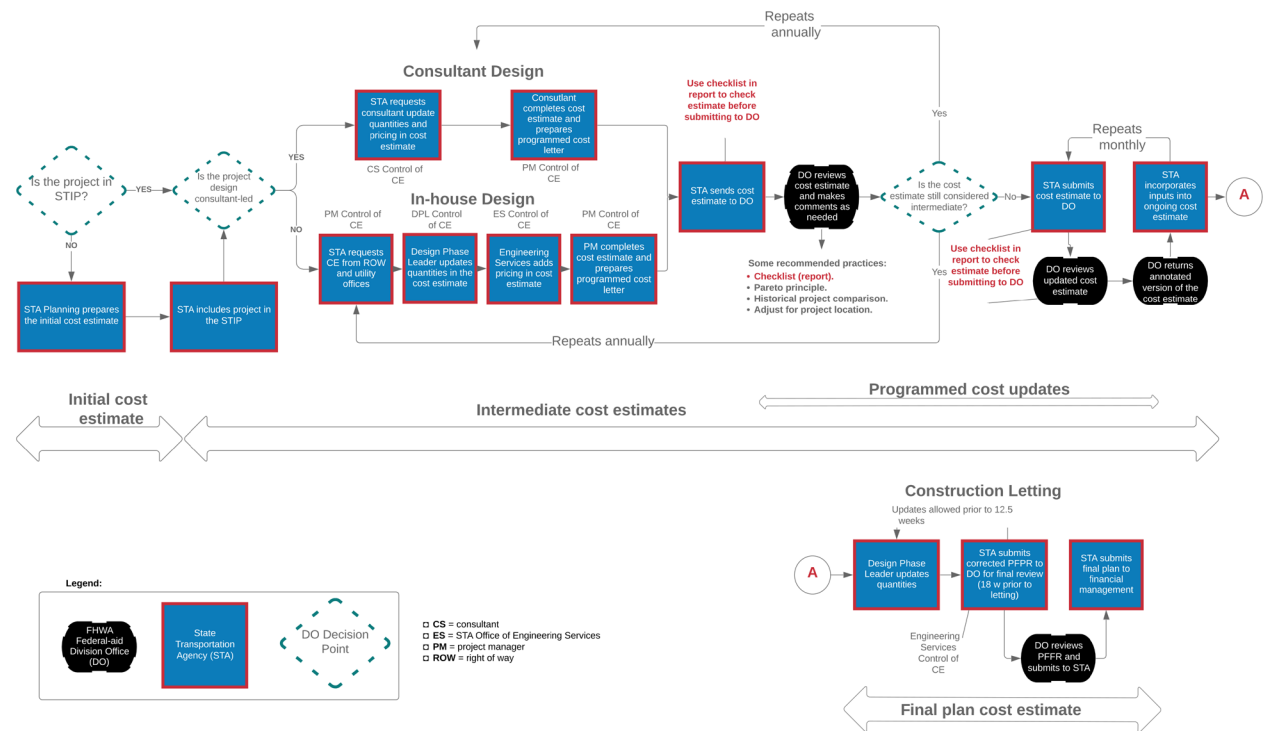


Assessment of Federal Highway Administration (FHWA) Highway Project Cost Estimation Tools

For transportation agencies, accurate and effective cost estimating is critical, during both the National Environmental Policy Act process and the development of the initial finance plan, for many reasons, including establishing the basis for significant project decisions, establishing a baseline cost to ultimately help measure project success, and communicating the project's status to internal and external stakeholders. The ability to develop reasonable and defensible cost estimates is also important in maintaining public trust and confidence during a project. Cost estimate methods typically fall within five different approaches:

- Historical bid-based estimations.
- Conceptual estimation.
- Risk-based estimation.
- Cost-based estimation.
- Combination of historical bid-based and cost-based estimations.



Source: FHWA.

Webinar Details

FHWA is introducing recently completed research into highway project cost estimation through a public webinar. This work was completed under FHWA Contract No. DTFH6117D00005_693JJ319F000053.

Date and Time

March 17, 2022
1–2:30 p.m. (eastern time)

Presenters

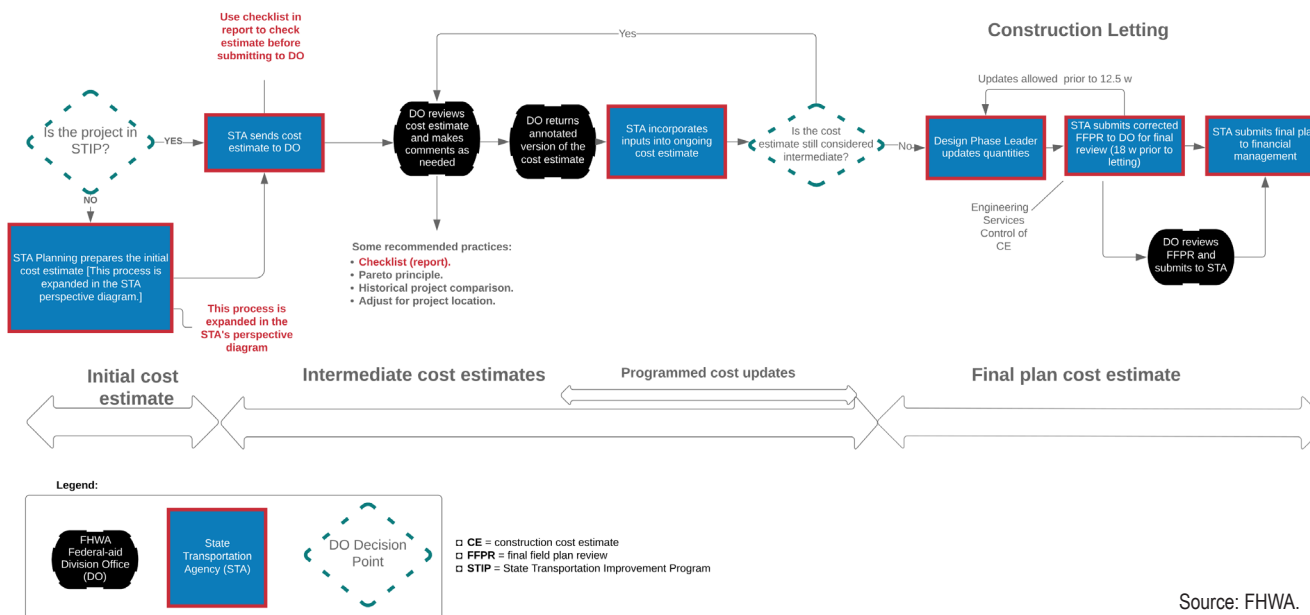
Matthew Corrigan, FHWA
Guillermo Nevett, Ph.D., University of Colorado
Paul Goodrum, Ph.D., Colorado State University

Registration

Cost: Free and open to the public.
Register at: [Documenting Cost Estimate Development and Oversight \(connectsolutions.com\)](https://connectsolutions.com).

Contact

Matthew Corrigan, FHWA
(matthew.corrigan@dot.gov)



Research Synopsis

Transportation agencies are charged with developing and delivering highway construction and maintenance programs that enhance the safety, mobility, and economic competitiveness of communities. While the design and construction of these projects are vital, accurate estimates of project costs during the multiple developmental stages are incredibly important in both developing the agency's project budget as the project advances and verifying that contractor bids represent fair market value during award. Agencies benefit from having consistent and reliable cost estimates to help them make financial decisions and provide oversight related to the following: estimating project funds for programs, conducting benefit-cost analysis in prioritization of projects, determining funds needed to deliver project phases, and determining the basis for cash-flow requirements over time. The research identified and ranked a series of five practices used to oversee the cost estimation process. These practices are useful for providing oversight for a single project cost estimate and can also be integrated into a comprehensive cost oversight program.

FHWA-HRT-22-060
HRDI-20/3-22(WEB)E

Recommended citation: Federal Highway Administration, *Assessment of Federal Highway Administration (FHWA) Highway Project Cost Estimation Tools* (Washington, DC: 2022) <https://doi.org/10.21949/1521862>.



U.S. Department of Transportation
Federal Highway Administration

Turner-Fairbank
Highway Research Center