



Internal Audit Report

Architecture and Engineering Indirect Cost Rates – Follow-Up

Report Number: 2017-02 | Report Date: March 10, 2017

Executive Summary

Audit Report No.: 2017-02

March 10, 2017

WE AUDITED the Procurement and Contracts Division's management controls over the acceptance and application of indirect cost rates from Architectural and Engineering consultants.

AUDIT OBJECTIVE was to determine whether corrective actions taken since the previous audit have been effective in addressing audit findings.

The audit examined management controls implemented in response to the previous audit in 2013.

WHAT DID WE FIND?

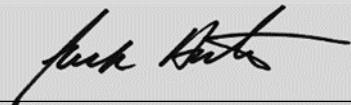
Indirect costs, often referred to as overhead, are costs incurred for common or joint objectives and cannot be readily identified with a particular project. An indirect cost rate is a device for assigning fairly and conveniently what proportion of indirect cost each project should bear. An indirect cost rate is the ratio between the total indirect expenses and a direct cost base, and typically determined for one-year periods. It is common practice for architectural and engineering (A&E) firms to utilize indirect cost rates for budgeting, estimating and billing.

Sound Transit contracts with A&E firms for much of the agency's design and engineering work. The agency's A&E contracts are administered by the Design and Construction Contracts group under the Procurement and Contracts Division. During the period January 2014 to December 2016, the agency had 70 open A&E contracts with a total spend of \$358 million. On average, indirect costs account for 45-50% of A&E payments.

Most of agency's capital projects are funded in some part by federal grants. Approximately 85% of the agency's A&E contracts, by count, are federally funded. For the period January 2014 to December 2016, more than 95% of the A&E spend was federally funded.

Internal Audit reported twice on indirect cost rates related to A&E contracts in 2011 and 2013, noting certain weaknesses in management controls on rate approval and administration including the absence of a formal written policy.

This current audit concluded that management has not effectively addressed the previous audit finding. The audit result noted lost savings opportunities of more than \$4 million but no instances of underpayments to consultants.



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Background

Indirect costs, often referred to as overhead, are costs incurred for common or joint objectives and cannot be readily identified with a particular project, contract or other activity of the organization. An indirect cost rate is a device for determining fairly and conveniently what proportion of indirect cost each project should bear. An indirect cost rate is the ratio between the total indirect expenses and a direct cost base. It is common practice for architectural and engineering (A&E) firms to utilize indirect cost rates for budgeting, estimating and billing.

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Most of agency's capital projects are funded in some part by federal grants. Approximately 85% of the agency's A&E contracts, by count, are federally funded. For the period January 2014 to December 2016, more than 95% of the A&E spend was federally funded, as follows.

A&E Contracts				
		2014	2015	2016
No. of Open Contracts	Federally Funded	45	51	54
	Non-Federal	9	6	8
Total Spend	Federally Funded	\$125,778,678	\$115,071,245	\$101,006,401
	Non-Federal	\$6,711,118	\$5,054,402	\$3,927,905

Source: GL Data

A&E consultants charging indirect cost rates on a federally funded project under certain cases are required to have the rates audited in accordance with federal regulations (e.g., US Code Title 49, Section 5325), to ensure only allowable costs are included in the calculation of the rate. Additionally, the rate is to be calculated based on 1-year accounting periods.

Internal Audit first reported on indirect cost rates related to A&E services during a contract cost audit in August 2011. It was noted that indirect cost rates were negotiated without obtaining appropriate documentation to support the rate. Additionally, it was found that ST did not have a formal written policy for addressing indirect cost rates, including documentation requirements and frequency of rate reviews. Management concurred with the findings and proposed corrective actions.

Internal Audit reported again on indirect costs rates in November 2013 in an evaluation of A&E indirect cost rate support. It was noted again that indirect cost rates were not appropriately supported nor approved, and rates had not been updated from the initial rate at the start of long-term contracts. In addition, no formal policy/procedure had been implemented to address indirect costs rates. Finally, the auditor noted a potential conflict between the agency's contract provisions and federal funding requirements. Contracts only required a change in rates if requested by the consultant. However, federal funding rules specify that indirect cost charges to federal grants must use approved, audited rates and those rates are valid for a one-year period. Management concurred with the findings and proposed corrective actions.

Audit Objectives

To determine whether corrective actions taken since the previous audit have been effective in addressing audit findings.

Scope and Methodology

We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards and the International Standards for the Professional Practice of Internal Auditing. 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.

After interviewing personnel and reviewing previous audit activity and management status of corrective actions taken, we determined to focus our efforts on the areas of most concern noted in the previous audit, specifically, management controls over the review, approval and use of indirect cost rates by A&E consultants, as of January 2014.

To determine whether management took effective corrective actions to address the previous audit findings, we conducted the following procedures:

1. Reviewed the new indirect cost rate procedure to determine compliance with federal requirements and whether it was designed adequately to address the issues noted in the previous audits.
2. Selected a sample of 12 contracts, with a total award value of \$544,713,936, from 61 open and active federally funded contracts. From the 12 contracts, we further sampled a group of 48 prime and sub-consultants with the highest budget and spend. The following steps were performed for the period 2014 to third quarter 2016:
 - a. Confirmed that appropriate documentation was obtained by PC&D for prime and sub-consultants indirect cost rates prior to contract execution.
 - b. Determined whether indirect cost rates were reviewed and documentation obtained annually, as appropriate.
 - c. Confirmed that the approved rates align with the actual rates billed.
3. Selected a sample of current billings from the contracts audited in 2013 to determine whether the current indirect cost rates billed were appropriately approved and supported.

Conclusion

Management has not effectively addressed the previous audit finding. See Finding 1.

Findings and Recommendations

1. Corrective Actions to Address Prior Audit Issues Related to Architectural and Engineering Contract Indirect Cost Rate Updates Have Not Been Adequate.

Architectural & Engineering (A&E) companies experience economic and industry changes continuously. At any given time, a company could have more or less projects, employees, facilities costs, etc. Indirect cost rates are based on these costs and inevitably impacted by these changes. (See Appendix) Maintaining a constant indirect cost rate for an extended period of time, regardless of likely changes in business environments and costs, would not reflect current costs, and could result in overpayments or underpayments of indirect costs. Therefore, it is necessary to implement an equitable approach to adjust indirect cost rates at a regular interval.

To maintain reasonably current indirect cost rates during the term of a contract while ensuring fair compensation, annual updates based on financial data from the most recent 1-year period are recognized as a best business practice by FTA. FTA's Best Practices Procurement Manual (BPPM) recommends a grant recipient "must accept FAR indirect cost rates for the one-year applicable accounting periods..." In addition, FTA's Frequently Asked Questions advise that the grantee obtain, as a matter of policy, audited overhead rate information on an annual basis for the prime and all cost type subcontractors. These audited rates would be the basis to adjust any previous billings of overhead for the period that was audited, and to establish provisional billing rates for the period going forward.

Internal Audit previously conducted two audits in which issues were noted with the lack of regular updates to indirect cost rates on long term A&E contracts. Those audits identified the need for a formal policy to ensure a consistent approach to the administration of indirect cost rates in compliance with federal requirements. Further, it was noted that older A&E contracts had been written without a requirement of regular updates to indirect cost rates while allowing the consultant to request an adjustment to their indirect cost rate if they provided the appropriate accounting data to justify the adjustment.

In response to prior audit issues, management established the "Administration of Overhead Rate on A&E Contracts" procedure in May 2014, which included a requirement to update indirect cost rates on an annual basis. Concurrently, management determined not to retroactively apply the new procedure to pre-2015 contracts with a remaining budget. While the determination was based on a management analysis, the analysis lacked a comprehensive financial impact assessment. Audit observations discussed below indicate that an effect of the decision on contract resources could be significant, but this likely significant financial impact was not considered to an extent commensurate with the risk. As a result, there have been lost savings opportunities for the agency and potentially unfair compensation to A&E contractors whose rates have materially increased since 2014.

The current audit observed the following:

- 15 (31%) of 48 consultants selected for testing used the current indirect cost rates in 2014-2016.
- 33 (69%) of 48 consultants selected for testing on 8 contracts billed overhead based on indirect cost rates that were not current¹ at the time of billing. 22 of the 33 consultants billed rates that were higher than the more current rates. The following are

¹ A current rate is based on the previous fiscal year's financial data.

examples of non-current rate uses:

- ✓ Nine consultants under a 2011 contract billed overhead in 2014-2016 based on the initially approved indirect cost rates calculated using 2010 fiscal year-end financial data. For seven of these consultants, we found more current indirect cost rates in other Sound Transit agreements. All of those post-2010 rates were lower than the 2010 FYE rate. The savings in overhead charges, if the lower rates had been used during the period 2014-2016 is estimated at \$1.4 million for these seven consultants.
 - ✓ Seven consultants under a 2011 contract billed overhead in 2014-2016 based on the approved indirect cost rates calculated using 2012 or earlier fiscal year-end financial data. For five of these consultants, we found more current indirect cost rates, all of which were lower than the initial rates. The savings in overhead charges, if the lower rates had been used during the period 2014-2016 is estimated at \$1.9 million for these five consultants.
 - ✓ Three consultants under a 2012 contract billed overhead in 2014-2016 based on the initially approved indirect cost rates calculated using 2010 or earlier fiscal year-end financial data. We found more current indirect cost rates for these three consultants, all of which were lower than the initial rates. The savings in overhead charges, if the lower rates had been used during the period 2014-2016 is estimated at \$725,000 for these three consultants.
 - ✓ In four instances, the consultant requested a rate change, but only in the years when their rate increased.
- The test sample did not have an instance where a consultant was billing an older indirect cost rate that was lower than the current rate.

Recommendations:

We recommend the Procurement and Contracts Division:

1. Establish a practice to update A&E consultants' indirect cost rates, based on current Federal Acquisition Regulation 31 compliant financial data, on a regular basis, to ensure amounts paid for overhead are fair and reasonable, for all new and existing contracts.
2. Review all applicable requirements and guidance for use of federal funds to determine the need to adjust prior A&E billings for current indirect cost rates, and implement adjustments as necessary.

Management Response

I. Introduction

Sound Transit Management, through the Procurement and Contracts Division(PCD), appreciates this opportunity to provide this Management Response to the Audit Report.

PCD has taken significant actions to evaluate and implement the Recommendations to the greatest extent practicable, described below. We look forward to seeking ways to further collaborate with the Office of Internal Audit in this area. However, we feel it is necessary to outline the extensive work that has been done to address prior audit issues as well as the Recommendations and Finding in this report.

This Management Response has been prepared in consultation with agency executives and with the opinions of Sound Transit legal counsel.

II. Response to the Two Recommendations

A. Internal Audit's Recommendation No. 1: "Establish a practice to update A&E consultants' indirect cost rates, based on current Federal Acquisition Regulation 31 compliant financial data, on a regular basis, to ensure amounts paid for overhead are fair and reasonable, for all new and existing contracts."

In 2014, PCD created a formal, written indirect cost rate (ICR) policy and procedure governing ICR formation at the time of contract award and the regular update of ICRs on an annual basis. This was a result of the 2013 audit recommendations.

In 2015, PCD implemented the practice of updating indirect cost rates on all "new" A&E contracts. "New" contracts refers to A&E contracts awarded since 2015 after the new Indirect Cost Rate policy and with the new contract language requiring annual ICR updates. At that time, Management made a decision to not go back and apply the practice to existing contracts that were awarded prior to policy implementation. The basis for that decision was that, as prescribed by the contract language, the ICR in those contracts was agreed and set during contract negotiations for the term of the contracts unless requested otherwise. The contracts as written represented a legal agreement between Sound Transit and the consultants. This language was based on the knowledge that a consultant's ICR constantly fluctuates over time, up and down, and having a consistent overhead rate for the life of the contract allowed allocation of hours to tasks to take place within the project's budget.

As of late 2016, PCD extended the practice to all existing contracts where practicable. For example, if the contract is near close out, it is not cost-effective to begin this process. "Existing" contracts refers to A&E contracts awarded with the old ICR contract language prior to the new ICR policy. As we move forward, all contracts will have the Indirect Cost Rate updated annually to ensure the rates are current.

PCD has also taken a number of other steps. We:

- In 2014, created and implemented a standardized checklist for reviewing documentation related to ICRs.
- In 2015, rewrote Sound Transit's existing contract language in conformity with the new policy and procedure to require regular updates of the ICR on an annual basis, and included this new ICR contract language in all A&E contracts awarded since 2015.
- In 2015, created and implemented an ICR database.
- In 2016, improved and revised the ICR policy and procedure.
- In 2016, recruited and hired a Senior Cost Analyst to support, among other things, administration of the ICR program including annual ICR updates on all "new" and "existing" contracts.
- In 2016, obtained executive and budget approval to hire additional resources in 2017 for a dedicated A&E Contract Administration team which will support, among other things, the ICR program including the administration of annual ICR reviews and updates on all "new" and "existing" contracts.

PCD is committed to:

- Continuing to train staff on ICR procedures, contract language and ICR database management.
- Enhancing current desk procedures for the ICR database.
- Further reviewing the ICR policy and procedure for opportunities to improve them for

- clarity and ease of use by PCD and other agency staff.
- Best practices as they evolve, consistent with FTA requirements

B. Internal Audit’s Recommendation No. 2: “Review all applicable requirements and guidance for use of federal funds to determine the need to adjust prior A&E billings for current indirect cost rates, and implement adjustments as necessary.”

PCD has requested and received a legal opinion on the issue of whether there is a legal requirement for Sound Transit to adjust indirect cost rates for A&E contracts on an annual basis.

After a comprehensive review of federal and state law, together with an examination of Sound Transit’s “existing” (pre-ICR policy) contract language, the legal opinion is that PCD is not required to request updates to consultant overhead (ICR) rates and that *“the management decision to sunset the existing contracts with the previous contract language complied with all applicable legal requirements.”*

The administration of annual IRC updates is, however, a best practice, and we strive to follow best practices.

Sound Transit is subject to frequent and ongoing audits by the FTA including the Triennial Review, the Procurement Systems Review Audit, and a comprehensive audit of all costs incurred under a Full Funding Grant Agreement where applicable. These include broad, deep reviews of Sound Transit’s procurement and contract policies, procedures and practices for compliance with federal law, and best practices as well. The most recent Triennial was in April 2016, and Sound Transit’s procurement and contracts operation was given high praise by the auditors, without exceptions or findings.

III. CONCLUSION

We believe that significant corrective actions have taken place and that our commitments going forward will fully address all prior and current audit issues.

We look forward to reporting our continuous strengthening of the ICR program, and any challenges we face, to the Office of Internal Audit and the Audit & Reporting Committee.

Appendix – Indirect Cost Rates for Select Consultants

The graphs illustrate rate changes for several consultants noted in the report for having billed non-current indirect cost rates. The rates were obtained from ST contract files and others. Rates weren't available for some years, which is evident in the graphs.

Unless otherwise noted, the two dollar amounts shown in each graph represent the remaining budget for the consultant as of January 2014 and funds added to the budget after January 2014. These amounts represent at-risk contractual resources subject to change by indirect cost rates.

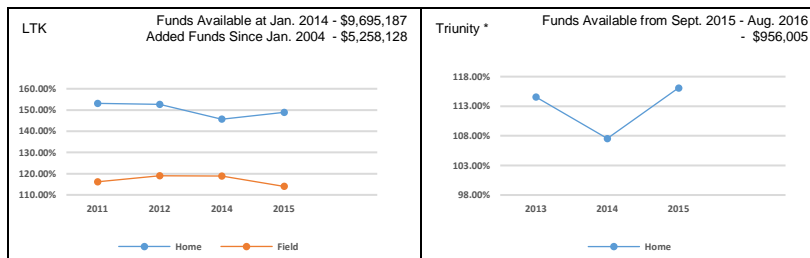
The rates are based on the consultant's fiscal year-end. These annual rates are generally approved for use approximately 6-9 months after their fiscal year end.

AE 0175-11 CH2MHill



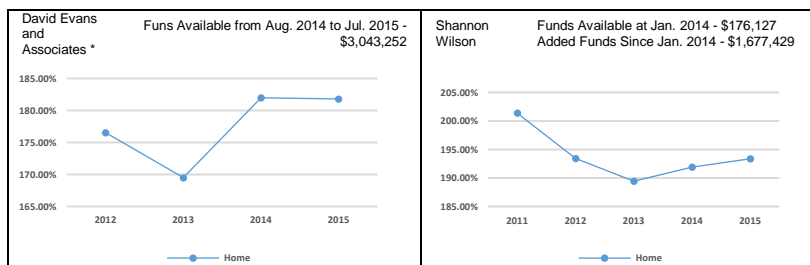
* The consultant requested a change in rate in 2014, but not again in 2015 when rate dropped.

AE 0027-12 LTK



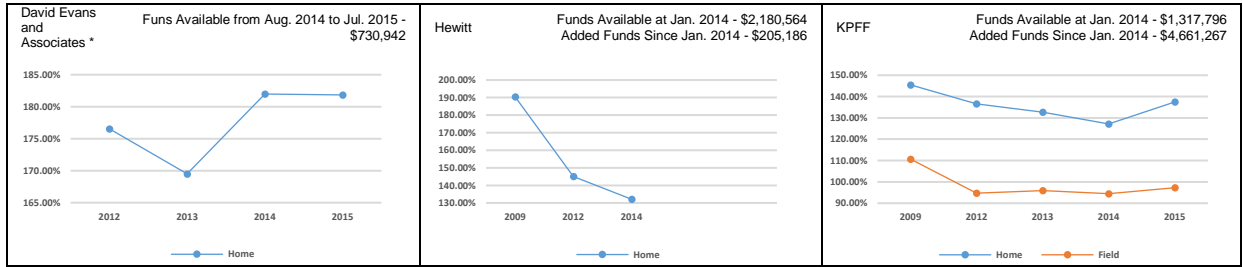
* The consultant requested a change in rate in 2014, but not again in 2015 when rate dropped.

AE 038-13 David Evans and Associates



* The consultant requested a change in rate in 2014, but not again in 2015 when rate dropped.

AE 0073-12 Parsons Brinkerhoff



* The consultant requested a change in rate in 2014, but not again in 2015 when rate dropped.

AE 0143-11 H-J-H

