



Design-Build Contracts Change Orders Audit

Audit Period: November 2018 through September 2023

June 2025

Report Number: 24-03
Prepared by the Audit Office

EXECUTIVE SUMMARY

The Audit Office of the California High-Speed Rail Authority (Authority) performed an audit to evaluate the Authority's design-build contracts change order process.

The objective of the audit was to determine compliance to the Authority's change order process, policies, procedures, design-build contracts, and alignment to best practices.

The scope of the engagement was limited to all change orders as of November 2018, through September 2023. Our audit included examining policies, procedures, other relevant criteria, interviewing personnel, and conducting tests necessary to complete the objectives.

Our audit of the design-build contracts change order process found that there were documented processes and policies in place and the consultants and contractors generally complied with procedures, policies, processes, and best practices. Additionally, the level of documentation has improved since the implementation of the Change Control Committee administration.

Furthermore, the audit recognizes the overall efforts by the Project and Construction Management consultants, the Change Control Committee and the assisting Program Controls Office. The personnel involved in the field level operations have extensive knowledge of change orders for their respective construction package and have an impact on the executed value of the change orders. The Audit Office also acknowledges the process improvement efforts by the Change Control Committee and the assisting Program Controls Office, as lessons learned are used to plan standardization and efficiency efforts. This includes recent adoption of changes to the processes and actively pursuing the approval of revised charter and procedures.

However, the audit found that the change order process is missing continuity between procedures, policies, and current practices. Auditors observed that the change order process is disjointed as there is a lack of cohesiveness and proper cross referencing within foundational documents. Auditors also observed that key performance indicators are not consistently being tracked, monitored, or enforced.

Auditee responded to and agreed with the recommendations from the audit and provided specific action items, estimated completion dates, and responsible individuals.

Paula Rivera

Paula Rivera, Audit Chief

June 10, 2025

Date

Audit Report

BACKGROUND

The California Legislature created the California High-Speed Rail Authority (Authority) as part of the California High-Speed Development Act of 1994, and is responsible for planning, designing, building, and operating the first high-speed rail system in the nation. The California High-Speed Rail will connect the mega-regions of the state, contribute to economic development and a cleaner environment, create jobs, and preserve agricultural and protected lands.

The high-speed rail system is being built through a series of design-build contracts in three construction packages: CP 1, CP 2-3, and CP 4. The Authority contracted with three Project and Construction Management consultants for engineering and construction oversight of the design-build contracts which includes contract monitoring, performance tracking, and reporting to the Authority. The Project and Construction Management consultants are required to facilitate each step of the change order process and will liaise between the Authority and the design-build contractor.

Change orders are implemented when there are Authority-directed changes, contractor-requested changes, changes in conditions, and/or time extensions. The Authority has written procedures and a manual for guidance on the change order process. The process begins with the identification of a change, then the submittal of a change order proposal from the design-build contractor, negotiation of the change, and then the execution of the change order. The change will go through the Project and Construction Management consultant and various Authority committees for review, validation, and/or approval, depending on the value and the impact of the change program-wide.

Changes that are greater than \$1 million will go to the Change Control Committee and changes greater than \$20 million will go to the Business Oversight Committee. As of January 2019, the Authority fully implemented the California State Auditor recommendation in their November 2018 to ensure that change order costs are necessary and appropriate, and in accordance with guidance and estimates provided by oversight firms. However, it was noted that because the corrective action applies only to change orders reviewed by the Business Oversight Committee, which does not review all change orders, ongoing monitoring is critical. The Change Control Committee, implemented in 2021, provides another level of monitoring at a lower threshold amount.

The change order process includes merit assessments/reviews, independent costs analysis of change order proposals, and negotiation discussions for both the Project and Construction Management and the Change Control Committee. The Program

Management Oversight Branch of the Project Controls Office is part of the Change Control Committee and provides subject matter experts to perform independent cost estimates to the committee. Prior to the execution of a change order, the funding source is identified and funds are encumbered. Additionally, the Project and Construction Management consultants are responsible to produce and maintain required change order documentation at all stages of the process, i.e. identification, submittal, negotiation, execution, and provide information to the Authority and its committees when appropriate.

In August 2024, the Audit Office issued an interim preliminary memo to the Authority Chief Operating Officer, Chief Executive Officer, Assistant Chief Operating Officer, Change Control Committee Chair, and Director of Infrastructure Delivery. The Change Control Committee Chair and Manager have been working to implement the audit recommendations and currently the revised Change Control Committee Charter and Change Control Committee Procedure is pending Authority approval.

The delegation of authority for change orders was changed in October 2024. As a result, the Chief Executive Officer created an unofficial sub-committee to review change orders with the Change Control Committee. Currently, change orders of all amounts are reviewed and the sub-committee provides a second look after the Change Control Committee's review of three key phases (merit assessment, negotiation strategy, and after negotiation with final documentation).

OBJECTIVES, SCOPE, and METHODOLOGY

The objectives of the audit were to determine compliance to the Authority's change order process, policies, procedures, design-build contracts, and alignment to best practices.

The scope of the audit was limited to all change orders as of November 2018, through September 2023. Auditors examined policies, procedures, and other relevant criteria, interviewed personnel, and conducted tests necessary to complete the objective. Auditors tested 9% of CP 1, 9% of CP 2-3, and 15% of CP 4 potential change orders for design-build contractor and Project and Construction Management consultant compliance. Auditors tested 15% of all executed change orders for funding identification and encumbrance verification and processing timeframes. Auditors also tested 100% of available independent cost estimates performed by the Project and Construction Management consultants and the Program Management Oversight Branch. Lastly, auditors tested 23% of merit reviews from the Change Control Committee.

The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing. The results of this audit were discussed with the Program Operations Chief, Director of Infrastructure Delivery, Deputy Director of Project Controls, and Change Control Committee Chair on January 29, 2025. The

Construction Office provided a response to this audit, which is included as an attachment to this report. The final report is intended as information for Authority management's use; however, this report is a public document, and its distribution is not limited. The Audit Office appreciates the Authority's time and cooperation throughout the audit and looks forward to assisting the Construction Office as needed.

CONCLUSION

Our audit of the Design-Build Contracts change order process found that there were documented processes and policies in place and the design-build contractors and oversight consultants generally complied with the Authority's change order process, policies, procedures, design-build contracts. The personnel involved in the field level operations have extensive knowledge of change orders for their respective construction package and have an impact on the executed value of the change orders; from our testing there was an average reduction of approximately 23% from proposed to executed change order across all three construction packages. The Audit Office also acknowledges the process improvement efforts by the Change Control Committee and the assisting Program Controls Office, as lessons learned are used to plan standardization and efficiency efforts. This includes recent adoption of changes to the processes and actively pursuing the approval of revised charter and procedures.

However, as identified in the issue and observations below the change order process is missing continuity between procedures, policies, and current practices. Additionally, auditors observed that the change order process is disjointed and key performance indicators are not consistently being tracked, monitored, or enforced.

Our findings are detailed below.

Issue 1: Change order process is missing continuity between procedures, policies, and current practices

Federal Standard for Internal Controls¹ states that management documents, in policies, internal control responsibilities of the organization and each unit documents policies at the appropriate level of detail, and may define further through day-to-day procedures, to allow management to effectively monitor the control activity. Having a stable framework and clear communication will maintain process integrity from sudden disruptions or changes, such as staff turnover, organizational change, and system updates or overhaul and ensures all parties understand the policies and procedures and consistently implements them. The change order process has documented written policies and procedures in place, however, the process is missing continuity which in turn affects the

¹ GAO Standards for Internal Control in the Federal Government (Green Book) Principles 12.02 -12.04

reporting, effectiveness of the process, and management's monitoring.

Recommendation:

The Construction Office should coordinate with the Program Controls Office and the Change Control Committee to review all change order policies, procedures, pending revisions, and current general practices to determine proper alignment. In addition, the revised Change Control Committee Charter and Change Control Committee Procedure (PROC-1046) should be finalized and approved.

Response:

"The Construction Office will coordinate with the Project Controls Office and the Contract Administration Office to review all change order policies, procedures, pending revisions, and current general practices (including continuity of language and naming/numbering conventions) to ensure proper alignment and cross referencing. In addition, as noted in our response to Observation 2 below, a revised Change Control Committee Charter and Change Control Committee Procedure (PROC-1046) will be finalized and published. It is estimated the review and issuance of revised policies/procedures will be completed by the end of the 3rd quarter of 2025 as reflected in the table [Attachment] in our response to Observation 2. The Director of Infrastructure Delivery will be the person responsible for this effort."

Analysis:

We acknowledge and agree with the corrective action as described, and we recognize the commitment to addressing the identified control deficiency.

Observation 1: Key Performance Indicators are unmonitored and unenforced

Federal Standard for Internal Controls² states management defines objective in measurable terms so that performance toward achieving those objectives can be assessed. Key performance indicators are established through chronological timelines in the Change Order Process Timeline section of the Design-Build Contract Change Order Procedure (PROC-PRCN-05). However, the Authority and its consultant teams are not monitoring, tracking, or enforcing the timelines as established. Management may not be able to assess performance toward achieving objectives.

² GAO Standards for Internal Control in the Federal Government (Green Book) Principle 6.04.

Recommendation:

The Construction Office should reassess the key performance indicators with current practices and monitor and implement efforts for compliance. Furthermore, tracking of consistent data points should be considered in continuity efforts.

Response:

“The Construction Office will coordinate with the Project Controls Office and the Contract Administration Office to reassess the key performance indicators (KPI’s) with current practices and establish a KPI reporting structure and frequency. This will be performed in conjunction with the updates to the policies and procedures as outlined in our response to Observation 2, and in accordance with the schedule outlined therein. The KPI reporting structure and frequency will be outlined in these updated processes/procedures. The Director of Infrastructure Delivery will be the person responsible for this effort.”

Analysis:

We acknowledge and agree with the corrective action as described, and we recognize the commitment to addressing the identified control deficiency.

Observation 2: Disjointed Change Order Process in Comparison to Best Practices established by Caltrans

The Authority change order process generally follows the best practice as established by the Caltrans Construction Manual, Chapter 5 Construction Administration, section 3 Change Orders. However, the Authority’s design build change order foundational documents; change order process manuals, procedures, workflows, authoritative charters, and documents lack cohesiveness and proper cross referencing which makes the change order process disjointed. The fragmented nature of the change order process may result in ineffective management of change orders, similar to the aforementioned issue of lack of continuity.

Recommendation:

The Construction Office should review foundational change order criteria documents and determine appropriate areas for potential revisions to have referencing and alignment to provide better cohesion as established in best practices.

Response:

“The Construction Office will coordinate with the Project Controls Office and the Contract Administration Office and review foundational change documents (change order process manuals, procedures, workflows, authoritative charters) and update the documents for proper alignment with current general practices in place.”

Refer to Response to Draft Report in Attachment for detailed corrective action items including estimated completion date and responsible individuals.

Analysis:

We acknowledge and agree with the corrective action as described, and we recognize the commitment to addressing the identified control deficiency.



CALIFORNIA High-Speed Rail Authority

Memorandum

DATE: June 2, 2025

TO: Paula Rivera, Chief Auditor

FROM: Mark Tollefson, Chief of Staff

CC: Ian Choudri, Chief Executive Officer
Benjamin Ruiz, Director of Infrastructure Delivery

SUBJECT: Response to Draft Report – Design-Build Contract Change Orders

Thank you for the opportunity to provide a response to the draft Design-Build Contract Change Orders Audit report dated May 2025 (Report Number: 24-03).

We appreciate that the report acknowledges the improvements made to the change order process since implementation of the Change Control Committee and that process improvements continue through lessons learned and the Authority's commitment to continuous improvement. The Audit Office acknowledges that there are documented process and policies in place for the change order process and that the staff involved in implementing these processes have extensive knowledge of the change orders and generally comply with the procedures, policies, and processes that are in place, including best practices.

However, the audit found that the change order process is missing continuity between procedures, policies, and current practices. Auditors observed that the change order process is disjointed as there is a lack of cohesiveness and proper cross referencing within foundational documents. Auditors also observed that key performance indicators are not consistently being tracked, monitored, or enforced.

As such, below are the Construction Office responses to the Auditor's findings:

Issue 1: Change order process is missing continuity between procedures, policies, and current practices

Response: The Construction Office will coordinate with the Project Controls Office and the Contract Administration Office to review all change order policies, procedures, pending revisions, and current general practices (including continuity of language and naming/numbering conventions) to ensure proper alignment and cross referencing. In addition, as noted in our response to Observation 2 below, a revised Change Control Committee Charter and Change Control Committee Procedure (PROC-1046) will be finalized and published. It is

estimated the review and issuance of revised policies/procedures will be completed by the end of the 3rd quarter of 2025 as reflected in the table in our response to Observation 2. The Director of Infrastructure Delivery will be the person responsible for this effort.

Observation 1: Key Performance Indicators are unmonitored and unenforced

Response: The Construction Office will coordinate with the Project Controls Office and the Contract Administration Office to reassess the key performance indicators (KPI's) with current practices and establish a KPI reporting structure and frequency. This will be performed in conjunction with the updates to the policies and procedures as outlined in our response to Observation 2, and in accordance with the schedule outlined therein. The KPI reporting structure and frequency will be outlined in these updated processes/procedures. The Director of Infrastructure Delivery will be the person responsible for this effort.

Observation 2: Disjointed Change Order Process in Comparison to Best Practices established by Caltrans

Response: The Construction Office will coordinate with the Project Controls Office and the Contract Administration Office and review foundational change documents (change order process manuals, procedures, workflows, authoritative charters) and update the documents for proper alignment with current general practices in place. Items to be reviewed and updated include the following:

Document Name	Action required	Estimated Completion Date	Responsible Individual
PROC-PRCN-05 Rev2 Design-Build Contract Change Order Procedure	Update	September 30, 2025	Director of Infrastructure Delivery
PROC-1046 Rev0 Change Control Committee Procedure	Finalize draft and publish	September 30, 2025	Director of Infrastructure Delivery
Change Control Committee Charter Rev1	Update	August 31, 2025	Director of Infrastructure Delivery
Project and Construction Management (PCM)	Update Section 11	August 31, 2025	Director of Infrastructure Delivery

Manual Rev3 section 11 Changes and Claims			
PLAN-PD-02 Rev0 Program Change Management Plan	Update <u>pertinent sections</u>	August 31, 2025	Deputy Director of Project Controls
Program Controls Manual [Manual-1029 Rev0]	Update <u>pertinent sections</u> . Need to “establish procedures, for the stated \$20 million threshold, for independent cost estimate validation performed by the Estimating Unit in the Program Management Oversight Branch.”	August 31, 2025	Deputy Director of Project Controls

If you have any questions or would like additional information, please do not hesitate to contact me at 916-284-2228 or Mark.Tollefson@hsr.ca.gov.