

## **DISTRICT VA COORDINATOR'S (DVAC) RESPONSIBILITIES**

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The District VA Coordinator's (DVAC's) function is to assure proper application of VA policies and procedures. The DVAC may assist in the selection of team members in cooperation with the appropriate project managers, stakeholders, and functional managers.

## **PROJECT MANAGER'S RESPONSIBILITIES**

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Active involvement with DVACs will ensure the success of the VA study. In cooperation with the DVACs, stakeholders, functional managers, and project managers (PM) focus on identifying projects with VA needs, selecting team members, providing resources for the Department's participation in the VA study, and implementing the accepted alternatives of the VA study.

## **HQ VA COORDINATOR'S RESPONSIBILITIES**

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HQ maintains a VA Program oversight staff whose main function is to support the DVAC's efforts and the VA needs of the Department. HQ VA Program Manager also provides resources to each project for consultant services used for VA purposes. This includes Team Leaders and Consultants with project specific expertise. HQ also supplies FHWA with an annual assessment of the VA Program. Continuous training is provided to Project Managers, team members, and other District personnel.

## **TEAM ROLES & RESPONSIBILITIES**

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VA uses multi-disciplinary teams with a range of perspectives to achieve meaningful results. Team Leaders are Certified Value Specialists (CVSs) recognized at the National level. Team member selection is the most vital part of the VA process. It is crucial that suitable team members are identified to maximize the performance of the study. The Team can be comprised of Caltrans, Local Agency, and/or Private Consultants experts not affiliated with the project. The goal of the VA team is to generate and analyze design alternatives under the guidance of the Team Leader. The Team must commit to participate for the duration of the VA Study.

## **TYPICAL VA STUDY**

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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.

## **CONTACT US**

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Each District/Region has a District Value Analysis Coordinator (DVAC). A statewide phone list is available on-line at:

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



# Value Analysis

## **A Quick Reference Guide for Project Managers**



July 2016

## 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

## 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:

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

## TYPES OF PROJECTS NEEDING VA STUDIES

The Department of Transportation currently performs three types of VA Studies:

- **Highway Construction Projects:** Federal legislation requires a VA study on ALL federal aid projects on NHS over \$50 million\* in total cost (R/W, Construction, and Support) prior to construction.
  - **Bridge Projects:** Over \$40 million in total cost.
  - **Product Studies:** The Department uses the VA process to improve the quality of highway products. Typically, engineering products are items and systems as described in the Department's standard plans and specifications. Value Analysis can help identify products that need to be updated due to changing technology, outdated applications, or any other changes affecting our standards.
  - **Process Studies:** The VA process is used to improve the quality of the Department's processes, including policies, procedures and business practices.
- \* Due to unforeseen circumstances, VA studies should be considered on projects priced over \$15 million.

Note: Corridor Studies involving one or more projects along a corridor can be combined into one study.

## BEST TIME TO PERFORM

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.

## VA STUDY STEPS

### **Pre-Study Preparation (8 hrs):**

- Initiate Study
- Organize Study
- Form Team \*
- Prepare Data

### **Study Workshop (40 hrs):**

- Inform Team
- Analyze Functions
- Create Ideas
- Evaluate Ideas
- Develop Alternatives
- Critique Alternatives
- Present Alternatives
- Assess Alternatives
- Resolve Alternatives
- Present Alternatives

### **Post-Study Activities (8 hrs):**

- Approving Alternatives \*
- Implementing Alternatives \*
- Publish Results
- Close out Study

\* Critical VA stages