**Process Name:** Conduct Value Engineering Study  
**Product/Service:** Completed VE Analysis with a report documenting the findings of the team  
**Primary Customers:** Management, DVE  
**Customer’s Valid Requirement(s):** Follow the VE Job Plan to produce quality recommendations that can be implemented.  
**Regulator’s Valid Requirement(s):** Follow the widely recognized systematic problem solving analysis process that is used throughout private industry and governmental agencies.

**Input(s):** Project Information  
**Supplier(s):** Project Manager

---

**Step / Time**  
**Dept / Person**  
**District Value Engineer**  
**Value Engineering Team**  

### NEED
- Conduct VE Study

### INVESTIGATION
- **Information Phase:**
  - Gather information about the present design from engineering reports, design plans, estimates, alternatives, right of way maps etc.  
  - Gather information about project from Project Manager, Designer and anyone else familiar with the project.

### ANALYSIS
- **Function Analysis Phase:**
  - Team identifies the elements with the greatest potential for value improvement.  
  - Function Analysis

### SPECULATION
- **Creative Phase:**
  - Team generates alternatives to the proposed design by using brainstorming techniques

### EVALUATION
- **Evaluation Phase:**
  - Team evaluates the alternatives and determines which offer the greatest potential for savings-end approval. Advantages and disadvantages are considered at this point.

### DEVELOPMENT
- **Development Phase:**
  - Team develops the alternatives selected. Sketches, cost estimates, validation of data and other technical work are done at this point.

### PRESENTATION
- **Presentation Phase:**
  - Team presents its recommendations to management and appropriate staff with time allocated for question and answer.  
  - VE Study report is developed during the study as a step-by-step record.

### RESULTS
- Post Study Surveys of Team, Project Manager and Management. Feedback results to Project Selection and Team Selection Processes & Team Leader.

- **Enter data into database**

- **VE Study Completed**

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**Checking / Measure Monitoring**

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<tr>
<th>Process Measures</th>
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**Process and Quality Measures**

- Adaptation Area  
- 01/2009 C  
- 01/2009 C  
- 01/2009 C  
- 01/2009 C  
- 01/2009 C  
- 01/2009 C  
- 01/2009 C  
- 01/2009 C  
- 01/2009 C  

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**Miscellaneous Information**

- Abbreviations - Procedure Reference Notes, etc.

- Federal Regulation 23 CFR 627
- VE Procedure 825-030-002
- AASHTO Guidelines for VE

**CODES:**
- C: Compliance  
- NC: Noncompliant  
- BP: Best Practices

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Approved: __________________________ Date: __________________  
Process Owner: VE Team Leader  
Rev #: 1.5  
Rev Date: 2/2009