



August 28, 2019

Performance Audit

Trane, Inc.

Citywide Vendor Audit – City Report

Report No. 19-105



**CITY OF ALBUQUERQUE
OFFICE OF INTERNAL AUDIT**

The purpose of this audit was to review and report on Trane Inc.'s contract and billing compliance for the period July 1, 2016 through December 15, 2018.

Recommendations



Executive Summary- City Report

The City of Albuquerque (City) contracts with Trane Inc. (Trane) to provide on-call HVAC services for City facilities. The population for the audit period consisted of 255 invoices totaling \$1,062,097. The audit period addressed was July 1, 2016 through December 15, 2018.

City departments are not sufficiently verifying the accuracy of contractual billing compliance prior to authorizing payments. The following billing issues were identified during the audit:

- Incorrect labor charges for unlicensed Journeymen and after-hour rates;
- Trip charge fees were billed but are not established in the contract; and
- Quoted services have been billed at the quoted price instead of the actual Time and Material project price.

From a statistical random sample of 22 invoices, overcharges were noted for incorrect labor charges and trip charge fees on 8 invoices totaling \$934. Extrapolating the error rate results in an estimated overcharge of \$23,004.

The two invoices for quoted service were billed at the quoted price, which exceeded the actual billable costs by \$11,930. An extrapolation estimate could not be generated because a population of quoted services could not be derived.

In addition to the two statistical random sample quoted services, a large dollar \$226,458 quoted service project was judgmentally selected for review. The review identified an undercharge variance between the quoted price billed vs. actual billable cost of \$(11,917) and an overcharge for unlicensed Journeymen of \$10,790, which results in a net undercharge of \$(1,127). An extrapolation estimate is also not possible for this amount because judgmental samples are not statistically valid for extrapolation estimates.

The CAO should:

- Emphasize to all user departments during the Purchasing Liaison User Group meetings the importance of verifying contractual compliance prior to authorizing payments, which include the following:
 - Ensure future billing rates are aligned with the labor qualifications of each employee being billed, especially those rates that require a Journeyman license.
 - Ensure trip charges are no longer billed to the City.
 - The actual T&M amounts for services are invoiced and all supporting documentation is provided when billing for quoted services.
- Work with Trane to determine and remedy the actual labor and trip overcharge costs that are estimated at \$23,004 for the audit period.
- Work with Trane to identify and remedy any billing variances for quoted services.

The City's Chief Administrative Officer (CAO) agrees with and will implement the recommendations.



City of Albuquerque

Office of Internal Audit

August 28, 2019

Accountability in Government Oversight Committee
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Audit: Vendor Audit - Citywide
Trane, Inc.
Audit No. 19-105

FINAL – City Report

INTRODUCTION

The Office of Internal Audit (OIA) completed a citywide vendor performance audit of Trane, Inc. (Trane) billings under the City’s HVAC On-Call Service contract No. 708371 for the period of July 1, 2016 through December 15, 2018. Vendor audits were included in OIA’s fiscal year 2019 audit plan and Trane was selected. Information pertaining to the audit objectives, scope, limitations and methodology can be found in **Appendix A**.

Trane offers a broad range of energy-efficient heating, ventilation and air conditioning (HVAC) systems; dehumidifying and air cleaning products; service and parts support; advanced building controls and financing solutions. Trane’s Albuquerque specific website states, “Because Trane offers HVAC equipment, Building Management Systems, parts and service under one roof, we provide cost-effective solutions that incorporate a total system perspective right from the start.”

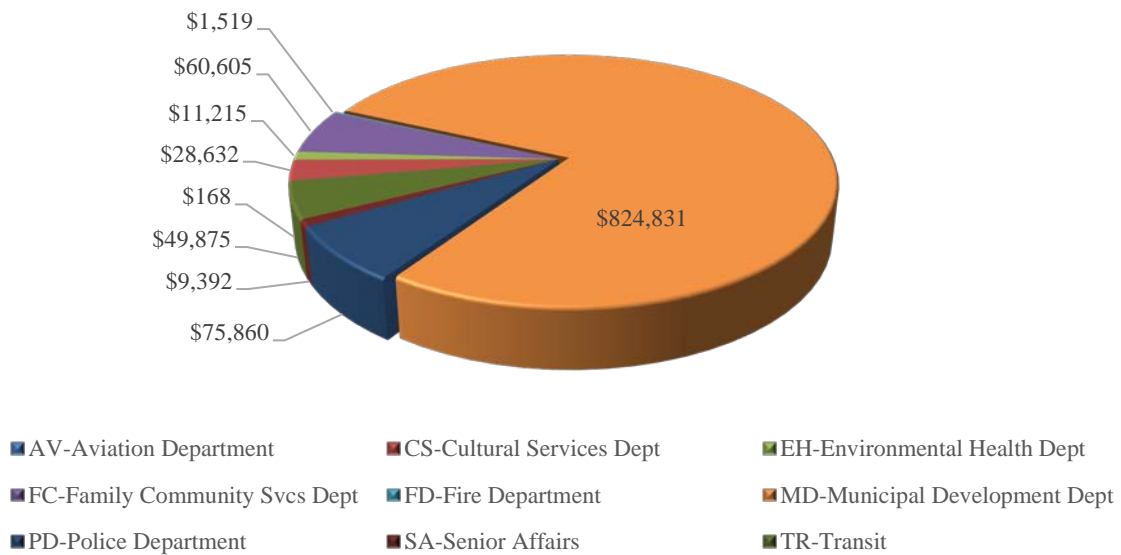
The City of Albuquerque (City) contracts with Trane to provide on-call HVAC services for City facilities. The audited contract began on May 20, 2016 and extends through May 19, 2020.

The current contract is established as a Time and Material (T&M) contract. T&M contracts require that the service provider bill on the basis of actual direct labor and material/equipment usage costs, which are established in the contract. For example, Trane’s contract establishes the direct labor rates for varying

skilled laborers from a standard General Laborer rate of \$55 per hour to a standard Journeyman rate of \$95 per hour.

The population for the audit period consisted of 255 invoices totaling \$1,062,097. Nine City departments represented the population and are illustrated in the table below.

Summary of Payments by Department



FINDINGS

The following findings address areas that OIA believes could be improved by the implementation of the related recommendations.

1. THE CAO SHOULD ENSURE USER DEPARTMENTS VERIFY THE ACCURACY OF CONTRACTUAL BILLING COMPLIANCE PRIOR TO AUTHORIZING PAYMENTS.

City departments are not sufficiently verifying the accuracy of contractual billing compliance prior to authorizing payments. The following billing issues were identified during the audit:

- Incorrect labor charges for unlicensed Journeymen and after-hour rates;
- Trip charge fees were billed but are not established in the contract; and
- Quoted services have been billed at the quoted price instead of the actual T&M project price.

From a statistical random sample of 22 invoices, overcharges were noted for incorrect labor charges and trip charge fees on 8 invoices totaling \$934. Extrapolating the error rate results in an estimated overcharge of \$23,004. In addition, 2 invoices for quoted service were billed at the quoted price, which exceeded the actual billable T&M costs by \$11,930. An extrapolation estimate could not be generated because a population of quoted services could not be derived.

Administrative Instruction NO: 3-4 VENDOR CITY AND RELATIONS AND RESPONSIBILITIES RELATING TO VENDOR PERFORMANCE states the following:

2. End-User/Department Responsibilities Relating to Vendor Performance, (E.) Monitor the Vendor's progress and performance to ensure that goods and services conform to the contractual requirements. (F.) Conduct a thorough inspection of all goods purchased to ensure that they are in compliance with contractual requirements. The receiving End-User Department shall also inspect and validate that the services being performed on behalf of the City by the Vendor have been performed and have been completed in accordance with contractual requirements. (G.) Request change orders and or amendments to the contract terms with the required approvals when necessary. An End-User may not verbally authorize the Vendor to begin work on a change before the formal process is fully authorized, documented and approved.

The following subsections provide detailed information regarding the above billing issues.

Incorrect Labor Charges for Unlicensed Journeymen and Overtime

Trane billed the City at the licensed Journeyman rates for two employees who did not possess Journeyman licenses. Journeyman licenses are required under the contract when billing at Journeyman or Project Manager rates. Journeyman licenses ensure individuals are competent and authorized to work in a specified field of study. For example, individuals that hold a Journeyman – Refrigeration license have proven their competencies to work on refrigeration components by successfully completing the education, supervision, and examination standards for that license.

From a statistical random sample of 22 invoices, 6 invoices contained incorrect labor charges for unlicensed Journeymen totaling \$857.50. The apprentice rate of \$60 per hour should have been charged instead of the Journeyman rate of \$95. The statistical random sample of 22 invoices totaled \$43,178, which equates to an overall error rate of 1.986 percent ($\$857.50/\$43,178$).

By applying the error rate to the audit period's total paid invoices, it can be estimated that the

City was overcharged a total of \$21,093 ($\$1,062,097 \times 0.01986$).

In addition, Trane billed the City for three hours of Journeyman after-hour labor at the rate of \$142.50 instead of the contract rate of \$147. The statistical random sample of 22 invoices totaled \$43,178, which equates to an overall error rate of 0.0003 percent ($\$13.50/\$43,178$).

By applying the error rate to the audit period's total paid invoices, it can be estimated that the City was undercharged a total of \$319 ($\$1,062,097 \times 0.0003$).

The contract specifies a normal billing of rate of \$95 per hour for licensed Journeymen and Project Managers, who shall be licensed Journeymen. All other labor rates are reduced based on the credentials of the employee. In addition, the contract specifies a rate of \$147 for after-hour Journeyman labor.

Key employees from various user departments acknowledged the lack of invoice oversight for some invoices and will ensure proper oversight in the future. One department stated that that Trane has acknowledged they have made a mistake concerning the Journeyman rates and will correct the issue.

Trip Charge Billings

Trane charged the City \$90 for "Trip Charges" on 2 of 22 invoices reviewed. The trip charge rates varied on each invoice and were charged at a \$15 or \$30 rate. Trip charges are not established in the contract and are not applicable to the City. The statistical random sample of 22 invoices totaled \$43,178, which equates to an overall error rate of 0.21 percent ($\$90/\$43,178$).

By applying the error rate to the audit period's total paid invoices, it can be estimated that the City was overcharged a total of \$2,230 ($\$1,062,097 \times 0.0021$).

Key employees from various user departments acknowledged the lack of invoice oversight for some invoices and will ensure proper oversight in the future. One department stated that it has been proactive in receiving credits for the invoices with travel time charges.

Billing for Quoted Services

Quoted services are not being billed at the actual T&M cost of performing the service and City approval of sub-contractors has not been documented. Trane is billing the City for the quoted price estimate and not providing the supporting T&M documentation for associated services. For example, the single charge description on invoice number 38136458 states "Quoted Billing

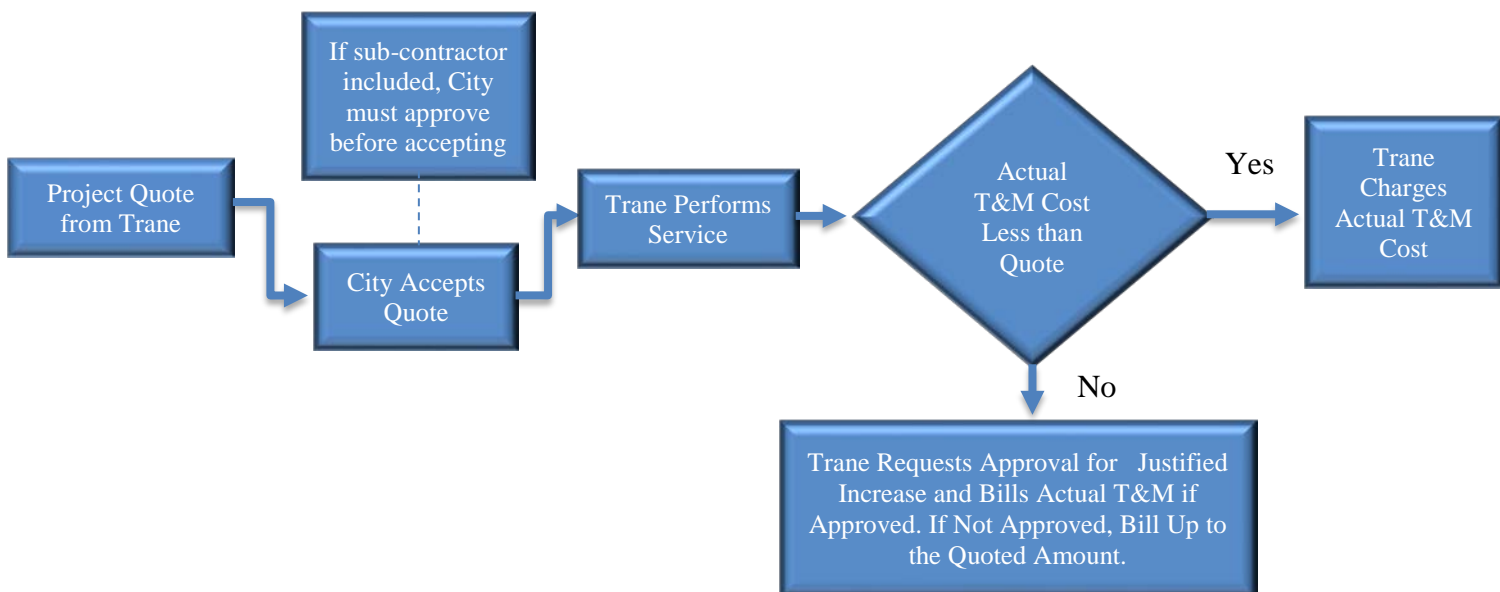
Summary”. In addition, written City approval of the sub-contractors was not documented prior to the issuance of the purchase order for invoice number 38910542.

The following process should be followed for quoted service projects:

- Trane provides quote for project;
- Trane performs service, after City acceptance of quote and written approval of sub-contractor(s) (if applicable);
- If the actual T&M cost of the project is less than the quote – Trane will bill for the actual T&M cost and provide the City with all supporting documentation; and
- If the actual T&M cost is estimated to be more than the quote – Trane will request approval and provide the City with a justification for the increased costs,
 - If the City approves the increase, Trane will bill for the actual T&M cost and provide the City with all supporting documentation,
 - If the City denies the increase, Trane will bill the quoted amount and provide the City with all supporting documentation.

The following graphic illustrates the process that should be followed by Trane for quoted service projects.

Billing Process for Trane’s Quoted Services



Two quoted services were identified and reviewed within the statistical random sample of 22 invoices. Services for both of quoted services were billed at or very near the quoted price.

Actual T&M cost documentation illustrates that Trane overcharged \$11,930 for the quoted services. However, an extrapolation estimate could not be derived for a potential over or under payment because a unique quoted project population could not be derived from the 255-invoice audit population. The table below illustrates the overcharges for the two quoted services reviewed.

Billed vs. Actual T&M Cost for Quoted Services

Invoice Number	Quoted Amount	Billed Amount	Actual Documented T&M Cost	Billed vs. Actual T&M Cost
38136458	\$28,417.93	\$28,418.06	\$17,606.29	\$10,811.77
38369692	\$4,787.02	\$4,787.00	\$3,668.36	\$1,118.64
Total Overcharge				\$11,930.41

Source: Trane, Inc.

In addition to the two statistical random sample quoted services, a large dollar \$226,458 quoted service project was judgmentally selected for review. The review identified an undercharge variance between the amount billed vs. actual T&M cost of \$(11,917) and an overcharge for unlicensed Journeymen of \$10,790, which results in a net undercharge of \$(1,127). An extrapolation estimate is also not possible for this amount because judgmental samples are not statistically valid for extrapolation estimates.

The contract includes language that generally outlines the process above. However, the contract does not specifically establish the quoted billing process outlined above. The contract states, “The City must be notified of and must approve the proposed sub-contractor in writing prior to issuance of a CRO/POR [Purchase Order] or secondary Procurement Contract for a specific project.” The contract also states,

Any additional materials services deemed necessary by the Supplier shall be documented and submitted to the requesting Department for approval. The City shall not be liable for the materials or a service other than those approved in advance or actually required to stabilize an emergency situation.

Key employees from various user departments acknowledged the lack of billing oversight for some quoted services and will ensure proper oversight in the future. One department requested additional information to verify Trane’s billing costs but did not receive responses for the inquires.

RECOMMENDATIONS

The CAO should:

- Emphasize to all user departments during the Purchasing Liaison User Group meetings the importance of verifying contractual compliance prior to authorizing payments, which include the following:
 - Ensure future billing rates are aligned with the labor qualifications of each employee being billed, especially those rates that require a Journeyman license.
 - Ensure trip charges are no longer billed to the City.
 - The actual T&M amounts for services are invoiced and all supporting documentation is provided when billing for quoted services.
 - If the actual T&M cost is estimated to be more than the quote – Trane should request City approval and provide a justification for the increase costs.
 - Written approval is provided by the City for all sub-contractor(s) prior to the issuance of a Purchase Order.
- Work with Trane to determine and remedy the actual labor and trip overcharge costs that are estimated at \$23,004 for the audit period.
- Work with Trane to identify and remedy any billing variances for quoted services.
- Work with Trane to clarify and include the process for quoted service billings in the contract.

RESPONSE FROM THE CAO

“The CAO agrees with the finding and recommendations. The CAO will work with the Purchasing Division, Accounting Division and all departments to address the issues identified. The Purchasing Division will emphasize the importance of verifying that invoices comply with contract requirements before authorizing payment. Specifically, as it pertains to the Trane contract, departments will be asked to:

- *Ensure that billing rates are consistent with the labor qualifications of each contractor billed, especially those rates that require a Journeyman license.*
- *Ensure trip charges are no longer billed to the City.*
- *Ensure the actual amount of services is invoiced and all supporting documentation is provided to compare against quoted services.*
- *Ensure that Trane requests City approval if the actual cost is estimated to be more than the quoted cost.*
- *Ensure that written approval is provided by the City for all sub-contractor(s) prior to the issuance of a Purchase Order.”*

“The next Purchasing Liaison User Group meeting is scheduled for August 29, 2019.”

“In addition, an electronic Vendor Non-Compliance form has been developed in the City’s Financial ERP System. This will allow departments to easily document contractual non-compliance issue with vendors. Purchasing will review the non-compliance forms and take appropriate action. Finally, Purchasing will continue to work with departments on how to properly enter change orders and attach supporting documentation for proper approval. “

ESTIMATED COMPLETION DATES

“The next Purchasing Liaison User Group meeting is scheduled for August 29, 2019. Purchasing will include this topic on the agenda.”

“By September 27, the Accounts Payable section will work with departments and Trane to remedy the actual labor and trip overcharge costs that are estimated at \$23,004 for the audit period and to identify and remedy any billing variances for quoted services.”

2. THE CAO SHOULD ENSURE USER DEPARTMENTS VERIFY INVOICES CONTAIN THE INFORMATION REQUIRED BY THE CONTRACT.

Trane is not including some of the information required on each invoice. Three general information requirements excluded from various invoices reviewed include the following:

1. Work Sheet/Job Ticket number,
2. Itemized Trade List and discounted percentages for material, and
3. Detail documentation to support quoted service billings.

The inclusion of the above information helps the City verify the costs and billings from Trane. Without the information on or attached to the invoice, the City may not be able to verify the costs of service.

The contract states that “All invoices shall include the following documentation:”, which includes the Work Sheet/Job Ticket number, and itemized Trade List and discounted percentages for material. In addition, quote documentation must be itemized in such a fashion to show hourly labor costs, line item material costs, miscellaneous expenses, gross receipts tax, and total estimated cost.

As mentioned in the previous finding, the contract does not specifically establish the quoted

billing process. The establishment of this process within the contract will allow for clarification about the detailed documentation to support quoted service billing that will be required with future billings.

As stated in Administrative Instruction 3-4 Vendor City and Relations and Responsibilities Relating to Vendor Performance. Item 3, End-User/Department Responsibilities Relating to Vendor Performance:

The goal of managing vendor performance is to ensure that contractual requirements are satisfactorily performed and the responsibilities of the Department End-User consist of the following:

- *(E) Monitor the Vendor’s progress and performance to ensure that goods and services conform to the contractual requirements...,*
- *(H) Maintain proper records, and*
- *(J) Report deficiencies to the Purchasing Division.*

Key employees from various user departments acknowledged the lack of invoice oversight for some invoices and will ensure proper oversight in the future.

RECOMMENDATION

The CAO should emphasize to all user departments during the Purchasing Liaison User Group meetings to verify all the information required by the contract when billing the City for services is included on every invoice, including the work sheet/ticket number, trade list price, discounted percentage, and detailed documentation to support quoted services.

RESPONSE FROM THE CAO

“The CAO agrees with the finding and recommendations. The CAO will work with the Purchasing Division and Accounting Division to ensure departments verify all information required by the contract upon billing is received with every invoice; including the work sheet/ticket number, trade list price, discounted percentage, and detailed documentation to support quoted services.”

ESTIMATED COMPLETION DATE

“The next Purchasing Liaison User Group meeting is scheduled for August 29, 2019. Purchasing will include this topic on the agenda.”

CONCLUSION

Verifying contractual compliance and invoice correctness are key activities for ensuring the accuracy of vendor billings. Opportunities for improvements exist among the various City departments that purchase services from Trane.

Effective contract and billing monitoring is important for ensuring contract compliance and will help user departments identify billing, quoted service, and required invoice information issues. In addition, specifically establishing the quoted billing process in the contract will help ensure consistent billing for quoted services.

We greatly appreciate the assistance, involvement, and cooperation of the various City department staff during the audit.

Vendor Audit – City Report
Trane, Inc.
August 28, 2019

19-105

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APPENDIX A

OBJECTIVES

The audit objectives were to determine:

1. Are the vendor's billings accurate and in conformance with the contract?
2. Is the vendor in compliance with the licensing and insurance requirements of the contract?

SCOPE AND LIMITATIONS

Our audit did not include an examination of all functions and activities related to Trane's contract. Our scope was limited to the objectives above.

This report and its conclusions are based on information taken from a sample of transactions and do not represent an examination of all related transactions and activities.

City management is responsible for establishing and maintaining effective internal control and complying with laws, regulations, contracts, and agreements.

In performance audits, a deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct (1) impairments of effectiveness or efficiency of operations, (2) misstatements in financial or performance information, or (3) noncompliance with provisions of laws, regulations, contracts, or grant agreements on a timely basis. A deficiency in design exists when (a) a control necessary to meet the control objective is missing or (b) an existing control is not properly designed so that, even if the control operates as designed, the control objective is not met. In the performance audit requirements, the term significant is comparable to the term material as used in the context of financial statement engagements. A deficiency in operation exists when a properly designed control does not operate as designed, or when the person performing the control does not possess the necessary authority or qualifications to perform the control effectively.

Our consideration of internal control was for the limited purpose described in our audit objectives and was not designed to identify all deficiencies in internal control. Therefore, unidentified deficiencies may exist. Accordingly, we do not express an opinion on the effectiveness of Trane's internal control.

As part of the performance audit, we tested Trane's compliance with certain provisions of laws, regulations, contracts, and agreements and noncompliance with which could directly and significantly affect the objectives of the audit. However, opining on compliance with those provisions was not an

objective of the performance audit and accordingly, we do not express an opinion.

The scope of this audit was limited due to the limitations of the vendor's software system to maintain historical trade list prices. Test work confirmed that a minimum discount rate of 20 percent applied to Trane provided parts and materials within the audit sample. In addition, an extrapolation estimate could not be derived for a potential over or under payment because a unique quoted project population could not be derived from the 255-invoice audit population.

We conducted this performance audit in accordance with generally accepted government auditing standards for performance audits, as prescribed in *Government Auditing Standards*, revision 2011, issued by the Controller General of the United States. 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.

METHODOLOGY

Methodologies used to accomplish the audit objectives include but are not limited to the following:

- Reviewed procurement contract and corresponding General Instructions, Terms and Conditions;
- Reviewed supporting vendor insurance documents and coverage limits;
- Reviewed and verified employee Journeyman license credentials with the State of New Mexico's website;
- Determined the population of paid invoices during the audit period;
- Identified contractual and non-contractual parts;
- Developed samples (judgmental and random statistical) from data supporting the objectives and assess the evidence against underlying criteria to the objective. Evidence includes physical (e.g. observation of operational HVAC units, etc.), documentary (e.g. invoices, service quotes, verification of trade list prices, etc.), and testimonial (e.g., interviews, inquiries, etc.) that supports compliance or non-compliance with the underlying criteria to each objective;
- Recalculated invoices to verify that all are mathematically accurate;
- Evaluated the results of testing to determine and document if sufficient, appropriate evidence has been obtained to address audit objectives and reduce audit risk to an acceptable level and that evidence is sufficient and appropriate to support findings and conclusion; and
- Performed other methodologies as needed.