WHEN IS VA REQUIRED?

Federal regulations requires a VA study on all federal aided projects on the NHS with a total cost (Construction, Right of Way, and Support) over $50 million (Bridge projects over $40 million) prior to construction. (DD-92 R-1)

PROCEDURES

Chapter 19 of the PDPM along with Chapter 12.5 of the LAPM describes the procedures for the Department. This unique function-driven process is used to increase the "Value" of the project. Not just cutting cost, but increasing the performance of the project. FHWA is continuously looking at our program and encouraging performance improvements and life cycle alternatives.

WHAT DEFINES A PROJECT?

The project is defined by the Environmental Document (ED). It may consist of several construction contracts or phases. Corridor studies are typically justified and will cover the child projects that get divided through the project development process. Mega-projects may need multiple studies if requested by FHWA.

BEST TIME TO PREFORM

The Department can obtain the best value by performing VA Studies at the beginning of the "0" Phase of the project rather than late in the project development process. In order to optimize value, it is also important to implement recommended alternatives.

TYPICAL VA STUDY

Typical studies are facilitated by a Certified Value Specialist (CVS) consultant. Studies involve a team of 7 – 10 multi-discipline Department experts. The studies are six working days over a two or three week period of time. Including Pre and Post study meetings, each study should be resourced approximately 500 hours in the project work plan for the Department's team member time. The consultant team leader is resourced from HQ VA program, and the Department's team members are resources from the project number. Average study cost's approximately $40,000.

TYPICAL RESULTS

Through our stewardship agreement with FHWA, the VA program has a goal which is typically reached:

- Project Savings = 5%
- Return on Investment (ROI) = 100:1
- Implementation Rate = 50%
- Mandated projects at RTL = 100%

CONTACT US

Each District/Region has a District Value Analysis Coordinator (DVAC). These committed team members are available to answer any questions and will coordinate your VA Study needs. A statewide phone list is available on-line at:

http://www.dot.ca.gov/hq/oppd/value/index.htm

Value Analysis

Frequently Asked Question
Fact Sheet

November 2012

WHAT IS VALUE ANALYSIS?

Value Analysis (aka Value Engineering) is a function-oriented, systematic team approach used to analyze and improve value in a project, product, or process. It is a powerful methodology for solving problems and reducing costs while improving performance and quality. "Value" can be summed up with the following equation:

$$\text{Value} = \frac{\text{Performance + Delivery}}{\text{Cost}}$$

BENEFITS OF VA

Value Analysis (VA) methodology has proven to be an extremely effective tool for project managers. It offers the following advantages:

- Convenes a panel of **experts** to advise on the following elements:
  - **Containing cost**
  - **Improving quality**
  - **Building consensus with our transportation partners**
  - **Solving difficult and complex transportation problems**
- Provides a documented, objective, multi-disciplinary solution to complex projects
- Involves stakeholders, PDT members and District management to ensure proper implementation of value

LOCALLY FUNDED PROJECTS

As long as the project touches the federal-aided system, the Agency is required to perform a VA study according to FHWA mandates. The Agency is also financially responsible for the study cost, and must report to CT HQ VA program for FHWA reporting.

HOW CAN CALTRANS SUPPORT LOCALLY FUNDED PROJECTS?

Full Participation: Caltrans supplies all or some of the team of Subject Matter Experts (SME) to participate as full time Team Members. These members would be actively developing alternatives and participating in the entire 40 hour workshop. This work would be considered as "reimbursable" work.

Stakeholder and Decision Making Participation: These members would be attending pre and post meetings (Kick-off and presentation phases), perform technical reviews on alternatives, review for federal compliance, and make recommendations for acceptance or rejection of alternatives. This participation would be considered as a project's Independent Quality Assurance (IQA) at no cost to the project.

WHY SHOULD A LOCAL AGENCY CONSIDER CALTRANS AS A TEAM MEMBER?

This is really a project specific question. At the discretion of the Project Manager, Caltrans Management and Local Agency officials, the level of participation should be agreed upon during the planning phase of the project. Depending upon the issues and complexity of the project, Caltrans team members may or may not be needed for the VA study.

WHAT IF A VA STUDY IS NOT PERFORMED ON A REQUIRED PROJECT?

The Department is not in compliance with federal law and is at risk of losing federal funding for this or other NHS projects. Also, at Ready to List (RTL), federal compliance is certified. If not in compliance, the project is at risk to not meet its schedule.

VA EXCEPTIONS?

There is no exception for a mandated VA study. At this time, our only exemption for a non-complex project is to shorten the duration of the study.

HOW DO I JUSTIFY A SHORTER STUDY?

Some less complicated projects (e.g. CAPM) may justify a shortened study. Because of the format of the VA process, the minimum workshop length is 24 hours (3-days). One day studies do not meet the FHWA requirement. In cooperation with the District VA Coordinator (DVAC), a "Modified Job plan justification" form may be filled out and sent to the HQ VA program manager. If the VA program manager feels that the study is within compliance of the law, the shortened study will be granted.