

Oversight Controls and Contract Compliance Related to the OC Streetcar Design and Construction Management

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July 13, 2022



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Conclusion

The Internal Audit Department (Internal Audit) of the Orange County Transportation Authority (OCTA) has completed an audit of oversight, procurement, invoice, and project reporting controls for compliance with policies, procedures, and contracts related to the design and construction management of the OC Streetcar project. Based on the audit, procurements were handled in compliance with procedures, required status meetings with the Federal Transit Administration (FTA) are conducted, and quarterly project reports to the Board of Directors (Board) are provided. However, recommendations have been made to reconsider the use of a Schedule of Values in firm-fixed price contracts, to recover identified overbillings by consultants, to resume preparation of internal project status reports on a monthly basis, and to enhance controls over contract amendments and monitoring of consultant insurance requirements.

The initial scope of the audit included the OC Streetcar construction contract; however, this was excluded at legal counsel direction, and consistent with government auditing standards that require consideration of interference with ongoing legal proceedings.

Background

OC Streetcar Project

OCTA is implementing a modern streetcar running between the Santa Ana Regional Transportation Center in the City of Santa Ana and the intersection of Harbor Boulevard and Westminster Avenue in the City of Garden Grove, in cooperation with these two cities. The OC Streetcar project, with a 4.15-mile route, is being implemented as part of the Measure M2 (M2) Project S – Transit Extensions to Metrolink. The project includes ten streetcar stops in each direction, comprised of four shared center platforms and six side platforms in each direction. Each stop includes a canopy, benches, leaning rails, trash cans, lighting, changeable message signs, video cameras, a public address system, and ticket vending machines, which will be procured separately. The project includes a maintenance and storage facility that accommodates up to 15 modern streetcar vehicles, as well as all necessary administration, operations, vehicle maintenance, parts storage, and maintenance-of-way needs.

The project budget at 30 percent design was established at \$309,013,000, increased to \$310,444,000 at 60 percent design, and increased to \$424,361,000 to reflect the award of the construction contract. The baseline to complete construction was set for April 2020, revised to July 2020, revised to August 2021, and revised to December 2021. On December 13, 2021, the Board approved a revised FTA Full Funding Grant Agreement budget of \$509.54 million, with staff determining March 2024 to be an achievable revenue service date.

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Contracts

Effective February 1, 2016, OCTA entered into Agreement No. C-5-3337 with HNTB Corporation (HNTB) to provide design consultant services for Plans, Specification, and Estimates (PS&E) for the OC Streetcar project. The contract was set up as a firm-fixed price contract, with a price of \$16,434,022, and term through December 31, 2019. By Amendment 11, the term had been extended through September 30, 2022, and the maximum obligation had increased to \$26,083,841.

Effective December 6, 2016, OCTA entered into Agreement No. C-6-0926 with PGH Wong Engineering, Inc., to provide construction management (CM) services in support of the OC Streetcar project. The contract was set up as a time-and-expense contract, with a maximum obligation of \$10,752,136 and term through June 30, 2021. By Amendment 14, the term had been extended through November 30, 2024, and the maximum obligation had increased to \$35,082,570.

Effective November 19, 2018, OCTA entered into Agreement No. C-7-1904 with Walsh Construction Company II, LLC, for the construction of the OC Streetcar project.

Procurements and amendments are governed by the Contracts Administration and Materials Management (CAMM) Department's procurement policies and procedures, and CAMM maintains evidence of compliance in the agreement files.

Project-Related Controls

The Regional Rail Program Management Procedures present project management procedures to manage projects and provide guidance on the preparation and updating of a risk register that identifies possible risks that may impact the project including design, construction, start-up, operations, and revenue service.

Meetings with the FTA and the FTA's consultant were held on a quarterly basis prior to September 2021, at which point meetings began to be held monthly.

Beginning 2019, quarterly updates on the OC Streetcar project are provided to the Board. The OC Streetcar project is also included in quarterly M2 progress reports and quarterly progress reports on the Capital Action Plan performance metrics provided to the Board.

Invoice Review

Project Controls staff reviews consultant invoices using an invoice review checklist. For the CM invoices, staff checks if the labor rates are consistent with the contract, invoiced labor hours are adequately supported, and other direct costs (ODC) are based on contract rate schedules or adequately supported. For the design invoices, staff prepares the

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account coding and checks if the total contract value is correct, and the invoice is within the maximum payment obligation. After Project Controls' review, the project manager reviews the invoices to check if labor hours or percentage completion are reasonable and work descriptions are consistent with his knowledge, approves ODCs as required by the contract, and approves the invoices. Accounts Payable reviews the invoices for proper signature authority prior to processing payment.

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Objectives, Scope, and Methodology

The <u>objectives</u> were to assess and test oversight, procurement, invoice, and project reporting controls and compliance with policies, procedures, and contracts.

According to Generally Accepted Government Auditing Standards (GAGAS), internal control is the system of processes that an entity's oversight body, management, and other personnel implemented to provide reasonable assurance that the organization will achieve its operational, reporting, and compliance objectives. The five components are control environment, risk assessment, control activities, information and communication, and monitoring.¹ The components and principles that were evaluated as part of this audit are:

Control Environment

 OCTA demonstrates a commitment to attract, develop, and retain competent individuals in alignment with objectives.

Risk Assessment

OCTA identifies risks to the achievement of its objectives across the entity and analyzes risks as a basis for determining how the risks should be managed.

Control Activities

 OCTA deploys control activities through policies that establish what is expected and procedures that put policies into action.

• Information and Communication

 OCTA obtains or generates and uses relevant, quality information to support the functioning of internal control.

Monitoring

 OCTA evaluates and communicates internal control deficiencies in a timely manner to those parties responsible for taking corrective action, including senior management and the Board, as appropriate.

The <u>methodology</u> consisted of testing compliance with selected procurement policies and procedures, confirming if a risk register was updated during the construction phase, assessing invoice review procedures and testing a judgmental sample of invoices for compliance with policies and contract provisions, reviewing reports and/or presentations for meetings with the FTA, testing a judgmental sample of Project Controls' monthly status reports, and testing the quarterly project status reporting to the Board.

The <u>scope</u> was originally designed to include contract compliance and internal controls over the design, construction management, and construction contracts. Subsequently,

¹ See U.S. Government Accountability Office publication, "Standards for Internal Control in the Federal Government," available at http://www.gao.gov/products/GAO-14-704G, for more information.

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the construction contractor initiated a lawsuit against OCTA. To avoid interference with the ongoing legal proceeding, OCTA's legal counsel advised Internal Audit to withdraw from the testing of construction contract compliance, change orders, and invoicing portions of the audit engagement. The audit scope was revised accordingly to exclude such work. The revised scope included: procurements for the design, construction, and construction management contracts, all amendments to the construction management contract distributed through February 2022, as well as amendments to the design contract distributed from November 2018 through February 2022, all invoices paid on the construction management contract through February 2022, as well as design contract invoices billed from November 2018 through invoices paid in February 2022, FTA meetings in 2021, Project Controls' monthly status reports posted from November 2020 through February 2022,; and OC Streetcar project quarterly updates to the Board for quarters beginning September 2020 and ending December 2021, M2 quarterly progress reports for quarters beginning July 2020 and ending September 2021, and quarterly Capital Action Plan performance metrics reports for quarters beginning October 2020 and ending December 2021. The scope of the testing of Project Controls' monthly status reports and quarterly reports to the Board was limited to reports not previously tested in OC Streetcar Project Management Consultant: Oversight Controls and Contract Compliance, Internal Audit Report No. 21-503, and to reporting posted or presented through February 2022. The judgmental samples of design contract amendments and invoices were selected to provide coverage during the construction phase which began in November 2018. Since the samples are non-statistical, any conclusions are limited to the sample items tested.

We conducted this performance audit in accordance with GAGAS. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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Audit Comments, Recommendations, and Management Responses

Design Contract Schedule of Values and Overbillings

The design consultant is billing for design support during construction using a Schedule of Values (SOV), which is not typical in design agreements and is inconsistent with a firm-fixed price contract for which work is billed based on percentage of completion. Prior to execution of the contract, the Scope of Work (SOW) was revised to include a provision allowing the consultant to develop a SOV at 90 percent PS&E completion. The SOV was developed and added in Amendment 8 to the contract that identified unit prices for administration, requests for information (RFI), submittals, non-conformance reports, etc.

The original firm-fixed price of the contract was \$16,434,022, and as of Amendment 11, had increased to \$26,083,841. Of the \$9,649,819 increase, \$7,091,782 relates to design support during construction, which was originally executed at a price of \$971,534, and had increased to \$8,063,316 as of February 2022.

While the project management consultant performed a review of unit values originally proposed by the design consultant, the unit values were increased significantly in Amendment 10, despite a lack of adequate accounting support to justify the increases. Unit values increased again in Amendment 11. The SOV, and increases, are as follows:

	Amendment 8- 11/21/19	Amendment 10- 9/14/20	%	Amendment 11- 6/14/21	%
Administration (monthly)	5,720	11,440	100.0%	11,726	2.5%
Meetings	750	750	0.0%	769	2.5%
Geotechnical Inspection	2,100	2,461		2,523	
Test Report Review		308	_	315	
	2,100	2,769	31.9%	2,838	2.5%
Partnering	5,240	176/hour		181/hour	
RFIs	700	1,214	73.4%	1,244	2.5%
Submittals	1,690	1,722	1.9%	1,765	2.5%
Sheet Changes	1,200	1,545	28.8%	1,584	2.5%
Spec Changes	700	905	29.3%	927	2.4%
Change Index Doc		150		154	
SOW Doc		377		385	
Independent Cost Estimate	640	827	_	848	
	640	1,354	111.6%	1,387	2.4%
Record Drawings	102,762	102,762	0.0%	102,762	0.0%
Non-Conformance Reports	860	860	0.0%	882	2.6%
Value Engineering Change Proposals	1,550	1,550	0.0%	1,589	2.5%

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While these amendments increased the contract maximum, the increases have been estimated to fund only a period of time (e.g., a year) instead of projecting the full firm-fixed price for services. Since the contract had run out of funding before two of the amendments were processed, costs were incurred without contract authority for six months.

The design consultant submits invoices that show a percentage of completion; however, the billed amounts are actually based on the quantities corresponding to the SOV items. The quantities are identified in monthly progress reports, which are not filed with the official invoice records. Since billings are based on the quantities corresponding to the SOV, Internal Audit reviewed the progress reports and recalculated invoice amounts based on the quantities in the progress reports and the SOV. Based on this review, Internal Audit identified overbillings totaling \$160,712, resulting from overcounting two RFIs, splitting an RFI into multiple parts with each part billed at the RFI rate, duplicate billings of RFIs, submittals, meetings, and non-conformance reports, and billing of responses to OCTA questions or requests as an RFI, when an RFI is actually a formal request notification issued by the construction contractor.

Further, starting in November 2021, the design consultant began billing labor hours of approximately 24 hours per week, for services of an engineering manager. These charges are not allowable per the contract or the SOV, and may overlap with time already being compensated for in the SOV for responding to RFIs, attending meetings, monthly administration, etc. These unallowable charges totaled \$44,958 in November 2021, and \$49,454 in December 2021.

Recommendation 1:

Internal Audit recommends that management reconsider whether a SOV should be allowed as a basis for billing under a firm-fixed price contract. If management continues to allow a SOV, increases to these rates should not be allowed until the design consultant provides adequate and sufficient support for proposed rates, and amendments should be initiated in a timely manner. Further, progress reports should be included as part of the invoice package and subjected to OCTA's formal invoice review process.

Management should recover identified overbillings and unallowable charges and disallow payments for services not allowed by the SOV.

Management Response (CAMM and Capital Programs):

The OC Streetcar project is unique and includes many complicated design elements and construction coordination. Therefore, it was determined that establishing SOVs to manage the consultant's services during construction seemed appropriate at that time for

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this unique project. For future firm-fixed price contracts, it will be evaluated if the use of SOVs is appropriate and may depend on the project design and construction complexity.

The rates for each SOV were developed by evaluating the level of effort and negotiating with the consultant. When the SOV rates were first established in Amendment No. 8 dated November 12, 2019, construction just began in March 2019. As construction progressed, additional coordination and effort were required by the consultant to maintain the pace of construction. In addition, project-related challenges, including hidden utilities and soil contamination, arise that require additional effort. As a result, Amendment No. 10 dated September 14, 2020, reflects the increased effort related to most SOVs. For Amendment No. 10, OCTA staff had the option to obtain detail accounting support to justify the increases; however, it was determined that multiple monthly reporting would be required to obtain a possible average of various SOVs. The value for each SOV would still need to be negotiated regardless of the accounting reports and will also vary as unknown project challenges arise. Understanding the detail review effort and possible results associated with the accounting support, it was determined by staff to not request the accounting reports, allow the consultant to propose SOV rates, and negotiate appropriately.

A progress report is required with each invoice to support the cost. Several invoices included a description of the same RFIs, submittals, meetings, and non-conformance reports due to the complexity of certain design and constructability. For a project of this size and complexity, it is common to have multiple reviews, submittals, meetings, etc. for a complex design element or project-related issue. In addition, when a design is modified it may trigger a modification to a previous RFI or submittal. In conclusion, some of the descriptions in the progress reports should have been expanded to clarify the additional effort. Duplicate efforts identified in this audit will be reviewed and costs will be recovered.

As the construction progressed and increased, so did the number of RFIs issued, submittals provided, and meetings attended. It was difficult for the consultant to maintain the pace of the construction; therefore, at the request of OCTA management, the consultant added an engineering manager to manage multiple SOVs to minimize delays to the contractor. The coordination effort by the engineering manager is extensive and varies each month; therefore, the associated cost is not included in the SOV rates. It was determined that the engineering manager may be billed at actual cost which is converted to percent complete towards the administration task.

After further review, staff has determined that the use of SOVs resulted in additional effort to monitor, review, and validate invoices. Furthermore, due to the complexity of the project, the effort required by HNTB for each subtask is not consistent and using SOVs with the same cost rates for inconsistent effort cannot be applied. The upcoming HNTB Amendment No. 12 was presented to the Board for approval on July 25, 2022. After Board

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approval, Amendment No. 12 will be prepared by CAMM to include contractual language that SOVs will no longer be used.

Duplicate Billing and Compliance with Advance Approval Requirements

Internal Audit identified duplicate billings of labor hours and ODCs by the CM, resulting in \$987.63 of overbillings. Internal Audit also noted that one subconsultant is not required to submit timesheets, as required of all other consultants. Additionally, consultants did not obtain the project manager's approval in advance of overtime billed in ten invoices and ODCs not listed in the contract schedule in five invoices, as required by the contract.

Recommendation 2:

Internal Audit recommends that management recover the overbillings, require all subconsultants to submit timesheets, and enforce advance approval requirements.

Management Response (Capital Programs):

Staff has reviewed and confirmed the overbillings; therefore, costs will be recovered. Missing timesheets will be obtained, and the timesheet requirement will be enforced. Advance approval for overtime work is ongoing and will continue.

Contract Escalation and Pricing of Amendment Values

The CM contract allows for escalation of labor billing rates on an annual basis; however, five new consultant staff were added to the contract and their billing rates were escalated before their hire date or within two to three months after their hire date. Two consultant staff were hired in December 2019 and February 2020, added to the contract at rates based on their salary offers, and their rates were escalated by three percent for the contract year starting December 2019. Another two consultant staff were hired in October 2018, added to the contract at rates based on their salary offers, and their rates were escalated by three percent and seven percent, respectively, for the contract year starting December 2018. The fifth consultant staff was hired in September 2020, added to the contract at a rate based on his salary offer, and his rate was escalated by three percent for the contract year starting December 2020.

In addition, when pricing the value of Amendment 1, a CM subconsultant was allowed an indirect rate higher than the contract rate. In pricing the values of Amendments 8, 10, and 11, a design subconsultant was allowed an indirect rate higher than the one used in the original cost proposal. Another design subconsultant was allowed direct labor rates higher than allowed by escalation in pricing the value of Amendment 10, and one design consultant staff was added without verification of the staff's rate through a payroll register.

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Recommendation 3:

Internal Audit recommends that CAMM enhance controls over escalation when adding new staff based on offer letters. CAMM should also ensure that the pricing of amendment values is based on the contract rates or rates used in the original proposal with appropriate escalation.

Management Response (CAMM):

Management agrees with the recommendation to enhance controls over escalation when adding new staff based on offer letters and will ensure that the pricing of amendment values is based on contract rates.

As new consultant staff is added to the contract based on an offer letter, CAMM will ensure that the billing rates for such employees are held consistent with OCTA standards for its new employees. New consultant staff added in the first seven months of the contract year will be eligible for agreed-upon escalation in the subsequent contract year. New consultant staff added in months eight to 12 of the contract year or within five months prior to the next annual escalation period, will not be eligible for escalation in the subsequent contract year, and the rate will be held for the subsequent contract period. The new staff will be added to the corresponding contract year based on the start date and labor billing rate identified in the offer letter.

For consultant staff that are being added with varying effective dates, separate amendments may be processed to make sure that the escalation to the billing rates is accurately applied to each staff addition request.

CAMM will ensure that the pricing of amendment values is based on the contract rates or rates used in the original proposal with appropriate escalation. CAMM will conduct refresher training to review the topics related to validating cost proposals with discrepancy in indirect cost rates or labor rates, processing of amendments and use of the automated rate schedules.

Project Controls Monthly Status Summary Reports

The Program Management Procedures states that Project Controls will prepare a monthly status report that provides summary data on the status of all projects; however, Project Controls recently changed the frequency of its status summary reporting from monthly to quarterly. As a result, monthly status summary reports were not prepared for the months of August 2021, October 2021, November 2021, January 2022, and February 2022. The audience for these reports includes the project manager, program manager, department director, and the Executive Director of Capital Programs.

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Recommendation 4:

Internal Audit recommends that Project Controls resume preparing its monthly status summary reports in accordance with procedures.

Management Response (Capital Programs):

Management recognizes that monthly summary reports were not prepared for projects as specified in the Project Management Procedures manual, and instead, quarterly project summary reports were prepared starting in October 2021. This was a temporary decision implemented primarily due to backlogged workload and lack of resources in the Project Controls group. Furthermore, in the assessment to consider only producing quarterly summary updates, it was determined that project cost, SOW, and schedule information for nearly all projects were experiencing relatively little change on a month-to-month basis and quarterly reporting was sufficient at the summary level. More detailed monthly project progress reporting by architectural and engineering consultants continued in accordance with specific contract terms. Progress reports for projects that required monthly monitoring and reporting continued to be prepared monthly. The OC Streetcar project follows FTA guidelines, and the FTA placed the project under a monthly recurring oversight review cycle in August 2021, which requires a substantial monthly project reporting effort. Beginning September 2021 and hence, monthly reports have been prepared for the OC Streetcar project. Going forward, Project Controls will again prepare and distribute monthly or quarterly summary reports for all major capital projects depending on specific projects needs and complexity. Staff is assessing any required revisions to the Project Management Procedures Manual to effect efficient use of project controls resources.

Contractors' Evidence of Required Insurance

The design and CM consultants had not submitted current certificates of insurance (certificates) three months after expiration of the last certificates provided, as reflected in a vendor-provided insurance tracking system. The design consultant's certificate identified policies expiring on January 1, 2022, and the CM's certificate identified policies expiring on December 18, 2021. An initial renewal notification was sent by the vendor to both consultants one month before expiration; however, no additional notifications or follow up had been performed by either the vendor or CAMM. The vendor refuses to commit to timelines for follow-up notifications because the contract does not outline standards for follow up.

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Recommendation 5:

Internal Audit recommends that CAMM develop procedures to ensure adequate insurance coverage by consultants throughout the contract term. If CAMM continues to use an outside party as part of the monitoring process, then the contract with the outside party should outline appropriate standards and timelines for follow up activities.

Management Response (CAMM):

Management agrees with this recommendation. CAMM will continue to use an outside party to perform insurance certificate tracking services. The insurance document tracking is currently provided by Insurance Tracking Services, Inc. (ITS), a subconsultant to Marsh USA Inc. (Marsh) under Agreement No. C-7-1585. The SOW for the existing contract, which expires June 30, 2022, outlines the general tasks that are required to process insurance certificate reviews and renewals; however, it does not include specified service levels nor performance metrics. This has resulted in extended turnaround times for ITS to upload insurance certificates into their database, as well as to send out renewal notifications to OCTA's consultants and vendors.

The Board has recently approved a new contract with Marsh, who will subcontract the insurance document tracking services similar to the current arrangement. CAMM will ensure that the executed agreement includes defined performance metrics, requiring ITS to send out renewal notifications to the vendor 30 days prior to the insurance certificate expiration date and follow-up requests approximately every 14 days following the initial request for renewal certificate until the updated certificate is received. CAMM will also implement procedures for progressive actions by July 20, 2022, if insurance certificates are not received.

CAMM will also send a notification to all vendors with active contracts reminding them of the process for submission of their insurance documents.