COUNCIL REPORT

CAPITAL PROJECT/PROGRAM SIZE REVIEW

Recommendation

That the June 11, 2024 Integrated Infrastructure Services report IIS02382, be received for information.

Requested Action		Information only	
ConnectEdmonton's Guiding Principle		**ConnectEdmonton Strategic Goals**	
CONNECTED This unifies our work to achieve our strategic goals.		Urban Places	
City Plan Values.	ACCESS		
City Plan Big City Move(s)	A rebuildable city	**Relationship to Council's Strategic Priorities**	Mobility Network
Corporate Business Plan	Managing the Corporation		
Council Policy, Program or Project Relationships	● C555 - Private Public Partnerships (P3) Policy ● C591 - Capital Project Governance Policy ● C556B - Sustainable Procurement ● Standard A1406A - Project Management for Capital Projects		
Related Council Discussions	● February 21/23, 2024, IIS02122, Major Capital Project Update		

Previous Council/Committee Action

At the February 21/23, 2024, City Council meeting, the following motion was passed:

> That Administration provide a report including a review and potential recommendations for a maximum capital project and/or program as measured by budget.

Executive Summary

- The City's Capital Budget has grown substantially over the last 10+ years to a currently approved total of $10.37 billion (all years) including 218 projects.
- Procurement planning for capital projects takes into consideration many context-sensitive factors when making a recommendation.
- Project delivery selection for major projects includes a robust market-sounding process that integrates industry feedback to capitalize on available interest and capability.
- The Public Private Partnership (P3) C555 Policy sets out the requirements in which projects should be evaluated for the possibility of being delivered as a P3 project delivery model.
- Administration is preparing amendments to the P3 Policy, for Council's consideration, that would increase the value of projects being considered to $500 million. This amendment would effectively achieve a similar outcome without the need for establishing a maximum capital project.
- Ninety nine per cent of all Capital Projects are currently under $500 million.
- Administration does not support a maximum capital project size.
- Administration will seek Council approval prior to proceeding with any procurement over $500 million, as part of the governance and oversight structure, to address large capital projects.

REPORT

In alignment with The City Plan, the City of Edmonton aims to deliver quality infrastructure for residents on time, on budget and with purpose. This includes, but is not limited to, investments in items such as: neighborhood renewal, active transportation construction, building rehabilitation and park development. Funding for these projects is allocated through the City's capital budget. Although not directly tied to municipal service, capital investments and projects help to provide the enabling infrastructure to support effective and efficient City services.

Capital Budget and Projects Overview

The level of capital budget investment has varied, influenced by factors such as increased growth pressures, varying grant funding programs and new or revised policy direction. The most recent multi-year capital budget totals (unindexed; values represent the totals at the time of approval) are as follows:

- 2012-14 - $2.8 billion (3 year)
- 2015-18 - $4.5 billion (4 year)
- 2019-22 - $4.8 billion (4 year)
- 2023-26 - $7.9 billion (4 year)

The current 2023-2026 Capital Budget total, including carry forward amounts (all years, including carryforwards), is $10.37 billion. This value is largely influenced by major city-building projects such as Metro LRT, Valley Line Southeast LRT, Yellowhead Trail Freeway Conversion, and the Valley Line West LRT. These major projects are unique in their scale, city-building impact and project specific funding. They are generally considered distinct from projects delivered through other growth or renewal programs such as Neighbourhood Renewal, Open Space Renewal or Facility Renewal.

The current 2023-2026 Capital Budget, excluding IT, fleet vehicles and land acquisitions, consists of approximately 200 to 250 projects at any given time. At present, the 218 projects identified on the Building Edmonton[1] website break down as follows:

By value:

Project Value	Number of Projects
$1-10 million	167 (76%)
$11-20 million	12 (6%)
$21-50 million	22 (10%)
$51-100 million	4 (2%)
$101-250 million	9 (4%)
$251-500 million	2 (1%)
$501-1,000 million+	2 (1%)

By asset type:

Asset Type	Number of Projects
Facility	82
Transportation	87
Open Space	45
LRT	4

Project Governance

Governance of capital projects typically includes three common key roles. The responsibilities of these assigned roles can vary primarily depending on the asset type, project delivery model and resource availability.

- <u>Owner as Project Manager:</u> The key City representative is solely responsible for project leadership, with support from other key funding or operating partners. This role is responsible for leading and integrating the broader project. This includes reporting to sponsors (Council, public, partners) and ensuring key project success factors (e.g. quality, budget, schedule, etc.) are being monitored and reported with effective oversight.
- <u>Designer/Architect</u>: Includes qualified and trained professionals such as engineers, architects, technologists and/or landscape architects. Depending on the complexity and

[1] https://building.edmonton.ca/projects

availability of resources, these roles are filled either internally by Administration and/or by industry. The industry associations involved in the engagement and advocacy of their professions include the Consulting Engineers of Alberta, the Consulting Architects of Alberta, etc.

- Contractor/Builder: This role is exclusively provided by industry. They are responsible for bringing the resources (labour, equipment, materials) needed to complete work. This includes trades, subcontractors, material vendors and equipment suppliers. The industry representing these roles include the Alberta Roadbuilders and Heavy Construction Association, Edmonton Construction Association, etc.

Procurement Planning

The most commonly used forms of project delivery models include:

- "Design-Bid-Build" (DBB) is a traditional project delivery method involving the completion of three distinct phases in sequence. The Owner holds a distinct contract with the designer and contractor separately. Construction does not begin until the design process is complete, so there is no overlap between design and construction.
- "Design-Build" (DB) requires only one contract with an entity including a designer and contractor working together, covering both the design and construction phases. The project usually progresses as an integrated process, overlapping the two phases of design and construction.
- "Construction Management" (CM) involves retaining a Construction Manager during the design phase that allows for collaborative input into the design phase to inform constructability and cost estimating. This process allows for the overlapping of the two phases of design and construction.
- "Public Private Partnerships" (P3) generally includes one contract with a single entity responsible for design, construction and some form of private financing. This type of model may also include operating and maintenance terms extending beyond the design and construction phases.

Project delivery models themselves do not eliminate risk, rather they are models that allow for different forms of risk sharing to the role in the best position to mitigate those risks. There are many advantages and disadvantages for each model, and each unique project carefully considers these factors as part of the procurement planning process before concluding a preferred delivery model.

The type of project delivery model recommended is often the result of many factors influencing the procurement planning process. These include:

- Type of goods (e.g. availability, volume/scale, complexity, etc.)
- Types of services (e.g. expertise, internal resources, etc.)
- Risk management (e.g. owner requirements, contract risk, bonding, insurance, liability terms, payment terms etc.)
- Market factors (e.g. supply chain, industry capacity and capability, competition, inflation, etc.)
- Level of integration (e.g. complexity of managing interface between various contracts)

- Trade agreements (e.g. New West Partnership Trade Agreement, Canadian Free Trade Agreement, etc.)
- Grant provisions (e.g. eligibility Requirements, timeline constraints, etc.)
- Project value (e.g. anticipated cost of service or materials)

The decision on what project delivery model is used for each project is a product of all these considerations and is not made independently of each other. The decision also takes into account the varied risk tolerance and varied success factors as outlined by the Owner team.

Linear infrastructure (e.g. utility, roads, etc.), which are often seasonal and shorter in duration, are commonly delivered under a DBB model. This fits with industry experience and expertise and is an accepted form of risk sharing. Alternatively, vertical infrastructure, such as bridges and buildings etc., are often multi-year projects that include more diverse skills and integrated scopes and are delivered under a CM model. These two models, DBB and CM, represent the majority (99 per cent) of all capital projects being delivered by the City.

Major projects such as LRT are generally regarded as the exception due to their scale and unique technical requirements. Because of this, they undergo a more comprehensive approach to procurement planning. Administration undertakes a robust in-depth market sounding process for each of these major projects to help capitalize on current industry trends. The market sounding process helps solicit information on the capacity and capability of industry as well as their risk tolerance to planned project requirements. The results of the market sounding for major projects help inform the recommended procurement strategy and project delivery model chosen.

The procurement strategy, process and final recommendations for major LRT contracts is also monitored and endorsed by oversight committees. For the Valley Line Southeast LRT project, this was done through the LRT Governance Board. The LRT Governance Board was established during the early phase of procurement planning for the project and was disbanded after the contract was awarded, in accordance with its mandate.

When new funding for LRT expansion was announced in 2018, the Procurement Due Diligence Committee (PDDC) was established as part of broader LRT program governance. The PDDC is tasked with providing oversight of LRT projects throughout the procurement process. The committee, which includes Administration representatives from LRT Expansion and Renewal, Corporate Procurement and Supply Services and Legal Services plus an external member, ensures a consistent, transparent and fair procurement process for all LRT expansion projects while also providing feedback and advice to project teams and reviewing and endorsing the procurement strategy and the outcomes of each stage of the procurement process.

The current and most recent LRT projects include:

- Valley Line Southeast - P3 / Design-Build-Finance-Operate-Maintain (Budget $1.8 billion)
- Metro Line North - CM / Construction Management (Budget $0.3 billion)
- Valley Line West (Budget $2.6 billion)
    - Civil - P3 / Design-Build-Finance
    - Vehicles - Design-Build Supply Agreement

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- Capital Line South - DB / Design-Build (Budget $1.1 billion)

Broader Market Trends

As outlined in the IIS02122 Major Capital Project Update report on February 21, 2024, there is growing interest both academically and within industry to understand how to improve the planning, preparation and delivery of *Major Projects* (generally defined as greater than $500 million). International trends have shown that as project budgets have increased, so have the scale and impact of the risks and challenges with delivering those projects. With this understanding, some project owners are adjusting their risk tolerance by breaking up projects to better fit with industry capacity and resources. This does transfer an increased amount of risk to the Owner of ensuring adequate integration between the multiple contracts.

The independent analysis (conducted by the University of Alberta and Stantec Inc.) included in report IIS02122 made multiple recommendations related to bolstering the processes relating to major projects. This includes the recommendation to amend the P3 policy minimum threshold for major projects from $30 million to a larger value. Administration supports the recommendation of increasing the minimum threshold and is preparing policy amendments for Council's consideration at a future date.

When large projects are broken into smaller projects (or contracts) there are a number of risks to consider as an Owner. First, the amount of items that require integration elevates and increases risk to the Owner. This includes where the individual performance of one contract can include knock-on effects to other contracts. Second, this approach would include a requirement for increased resourcing to support the contract administration of multiple contracts. Third, the risk of silos or unique work cultures emerging between various project teams as they work within their own prescribed objectives. These risks are generally balanced off with the risk tolerance of industry as informed by the market sounding process described earlier in this report.

Policy Context

Sustainable Procurement C556B Policy provides direction to Administration to create economic, environmental and social impacts by leveraging the City's procurement processes. Administration applies sustainable procurement principles during the procurement planning, leading into the recommendations for contract award of capital projects. The community benefits goals outlined in the Sustainable Procurement Policy are often congruent with grant conditions for major projects which require regular reporting to funding partners on various metrics.

Public Private Partnerships (P3) C555 Policy provides direction to Administration to undertake an assessment of all projects estimated in excess of $30 million for consideration as a P3 project. The minimum financial analysis (Level 1 Screening) involved to assess P3 consideration is often accompanied by an expense (up to $75,000). The initial Level 1 Screening does not generally provide a definitive outcome related to a definitive Value-For-Money. The policy also outlines the various key decision points during the procurement planning process where Administration must report to Committee or Council.

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Summary

Project size is not the only factor influencing procurement planning. Procurement planning takes into account multiple factors. In the context of these factors, as well as existing policy direction set out in Public Private Partnerships C555 Policy that requires Administration to report to Committee and Council on procurement related decisions for major projects, Administration does not support the establishment of a maximum project size. Administration will seek Council approval prior to proceeding with any procurement over $500 million, as part of the governance and oversight structure, to address large capital projects.

Legal Implications

Bylaw 16620, City Administration Bylaw, provides the City Manager with the authority to approve agreements resulting from a competitive procurement process provided that the expenditures are within a budget approved by Council and the agreement complies with any other specific Council direction including applicable policies.

For P3 delivery models when the City pays the contractor over a period of five years or more beyond the construction period, this is considered a borrowing which is subject to implementing a borrowing bylaw approved by Council.

Community Insight

Administration did not complete any formal engagement related to this motion and does meet with industry associations on a regular basis to solicit feedback around various topics of mutual interest to better facilitate a strong partnership as City builders. In addition, for unique and large, complex projects, Administration does undertake market sounding to inform procurement due diligence, including how best to mitigate risk and achieve maximum value between industry and Administration.

GBA+

GBA+ in P3 projects is a developing area of research. The City ensures contractors, including those in the P3 environment, follow modern high standards of equity, inclusion and accessibility. Generally, equity measures are implemented directly through the design phase of specific projects or through the development and review of policies and standards.