



# PROCESS REVIEW ON PS&E SUBMITTAL

### September 3, 2018

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

Process Review 18 03

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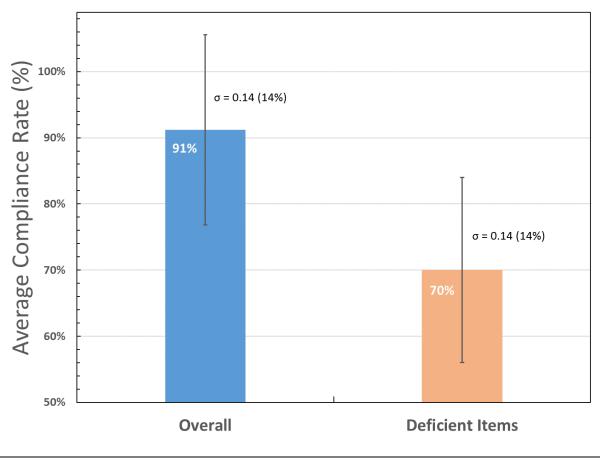
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### A. Executive Summary

In order to ensure compliance with federal and state requirements, the Caltrans Division of Local Assistance (DLA) recently conducted a process review on Plans, Specifications, and Estimate (PS&E) submittal for construction projects being administered by local agencies. This submittal process is an essential part of project development, because PS&E documents must be reviewed and approved prior to construction authorization, pursuant to both law (*23 USC 106* and *23 USC 109*) and regulation (*23 CFR 635.309* and *23 CFR 630 Subpart B*). Also, general policies and guidance for submittal of PS&E documents are discussed in detail by both the Federal Highway Administration (FHWA) and Caltrans in the relevant manuals.

A total of 61 projects authorized by FHWA in the 2017 Federal Fiscal Year (FFY) were reviewed for agency compliance in completing the PS&E submittal package. Among the documents included in the package made available for the review, *Exhibit 12-D PS&E Checklist* is most important to this submittal process, because it summarizes the items required for local agencies' compliance. This submittal form (or checklist) consists of 18 specific areas that are divided into 32 subcategory items. The evaluations of this process were conducted by examining the responses to these questionnaires and the inquiries (called "items") on the form.





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Figure 1 shows the results of the review, expressed in terms of compliance rate as a percentage. As shown, the overall compliance rate is relatively high, at 91%, despite the wide variability of the samples in the rates, as expressed in a standard deviation (14%). Among all the reviewed areas, including all 32 subcategorized items, eight items were identified as deficiencies, with rates of compliance below the overall average of 91%. The average of these deficient items was 70%, with a standard deviation of 14%. The deficient items, which have been identified as the primary detrimental factors dragging down overall performance during the PS&E process, were subject to intensive investigation during this review. Accordingly, this report presents an analysis of the investigation and suggests feasible countermeasures for future enhancement.

### **B.** Purpose and Objectives

The purpose of the process review is to assess local agencies' compliance with federal and state requirements in completing a PS&E for projects off the State Highway System (SHS). Observations and recommendations are to be used to improve the related process and procedures in the Local Assistance Procedures Manual (LAPM).

The objectives of the review are as follows:

- To evaluate the effectiveness and efficiency of the guidance provided in the LAPM
- To identify any deficiencies in the existing procedures
- To make recommendations for correcting deficiencies or making improvements
- To establish a baseline and compliance goal for future reviews

### C. Background

For locally administered federal-aid projects off the SHS, local agencies are responsible for preparing and certifying a PS&E package. Certification means that a PS&E was prepared in accordance with Chapter 12 of the LAPM and that the local agency accepted all responsibilities for compliance with federal and state requirements. Local agencies are also required to complete a PS&E checklist and attach it to all PS&E packages submitted to the District Local Assistance Engineer (DLAE) when a project is submitted for construction authorization.

Chapter 12 of the LAPM is intended to guide local agencies' adherence to all applicable federal and state regulations and procedures in preparation for the PS&E. The policies and procedures contained in the chapter reflect current federal and state requirements, with some important requirements including, but not limited to, the following:

- Section 12.6 Plans
- Section 12.7 Standard specifications
- Section 12.12 Estimates
- Section 12.8 Federal contract requirements
  - 23 CFR 230, Subpart B Disadvantaged Business Enterprises (DBE)
  - 23 CFR 635.127 Liquidated damages



- o 23 CFR 635.410 Buy America
- o Form FHWA 1273 Federally required contract provisions
- o 46 CFR 381 Cargo preference act requirements
- o 23 CFR 230.111 Federal trainee program
- o 23 USC 113 & Davis-Bacon Act of 1931 Federal wage rates
- o 23 USC 140(a) & 23 CFR 230 Equal Employment Opportunity

The PS&E Checklist (Exhibit 12-D) was developed to assist local agencies to ensure that all applicable requirements are met and stipulated in the contract documents. Once submitted to the District (or DLAEs), each checklist is reviewed to verify that the local agency has completed the form according to the instructions (Exhibit 12-E) in the LAPM. Typically, this review is limited to the actual checklist and does not involve a thorough review of the complete PS&E package, although some reviewers verify the checklists against relative parts of the packages. The only requirement for DLAE is merely to conduct at least one review of a set of special and federal contract provisions per annum for each local agency that submits a PS&E.

### **D.** Scope and Methodology

This review was intended to evaluate PS&E submittal compliance with federal and state requirements, as well as the effectiveness and efficiency of the current process. It involved an assessment of the current process in place for preparing and verifying the PS&E package and offers proposals for enhancing compliance for future projects.

To achieve this scope, the following methodology was used:

- Perform quantitative reviews on sampled checklists along with supporting documents
- Provide documented information and recommendations, including that related to
  - Existing deficiencies for future comparison
  - o Innovative methods for correction and improvement
  - Action/follow-up plan

Document reviews served to identify deficient areas or items in the checklist requiring improvement. Based on observation and findings, specific recommendations were derived to correct deficiencies or improve the process, as discussed in detail later in this report.

### **E. Review Procedures**

As the first step of the review, eligible federal-aid projects were selected. Because the PS&E packages are submitted prior to authorization for construction, the projects were selected among the authorized construction projects. The project population for the review included all projects authorized for construction within the past 12 months (October 1, 2016–September 30, 2017) and is pulled from *Federal Aid Data System (FADS)*. Project sample size was determined from this project population using the following statistical criteria:



- 95% confidence level
- 15% margin of error

It was reported that 467 projects were authorized for construction for FFY 2017. Based on the statistical criteria and the project population, the sample size was determined using web-based software (https://www.surveysystem.com/sscalc.htm). As a result, a minimum of 39 projects—a number equal to the sample size—should be randomly sampled from the project population. About 10% of projects from each district were selected. For districts not having enough projects, at least three projects were selected. A total of 61 projects were sampled, as listed on Attachment A.

Once the projects were sampled, related documents for those sample projects were obtained with the DLAE's help. The process review engineer then reviewed the documents. The process review was primarily a desk review of related documents in the PS&E packages, including, but not limited to, the following:

- PS&E Certification and Checklist (Exhibits 12-C & 12-D)
- Request for Authorization to proceed with construction (Exhibit 3-D)
- Scoping documents for project description
- Environmental documents
- A set of project plans
- Specifications (contract special provisions)
- Preliminary estimate

Along with the document review, a list of projects reviewed, with verification by DLAEs, was also requested. For these projects, it was verified that the required Federal Contract Provisions were included in the specifications of the PS&E package and that the second box of Exhibit 12-D, for "Item XVIII. Caltrans Acceptance," was checked. Review of the list of these projects should reveal whether the required review of Exhibit 12-D with verification, as stated in Section 12.13 of the LAPM, was performed on at least one PS&E package per year for each local agency that submitted a PS&E.

### F. Process Review Analysis

The review consisted of a detailed examination of an Exhibit 12-D (PS&E Checklist), with verification that the project's submittal package was accurate and complete. The review's analysis also included a discussion of the required reviews by DLAEs and of variations in performance among the agencies.

### 1. Deficient Items (or Areas)

As noted earlier, the 18 specific areas in the checklist form are divided into 32 subcategorized items. One major task during review was the examination of agencies' responses to these items for



accuracy and completeness. An examination of all items in the checklist for the selected 61 projects, with an evaluation of average compliance rate, is shown in the following chart.

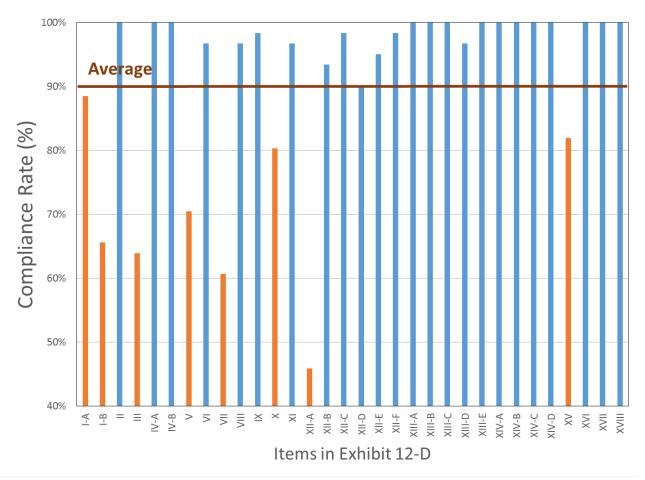


Chart 2. Average Compliance Rate of Items in Checklist (Exhibit 12-D)

Among all the examined areas in the checklist, of most interest are the eight specific items highlighted in orange in Chart 2. These items were subject to intense investigation, because they fell below the average compliance rate of 91% for all items. The following table gives these items and their compliance rates, and a detailed discussion follows.

It should be noted that the review is not purposed to find whether the projects with deficiencies were acknowledged by DLAEs, and the agencies exhibiting the noncompliance were subjected to appropriate sanctions depending on the severity and circumstances of the deficiency.



Item ID	Description	Main Concerns	Compliance Rate (%)
I-A	National Highway System	Inappropriate choice for on/off NHS	89%
I-B	Functional Classification	Inappropriate choice for functional classification	66%
III Type of Construction		Inappropriate choice for construction type	64%
V	Environmental Analysis Missing Environmental Commitment		70%
VII	Geometric Design Standards	Inappropriate choice for design standard	61%
X	Project Plans and Specifications	Missing required plans and specifications	80%
XII-A	Required Federal Contract Provisions	Missing federal contract provisions	46%
XV	Preliminary Estimate	Missing break-down estimate / non-participating items of work	82%

### Table 1. Items of Concern for Intense Investigation

### Item I-A. National Highway System

Some PS&E requirements depend on a project's location. Inclusion within the NHS (or not) is of particular importance, because selection of appropriate geometric design standards, standard plans, and specifications depends on a project's type of construction and location, per federal (23 CF R 625) and state (Chapter 11 of LAPM) regulation/guidance. Exhibit 12-E (PS&E Checklist Instructions) explains how local agencies can determine whether a project is on or off NHS. The determination should be based on FHWA-approved NHS maps, accessible at <a href="https://www.fhwa.dot.gov/planning/national\_highway\_system/nhs\_maps/">https://www.fhwa.dot.gov/planning/national\_highway\_system/nhs\_maps/</a> of state and urbanized areas depicting the designated NHS routes.

Even with a relatively high compliance rate of 89% compared to other deficient areas, the response rate for the item was found yet still below the overall average rate, with two possible main causes for the deficiency identified in review. These web-based maps' lack of user-friendliness for those seeking to find an exact route was suggested as one cause, particularly for first-time users—and especially for projects located in remote rural areas, for which the engineer would need to guess an approximate project location, then often engage in a cumbersome and time-consuming search for the exact location. The other concern is over the absence of proper route labeling: These maps depict the designated routes very clearly if they are on an interstate or state route, but many of the "enhanced NHS" routes are not shown with a descriptive term, such as their identifiable street name. These enhanced NHS routes, which are those that were added to the NHS system in 2012 by Section 1104 of the *Moving Ahead for Progress in the 21st Century Act* (MAP-21), were hitherto functionally classified as principal arterials but not yet part of the NHS system. Absent familiarity with and proper geographic information concerning the route, locating the project on the map and determining whether it was part of the NHS would be very difficult.



### Item I-B. Functional Classification

Similar to the NHS requirement already discussed, some PS&E requirements, such as design guidance, depend on the functional classification of the route to which a project is assigned. More important, it is directly related to a project's eligibility for funding through the federal-aid system, because only certain classifications are allowed to receive federal-aid funds. Only about two-thirds (66%) of sampled projects responded accurately to this item in the checklist. Despite its significance, no guidance for determining classification is found within the LAPM, including in the checklist (Exhibit 12-D) and the instructions for the checklist (Exhibit 12-E). The only sources for answers about this item are the FHWA-approved California Road System (CRS) maps available at http://www.dot.ca.gov/hq/tsip/hseb/crs maps/, which divide the entire state into 260 squares; agencies can find an approximate location, then select a square that includes its location. If a project is located close to the border of two adjacent squares, multiple trials are sometimes necessary. An experienced engineer would instead wish to use the Microsoft Excel file downloadable from the same web page where the CRS maps are to be found, which contains place names for cities and counties as well as hyperlinks leading directly to the CRS map that describes the project location. To identify the functional classification of the project, an engineer then needs only to follow the hyperlink for the named place containing the project location. Ideally, this instructional information would be well known to agencies when they seek answers to this item, but the low compliance rates suggests that it is not.

### Item III. Type of Construction

The choice of appropriate design guidance, along with certain other oversight responsibilities, depends on the type of construction. There are three types of construction to choose from in the checklist, with each well explained in Section 11.1 of the LAPM. Prior to the investigation, a high compliance rate for this item was anticipated because of clarity with which these options were defined, yet the compliance rate was found to be 64%-far below the overall average. The investigation further revealed that the low compliance rate was probably caused by agencies' misunderstanding or misinterpretation of construction type definitions. Choosing the construction type "New or Reconstruction" instead of "Resurfacing, Restoration, and Rehabilitation (3R)" was reported as the most common mistake. Often the scope of federal-aid projects includes chiefly roadway features such as safety appurtenances to be newly constructed for the project, but the addition of appurtenances to an existing facility is not considered new construction. These features include, but are not limited to, pedestrian walkways, crosswalks, solar lighting, curb ramps, ADA improvements, pavement striping and markings, pedestrian warning lights, noise barriers, and traffic signals/signs. Another noticeable major mistake observed for this item was confusion between new construction and maintenance. Some surface treatments were incorrectly marked as "New or Reconstruction," but these surface treatments should be considered "Preventive Maintenance."

### Item V. Environmental Analysis

Submittal of a PS&E package should include and reflect findings of the environmental analysis for the project. Using the checklist, agencies certify that the necessary actions called for by the environmental documents have been responded to in the PS&E. Failure to indicate the agencies'



certification using the checklist will result in denial of the Request for Authorization. This review further investigated this item by not only checking agencies' certifications but also verifying those certifications against supporting documents. As a result, the compliance rate was found to be 70%, although all reviewed projects had been certified. If Item V in the checklist was checked, then environmental requirements should have been met. For this review, all projects were found to be accompanied by approval of the final environmental document (in most cases, a signed CE form). With the approval, local agencies are required to provide a list of mitigation commitments to the DLAE, which should be reflected in the PS&E package by reference to the page numbers of the guidance, specification, or plan sheets. Absence of references in the specification, a common cause of noncompliance, resulted in 30% of noncompliance with the environmental item of the checklist. Among the environmental requirements most frequently missed in the specifications were the following:

- Air Quality/Dust Best Management Plan (BMP)
- Wildlife/Bird Protection Plan and related regulations
- Erosion Control Plan
- Noise Control Plan
- Water Pollution Control Plan
- Environmental Training Plan

It is worth noting that failure to fulfill an environmental mitigation commitment is a major project deficiency as defined in Section 20.2 of the LAPM that if not corrected would prevent federal or state participation in all or a portion of a project.

### Item VII. Geometric Design Standards

If a project includes any changes in existing geometrics, the local agency is required to indicate an appropriate design standard by checking an appropriate box in this item. A design standard needs to be chosen based on the project's location (on or off NHS) and construction type (New/Reconstruction or 3R). Detailed guidance can be found in Chapter 11 of the LAPM. Because the response to this item is related to the answers to Items I-A (National Highway System) and III (Type of Construction) of the checklist, its compliance rate (61%) was also found to be relevant to those for these items (89% and 64%, respectively, for Items I-A and III). If the responses to these items are incorrect, the answer to the design standard inquiry is increasingly to be incorrect. This relationship among the relevant items was evident in their respective compliance rates. In particular, the rate for the construction type (Item III) seems to be closely related to the rate for the design standards (Item VII). The project location has less impact on the design standards, because projects off NHS are allowed for all options for any approved design standards, making the choice of an appropriate design standard less prone to error. There are 24 noncompliant projects for the design standards, among which 16 projects were also identified as being noncompliant for the construction type, as well as two projects for the project location. The remaining noncompliant projects were assumed to be mistaken by the agencies' engineers when responding to the item.



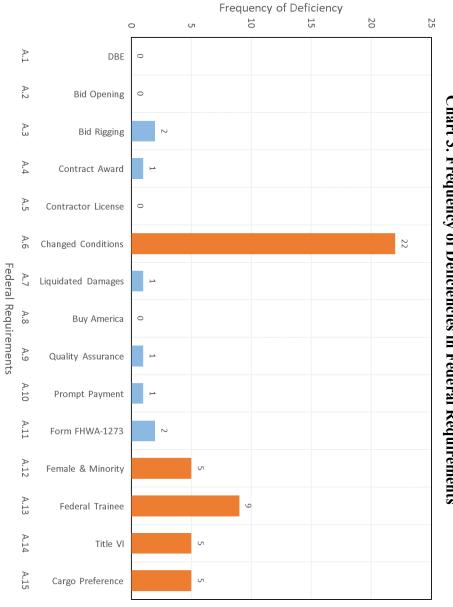
### Item X. Project Plans and Specifications

Section 12.6 of the LAPM requires that the PS&E be signed and stamped on behalf of the local agency by a registered professional engineer licensed to practice in the State of California. It also requires that a Temporary Traffic Control (TTC) plan be included in the preparation of PS&E for all federal-aid construction projects. Furthermore, the instruction for the checklist (Exhibit 12-E) explains that failure to check both boxes for the aforementioned requirements will result in denial of the Request for Authorization. In addition to these requirements, erosion control plans and federal Americans with Disabilities Act (ADA) requirements are to be checked whenever applicable. Out of a total of 61 reviewed projects, 12 were found to be noncompliant with the guidance, for an 80% compliance rate for this item. The most common deficiency was absence of erosion control plans, despite the commitment specified on the final environmental documents. Seven projects were reported as noncompliant with this requirement. Absence of a TTC plan and reference to a signs/striping plan was also found to be another deficient area. Four projects did not include these traffic control-related requirements in the PS&E package. Two projects show no signature/stamp on the title pages of the plans and specifications, and another two projects were submitted without ADA requirements. (It should be noted that some projects had multiple deficiencies for the reviewed item.) According to Exhibit 12-D, projects without a signature/stamp and/or traffic plans may render agencies ineligible to participate in federally or state-funded projects.

### Item XII-A. Required Federal Contract Provisions

This item was the area of greatest concern-not only because it involves compulsory federal requirements but also because it shows the deepest dip in compliance of all items reviewed in the checklist, at only 46%. The purpose of this checklist item is to ensure the presence of Required Federal-Aid Contract Language (Exhibit 12-G) in the contract. One reason this item has the highest rate of deficiency is that many requirements are included in this one item, and missing even one is considered deficient for the item. Exhibit 12-G contains 15 federal requirements that must be incorporated into all federal-aid construction projects. Deficiencies were reported whenever missing requirements were found or responses to requirements were not correct. The frequency with which absent requirements or erroneous responses were observed is shown in the following chart. A total of 33 projects included at least one deficiency among the 15 federal requirements, and some had multiple errors—even as many as six. Two-thirds of the requirements were found to be associated with a high level of compliance, having none to only a couple deficiencies. Five specific requirements were outstanding for having five or more incidences of error, as shown in Chart 3. The highest rate of deficiency was observed for "Changed Condition Clauses." The regulation requires the inclusion of three different clauses in all contracts. About a third of all reviewed projects failed to meet this requirement by including none or just one of the clauses. The agencies' responses to the "Female and Minority Goals" requirement also showed a relatively high rate of deficiency, with this nondiscrimination requirement absent in federal-aid contracts and subcontracts. In addition, the number of trainees or apprentices for the federal training program was often found to be incorrectly stated or, more often, not even included in contracts. Absence of two of the requirements regarding Title VI and Cargo Preference Act was also found as a major cause of the deficiency for the item. General instructions for responding to

contract. In this review, two projects were found not to have incorporated this FHWA form. of deficiency. Beyond these highly deficient areas, it should be emphasized that inclusion of Form absence of specific instructions for meeting these requirements might contribute to the high rates ineligible for federal reimbursement. relation to FHWA concerns; the form must be physically inserted, unmodified, into the executed FHWA-1273 along with Federal Wage Rates has been noted to be of the greatest importance in the federal requirements in the checklist are available in Exhibit 12-E of the LAPM, but the is considered an unrecoverable project deficiency and makes the construction phase of the project According to Section 20.2 of the LAPM, failure to incorporate the form in the executed contract



# **Chart 3. Frequency of Deficiencies in Federal Requirements**

# Item XV. Preliminary Estimate

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comply with these requirements, for an 82% compliance rate.

moreover, they must be indicated in this item. About a dozen of the reviewed projects failed to with more than one type of federal funds and/or includes non-participating items of work, detailed as to meet the requirement stated in Section 12.12 of the LAPM. If the project is funded Exhibit 12-A of the LAPM. Also, the estimates must be broken down into items sufficiently An estimate of the contract items of work must be prepared in a format similar to that described in

This is close to the overall

enhance agencies' understanding and quality of future performance. Failure to indicate "Noncompliance rate of the review (91%), but the causes of the deficiency should still be examined to



participating items of work" was the most common error found in eight projects. Three of the projects were also reported as being faulty in this review item for having failed to segregate types of funds in their estimates. Absence of a list of practical examples for "Non-participating items," either in the manual or the instruction, as well as agencies' failure to understanding these requirements, is assumed to have contributed to this deficiency.

### 2. Verification Review of Special Provisions by Caltrans DLAEs

According to Section 12.13 of the LAPM, the DLAE has the responsibility to confirm that the correct Special and Federal Contract Provisions are included in the contract provisions, as indicated on the checklist. The DLAE should ensure that at least one set of Special and Federal Contract Provisions is reviewed per year for each local agency that submits a PS&E. Although not mentioned in the manual, this selective quality review is seen as a way for DLAEs to help local agencies enhance their understanding and performance by locating potential areas of deficiency prior to the construction phase of the project. To assess the DLAE's review responsibility, a list of the projects reviewed with verification by DLAEs was requested. Not all the districts responded to this request, however; ultimately the project lists of only six districts were collected and analyzed, as shown in Table 2.

District	No. of Projects Funded <sup>1</sup>	No. of Agencies for Funded Projects <sup>2</sup>	No. of Agencies with Verified PS&Es	Verification Rate (%)
1	15	6	4	67%
3	39	24	2	8%
5	13	8	8	100%
8	42	24	0	0%
11	23	14	10	71%
12	5	3	1	33%
Total	137	79	25	32% <sup>3</sup>

### Table 2. Verification Review by Caltrans DLAEs

<sup>1</sup> All project funded during FFY 2016, excluding ER projects

<sup>2</sup> Agencies that submitted at least one PS&E during the same FFY

<sup>3</sup> Overall average verification rate

While the analysis does not contain all the projects to be verified, it is reasonable to assert that the pooled samples are enough to represent the DLAE's overall performance regarding their verification requirement. With high variation seen in the districts' performance (0-100%), the overall average verification rate was observed to be 32%. The analysis was further investigated to discover whether verification rate was related to compliance rate, leading to the creation of the following chart. Due to the limited availability of samples, a sophisticated statistical analysis was not feasible. However, from the chart it could be observed that both rates are reasonably correlated, in that those districts having high verification rates generally show high compliance rates and vice



versa. In the same context, it is true that District 5 showed the highest percentages for both compliance and verification rates, whereas District 8 was ranked lowest for both.

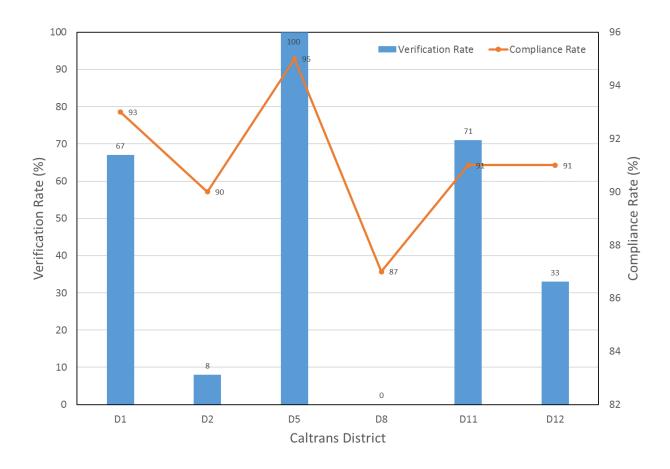


Chart 4. Correlation between Verification Rate and Compliance Rate

### 3. Performance Variation among Agencies

Although the focus of the review was on compliance rates for the items reviewed in the checklist, noting significant deviations in performance among agencies was also an important consideration. To visualize variations in compliance rate among agencies, a box-and-whisker plot for the agencies in each Caltrans district was prepared. Chart 5 displays a five-number summary of a set of collected data. Each box plot presents the data set in the following order: minimum, first quartile, median, third quartile, maximum value. While the mean values of the rates fluctuated between 88% and 97%, the difference between minimum and maximum rate in a district (depicted as the length of the box plot) ranged from 3% to 19%, and districts exhibiting less difference between maximum and minimum compliance rates showed stronger performance (higher mean value) and thus a higher compliance rate. This observation suggests that in general, overall level of compliance is sensitive to the constant outputs of the agencies. In short, those agencies that show more constant performance (or less variant performance) can produce more compliant results. Uniform and



constant preparation of PS&E package should thus be seen as an important factor affecting compliance results for PS&E preparation, and the reasons for such constant performance call for further examination.

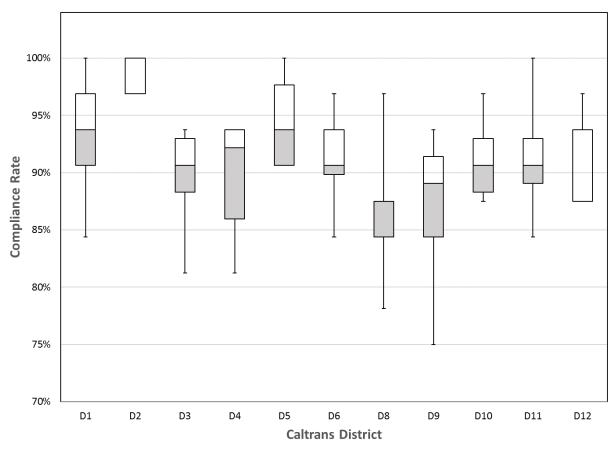


Chart 5. Box and Whisker Plots for Local Agencies by Caltrans District

One limit of this statistical analysis should be noted: the pooled data set for each district was relatively small, and the plots were created to visualize mainly median and minimum/maximum values, which show the range of agencies' general performance. Furthermore, one district was omitted from the chart, because too few data were collected from it for this statistical analysis.

### 4. Data Management

Despite not being a main topic, a discussion related to data management arose during the review because of the low rate of response from some of districts to requests for data for this review. It was concluded that so low a response rate from some districts probably indicated their lack of an efficient database or project tracking system. Further observations suggested that some districts use the LP2000 database, whereas others have created their own databases using Microsoft Excel, Access, or similar data management software. Still other districts have a centralized data system for the district, whereas others rely on individual engineers' personal filing systems. No standard format for project-related documents was found: some are kept in hard copies and others in a



digital format. Some districts and individual engineers who did not keep project documents at all had to ask agencies for the copies of the project files used for this review. Also, engineers' level of familiarity with database systems such as LP2000 is not known and requires further examination.

### G. Recommendations

Based on the findings of this review, several recommendations can be made for enhancing local agencies' competence at complying with federal and state regulations:

### 1. Enhancement in LAPM

Process review engineers and other relevant Subject Matter Experts (SMEs) in the Office of Guidance and Oversight (OGO) should make continual efforts to focus on providing the most updated and applicable information during the preparation of PS&E using the checklist (Exhibit 12-D). Many of the noncompliant areas observed in the review are believed to have been derived from either insufficient or obsolete information provided in the LAPM. For example, several items still remaining in the checklist are no longer required by federal regulations. In some areas, the contents of a chapter in the LAPM do not correspond to items in the checklist, which was not been updated when the chapter was. To help address these deficiencies related to the LAPM, significant opportunities for improvement can be identified, including the following:

- Providing a more comprehensive and self-explanatory checklist (Exhibit 12-D)
- Improving the instructions (Exhibit 12-E) with complete information for the checklist
- Including more necessary supplemental documents, such as a list for FHWA nonparticipating items
- Eliminating duplicative and obsolete areas in the checklist and related chapters
- Promptly updating the guidance and procedures relevant to PS&E and informing the local agencies of such updates by using Local Programs Procedures (LPP), Office Bulletins (OB), and other methods such as the OGO blog and Constant Contact
- Providing a sample exhibit that shows the correct way to prepare a PS&E and fill out the form accordingly

A revised checklist (Exhibit 12-D) with the updates is proposed in Attachment B, and a list of FHWA non-participating items is presented in Attachment C (the list can be practically embedded into the instruction for the related item).

### 2. DLAE Involvement

In this review, the roles of Caltrans districts (or DLAEs) have been identified as being very crucial for local agencies as they seek to conform to PS&E-related requirements. DLAEs and staff in the districts are the first point of contact for agencies that have encountered issues in and/or that wish to make inquiries about the preparation of PS&E, and their ability to effectively assist agencies in



such matters, and to review the materials submitted by those agencies, depend on their level of knowledge and competence. Unfortunately, some mistaken reviews conducted by the districts were noticed, some of which could jeopardize agencies' eligibility for funding. Examples include the following:

- Accepting/approving the PS&E prior to receipt of specifications and plans
- Failure to indicate missing requirements in the checklist
- Insufficient reviews for projects subject to the verification requirement (one verification/year/agency)

To enhance districts' levels of competence and efficiency, certain measures are suggested:

- Keep up with the updates regarding PS&E submittal
- Conduct in-depth reviews of projects under the annual verification requirement
- Increase the number of verification reviews from once per year per agency to multiple
- If possible, review the deficient items for all the projects submitted for PS&E, as resources allow
- Use LP2000 as a uniform and statewide database and project tracking system

Verifying all projects submitted for PS&E could consume many district resources and might not be feasible, especially for districts that are home to many agencies and projects. However, as proven in Chart 4, higher percentages of verification can result in higher rates of compliance, making this a key recommendation and a prime candidate for immediate implementation.

In addition to the important roles of the DLAEs, the District Local Assistance Senior Environmental Planner (SEP) has also to be recognized as a critical member for the process especially when it comes to the environmental parts of the package. The main role of the SEPs during the PS&E is to make the Categorical Exclusion (CE) determination. And it is recommended that the District SEPs ensure that the list of the mitigation commitments is firmly affixed to the signed CE form prior to submitting it to the DLAE for co-signature, and that either the DLAE or the District SEP informs the local agencies in writing that the list of the mitigation commitments shall be fully incorporated into their PS&E packages and implemented during construction. This involvement of the District SEPs is expected to help and ensure the local agencies include what is necessary for their environmental commitments in the PS&E package, and therefore, reduce the environment-related noncompliance.

### 3. HQ Involvement

Beyond the recommendations related to the LAPM assigned to the OGO, it would be beneficial if the Offices of Implementation (South & North) in Caltrans HQ were to extend their roles in this process. The implementation offices once received and reviewed PS&E packages from local agencies prior to the authorization for construction. With the delegation of responsibilities to agencies, however, and amid workload issues, this review obligation was eliminated for area engineers in the implementation offices. Reviving this once-neglected engagement between area



engineers and local agencies should reduce rates of deficiency and thereby improve agencies' number of responses that conform with the PS&E requirements. It would be ideal if the implementation offices were available to review the same PS&E submittals that the districts handle. (In this case, the same copies of the PS&E packages will be received both by Caltrans HQ and DLAEs for their reviews and acceptances/approvals.) If HQ offices' limited resources made this an overwhelming task, conducting the review work pursuant to the current review requirement (one review/year/agency) would be a good starting point.

### 4. Work with FHWA

Working with FHWA to resolve issues pertaining to specific areas having deficiencies is necessary. To catch up with the fast-changing policy environment relating to federal-aid projects, establishing a close working relationship with FHWA is an essential key to successfully delivering local agency projects that conform to most current federal regulations. Unfortunately, it has not been clearly identified how new federal policies and regulations were transferred to the state level so that they can be reflected in the LAPM and implemented for federal-aid projects accordingly. As a result, the staff responsible for the procedural updates in OGO have often been left unnotified of important information relevant to federal-aid local projects and programs. Some items found obsolete during this review included a notable issue relate to interagency information sharing: the items for *Title VI Assurance* and *Cargo Preference Acts* have not been required as separate federal contract provisions, because they have been included in Form FHWA-1273. The following suggestions are intended to improve interagency information sharing at the state level while encouraging increased levels of trust and stronger working relationships with the FHWA:

- Develop interagency networking opportunities, such as regularly scheduled meetings
- Participate in FHWA external trainings and conferences
- Establish a subscription and/or notification system for new/updated policies
- Facilitate better communication between agencies

### 5. Regular Performance Measures

It is strongly recommended that performance measures using quantitative evaluation metrics, such as a conforming rate for each deficient item in the checklist, evaluated against the established baseline and compliance goal, be established and used. Considering that a 91% compliance rate was seen in the current review, establishing an overall compliance goal of 95% for future reviews would be reasonable. Eight deficient items (areas) in the checklist were reported in this review, averaging 70%. Improving these deficiencies by increasing their average compliance rate to 80% would enable the overall average to meet the 95% goal. Performance measures for these deficient items should be made at least every two years.



Attachment A

# **List of Reviewed Projects**



DISTRICT	PROJECT ID	AGENCY NAME	DESCRIPTION	
01	ATPL-5427(027)	Clearlake	Along Phillips Ave. From 18Th Ave To 40Th Ave Add Class Ii Bike Lanes (Tc)	
01	BRLO-5904(126)	Humboldt County	Jacoby Creek Bridge On Brookwood Drive ( Br 04C0124) Bridge Rehabilitation (Tc)	
01	BRLO-5914(106)	Lake County	In Lake County On Harbin Springs Road Over Harbin Creek, Bridge Number 14C0111. Replace Bridge. (Tc)	
01	SRTSL-5914(097)	Lake County	Along Portions Of State Route 20 In The City Of Clearlake Oaks (Keys Blvd To Foothill Blvd) Pedestrian Walkways, Crosswalks, And Solar Lighting	
01	BRLO-5910(086)	Mendocino County	Reeves Canyon Road At Forsythe Creek, Bridge No. 10C0077 Bridge Replacement, Added Capacity (Tc)	
02	BRLO-5909(080)	Plumas County	Cr 413 (Pm 0.9) Over Spanish Crk Near Bucks Lk(Br. # 09C0039) Bridge Replacement (Tc)	
02	BRLS-5902(078)	Siskiyou County	This Project Include: Bridge Replacements On Schulmeyer Gulch 02C0264 Brls 5902(064), Guys Gulch 02C0276 Brls 5902(065) And The Guys Gulch Road Realignment Hsip Cycle 5. Ce And Con Only For Two Bridge Replacements And Road Realignment	
02	HSIPL-5905(099)	Trinity County	Various Locations In Trinity County Install Edgeline And Centerline Striping (Tc)	
02	BRLS-5020(016)	Yreka City	Fairlane Road Bridge 0.3 Miles South Of Sharps Road/Br.# 02C0149 Bridge Resurfacing - Preventative Maintenance	
02	BPMP-5020(020)	Yreka City	Preventative Maintenance On Three Of The City'S Brides: 02C0225 E. Lennox, 02C0260 Raymond Street, And 02C0267 Westside Road Preventative Maintenance	
03	STPL-5089(024)	Lincoln	Twelve Bridges Drive And Joiner Parkway Ac Overlay - Tc	
03	DEM05L-5015(023)	Placerville	Us-50 And Ray Laywer Drive Interchange Construct Eastbound Us- 50 Off Ramp To Ray Lawyer Drive And Improvements To Ray Lawyer Drive And Forni Road. Construct Class I Bike Path Along Forni Road From Ray Lawyer To Existing Bike Path On Forni Road. Construct Sidewalks And Class Ii Bike Lanes Along Forni Road And Ray Lawyer Drive. (Tc)	
03	HRRRL-5482(026)	Rancho Cordova	Douglas Rd./Grant Line Rd. Safety-New Signal, Widen Roadway For Turn Pockets And Bike Lanes	
03	DEMO5L-5002(163)	Sacramento	R Street Between 13Th Street And 16Th Street Streetscape And Roadway Improvements	
03	STPL-5924(220)	Sacramento County	Fulton Ave Btwn Arden And Auburn Blvd. Phase 2 Add Bike Lanes, Construct New Sidewalk, Repair And Infill Damaged/Discontinuous Sidewalks, Install Curb Ramps And The Ada Improvements And Modify Traffic Signals. Rehabilitate Pavement Between Arden And Marconi.	
03	STPL-5916(120)	Yuba County	Feather River Blvd, From Algodon Rd To 400' West Of River Oaks Blvd Pavement Resurfacing And Rehabilitation	
04	CML-5171(021)	Burlingame	Carolan Avenue Between Broadway And Oak Grove Avenue Convert 4-Lane Roadway To 2-Lanes With Center Turn Lane And Class Ii Bike Lanes	
04	HSIPL-5928(118)	Contra Costa County	Alhambra Valley Road Between Rancho La Boca Rd. And Ferndale Road Shoulder Widening / Roadway Reconstruction	
04	STPL-5434(021)	Danville	2 Locations-Sycamore Valley Road (Including Adjacent Bus Loop) And El Cerro Blvd Pavement Rehabilitation	
04	HSIPL-5404(027)	Lafayette	Southbound Taylor Blvd At Merge With Pleasant Hill Road. Install Guard Rail/Median Barrier And High-Friction Surface Treatment.	



DISTRICT	PROJECT ID	AGENCY NAME	DESCRIPTION
04	STPL-5921(075)	Napa County	County Of Napa: On Silverado Trail From Howell Mtn To Zinfandel (Phase H) Rehabilitate Roadway Retaining Existing Class Ii Bicycle Lanes (Asphalt Concrete Overlay Of Existing County- Maintained Road On The Federal Aid System)
04	CML-5350(019)	Pacifica	Palmetto Ave Fr Bella Vista To Clarendon Rd Pavement Rehab And Pedestrian Sidewalk Improvements
05	CML-5359(020)	Grover Beach	In The City Of Grover Beach In San Luis Obispo County Expand The Existing Amtrak Grover Beach Train Station
05	STPLX-5944(124)	Monterey County	San Jon And Boronda Road Bridges - Rail Replacement Bridge Rail Replacement (Tc)
05	BRLO-5949(127)	San Luis Obispo County	Cypress Mountain Drive At Klau Creek Bridge (Tc) Replace 1-Lane Bridge With 2-Lane Bridge (Tc)
05	ATPL-5007(066)	Santa Barbara	Cacique And Soledad Streets In The City Of Santa Barbara (Tc) Ped Bridges And Corridor Improvements Tc
06	STPL-5109(229)	Bakersfield	California Avenue Between Oak Street And H Street Rehabilitation Of Existing Pavement Structural Section, Installation Of Pavement Striping And Markings, Construction Of Pedestrian Access Ramps, Curbs&Gutters, Adjustment Of Manholes And Monuments.
06	CML-5942(211)	Fresno County	Fowler Avenue From South Avenue To Elkhorn Avenue Shoulder Improvements; Paving/Stabilazation (Tc)
06	STPL-5950(430)	Kern County	<ol> <li>(1) Kimberlina Road: Wasco Avenue To Sr 99</li> <li>(2) Lerdo Hwy: Wildwood Avenue To Sr 99</li> <li>(3) Button Willow Drive.: Sr 58 To I-5</li> <li>(4) Garces Hwy: Sr 43 To Melcher Road Pavement Resurfacing And Rehabilitation</li> </ol>
06	CML-5945(065)	Kings County	Intersection Of 13Th Ave And West Lacey Blvd Install Traffic Signals And Turn Lanes
06	CML-5115(034)	Lemoore	Intersections Of Lemoore Avenue And Skaggs Street, And Lemoore Avenue And Larish Street Install Synchronized Pedestrian In- Pavement Roadway Warning Lights.
06	STPL-5193(039)	Taft	In Taft On 6Th Street From Main Street To Supply Row Resurfacing Roadway, Upgrading Striping And Pavement Markings, Installing Curbs, Gutters, And Sidewalks, And Reconstructing Curb Ramps
06	STPL-5946(156)	Tulare County	Avenue 144 From Road 72 To Burnett (D115) As Base Bid And From Road 64 To Road 72 As Additive Alternative. Road Rehabilitation And Resurfacing Using Asphalt Concrete (Tc)
06	STPL-5287(050)	Wasco	7Th Street From Central To Palm Road Rehabilitation
07	STPL-5108(165)	Long Beach	Bellflower Blvd. Between Pacific Coast Hwy And Atherton Street Pavement Rehabilitation; Repair Curb And Gutter And Sidewalk. And Bike Lane(Tc)
07	RPSTPLE-5953(685)	Los Angeles County	Vermont Ave - From Manchester Blvd To El Segundo Blvd Class Ii Bike Lane Construction (3 Miles)
07	STPL-5336(020)	Paramount	Alondra Blvd: Gundry Ave. To Hunsaker Ave. Street Resurfacing Etc.
08	ATPL-5294(015)	Coachella	Avenue 50 And Avenue 52 From The Western City Limits To The Future Cv Link Trail Class Ii Bicycle Lanes And Class Iii Bikeways With Sharrows, Asphalt Concrete Bicycle Paths, Pedestrian Crossings, Sidewalk, And Median Landscaping (Tc)
08	HSIPL-5058(092)	Riverside	Arlington Avenue From The West City Limits To Fairhaven Drive Street Widening Improvements
08	STPLN-5075(018)	San Jacinto	San Jacinto Avenue From Midway Avenue To 7Th Street Road Rehabilitation



DISTRICT	PROJECT ID	AGENCY NAME	DESCRIPTION
08	HSIPL-5380(033)	Victorville	El Evado Road From 460 Feet North Of Hook Boulevard To 800 Feet South Of Mojave Drive Widen And Pave Shoulder
08	HSIPL-5457(020)	Yucaipa	Yucaipa Boulevard From 16Th Street To 15Th Street Raised Concrete Median, Roadway Widening, And Traffic Signal
09	ATPLN-5961(001)	Kern County (District 9)	In Kern County, Community Of Mojave., East Side Of Sr 14 Beginning 300 Feet North Of Oak Creek Rd. Grade Separation And Continuing To Approximately 800 Feet North Of Intersection Of Sr 14 And Old Sr 58, Approximately 3,000Ft. Install New Sidewalk, Curb In Locations, And Fix Ramps. Uses Toll Credits (Tc).
09	ATPL-5961(003)	Kern County (District 9)	Downtown Mojave (East Of Sierra Highway, East Of K Street, North Of Business State Route 58), And On Barstow Road (South Of State Route 58). Safe Routes To School (Atp) Project That Will Provide Pedestrian Improvements By Way Of Sidewalk And Ramp Construction Withing Downtown Mojave.
09	CML-5961(004)	Kern County (District 9)	In Kern County, Community Of Mojave, On A Parcel Near The Northeast Corner Of K Street And Mono Street. Construct A Transit Center With Asphalt And Concrete Flat Work To Accommodate Buses And Pedestrians And A Building To House Restrooms And Maintenance Facilities.
09	STPL-5184(030)	Tehachapi	Curry St., Dennison Rd., Tehachapi Blvd., Tucker Rd., Mountain View Ave., Mill St. Surface Seal Various Roads. Slurry Seal, Cape Seal, Etc.
10	CML-5241(056)	Ceres	Morgan/Aristocrat, Central/Pine And Central/Industrial Roundabout
10	STPL-5059(205)	Modesto	Various Roadways Throughout The City Of Modesto Pavement Rehabilitation (Tc)
10	STPL-5153(039)	Oakdale	C Street (1St St To Yosemite) Pavement Rehabilitation
10	BRLS-5938(188)	Stanislaus County	Santa Fe Avenue Over Tuolumne River (Bridge 38C0003) Seismic Retrofit - Replace Bridge
10	HSIPL-5008(137)	Stockton	Along El Dorado Street Between Duncan Avenue And Alpine Avenue Signal Controllers At Intersections (Tc)
10	STPL-5165(082)	Turlock	Monte Vista Avenue Between Geer Road And Amthyst Way Road Rehabilitation - Includes Excavation, Asphalt Paving, Minor Concrete Work, Thermoplastic Striping, Utility Cover Adjustments, And Traffic Signal Loop Replacements
11	STPL-5958(101)	Imperial County	Dogwood Road From El Centro City Limits To Imperial City Limits. Wheel Path Dig Out Areas Ranging From 1 To 3 Feet Wide In Both Directions. Ac Grinding Of Existing Paving And A 3 Inch Ac Cap Including Shoulder Backing.
11	HSIPL-5066(027)	National City	Highland Ave/ E 4Th St, Highland Ave/Shopping Center Driveway, Highland Ave/E 16Th St, Highland Ave/E 18Th St, Highland Ave/E 21St St, Highland Ave/E 24Th St Upgrade Traffic Signals; Install Protected Left-Turn Phasing
11	ATPL-5957(121)	San Diego County	Reche Rd (Oak Glade Dr - Via Green Canyon Rd) Srts Live Oak Elemenentary And Potter Jr High (Tc)
11	HSIPL-5429(026)	Santee	Mission Gorge Road Median Installation Insallation Of Raised Median From 1St. Sreet To Riverview Pkwy (Tc)
12	ATPCML-5237(035)	Brea	Former Union Pacific Railroad Right Of Way From State College Boulevard To Birch Street, Segment 4 Class I Bicycle Trail, An Adjacent Pedestrian Path, And Trail Improvements
12	HSIPL-5312(092)	Costa Mesa	Placentia Avenue From Wilson Street To Adams Avenue Raised Landscaped Median Islands
12	HSIPL-5181(178)	Huntington Beach	Intersections Of Gothard Street At Talbert Avenue, Gothard Street At Heil Avenue, And Springdale Street At Mcfadden Avenue Install Left-Turn Signal Phasing



DISTRICT	PROJECT ID	AGENCY NAME	DESCRIPTION
12	HSIPL-5073(079)	Orange	Intersection Of Chapman Avenue And Cannon Street/Crawford Canyon Road Protected Left Turn Signal Phasing
12	STPL-5063(176)	Santa Ana	Fairview Street From Segerstrom Avenue To The North City Limits North Of Lori Lane Road Rehabilitation



Attachment B

# **Proposed Checklist (Exhibit 12-D)**

Please note that newly edited areas are indicated in red.



Exhibit 12-D PS&E Checklist

Exhibit	12-D	PS&E	CHECKLIST
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Aconor	Federal Project
Agency	No.

This form is to be completed by the local agency and attached to the PS&E Certification. See Exhibit 12-E for instructions and the referenced attachments.

### I. HIGHWAY SYSTEM AND FUNCTIONAL CLASSIFICATION

A. National Highway System (Check applicable box. Please refer to FHWA approved NHS maps at https://www.fhwa.dot.gov/planning/national\_highway\_system/nhs\_maps/)

Off the NHS

On the National Highway System (NHS)

**B.** Functional Classification (Check as many as appropriate. Please refer to Caltrans CRS maps at http://www.dot.ca.gov/hq/tsip/hseb/crs\_maps/)

On the Federal-aid System	Off the Federal-a	aid System
Principal Arterial - Fwy or Ex	xprwy	Rural Minor Collector
Other Principal Arterial		Local
Minor Arterial		
Major Collector		
Urban Minor Collector		

II. PROJECT SCOPE OF WORK (Check applicable box)

PS&E is consistent with the scope of work identified in a scoping document or application.

PS&E is consistent with the scope of work that was revised during a later phase of development and appropriate approvals were obtained.

III. TYPE OF CONSTRUCTION (Check applicable box)

- New or Reconstruction
- Resurfacing, Restoration and Rehabilitation (3R)
- Preventive Maintenance

Bridges and Other Structures Only

### **IV. METHOD OF CONSTRUCTION**

A. Contracting Method (Check appropriate box)

Competitive	bidding
-------------	---------

Other than competitive bidding. (If the contracting method is other than competitive bidding, check the appropriate box below).

The project is "Delegated" (subject to minimal FHWA oversight). A Public Interest Finding has been submitted to the DLAE for approval and filed in the contract records justifying the method.

The project is "High Profile" (subject to a higher degree of FHWA oversight). A Public Interest Finding justifying the method has been submitted and approved by Caltrans and FHWA.



### Exhibit 12-D PS&E Checklist

B.	Force Accou	nt (Day Labor) (Check appropriate box)
	The	entire work will be constructed by contract as indicated above.
	Som	e work (incidental to the main purpose of the project) will be constructed by Force Account.
	A Pu worl	ublic Interest Finding approved by the DLAE is on file in the contract records justifying the k.
		entire project will be constructed by force Account (Day Labor). (If the entire project will onstructed by Force Account, check the appropriate box below).
		The project is "Delegated" (subject to minimal FHWA oversight). A Public Interest Finding has been submitted to the DLAE for approval and filed in the contract records justifying the method.
		The project is "High Profile" (subject to a higher degree of FHWA oversight). A Public Interest Finding justifying the method has been submitted and approved by Caltrans and FHWA.
v.	ENVIRONME	ENTAL ANALYSIS (Check box if requirement is met)
		E is fully responsive to the necessary actions called for by the environmental document, conditions, and other agreements.
VI.	VALUE ENG	INEERING ANALYSIS (VA) (NHS projects only - Check appropriate box)
		been performed on this project and a copy of the analysis has been submitted to the DLAE varding to the Caltrans District Value Analysis Coordinator.
	The pro	ject is not a bridge project. VA has not been performed as the estimated total project cost is illion.
	The pro	ject is a bridge project. VA has not been performed as the total project cost is <\$40 million.
VII	. GEOMETRIC	<b>DESIGN STANDARDS</b> (Complete this section only if project changes existing geometrics)
	Current	Caltrans Design Standards (on SHS)
	FHWA-a	adopted AASHTO Standards (Green Book)
	3R Proje	ects – Caltrans DIB 79-03 (on SHS)
	3R Proje	ects – Exhibit 11-A Geometric Design Standards for Local 3R Projects (off SHS)
	Local Ag	gency approved Design Standards (non NHS only) Date:
VII	I. BRIDGE DI	ESIGN PROCEDURES
		ges have been designed in accordance with the current AASHTO LRFD Bridge Design ations with California Amendments.
	Not appl	icable (Bridge construction not included in the project).
IX.	STANDARD F	PLANS
	Current	Caltrans Standard Plans
	 Standar	d Plans for Public Works Construction
		gency approved Standard Plans:



Local Assistance Procedures Manual	Exhibit 12-D PS&E Checklist
Date signed (on behalf of the local agency) by a person in responsible is a registered professional engineer licensed to practice in the State	
X. PROJECT PLANS AND SPECIFICATIONS	
Cover sheet of plans and specifications signed and stamped on behalf of the local as person in responsible charge, and who is a registered professional engineer licensed the State of California.	
Temporary Traffic Control (TTC) Plans or reference to Signs/Striping Plans in Statincluded. (Note: Additionally, Traffic Management Plans are required to be on file reconstruction, rehabilitation, and other projects [including projects on the State High not funded by the State], if significant traffic delays are anticipated and as a result fractivities).	for all ghway System
Erosion Control Plan, if required.	
Americans with Disabilities Act (ADA) Compliance Plan, whenever applicable, is Complied with including <i>Federal ADA Standards for Accessible Guidelines for Facilities</i> (ADAAG), Title 24 of the California Code of Regulations and local complexity of the California Code of Regulations and local complexity.	Buildings and
XI. STANDARD SPECIFICATIONS USED	
Current Caltrans Standard Specifications and Standard Special Provisions	
Standard Specifications for Public Works Construction (Green Book)	
Locally Agency approved Standard Specifications	
XII. FEDERAL REQUIREMENTS	PAGE NO.*
<b>A.</b> Required Federal Contract Provisions (Refer to Exhibit 12-G Required Federal-a *Note – Embedding unmodified Exhibit 12-G with appropriate information filled, into strongly recommended. Otherwise, indicate page numbers of each federal requirement	o the project's contract is
<b>1. Disadvantaged Business Enterprise</b> or equivalent provisions are included	
<b>2. Bid Opening</b> or equivalent provisions are included	
<b>3. Bid Rigging</b> or equivalent procedures are included	
4. Contract Award or equivalent procedures are included	
<b>5. Contract License</b> or equivalent provisions are included	

6. Changed Conditions or equivalent provisions are included	
7. Beginning of Work, Time of Completion and Liquidated Damages or equivalent provisions are included.	
8. Buy America	
"Buy America" or equivalent provisions are included	
A Buy America Waiver was approved by FHWA on, 20 .	
9. Quality Assurance or equivalent provisions are included	
<b>10.</b> Prompt Payment of Funds Withheld from Subcontractors or equivalent	

] 10. Prompt Payment of Funds Withheld from Subcontractors or equivalent provisions are included .....



Exhibit 12-D PS&E Checklist

11. Form FHWA-1273 – An unmodified copy of Form FHWA-1273 Required Contract Provisions Federal-aid Construction Contracts (1273 Revised May 1, 2012) has been physically incorporated into the executed contract.	
All sections of the FHWA Form 1273 apply to this project	
Section IV. Davis-Bacon and related Act Provisions does not apply because the project is not on the Federal-aid System (roads classified as local roads or rural minor collectors) which are exempted, as specified in the special provision on page.	
Section VI. Subletting or Assigning the Contract does not apply since this project is off the NHS, as specified in the special provision on page	
12. Female and Minority Goals or equivalent provisions are included	
13. Federal Trainee Program	
Federal Trainee Program or equivalent provisions are included	
Federal Trainee goal and special provisions do not apply since the engineer's estimate in under \$400,000 in each of the work categories specified in LAPM Chapter 12 "Federal Trainee Program" or the project has less than 100 working days.	
14. Title VI assurances are included	
15. Use of United States-Flag Vessels (Cargo Preference Act)	
B. DBE Goal (Refer to Exhibit 12-E PS&E Checklist Instruction)	
Local Agency non-zero DBE goal percentage for this contract is:	
The DBE goal for this contract is zero percent because there are no subcontracting opportunities participation. Documentation verifying this determination is attached to this PS&E Checklist are on file with the local agency. (Refer to Exhibit 12-E, PS&E Checklist Instructions).	
This contract has no DBE goal because:	
This is an emergency relief project	
This contract is "nonprofit"	
This contract uses Force Account	
Other, specify:	
Documentation verifying the above "no DBE goal" determination is attached to the PS&E Checklist and is also on file with the local agency. Refer to Exhibit 12-E <i>PS&amp;E Checklist Instructions</i> .	
C. Certifications/Disclosures (Refer to Exhibit 12-H Sample Bid)	
Equal Employment Opportunity Certification or equivalent	
Noncollusion Affidavit or equivalent	
Debarment and Suspension Certification or equivalent	
Nonlobbying Certification for Federal-aid Contracts	
Disclosure of Lobbying Activities	

D. Other Required Forms (The following forms are applicable with the above required federal



Local Assistance Procedures Manual	Exhibit 12-D PS&E Checklist
Exhibit 15-G Local Agency Bidder DBE Commitment (Construction Contract Equivalent.	
Exhibit 15-H DBE Information - Good Faith Efforts (if DBE Goal not met)	
Exhibit 12-B <i>Bidder's List of Subcontractors (DBE and Non-DBE)</i> include d subcontractors listed by the prime contractor.	
E. Federal Wage Rates	
Federal wage rates are physically incorporated into this contract advertising p Local agencies shall comply with the federal " <b>10-day rule</b> ": local agencies an access the federal wage rates within ten days prior to bid opening to check if have been posted. If the updated wage rates exist, the revised federal wage rates issued by an addendum by local agencies. The final contract documents sig local agency and the contractor must physically include the current federal	re required to updated rates ates shall be gned by the
Federal wage rates are not physically incorporated in the contract advertising referenced to an Internet web site address on page number of the Spe applicable federal wage rates can be found. Local agencies shall comply with as described above. The final contract documents signed by the local agen must physically include the current federal wage rates.	cial Provisions where the h the federal "10-day rule"
Federal Wage Rates are not required since this project is not located on a Fed	leral-aid route.
F. Relations with Railroad	
The required provisions are included	
This project does not involve the use of railroad properties or adjustments to	ranroad facilities.
XIII. RESTRICTED CONTRACT PROVISIONS (CHECK APPROPRIATE BOX)	
A. Indian Preferences	
Not included	
Included. The project is on or near the	Indian Reservation.
B. Bonding and Prequalification Not included	
<ul> <li>Included</li> <li>Bonding or prequalification, if required and included, will not be used to a submission of a bid by, or prohibit consideration of a bid submitted by an whether a resident or nonresident of the State of California.</li> </ul>	
C. Price Adjustment Clauses	
Price adjustment clauses are not included.	
Price adjustment clauses are included. The federal conditions restricting the u been met and are documented in the project files.	ise of these clauses have



Exhibit 12-D **PS&E** Checklist

- **D.** Warranty Clauses (Complete this section if project is on the NHS)
  - Warranty Clauses are not included

- Warranty Clauses are included. Documentation of the required conditions on the use of these clauses is in the project files.

### E. Proprietary Items

- Proprietary Items are not included
- Proprietary Items are included. A Public Interest Finding (certification if applicable) justifying the use has been approved and emailed to Proprietary.PIF@dot.ca.gov.

### **XIV. MATERIALS & EQUIPMENT**

### A. Publicly Owned Equipment (for use by Contractor).

- Not included.
  - Included. A Public Interest Finding justifying this use is in project files and the project specifications meet the requirements for federal participation listed in Chapter 12.

### B. Equipment Purchases for Local Ownership

Not included.

Included. Amount charged to construction engineering will be limited to amortized equipment cost (over its useful life) attributable to the time the equipment is used on the project.

### C. Convict Produced Materials

Not included.

Included. The conditions placed on the use of these materials by the contractor meet federal requirements and are included in the contract specifications.

### D. Local Agency Furnished Materials (Check appropriate box)

- Local Agency Furnished Materials are not included.
- Local Agency Furnished Materials have been acquired on the basis of competitive bidding.
- A Public Interest Finding is on file in the contract records justifying another method of acquisition.

### **XV. PRELIMINARY ESTIMATE**

- Exhibit 12-A or equivalent has been completed and is attached.
- The estimate is broken down into items sufficient in detail to provide an initial prediction of the financial obligation to be incurred by the local agency, State and FHWA and to permit an effective review and comparison of the bids received.
- Non-participating items of work have been identified and segregated from the estimated cost of work eligible for Federal-aid. (Refer to Item XV of *Exhibit 12-E* for a list of frequent Federal Non-Participating Items)
- The estimate has been segregated by fund types for use in preparing the "Request for Authorization for Construction" (Detail Record) and the Finance Letter.

### XVI. Major Projects with Total Cost of \$100 Million to \$500 Million or more

The total cost of this project is Expected to be less than \$100 million. No financial or project



Exhibit 12-D PS&E Checklist

_	management plans are required.
	This project is expected to be \$100 million or more. A Financial Plan is required and has been prepared and submitted to the DLAE. Approval Date:
	This project is expected to be \$500 million or more and:
	A Project Management Plan has been prepared and submitted to the DLAE. Approval Date:
	An Annual Financial Plan has been prepared and submitted to the DLAE Approval Date
XVII. Loo	cal Agency Signature
	This Federal Contract Provisions checklist has been prepared in accordance with Chapter 12 <i>Plans, pecifications &amp; Estimate</i> of the Local Assistance Procedures Manual.
S	ignature: Date:
Т	Citle:
I i c a	ALTRANS ACCEPTANCE t is the responsibility of Local Agencies to make sure that the PS&E package is complete, adequate for ts purpose, accurate, free of defects and inaccuracies, and unambiguous. Caltrans has not conducted a comprehensive review of the PS&E package and does not assume any responsibility or liability of the accuracy, completeness or adequacy of the PS&E package as a result of the Caltrans review of the "PS&E CHECKLIST."
Ch	eck appropriate acceptance statement:
	I have reviewed this "PS&E Checklist". The PS&E checklist appears to have been prepared in acceptance with Chapter 12 "Plans, Specifications & Estimate" of the Local Assistance Procedures Manual. I have not conducted a comprehensive review of the PS&E package and I cannot, therefore, attest that there are no errors, ambiguities, or omissions in the PS&E package. Caltrans assumes no liability for any defect in the PS&E package by virtue of its review of the PS&E checklist.
	I have reviewed this "PS&E Checklist". I have verified that the required Federal Contract Provisions are included in the specifications of the PS&E package but I have not reviewed the PS&E package in detail for other purpose. The PS&E checklist appears to have been prepared in accordance with Chapter 12 "Plans, Specifications & Estimate" of the Local Assistance Procedures Manual. I have not conducted a comprehensive review of the PS&E package and I cannot, therefore, attest that there are no errors, ambiguities, or omissions in the PS&E package. Caltrans assumes no liability for any defect in the PS&E package by virtue of its review of the PS&E checklist.
	Signature: Date:
	Title:
Distribution:	<ol> <li>Original with PS&amp;E Certification - DLAE</li> <li>Original "Accepted" copy with PS&amp;E Certification - DLAE file</li> <li>One "Accepted" copy to be returned to Local Agency</li> </ol>



Attachment C

# List of FHWA Non-Participating Cost Items

Reference: http://www.dot.ca.gov/construction/changeorder/docs/fhwa\_nonpart\_cost\_items.pdf



Note: The following is a list of highway construction costs that are not eligible for funding provided under Title 23 of the US Code. This list is not intended to be all-inclusive and specific funding programs may have additional funding restrictions (i.e. Highway Bridge Program). In addition, numerous circumstances may arise during project delivery that may result in additional items being considered ineligible for federal funding.

- 1. Work done prior to FHW A authorization of federal funds, including work on environmental review, preliminary engineering, right-of-way acquisition, construction, research, etc. (23 CFR 630.106)
- Construction work done under a contract that does. not have FHW A Form-1273, "Required Contract Provisions, Federal-Aid Construction Contracts," physically incorporated in the construction contract and not incorporated by reference (including Emergency Relief contracts). (23 CFR 633.102)
- 3. Work not included in the scope of work, or outside the project limits, as defined in the project's environmental document.
- 4. Costs that were not actually incurred prior to requesting reimbursement by FHWA. (23 CFR 1.9)
- 5. Work not done in accordance with approved plans, specifications and estimates, unless quality of methods/materials covered by the specifications is maintained and the work was performed under a properly approved Change Order (CO) approved before the work was initiated. (23 CFR 630.205, 23 CFR 635.120)
- 6. Work that is normally considered to be routine maintenance. Examples include, but are not limited to, ditch cleaning, snow plowing, graffiti removal, trash removal, and/are mowing roadsides. (23 CFR 633.208)
- 7. Non-conforming work such as non-standard details~ designs determined undesirable or discontinued because of poor performance. Examples include, but are not limited to, sidewalks that do not meet requirements of the Americans with Disabilities Act, or devices within the clear zone that are not crash tested or are not crashworthy.
- 8. Work included on a CO or a contract addendum that was required to have prior approval by FHW A but did not obtain the prior approval. (23 CFR 635.120, 23 CFR 635.112)
- 9. Payment for work done by an unapproved subcontractor.
- 10. Utility work that is not a result of the highway or bridge work. Examples include, but are not limited to) replacing sewer leads that are not a result of the roadway construction activity.
- 11. Work on private facilities or outside of the highway right-of-way {signs, fences, lawn sprinklers, etc.) unless that work is included in a right-of-way agreement or permit
- 12. Federal eligibility of costs associated with claims (compensation for time, attorney fees, and interest, etc.) will be determined on a case-by-case basis (23 CFR 635.124). Such costs may be eligible to the extent that any contract adjustments made are supported, and have a basis in terms of the contract and applicable State law.



- 13. Change order work performed using force account (FA), including costs associated with time extensions, without appropriate documentation of the need to use force account, analysis of costs, and/or use of labor, equipment, material rates, specified in the contract. (23 CFR 635.120(d))
- 14. Work that is performed by State or local agency using force account work in-lieu of hiring a contractor, that is not approved as cost effective and that does not conform to requirements of 23 CFR 635 Part B. (The term *cost effective* shall mean the efficient use of labor, equipment, materials and supplies to assure the lowest overall cost. The term force account shall mean the direct performance of highway construction work by a State transportation department, a county, a railroad, or a public utility company by use of labor, equipment, materials, and supplies furnished by them and used under their direct control.)
- 15. Acquisition/incorporation of iron or steel products that are subject to Buy America but have not been certified as compliant with Buy America requirements. Note: Making iron and steel products non-participating is generally not allowed as it circumvents the Buy America requirements and eligibility of the entire project to receive Federal-aid could be jeopardized. (23 CFR 635.410) See also Caltrans, guidance for implementing and certifying Buy America on utility relocations (http://www.doLca.rmv/hg/buyamerica/)
- 16. Time extensions that do not have proper justification or a Time Impact Analysis, when required. For the time extension to be eligible for Federal-aid, the work must be eligible for Federal-aid and affect the "controlling operations" (or critical path). (23 CFR 635.121)
- 17. Costs incurred solely for the benefit or of a railroad or utility. (23 CPR 646.212)
- 18. Payment for items that are the responsibility of others. Examples include, but are not limited to, relocation of utilities located within the right-of-way (unless part of an existing Joint Use Agreement or where prior rights have been determined), or collision damage that is the responsibility of others.
- 19. Purchase of right-of-way under the following circumstances:
  - a. Right-of-way that is not programmed in the current State Transportation Improvement Program.
  - b. Right-of-way acquisition for which the owner was previously compensated.
  - c. Land that is owned by a federal agency.
  - d. Land owned by a Local Public Agency which is currently part of a transportation facility.
- 20. Patented or proprietary items unless one of the following conditions has been met (23 CFR 635.411):
  - a. The item is purchased or obtained through competitive bidding with equally suitable proprietary items.
  - b. The plans or specification lists at least two proprietary items along with the words "or equal."
  - c. The proprietary item is used for experimental purposes and a Construction Evaluation Work Plan has been approved by FHWA for the item.



- d. If more than one equally suitable item exists, Caltrans or FHWA must approve a Public Interest Finding that justifies the use of the item is in the public's interest. (Local agencies cannot sign these PIFs.)
- e. The project owner certifies, based on proper justification, the proprietary the items are essential for synchronization with existing highway facilities or that no equally suitable alternate exists. (Synchronization is defined in "Questions and Answers Regarding Title 23 CFR 635.411.")
- f. The contractor chooses the proprietary item.
- 21. Payment for betterments that do not have a transportation function and/or are not part of the project. Examples include, but are not limited to, payment for excess sizing of sanitary sewer adjustment for future development. (23 CFR 645.105, 23 CPR 710.509(d)(l))
- 22. Materials that do not meet the sampling and/or testing requirements except materials for which the Standard Specifications allow a deduction for diminished quality. (23 CFR 637)
- 23. Plant establishment periods exceeding three years from the date of contract acceptance. (23 CFR 752.4)
- 24. Costs associated with advertising, sale5 promotion, interest on borrowings, the issuance of stock, bad debts, uncollectible accounts receivable, contributions, donations, entertainment, fines, penalties, lobbying, and research programs unless the research is conducted under a Construction Evaluation Work Plan. (23 CFR 635.411 (a)(3) and 23 CFR 645.117 (d)(2))
- 25. Supplemental Work and State-Furnished Materials and Expenses not approved by FHWA. The use of State-furnished materials requires a finding by the Department that it is in the public interest to require the contractor to use materials furnished by the Department or from sources designated by the Department (23 CFR 635.407)
- 26. The use of publicly owned equipment in a contract unless it can be shown to be cost effective (23 CFR 635.106). Federal funds may participate fa the costs associated with the use of publicly owned equipment provided that: the PS&E submittal clearly sets forth the proposed use, the specifications indicate the items of equipment that are available, the rates to be charged, and the point(s) of availability or delivery, the specifications include the express condition that the contractor has the option to rent all or part of the available equipment, or to provide the equipment, and the Department cannot benefit from the rental of its own equipment by virtue of a Federal-aid contract.
- 27. The use of noncompetitive negotiation to procure engineering and design related services on Federal-aid participating contracts unless it can be justified by demonstrating that: The service is available only from a single source; There is an emergency which will not permit the time necessary to conduct competitive negotiations; or after solicitation of a number of sources, competition is determined to be inadequate. (23 CFR 172.5(a)(3))
- 28. Construction contracts that are not advertised by the competitive bidding process unless preapproved by FHWA. (23 CFR 635.204)
- 29. Informal contracts (less than 3-week advertisement) unless approved by FHWA. (23 CFR 635.112(b))



- 30. Mandatory use of borrow/disposal site unless approved by FHWA. FHWA approval requires a finding that uses of the mandatory borrow/disposal site is the most economical or that the environment would be substantially enhanced without excessive cost. (23 CFR 635.407)
- 31. Costs that arise from negligence, intentional acts or omissions, fraud, carelessness, incompetence or other actions by STA employees which are not consistent with the usual State practices.
- 32. Costs incurred for relocation of utilities are generally eligible for federal funding, except as provided in 23 CFR 645.
- 33. Time extensions and delay claims associated with utility and railroad work or right-of-way clearances since the state is required to provide a statement confirming proper coordination with these third parties before construction authorization.