
GIAMPO – Policy Board

Tuesday, February 24, 2015

Regular Session

Item E3

Proposed Dedicated Capital Improvement Fund Process - City of Grand Island

Staff Contact: John Collins PE, Public Works Director

Agenda Memo E1, E2, E3, E4

From: John T Adams, MPO Program manager

Meeting: February 24, 2015

Subject: Financial Constraint in Developing the Long Range Transportation Plan and Transportation Improvement Program.

Item #'s:

Background

Items E1, E2, and E3 – Federal Requirements

E-1 Financial Constraint in the Development of the Long Range Transportation Plan (LRTP)

A key component of a performance-based transportation plan is reviewing and estimating available financial resources. Developing a financial resource estimate typically involves developing an inventory of available funding streams, along with projections of funding that is forecast to be available from each funding stream over the life of the transportation plan. . The financial plan will contain information on funding sources at the Federal, State, and local levels. Reasonably expected funds will be estimated and projected over the entire lifespan of the transportation plan. When developing the financial plan, eligible projects and their phases will be prioritized and funding will be identified for each phase and the expected year of activity. Attached for your review is an excerpt from the Federal Highway Administration on Financial Planning in the Development of the Long Range Transportation Plan.

E-2 City of Grand Island 1-6 Year Improvement Program

One of the key planning activities required of the Policy Board, is the development of a Transportation Improvement Program (TIP). The TIP is developed on an annual bases identifying/programming projects that were initially identified in the LRTP. Currently, the City and County both develop 1-6 year transportation improvement plans for projects under Nebraska State Statute Section 39-2119. With the designation of the Grand Island Area becoming an MPO these activities will become a part of the federally mandated activity of the MPO, which is the development of the Transportation Improvement Program (TIP). Included is a PowerPoint presentation of the projects currently in the 1-6 program that will be presented to Grand Island City Council on February 24, 2015.

E-3 Proposed Dedicated Capital Improvement Fund Process

A presentation will be made by John Collins P.E., Public Works Director, and William Clingman, Interim Finance Director.

As mentioned in E1, and E2, two (2) of the primary planning requirements of an MPO are to identify and have reasonable expectations of revenue streams to implement proposed projects, identified through the planning process. Many, if not all roadway projects have several phases (I.E., preliminary engineering, right-of-way needs, utility relocations, construction, and construction engineering, Etc.), these phases are generally spread out through several budget cycles. The presentation begins to outline possible changes to the budgeting of the Capital Improvement Program (CIP), to committing funding to projects over the life of their implementation.

E-4a Aerial Photography – Past Amendment to the Unified Planning Work Program (UPWP)

Costs were solicited for aerial photography to be flown in the spring of 2015. As firm has been selected and recommendation has been made for City Council for February 24th. The anticipated period for the photography to be flown is between March 15–April 15. This is the optimal time for the photography to be taken. The high resolution photography will be used in the development of the Long Range Transportation Plan.




E-4b Performance-Based Long Range Transportation Plan

The final negotiations are completed and submitted to the department of Roads for final agreements. These agreements will be taken to City Council on March 10th. The consultants will begin work shortly after the agreements are signed.

Capital Improvement Program Budgeting and Funding



Goal

-  Persistent funding.
-  Improve project delivery.
-  Reduce unnecessary effort, especially during construction season.

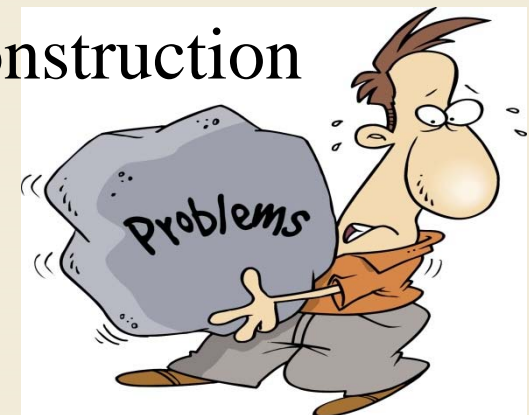
Capital funds vs Operating Funds


The primary difference between Capital Funds and Operating funds is:


- Operating funds may be used for any purpose and persist through the fiscal year.
- Capital funds may only be used for capital assets and persist through the life of the project.


Issues

- CIP is presented with mostly Conceptual Estimates.
- Many Capital Projects take more than 1 fiscal year to complete.
- The design and construction time is dependent on factors outside of the City's control.
- Budgeting occurs in the middle of Construction season.

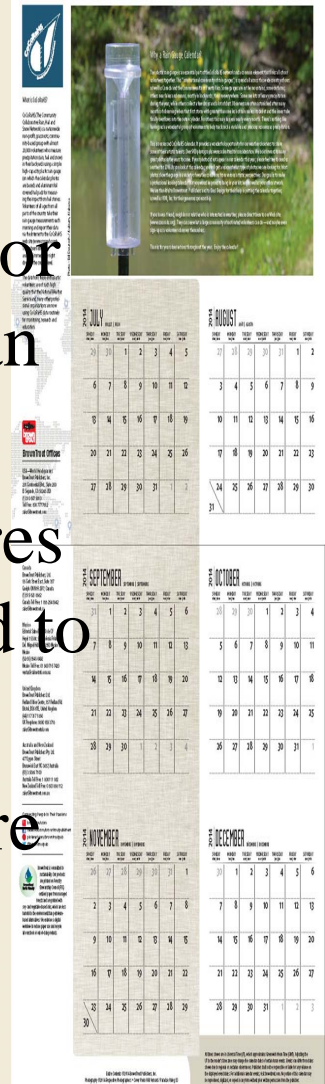


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The current fiscal year expenditures estimate occurs in May, which is the first part of construction season, prior to most construction or expenses; the estimate in May is little better than the one presented with the CIP.
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At the May estimate, projects where expenditures may occur after September 30 are often delayed to the next year.
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October, November and December payments are often from the prior fiscal year's budget and activities.



Consequences

- 🌊 Projects are cancelled or delayed
- 🌊 Significant effort by Public Works and Finance staff estimating expenses repeatedly/frequently through the construction season.
- 🌊 Frequent budget adjustments.



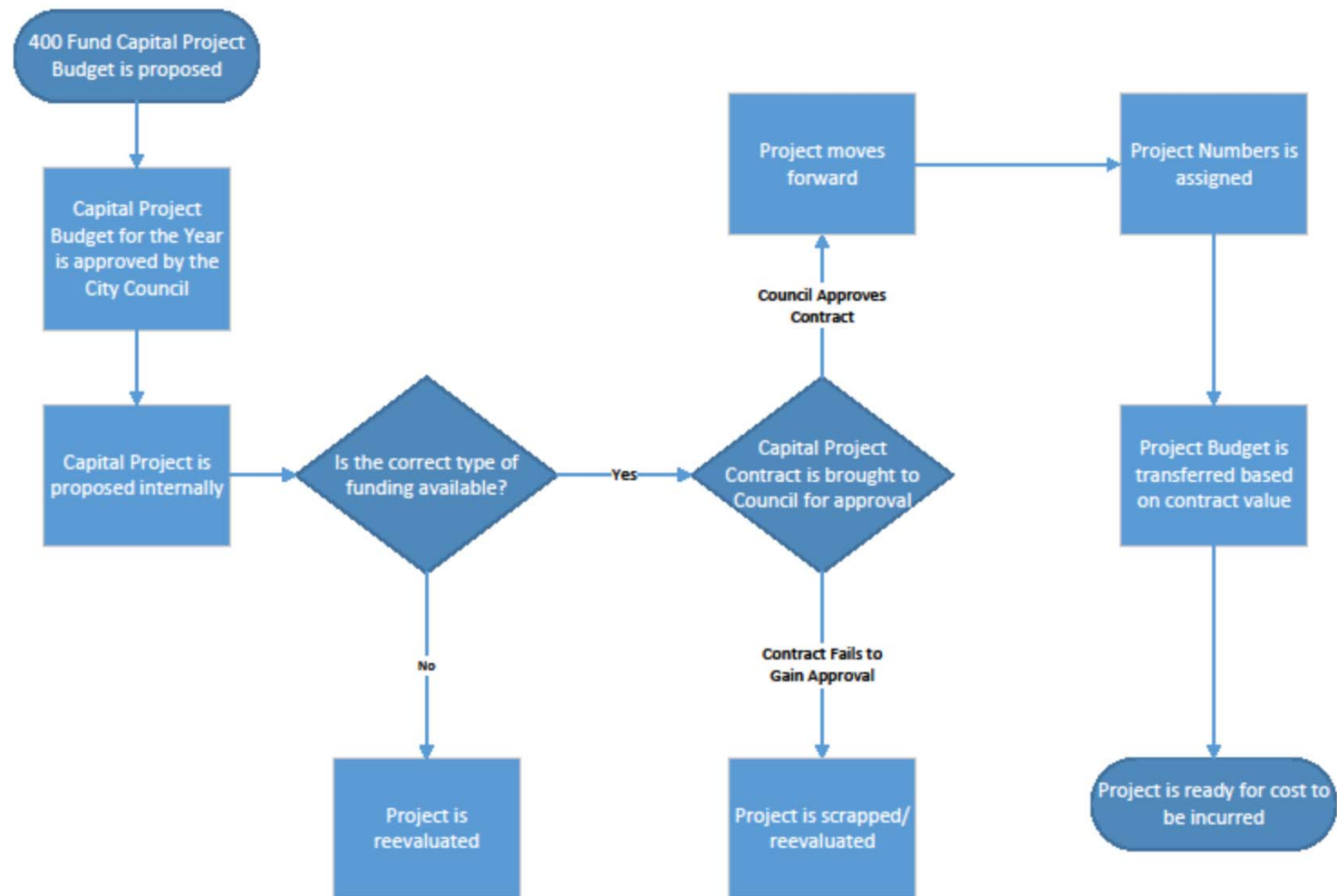
Establish a dedicated Capital Program Account

- Account funded with the budget each year.
 - Current cash balance
 - Projected expenditures for the coming year
 - Maintaining a minimum balance
- Funds (cash) remain in account until spent on an approved project.
- The amount transferred for the Capital Program will be approved by Council each year.
- Projects will be approved on a contract by contract basis

Restricted Revenue

- The Finance Department maintains separate cash account for dedicated funds (gas tax, bridge funds, etc.) within the dedicated Capital Improvement Fund.
- The Public Works Department specifies which projects (or portions thereof) are eligible for which types of funding

Establishing a Capital Project Budget



Recommendation

- Establish dedicated Capital Improvement Funding
- Set the transfers to the CIP fund with the budget each year.
- Funding will be tied to a project



MPO

- Will require City to be fiscally responsible on a program basis; meaning that we must be reasonably confident that sufficient funds will be available for all programed projects.
- Requires 5 year program
- Requires 20 year program

City Administration and Council Still Approve

- Annual Capital Program
- Individual projects
- Individual contracts for design, construction, receipt of funds, real estate acquisition, etc...
- Individual payments
- Un-programmed projects (Grand Generation, Delta drainage, etc.)

Definition of Estimates

Below is an explanation of the types and accuracy of estimates typically used with infrastructure projects. Each type of estimate may be revised. For example, prior to developing a preliminary estimate, a conceptual estimate may be revised to account for work added to the project. Programming is based primarily on conceptual estimates, so the Capital Improvement Program is presented based on this.

Conceptual Estimate – high error

This estimate is based on rules of thumb with only a general idea of the work involved. For example, we know we need to build a sewer line between two points about a mile apart. We assume the line can be built directly between the two points and use the most recent cost per foot and length of pipe to estimate the costs. More detailed (and work intense) examination may show that there are obstructions to the shortest route, advantages to selecting another route, need for additional capacity in the line, grade issues (i.e. the pipe would be too deep or too shallow) or many other issues that can only be uncovered after significant effort (i.e. cost and time). The Capital Improvement Program is planned using mostly conceptual estimates as design has not been approved and expending resources to develop better estimates is cost prohibitive.

Preliminary (30%) Estimate – high error

Sufficient design has been performed so that the general details of the project are known, and the project could be built. However, there has been little field checking of the design, nor design optimization. The Field meeting that takes place after preliminary plans are ready is expected to identify major issues that affect the project, sometimes requiring a complete redesign and repeat of preliminary plan development.

Advanced Check Print/Plan-in-Hand (90%) Estimate – medium error

For most purposes the design is complete, but the final field review has not occurred. Issues discovered during the field review (aka Plan-in-Hand) should only have a minor impact on the design.

City Engineer's Estimate (defined in statute)/Final Design Estimate – some error

This is the estimate required by statute, and is confidential until after the bids have been opened. Plans and specifications are complete. Estimate is based by pricing individual tasks and components. Most common error sources include: changes in labor costs and/or contractor profit margins (increasing as contractors get busy, decreasing as work diminishes), sudden changes in commodities (often oil and/or cement), issues discovered after excavation, and last minute changes in design.

Bid/Award – minimal error

This is the actual bid amount; the contract is executed for this amount. Projects are sometimes completed for this amount, though unknown issues often cause change orders.

Final Cost - accurate

Determined after all work is complete and the City Engineer has signed the Certificate of Completion as required by state statute. This is the total amount paid to the contractor.

Total Project Cost – accurate and complete

This includes the Final Cost as described above and all other costs such as real estate acquisition, design, testing, and surveying. Note that some or all staff time is usually excluded as there is nothing in place to accurately and easily track this.

Note that there is a tendency for the scope of projects to expand throughout the design process, known as project scope creep. This increase in scope results from additional deficiencies being discovered during various inspections/investigations, cost savings anticipated by including work from another project, and from community or political desire to expand the project. While this makes accounting and programming a little more difficult, it often results in a better product with some overall cost savings, except when the project has already bid.