

## APPROVED CAPITAL PROJECTS

### Budget vs Actuals

#### RECOMMENDATION

That the June 2, 2023, Integrated Infrastructure Services report IIS01631, be received for information.

<b>Requested Council Action</b>	Information only		
<b>ConnectEdmonton's Guiding Principle</b>	<b>ConnectEdmonton Strategic Goals</b>		
<b>CONNECTED</b> This unifies our work to achieve our strategic goals.	N/A		
<b>City Plan Values</b>	N/A		
<b>City Plan Big City Move(s)</b>	N/A	<b>Relationship to Council's Strategic Priorities</b>	Conditions for service success
<b>Corporate Business Plan</b>	Managing the corporation		
<b>Council Policy, Program or Project Relationships</b>	<ul style="list-style-type: none"> <li>2019-2022 Capital Budget</li> <li>C591 - Capital Project Governance</li> </ul>		
<b>Related Council Discussions</b>	<ul style="list-style-type: none"> <li>FCS01696, Capital Financial Update - December 31, 2022, City Council, March 14, 2023</li> </ul>		

#### Previous Council/Committee Action

At the November 30, 2022, City Council meeting, the following motion was passed:

That Administration provide a report that identifies budget vs actuals for the total of approved capital projects, what is contributing to delays, and ways to enhance project management or other supports to increase the percentage of on-time, approved capital projects within the 2023-2026 capital budget cycle.

## **APPROVED CAPITAL PROJECTS - Budget vs Actuals**

### **Executive Summary**

- Budgeted capital expenditures within the four year 2019-2022 Capital Budget totaled \$7.27 billion. As of December 31, 2022, the end of the 2019-2022 budget cycle, the City spent \$5.03 billion, or 69.3 per cent, of the budgeted capital expenditures in the four-year period.
- The majority of the variance can be attributed to a small number of capital projects that have experienced some delays in the timing of project spend. Overall, the majority of projects are delivered on time and on budget.

## **REPORT**

### **Capital Budget 2019-2022 Actual vs Budget**

As reported in the March 14, 2023, Financial and Corporate Services report FCS01696, Capital Financial Update - December 31, 2022, budgeted capital expenditures within the four year 2019-2022 Capital Budget totaled \$7.27 billion. As of December 31, 2022, the end of the 2019-2022 budget cycle, the City spent \$5.03 billion, or 69.3 per cent, of the budgeted capital expenditures within the four-year period.

The unspent balance was considered as part of the year-end capital budget carryforward process and, where appropriate, budget adjustments will be brought forward for Council's consideration through the upcoming Spring 2023 Supplemental Capital Budget Adjustment in June.

For comparison, planned expenditures for the 2015-2018 budget cycle totalled \$5.95 billion, of which 72.6 per cent was spent at December 31, 2018.

This report focuses on budget and actual data only for the 2019-2022 budget cycle for capital infrastructure projects. This was done specifically to address questions about spend rates and variances that, at times, occur within or across budget cycles. This is different from the quarterly financial updates routinely prepared for City Council, which present budget, projections and spend to date information for the projects as a whole and are not limited to a particular budget cycle. The most recent quarterly report was presented to Council on March 14, 2023 in FCS01696, Capital Financial Update - December 31, 2022. The project statuses reported quarterly through a memo to Council (red, yellow, green) are also based on total project budgets as opposed to just a particular budget cycle. The report also focuses on capital infrastructure projects, including technology and land development projects but excluding fleet as these are the projects that have prompted questions regarding spending during the quarterly reporting processes, this again also was done to address specific questions posed regarding the timing of cash flows and spending within budget cycles.

### **Integrated Infrastructure Services (IIS) Infrastructure Projects - Budgets versus Actuals**

During the 2019-2022 Capital Budget cycle, Integrated Infrastructure Services spent over \$4.09 billion, or approximately 67.1 per cent of the approved budget for the department, leaving approximately \$2 billion in funds being considered in the carryforward process. In 2022, \$1.17 billion was spent on IIS capital infrastructure projects.

During the previous budget cycle, the majority of the variance or underspent funds can be attributed to nine projects, accounting for approximately \$1.5 billion of the spending variance.

## **APPROVED CAPITAL PROJECTS - Budget vs Actuals**

The most significant variances are found in the LRT projects and with the Blatchford Redevelopment project.

Four LRT projects have \$1.16 billion in funds not spent in the 2019-2022 cycle, including the Metro Line LRT (NAIT to Blatchford), Valley Line LRT (Mill Woods to Lewis Farms) and Capital Line South LRT (Century Park to Ellerslie Road). The Blatchford Redevelopment project was under spent by \$141.8 million compared to budget. Some standalone transportation projects have also experienced a combined underspending of approximately \$224.0 million. The standalone transportation projects include 50 Street CPR Grade Separation, Terwillegar Drive Expressway Upgrades, and the Yellowhead Freeway program.

The majority of the department's carryforwards are restricted funds, being federal, provincial or partnership funding and City-matched tax supported debt. A significant amount of the capital budget is funded with grants from the provincial and federal governments. In many cases, these funds are project specific and not available to be allocated to other projects. Often these funding agreements also stipulate a maximum allowable government funding contribution/allocation that require matching City contributions (e.g. 40 per cent federal, 40 per cent provincial, 20 per cent municipal for Investing in Canada Infrastructure Program funded LRT projects). As a result, these matching requirements can limit the use of the City's own internal funding (i.e. pay-as-you-go) in order to fully leverage external grants funding from other orders of government. The grant funded projects listed above were not advanced to Checkpoint 3 of the Project Development and Delivery Model (PDDM) prior to establishing the cashflows; cashflows were required ahead of Checkpoint 3 in order to meet grant timelines. As a result, the accuracy of the estimates and cashflows are lower than typical at PDDM Checkpoint 3 for projects, which leads to the variations noted.

Attachment 1 provides additional details regarding the variances in the 2019-2022 budget cycle for those projects identified above as well as the IT projects discussed below.

### **Technology - Budget versus Actuals**

During the 2019-2022 budget cycle, Administration spent \$50.5 million on technology capital projects compared to a budget of \$53.5 million, which represents 94 per cent of the total technology approved capital budget. Of the remaining \$3 million, \$2.6 million was approved as a carry forward to use in 2023 and \$0.4 million was deemed a surplus. The majority of the approved carryforwards were related to projects in progress that were delayed primarily due to vendor and supply chain issues.

### **Land Enterprise - Budget versus Actuals**

Land Development activities carried out by the City are led by the Land Enterprise section within the Real Estate branch which utilize the constrained funding sources Land Enterprise Retained Earnings.

Land Enterprise was underspent by \$129.1 million from 2019-2022. This can primarily be attributed to the major Land Enterprise capital profiles that were held in abeyance in the 2019-2022 budget cycle which prevented their use. Capital profile CM-16-2010 Industrial-Commercial-Investment Land Development was held in abeyance until March 2020 and

## APPROVED CAPITAL PROJECTS - Budget vs Actuals

the CM-16-2020 Residential/Mixed-Use Land Development profile was held in abeyance until February 2022. These profiles were held in abeyance as of the April 2, 2019, City Council meeting, Council motioned for a further review of the City's role in Land Development, strategies to dispose of land within Enterprise Lands and recommendations of revisions to City Policy C511 - Land Development Policy, among other items. During this time, Land Acquisitions were also put on hold and the Heritage Valley Land Development project was also advanced slower than initially anticipated.

### Project Management

In terms of increasing the percentage of on-time approved capital projects, it is important to distinguish between spending that occurs during a budget cycle and overall project performance. Within and across budget cycles the timing of capital spending may vary from a cash flow perspective (i.e. when funds are actually spent versus planned spending). Some of the changes in spending result in timing differences that do not impact the overall project schedule. An example of this is the Metro Line LRT (NAIT to Blatchford) Extension project. While spending in the 2019-2022 budget cycle was lower than originally anticipated, the overall project is on time; the timing difference had no impact on overall project performance. Changes in the timing of cash flows can be a result of original cash flows being prepared early in the project planning process to meet funding application deadlines of our funding partners. Other reasons can include factors such as delays in funding approvals from partners or, in the case of the Blatchford Redevelopment project, cash flows were prepared for an extended duration (over 20 years), which can introduce a large amount of uncertainty. A change in cash flows, even across budget cycles, is not always an indicator of project delays.

When it comes to project delivery more broadly, the delivery of capital projects is complex and relies on the use of cost estimates and schedule forecasts which take into account multiple assumptions and risk planning. According to the Project Management Institute<sup>1</sup>, "Organizations that complete 80 per cent or more of their projects on time and on budget, meet their original goals and business intent and have high benefits realization maturity are known as "champions" or elite organizations." This recognizes that 100 per cent on time and on budget performance is not a probable outcome, because of the uncertainty that exists with the delivery of capital projects. As outlined in the March 14, 2023, Financial and Corporate Services report, FCS01696 - Capital Financial Update - December 31, 2022, the majority of significant capital profiles, weighted by approved budget, are within an acceptable tolerance for budget (99.8 per cent) and schedule (80.5 per cent). As of December 31, 2022, of the 64 significant profiles reported, 62 are within the acceptable tolerance for budget and 57 are within the acceptable tolerance for schedule.

In instances where performance of projects falls outside the acceptable tolerances, there are a number of factors that can impact the budget and the schedule performance of capital projects. Some of these factors are within the control of the City, others can be influenced but not controlled by the City and others still fall outside the influence or control of the City.

From a schedule perspective, some examples of these factors include;

---

<sup>1</sup> Burba, D. (2015). Focus on the fundamentals: Organizations that master the basics of project and program management continue to gain the competitive edge. PM Network, 29(4), 64-67.

## APPROVED CAPITAL PROJECTS - Budget vs Actuals

- Project development (scope development) and establishing schedule milestones for projects (City control and influence),
- Performance of construction activities completed by third parties (e.g., utility relocations) not directly within City contract (City influence only),
- Land acquisition process and more specifically the expropriation process which is governed provincially (City influence only),
- Supply chain management (partial City influence and control)
- Coordination with Rail Authorities (no City influence or control).

From a budget perspective, some examples of these factors include;

- Unplanned scope or scope adjustments based on public feedback (City influence and control)
- Geotechnical or unknown field conditions (City influence and control)
- Land compensation settlements (no City influence or control)
- Market conditions for internationally sourced material commodities (partial City influence only)

The City's project delivery approach is built around a business objective that strives for optimum performance, management of risks relative to schedule and to budget as proactively as possible. One of the cornerstones of this work is a continuous improvement mindset contributing towards a goal of never being content with the level of project management expertise. To support this ambition, Administration created the Project Management Center of Excellence (PMCE) to work closely with capital infrastructure project planning and delivery areas to advance their collective project management maturity. This long term ambition will lead to better implementation of projects and ultimately improved corporate and community outcomes. PMCE supports its business partners in advancing project knowledge and maturity by providing project management excellence through the key areas of knowledge, processes and systems.

To assist with ensuring good project performance, several tools have been implemented.

1. The Project Development and Deliver Model (PDDM) is a gated delivery model designed to enhance capital infrastructure project integration between project and financial processes and ultimately oversight of performance. The model applies a structured review of projects at key decision points throughout the project life cycle and ensures reliability, accuracy, and transparency in estimates of budget and schedule for projects.
2. Routine root cause analysis is conducted on completed projects. The analysis aligns with the continuous improvement culture to assess root causes of past performance and use learnings to apply for future projects.
3. Administration is in the initial phases of undertaking a comprehensive review of approach to delivering Major Capital projects (>\$100 million). The review includes two streams; academic and industry. The project includes, but is not limited to, an assessment of our governance and decision making, benchmarking with other project owners, and an environmental scan of industry trends. A Council report is intended to be complete by the end of 2023.

### COMMUNITY INSIGHT

Through significant public engagement completed for ConnectEdmonton and The City Plan, Edmontonians described a community that works today and continuously adapts and re-imagines its built environment to meet the needs of the future. As infrastructure projects are contemplated, Council Policy C593A - Public Engagement guides decision-making to determine the most appropriate methods of research and engagement.

Typically, engagement on infrastructure projects is considered at the beginning of concept design to determine how residents can contribute to decision making on the project. Engagement with the public and stakeholders usually occurs in multiple phases during concept and preliminary design. The tools and tactics used to gather feedback are determined based on the target audience and the information being gathered. Feedback received is then analyzed and reported on in What We Heard reports that are made public on the City website.

If there is a significant scope change or project delay, stakeholders who have been engaged are informed directly. The general public are informed by e-newsletter, mailout and an update to the project webpage.

### GBA+

As this is an update on project results and speaks to the quantitative progress of projects and considers budget and schedule performance. Each project referenced in the document has individual implications for GBA+ and would be considered during project planning. An additional GBA+ is not completed specifically for quantitative update reports.

### ATTACHMENT

1. Project Specific Variance Explanations - 2019-2022 Budget Cycle