



# EVALUATION OF FIELD REVIEW PROCESS

**August 10, 2018**

State of California  
Department of Transportation  
Division of Local Assistance  
Office of Guidance and Oversight

**Process Review 18 02**

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## A. INTRODUCTION

The field review process is an important early action in developing a local transportation project financed by federal-aid funds. In the development of federal-aid project, the field review is a data-gathering and project-scoping step in which systematic collection of initial engineering and related project data and information is carried out. The field review for federal-aid projects off the State Highway System (SHS) is equivalent to the Project Study Report (PSR) for state highway projects, whose purpose is to document agreement on the scope, schedule, and estimated cost of a project prior to programming the project. In addition, field reviews are designed to bring about agreement on the project requirements necessary to comply with federal and state laws and regulations.

## B. PURPOSE AND OBJECTIVES

Albeit not being a formal process review, this study intends to evaluate the current field review process and to revisit its benefits and aims. More importantly, the study will draw conclusions about whether the process is essential enough to be retained during federal-aid project development.

The study has the following general objectives:

- To examine users' understanding of the purpose of the field review process
- To identify any processes having a similar intention
- To develop the best way to utilize the process
- To revise the process, if necessary, in accordance with the results of the evaluation

## C. SCOPE AND METHODOLOGY

The scope of this study includes an examination of whether the field review process is essential, effective, and efficient and also of whether it enhances opportunities for further stewardship and guidance. The study will review existing documentation and processes and also examine potential problems in the field review.

To achieve this scope, the following methodology has been used:

- Document, from the standpoint of local agencies, Caltrans District Local Assistance Engineers (DLAEs), and the Division of Local Assistance (DLA), the practices currently used in locally administered federal-aid projects.
- Identify, from the standpoint of local agencies, DLAEs, and the DLA specific issues or areas of weakness in the process.

## D. APPROACH

This study involves the collection of existing documentation and research as well as the analysis of sample projects. This information has been collected by means of a comprehensive review of existing literature, process reviews (if any), and procedural documentation. The evaluation of the



process was principally conducted by means of a literature review, and a survey and case study were performed in accordance with its findings.

## **Literature Review**

The literature review consists of a review and content analysis of the current federal and state regulations, including Chapter 7 and related chapters of the Local Assistance Procedures Manual (LAPM). The practices and procedures of states other than California are also considered in the literature review, which documents all existing regulations in relation to the field review and also contains a content analysis of guidance documents.

## **Survey**

The survey instruments were designed for both local agencies and Caltrans District respondents. The survey of local agencies included questions about the clarity of the field review form and about its purpose. Similarly, the survey of Caltrans districts included questions about the value of the field review process. The surveys also asked respondents to identify deficiencies and unnecessary steps in the field review process, and the questions were designed to allow the review team to determine the best way to utilize the process.

## **Case Study**

An examination of field review forms on file (Exhibit 7-B) and of other related exhibits was necessary to evaluate the purpose and benefits of the field review process. The review team solicited a couple of sample projects that employed field review forms from each district.

The goals of the case study were as follows:

- Gather detailed information on, and insights into, the likely causes of issues or noncompliance and determine practices that best resolve these issues.
- Identify best practices for future enhancement, concentrating on reducing redundancy of information that appears on more than one exhibit or form.

## **E. FINDINGS**

The following highlights some of the key findings from the literature review and the survey that supplemented the case study.

### **Literature Review**

#### **Federal Requirements**

While the term ‘field review’ does not appear on any references for federal regulation or requirement, the contents of the process can be located in a Codes for Federal Regulation (CFR).



23 CFR 450 Subpart C explains ‘development and content of the Transportation Improvement Program (TIP)’ and requires the TIP to include certain project specific information such as project description, estimated cost, financial plan, agencies’ responsibility, environmental requirements and etc. for each project or phase. Such project information is identical to the contents of PSR which should be prepared prior to getting programmed. Because most of the federal-aid local projects are under the Federal TIP (FTIP), and the field review is a PSR-equivalent process whose purpose is to acquire a proper programming and scoping, it is not deviated for the CFR section mentioned above from being applicable to the field review process.

### State Requirements

Other than the required procedures, as described in Chapter 7 of LAPM, there is no additional requirement on the state side. It is understood that for locally administered projects, field reviews are regarded as a project initiation document (PID), similar to the PSR for Caltrans capital projects.

### Field Review in Other States

Because there are no federal regulatory requirements, the research team was interested in learning how other state agencies regulate their local assistance projects when it comes to field reviews or any equivalent process in project development. For this purpose, a literature review was conducted to gather information from neighboring states and from other sizable states, among them New York, Florida, and Texas.

The results of the literature review (Table 1) illustrate that some states use different terms for the field review and that others use the term to describe a site visit only. Only one state, Idaho, does not specify such a process for project development (although it has an equivalent process for its capital projects). States differ from California in when they execute the process: some conduct the process as a PID at a very early stage of project development, whereas others conduct it so as to submit it for authorization for the Preliminary Engineering (PE) phase. Some states prepare the review as a report or form so that it can be submitted together with an environmental document. Other states do not use a specific type of document, although they may keep minutes of meetings.

**Table 1. Field Review in Other States**

State	Equivalent Process	Name of Process	Type of Document
Oregon	Yes	Plans-in-Hand Meeting	None
Nevada	Yes	Kick-off Meeting	None
Arizona	Yes	Project Assessment	Report
Utah	Yes	Contract Scoping Meeting	None
Washington	Yes	Early Project Coordination	Form
Idaho	No*	N/A	None
Texas	Yes	Kick-off Meeting	None
New York	Yes	Project Scoping Report	Report
Florida	Yes	Engineering Concept Report	Report

\*The Idaho DOT has a plan-in-hand field review for the state’s capital projects but none for local assistance projects.



## Survey

A brief email survey questionnaire was distributed to Caltrans twelve districts. They were asked to forward it to their staff and, if possible, to the local agencies.

### Survey Questionnaire

The purpose of the survey was to gain insight into the preparation, approval, and execution of the field review process. The questionnaire asked the following questions:

1. Are the field review process and its purpose clear enough?
  - a. If not, can you specify?
2. Can you identify deficiencies and/or unnecessary steps in the process?
  - a. If any, what are the likely causes of issues or noncompliance?
3. Can you suggest or identify possible best practices for future enhancement?

### Survey Responses

The rate of response to the survey was not high: only a small number of DLAEs and local agencies complied. Although the rate was not sufficient for conducting statistical tests and analysis, the response was considered representative of the DLAEs and the agencies' general opinion based on their knowledge and experience, and therefore, adequate for this study. Table 2 summarizes the responses to the questionnaire explaining the need of the process and relating to the areas where the issues and improvement need to be revealed if necessary.

**Table 2. Survey Responses**

Item No.	Question	Yes (%)	No (%)
<b>1</b>	Clarity of the process and its purpose	71	29
<b>1.a</b>	Specified non-clarity	See following discussion	
<b>2</b>	Deficiencies of the process	86	14
<b>2.a</b>	Causes of deficiencies	See following discussion	
<b>3</b>	Suggestions for best practice	See following discussion	

In Item 1 reported in Table 2 the respondents were asked to indicate whether the purpose of the process is clear enough for the DLAEs and local agencies to understand. The responses showed that about 70% of the respondents have a great degree of understanding of the process and its purpose that the process is used for an essential project initiation phase. The rest of the respondents expressed otherwise.

Areas of specified non-clarity for Item 1.a can be summarized as follows:

- The title of the form is not adequate, especially when the field review is optional, and the form is still required to be filled out.
- Some required input to the form are redundant, including “Programming and Financial Data.”



- The purpose of some fields is not clear, including “Cost Estimate Breakdown,” “Project Administration,” “Schedules,” and “DLAE Field Review Notes.”

A majority (86%) of respondents stated that there were deficiencies and unnecessary steps in the process. Most specified that the field review form (Exhibit 7-B) needs to be improved. Reported problems included the following:

- The form includes information repeated on other forms, such as “Work Description” and “Programming Data.”
- The instructions for completing the form (Exhibit 7-A) should be more specific.
- The form does not distinguish between an NHS project and a non-NHS one.
- The local agencies may not be aware of information regarding programming and project funding or know that such information can be accessed by HQ Division of Local Assistance (DLA).
- The purpose of “Roadway Data” (Exhibit 7-C) is not clear, because some projects do not require any changes in geometric characteristics.

In their responses to Item 2, the respondents suggested some measures that could be adopted to improve the field review process. Most of the suggestions related to a revision of the field review form and will be further discussed later in this report. The suggestions included the following:

- The process using the form should collect only data critical to the phase.
- Attachments should be submitted only once unless there have been changes/revisions.
- The form is lengthy and should be split in two. Because the financial reporting is more complicated for some projects, it would be more practical to have a second form solely for the financial and programming parts of the project.
- If the goal of the form is to gather all data relating to the project, the form, while remaining unchanged, should be given a more generic name, such as “Project Information Sheet” or “Project Review Form.”
- The form should be considered a required attachment to the Preliminary Environmental Study (PES) submission. LAPM specifies that in many cases it is to be submitted with the PES, so requiring such a submission would help local agencies understand when the form should be submitted.

## Case Study Results

The field review forms submitted by the local agencies were abstracted from a process review that has been concurrently conducted for a Plans, Specifications, and Estimate (PS&E) submittal. Some PS&E packages submitted for the process review included the field review form as part of the submittal package, and from these, the total of sixteen forms were collected for this case study.

This case study is not like a formal process review, which conducts thorough research on the performance of the process; instead, the study deals only with finding missing or incorrect data/information in the form that cause the local agencies difficulty in filling parts of it out.





Identifying where such incorrect or missing information occurs also indicates likely areas of issues. (Table 3).

**Table 3. Case Study for Exhibit 7-B (Items 1–13)**

Project ID	Local Agency	Incorrect (I) or Missing (M) Data in Exhibit 7 B												
		Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12	Item 13
5109-229	Bakersfield					I <sup>1</sup>								M <sup>2</sup>
5312-092	Costa Mesa				I									M
5237-035	Brea				M	I				M				M
5181-178	Huntington B.				I	I								
5073-079	Orange				I									M
5063-035	Santa Ana													M
5058-092	Riverside			M	I	I						I		M
5953-685	Los Angeles					I								M
5336-020	Paramount													M
5950-430	Kern County											M		M
5946-156	Tulare County			M	I	I								M
5945-065	Kings County				I									M
5942-211	Fresno County		M							M				M
5115-034	Lemoore			M		I				M				M
5193-039	Taft					I						I		M
5060-305	Fresno					I						M		M

<sup>1</sup> 'I' denotes 'incorrect'.

<sup>2</sup> 'M' denotes 'missing'.

Table 3 illustrates that Items 4 and 5 are the areas most likely to cause agencies to provide inaccurate data. Such responses might be caused by a lack of understanding of “Functional Classification” (Item 4) and “Stewardship” (Item 5). Insufficient instructions for items in Exhibit 7-A might also contribute to inaccurate responses.

The table also illustrates that most of the agencies failed to provide the “Field Review Notes” (Item 13). This failure might be due to the misleading title of the item “DLAE Field Review Notes,” which might suggest that DLAEs should submit the notes from the field review meeting and that the agencies were not responsible for the item.

**Table 4. Case Study for Exhibit 7-B (Attachments)**

Project ID	Local Agency	Field Review Meeting		Missing (M) Attachments			
		Required?	Conducted?	Attendance	Vicinity Map	Roadway Data	Typical Section
5109-229	Bakersfield	No	Yes				M <sup>1</sup>
5312-092	Costa Mesa	No	Yes				
5237-035	Brea	No	No	M	M	M	M
5181-178	Huntington B.	No	Yes				
5073-079	Orange	No	Yes				M
5063-035	Santa Ana	Yes	Yes				M
5058-092	Riverside	No	Yes				M
5953-685	Los Angeles	No	No	M			
5336-020	Paramount	No	Yes				
5950-430	Kern County	N.A.	Yes				
5946-156	Tulare County	No	No	M			M
5945-065	Kings County	No	No	M			
5942-211	Fresno County	No	No	M			
5115-034	Lemoore	No	No	M	M		
5193-039	Taft	No	No	M			M
5060-305	Fresno	N.A.	No	M			M

<sup>1</sup> 'M' denotes 'missing'.

Table 4 shows the frequency and type of missing attachments (exhibits related to field review) from the form. Both the “Attendance Roster” and the “Vicinity Map” are compulsory if a field review is required. About half the agencies did not include the “Attendance Roster,” but this is not essential if projects are not elected for a required field review. However, about half the agencies failed to include “Typical Roadway Geometric Section(s),” which is required for roadway projects.

Tables 3 and 4 serve as a guide for improving the field review form by revealing the types of deficiencies discussed in this report and where they occur. In accordance with the results of the case study, a revised form for the field review process is suggested (Attachment A).

## F. RECOMMENDATIONS

The purpose of this study was to discover whether the field review is an essential part of locally administered project development. To answer this fundamental question, a series of evaluation methods—including a literature review, a survey, and a case study—were used. The results of this evaluation suggest that there are clear reasons for keeping the process. These can be summarized as follows:

- Most of the federal-aid projects are under the FTIP, and the CFR requires the TIP to include the information relevant to the project such as project description, financial data, funding sources, environmental requirements, schedules and agencies responsibilities, which



should be documented for the field review and PES because these documents are equivalent to a PSR which should be prepared prior to getting programmed. Therefore, the field review is necessary for a federal-aid local project to comply with federal requirements.

- A field review is a process for defining the scope, schedule, and cost of a project. Its equivalent document for capital projects is a PSR for a PID phase, and it is hard to imagine a Caltrans capital project being developed without a PSR. If the field review process were eliminated, this would create a significant missing point in developing a locally administered project, because the process involves not only the scoping of work but also the gathering or verifying of project data, including the schedule and costs, the performance of analyses, and the making of decisions for specific projects.
- The field review process is linked to many other directly related steps or phases of project development. If the process were eliminated, this would result in confusion among users or insufficient data for the steps or phases to be followed. The following are examples of these connected or sequenced steps or phases:
  - A Project Supplemental Agreement (PSA) will be prepared by Caltrans on its receipt of a completed field review form from a local agency.
  - The field review document must be completed and submitted prior to, or concurrently with, the first occurrence of the PES form.
  - The completed field review form including all required attachments provides the data necessary to prepare a proper initial Request for authorization and subsequent proper initial authorization by DLA-Implementation.
  - A request for right-of-way authorization must include a completed field review form if this was not submitted previously.
  - The request package for Authorization to Proceed with Construction must include a field review form.
  - The information contained in the field review and PES documents is crucial in obtaining the Federal Highway Administration's right-of-way authorization to proceed to the next stage of a project.
  - The field review documents for projects funded by the Highway Bridge Program must be completed prior to any request for authorization.
- The literature review on other states' practice indicates that all but one of the states assessed conduct an equivalent process for their locally administered projects. Although the process may have different names, its purpose is almost identical. This suggests that the process be regarded and widely adopted as an important phase and document for a project development nationwide.
- The survey responses received from DLAEs and local agencies suggest that a majority (more than 70%) of respondents understand the purpose and importance of the process—that is, as a project initiation document in place of a PSR.
- Deficiencies in the field review form can be clearly seen from the results of the case study. However, these deficiencies were not found to be related to the purpose of the process. Instead, these deficiencies seem to be derived from a misunderstanding among those filling out the form or from insufficient guidance provided on the LAPM and related forms.



Revising the relevant chapters and forms in the LAPM would be the most viable option for improving the understanding of users and consequently for achieving compliance with the process.

In conclusion, some ideas for improving the field review process were suggested by the results of the survey and the case study:

- Making an appropriate revision of the current form by removing unnecessary data input sections (see Appendix A: Proposed Field Review Form)
- Adding more details to the instructions (Exhibit 7-A) for the field review form
- Changing the title of the field review form to a more generic one, such as “Project Information Sheet” or “Project Review Form” or Caltrans similar terms of “Project Initiation Document (PID)” or “Project Study Report (PSR)”
- Submitting attachments to the field review only once unless there have been changes and revisions

While these recommendations bulleted above can be implemented in no time, the following suggestions will take more time and further discussion for applicability before implementation in the future.

- Combining the field review process and form with the PES, because this environmental phase is processed (and actually submitted) at the same time as the field review, and some of the data required by both are identical, including project limits (and location maps), work description, and programming data (this would require a further discussion among relevant offices within HQ DLA)
- Examining whether it is more practical to split the form in two and have a second form solely for the financial and programming part of the project



## Attachment A

# Proposed Field Review Form



**EXHIBIT 7-B PROJECT ~~FIELD~~ REVIEW FORM**  
 Please complete information required in the shaded boxes

Local Agency		Project-Field Review Date				
Project Number		Locator (Dst/Co/Rte/PM/Agency)				
Project Name		Bridge No.(s)				
<b>1. PROJECT LIMITS (see attached list for various locations)</b>						
Net Length (miles)		On NHS?	Yes		No	
<b>2. WORK DESCRIPTION</b>						
ITS project or ITS element	Yes		No			
If yes, choose: High-Risk (formerly "Major") ITS		Low-Risk (formerly "Minor") ITS		Exempt ITS		
<b>3. PROGRAMMING DATA</b>	<b>FTIP (MPO/RTPA)</b>		<b>FY</b>		<b>Page</b>	
<b>Amendment No</b>	<b>FTIP PPNO</b>		<b>FHWA/FTA Approval Date</b>			
<b>Federal Funds (\$)</b>		<b>Phases</b>	<b>PE</b>	<b>R/W</b>	<b>Const</b>	
<b>Air Basin: (CMAQ only)</b>						
<b>3. FUNCTIONAL CLASSIFICATION</b>						
<u>On the Federal-aid System</u>			<u>Off the Federal-aid System</u>			
	Principal Arterial – Freeway or Expressway			Rural Minor Collector		
	Other Principal Arterial			Local		
	Minor Arterial			Bike/Ped paths not on existing road		
	Major Collector					
	Urban Minor Collector					
<b>4. STEWARDSHIP CATEGORY</b>		Is a Project of Division Interest (PoDI) project?		Yes	No	
<b>High Profile (Stewardship)</b>	Yes	No				
<b>Delegated (Stewardship)</b>	Yes	No	<b>(a) DLAE Oversight</b>	Yes	No	
			<b>(b) District Construction</b>	Yes	No	
<b>5. CALTRANS ENCROACHMENT PERMIT</b>		Is it required?		Yes	No	
<b>6. STATE ONLY FUND</b>		Is State-only funded?		Yes	No	



7. COST ESTIMATE BREAKDOWN									
(Including Structures)				(\$1,000'S)		Federal Participation			
PE	Environmental Process					Yes		No	
	Design					Yes		No	
	ITS System Manager or Integrator					Yes		No	
CONST	Const. Contract					Yes		No	
	Const. Engineering					Yes		No	
R/W	Preliminary R/W Work					Yes		No	
	Acquisition					Yes		No	
	No. of Parcels					Yes		No	
	Easements					Yes		No	
	Right of Entry					Yes		No	
	RAP (No. Families)					Yes		No	
	RAP (No. Bus)					Yes		No	
	Utilities (Exclude if included in contract items)					Yes		No	
<b>TOTAL COST</b>									
<b>7a. Value Engineering Analysis Required?</b>						Yes		No	
(Yes, if total project costs are \$50M or more on the NHS, or \$40M or more for bridges on the NHS)									
<b>8. PROPOSED FUNDING</b>				<b>Total Cost</b>		<b>Cost Share</b>			
Grand Total			\$						
Federal Program	#1		\$		Fed	\$		Reimb Ratio	
(Name/App Code)	#2		\$		Fed	\$		Reimb Ratio	
<b>Matching Funds Breakdown</b>					Local \$				%
					State \$				%
					Other \$				%
State Highway Funds?	Yes			Source				No	
State CMAQ/RSTP Match Eligible?				Yes		No		Partial	
Is the Project Underfunded? Fed \$ < Allowed Reimbursement Rate.					Yes			No	
<b>8. PROJECT ADMINISTRATION</b>									
				Agency	Consultant	State			
PE	Environ Process								
	Design								
	System Manager/Integrator								
R/W	All Work								
CONST ENGR	Contract								
CONSTRUCTION	Contract								
MAINTENANCE									
Will Caltrans be requested to review PS&E?				Yes		No			
<b>9. SCHEDULES</b>		Proposed Advertisement Date							
Other Critical Dates									



<b>10. PROJECT MANAGER'S CONCURRENCE</b>			
Local Entity Representative		Date	
Signature		Phone	
Title			
Is <b>Project Field</b> Review required?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Caltrans (District) Representative (if attended <b>Field</b> Review)		Date	
Signature		Phone	
Title			
FHWA Representative		Date	
Signature		Phone	
Title			
<b>11. LIST OF ATTACHMENTS</b> (Including all appropriate attachments if <b>project field</b> review is required. See the "[ ]" Notation for minimum required attachments for non-NHS projects.)			
<input type="checkbox"/>	<b>Project Field</b> Review Attendance Roster or Caltrans Roster		
<input type="checkbox"/>	Vicinity Map (Required for Construction Type Projects)		
IF APPLICABLE (Complete as required depending on type of work involved)			
<input type="checkbox"/>	Roadway Data Sheets [Req'd for Roadway projects]		
<input type="checkbox"/>	Typical Roadway Geometric Section(s) [Req'd for Roadway projects]		
<input type="checkbox"/>	Major Structure Data Sheet [Req'd for HBP]	<input type="checkbox"/>	Signal Diagram
<input type="checkbox"/>	Railroad Grade Crossing Data Sheet	<input type="checkbox"/>	Collision Diagram
<input type="checkbox"/>	Sketch of Each Proposed Alternate Improvement	<input type="checkbox"/>	CMAQ/RSTP State STIP Match
<input type="checkbox"/>	Existing Federal, State and Local ADA deficiencies not included on other Attachments		
<input type="checkbox"/>	System Engineering Review Form (SERF) Req'd for High-Risk (formerly "Major") and Low-Risk (formerly "Minor") ITS projects		

**12. DLAE PROJECT FIELD REVIEW NOTES**

- A. MINUTES OF FIELD REVIEWS (See Attachment)
- B. ISSUES OR UNUSUAL ASPECTS OF PROJECT (See Attachment)

**Distribution:** Original with attachments – Local Agency  
 Copy with attachments (2 copies if HBP) – DLAE