



# INTERNAL AUDIT REPORT

Operational Audit  
Architectural & Engineering Consultant Rates

January 2017 – September 2019

Issue Date: December 9, 2019  
Report No. 2019-11

Revised: December 9, 2019



INTERNAL AUDIT

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## Executive Summary

Internal Audit (IA) completed an audit of the process to establish Architectural & Engineering (A&E) Consultant Rates for the period January 2017 through September 2019. The objective of the audit was to evaluate the effectiveness of internal controls. To provide context and perspective, this report explicitly references when assumptions were applied. Otherwise, the basis for our conclusions and recommendations was derived using data provided by management.

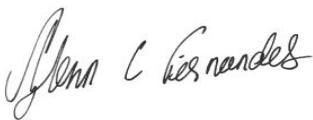
A&E costs will most likely increase as the Port embarks on a series of capital projects over the next ten years and account for approximately 10-20 percent of capital costs. The Port's 2020 approved five-year capital plan is \$3.6 billion, underscoring the importance of having established systems and controlled processes, guided by effective oversight. It also highlights the need to improve efficiencies.

Management self-identified the need to improve efficiency by decreasing the time to negotiate A&E contracts. Therefore, we did not perform testing to assess efficiencies. Nonetheless, Central Procurement Office (CPO) management needs to make data-based decisions and overlay those decisions with input from non-management staff who have deep knowledge and can provide valuable suggestions for process improvement.

Our audit identified four issues, which if addressed and implemented, will mitigate risk, and as a byproduct, may improve efficiency.

1. High – CPO had not established guidelines for what is determined fair and reasonable. Our testing of over 400 A&E consultants identified many instances where profit **markups**<sup>1</sup> exceed what the industry deemed reasonable.
2. High – Management approval was not required when hourly rates exceeded the maximum rates produced by the service rate negotiation tool / model.
3. High – A reconciliation between the final negotiated rates and the contract did not occur. As a result, we were unable to verify that all positions and rates reflected in the contract were accurate.
4. Medium – CPO is responsible for procuring all contracts related to public works, consulting services, and goods and services. Governance meetings, for Executive Leadership Team (ELT) oversight of CPO, had not occurred since December 7, 2017.

These issues are discussed in more detail beginning on page six of this report.



Glenn Fernandes, CPA  
Director, Internal Audit

### Responsible Management Team

Dave Soike, Chief Operating Officer  
Nora Huey, Director, Central Procurement Office

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<sup>1</sup> Profit Markups are based on direct labor and overhead rates compliant with FAR 48 CFR Part 31. FAR 48 CFR Part 31 does not allow certain overhead costs to be billed to the governmental entity.

## Background

A&E costs will most likely increase as the Port embarks on a series of capital projects over the next ten years and account for approximately 10-20 percent of capital costs. The Port's 2020 approved five-year capital plan, including the Port of Seattle's portion of the Northwest Seaport Alliance (NWSA) capital costs, is \$3.6 billion. While this number includes \$300 million for the Sustainable Airport Master Plan's (SAMP) design costs, it does not include SAMP capital costs which will be approved and overlaid at a later date. This underscores the importance of having established systems and controlled processes, guided by effective oversight. It also highlights the need to improve efficiencies.

The Port has several capital projects in process and has numerous others that will be launched in the near future. In many cases, the Port will contract with Architects and Engineers to perform services related to these projects. Projects range from larger projects, such as architectural design services for the North Satellite, to medium and smaller sized projects such as the airport Service Tunnel and the Concourse D Hardstand Holdroom, respectively.

RCW 39.80.050 states: "The agency shall negotiate a contract with the most qualified firm for architectural and engineering services at a price which the agency determines is fair and reasonable....". It also states: "If the agency is unable to negotiate a satisfactory contract with the firm selected at a price the agency determines to be fair and reasonable, negotiations with that firm shall be formally terminated and the agency shall select other firms...."

In 2016 the Boston Consulting Group (BCG) was engaged at a contract value of \$4 million as part of the Procurement Excellence initiative. BCG's overall project objectives included the following:

- Faster speed to delivery in the procurement process
- Improved capabilities of internal Port staff
- Making the Port an easier partner with whom to do business
- Stronger strategic partnerships with our key internal and external customers
- Improved ability to support our small business and minority, women, and disadvantaged business (MWDBE) community
- Improved ability to support our environmental objectives in the procurement process

As part of this initiative, the BCG working team developed a refreshed process and tool for A&E rate setting. This was driven in part by a call to action driven by internal frustration (e.g. lengthy resume reviews) and external frustration (confusion over benchmarks, inconsistency). This team conducted internal interviews, market research of A&E firms, and interviewed six peer public agencies in Seattle. The team relayed that they will still be negotiating billing rates but will focus on expedited and synchronized negotiations. Two of the key tenets of the new process included the following: Requesting Department Representatives (RDR) be involved upfront and play a greater role to act as "One Port" (e.g. CPO was to lay out a negotiation strategy and solicit feedback from the RDR before engaging) and rates analysis was to be grounded firmly in market data, with a consistent process.

## **Audit Scope and Methodology**

We conducted the engagement 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 conduct an engagement to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our engagement objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our engagement objectives.

The period audited was January 2017 through September 2019 and included the following procedures:

### Determine if risks have been identified and controls have been implemented

- Interviewed Port management and staff to obtain an understanding of the rate negotiation process.
- Reviewed agreements and exhibits related to the contract.
- Identified and tested the design and operating effectiveness of internal controls.
- Obtained negotiated rates and judgmentally selected a sample of consultants to determine if finalized rates were within the rate range as outlined by the Planning and Analytics team.

### Determine if contract positions and rates are accurate and complete

- Compared finalized negotiated positions and rates to selected contracts.

### Determine consultant profit

- Obtained direct labor rates and WSDOT approved overhead rates from consulting firms for individual consultants that were agreed upon by the Port through the rate negotiation process.
- Calculated individual consultant profit margin for consultants on selected contracts.

## Schedule of Findings and Recommendations

**1) Rating: High**

**CPO had not established guidelines for what is determined fair and reasonable. Our testing of over 400 A&E consultants identified many instances where profit **markups** exceed what the industry deemed reasonable.**

We evaluated profitability by subtracting actual direct labor and the applied overhead rate, from the agreed upon negotiated rate for over 400 A&E consultants from 33 firms. We used the approved WSDOT overhead rate if one was available. If one was not available, we used the Safe Harbor Indirect Cost Rate. The Safe Harbor rate provides eligible firms, who opt to use this program, with an indirect cost rate (ICR) for use in the billing rates until they have developed their own ICR.

According to the State Auditors Report on the Columbia River Crossing Project, dated April 14, 2014:

“Industry sources indicate you must consider a firm’s overhead rate before you can determine the profit markup you are paying. Consistent with this standard, most state transportation departments typically pay a **10 percent to 12 percent** consultant markup on labor and overhead.” The report also references a maximum rate used by the Federal Highway Administration of **15 percent**.

The Port’s Rate Negotiation Rate Tool uses a targeted profit of **10 percent** of each negotiated position. However, based on our testing, rates were agreed to with profit **markups** that far exceeded these **markups**.

For example, we calculated profit **markups** that exceeded 20 percent for 187 negotiated positions. However, we also identified 139 positions where the profit **markups** were less than 10%. Risk increases when disparate profit ranges in each position exist. This is because profit can be manipulated by how many hours the A&E firm uses the individual. For example, an individual who has a 50% profit **markup** could be used significantly more, than an individual who has a profit **markup** of 6%.

Profit	10% and below	11-19%	20-29%	30-39%	40-49%	Above 50%
Number of Consultants	139	81	79	60	30	18

Internal Audit is not offering or defining a fair and reasonable rate as required by RCW 39.80.050. Rather we believe ELT management should determine what constitutes fair and reasonable, and CPO management should build efficient processes and risk mitigating controls to minimize agreeing to rates that exceed fair and reasonable.

We also recognize that models inherently contain imprecision and therefore there may be times when management determines it is necessary to override the model results. When those instances occur, they should be decided at the appropriate level (i.e. director or COO), documented to provide the rationale, and disclosed to the Procurement Council.

**Recommendation:**

The Procurement Council should determine what the Port deems a fair and reasonable rate and should document the rationale for transparency.

CPO should engage a third party to perform an independent model validation of the rate tool so that management can gain confidence that the model produces accurate market rates.

**Management Response/Action Plan:**

See Appendix B

**2) Rating: High**

**Management approval was not required when hourly rates exceeded the maximum rates produced by the service rate negotiation tool / model.**

The tool was developed by Boston Consulting and uses market data to produce a target rate and maximum rate that is used during negotiations. According to process documents and as initially communicated by management, management approval is required prior to the Contract Administrator agreeing to rates that exceed the maximum rate plus 2% (maximum) produced by the model.

However, when we requested documentation to evidence the approval, management was unable to provide evidence and then communicated that approval was not required.

Internal Audit reviewed 10 contracts and identified 166 positions that exceeded the maximum rate produced by the model.

The table below reflects the number of positions that exceeded the maximum and the amount that the Port agreed to pay over the maximum rate for every hour worked.

Positions	Amount over the Maximum (+2%)
31	\$51.05 - \$175.03
32	\$21.20 - \$48.05
103	\$.17 - \$19.98
166	

**Recommendations:**

CPO should implement a management review process when consultant rates exceed the maximum. This review should be documented and contain established criteria and approval thresholds (i.e. up to 20% over the maximum) for both the Services Agreement Manager and Planning and Analytics Manager to approve.

If the thresholds exceed their authority or if agreement cannot be reached, approval should be escalated to the appropriate person (i.e. director, COO) for approval, as required by the authority guidelines.

**Management Response/Action Plan:**

See Appendix B

**3) Rating: High**

**A reconciliation between the final negotiated rates and the contract did not occur. As a result, we were unable to verify that all positions and rates reflected in the contract were accurate.**

After positions and rates are agreed to between the Port and the A&E firms during negotiations, they are memorialized in an appendix within the contract.

We were initially told by management that the agreed upon positions and rates are captured in an excel document called the final rate negotiation spreadsheet. When management provided Internal Audit with the final rate spreadsheet we traced the positions and rates to the contract.

Based on our initial review of 10 contracts, we could not agree either the rate or position for 197 of 817 positions. When presented to management, it was then communicated that we should rely on the contract as the final and accurate document.

We provided an opportunity for management to research and provide documentation to evidence that the contract was accurate. As a result, we reduced the exceptions by 29 for a total of 168 exceptions.

The table below reflects the type and number of exceptions:

Position on contract did not exist on the rate tool	108
Rate on rate tool did not agree to the contract	40
Position on rate tool did not exist on the contract	<u>20</u>
	168

**Recommendation:**

CPO should retain documentation to evidence the agreed upon rate and position.

CPO should the use this documentation, to verify that the rates are accurately captured into the contract before it is executed.

**Management Response/Action Plan:**

See Appendix B



**4) Rating: Medium**

**CPO is responsible for procuring all contracts related to public works, consulting services, and goods and services. Governance meetings, for Executive Leadership Team (ELT) oversight of CPO, had not occurred since December 7, 2017.**

With overall spending on third party suppliers expected to exceed \$400 million annually, the importance that Port Leadership must place on oversight, guidance, and support to the CPO function is critical. Developing guidelines and criteria for procurement decisions, establishing risk tolerances, and monitoring key metrics is information that should be discussed, reviewed, and evaluated. The importance leadership places on governance plays a fundamental role to prudent management and long-term success.

In 2016, the Port hired the Boston Consulting Group (BCG), at a contract value of \$4 million, to evaluate CPO processes and to transform procurement from a compliance-based function to a core value-driven function. On September 20, 2016, a Commission Agenda staff briefing (Item No. 7b) stressed the vital importance of governance. The following excerpts are provided:

*“...the establishment of the Procurement Council and its ELT-level membership from across the Port signals the fundamentally cross-functional nature of procurement. This group has and will continue to serve as a ‘leadership by example’ in terms of overcoming silos and operating as ‘One Port.’”*

*“Procurement will continue to be guided and overseen by the Procurement Council, a group of ELT-level stakeholders. This body will continue to meet beyond our engagement with BCG and will be a core aspect of Procurement Excellence into 2017 and beyond.”*

*“Continued leadership and management commitment, as demonstrated by ongoing engagement in the Procurement Council, and more importantly, by each leader holding their respective teams accountable for engaging proactively and constructively with CPO.”*

**Recommendation:**

The Chief Operating Officer should lead an effort to determine the meeting frequency and information that is deemed necessary to perform effective governance.

We also recommend that, at a minimum, the CFO and the Port’s Managing Directors of Aviation and Maritime, attend these meetings.

Finally, we recommend developing a charter that defines the purpose, objective, and voting rights (if necessary) within the Governance Committee.

**Management Response/Action Plan:**

See Appendix B

## Appendix A: Risk Ratings

Findings identified during the audit are assigned a risk rating, as outlined in the table below. Only one of the criteria needs to be met for a finding to be rated High, Medium, or Low. Findings rated Low will be evaluated and may or may not be reflected in the final report.

Rating	Financial Stewardship	Internal Controls	Compliance	Public	Commission/ Management
<b>High</b>	Significant	Missing or not followed	Non-compliance with Laws, Port Policies, Contracts	High probability for external audit issues and / or negative public perception	Requires immediate attention
<b>Medium</b>	Moderate	Partial controls Not functioning effectively	Partial compliance with Laws, Port Policies Contracts	Potential for external audit issues and / or negative public perception	Requires attention
<b>Low</b>	Minimal	Functioning as intended but could be enhanced to improve efficiency	Mostly complies with Laws, Port Policies, Contracts	Low probability for external audit issues and/or negative public perception	Does not require immediate attention

## Appendix B: Management Response

December 9, 2019

To: Glenn Fernandes, Director, Internal Audit

From: Dave Soike, Chief Operating Officer  
Nora Huey, Director, Central Procurement Office

Re: **Management Response, Report No. 2019-11, Operational Audit, Architectural & Engineering Consultant Rates**

In response to the Final Audit Report, please find our management response to the final report for the December 9<sup>th</sup> Audit Committee. This response incorporates the final report's recommendations as it made it easier to respond. We appreciate the recommendations and look forward to getting started on improving our rate process.

### **Internal Audit Recommendations (portion copied/pasted from final report), Finding #1:**

**CPO has not established guidelines for what is determined fair and reasonable. Our testing of over 400 A&E consultants identified profit margins that exceed what the industry deemed reasonable.**

#### **Recommendations:**

The Procurement Council should determine what the Port deems as a fair and reasonable rate.

Engage a third party to perform an independent model validation of the rate tool so that management can gain confidence that the model produces accurate market rates.

#### **Management Response/ Action Plan:**

CPO Management appreciates the effort of Internal Audit's team to assist in identifying areas for continuous improvements. This is consistent with the priority Port management continues to place on this as well.

In early 2019, CPO Management determined further refinements of the existing tool and process were necessary to improve efficiencies. CPO Management, with support of the Executive, sponsored an initiative to evaluate the rate negotiation process involving a cross-functional team. We are working with the Continuous Process Improvement team and involving management and front-line staff from across the Port in the Lean project (referred to as the Rate Negotiation Lean project).

1. Our plan below incorporates the first recommendation:

The implied profit margins identified in this audit require CPO Management, in conjunction with Port Executive, to research further as part of the Port's delegated authority to obligate Port funds. Our quick test of the data shows higher overhead rates for some firms than utilized in the audit resulting in lower implied profit rates. We plan to do a robust check and have conversations with the consulting community to better understand the market and actual profitability. The Port's current contracting practice differs from cost-reimbursement type contract. The Port negotiates

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firm-fixed billing rates. Indirect cost rates as they relate to direct costs may differ between a cost-reimbursement type contracts and the Port's approach utilizing firm-fixed billing rates. We will conduct our due diligence within the next six months.

We will use the information gained from our research to present our recommendations to the Executive to gain buy-in on our principals related to compensation; including what the Port values and determines to be fair and reasonable and market rates. Port procedures will be updated accordingly.

2. Our plan for the second recommendation includes finalizing our Rate Negotiation Lean project to determine if validation of the model is the most appropriate step taking into consideration the collaborative efforts recommended by the cross-functional Lean team. CPO Management, with support from the Executive, is embracing and supporting our continuous process improvement culture which fosters empowering the team who actually conducts the work to recommend improvements.

**DUE DATE: 6/30/2020**

#### **Internal Audit Recommendations (portion copied/pasted from final report), Finding #2:**

**Management approval is not required when hourly rates exceed the maximum rates produced by the service rate negotiation tool / model.**

#### **Recommendations:**

Implement a management review process when consultant rates exceed the maximum. This review should be documented and contain established criteria and approval thresholds (i.e. up to 20% over the maximum) for both the Services Agreement Manager and Planning and Analytics Manager to approve.

If the thresholds exceed their authority or if agreement cannot be reached, approval should be escalated to the appropriate person (i.e. director, COO) for approval, as required by the authority guidelines.

#### **Management Response/ Action Plan:**

Our practice is to allow the team (the Rate Analyst, Contract Administrator and Requesting Department Representative) the ability to exceed the maximum when all three were in agreement without escalating to management. The purpose is to empower the team and be more responsive during negotiations. Our existing process can be refined by providing additional guidance on how to properly document the decision.

In regards to the recommendation, the following steps have been taken to support this program:

1. In February 2019, CPO Management launched an enhanced Negotiation Summary Memo template incorporating guidance on how to document decisions made by the Contract Administrator with input from the Rate Analyst and Project Manager; and/ or when escalated to management for approval.
2. In July 2019, CPO Management launched a refined Service Agreements' filing system to ensure rate decision documentation is filed and saved accordingly.

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3. In November 2019, CPO Management launched a Planning and Analytics' filing system to ensure rate recommendation documentation is filed and saved separately from the Service Agreements' filing system.
4. In November 2019, CPO Management launched an interim enhancement to our existing process while we conduct the continuous process improvement for rate negotiations (The Rate Negotiation Lean Project). We are testing this on three professional service procurements. The goal is to test, refine, and update our procedures accordingly by clarifying decision making ability in our procedures.
5. As part of the Rate Negotiation Lean Project, Management will re-evaluate our internal controls and escalation process. We anticipate engaging with Executive by June 30, 2020.

**DUE DATE: 06/30/2020**

**Internal Audit Recommendations (portion copied/pasted from final report), Finding #3:**

**A reconciliation between the final negotiated rates and the contract does not occur. As a result, we were unable to verify that all positions and rates reflected in the contract were accurate.**

**Recommendation:**

Retain documentation to evidence the agreed upon rate and position.

That documentation should then be used to verify that the rates are accurately captured into the contract.

**Management Response/ Action Plan:**

It is accurate that CPO uses the rate negotiation tool (an Excel spreadsheet) to document our rate negotiation offers/acceptance with the consultants. We use the Excel spreadsheet as a tool to help us communicate offers and acceptance over multiple rounds with the prime consultants and multiple subconsultants. It is not part of the contract. The contract represents the agreement between the Port and the consultant.

We have learned through the efforts of this internal audit the Rate Analyst and the Contract Administrators frequently used other supplemental sheets and email exchanges to document/ finalize the rate negotiations.

Here are the efforts previously taken and our plan to refine our existing process in the future:

1. In February 2019, CPO Management launched a refined Negotiation Summary Memo Template incorporating additional guidance on how to document rate negotiation decisions.
2. In July 2019, CPO Management launched an enhanced Service Agreement filing system to ensure rate recommendations and decision documentation is filed and saved accordingly. This includes documenting when decisions were escalated to management.
3. In November 2019, CPO Management launched a Planning and Analytics filing system to

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ensure rate documentation is filed and saved separately from the Service Agreement's filing system. This is a departure from filing directly in Service Agreement's filing system.

4. In November 2019, CPO Management re-established the proper use of the rate tool of transferring accurate rate data and verification between the Rate Analyst, the Contract Administrator, the Contract Administrator and the consultant. Using supplemental sheets and email exchanges are appropriate; however, decision-making must be documented as noted in item #1, above.
5. As part of our Rate Negotiation Lean project, we will evaluate and implement additional mechanical refinements to the existing tool to simplify the documentation process with the intent to remove waste. We will update our procedures accordingly.

**DUE DATE: 06/30/2020**

**Internal Audit Recommendations (portion copied/pasted from final report), Finding #4:**

**The Central Procurement Office is responsible for procuring all contracts related to public works, consulting services, and goods and services. Governance with Executive Leadership Team (ELT) oversight of CPO does not occur.**

**Recommendation:**

The Chief Operating Officer should lead an effort to determine the meeting frequency and information that is deemed necessary to perform effective governance.

We also recommend at a minimum, the CFO, Managing Directors of Aviation and Maritime, attend these meetings.

Finally, we recommend developing a charter that defines the purpose, objective, and voting rights (if necessary) within the Governance Committee.

**Management Response/ Action Plan:**

Executive Leadership Team (ELT) oversight of CPO does occur. CPO Management engaged with the Executive Leadership Team on procurement matters multiple times during the 2018 and 2019 leadership retreats. Issues addressed in those meetings included: lessons learned from state audit and resulting proposed changes; Diversity in Contracting; improvement initiatives; minority and women business enterprise (MWBE) utilization reporting and dashboard, and most recently updates on 2019 process improvements. As the Port moves forward for efficiency reasons, issues related to procurement will be covered in executive retreats. When necessary, meetings with additional staff outside of the Executive Leadership Team will be set up to handle specific issues.

**DUE DATE: 06/30/2020**