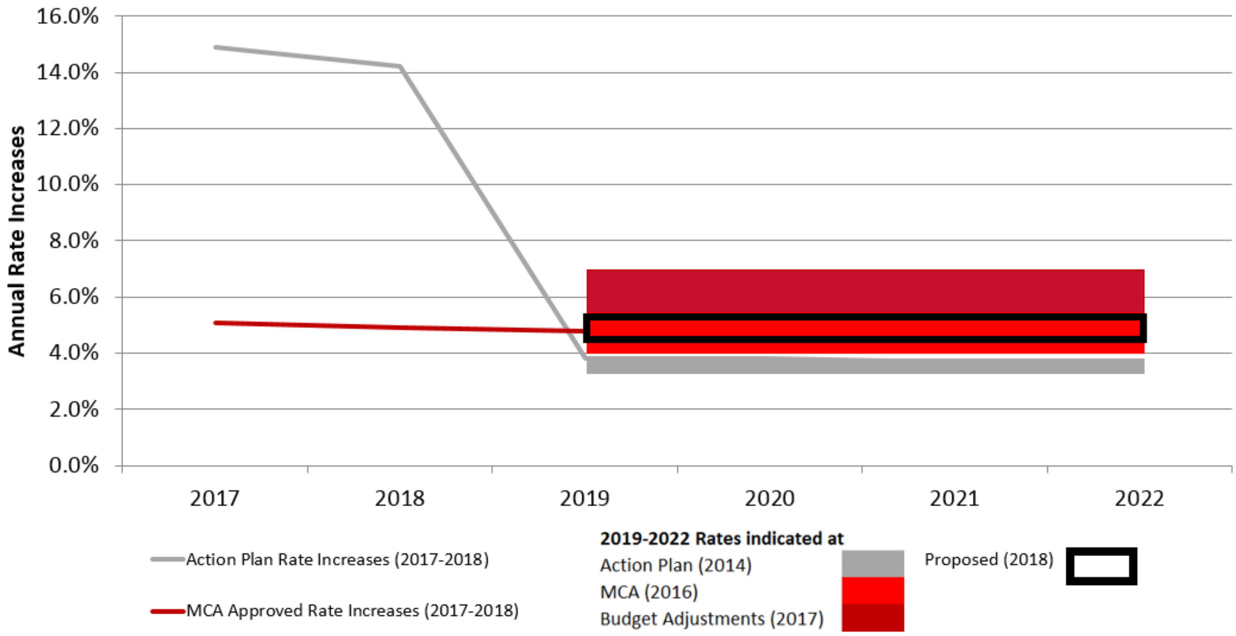
The annual wastewater rate increase proposed for 2019-2022 is in the range of 4.5 to 5.5 per cent per year. These proposed indicative rates are within the ranges of previous forecasts.

The table and figure below summarize previous reported and current proposed wastewater indicative rates for 2019-2022.

Table 3: Indicative wastewater rate increases (2019-2022)

	2017	2018	2019	2020	2021	2022
Action Plan (2014)	14.9%	14.2%	3.8%	3.8%	3.8%	3.8%
Mid Cycle Adjustment (2016)	5.1%	4.9%	4.0-5.0%	4.0-5.0%	4.0-5.0%	4.0-5.0%
Budget Adjustment (2017)	–	–	6.0-7.0%	6.0-7.0%	6.0-7.0%	6.0-7.0%
Indicative Rates (2018)	–	–	4.5-5.5%	4.5-5.5%	4.5-5.5%	4.5-5.5%

Figure 1: Indicative wastewater rate increases (2019-2022)



Indicative rates for the Stormwater Management Line of Service

The Stormwater line of service continues to experience upward pressure to mitigate the environmental, social and economic risks of river and localized flooding while considering climatic variability.

When the Action Plan approved stormwater drainage charge increases for 2017 and 2018 were reduced to 7.4 per cent per year at MCA, the rate increases for 2019-2022 were expected to extend at approximately the same magnitude of 7.4 per cent per year.

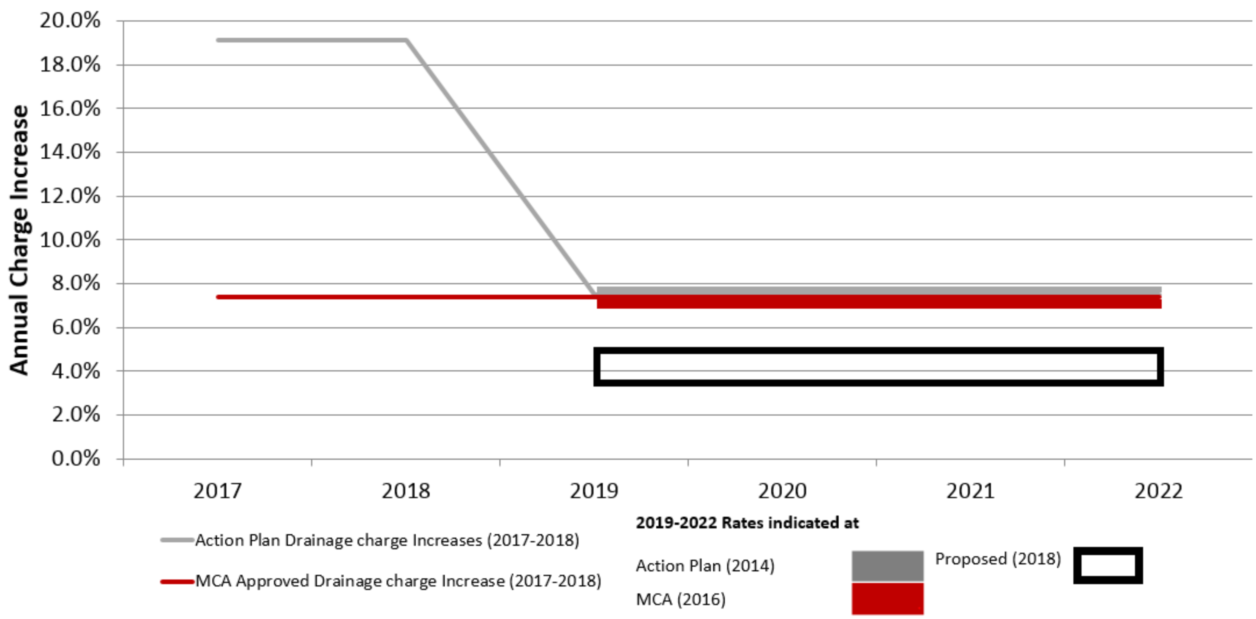
To deliver the proposed capital and operating programs amidst inflationary pressures, the annual stormwater drainage charge increase proposed for 2019-2022 is now in the range of 3.5 to 5.0 per cent per year. These proposed indicative rates compare favourably to ranges provided in previous forecasts due in part to ongoing efforts in realizing efficiencies.

The table and figure below summarize previous reported and current proposed stormwater drainage charge indicative rates for 2019-2022.

Table 4: Indicative stormwater drainage charge increases (2019-2022)

	2017	2018	2019	2020	2021	2022
Action Plan (2014)	19.1%	19.1%	7.5%	7.5%	7.5%	7.5%
Mid Cycle Adjustment (2016)	7.4%	7.4%	7.4%	7.4%	7.4%	7.4%
Budget Adjustment (2017)	—	—	—	—	—	—
Indicative Rates (2018)	—	—	3.5-5.0%	3.5-5.0%	3.5-5.0%	3.5-5.0%

Figure 2: Indicative stormwater drainage charge increases (2019-2022)



Estimated customer impacts

The tables below summarize 2019-2022 indicative rate drivers for Water, Wastewater and Stormwater lines of service.

Table 5: Water treatment and supply drivers / impacts

WATER	Estimated total	Increased operating costs	Capital related costs	OSL shortfall	Reserves	Franchise fee
Impact on typical monthly utility bill* $46.97 in 2018	0.0%	3.1%	-6.5%	2.3%	1.2%	0.0%

*Approximate only – Impacts will vary based on cost of service recommendations to be presented June 2018

Table 6: Wastewater collection and treatment drivers / impacts

WASTEWATER	Estimated total	Increased operating costs	Capital related costs	OSL shortfall	Reserves	Franchise fee
Impact on typical monthly utility bill* $53.91 in 2018	5.0%	0.9%	3.0%	0.2%	0.5%	0.3%

*Approximate only – Mid-point of rate impact. Impacts will vary based on cost of service recommendations to be presented June 2018

Table 7: Stormwater management drivers / impacts

STORMWATER	Estimated total	Increased operating costs	Capital related costs	OSL shortfall	Reserves
Impact on typical monthly utility bill* $15.05 in 2018	4.3%	2.2%	-0.4%	2.2%	0.2%

*Approximate only – Mid-point of rate impact. Impacts will vary based on cost of service recommendations to be presented June 2018

The tables below summarizes the approximate impacts on typical monthly utility bill for 2019-2022 for Water, Wastewater and Stormwater lines of service.

Table 8: Approximate impact on typical residential monthly utility bill

Line of Service	2019	2020	2021	2022
Water Treatment and Supply $46.97 monthly in 2018	$0.00	$0.00	$0.00	$0.00
Wastewater Collection and Treatment $53.91 monthly in 2018	$2.43 - $2.96	$2.54 - $3.13	$2.65 - $3.30	$2.77- $3.48
Stormwater Management $15.05 monthly in 2018	$0.53 - $0.75	$0.55 - $0.79	$0.56 - $0.83	$0.58 - $0.87
Incremental monthly change	$2.96 - $3.71	$3.09 - $3.92	$3.21 - $4.13	$3.35 - $4.35
Total* $115.93 monthly in 2018	$118.89 - $119.64	$121.98 - $123.56	$125.19 - $127.69	$128.54 - $132.04

*Approximate only, impacts will vary based on cost of service recommendations to be presented June 2018

2019-2022 indicative rates summary for the Water, Wastewater and Stormwater lines of service

The table below summarizes the proposed indicative rate increases for 2019-2022. These indicative rates align with what has been shared with Council previously and are, in fact, a touch lower. Achieving this outcome has been possible due to operational efficiencies and operating budget reductions, including in the areas of vehicle and equipment expenditures, consulting and salary and wage through intentional workforce management.

Table 9: 2019-2022 indicative rates summary for the Water, Wastewater and Stormwater lines of service

Line of Service	Indicative Rates 2019-2022
Water Treatment and Supply	0% per year
Wastewater Collection and Treatment	4.5% - 5.5% per year
Stormwater Management	3.5% - 5.0% per year

The Water Utility is currently conducting a Cost of Service Study to ensure costs are being recovered appropriately and equitably through rates from each customer class according to their specific demands on the system. Recommendations from the Cost of Service Study will be presented to Council in 2018 June. Implementing the recommendations of the Cost of Service Study will mean that different customer classes will be impacted differently and that not all customer classes will see the same increase to their utility rates, but that overall the utility revenue will change according to the rate increases indicated above. Proposed rates will be brought to Council for approval as part of the November budget deliberations.

C2018-0489
ATTACHMENT 2

WASTE & RECYCLING SERVICES INDICATIVE RATES AND FEES 2019-2022

2018 APRIL 25

MAKING LIFE BETTER EVERY DAY

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1.0 EXECUTIVE SUMMARY

This report proposes five indicative rates/charges for Council approval. These rates, combined with The Corporate indicative property tax rate, determine the majority of Waste & Recycling Services' (WRS') sources of revenue for the next business cycle. The rates for Council approval include: Black Cart Program charge, Blue Cart Program charge, Green Cart Program charge, Basic Sanitary rate and Minimum Load charge for waste disposal at Waste Management Facilities (WMF). Table 1 outlines the three residential charges and the waste disposal rate and charge for materials brought to the WMF for the 2019-2022 business cycle.

WRS' financial model objective for 2019-2022 is to align revenue with the cost of service for customer classes, while reducing WRS' dependency on tax support for specific residential services. This will create a cost structure for residential services that is more transparent to the customer; has better equity among customer classes; and facilitates variable levels of service, which supports customer choice in the future.

The indicative rates and charges in this attachment were developed to ensure that: WRS is able to continue next steps towards the 70 per cent by 2025 diversion goal; maintain services levels for existing customers; extend those services to new communities; maintain capacity and efficiency of its infrastructure; and respond to inflationary impacts.

Table 1: Indicative charges and rates for 2019-2022

MONTHLY CHARGE: $ PER 30 DAYS	2018	2019	2020	2021	2022
Waste Management Charge	$4.90	REMOVED			
Black Cart Program Charge	NOT APPLICABLE	$6.75- $6.85	1% - 2%	1% - 2%	1% - 2%
Blue Cart Program Charge	$8.50	$8.70- $8.80	1% - 2%	1% - 2%	1% - 2%
Green Cart Program Charge	$6.50	$8.50- $8.70	1% - 2%	1% - 2%	1% - 2%
Monthly Residential Subtotal	$19.90	$23.95 – $24.35	$24.19 – $24.84	$24.43 – $25.33	$24.68 – $25.84
DISPOSAL RATES AT WASTE MANAGEMENT FACILITIES	**2018**	**2019**	**2020**	**2021**	**2022**
Basic Sanitary Rate per tonne	$113	$113	$113	$115	$115
Minimum charge per load	$20	$25	$25	$25	$25

WRS will monitor costs; customer activity; and economic recovery and may adjust rates and charges for 2021 and 2022 through Council approval as part of the Mid-Cycle Adjustment process, if necessary.

2.0 INTRODUCTION

WRS, as part of One Calgary has one defined line of service – Waste & Recycling. The service's plan and budget will be developed through 2018 for Council consideration in November. Preliminary overviews of anticipated initiatives as well as operating and capital investment are provided in the following sections. The strategies and investments identified in this report will be funded by a combination of these proposed rates/charges and the indicative property tax rate. These investments and plans will be further developed and refined as part of the One Calgary service plans and budget process.

WRS currently has a financial model that includes a blend of property tax, grants and fees to fund WRS' programs, associated activities and increase diversion. While this financial model had historically served WRS' financial requirements, the evolution of services delivered by WRS requires financial changes to ensure reliable funding options are in place, providing long-term self-sufficiency in an environment with changing and evolving business drivers.

As part of Action Plan 2015-2018, WRS completed a financial review to inform the 2019-2022 business plan and budgeting cycle. This led to WRS' establishing four financial objectives that future financial models would achieve and are as follows: financially and operationally sustainable; support waste diversion; transparent; and equitable

On 2018 March 19, Council approved WRS' new financial model (UCS2018-0150) for implementation as of 2019 January 01. The changes included in One Calgary 2019-2022 are; an increase in fee revenue of $20 million annually balanced by a reduction in tax support of $20 million annually ($10 million for residential and $10 million for non-residential customers). The decrease in tax support is offset by an increase to the Green Cart Program charge; removal of the Waste Management Charge; introduction of a residential Black Cart Program charge; and fee for service contracts for condominium customers who are currently tax supported.

Based upon 2018 rates, if this was in effect today, each single family residential household would see an increase of approximately $4.35 per month on their residential utility bill for Black and Green Cart Programs combined. There would be a corresponding decrease of approximately $2 per household per month for the median residential property due to the reduction in property tax support. This would result in a net increase of approximately $2.35 per month for the median residential property.

Based on the proposed indicative rates for 2019 in this report, each single family residential household would see an increase in the range of $4.05 to $4.45 per month on their residential utility bill for Black, Blue and Green Cart Programs combined. With the current share between residential and non-residential property tax, there would be a corresponding decrease of approximately $2 per household per month for the median residential property. This would results in a net increase of $2.05 to $2.45 per month for the median residential property. It is important to note that, with these changes, the non-residential sector will no longer be subsidizing the residential black and green cart programs. How the reduction in tax support will be allocated is within Council's purview.

The property taxes that do still support WRS, will be redirected to community-wide and strategic initiatives. WRS' indicative rates in this attachment align with Council's direction to transition to the new financial model in 2019.

The objective of WRS' financial model for 2019-2022 is to align revenue with customer classes and their services, while reducing WRS' dependency on tax support for specific residential services. This creates a cost structure for residential services that is more transparent to the customer and has better equity among customer classes.

Council approval of the five rates/charges in this report, combined with The Corporate indicative property tax rate, will determine the majority of WRS' sources of revenue for the next cycle. The rates for Council approval include: Black Cart Program charge, Blue Cart Program charge, Green Cart Program charge, Basic Sanitary rate and Minimum Load charge for waste disposal at Waste Management Facilities.

3.0 CONTEXT

WRS provides a broad mix of front line services to the citizens of Calgary, and manages operational and environmental performance at The City's waste management facilities (WMF). These include: three active landfills; five closed landfill sites; and nine household hazardous waste drop-off locations operated in partnership with the Calgary Fire Department. WRS also operates community-based diversion programs including: Christmas tree depot program; electronics and paint recycling; Community Recycling Depots (CRDs); and community cleanups. Most visibly, WRS delivers Black Cart Program, Green Cart Program and Blue Cart Program for over 325,000 residential customers.

WRS is also responsible for developing and managing waste diversion programs, and providing infrastructure planning, project delivery and asset management. There is a strong focus on providing strategic planning services to support maximum waste diversion in all sectors (residential, construction & demolition and industrial, commercial & institutional) to support the target of 70 per cent waste diversion by 2025.

4.0 WRS BUSINESS PLAN 2019-2022

The 2019-2022 service plan and budget cycle will be one of planning and refining for WRS, as WRS continues to work towards the target of 70 per cent diversion by 2025.

Variable pricing is a part of WRS' overall waste diversion strategy. Variable cart sizes and pricing, including tag-a-bag for excess, for the Black Cart Program will increase awareness of the amount of waste generated by residents and encourage participation in both the Blue and

Green Cart Programs. It will also provide residents with choice in the level of black cart service they receive.

WRS has several studies and plans that will be updated and implemented over the course of the next business cycle. The Collection Services Review will commence in 2018 and will result in a report to Council in late 2018. The Landfill Master Plans, which are the main planning documents for the WMF, will also be updated during the next business cycle. WRS will start the process for renewals of the Landfill Approvals to Operate with Alberta Environment and Parks, which will be completed in the 2023-2026 cycle.

During 2019-2022 WRS will also be reviewing the model and technology used for recycling, and identifying the approach that should be taken in the 2023-2026 cycle. Finally, WRS will continue consolidation of the Community Recycling Depot network. With the city-wide requirement for on-site recycling in 2016, use of the depot network has changed. WRS will continue to monitor this service to ensure it is operated in an efficient manner, while maintaining a cost-effective level of service.

4.1 WRS Program Descriptions

WRS seeks Council approval of the five rates/charges in this report, these are based on the programs and program descriptions in Table 2.

Table 2: Rate, charges and program descriptions

Charge or Rate	Program Description – level of service
Black Cart Program charge	Every-other-week collection of 240 litre black cart, including excess to approximately 325,000 customers.
Blue Cart Program charge	Weekly collection of a 240 litre blue cart to approximately 325,000 customers.
Green Cart Program charge	Weekly summer collection, every-other-week winter collection of a 240 litre green cart, including excess to approximately 325,000 customers.
Basic Sanitary rate	Waste disposal at two waste management facilities (WMF). Spyhill WMF: 6 days per week operation year round. East Calgary WMF: 6 days per week October to April, 7 days per week April to October.
Minimum load charge for loads less than 250 kilograms	Existing: Disposal and diversion of materials at Throw ‘n’ Go’s at WMF. Spyhill WMF: 6 days per week operation year round. East Calgary WMF: 6 days per week October to April, 7 days per week April to October. Shepard WMF: Residential only April to October, 4 days per week.

5.0 WRS FINANCIAL PLAN 2019-2022

A report to Committee in 2016 February (UCS2016-0136) on WRS Financial Model Review demonstrated that a self-sustaining model, with less reliance on tax support and greater use of fees provides the strongest support for achieving WRS' future financial objectives. WRS' financial objectives are:

Financially and Operationally Sustainable
A sustainable model has reliable and adequate funding for all operating, capital and long-term liability requirements. Stable funding is required to maintain assets, meet increasingly stringent regulatory requirements, provide reliable, high quality waste and recycling services, and keep pace with growth. A sustainable model is one that is flexible and adaptable to changes within WRS' operating environment.

Supports Waste Diversion
A financial model that supports waste diversion is able to adjust to accommodate new programs and changes to existing programs. WRS will continue to develop diversion strategies for each sector into the next business cycle. The future financial model must be able to support the delivery of these strategies and their associated programs and services.

Transparent
A transparent model allows for easy communication between WRS, their stakeholders and customers. It creates a shared understanding of the services that WRS provides, their value and how they are funded. A transparent financial model establishes rates and fees that are justifiable, fair, and stable for the end customers.

Equitable
Ensuring the model is equitable, produces rates that have no unintentional cross-customer subsidizations. This supports cost of service principles, such that recipients of a service pay the full cost for that service.

WRS will transition to a more self-sustaining financial model in 2019. The objective of WRS' financial model for 2019-2022 is to align revenue with customer classes and their services, while reducing WRS' dependency on tax support for specific residential services. This creates a cost structure for residential services that is more transparent to the customer and with better equity among customer classes. The rates and charges proposed by WRS for 2019-2022 have been sent with these objectives in mind.

5.1 Operating Budget

Black Cart Program Charge

As part of the 2019-2022 Financial Plan, WRS will introduce a new Black Cart Program charge. The charge will reflect cost recovery and includes: operating costs for collection, waste disposal and overhead; capital costs for collection and waste disposal at WMF; education and communication; and landfill liability contribution.

Variable pricing is a part of WRS' overall waste diversion strategy. This initiative will be proposed as part of the 2019-2022 service plans and budgets. WRS will discuss with Council different approaches for introducing variable cart sizes and variable pricing to Black Cart Program customers in the second quarter of 2018 and will return to Council in early 2019, for approval of an implementation plan. Finally, WRS will report back through the 2019 Budget Adjustment process in November with a revised charge structure which aligns with program implementation to customers in 2020.

Blue Cart Program Charge

There is uncertainty regarding revenue from the sale of recyclables. Traditional recycling markets in China have disappeared as a result of initiatives such as Green Fence and National Sword. These initiatives focus on making sure that materials exported to China are of a high quality. China has effectively stopped receiving recyclables collected through residential programs outside of their own domestic market. Many other jurisdictions are following in China's steps by implementing increasingly stringent standards for imported recyclables.

WRS is currently working with our recycling processor, Cascades Recovery+, to locate new potential buyers for recyclable materials and implementing new processes and technology to increase the quality of the end-product. Contract costs for this service are tied to inflation factors.

As well, overall recycling materials commodity values have decreased. The revenue from the sale of recyclables, used to keep the Blue Cart Program charge affordable, is at risk. Without this source of funding, WRS will need to make up the funding shortfall from the WRS sustainment reserve. WRS will continue to monitor access to recyclable markets and the value of commodities.

Green Cart Program Charge

As part of the 2019-2022 Financial Plan, WRS will modify the Green Cart Program charge. In 2019, the removal of $10.1 million property tax subsidy, or approximately $2.50 per household per month, from shifting to every-other-week black cart collection from the Green Cart Program will create a charge that reflects cost recovery.

2018 will be the first full year of operation of the Green Cart Program. To date participation is high and tonnes to be managed are greater than expected resulting in higher than anticipated processing costs. Contract costs for processing are tied to inflation factors.

In addition, WRS will continue to evolve the level of service for the Green Cart Program with a change to every-other-week green cart collection in the winter of 2018. The approximately $0.50 per month saving created from this change will be passed onto residential green cart customers.

Basic Sanitary Rate

For the next cycle, WRS proposes small changes to the Basic Sanitary Rate for disposal at the WMF. Setting this rate is a key indicator to the waste industry within the Calgary Economic Region.

WRS experienced a landfill revenue shortfall due to reduced landfill tonnes to the WMF. While a decline in landfill waste tonnes was expected as part of Calgary's 70 per cent diversion across all waste sectors by 2025 target, the drop experienced by WRS has been accelerated by the economic downturn and competitive environment.

Actions have been taken to reduce costs in both the operating and capital budgets for the WMF, while trying to minimize customer impacts and meet their needs. The new WMF schedule, which started 2018 February, optimizes commercial commerce days, and standardize the days of operation across the sites. Effectively, two sites will have all services, six days per week and the third site will only accept industrial waste, green cart materials and the residential Throw 'n' Go open over the summer months. Customer feedback continues to be monitored.

The City continues to set rates at a level that supports diversion via existing markets and service providers, but will not increase rates for 2019 and 2020 as the economic recovery within the region is still fragile. Historically, waste is a lagging indicator and one of the last to experience economic recovery.

Minimum Load Charge

For residential customers, WRS will work towards full cost of service over time, while monitoring customer accessibility and affordability. Changing customer patterns at the WMF have redistributed costs across all services at the WMF. Current minimum load charges do not represent full cost recovery for this service. To balance customer demands and costs this service requires an increased charge.

Also, WRS aligns the Minimum Load charge with the Basic Sanitary rate as this rate is applied to any loads less than 250 kilograms. One quarter or 250 kilograms of the $113 per tonne Basic Sanitary rate is $28.25. As such a rate of $25 per load achieves better alignment.

WRS doesn't inflate this charge annually. For the last several cycles increases were only implemented at the start of a cycle, with WRS managing inflationary pressures accordingly.

5.2 Capital Budget - Waste & Recycling Infrastructure Investment Plan (WRIIP)
The Waste & Recycling Infrastructure Investment Plan (WRIIP) identifies capital investments that are required to address four key investment drivers: maintain assets, meet increasingly stringent regulatory requirements, provide reliable and high quality waste and recycling services, and keep pace with growth. The WRIIP contains proposed investments of approximately $300 million to be completed over the next 10 years.

For the 2019-2022 budget, the WRIIP will be revised based on decreased tonnage to Waste Management Facilities, and therefore decreased tipping fee revenue. Annual spending, including Gas Tax Funding (GTF), of approximately $30 million per year will be the target. GTF will be used to complete many projects that are necessary for legislative and regulatory compliance. Infrastructure Calgary's Corporate Infrastructure Investment Plan process will prioritize GTF for the One Calgary 2019-2022 service plans and budgets. Figure 1 shows WRS' proposed infrastructure investments by investment driver for the next cycle.

Figure 1: WRS WRIIP –Draft Expenditure by investment driver

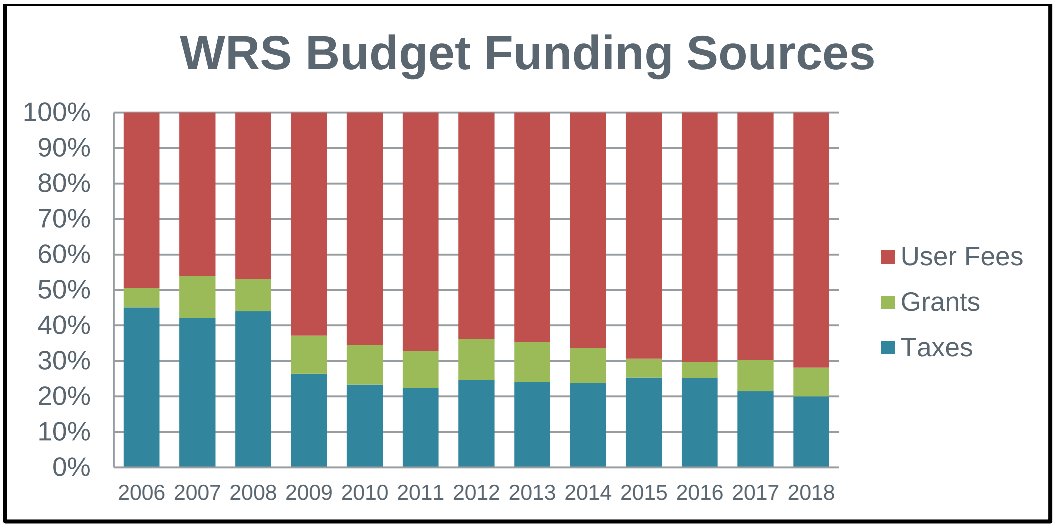
Investment Driver	**Objective**	**Percentage of WRIIP 2019-2022**
Maintain assets	Maintaining, protecting and extending the life of infrastructure investments.	15% - 25%
Regulatory & Environmental Protection	Continuing to meet increasingly stringent regulatory and environmental protection requirements.	30% - 40%
Service	Continuing to provide reliable and high quality services to meet the needs of citizens.	15% - 25%
Growth	Providing infrastructure to meet the needs of a growing city.	10% - 20%

6.0 WRS' SOURCES OF FUNDING

WRS' operating, capital and net contributions to WRS Sustainment Reserve and Landfill Liability Fund are funded from a mix of property taxes, fee revenue and grants.

Figure 2 shows how WRS funding sources have changed over time. As a percentage of funding, WRS has decreased its dependence on tax support and increased the use of fees. WRS proposes to continue this trend in the 2019-2022 business plan and budgeting cycle.

Figure 2: WRS Funding Sources 2006-2018



Fee Revenue

WRS' reliance on fees as a source of funding has increased over the last several business cycles. WRS' primary fees revenue for 2019-2022 are Landfill Tipping Fees, Black Cart Program charge, Blue Cart Program charge and Green Cart Program charge.

Residential program charges work towards full cost of service recovery including: collections; processing/disposal; education; communication and marketing. The rate charged is net of revenues received from the sale of recyclables or compost. These charges will create a cost structure for residential services that is more transparent to the customer; has better equity among customer classes; and facilitates variable levels of service, which supports customer choice in the future.

The residential Black, Blue and Green Cart Program charges will be non-tax supported as there is a customer who receives the benefits from that service who can be charged. The use of charges helps to manage growth, or lack of growth, in an equitable way.

Landfill tipping fees need to be set appropriately to cover costs of operating, capital and landfill liability for the WMF. Landfill tipping fees also need to be set at a level to encourage diversion opportunities, but do not impede economic recovery.

Setting rates without certainty of costs is a risk for WRS in the next cycle. For example: throughout 2018, WRS will continue to evolve services and levels of service to best meet the needs of our citizens. This year will be the first full-year of the city-wide Green Cart Program including every-other-week collection in the winter months and changes to the days and hours of operation at the waste management facilities. Also, the lack of a collective bargaining agreement makes it challenging to estimate costs for specific rates and charges that have a large percentage of salary and wages expenditures.

WRS will mitigate these risks by: single sources of funding for each service, where possible, such that risks in one service do not impact other services and the use of the WRS Sustainment Reserve to offset revenue fluctuations and manage cash flow for both operating requirements.

Tax Support
WRS' financial model includes some tax support. WRS will use tax to fund Community Recycling Depots and other community-wide programs and strategic initiatives. Switching tax support to these types of programs and initiatives better supports the need to balance high citizen expectations with limited resources. Combined these programs and initiatives require approximately $20 million in tax support per year.

Examples of the types of programs, services and initiatives that would be funded from tax support include:

- Community Recycling Depots
- Christmas tree depot program
- Community Clean ups – net of support from other Business Units
- HHW Program – net of Provincial government funding
- Corporate support of waste and recycling services
- Education and Communications
- Infrastructure planning and Asset management

In 2018, WRS' total tax support was just over $40 million. As noted in UCS2018-0150, WRS will reduce the amount of property tax by $20 million and Administration will forward these tax dollars to the One Calgary service plans and budget discussions.

Grants (Gas Tax Funding)
WRS has received GTF as a source of funding since 2006, and has relied on it for the completion of many capital projects necessary to meet legislative and regulatory compliance. Continued use of GTF in 2019-2022 budget cycle will support keeping WRS' rates and charges at reasonable levels. As such, WRS will request similar funding amounts in the 2019-2022 budget cycle via the Infrastructure Calgary process.

Funding mechanisms
The following are funding mechanisms that WRS uses to manage services.

<u>WRS Sustainment Reserve</u>
The purpose of this reserve is to provide an operating contingency to offset revenue fluctuations, manage cash flow for both operating and capital requirements, and financing needs associated with capital expenditures. A target balance for sustainment purposes of 10 per cent of the current year's annual revenue is to be maintained.

WRS expects to fund the majority of their capital plan for 2019-2022 from a combination of this reserve and GTF. Estimates for the 2019-2022 cycle indicate that WRS should be able to meet the reserve target balance, fund capital and manage revenue variations.

Landfill Liability Fund

The Public Sector Accounting Board (PSAB) requires that a liability for closure and post closure care of landfills must be recognized on government financial statements. The calculation of the landfill liability and the funding of that liability are two separate actions. As of 2017 December 31, WRS has a funded landfill liability in consideration of current account balances and capital plan.

Self-Supported Debt

In recent years, WRS has increased the use of self-supported debt in the funding of capital projects. In Action Plan 2015-2018, the capital budget is funded by up to 50 per cent debt, which was largely used for construction of the Organics & Biosolids Composting Facility. WRS expects limited use of debt in the 2019-2022 budget cycle.

7.0 PROPOSED 2019-2022 INDICATIVE RATES AND CHARGES

The rates and charges shown in Tables 3 and 4, were developed to ensure that: WRS is able to continue next steps towards the 70 per cent by 2025 diversion goal; maintain service levels for existing customers; extend those services to new communities; maintain capacity and efficiency of its infrastructure; and respond to inflationary impacts.

7.1 Residential

WRS will work towards full cost of service over time, while monitoring customer affordability.

WRS will discuss with Council different approaches for introducing variable cart sizes and variable pricing to Black Cart Program customers in the second quarter of 2018. Any changes to rates as a result of those decisions would be addressed via the annual Budget Adjustment process.

Table 3: Residential Indicative charges for 2019-2022

MONTHLY CHARGE: $ PER 30 DAYS	2018	2019	2020	2021	2022
Waste Management Charge	$4.90	REMOVED			
Black Cart Program Charge	NOT APPLICABLE	$6.75-$6.85	1% - 2%	1% - 2%	1% - 2%
Blue Cart Program Charge	$8.50	$8.70-$8.80	1% - 2%	1% - 2%	1% - 2%
Green Cart Program Charge	$6.50*	$8.50-$8.70	1% - 2%	1% - 2%	1% - 2%
Monthly Residential Total	$19.90	$23.95 – $24.35	$24.19 – $24.84	$24.43 – $25.33	$24.68 – $25.84

*An additional $10.1 million in property tax funding, equivalent to $2.50 per household per month, from changing to every-other-week black cart collection, was used to subsidize the Green Cart Program charge in 2018.

7.2 Disposal

Rates will continue to be set at a level that supports diversion via existing markets and service providers, but does not impede economic recovery within the region. Historically, waste is a lagging indicator and one of the last to experience economic recovery.

Minimum load charges will work towards cost of service. To balance customer demands and costs this service requires an increased charge.

Table 4: Disposal Indicative rates and charges for 2019-2022

DISPOSAL RATES AT WASTE MANAGEMENT FACILITIES	2018	2019	2020	2021	2022
Basic Sanitary Rate per tonne	$113	$113	$113	$115	$115
Minimum charge per load	$20	$25	$25	$25	$25

WRS will monitor all operating and capital costs; customer activity; and economic recovery and may adjust rates and charges for 2021 and 2022 through the Mid-Cycle Adjustment process, if necessary.

ISC: Protected

Memo

2018 March 27

To: Mayor Nenshi and Members of Council

From: Eric Sawyer, Chief Financial Officer

Re: Response to Administrative Inquiry
2018 March 19 Council Meeting –
Submitted by Councillor Farkas

Administrative Inquiry:

"If property tax supported spending was reduced by $10 million, what would the corresponding reduction in the median residential property's yearly tax bill be?"

Administrative Response:

Reducing $10 million in taxes collected from both residential and business taxpayers equates to a property tax reduction of approximately $1 per month or $12 per year for a median residential property.

The City of Calgary | P.O. Box 2100 Stn. M | Calgary, AB, Canada T2P 2M5 | calgary.ca