

# **DRAFT MEMORANDUM**

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**TO: Transportation Co-Operative Committee**

**FROM: Data Collection Subcommittee**

**DATE: January 28, 2016**

**RE: Construction Data Collection**

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The purpose of the Data Collection Subcommittee was to identify construction milestone data to be collected and provided to FHWA for local agency federal-aid highway projects. FHWA is interested in obtaining additional construction project information because once a project is authorized for construction in FHWA's Financial Management Information System (FMIS), FHWA does not have any construction milestone information until the project is subsequently closed in FMIS. Using FMIS information for CY2010 through CY2015 the typical time between the construction authorization and close out in FMIS, for local agency projects, is a little over three years.

The Subcommittee assessed three items: 1) what construction milestone data should be collected; 2) an interim process for collecting the data; and 3) the long-term process for collecting the data in the long-term. It is envisioned that in the long-term, the construction milestone data will be collected in real-time. However, because there is currently no system in place to collect the real-time data, the Subcommittee identified an interim data collection effort and a long-term data collection effort. In the interim period, there will be some delay with getting the data until the long-term data collection tool can be put into place. Long-term, real-time data collection options were assessed in a qualitative manner as they are very dependent on how Caltrans chooses to collect and manage project data in the future.

## **CONSTRUCTION MILESTONE DATA**

The first task of the Subcommittee was to determine what construction milestone data would be collected. The primary considerations used for this task included: 1) what data would be most beneficial for management of the Federal-aid highway program; and 2) what data was Caltrans already collecting. Given those two primary objectives, the following construction milestone data is recommended for collection: advertisement; award; and, construction completion. Furthermore, as requested by FHWA, both the anticipated and actual dates will be collected for each of the milestones.

These anticipated construction milestone dates as currently being collected by Caltrans in the identified Local Assistance Procedures Manual (LAPM) Exhibits:

- anticipated advertisement date – Exhibit 7-B: Field Review Form (Figure 1)
- anticipated award date – Exhibit 3-D: Request for Authorization to Proceed with Construction (Figure 2)
- anticipated construction completion date – Exhibit 3-E: Request for Authorization to Proceed Data Sheet (Figure 3)

In order to collect this data more efficiently, Caltrans may want to consider updating the Exhibit 3-E or 7-B to include all anticipated project information in one location. Additionally, Caltrans could also consider removing the schedule information from the other exhibits so that local agencies are not submitting the same information in multiple locations. A suggested example of an update to Exhibit 3-E or 7-B is provided in Figure 4.

Actual project schedule information is currently provided to Caltrans from the local agencies in Exhibit 17-A: Cover Letter & Federal Report of Expenditures Checklist (Exhibit 17-A), Figure 5. The actual contract award date is also collected in Exhibit 15-L: Local Agency Contract Award Checklist (Exhibit 15-L), Figure 6. Since Exhibit 15-L is submitted earlier than the 17-A, Caltrans should use the award date from Exhibit 15-L.

## **Interim Data Collection**

For the interim period, the data collection and distribution will be a manual process. While all the data is currently being collected by Caltrans, it is all being collected on individuals forms. The DLAEs will have to manually input the data, probably in LP2000. Once it is input to LP2000, DLA staff will have to identify which projects have been authorized for construction. Once the construction authorizations are identified, then the DLA will have to compile the requested data and send it to FHWA. FHWA is requesting that the data be provided on monthly basis.

## **Long-term Data Collection**

The Data Subcommittee performed a qualitative analysis of possible long-term data collection options. The mechanism for collecting and distributing the data is very dependent on how Caltrans chooses to manage the overall Federal-aid program over the long-term. Caltrans is considering the development of a new system called California Transportation Infrastructure Funding System (CTIFS). CTIFS would combine, into one system, the functionalities of CTIPS, LP2000 and FADS. Additionally, Caltrans is also investigating the use of the electronic system AASTHOWare for the collection of the disadvantaged business enterprise data.

Four options were considered for the long-term data collection: LP2000; LA-ODIS/CRIS; AASTHOWare; and a new proprietary system (i.e. CTIFS). The qualitative analysis of the pros and cons of each of the options is summarized in Figure 7. The options are included in the matrix lists by level of complexity of

implementation; modifying the existing LP2000 system would be the least complex, and developing a new proprietary system would be the most complex.

**Figure 1**  
**Exhibit 7-B: Field Review Form Excerpt**  
**Anticipated Advertisement Date**

10. SCHEDULES: PROPOSED ADVERTISEMENT DATE \_\_\_\_\_  
 Other critical dates: \_\_\_\_\_
11. PROJECT MANAGER'S CONCURRENCE \_\_\_\_\_

**Figure 2**  
**Exhibit 3-D: Request for Authorization to Proceed with Construction Excerpt**  
**Anticipated Contract Award Date**

DBE Contract Goal Methodology Form (Exhibit 9-D)

- Anticipated Award Date \_\_\_\_\_
- Completed Exhibit 9-D *DBE Contract Goal Methodology* and the DBE goal is \_\_\_\_\_
- The DBE goal is 0% because there are no subcontracting opportunities for DBE participation. Documentation verifying this determination is attached to this exhibit, on file with the local agency and has been approved by the DLAE.

**Figure 3**  
**Exhibit 3-E: Request for Authorization to Proceed Data Sheet Excerpt**  
**Anticipated Completion Date**

INITIAL AUTHORIZATION & ESTIMATED COMPLETION DATES

<u>PHASE OF WORK</u>	<u>INITIAL FEDERAL AUTHORIZATION DATE</u>	<u>ESTIMATED COMPLETION DATE</u>
PE	_____	_____
RW	_____	_____
CON	_____	_____

**Figure 4**  
**Recommended Revisions to Project Schedule Information**

<b>Anticipated Project Schedule</b>	<b>Month/Year</b>
PE Authorization	_____
Consultant Contract Award	_____
ROW Authorization	_____
Consultant Contract Award	_____
Construction Authorization	_____
Consultant Contract Award	_____
Construction Contract Advertisement	_____
Construction Contract Award	_____
Construction Contract Acceptance	_____
Period of Performance End Date	_____
Project Agreement End Date	_____

**Figure 5**  
**Exhibit 17-A: Federal Report of Expenditures Excerpt**  
**Actual Construction Milestone Dates**

Contract Chronology

1.	Bids Opened	1/1/2015
2.	Contract Approved by local agency	1/2/2015
3.	First chargeable working day	1/3/2015
4.	Contract Time (Working Days)	1/4/2015
5.	Unworkable Days - weather	2/1/2015
6.	Time Extensions - CCOs	3/1/2015
7.	Time Extensions - other	4/1/2015
8.	Number of working days suspended	5/1/2015
9.	Extended Date of Completion	6/1/2015
10.	Date work accepted by Resident Engineer	7/1/2015
11.	Liquidated damage days charged (calendar days)	8/1/2015
12.	Date accepted by County Supervisors	9/1/2015

**Figure 6**  
**Exhibit 15-L: Federal Report of Expenditures Excerpt**  
**Actual Construction Award Date**

Date of award ..... \_\_\_\_\_

**Figure 7**  
**Long-Term Construction Data Collection Options**

<b>Option</b>	<b>Pros</b>	<b>Cons</b>
<b>LP2000</b>	<ul style="list-style-type: none"> <li>• uses existing system</li> <li>• contains fields for data to be collected</li> </ul>	<ul style="list-style-type: none"> <li>• only accessible for/by Caltrans</li> <li>• information will have to be exported</li> <li>• data will have to be input manually</li> <li>• contains so many fields &amp; other fields could be distracting</li> </ul>
<b>CRIS/LA-ODIS</b>	<ul style="list-style-type: none"> <li>• uses existing system</li> <li>• agencies are familiar with the system</li> <li>• as currently formatted, it provides all data of interest</li> <li>• accessible to local agencies via the internet</li> </ul>	<ul style="list-style-type: none"> <li>• system is currently limited to specific programs of projects</li> <li>• limited system accessibility</li> <li>• does not provide an incentive for data to be kept up-to-date</li> <li>• only accessible by Caltrans and local agencies</li> </ul>
<b>AASHTOWARE</b>	<ul style="list-style-type: none"> <li>• system may be used by Caltrans to collect realtime DBE data</li> </ul>	<ul style="list-style-type: none"> <li>• Caltrans is still assessing the possibility of using this software</li> <li>• it may not currently contain fields for desired data</li> <li>• will take time to implement</li> <li>• probably only accessible by Caltrans and local agencies</li> </ul>
<b>NEW PROPRIETARY SYSTEM (i.e. CTIFS)</b>	<ul style="list-style-type: none"> <li>• system could be developed to meet all current needs</li> <li>• system could be developed with internet accessibility for all interested parties</li> <li>• system could be developed to streamline submittal process</li> </ul>	<ul style="list-style-type: none"> <li>• will take significant resources to develop</li> <li>• could be developed to have open access to project informat</li> </ul>

