

FHWA VE Program Performance Form  
Instruction Sheet

**Purpose:** The FHWA’s VE program is focused on continuously improving the development and delivery of highway improvement projects. The following goals and measures were developed in FY 2009 to monitor and report on the progress of FHWA’s VE Program:

- Goal 1: Maximize the influence VE studies have on a project’s cost and performance;
- Goal 2: Enhance the quality of VE programs; and
- Goal 3: Improve FHWA’s stewardship and oversight of the VE Program.

These goals also reflect FHWA’s priorities of continuously improving their stewardship and oversight of the VE program, enhance how VE analyses are conducted, and support State DOTs efforts to improve their VE programs. Annually FHWA collects, analyzes and reports on the progress that has been made toward achieving these goals. The innovative and successful practices that are identified along with the annual VE Performance Report are posted on FHWA’s VE website at: <http://www.fhwa.dot.gov/ve/>.

Please provide responses to the following list of questions.

2012 VE Program Performance Form

Instructions: The following form follows the format of the electronic survey that will be used by FHWA Division Offices to submit VE Program Performance information via FHWA’s SharePoint website. A few question numbers are out of sequence due to the logic required in the survey software. There are certain questions that will be skipped if the first question in a sequence is answered ‘no’ in the SharePoint survey. There are instructions, below, when this occurs within a series of questions. Provide your answer to each question in the center column under response. Please make sure to read the specific guidance and instructions provided in the far right column for each question as these are intended to assist in a filling out the survey.

Question:	Response:
<b>What is the State, Territory or Federal Lands office being reported?</b>	Colorado
<b>PART 1 – VE Programs</b>	
<b><u>VE Program</u></b>	
<b>1a_7. Does your DOT have a formalized VE Program?</b>	Yes. We have also drafted new VE Program guidance that will be implemented this fiscal year.
<b>1a_1. Does your DOT’s VE program include a documented and adopted VE Policy?</b>	Yes.

<b>1a_2. Does your DOT's VE program have an identified VE coordinator?</b>	Yes, it will when the modifications implemented.
<b>1a_3. Does your DOT's VE program include a VE Training initiative?</b>	Yes, it will when the modifications implemented.
<b>1a_4. Does your DOT's VE program include VE Program Performance Goals and Measures?</b>	Yes, it will when the modifications implemented.
<b>1a_5. Does your DOT's VE program include a plan to monitor, evaluate and report on the performance of the VE Program?</b>	Yes, it will when the modifications implemented.
<b>1a_6. Does your DOT's VE program include documented procedures for conducting VE analyses?</b>	Yes, it will when the modifications implemented.
<b>1a_Comments. Briefly provide comments on your State DOT VE Program.</b>	Revised policy will include guidance on when VE is required by law, but will also include guidance on when VE should be considered based on project specific considerations and risks. We are also going to attempt to capture and report information on effectiveness of the VE program in terms of cost/time savings and other potential benefits.
<b><u>VE Policy and Procedures</u></b>	We have drafted a new VE Program that includes Policy and Procedures to be implemented this fiscal year.
<b>1b_9. Does your DOT have an official VE Policy/Procedure?</b>	
<b>1b_1. Does your DOT's VE Policy/Procedure include processes to identify candidate projects to conduct VE analyses?</b>	Yes, it will when the modifications implemented.
<b>1b_2. Does your DOT's VE Policy/Procedure include processes to assure that required VE analyses are conducted?</b>	Yes, it will when modifications are implemented.
<b>1b_3. Does your DOT's VE Policy/Procedure include processes to conduct VE analyses?</b>	Yes, it will when the modifications implemented.
<b>1b_4. Does your DOT's VE Policy/Procedure include a process for</b>	Yes, it will when modifications are implemented.

<b>scheduling VE analyses?</b>	
<b>1b_5. Does your DOT's VE Policy/Procedure include processes to review, accept and reject VE recommendations?</b>	Yes, it will when modifications are implemented.
<b>1b_6. Does your DOT's VE Policy/Procedure include processes for tracking and monitoring VE analyses?</b>	Yes, it will when modifications are implemented.
<b>1b_7. Does your DOT's VE Policy/Procedure include processes for tracking and monitoring implementation of VE recommendations?</b>	Yes, it will when modifications are implemented.
<b>1b_8. Does your DOT's VE Policy/Procedure include or reference established VE coordinator roles and responsibilities?</b>	Yes, it will when modifications are implemented.
<b>1b_Comments. Briefly provide comments on your State DOT's VE Policy/Procedure.</b>	We have drafted modifications to our VE Program to make it more robust and improve reporting.
<b>VE Program <u>Resources</u></b>  <b>2. Identify the title and links to any of your DOT's VE Program websites, such as:</b> - General VE Program Information - VE Program Policy - VE Program Procedures - VE Program Performance Reporting - Other VE program activities, documents, or resources.	CDOT has an updated section in the project development manual. Currently, the process is included in section 2.08 of the PDM at: <a href="http://www.coloradodot.info/business/designsupport/bulletins_manuals/project-development-manual/pdm_sect8_2001.doc/view">http://www.coloradodot.info/business/designsupport/bulletins_manuals/project-development-manual/pdm_sect8_2001.doc/view</a>  This will be revisited when the new VE Program is implemented.
<b>Improving VE <u>Analyses</u></b>  <b>3a. Briefly describe any practices your DOT uses to improve the VE Program and VE analyses conducted more successful.</b>	CDOT performs VE studies in the NEPA stage. This helps in making major changes while still in the NEPA decision stage.
<b>3b. Briefly describe any practices your DOT uses to encourage the</b>	CDOT encourages all Contractors to submit VECs by discussing the possibility in the Preconstruction Conference

use of and help make construction VE Change Proposals (VECPs) more successful.	
4a. Identify the typical project factors and associated measures that your State DOT used on VE analyses conducted in 2012.	Safety Cost Savings/Efficiency Schedule Savings Environmental
4b. Describe how your DOT incorporates life cycle cost analysis in VE analyses.	LCCA are used as part of the determination of cost benefit. This is done as part of the study when recommendations are presented.
4c_1 What percentage of VE analyses completed in FY 12 occurred during the Planning and Concept Development Phase?	100% <i>Planning and concept development phase</i>
4c_2 What percentage of VE analyses completed in FY 12 occurred during the Preliminary Design Phase from 0-30% Final Design?	0% <i>Up to 30% Design Phase (i.e., preliminary design, alternative analysis, environmental review)</i>
4c_3 What percentage of VE analyses completed in FY 12 occurred during the Final Design Phase from 30-60% Final Design?	0% <i>30-60% Design Phase (i.e., final design)</i>
4c_4 What percentage of VE analyses completed in FY 12 occurred during the Final Design Phase from 60% or later?	0% <i>60% or later Design Phase (i.e., final plans complete, PS &amp; E)</i>
4c_Comments. Briefly describe your State DOT's experience regarding the timing of VE analyses.	It is preferable to conduct VE analyses early in the project, during planning and concept development.
4d. For design-build projects, select the option that best represents when VE analyses are typically conducted by your DOT. -Planning and Concept Development	VE analyses are typically conducted during planning and concept development.

<p>-Preliminary Engineering and prior to issuance of RFP          -After issuance of RFP          -State DOT does not currently use design build</p>	
<p><b>4d_Comments. Briefly describe your State DOT's experience regarding the timing of conducting VE analyses for design build projects.</b></p>	<p>It is preferable to conduct VE studies prior to issuing an RFP.</p>
<p><b>4e_1. Did your State DOT conduct more than one VE study for any Major Project during FY 2012?</b></p>	<p>No</p>
<p><b>4e. Identify all milestones of the development of a Major Project where the VE analyses occurred.</b>          - Planning and Concept Development Phase          - 0-30% Preliminary Design Phase          -30-60% Final Design Phase          -60% Final Design or later</p>	<p>During NEPA after the preferred alternative is identified, and during the design effort that follows NEPA, for each individual phase or project affected by the NEPA decision.</p>
<p><b>5. Briefly describe any special VE analyses conducted by your DOT in FY 2012.</b></p>	<p>CDOT did not conduct any Special Analyses in FY 2012.</p>
<p><b>6. Describe any successful VE analyses that were completed by your DOT in FY 2012.</b></p>	<p>Four successful VE studies were conducted last year:          (1)CDOT Project No. FBR 0704-224, "Pecos Street over I-70 Bridge Replacement" - A VE study produced 12 approved recommendations that included changes to the bridge foundation, traffic phasing and routing, and other areas for potential savings of \$5.4 million.          (2) CDOT Project No. IM C040-029, "I-25 North of Colorado Springs" – A VE study produced 7 approved recommendations that included changes to managing runoff, pavement mix design, and the method of construction for estimated savings of \$2.27 million.          (3) CDOT Project No. NH 0361-103, "US 36 Managed Lanes Phase II" – A VE study produced 12 recommendations; approval has not been finalized.          (4) City of Pueblo Local Project "I-25/Dillon Drive" – A VE study produced 14</p>

	recommendations, but implementation has not yet been determined.
<b>7_1. Describe a unique or innovative VE recommendation that provided a significant benefit to the project on which it was implemented.</b>	None identified
<b>7_2. Describe a unique or innovative VECP that provided a significant benefit to the project on which it was implemented.</b>	None identified
<b><u>VE Training</u></b>  The following three questions relate to the number of individuals attending VE training activities conducted by your State DOT during FY 2012.  8a_1. Enter the number of State DOT and LPA staff that received VE training in your State during FY 2012.	0 - CDOT 0 - LPA
8a_2. Enter the number of FHWA staff receiving VE training within your State during FY 2012.	0
8a_3. Enter the number of consultant staff receiving VE training in your State during FY 2012.	0
The following seven questions relate to your State DOT's approach to conducting VE training during FY 2012.  8b_1. Did your DOT conduct any VE awareness building presentations or briefings for agency leadership?	No
8b_2. Did your DOT conduct and VE awareness building presentations or	No

briefings for technical staff?	
8b_3. Did your DOT conduct short duration workshops on conducting VE analyses?	No
8b_4. Did your DOT conduct an NHI VE Training Course (Workshop) during FY 2012?	No
8b_5. Did your DOT conduct a SAVE Mod I training course during FY 2012?	No
8b_6. Did your DOT conduct a SAVE Mod II training course during FY 2012?	No
8b_7. Did your DOT conduct another type of VE training course during FY 2012?	No
Part 2 – Summary of VE Analyses	0
9a_1. Enter total number of VE analyses completed in FY 2012 and completed by agency staff.	
9a_2. Enter total number of VE analyses completed in FY 2012 and completed by consultant staff.	4
9b_1. Enter number of VE analyses completed in FY 2012 that were required by Federal Law and completed by agency staff.	0
9b_2. Enter number of VE analyses completed in FY 2012 that were required by Federal Law and completed by consultant staff.	4
9c_1. Enter number of VE analyses completed in FY 2012 that were specially designated by FHWA and completed by agency staff.	0
9c_2. Enter number of VE analyses completed	0

in FY 2012 that were specially designated by FHWA and completed by consultant staff.	
9f_1. Enter the anticipated number of VE analyses to be completed during FY 2013.	2
9f_3. Enter the anticipated number of VE analyses to be completed during FY 2014.	2
10a. Enter the estimated costs associated with conducting the VE analyses during FY 2012.	\$163,000
10b. Enter the estimated costs of the projects studied during FY 2012.	\$158,500,000
11a. Enter the total number of proposed VE recommendations during FY 2012.	56
11b. Enter the total number of approved VE recommendations during FY 2012.	19
12a. Enter the value of proposed VE recommendations during FY 2012.	\$22,763,350
12b. Enter the value of approved VE recommendations during FY 2012.	\$7,689,850
13a. Enter the total number of VECs submitted for FY 2012.	10
13b. Enter the total number of VECs approved for FY 2012.	8
14a. Enter the value of VECs submitted for FY 2012.	\$524,750
14b. Enter the total value of VECs approved for FY 2012.	\$324,750
Part 3 – Benefits of VE	0



**Analyses & VE Change Proposals**

The next five questions relate to the type of VE recommendations approved. If a specific recommendation can be shown to provide benefit to more than one category as defined in questions 15\_1 through 15\_6, count the recommendation in each category that is applicable.

15\_1. Enter the number of approved VE recommendations that improved safety.

15\_2. Enter the number of approved VE recommendations that improved traffic operations.

6

15\_3. Enter the number of approved VE recommendations that mitigated environmental impacts.

1

15\_4. Enter the number of approved VE recommendations that improved construction.

12

15\_6. Enter the number of approved VE recommendations that mitigated right of way impacts.

0

**VE Change Proposals**

The next five questions relate to the type of VECP proposals approved for construction projects. If a specific VECP can be shown to provide benefit to more than one category as defined in questions 16\_1 through 16\_6, count the VECP in each category that is applicable.

16\_1. Enter the number

0

of approved VECPs that improved safety.	
16_2. Enter the number of approved VECPs that improved traffic operations.	0
16_3. Enter the number of approved VECPs that mitigated environmental impacts.	0
16_4. Enter the number of approved VECPs that improved construction.	8
16_6. Enter the number of approved VECPs that mitigated right of way impacts.	0
Part 4 – FHWA Stewardship and Oversight of VE Programs  17a Is VE evaluated as part of your Division's Annual Risk Assessment process?	Yes
17b Is VE evaluated directly (i.e. individual VE risk assessment conducted specifically for VE) or indirectly (i.e. VE incorporated as a part of a larger program such as Design) during your Division's Annual Risk Assessment?	Indirectly
17c. What was the identified level of risk assigned to VE by your division?	High
17d_Comments. Provide comments on how VE was considered or integrated into your Division's Annual VE Risk Assessment.	For FY12, risk assessment was based on project cost. Beginning in FY13, revised VE policy will include additional guidance for conducting VE analyses based on project specific considerations and risks.
18a. Did your DOT or Division conduct a review of the DOT's VE Program between FY	Yes.

<b>2010 and FY 2012?</b>	
<b>18b. Does your DOT or Division plan to conduct a review of the DOT's VE Program in FY 2013?</b>	Yes.
<b>19a. Is VE specifically discussed in your Division's Stewardship and Oversight Agreement with your DOT?</b>	Yes.
<b>19b_1. Is VE addressed by reference in the Design Oversight Section of the Stewardship and Oversight Agreement?</b>	Yes
<b>19b_2. Are the VE Federal Regulations referenced in the Stewardship and Oversight Agreement?</b>	Yes
<b>19b_3. Are the State DOT VE Policies and Procedures referenced in the Stewardship and Oversight Agreement?</b>	Stewardship agreement contains language stating when VE is required.
<b>19b_4. Is the role of the Division's VE Coordinator identified in the Stewardship and Oversight Agreement?</b>	No
<b>19b_5. Are the Division's roles and responsibilities for VE discussed in the Stewardship and Oversight Agreement?</b>	No
<b>19b_6. Is the Division's participation in VE analyses discussed in the Stewardship and Oversight Agreement?</b>	Yes
<b>19b_7. Is the Division's role in the review of VE recommendations identified in the</b>	No

<b>Stewardship and Oversight Agreement?</b>	
<b>19b_8. Is the Division's role in VE Program monitoring, evaluating and reporting discussed in the Stewardship and Oversight Agreement?</b>	No
<b>20a. Identify your Division's typical level of participation in VE analyses on projects with full FHWA oversight.</b>	Frequently (60 to 80% of projects)
<b>20b. Identify your Division's typical level of participation in the approval/rejection process of VE recommendations on projects with full FHWA oversight.</b>	Frequently (60 to 80% of projects)
<b>20c. Identify your Division's typical level of effort monitoring the implementation of VE recommendations on projects with full FHWA oversight.</b>	Rarely (0 to 20% of projects)
<b>The following six questions are based on your Division's efforts to ensure that the States complete the required VE analyses prior to authorizing a project for construction.</b>	
<b>21_1. Does the Division check that all required VE analyses are performed on projects with full FHWA oversight prior to authorizing a project for construction?</b>	Yes
<b>21_2. Does the Division spot check that required VE analyses are performed on</b>	Yes

<p>projects with full FHWA oversight? (e.g. sampling of projects, program assessments or process reviews)</p>	
<p>21_3. Does the Division spot check that required VE analyses are performed on State administered projects?</p>	<p>Yes</p>
<p>21_4. Does the Division verify that the State VE policies, procedures &amp; guidance comply with VE Federal regulations?</p>	<p>Yes</p>
<p>21_5. Does the Division verify the accuracy of the data collected during the annual VE Call for Data?</p>	<p>Yes</p>
<p>21_6. Does the Division have a documented process to check that all required VE analyses are conducted prior to authorizing a project for construction?</p>	<p>Yes - We have a box on our checklist that all engineers fill out prior to granting FMIS authorization for Construction</p>
<p>22a. Identify any clarification or revisions FHWA should consider in 2013 when updating the Federal Regulations on VE, 23 CFR 627.</p>	<p>None at this time.</p>
<p>22b. Identify any clarifications of revisions FHWA should consider in 2013 when updating the FHWA VE Policy.</p>	<p>None at this time.</p>

Thank You for your time assembling and reporting on your States VE Program efforts.

Please provide comments on how the FHWA VE program can be improved or how this data collection process can be improved.