

		Capital Project Cost Estimate Development Policy	
			Page 1 of 4
CHAPTER:	Corporate Administration		
SECTION:	Finance		
SUBJECT:	Capital Project Cost Estimate Development Policy		
AUTHORIZED BY:	City Manager		
EFFECTIVE DATE:	December 1, 2016	REVISION DATE:	
REVIEW FREQUENCY:	Every two years		

1. PURPOSE / OBJECTIVES

The purpose of the Capital Project Cost Estimate Development Policy is to help ensure the quality and reliability of cost estimates for financial and project delivery needs by establishing:

- Principles for developing cost estimates;
- Standard costing factors (i.e. contingencies, administration costs, legal costs, financing costs);
- Requirements for lifecycle cost estimates; and
- Requirements for engaging outside expertise on cost estimation.

The Capital Project Cost Estimate Development Policy directly supports the City's commitment to continual improvement in financial planning and sustainability.

2. APPLICATION

This policy applies to the development of the Financial Plan, but should also be applied to project management, budget approvals, and to the development of business cases for new capital project proposals.

3. POLICY STATEMENTS

A. All cost estimates will be developed according to the following guiding principles:

- **Quality:** Prepared using industry recognized practices that cover a comprehensive list of project requirements and costing parameters that suit the decision or stage of the project.

- **Comprehensive:** The preparation of cost estimates for City projects should be comprehensive and completed in collaboration with all applicable departments and engage external expertise when appropriate.
 - **Interdisciplinary Expertise:** Prepared by individuals in the appropriate disciplines with knowledge, skill and experience in estimating for the range of factors affecting the project.
 - **Reliability:** Prepared using repeatable and defensible practices including the use of thorough archives for future consideration.
- B. Decisions on projects will be made once a project is well defined.
- C. Staff will consult with other service and infrastructure departments throughout the project development process, starting from the project conceptualization stage, to incorporate all cost factors into the cost estimate (i.e. construction costs are only one aspect).
- D. Staff will exercise professional judgement and consider industry best practices to determine the uncertainties of a project and develop cost estimates that suit the appropriate project decision by applying contingencies as outlined in Table 1 of Schedule A.
- E. When cost estimating expertise is not readily available or limited within the City, Staff will engage with external cost estimating experts and incorporate project-specific cost considerations or when significant project risks emerge, such as those outlined in Table 2 of Schedule A.
- F. Lifecycle cost estimates will be completed when the City undertakes new works including new assets or expanded services.
- G. To enable the continuous improvement of the quality of project cost estimates, staff are required to:
- Maintain a comprehensive framework of capital and life-cycle costing factors that covers internal and external costs;
 - Maintain an ongoing database of actual cost expenditures for the purposes of historical cost estimating and asset valuation; and
 - Complete, upon request, a comparative report of select capital projects including their budget estimates and actual costs for projects at the discretion of the City Manager.

4. BACKGROUND

Taxpayers and ratepayers expect high levels of skill and quality in the delivery of effective municipal services. Cost estimates are integral to stable finances as they frame the monetary impact of projects, including whether they pass a business case test and provide an appropriate

return on the investment. Council decision making often relates to reliability and accuracy of cost estimates prepared by Staff and consultants. Inaccurate cost estimates for notable capital projects can erode public trust and negatively frame the overall investment and its outcomes.

Council direction through cost estimate policies recognizes the technical challenge in approximating and therefore offers further definition and additional resources to Staff. The aim of this policy is to build confidence in municipal finance decisions and provide stability to the cost of service delivery to taxpayers.

5. REVISION HISTORY

None

Schedule A: Cost Estimate Classes, Contingencies and Project Risk Factors

Table 1: Cost Estimate Classes and Guidance on Contingency Factors

Estimate Level	Cost Estimate Name	Typical Administrative Need	Contingency Factor* Based on Project Uncertainty
			Low Uncertainty High Uncertainty
-	Conceptual	Varies; Business Case (if required)	35% ←-----→ 50%
	Planning	5 Year Financial Plan	
D	Preliminary	Annual Financial Plan/Budget Approval	25% ←-----→ 35%
C	30% Design	For Information	15% ←-----→ 25%
B	60% Design	For Information	10% ←-----→ 15%
A	Pre-Tender	Varies	Up to 10%

*As a percentage of the estimated total cost of the project, including all direct and indirect costs such as administration, project management, consulting fees and construction.

Table 2: List of High-Risk Factors that Warrant Project Specific Contingencies Regardless of the Scale of Initial Cost Estimates

Cost Estimate Certainty: High-Risk Factors	Example(s)
A. Cost estimates that exceed ≈ \$200,000*	- Any large-scale capital project
B. Land acquisition or title considerations	- Unresolved land trust
C. Archaeological potential or atypical environmental remediation yet to be determined	- Site with historical significance but unknown artifacts - Stored hazardous materials
D. Irregular construction projects not typical of the municipality	- Major bridges
E. Contractual obligations to affected parties	- Unresolved tenure agreements for existing community facilities - Unusual procurement structure
F. Probable geotechnical issues	- Unexpected subsurface pockets of rock - Unexpected groundwater conditions
G. Significant change in quantities of work	- Number of water meters to repair
H. Market forces influencing demand or local pricing for key items	- Price of steel or PVC at times of commodity market volatility
I. Evolving regulations or inter-agency collaboration	- Increase in standards to suit emerging trends
J. Expedited cost estimate	- Emergency issue
K. Facilities Renovations and Underground Infrastructure	- Unknown asbestos in walls - Unknown condition of assets

* Policy may be applied to projects of a lower threshold if other risk factors exist.