



TDOT Value Engineering Quick Reference Guide

What is Value Engineering?

Value Engineering (VE) is a multidisciplinary, independent review that enhances project value by delivering required functions safely, efficiently, and cost-effectively while minimizing completion time. The TDOT VE Office ensures proper identification of eligible projects and oversees VE analyses.

Objectives of VE in TDOT Projects

- Maximize project value and performance
- Identify cost savings without compromising quality or safety.
- Improve constructability.
- Optimize use of material and resources.

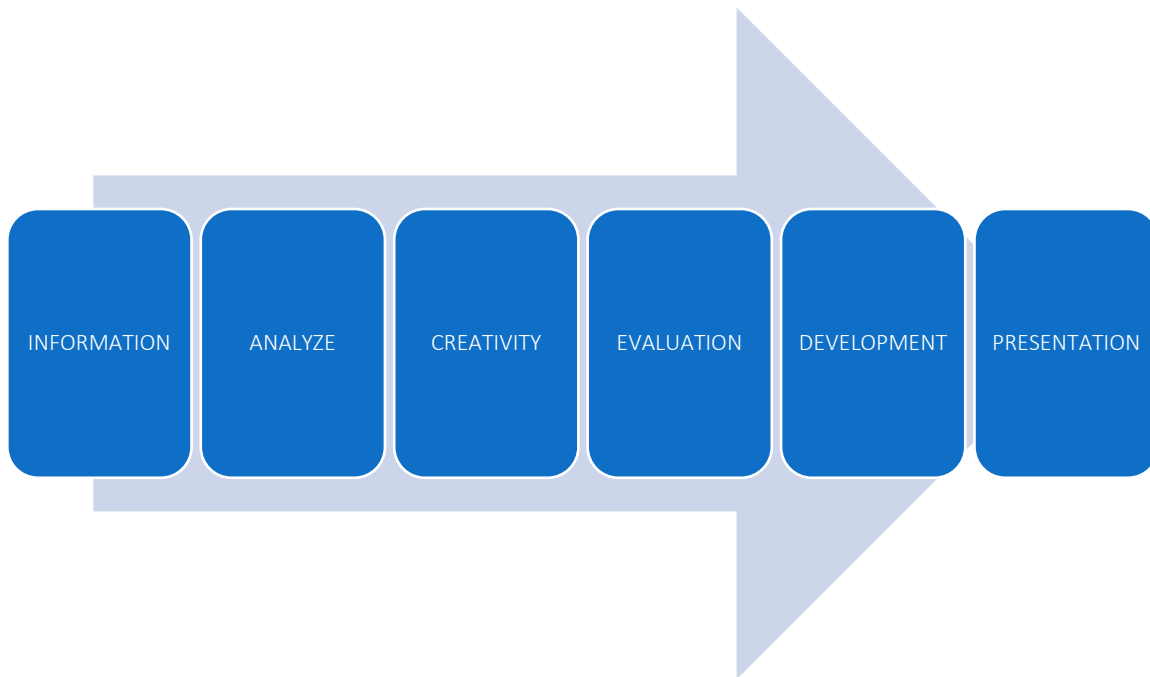
Benefit for TDOT

- Cost reduction and budget optimization.
- Enhanced Project Schedules.
- Improved project lifecycle and sustainability.

Workshop Job Plan

- TDOT's VE workshops utilize a well-established and proven VE methodology. The 30-hour process is divided into six phases: Information (4 hours), Analysis (4 hours), Creativity (6 hours), Evaluation (6 hours), Development (8 hours), and Presentation (2 hours).

Typical VE Process Steps



Team Member Mindset

- VE employs a diverse team of specialists to offer a wide range of ideas for tackling complex engineering challenges. The key is fostering innovation. VE creates a space where subject matter experts are encouraged to think creatively and unconventionally. By embracing an open mindset and breaking down barriers, the team can deliver impactful and substantial outcomes.

Time Commitments

- Team members are expected to fully participate for the entire duration of the VE study workshop. Their commitment and dedication are essential, as the quality of the results depends directly on the level of engagement each participant brings to the process.

Action Guide for Team Members

- **Understand VE Goals**
Set metric prefixes, efficient design.
Focus on efficient design, cost-effectiveness, risk mitigation, and time savings.
- **Engage Actively**
Contribute expertise to brainstorming evaluation.
Record functions, options, criteria, and rationale.
- **Coordinate Closely**
Ensure alignment.
Collaborate with the VE Office to ensure alignment.

Summary for Quick Reference

Component	Key Takeaway
Goal of VE	Maximize project value—safety, efficiency, cost
Process	Defined stages from gathering through
TDOT Role	Central oversight ensures VE is applied correctly

To learn more about the Value Engineering Job plan, please visit our Web page at [Value Engineering](#).

For more information on the VE Program, see [Chapter 1 RDG - PDN.pdf](#).