

## Memorandum

*Serious drought.  
Help save water!*

**To:** CLARK PAULSEN, CHIEF  
Division of Accounting

**Date:** September 30, 2016

**File:** P3010-0626

**From:** WILLIAM E. LEWIS  
Assistant Director  
Audits and Investigations



**Subject:** FINAL AUDIT REPORT OF PROJECT DATA IN ADVANTAGE

Attached is Audits and Investigations' (A&I's) final audit report on Project Data in Advantage. Your response has been included as part of our final report. This report is intended for your information and Department Management.

As a matter of public record, this report and the status reports will be posted on A&I's website.

We thank you and your staff for their assistance provided during this audit. If you have any questions or need additional information, please contact Zilan Chen, Chief, Internal Audits, at (916) 323-7877, or me at (916) 323-7122.

Attachment

c: Malcolm Dougherty, Director  
Kome Ajise, Chief Deputy Director  
Zilan Chen, , Chief, Internal, Audits and Investigations  
Nicole Felcher, Audit Coordinator, Division of Accounting

# Division of Accounting Advantage Project Data Audit



Audit Report  
September 2016

## PREPARED BY:

California Department of Transportation

Audits and Investigations – MS 2

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## AUDIT TEAM

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P3010-0626

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# SUMMARY, OBJECTIVES, SCOPE, METHODOLOGY, BACKGROUND, AND CONCLUSION

## SUMMARY

Audits and Investigations (A&I) has completed an audit of the California Department of Transportation's (Caltrans) AMS Advantage (Advantage) and InfoAdvantage system data. The purpose of the audit was to evaluate the accuracy of project cost data and verify that costs charged to and reimbursed by federal and local partners are correct.

Our audit disclosed that Caltrans generally has adequate controls and procedures in Advantage to properly capture project costs charged to and reimbursed by federal and local partners. However, we identified areas for improvement in the preparation, review and workflow of Cost Accounting Setup (Setup) and Cost Accounting Modification (Modification) documents used to create and modify project information.

## OBJECTIVES

The audit was performed in accordance with the International Standards for the Professional Practice of Internal Auditing. The objectives of the audit were to:

- Evaluate if projects are properly set up in Advantage.
- Determine whether Advantage properly captures project costs.
- Determine that project costs charged to and reimbursed by federal and local partners are correct.

The audit focused on project data from July 1, 2012, to July 31, 2015. We completed our field work on April 14, 2016. Changes after this date were not considered, and accordingly, our conclusion does not pertain to changes arising after April 14, 2016.

## SCOPE & METHODOLOGY

The scope of our review included staff interviews in the Divisions of Accounting, Budgets, Planning, and Mass Transportation and Rail to obtain an understanding of the project related processes and procedures. We also surveyed district project control officers, sampled seven projects that received local or federal funding, performed tests of transactions entered into Advantage, reviewed records, and performed other analytical procedures and tests as we considered necessary.

## BACKGROUND

On July 1, 2010, Caltrans implemented a new financial management system, the Enterprise Infrastructure Financial System (E-FIS), to support a range of business functions. E-FIS includes

the Advantage system. Advantage is a commercial, modified, off-the-shelf product that serves as Caltrans' core financial system. The web-based application is an integrated system which includes the following business functions:

- Budgets
- General Accounting
- Procurement
- Accounts Payable
- Accounts Receivable
- Project and Cost Accounting

We focused the audit on the Project and Cost Accounting business functions. Caltrans is a project-oriented department with a fundamental need to capture and accumulate costs by project. The Project and Cost Accounting module incorporates the creation and maintenance of Caltrans projects in the financial system. This is primarily accomplished using the Setup and Modification documents. The Setup documents are part of the mechanism in Advantage used for establishing 10-digit project numbers and initial details for new projects. Modification documents are used whenever there are changes to existing project information. Project details including project location, contacts, funding and coding are recorded for purposes of recording project costs, billing an outside entity to recover the costs incurred, and ensuring proper project cost accounting.

The integrated modules eliminate manual processes wherever possible, use seamless end-to-end transactional flows with workflow approval processes, facilitate attaching supporting documents to transaction documents, and provide access to consistent, accurate, and real-time information across the financial system.

There are also other systems that interface with Advantage that provide financial data. Among these interfaces are Staff Central, which is the source for labor reporting information, and the Integrated Maintenance Management System that passes maintenance information to the financial reporting system. Additional systems include the Division of Local Assistance's LP2000 for tracking state and federal funded local transportation programs; and the Division of Construction's Contract Administration System which manages construction payments, construction progress, and contract change orders.

In addition, E-FIS has a reporting tool, InfoAdvantage. InfoAdvantage provides managerial and operational project data and has the capability to enable users to customize and generate reports.

The Division of Accounting is responsible for providing guidelines and training to all users including the 12 district offices. They are also responsible for ensuring the financial system reflects current and proper charging practices.

Caltrans receives funding from federal, state, and local governments. Each year, funds are appropriated to programs on a reimbursement basis. Federal and local partners reimburse Caltrans for their share of costs incurred on approved, programmed projects. Caltrans bills the federal or local share of the project costs to these partners as the expenditures are incurred throughout a

project life cycle based on data obtained from Advantage. Therefore, it is important that project funding amounts and incurred expenditures are accurate.

In 2013, A&I issued a report based on a review of the E-FIS project data process flow, including conversion data and project setup. This report identified adequate policies, procedures and internal controls over the project setup and modification process. The audit also found project information and financial data were accurately transferred from the Transportation Accounting Management System to E-FIS.

## **CONCLUSION**

Our audit disclosed that Caltrans generally has adequate controls and procedures in Advantage to properly capture project costs charged to and reimbursed by federal and local partners. However, we identified areas for improvement in the preparation, review, and workflow of Setup and Modification documents used to create and modify project information.

This report is intended as information for Caltrans management. The report is a matter for public record and will be placed on Caltrans' website, which can be viewed at [www.dot.ca.gov/hq/audits/reports\\_issued.html](http://www.dot.ca.gov/hq/audits/reports_issued.html).

## **VIEWS OF RESPONSIBLE OFFICIALS**

We requested and received a written response to our finding from the Chief of the Division of Accounting. The response is included as Attachment I to this report.

We appreciate and thank the Division of Accounting staff who worked with the audit team and look forward to working with them in the future, as necessary.



**WILLIAM E. LEWIS, CPA**  
**Assistant Director**  
**Audits and Investigations**

**September 12, 2016**

## FINDINGS AND RECOMMENDATIONS

### **FINDING 1 – Areas for Improvement in Cost Accounting Setup and Cost Accounting Modification**

As a project-oriented department, California Department of Transportation (Caltrans) captures and accumulates costs by project numbers. AMS Advantage (Advantage) identifies projects through a 10-digit system-generated number established on a Cost Accounting Setup (Setup) document. The Cost Accounting Modification (Modification) document records changes to existing project information within Advantage, which includes updates or changes to phases and funding. Each district's project control officer is responsible for creating a Setup document to reserve an identification number for each new project, or a Modification document to record changes to existing projects. Under the established workflow, the Setup and Modification documents are routed to individual units in the district or program for additional information, review, and approval. Final review and approval of Setup and Modification documents is the responsibility of the Division of Accounting's Project Control Unit.

Through our review, we found that districts and programs are adhering to established project set-up procedures. However, we identified the following areas for improvement in the preparation, review, and workflow of Setup and Modification documents used to create and modify project information.

#### Oversight of Data Accuracy

We found several Caltrans division staff reviewed certain parts of Setup and Modification documents; however, there are limited controls to ensure the project information is entered correctly. Although the Project Control Unit provides a final review and approval of these documents, this review is limited to determining whether required data fields in the documents are populated and the information inputted is compatible with project requirements. Review of the Project Control Unit's processes and discussion with staff disclosed that there is no assessment of the accuracy of the information in the fields. If data is missing, the Project Control Unit sends the Setup or Modification document back to the preparer in the district or program for correction. According to the Project Control Unit's staff, ensuring the accuracy of the project data is the responsibility of the district or programs.

Our audit also revealed the verification and oversight of data accuracy for the Setup and Modification documents in Advantage is difficult due to limitations in Advantage and InfoAdvantage. For instance, we found the only way to review a Setup or Modification document in Advantage is to click through several screens for each document, resulting in a lengthy time consuming review process and the inability to view all required project fields at one time. Initially, we also found that InfoAdvantage reports only provide the header information and users cannot access the supporting details within the Setup or Modification documents to verify the accuracy of the information being reported. Subsequent to the exit conference, the Division of Accounting

provided us with a detailed one-page InfoAdvantage project report as an alternative support to the header information.

### System Workflow

The Division of Accounting's Security and Workflow Section is responsible for ensuring Setup and Modification documents are correctly routed through the system to authorized, responsible staff. Once the Setup and Modification documents are approved, they are forwarded to the Project Control Unit for final review and approval. We found that the workflow process established by the Security and Workflow Section provides good internal controls. It ensures segregation of duties and approval of projects by authorized, responsible approvers during project setup and modification.

However, during the audit, we noted that not all Caltrans divisions use the workflow process when setting up and modifying projects. Some divisions prepare project documents and submit them directly to the Project Control Unit without a secondary level of review. According to Division of Accounting staff, participation in the workflow process is not mandatory. Without an intermediary or secondary level of review, the risk of inaccurate project data is increased.

Government Code section 13402 makes state agencies responsible for the establishment and maintenance of a system or systems of internal accounting, administrative control, and effective, independent and objective ongoing monitoring of their agencies through documenting and communicating system requirements to employees.

In addition, Government Code section 13403 states that all levels of management must provide active, ongoing oversight and monitoring processes for the prevention and early detection of fraud and errors in program administration, and must routinely monitor, evaluate, and improve internal controls when necessary. Internal administrative controls comprise the methods and procedures that address operational efficiency and adherence to management policies, and include "... Government Code 13403 further requires that the elements of a satisfactory system of internal and administrative controls include: a plan of organization that provides appropriate segregation of duties; and a system of authorization and recordkeeping procedures adequate to provide effective accounting control over assets, liabilities, revenues, and expenditures.

### **RECOMMENDATION**

We recommend that the Division of Accounting's management:

- Add set up and modification data fields into Advantage to ensure that multiple Setup and Modification document data can be viewed on one screen. Alternatively, the Division of Accounting should consider using the one-page project report available in InfoAdvantage to view project information.
- Encourage and facilitate the participation of all programs in the workflow process administered by the Security Workflow Section to ensure adequate review and approval of Setup and Modification.

**DIVISION OF ACCOUNTING'S RESPONSE**

1. The Division of Accounting has considered Advantage modification alternatives but found that the cost of re-programming would significantly exceed the benefit to be gained and would complicate the future upgrade and maintenance of the system. A useful alternative is the one-page detailed project data report provided by InfoAdvantage.
2. The Division of Accounting relies on the Programs to evaluate the risk and complexity of the project set-up and modification processes for their program. Including additional workflow steps where there is no pattern of errors would be inefficient.

**ANALYSIS OF DIVISION OF ACCOUNTING'S RESPONSE**

1. We analyzed the Division of Accounting's response and the one-page InfoAdvantage project report that they provided. This report summarizes information on Setup and Modification documents but was not made available to us until after the exit conference. Based on our analysis, we modified our finding and recommendation.
2. Although the Division of Accounting has allowed Programs to identify and assess their risk, the lack of additional approvals in the work flow process poses a risk that coding is not reviewed by another division or program.

**ATTACHMENT I**

**Audit Response from Division of Accounting**

## Memorandum

*Serious drought.  
Help save water!*

To: WILLIAM E. LEWIS  
Assistant Director  
Audits and Investigation

Date: September 1, 2016

From: CLARK PAULSEN   
Chief  
Division of Accounting

Subject: **Division of Accounting Initial Response – Advantage Project Data Audit (P3010-0626)**

The attached worksheet provides the Division of Accounting's response to the finding noted in the draft report. In addition to our response to the recommendations, we wanted to address the comment in the audit report stating that InfoAdvantage project data reports only contain header information. InfoAdvantage does have a more detailed project data report. A sample of this report is attached.

Should you have any questions regarding this response, please contact Katrina Whitmore at (916) 227-9230.

c: Norma Ortega, Chief Financial Officer  
Zilan Chen, Chief Internal Audits, Audits and Investigations  
Douglas Gibson, Manager, Internal Control Audits, Audits and Investigations  
Grace Kong, Chief, Office of Project Accounting, Division of Accounting  
Frank Garcia, Chief, Office of Receivable, Systems, and Administration, Division of Accounting  
Katrina Whitmore, Chief, HQ Project Control & Final Vouchering Branch, Division of Accounting  
Twwana Owens, Chief, Accounts Receivable Branch, Division of Accounting  
Nicole Felcher, Audit Coordinator, Division of Accounting

## Project Report

<b>Project Code</b>	0517000002
<b>Phase Code</b>	K
<b>Major Project</b>	HWYS
<b>Project Name</b>	Nojoqui Rehab
<b>Project Short Name</b>	05-1H860
<b>Project Active Flag</b>	Yes
<b>Project Description</b>	05-SB-101-46.2/R52.5. In Santa Barbara County Near Buellton From 1.0 miles South of Gaviota Tunnel
<b>Project Contact Code</b>	168
<b>County</b>	5951
<b>Station</b>	
<b>Mile Post Start</b>	46.2000
<b>Mile Post End</b>	52.5000
<b>Corridor</b>	101
<b>Board Entity</b>	
<b>Legislative Entity</b>	
<b>Work Description</b>	to 2.2 miles South of Nojoqui Creek Bridge No. 51-0020. Pavement Preservation
<b>Phase Effective Begin Date</b>	
<b>Funding Profile Code</b>	L02089
<b>Funding Priority Code</b>	10
<b>BFY</b>	2017
<b>Contributor ID</b>	CALTRANS
<b>Reimbursement Percent</b>	100.00
<b>Fund</b>	0042
<b>Appropriation</b>	17001
<b>PEC</b>	4050201
<b>PECT</b>	120
<b>Task</b>	0430
<b>Sub-Task</b>	0000
<b>Federal Catalog Agency</b>	
<b>Federal Appropriation Number</b>	
<b>Project Agreement No</b>	
<b>External Account Number</b>	
<b>Letter of Credit Number</b>	
<b>Demo ID</b>	

Audits and Investigations (A&I) - Response to Draft Report				
Audit Name: <u>Advantage Project Data Audit</u>		Auditee: <u>Division of Accounting</u>		Audit No. <u>P3010-0626</u>
A&I Audit Recommendation	Auditee Response to Draft Report	Estimated Completion Date	Staff Responsible	A&I Analysis
<b>Audit Report Finding # 1</b>				
<b>Areas for Improvement in Cost Accounting Setup and Cost Accounting Modification</b>				
<b>Recommendations to Division of Accounting</b>				
<ul style="list-style-type: none"> <li>• Add set up and modification data fields into Advantage to ensure that multiple Setup and Modification document data can be viewed on one screen.</li> </ul>	<p>A modification to Advantage for the recommended purpose has been previously evaluated by the Division of Accounting and the Project Control Council (made up of representatives from Headquarters and Districts involved in project set up and modification). The conclusion of the alternatives considered was that the cost of re-programming Advantage for this purpose would significantly exceed the benefit to be gained and would complicate the future upgrade and maintenance of the system. This is due to the Advantage structure of multiple tables and the volume of data involved as a result of the Department's complex cost accounting structure. Furthermore, from a practical standpoint even if such a change were feasible, the volume of project data to be displayed would not fit on one screen.</p>	N/A		
<ul style="list-style-type: none"> <li>• Establish procedures to ensure the Project Control Unit or an equivalent unit reviews Setup and Modification document fields for completeness.</li> </ul>	<p>Procedures currently exist and were in existence during the audit period for the Project Control Unit to review Setup and Modification fields for completeness.</p>	N/A		
<ul style="list-style-type: none"> <li>• Encourage and facilitate the participation of all programs in the workflow process administered by the Security Workflow Section to ensure adequate review and approval of Setup and Modification.</li> </ul>	<p>Each program evaluates the risk and complexity of the Project Set-up and Modification processes for their program. Based on their judgment, they have concluded whether existing approval processes are effective. Adding additional workflow steps where there is not a pattern of errors would be inefficient.</p>	N/A		