



RISK MANAGEMENT REPORT BACK

Charles A. Kilpatrick, P.E.
Commissioner of Highways

October 14, 2014

CTB RESOLUTION – PROJECT RISK

CTB Resolution, May 2014:

- **Commissioner is to establish standards and guidelines addressing the risk associated with PPTA and Design-Build projects that identifies, minimizes, mitigates, and limits the risks to VDOT.**
- **Commissioner to provide recommendations to CTB by October 2014 meeting.**

Highway Commissioner's Responsibility:

- **All projects are the responsibility of the Highway Commissioner, including PPTA projects.**
- **If a project is deemed to be HIGH RISK, decisions cannot be pushed down in the organization; they must be made by the Highway Commissioner.**

TYPICAL RISKS

- **Environmental approvals**
- **Permits (Water Quality, etc)**
- **Geotechnical/Subsurface conditions**
- **Differing Site Conditions**
- **Scope Issues**
- **ROW**
- **Utilities**
- **Railroad**
- **Third - Party Requirements**
- **Approvals (external agencies)**
- **Time / completion**
- **Force majeure**
- **Elected officials, local jurisdictions, other agencies, citizen support**

PROJECT- LEVEL RISK ASSESSMENT - CURRENT

Design-Bid-Build (DBB) - Risk is managed on Design-Bid-Build projects through the project development process. Key milestones and controls are built into the process, and if a requirement is unmet, most projects will not move forward until the requirement is satisfied.

For example:

- **Staff do not begin engineering work until preliminary engineering funds are authorized and allocated.**
- **Staff do not begin design work until the project scope is approved.**
- **Staff do not begin acquiring right of way until the design is approved, funding is authorized and allocated, and public involvement requirements are met.**
- **Staff do not advertise plans for construction until environmental, permits, funding, right of way and utilities are certified and the plan assembly is reviewed by the appropriate sections.**

PROJECT- LEVEL RISK ASSESSMENT - CURRENT

Design-Build (DB) - State/federal law sets requirements for DB projects, which include consideration of project risk.

Code of Virginia - § 33.2-209.B - A Finding of Public Interest (FOPI) must be in place prior to moving forward with project development.

- **As part of the FOPI, a high level preliminary risk assessment is performed and included with the FOPI documentation.**
- **The FOPI is approved by the Chief Engineer and Commissioner.**

Code of Federal Regulations - 23 CFR Part 636.114 - For Design-Build highway projects, the CFR lists risk factors to consider when completing a risk assessment.

- **VDOT performs a Risk Analysis for all design-build projects prior to advertisement.**
- **The Risk Analysis identifies major project risks, proposes mitigating actions and allocates risks to the party who is in the best position to manage the risk (Design-Builder, Owner or shared).**

RISK MITIGATION IMPROVEMENTS [STANDARDS AND GUIDELINES]

- **Develop instructional guidance to be issued by the Commissioner.**
- **Guidance will include:**
 - **Developing a risk assessment process.**
 - **Identifying and managing projects with HIGH RISK or that are estimated to cost over \$100 million. Examples include projects with:**
 - Large public funding
 - Complex environmental approvals
 - Altered procedures (ex., railroad agreement not in place at advertisement)
- **These projects will have a Risk Mitigation Plan developed.**
- **At key points during scoping and project development, the project team will consider risk.**

RISK MITIGATION IMPROVEMENTS [STANDARDS AND GUIDELINES]

- **The Risk Mitigation Plan will be reviewed by the Responsible Charge Engineer of Record and forwarded to the Chief Engineer for concurrence.**
- **The Chief Engineer can also identify any project that poses unusual risk and elevate it to HIGH RISK.**
- **The Risk Mitigation Plan will be forwarded to the Highway Commissioner, by the Chief Engineer, for approval.**
- **Prior to procurement, for projects estimated to cost over \$100 million, or that are deemed to have HIGH RISK, the Highway Commissioner will provide a briefing to CTB.**

RISK MITIGATION IMPROVEMENTS [STANDARDS AND GUIDELINES]

- The CTB briefing would include a discussion of risks, risk mitigation efforts, proposed risk sharing, and contract limitations to address the risks, such as:
 - Providing a limited Notice to Proceed to dictate the specific work activities that can be started.
 - Limiting the amount of money that will be paid to the contractor until the risk is resolved.
 - Providing clear contract language provisions for termination due to inability to continue the project.

RISK MITIGATION – ENVIRONMENTAL

VDOT is also working with federal resource agencies to make process improvements for environmental risks, such as:

- Developing a Memorandum of Understanding (MOU) between VDOT, FHWA, and the U.S. Army Corps of Engineers to require consideration of a merged review process for projects that are on a new location, require an Environmental Impact Statement, and an Individual Permit (high level of water quality permit). This MOU can be expanded to include other parties, as needed.**
- Collaborating closely with the U.S. Army Corps of Engineers to assist in their identification of the Least Environmentally Damaging and Practicable Alternative (LEDPA).**

SUMMARY OF RISK PROCESS RECOMMENDATIONS

- **Potential high dollar/high risk projects will have a risk assessment performed during the scoping phase.**
- **At the end of the scoping/project development phase, all DBB or DB projects determined to have HIGH RISK or with an estimated cost exceeding \$100 million, will be briefed to CTB.**
- **All P3 projects will be briefed to CTB.**
- **Contract language will be written to mitigate risk through enumerated limitations (work activities, payout limitations, termination provisions).**
- **VDOT will continue to develop other risk mitigation policies related to environmental risks.**



RISK MANAGEMENT REPORT BACK

Charles A. Kilpatrick, P.E.
Commissioner of Highways

October 14, 2014