Project Funds Management

Project Funds management consists of estimating project costs, authorizing funds, and monitoring project expenses. This process begins when projects come out of feasibility and continue through the preconstruction phase to construction completion.

Please note – there is a committee discussing future budget management guidelines. Information relating to project budgets will be added when more information is available. However, it is important to understand the difference between estimates and budgets. Estimates approximate the level of funds required to complete a project. A budget represents the cap of funding programmed and available for the project to receive.

Why Important

- Managing project costs (what's being invoiced & expended) can help ensure project costs do not exceed the planned amount. If project costs exceed the planned amount, the project may be delayed.
- Ensure funding is available so invoices can be paid.
- Updating project estimates informs the funding amount in the STIP. Strong justifications can be used to identify common issues affecting numerous projects and potentially incorporate programmatic improvements to the estimating process.
- Maintain the public and stakeholders' level of confidence in NCDOT's ability to deliver projects on time and within the cost communicated to them.
- Each SFY, the BOT approves an annual Spend Plan which is developed from cost planning projections and project cost estimates.

Key PM Responsibilities

Estimating Project Costs

Update Cost Estimates
Request & review ROW, UTL, & CON estimates to ensure reasonableness & justify changes.

Cost Plan
Use best practices to provide accurate projections & estimates, that are used to build spend plan.

Authorizing Funds

Estimate Internal Charges
Include internal (NCDOT) anticipated charges with the funding request.

Request Funds
Submit a funding request for PE, ROW, & utility to authorize funds or request additional funds.

Monitoring Project Expenses

Monitor Expenses
Proactively monitor each phase for expenses vs funding.

Request Additional Funds
Request additional funds that exceed initial authorization as needed. PE is funded by SFY.

Close WBS
WBS's no longer needing charges, ensure commitments are cleared, & notify appropriate entity.

Key Things to Consider

Estimating Project Costs

All Projects:
- Are estimates less than 2 years old? Estimates are required to be updated a minimum of every 2 years and at major milestones as directed until funds are authorized.
- In early estimates:
  - Are potential additional costs resulting from IMD, agency, and other stakeholder coordination included that may affect, ROW, Utility or Construction?
- In the project construction estimate:
  - Are there items that are not yet quantifiable that need an allowance included in the estimate? (A lump sum estimate for items with no known quantity is better than a zero quantity.)

STIP Projects:
- Do the PE cost projection include all disciplines that might contract with a firm over the next State Fiscal Year (SFY)?
- Is ROW authorization within the next 11-13 months? How long will ROW estimate requests take to complete? Consider these to determine when to request estimates updates to meet the ROW, UTL, and Construction estimate requirements described in the 6.27.22 Cost Verification Memo.
- For central let projects, is the project 15-Month Let List (MLL) review meeting coming up? Consider when to request an updated ROW and Construction estimate to meet the requirements described in the 6.27.22 Cost Verification Memo.
- Does the justification in the Cost Verification Estimate memo clearly explain what caused the change in cost? Consider CVE Justification Examples.

Non-STIP projects
- Are internal and external PE costs included in the PE cost projections?
- Have the ROW and Construction estimates been updated using the CEA prior to beginning ROW acquisition?

Authorizing Funds (Funding Request)
Single Level Non-STIP projects may be funded for the entire project up front.
STIP projects and Non-STIP with separate phases require authorization requests pending Board approval.
STIP project authorizations are requested via the AFRA EBS tile. Users can refer to "funding checklists" within AFRA to ensure authorization requirements are met.

Preliminary Engineering (PE):
- For STIP projects, is the project programmed in the STIP and does it have a PE Move Forward Date in SAP?
- How much PE funding is needed for the project over the next SFY? Each spring, the PM is responsible for requesting PE funds for the next SFY Are internal charges and any anticipated invoiced amount (from any discipline) included in the funding request?

Right-of-Way & Utility:
- Will the project need a separate WBS's for ROW and utility relocations?
  - Can Utility Authorization be offset from ROW authorization? Schedule authorization with enough time to execute UBO agreements before relocations begin.
- Is the Environmental Document complete? If so, is a consultation needed?
  - State or federal documents >1 year old and/or have significant scope changes.
- Is a Location and Design Approval (LADA) required? Only projects with an EA/FONSI or EIS/ROD environmental document need a LADA. If needed, is the LADA retained/written?
- When should the funding request be submitted? Is this in the project schedule?
  - Recommend requesting funds 2-3 months in advance. Use the BOT agenda schedule to know when the request will go to the board. Authorization of Federal funds will be ~3 weeks following the BOT meeting and ~1 week for state funds.
- For **non-STIP** projects, is the project within 2-3 months of the Right of Way Plans Complete (RPC) milestone? Regardless of if ROW funds are released or if there is a ROW phase on the project (single level wbs), Board of Transportation (BOT) authorization is REQUIRED before ROW acquisition can begin.

Construction:
Division LET: *The PM or Division delegate requests construction authorization.*
- Are all certifications complete?
- Is the estimate updated?
- Are all agreements executed?
- Is the environment document/consultation completed?
- Permits in hand?
- PS&E checklist complete?
- Any other Division requirements complete?

Central LET: *Contract Standards & Development requests construction authorization.*
- If everything submitted on the PS&E checklist, project should meet all requirements to request construction authorization. (enviro. Doc. consultation complete, permits approved (DB excluded), agreements executed.)

Monitoring Project Expenses
- Are the projected expenditures exceeding the remaining funds? If so, consider when a funding request will be needed or obtain approval to increase the funds.
- Are the funding requests going to meet or exceed the remaining budget?

Best Practices & Common Pitfalls

Best Practices	Common Pitfalls
Estimating Project Costs:	**Estimating Project Costs:**
✓ Account for changes in project circumstances and how that may affect the project funds. ✓ At the 15-month meeting, the construction estimate is < 2-months old and is a best representation of current design and project required pay items. ✓ If submit SCR after project enters 12-month let list, request updated estimate before re-entry to 12MLL or ASAP if remaining on list.	✗ Vague justification for cost changes can delay or prevent Division Engineer's ability to approve. ✗ Construction estimate is not updated prior to the 13-mth LET list, preventing project from going on the 12-mth LET list. ✗ Inaccurate estimates could result in project(s) delays when estimate is updated due to insufficient STIP funds.
Authorizing Funds	**Authorizing Funds**
✓ Proactively submit funding request to avoid overdraft with consideration of BOT approval time. ✓ Consider historical internal charges & the level of upcoming effort when estimating future funds needed.	✗ Submit funding request after cutoff date for the next BOT meeting. ✗ Request inadequate funds to carry the project through the SFY or project phase (STIP or non-STIP).
Monitoring Project Expenses	**Monitoring Project Expenses**
✓ Be aware of how project scope can impact project costs in the decision-making process. ✓ Identify opportunities that could reduce project costs. ✓ Compare projects' schedule to anticipated monthly expenditures needs (be aware of spikes in review time or internal workflows).	✗ Wait until very few funds remain and project goes into overdraft requiring a waiver. ✗ Unaware of misc. or stray charges going against the project. ✗ Assume the projects' monthly expenditures (in SAP) are the same from month to month. ✗ Failure to update Project Manager in SAP.

Tools

Preconstruction Finance Guide
Roadway Design Manual - Chpt 12 LADA requirements
Non-STIP ROW LOA Submission Form
Overdraft Policy Resources

Memos:
3.22.21 Cost Verification Memo Approvals
6.17.22 Updating Cost Estimate for STIP Projects Memo R&R
6.27.22 Cost Verification Memos Update Requirements
9.15.22 Overdraft Policy Memo
11.3.23 Non-STIP Projects – Milestone and Estimate Tracking Memo

Estimate Request Forms:

Utility Cost Estimate Request Form
Photogrammetry Tool for ROW Parcel Data Sheet
ROW Cost Estimate Form and Guidance
Construction Cost Estimate Form > Under "Additional Resources"

SAP Transaction Codes:
ZPSR01- Funding and expense summary
S_ALR_87013542 - Compare actuals with plan

Definitions

AFRA:	*Automated Funding Request Application (AFRA) - For Central and some Division managed projects, the Project Manager makes funding requests using AFRA for preliminary engineering, right of way, utility, and construction.*
Budget:	*The limit of funding programmed and available for the project to receive. This is a Not To Exceed amount and includes Right of Way, Utilities, and Construction.*
Contingency/ Misc.	*An item in the estimating process to account for uncertainties, risks (unknowns), and inaccuracies resulting from broad-based assumptions (esp. during initial stages of project development). The contingency value decreases as the project moves from Planning to letting and as risks are mitigated or eliminated.*
E & C:	*Engineering and Contingency – Construction administration costs to deliver the contract, including CEI, field engineering, administrative costs, and any overruns. Currently 16% with 4% for contingencies and 12% for engineering.*
Estimate:	*Projected costs of various phases of a project (PE, ROW, UTL, Construction).*
Expenditures:	*Money spent on internal, external, and overhead charges.*
Funds:	*Amount of money that has been authorized and added to a WBS.*
Overdraft:	*Amount of spending beyond the funds that have been allocated.*
Overdraft Waiver:	*A request for WBS expenditures to exceed the allocated funds authorized.*
SAP:	*Business and Financial system used to manage contracts, purchase orders, financial data, cost planning, funding requests, official project schedules (major milestones), and reporting of schedule and financial data. Enterprise Business System (EBS) is the web-interface for SAP.*
STIP:	*State Transportation Improvement Program.*
Non-STIP	*Designation for projects not in the State Transportation Improvement Program.*
WBS:	*A project identifier in SAP. This can be broken into smaller subset phases to track milestones and funding to include (PE Phase 100, ROW Phase 200, UBO Phase 250 and Construction Phase 300)*