

Additional Guidance for TSM&O Evaluation

This document provides additional information for completing the requirements of Section 4.12 TSM&O (Transportation Systems Management and Operations) Evaluation in the *Project Development Manual*.

RESOURCES

The Project Manager may access resources in the following order:

1. Change Hub
2. Change Agent Network
3. RTR
4. TSM&O

Exhibit 1:

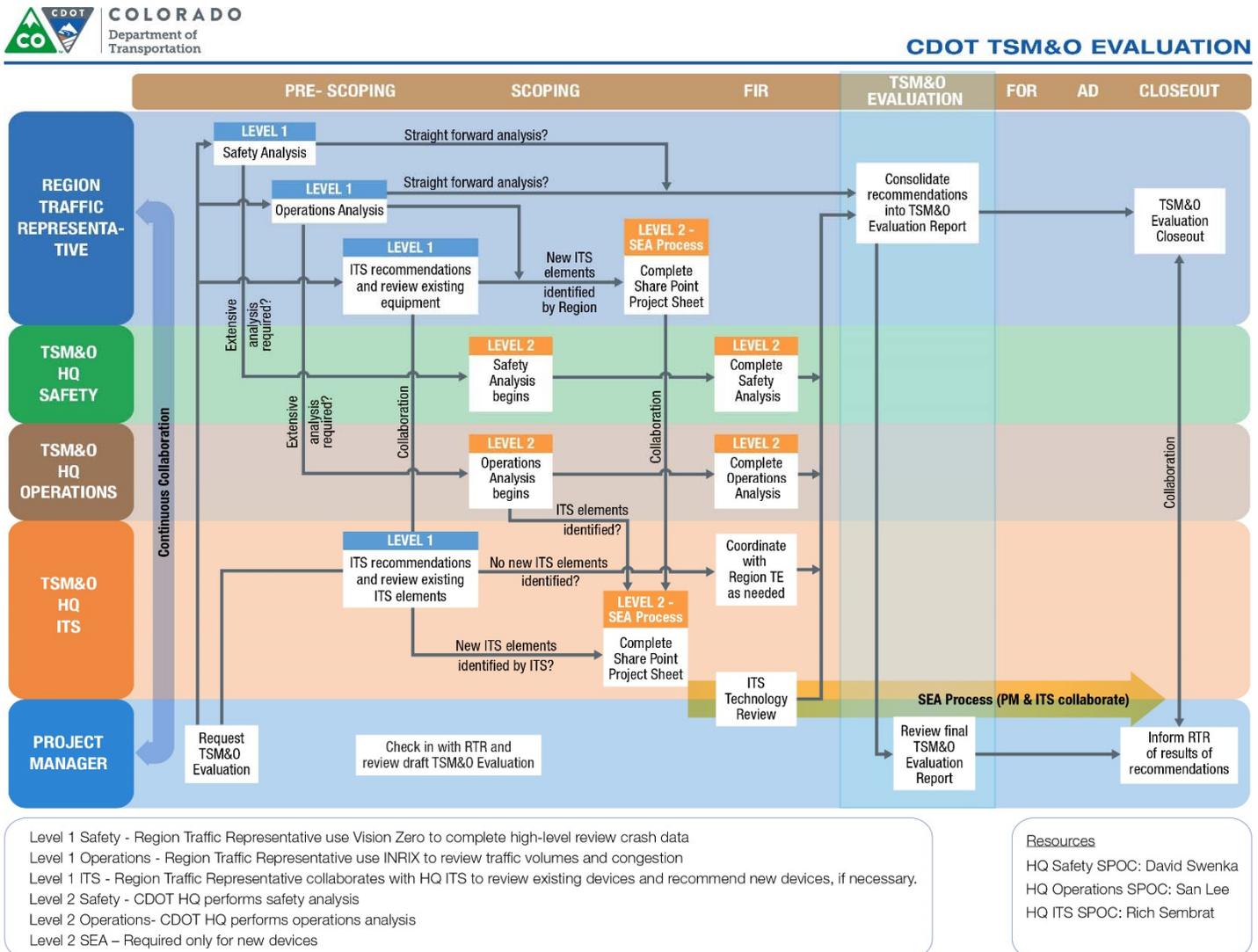


Table 1: TSM&O Evaluation Process Steps

Ref #	Responsible	Process Step	Notes/Tools
1.	Project Manager	Create the TSM&O Evaluation milestone in SAP CJ20N when project is initiated and establish the targeted completion date. See SAP Workflow 1.	Ideally the TSM&O Evaluation will be substantially completed by FIR so that recommendations can be incorporated in the design
2.	Project Manager	Prepare and distribute the TSM&O Evaluation Request in Pre-scoping phase of project <ul style="list-style-type: none"> • Prepare the request by entering project information in the request form. • Email to Region Traffic contacts and ITS as indicated on the webpage. • Begin filling out the 1048 section 4.12 on TSM&O evaluations. 	http://cdot.dot.state.co.us/business/tsm-o/evaluation/request
3.	Project Manager	If not present in the ProjectWise folder structure, create a "TSMO_Evaluations" folder in the ProjectWise "Traffic_ITS" folder for the project, and file the TSM&O documentation.	
4.	Region Traffic	Identify and assign a Region Traffic Representative (RTR) for the particular project and forward the TSM&O Evaluation Request. Once the initial analysis is completed, you will receive a Level 1 Operations Assessment similar to this sample. See page 2 for spreadsheet with recommendations (FYI only):	Copy the Project Manager on the email.  Sample Level 1 Operations Assessm
5.	RTR	Create folder in the HQ TSM&O (TRAFTSMOEVAL) shared drive at \\public\traftsmoeval\evaluations Folder Structure: SHXXX\SHXXX_YYYY-YYYY_(ZZZZ) XXX = State Highway Number XXXX = State Highway Number and Section (e.g. SH070A, SH285D) YYYYY = Milepoint Limits (e.g. MP 0.00 to MP 1.52 = 00000-00152, MP 90.50 to 112.00 = 09050-11200) ZZZZZ = Project Sub Account Number (if not available, folder name will be SHXXXX_YYYY-YYYYY) Conduct a physical review of the roadway to determine TSM&O opportunities using the TSM&O Evaluation Level 1 checklist.	\\public\traftsmoeval\evaluations

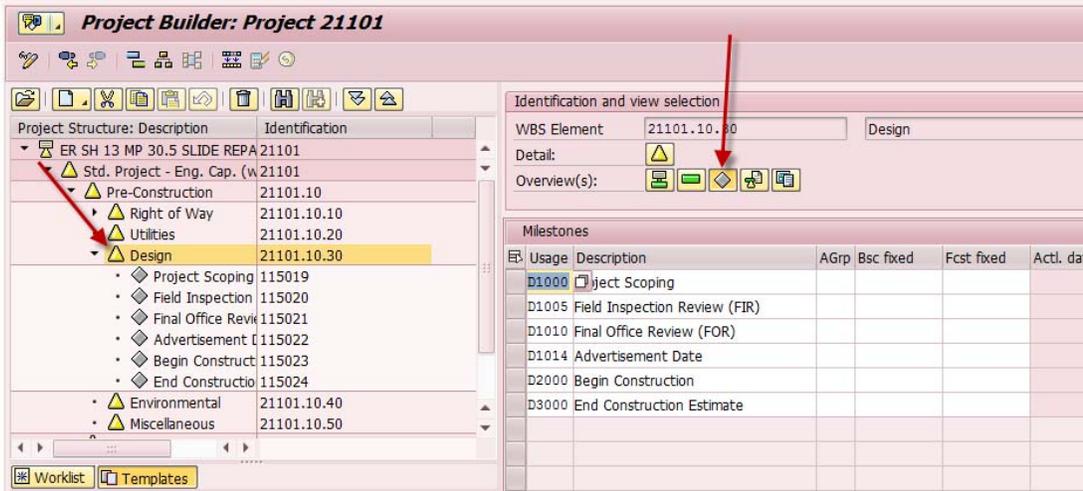
Ref #	Responsible	Process Step	Notes/Tools
6.	RTR	Download the latest version of the TSM&O Evaluation spreadsheet tool.	http://cdot.dot.state.co.us/business/tsm-o/evaluation/resources/eval-tool
7.	ITS	Review the project to determine if there are existing ITS devices and coordinate findings with the RTR.	
8.	RTR	<p>Assess and complete the Level 1 TSM&O Evaluation.</p> <p><u>Level 1 Safety Analysis:</u></p> <ul style="list-style-type: none"> Review crash history, conduct crash pattern analysis using Vision Zero Suite. Identify safety opportunities and complete Level 1 recommendations. <p><u>Level 1 Operations Analysis:</u></p> <ul style="list-style-type: none"> Review traffic volumes, patterns and congestion data. Identify opportunities and prepare recommendations. <p><u>Level 1 ITS Analysis:</u></p> <ul style="list-style-type: none"> Identify known ITS devices. Identify opportunities for ITS in the project. Review with ITS representative for potential ITS to include or ITS items already in the roadway. Prepare recommendations 	TSM&O Evaluation must be completed prior to FOR
9.	RTR/TSM&O	When filling in SAP timesheets, for work done on TSM&O Evaluations both in the Region Traffic Units and at HQ (requesting, processing, program admin, meetings, study/analysis for Safety, Ops, or ITS) include the following Rec Order to document time spent (Rec Order: 200664).	HQ will periodically query the amount of time reported on TSM&O Evaluations for reporting and program administration purposes.
10.	RTR	File the complete Level 1 analysis in the HQ TSM&O (TRAFTSMOEVAL) shared drive at \\public\traftsmoeval\evaluations for reference by state highway and mile markers.	\\public\traftsmoeval\evaluations
11.	RTR	<p><u>Initiate a Level 2 Analysis, if necessary</u></p> <p>Depending on the findings from Level 1 Analysis, the RTR may request a Level 2 Analysis by contacting the identified TSM&O contacts and providing them with the Level 1 Analysis information.</p>	
12.	HQ Safety	Conduct Level 2 Safety Analysis, if required and report recommendations to RTR.	
13.	HQ Operations	Conduct Level 2 Operations Analysis, if required and report recommendations to RTR.	

Ref #	Responsible	Process Step	Notes/Tools
14.	RTR	If new ITS devices are recommended by the RTR during the Level 1 Analysis, initiate the Level 2 Analysis by preparing the project information form on the ITS SharePoint site.	http://connectsp/sites/TSMO/ITSEval/SitePages/Home.aspx
15.	ITS	If new ITS devices are recommended by ITS during the Level 1 Analysis, initiate the Level 2 Analysis by preparing the project information form on the ITS SharePoint site.	http://connectsp/sites/TSMO/ITSEval/SitePages/Home.aspx
16.	RTR	Consolidate Safety, Operations and ITS recommendations and file in the TSM&O (TRAFTSMOEVAL) shared drive.	\\public\traftsmoeval\evaluations
17.	RTR	Notify the Project Manager recommendations are filed and provide updates at project milestone meetings, e.g., Scoping, FIR, FOR.	
18.	PM/RE/RTR	Consult funding resources to identify potential funding and determine which recommendations are funded to be incorporated in the project on the TSM&O Evaluation Report summary page.	
19.	Project Manager	File the complete TSM&O Evaluation Report and supporting documentation in the ProjectWise TSM&O folder.	\\public\traftsmoeval\evaluations reference by state highway and mile markers
20.	Project Manager	Assess project to weigh implementing recommendations. Update the Form 1048 with current information, and decisions made.	TSM&O Evaluation, and Form 1048.
21.	Project Manager	After project advertisement, and before bid opening, coordinate with the RTR to identify which recommendations were integrated into the design.	
22.	RTR	After project advertisement, and before bid opening, complete TSM&O Evaluation report summary for TSM&O items integrated into the design vs. not integrated into the design. Archive TSM&O documentation for future use on the HQ TSM&O (TRAFTSMOEVAL) shared drive at \\public\traftsmoeval\evaluations .	
23.	Project Engineer	Coordinate acceptance testing for ITS devices with ITS representatives and provide documentation to ITS.	

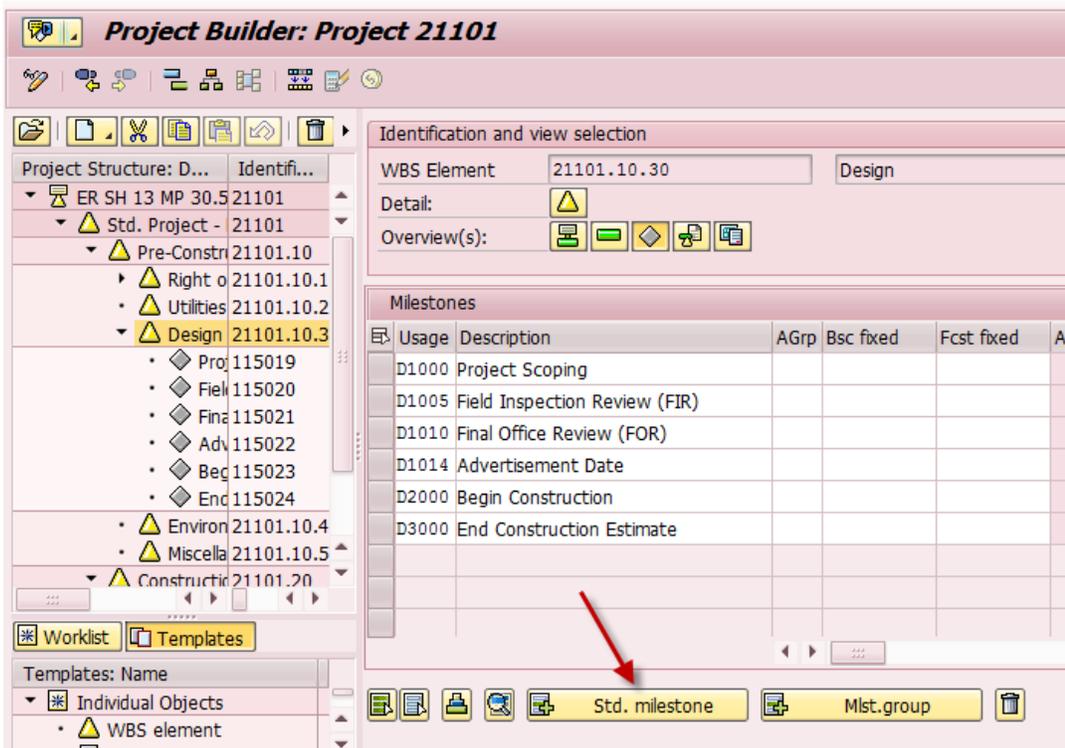
SAP Workflow 1:

[See Design Bulletin 2014-3, Milestone Dates in SAP Project Builder (CJ20N) February 10, 2014 for more information on entering milestones in SAP CJ20N]

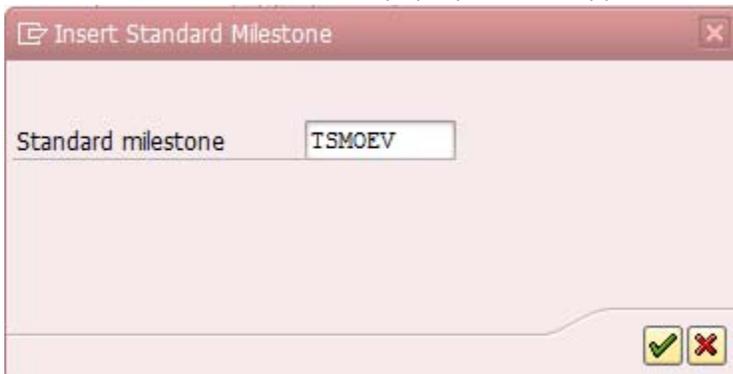
1. Open the project and select the Design phase then select the 'Milestone Overview' button.



2. From the bottom of the screen, select the 'Std. milestone' button.



- The 'Insert Standard Milestone' pop-up box will appear. Enter in the TSMO Evaluation code of "TSMOEV".



- The 'TSMO Evaluation' should now be displayed with the rest of your Project's milestones.

Project Builder: Project 21101

Identification and view selection

WBS Element: 21101.10.30 Design

Detail: [Warning Icon]

Overview(s): [Icons]

Usage	Description	AGrp	Bsc fixed	Fcst fixed	Actl. dat
D1000	Project Scoping				
D1005	Field Inspection Review (FIR)				
D1010	Final Office Review (FOR)				
D1014	Advertisement Date				
D2000	Begin Construction				
D3000	End Construction Estimate				
20001	TSMO Evaluation				

Templates: Name

- Individual Objects
 - WBS element

Std. milestone Mlst.group