

EARLY-STAGE ESTIMATING · ROADWAY WIDENING

Early-Stage Cost Intelligence Stops a \$92M Mistake

How a conceptual estimating tool revealed a critical funding gap before a major roadway project could gain momentum.

\$92.3M TOTAL PROJECT COST Full OPC including soft costs	\$29.9M ENGINEER'S PROJECTION Construction cost only, no soft costs	\$58.1M TRUE CONSTRUCTION COST Detailed conceptual estimate (Class 4)	\$0 AVAILABLE FUNDING Resulting in a 100% budget deficit
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The Situation

A municipal public works department was evaluating a proposed arterial widening — a 2.25-mile corridor requiring a raised median, lighted intersections, storm drainage improvements, sidewalk, and a multi-use path. At 16%–30% design completion (Class 4 estimate risk), the project had been assigned a preliminary construction budget based on the engineer of record's cost projection.

“The total construction cost is projected to be around \$29,961,667. At a size of 114,780 SY, that comes out to \$261/SY.”

ENGINEER OF RECORD, PROJECT COST MEMO

The \$30M figure reflected direct construction scope only. It excluded project soft costs such as design and construction administration fees, post-design services, utility coordination, city fees, escalation to a projected 2028 construction start, and project contingency — cost categories that routinely represent 40%–60% of total project delivery cost on infrastructure of this type. No funding had been identified against any estimate.

The Approach

Before a 15% plan set was developed far enough to require a full quantity takeoff, the owner's cost estimating team applied a conceptual estimating tool built on historical bid data from the agency's own project portfolio. The tool generates a rapid, division-level cost breakdown by project type and size —

without requiring plan review — enabling early-stage budget reality checks before design resources are committed.

The conceptual estimate was presented to the project team with no prior look at the engineer's number. Absent escalation and contingency, the tool's output alone was sufficient to surface a material discrepancy. The team immediately recognized the project was underbudgeted and voted to halt further design expenditure.

To satisfy a broader stakeholder group and document the decision formally, a full Detailed Conceptual Estimate (Class 4) was then developed from the 15% plan set. The estimate included a complete division-by-division quantity takeoff, unit pricing from current project cost data, 5% annual escalation applied to a July 2028 break-ground date (2.33 years forward), and a full Owner's Project Cost (OPC) summary covering all soft cost categories.

Cost Comparison: What Was Known vs. What Was True

COST CATEGORY	ENGINEER'S ESTIMATE	DETAILED CONCEPTUAL ESTIMATE
Construction (base scope)	\$29,961,668	\$40,892,366
Escalation (to Jul 2028)	—	\$4,758,181
Gen. Conditions, Insurance, Bond, Fee, Tax	—	\$12,458,453
Total Construction	\$29,961,668	\$58,109,000
Design / CA (15%)	—	\$11,486,016
Post-Design (10% of Design)	—	\$1,148,602
Utilities	—	\$2,000,000
City Fees & Public Art	—	\$1,114,135
Project Contingency (25%)	—	\$18,464,439
TOTAL PROJECT COST (OPC)	\$29,961,668*	\$92,322,191

* Engineer's projection reflected construction scope only with no soft costs, escalation, or contingency. Reported project area: 114,780 SY. Detailed estimate area: 129,313 SY.

Construction Estimate Scope Summary

DIV	SCOPE ITEM	ESTIMATED COST
01	Traffic Control, SWPPP, Mobilization	\$3,766,929
02	Surveying & Demolition	\$1,735,501
31	Grading (incl. 205K CY import)	\$6,408,161
32	Asphalt, Concrete, Striping, Landscaping	\$16,971,722
33	Water, Sewer, Stormwater, Dry Utilities	\$8,703,490
34	Traffic Signals (16 full + 8 ped)	\$2,720,000
44	Dust Control	\$586,559
	Escalation, GC, Insurance, Bond, Fee, Tax	\$17,216,634
TOTAL CONSTRUCTION		\$58,109,000

Estimate class: Class 4 · Design completion: 16%–30% · Estimate date: April 3, 2026 · Projected break ground: July 31, 2028

The Outcome

Armed with a defensible, fully documented cost picture, the project team made a deliberate, data-driven decision to stand down. The allocated funds — insufficient to deliver the project by more than \$92 million — were redirected to better-positioned priorities in the capital program.

The decision is significant not only for its fiscal outcome but for its timing. Stopping a project at 15% design is categorically different from stopping one at 60% or after contractor procurement has begun. Early identification of a funding gap avoids sunk design costs, preserves contractor relationships, and keeps the capital program credible with elected officials and the public.

WHAT THIS DECISION AVOIDED

Continuing down a path with a \$92M+ project cost and zero identified funding would have consumed design fees estimated at \$11.5M (15% of construction), staff time across multiple departments, and political capital — before an inevitable cancellation. Early cost intelligence made the hard call easy.

Key Takeaways for Municipal Project Owners

1 Construction cost ≠ project cost.

A contractor's scope estimate is a starting point, not a budget. Soft costs, escalation, and contingency routinely add 50%–60% on top of base construction for infrastructure projects.

- 2 Class 4 estimates are decision tools, not just check boxes.**
A well-constructed conceptual estimate at 15%–30% design is sufficient to make a go/no-go call — especially when it is grounded in real, comparable project cost data.
- 3 Historical bid data is a competitive advantage.**
Unit pricing anchored to the owner's own project history — rather than published index data alone — produces more defensible and locally calibrated cost estimates.
- 4 Early honesty protects capital programs.**
Stopping a project at concept stage is a sign of disciplined program management, not failure. It preserves funding for projects that can actually be delivered.

Prepared by Capital Budget Solutions. Project identity, agency, and location are withheld; figures reflect the underlying project data as documented. Cost figures are expressed in April 2026 dollars unless otherwise noted. Analysis performed using CostDB, a proprietary cost benchmarking platform.