

**Performance Audit:  
Department of Aviation  
Construction Contract Solicitations**

**February 2018**

**City Auditor's Office  
City of Atlanta**

File #17.04





**CITY OF ATLANTA**  
City Auditor's Office  
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February 2018

## *Performance Audit:*

### **Airport Construction Contract Solicitations**

#### *What We Found*

While the city's procurement process follows the American Bar Association's Model Procurement Code, which is designed to be fair and transparent, our review of 54 construction-related solicitations for the airport, amounting to just over \$1 billion, found red flags indicating elevated risk of fraud.

We found calculation errors in 13% of proposals for projects evaluated or awarded. In one case, the error appears to have changed the outcome of an award. We also found eight instances of a bid or proposal deemed responsive in error with three that may have affected the outcome of an award; the results of the Department of Procurement's responsiveness review were ambiguous for an additional 11 bids or proposals received and missing for 29.

The city cancelled 10 of the 63 solicitations in our sample. City code allows the chief procurement officer or department head to cancel a procurement when it is in the best interest of the city; the reasons for cancellation were unclear in 6 of the 10 cancellations.

Strengthening documentation of the procurement process could better protect the city against fraud and the appearance of corruption. Procurement is creating electronic forms with input controls to reduce errors that disqualify proponents. A complete e-procurement system would improve consistency and quality control.

Robust competition helps to reduce risk of fraud. We found 39% of the solicitations in our scope received fewer than three responses. The distribution of bid amounts for some solicitations also indicates heightened risk of collusion. Bids that are too far apart could indicate that the winning bidder had inside information. Procurement should evaluate bid patterns to detect potential fraud.

#### *Why We Did This Audit*

The airport launched a \$6 billion expansion program. We last reviewed procurement solicitation and evaluation processes at the airport in 2006. A performance audit could help provide assurance that the city's procurement processes are fair and transparent.

#### *What We Recommended*

To ensure transparency and facilitate accuracy quality control reviews, the chief procurement officer should:

- perform a quality assurance review of the scoring methodology
  - automate the calculations
  - ensure that evaluation scores are verified
- record evaluation scores using a standardized memorandum template and provide a copy to the user department
- record the final determination of responsiveness, and the name and date of the person conducting the review
  - in cases when a submittal is deemed non-responsive, document the reason for the determination on the responsive checklist
- evaluate bid patterns to detect potential fraud
- implement an e-procurement system that allows submittals to be received, reviewed, evaluated and stored within the system
- provide specific justification for the cancellation of a solicitation in the management file
- verify all required documentation is maintained in the project files according to city code and procurement procedures

For more information regarding this report, please use the "contact" link on our website at [www.atlaudit.org](http://www.atlaudit.org)

## Management Responses to Audit Recommendations

### Summary of Management Responses

**Recommendation #1:** We recommend the chief procurement officer perform a quality assurance review of the scoring methodology, ensure that it is consistent with procedures, and use a tool to automate the calculations. Once the automated spreadsheet is developed, Procurement should ensure that all evaluation score inputs into the spreadsheet are verified.

**Response & Proposed Action:** A standardized Excel Evaluation Matrix Template was developed and sent to the Procurement Officers to discuss with contracting officers. The formulas on the template were vetted and locked. The template allows the Contracting Officer the ability to change the weights of the criteria and validate that the aggregate weight does not exceed 100 and the aggregate score does not exceed 1,000. This ensures accuracy of the scores. In addition to this, a manual calculation is conducted to compare the scores.

**Agree**

**Timeframe:** November 2017

**Recommendation #2:** We recommend the chief procurement officer record evaluation scores using a standardized memorandum template and provide a copy to the user department at the end of the scoring session.

**Response & Proposed Action:** We will develop a memo template and append it to the Evaluation Matrix referenced in Recommendation One after review from the Department of Law. This memo and matrix will be distributed to the user departments at the appropriate time in the procurement cycle.

**Agree**

**Timeframe:** April 2018

**Recommendation #3:** We recommend the chief procurement office record the final determination of responsiveness, and the name and date of the person conducting the review. In cases when a submittal is deemed non-responsive, document the reason for the determination on the responsive checklist.

**Response & Proposed Action:** In June 2017, DOP developed a Non-Responsiveness Determination Form as tool to record non-responsive documentation. We will modify and standardized the template used to record the initial responsive review. This revised template will be affixed to the Non-Responsiveness Determination Form to provide a comprehensive record of responsive and non-responsiveness submittals.

**Agree**

**Timeframe:** April 2018

**Recommendation #4:** We recommend the chief procurement officer evaluate bid patterns to detect potential fraud.

**Response & Proposed Action:** We will solicit the assistance from Internal Audit for methods to detect potential fraud. The Audit conducted by Internal Audit referenced two (2) sources. **Agree**

**Timeframe:** July 2018

**Recommendation #5:** We recommend the chief procurement officer implement an e-procurement system that allows all submissions and required documents to be received, reviewed, evaluated and stored within the system.

**Response & Proposed Action:** DOP recognizes value of an e-procurement system. We have engaged in conversation with DAIM for a solution. The Oracle Upgrade will provide more e-procurement functionalities. To design a system for all submissions will require Code and Procedures changes. **Agree**

- Benchmark other cities to determine what e-procurement systems are used and how they are used
- Identify best practices
- Conduct on-line demos for solutions

**Timeframe:** September 2018

**Recommendation #6:** We recommend the chief procurement officer provide the specific justification for the cancellation of a solicitation in the management file.

**Response & Proposed Action:** We currently request user agencies to provide written reasons when requesting cancellation of a solicitation. We will meet with DOL for its opinion and recommendation to determine the department's course of action. **Agree**

**Timeframe:** May 2018

**Recommendation #7:** We recommend the chief procurement officer verify all required documentation is maintained in the project files according to city code and procurement procedures.

**Response & Proposed Action:** The Project File Checklist will be updated to include new forms and procedures. Staff will be trained on the Checklist and the first audit will occur by March 2018. We will also reinstitute the quarterly review of project files. **Agree**

**Timeframe:** March 2018

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**AUDIT COMMITTEE**  
Marion Cameron, CPA, Chair  
Cheryl Allen, PhD, CPA  
Daniel Ebersole

February 19, 2018

Honorable Mayor and Members of the City Council:

The airport launched a \$6 billion expansion program. We last reviewed procurement solicitation and evaluation processes at the airport in 2006. A performance audit could help provide assurance that the city's procurement processes are fair and transparent. The chief procurement officer agreed with the respective recommendations and has begun to address them.

The Audit Committee has reviewed this report and is releasing it in accordance with Article 2, Chapter 6 of the City Charter. We appreciate the courtesy and cooperation of city staff throughout the audit. The team for this project was Nia Young, Coia Walker and Diana Coomes Lynn.

Amanda Noble  
City Auditor

Marion Cameron  
Chair, Audit Committee





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# Airport Construction Contract Solicitations

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# Introduction

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We undertook this audit because the airport recently launched a \$6 billion expansion program and public procurements are vulnerable to fraud. The purpose of this audit was to assess whether the city's procurement processes are fair and transparent. We last reviewed procurement solicitation and evaluation processes for the airport in 2006.

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## Background

The Department of Procurement facilitates the purchase of goods and services for all city departments, the City Council, and the Mayor's Office. The department's mission is to model best practices in public purchasing while promoting equity, fairness, and economic inclusion. City code establishes procurement guidelines for the city and authorizes the chief procurement officer (CPO) to administer the procurement function, including:

- managing solicitations
- awarding contracts
- creating purchase orders
- renewing annual contracts
- monitoring small purchases

The city uses multiple methods of procurement. The city uses four formal methods of procurement and four alternative methods of procurement. The eight methods are shown in Exhibit 1, along with a description of when each type is used and the level of competition required. Formal methods require competitive source selection; alternative methods are primarily non-competitive and require justification that the need exists. Competitive procurements are typically required for contracts and purchases over \$20,000.

## Exhibit 1 Procurement Types Used by City

Type of Procurement	Procurement Method	When Used	Award Process
<b>Invitation to Bid</b>	Formal	<ul style="list-style-type: none"> <li>Price and responsibility are primary means for the award</li> </ul>	<ul style="list-style-type: none"> <li>City evaluates bids and awards contract to the most responsive and responsible bidder with the lowest price</li> </ul>
<b>Request for Proposal</b>	Formal	<ul style="list-style-type: none"> <li>Identifying the most responsible proponent who will provide a specific service or commodity that poses the greatest value to the city</li> </ul>	<ul style="list-style-type: none"> <li>City evaluates proposals to a RFP using a scoring matrix based on a variety of evaluation factors, including price, understanding of the scope and objectives, expertise, qualification of team members, experience, technical approach, past performance and other evaluation criteria</li> </ul>
<b>Request for Qualifications</b>	Formal	<ul style="list-style-type: none"> <li>City solicits statements from a group of professionals or suppliers to satisfy a future need</li> </ul>	<ul style="list-style-type: none"> <li>Only contractors deemed qualified are allowed to submit a bid or proposal for future solicitations associated with the service or commodity</li> </ul>
<b>Request for Information</b>	Formal	<ul style="list-style-type: none"> <li>Used to obtain information from contractors in a specialized or unique field prior to soliciting a formal bid or proposal</li> </ul>	<ul style="list-style-type: none"> <li>A department may make a formal request to CPO to obtain information from contractors; the information may become the basis for a subsequent invitation advertised by the DOP</li> </ul>
<b>Emergency Authorization</b>	Alternative	<ul style="list-style-type: none"> <li>An emergency exists that presents a threat to public health, welfare, or safety, or interruption of essential services</li> </ul>	<ul style="list-style-type: none"> <li>CPO may authorize others to procure supplies, services, construction items or professional or consultant services using competition as is practicable under the circumstances</li> </ul>
<b>Special Procurement</b>	Alternative	<ul style="list-style-type: none"> <li>An unusual or unique situation exists that makes the application of competitive requirements contrary to public interest</li> </ul>	<ul style="list-style-type: none"> <li>CPO has discretion to require limited competition or decide that there is only one logical choice of vendor to provide the needed services or commodity</li> </ul>
<b>Sole Source</b>	Alternative	<ul style="list-style-type: none"> <li>CPO determines that there is only one source for a supply, service, construction item or professional or consultant service</li> </ul>	<ul style="list-style-type: none"> <li>CPO may award contract or purchase without competition after a good-faith due diligence review of reasonable available sources</li> </ul>
<b>Cooperative Procurement</b>	Alternative	<ul style="list-style-type: none"> <li>Price agreement exists with another governmental agency</li> </ul>	<ul style="list-style-type: none"> <li>The CPO is authorized to participate in or administer an agreement with another public procurement unit. The CPO is also authorized to procure through contracts established by state and federal agencies</li> </ul>

**Source:** Department of Procurement's Standard Operating Procedures

Standard operating procedures. Procurement’s standard operating procedures for solicitations defines nine steps and considers user departments’ needs (see Exhibit 2):

Exhibit 2 Formal Procurement Process for Solicitations



**Source:** Department of Procurement’s Standard Operating Procedures

In the advertisement phase (Step 4), the public is made aware of the opportunity to compete for business with the city. Procurement advertises, at a minimum, on the City of Atlanta and the State of Georgia official websites. During Step 5, vendors submit their bids or proposals, also known as submittals, by the advertised deadline. During evaluation (Step 6), procurement initially reviews submittals for responsiveness and forwards the responsive ones to the Department of Aviation to determine responsibility, with the assistance of the Office of Contract Compliance and Division of Risk Management.

Standard operating procedures describe a *responsive* proponent as a submittal that meets the following criteria in respect to the ITB (Invitation to Bid) or RFP:

- timely delivery of the bid or proposal;
- the completeness of all material, documents and/or information that the bid/proposal requires;
- the notification of how the submittal’s methods, services, supplies, and/or equipment could reduce cost or increase quality.

The procedures define a *responsible* proponent as someone who can satisfactorily comply with the scope of service and all minimum

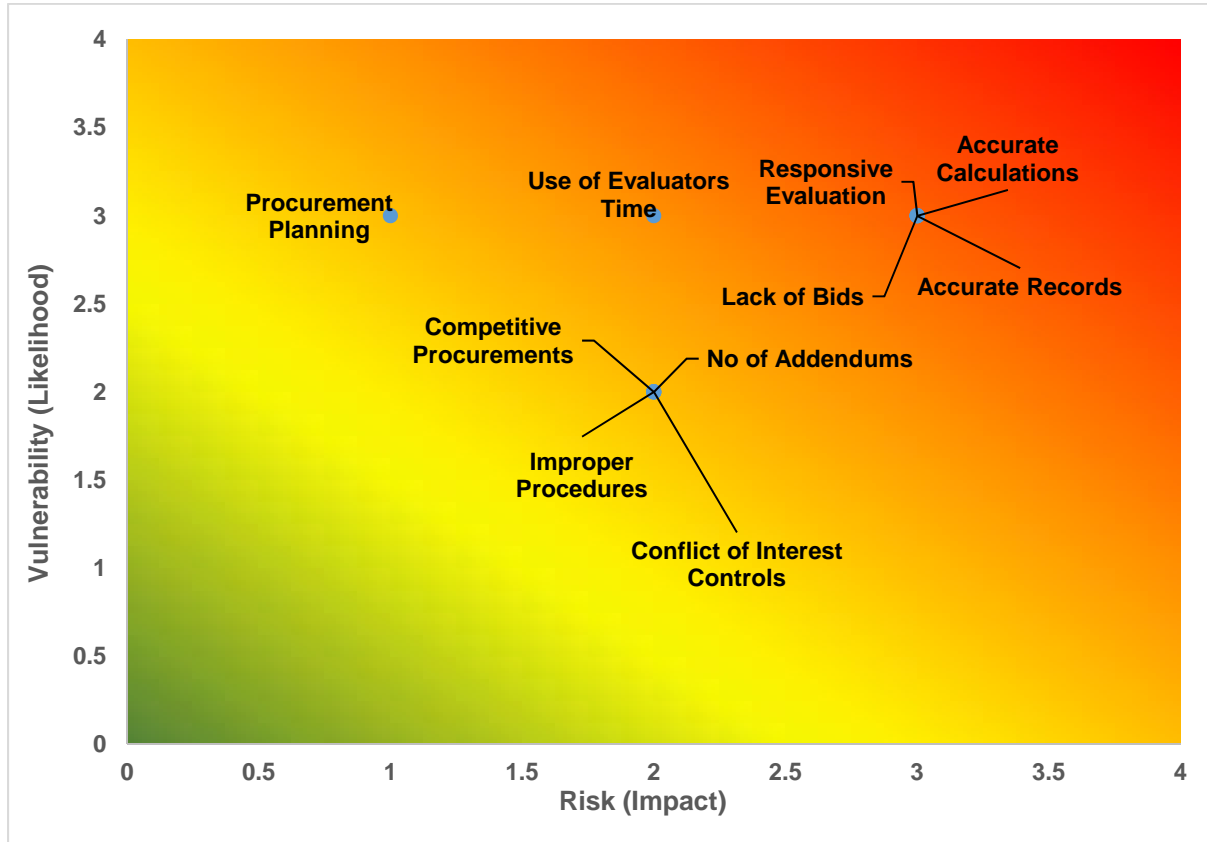
requirements set forth in the solicitation document. The city reviews the following criteria when assessing responsible bids/proposals:

- ability, capacity and skill of the proponent to perform or provide the work required
- capability of the proponent to perform or provide the work promptly
- character, integrity, reputation, judgment, experience and efficiency of the bidder/proponent
- quality of performance of previous contracts or work
- compliance with laws and ordinances relating to the agreement or work
- sufficiency of the financial resources to perform or provide the work
- quality, availability and adaptability of the supplies or contractual work
- successful proponent shall assume full responsibility for the conduct of his agents and/or employees

The award recommendation to City Council is based on pre-determined evaluation factors and award criteria outlined in the solicitation (Step 7). Procurement drafts the contract and the Department of Law reviews the agreement prior to initiating the signature process (Step 8).

Significant areas of risk identified in procurement process. We assessed risk related to the city's solicitation process. We created a process map to analyze the process and existing internal controls and identified areas that pose the highest risk to prioritize the audit focus. Our review identified the top areas of risk (see Exhibit 3).

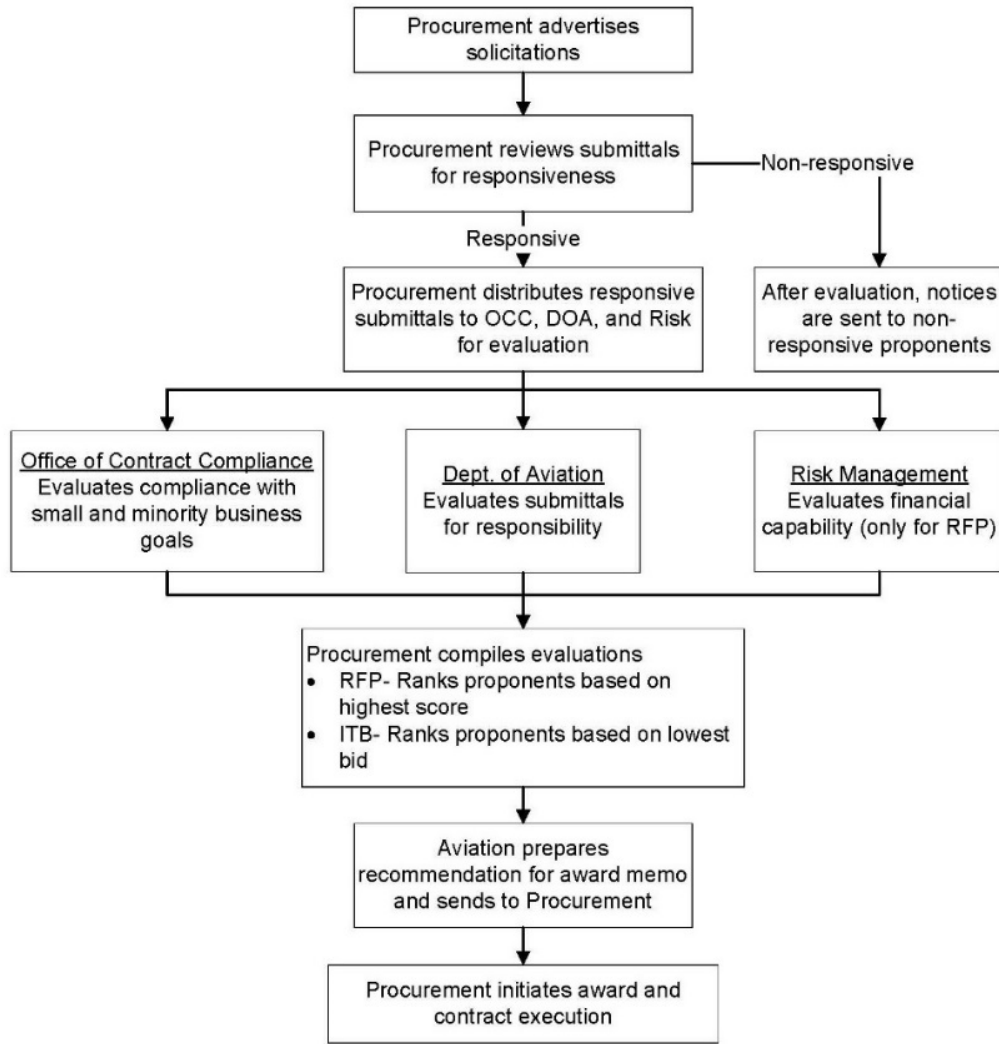
**Exhibit 3 Assessment Identifies Risk Areas in Procurement Process**



**Source:** Developed by auditors based upon review of controls, previous audits, interviews with staff, and process mapping.

Based upon the risk assessment, we focused on steps four through seven shown in Exhibit 2: advertisement, public receipt of responses, evaluation, and recommendations. The process flow that follows indicates the audit’s focus on the high-risk areas and describes the responsible parties during the various steps in the procurement process (see Exhibit 4).

#### Exhibit 4 Key Steps and Areas of Risk in Procurement Process



**Source:** Developed by auditors based on Procurement’s standard operating procedures and interviews with Procurement and Aviation staff.

The Department of Aviation is the subject matter expert. The Department of Aviation acts as the subject matter expert for the construction-related projects and determines which proponent is the most responsible for the projects solicited. The department arranges an evaluation team to assist in scoring the request for proposals and propose a recommendation to procurement before the final award is made.

The Office of Contract Compliance and its roles. The Office of Contract Compliance administers and enforces the equal employment opportunity and minority and female business enterprise programs of the city. It is



responsible for establishing equal business opportunity, small business enterprise, and disadvantaged business enterprise goals for city contracts. It also monitors city contracts for subcontracting participation.

**The Risk Management Division.** The Risk Management Division within the Department of Finance ensures that the city is protected through risk transfer in contractual agreements, reviewing and approving insurance provisions and requirements and holding the city harmless in contracts. Risk Management plays a role in the scoring of proposals by evaluating financial capability.

**Solicitation status.** The Department of Procurement has five statuses that apply to a solicitation moving through the procurement process:

- **Executed** - The contract has been executed and the goods/services are being provided to the city by the vendor in accordance with the terms of the contract.
- **Awarded** - The evaluation period has concluded and a preferred proponent has been determined, but the contract has not been executed.
- **Under Evaluation** - The solicitation submission period is closed and all responsive submittals are being evaluated against the solicitation criteria.
- **Open** - The solicitation submission period is open and responsive submittals are being accepted for consideration.
- **Canceled** - The solicitation was canceled before a contract was executed.

Construction-related contracts at the airport were awarded to 244 unique vendors. Over 550 unique vendors were associated with the 37 RFPs and ITBs awarded. This includes 149 prime contractors and 465 subcontractors; 244 different vendors were awarded projects for solicitations they bid on, either as a prime contractor or as a subcontractor. Of these vendors, 59 unique prime contractors and 198 unique subcontractors won bids (see Exhibit 5).

**Exhibit 5 City Awarded Construction Contracts to Over 240 Unique Vendors**

Type of Vendor	Number of Unique Vendors	Number of Unique Vendors Awarded
# of Prime Contractors	149	59
# of Subcontractors	465	198
# of Duplicates Between Unique Prime Contractors and Subcontractors	60	13
Grand Total Vendors*	554	244

**Source:** Compiled by audit staff using records from our audit sample of 2014 – 2016 awarded or executed aviation construction solicitations received from the Department of Procurement.

\* The grand total includes overlap between the prime and subcontractor figures.

A prime contractor is legally responsible for all aspects of fulfilling the contract, and may employ (and manage) one or more subcontractors. A subcontractor may join a prime contractor to provide a specific function or product. In a City of Atlanta joint venture, a contractor joins with a minority contractor in order to encourage business opportunities at the prime level.

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## Audit Objectives

This report addresses the following objectives:

- Do the city’s solicitation and evaluation processes facilitate fair and open competition that follow city code and procedures?
- Do procurement processes reflect best practices?
- Does the city have controls in place to limit or monitor risks for unfair solicitation and evaluation?

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## Scope and Methodology

We conducted this audit in accordance with generally accepted government auditing standards. We reviewed projects in various stages of the procurement process between January 1, 2014, and December 31, 2016.

Our audit methods included:

- reviewing the city code, state code and standard operating procedures for procurement and aviation
- reviewing the implementation of previous recommendations
- interviewing staff from the Departments of Procurement, Finance and Aviation, and the Office of Contract Compliance
- conducting an assessment to identify procurement risks
- observing evaluator training for request for proposals
- researching industry best practices for public procurement process
- analyzing airport construction-related solicitations

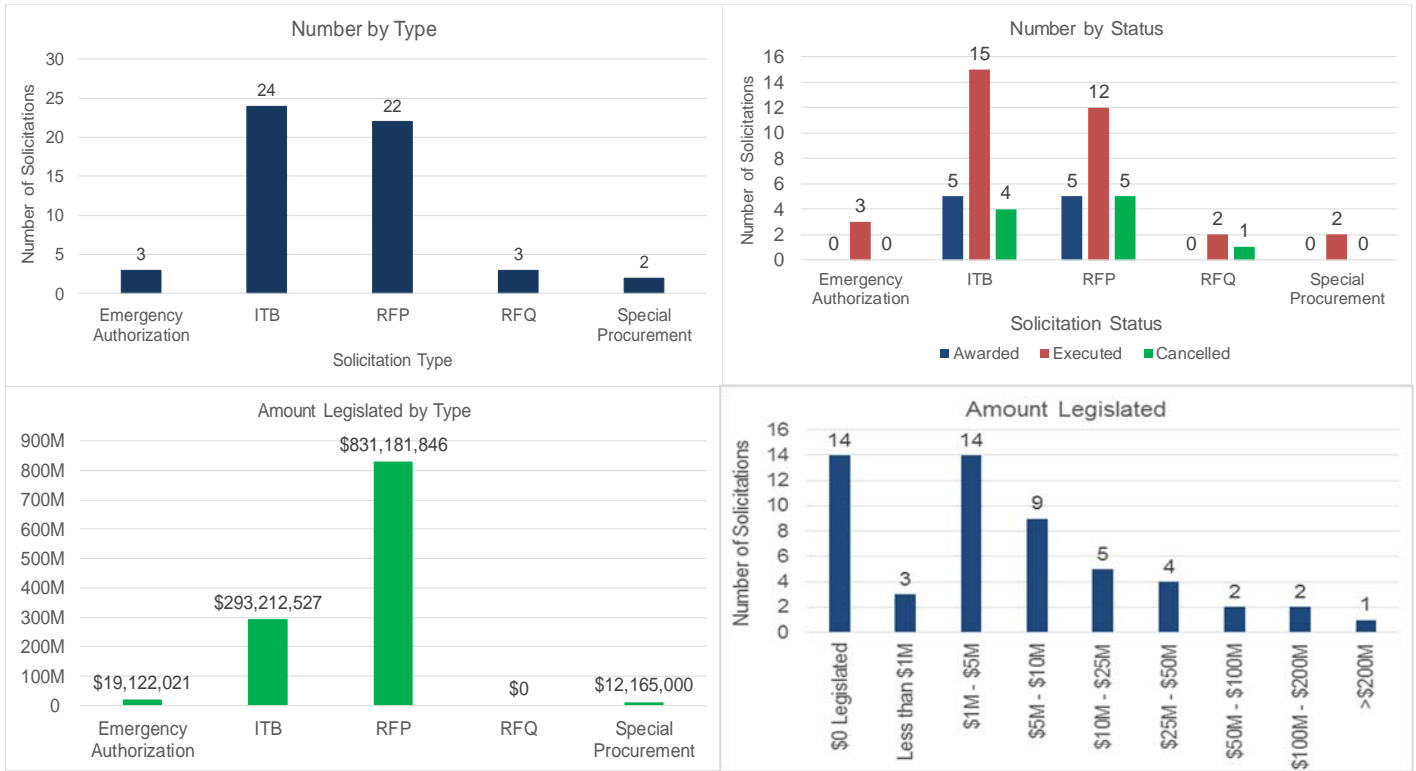
We requested all solicitations in progress between 2014 and 2016 associated with the Department of Aviation's design, construction, renovation, demolition, or maintenance of a fixed asset (property, plant and equipment) from the Departments of Procurement, Finance and Aviation, and the Office of Contract Compliance, which totaled 63. The Office of Contract Compliance included one solicitation on its list that had been executed in 2013; therefore, we also included it in our scope. Nine solicitations from our sample were either open or under evaluation as of January 2017 and we could not evaluate the solicitations that were in stages prior to award. Our final sample included a total of 54 solicitations available for our review, which encompassed just over \$1 billion dollars according to final action legislation, as shown in Exhibit 6. Our sample included solicitations procured using the following methods: Invitations to Bid, Request for Proposal, Request for Qualifications, Special Procurement, and Emergency Authorization.

Generally accepted government auditing 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.

Government auditing standards also require that we report any scope limitations that affect our ability to perform any audit procedures and

describe the effect that the limitation has on our ability to provide assurance in those areas. Because procurement was unable to provide us with one solicitation and the original management file associated with two solicitations that were within our sample, we were unable to complete our planned work.

**Exhibit 6 Audit Sample Evaluated 54 Different Solicitations**



**Source:** Compiled by audit staff using records from our audit sample of 2014 – 2016 aviation construction solicitations received from the Departments of Aviation, Finance, and Procurement, as well as the Office of Contract Compliance and Final Action Legislation.

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## Findings and Analysis

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### The City's Procurement Process Is Designed to Be Fair; But Poor Documentation and Errors Raise Red Flags

While the city's procurement process follows the American Bar Association Model Procurement Code, which is designed to be fair and transparent, our review of 54 construction-related solicitations for the airport, amounting to just over \$1 billion, found red flags indicating elevated risk of fraud. We found calculation errors in 13% of proposals for projects evaluated or awarded. In one case, the error appears to have changed the outcome of an award. We also found eight instances of a bid or proposal deemed responsive in error with three that could have affected the outcome of an award. The results of the Department of Procurement's responsiveness review were ambiguous for an additional 11 bids or proposals received and missing for 29. The city cancelled 10 of the 63 solicitations in our sample. City code allows the chief procurement officer or department head to cancel a procurement when it is in the best interest of the city; however, the reasons for cancellation were unclear in 6 of the 10 cancellations. Red flags do not necessarily indicate that fraud occurred.

Strengthening documentation of the procurement process could better protect the city against fraud and the appearance of corruption. Procurement is creating electronic forms with input controls to reduce errors that disqualify proponents. We recommend the department implement an e-procurement system that allows all submissions and required documents to be received, reviewed, evaluated and stored electronically, which should improve consistency and quality control.

Robust competition helps to reduce risk of fraud. We found 39% of the solicitations in our scope received fewer than three responses. The distribution of bid amounts for some solicitations also indicates heightened risk of collusion. Bids that are too far apart could indicate that the winning bidder had inside information or a proponent did not understand the scope of services. Procurement should evaluate bid patterns to detect potential fraud.

## The City's Procurement Code Is Consistent with Recommended Practices

The city's procurement code is modeled after the American Bar Association's (ABA) Model Procurement Code. The Model Code acts as a guide for state and local governments to ensure procurement procedures meet legal and ethical standards. It also addresses requirements to promote fairness and transparency while reducing opportunities for corruption.

The city's procurement code and standard operating procedures encompass many of the principles intended to ensure a fair and competitive procurement system, including:

- selection criteria are established in the solicitation
- bidding opportunities are published
- standard forms
- advertisement requirements set by state to allow enough time to respond
- contact between proponents and agency is restricted during procurement
- proponents have the same access to information
- competitive sealed bidding/proposals in most circumstances
- subcontractors identified in solicitation
- bid openings/acceptances are public
- no late submissions are accepted
- evaluation process limits influence of a single individual
- procedures to ensure evaluation team has technical expertise and no conflicts of interest

According to Transparency International, construction and public works rank as industry sectors most prone to various types of corruption. Transparency International is a global, independent organization that partners with governments and businesses to put effective measures in place to tackle corruption. The International Anti-Corruption Resource Center is a non-profit organization tasked with training investigators, auditors and project personnel on how to detect, investigate and prove procurement fraud and corruption.

Both these organizations provide information on how to recognize various fraud schemes and their red flags that could impede a fair and transparent public procurement process. The city has implemented key best practices that these organizations recommend to mitigate fraud risks and incorporated these practices into city code and/or standard operating procedures (see Exhibit 7).

**Exhibit 7 City Implemented Prevention Practices in Code or Policy**

Fraud Scheme	Red Flags	Prevention Practices	City Code or Policy Addresses?
<b>Fraudulent Practices (Corruption)</b>	<ul style="list-style-type: none"> <li>- Clarification sought by proponents is not answered in writing and circulated to all bidders</li> <li>- Delay between deadline for submitting and opening submittals</li> <li>- Delay between deadline for submitting and opening submittals</li> </ul>	<ul style="list-style-type: none"> <li>- All proponents have the same access to information</li> <li>- Competitive sealed submittals in most circumstances</li> <li>- Bid openings and acceptances are public</li> <li>- Publicize the award decision immediately, notify unsuccessful bidders and offer to explain why the submittal was not accepted</li> </ul>	<ul style="list-style-type: none"> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> </ul>
<b>Manipulation of Bids</b>	<ul style="list-style-type: none"> <li>- Poor controls and inadequate bidding procedures</li> <li>- Winning submittal voided for “errors” in contract specifications</li> <li>- Submittals accepted after the submission deadline</li> <li>- Submittals are “lost”</li> <li>- A qualified proponent is disqualified for questionable reasons</li> </ul>	<ul style="list-style-type: none"> <li>- Selection criteria are established in the solicitation</li> <li>- Standard forms</li> <li>- Adhere to established deadlines, unless extensions are notified to all proponents</li> <li>- No late submissions accepted</li> <li>- Bidding opportunities are published</li> </ul>	<ul style="list-style-type: none"> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> </ul>
<b>Excluding Qualified Bidders</b>	<ul style="list-style-type: none"> <li>- Failure to adequately publicize requests for submittals</li> <li>- Allowing an unreasonably short time to bid</li> <li>- A significant number of qualified proponents fail to bid</li> </ul>	<ul style="list-style-type: none"> <li>- Establish deadlines that are reasonable for the type of procurement</li> <li>- Advertisement requirements set by state to allow enough time</li> </ul>	<ul style="list-style-type: none"> <li>✓</li> <li>✓</li> </ul>
<b>Conflict of Interest</b>	<ul style="list-style-type: none"> <li>- There are political figures on the evaluation committee</li> </ul>	<ul style="list-style-type: none"> <li>- Use of evaluation committees to make critical decisions</li> <li>- Ensure that the bid evaluation team has the technical expertise needed and no conflicts of interest</li> </ul>	<ul style="list-style-type: none"> <li>✓</li> <li>✓</li> </ul>
<b>Collusive Bidding</b>	<ul style="list-style-type: none"> <li>- Unusual bid patterns                             <ul style="list-style-type: none"> <li>o Too high</li> <li>o Too close</li> <li>o Too consistent</li> <li>o Too far apart</li> <li>o Round numbers</li> </ul> </li> <li>- Losing proponents hired as subcontractors</li> </ul>	<ul style="list-style-type: none"> <li>- Contact between proponent and agency is restricted during procurement</li> <li>- Subcontractors identified in solicitation</li> </ul>	<ul style="list-style-type: none"> <li>✓</li> <li>✓</li> </ul>

**Source:** Auditor comparison of best practices to Department of Procurement standard operating procedures and city code.

## Errors, Missing and Inconsistent Documentation, and Cancellations Raise Red Flags

In our review of 54 solicitations, we found typical indicators of potential bid manipulation, acceptance of nonresponsive bids, presence of errors, and missing documentation. We also found four procurement packages missing significant documentation, and some cancelled solicitations lacked specific justifications, which is a red flag of bid manipulation.

These issues have resulted in what appears to be four incorrectly awarded contracts. We found 17 miscalculated evaluations, which resulted in one incorrectly awarded contract. The errors could be caused by manual scoring calculations, lack of review of documentation at each stage of the solicitation process, or bid manipulation. Procurement's procedures do not require evaluation scores to be reviewed for accuracy after the calculations are compiled and tallied.

We found that procurement incorrectly designated eight proponents as responsive, which may have resulted in three incorrectly awarded contracts. We also could not verify 30% of the responsive reviews. Procurement was unable to locate 29 reviews of the 135 submittals (21%) in the project files.

Miscalculations appear to have resulted in an incorrect award. One contract associated with a multi-award solicitation appeared to be awarded in error to a vendor due to calculation errors. We found that one of the awardees did not appear to rank among the four highest scoring proposals after we recalculated the scores using procurement's scoring matrix. Although the chief procurement officer has the authority to consider other factors in making the award, we found no evidence in the files that this was the case. This vendor received approximately \$31 million in payments under the contract between June 2014 and October 2, 2017. The contract is set to expire in August 2018. Overall, 17 of the 135, or 13%, vendors' submittals in our sample of awarded or executed solicitations had calculation errors; however, only one miscalculation appeared to affect the outcome.

Incorrect computation on the scoring matrix resulted in 16 of the 17 calculation errors. Three submittals had miscalculation errors due to procurement recording the scores incorrectly from memos sent by the Office of Contract Compliance and the Risk Management Division. The errors did not affect the outcome of these awards. Calculation errors affect the credibility of the procurement process and put the city at risk, even when the errors do not impact the outcome of the award.



Procurement's procedures do not require the scores to be reviewed and verified for accuracy after the calculations are complete. The evaluation should result in the responsive and most responsible bidder having the highest score.

Scoring process is not standardized or automated, resulting in various recording methods and calculation errors. Procurement is responsible for compiling the scores from the evaluation team that is selected by the user department as well as the Offices of Contract Compliance and the Risk Management Division. The scores are then multiplied by the weight factor and scaling factor to calculate a final score (see Exhibit 8). While procurement's procedures require the use of a scoring matrix to compile evaluation scores, they do not specify how the scores should be recorded or which tools should be used to calculate scoring. We found that procurement's procedures do not provide for the review of scores or accuracy. Automating the scoring process and reviewing scoring inputs could help to reduce calculation errors and better protect the city against fraud and the appearance of corruption.

**Exhibit 8 Scoring Matrix Template**

Proposals are evaluated based on the criteria set forth in the RFP by the Evaluation Team selected from various divisions within the City.			Company A		Company D Non-Responsive Per OCC)		
		Scaling Factor	Score	Totals	Score	Totals	Ax10
A		sc	B	A x SC x B	B	A x SC x B	
25	RESUME OF KEY PERSONNEL	1	2	30	2	30	150
20	MANAGEMENT AND SUPPORT PLAN	1	4	80	4	80	200
20	OVERALL EXPERIENCE	1	5	100	10	200	200
10	COST PROPOSAL	1	10	100	1	10	100
10	FINANCIAL CAPABILITY	1	4	40	8	80	100
15	OFFICE OF CONTRACT COMPLIANCE	0.67	15	150	0	0	150
100	TOTALS			570		470	1000
	(A) represents the weights of each category represented in the RFP documents.						
	(B) represents the scores from the evaluators.						
	(SC) represents the scaling factor to evenly scale all scores to a 10 point scale.						
	(A x SC x B) represents the properly weighted and scaled score for each factor.						
	(N/R) Non-responsive or Non-responsible						

**Source:** Department of Procurement Standard Operating Procedures Manual, pg. 85

According to the International Anti-Corruption Resource Center, poor controls and inadequate bidding procedures can allow for manipulation

of the process to benefit a favored proponent. We recommend that procurement perform a quality assurance review of the scoring methodology, ensure that it is consistent with procedures, and automate the calculations. We also recommend that, once the automated spreadsheet is developed, procurement ensure that all evaluation score inputs are verified.

User departments cannot validate evaluation scores. Procurement staff record initial evaluation scores for the user department at the time of evaluation; the user department does not retain a copy of the scores. As a result, it is not possible for the user department to validate final scores once procurement compiles them into the scoring matrix. Conversely, scores prepared by Contract Compliance and Risk Management are recorded and forwarded to procurement in a memorandum; they typically retain the original memorandum and a copy is sent to procurement. Policy and procedures state that all documents pertaining to the solicitation, including internal communications, are to be housed in a contract file.

To ensure transparency and facilitate adequate quality control reviews, we recommend that procurement staff record evaluation scores using a standardized memorandum template and provide a copy to the user department at the end of the scoring session.

Unclear responsive reviews prevent reasonable assurance of a fair and transparent process. We could not verify 30% of the responsive reviews. Procurement was unable to locate 29 reviews of the 135 submittals (21%) in the project files (see Exhibit 9). Eight responsive reviews found proponents responsive in error, which allowed those proponents to progress to the next stage of the solicitation process when they should have been deemed non-responsive; these submittals appeared to have incorrect or missing required documentation or the proponent submitted blank forms. We found no indication in the files that the chief procurement officer exercised discretion to waive requirements. Three of the eight contract awards could have been affected. We found only three responsive checklists within our sample that had a clear determination of responsive status. We could not verify responsive status for eleven submittals because the submittals were either missing required documentation that was recorded as present during the initial responsive review or were not evaluated by procurement.

### Exhibit 9 Over One-Third of Responsive Reviews Questionable

Responsive Review Status	Number of Submittals	Occurrence Rate
Correct	87	64%
Could Not verify	40	30%
- Missing Subset of Could Not Verify	29	21%
Found Responsive in Error	8	6%
Found Non-Responsive in Error	0	0%
<b>Total</b>	<b>135</b>	<b>100%</b>

**Source:** Compiled by audit staff using records from our audit sample of 2014 – 2016 aviation construction-related solicitations received from the Department of Procurement.

According to procurement's standard operating procedures, only submittals found responsive should be distributed to the department and other supportive agencies for evaluation. Procurement conducts a responsive review of bids received prior to moving forward for evaluation. The department is responsible for identifying the submittals that are responsive and recording all findings on a responsive checklist. The checklist must identify all required submittals for the project and a bidder's compliance with submittal requirements. The findings should be kept in the contract file for auditing purposes. The procedures provide no guidance on how to document the responsive review including the person conducting the review and the reason for the determination. Strengthening policies and procedures could better protect the city against fraud and the appearance of corruption.

Our previous audits recommended clarification of procedures for determining proponents' responsibility and responsiveness, which procurement agreed to implement. We also recommended that, when a submittal is deemed non-responsive, procurement document the non-responsiveness review, including the person conducting the review and the reason for the determination. According to our current review, procurement uses the checklist, but does not record the responsive determination. Transparency International states that documenting and maintaining effective record-keeping of decisions made and the reason for the decisions promotes accountability within the procurement process.

We recommend that procurement record the final determination of responsiveness and the name and date of the person conducting the review. In cases when a submittal is deemed non-responsive, we

recommend that the department document the reason for the determination on the responsive checklist.

Missing documents increase city’s risk. Procurement staff were unable to produce the management file or any vendor submittals for one solicitation. Two additional solicitations were missing the entire management file, which contains the review and evaluation documentation about the vendor submittals. One vendor submittal was missing from another solicitation file (see Exhibit 10). We could not determine that the procurement process was fair and transparent to all vendors due to the missing documentation, which increases the city’s risk.

**Exhibit 10 Four Solicitations Missing Significant Documentation**

Issues	Total # of Issues
Unable to Produce Entire File	1
Missing Management File	2
Missing Vendor Submittal	1
<b>Total</b>	<b>4</b>

**Source:** Compiled by audit staff using records from our audit sample of 2014 – 2016 aviation construction solicitations received from the Department of Procurement.

City code Section 2-1108 states that all determinations and other written records pertaining to the solicitation, award or performance of a contract or purchase order shall be maintained in a contract file by the chief procurement officer. The department’s standard operating procedures further explains that the procurement professional must ensure all communications between both internal and external representatives are in a contract file and the file should be kept in an audit-ready status at all times. The contract files should include a minimum of 25 items, including: vendor submittals, responsive checklists, award recommendations, legislation, evaluation results (for RFPs only), and project file checklists.

According to the National Institute of Government Procurement, procurement departments should integrate and use technology to enhance transparency. A transparent and informative public procurement process encourages confidence through the free and open exchange of information, enhanced knowledge, improved efficiency, and reduction of the potential for corruption and waste. According to Transparency International, the use of e-procurement (electronic procurement) provides opportunities to reduce corruption in the procurement process by increasing and improving opportunities to monitor the process. Centralizing all information in a publicly available

web portal can also increase the number of vendors and the amount of competition by making access easier and significantly enhancing transparency. In the long term, transparency via e-procurement will save time as well as costs to the city and the vendor community.

Procurement currently only accepts paper solicitation responses. The department stated that transitioning to a fully online submission system violates city code. According to city code Section 2-1188, all submittals must be delivered to and received by the chief procurement officer or designated procurement staff at the bid opening and stamped no later than 2:00 p.m. eastern time. The code does not appear to prohibit the use of e-procurement submission. According to department staff, the city plans to implement some e-procurement tools, such as creating online forms to limit errors during submission, but will still rely on paper copies.

We recommend that procurement implement an e-procurement system that allows all submittals and required documents to be received, reviewed and evaluated within the system to increase the transparency and completeness of the contract file.

Missing documents cloud compliance with advertising requirements. Of the 49 solicitations that were advertised because they were required to be competitively bid, 32 files (65%) contained evidence showing the advertisement date. Of those 32, all had been advertised for at least 28 days, in accordance with state law. The remaining 17 files (35%) did not contain evidence of advertisement, as required by procurement's procedures; therefore, we could not determine whether those solicitations had been advertised for the required time period.

We recommend that procurement include documentation in the solicitation files showing the posting date of the solicitations in order to document compliance with state advertisement guidelines and ensure transparency in the process.

Cancellations in the "best interest of the city" can be a misuse of discretion that jeopardizes the integrity of the process. The city cancelled 10 solicitations, or 19% of the aviation construction-related projects in our sample. Of the ten solicitations, six did not follow cancellation procedures or city code requirements. Two of the six were missing cancellation letters in the file. Four of the six cited "in the best interests of the city" as the reason for cancellation but did not provide the required justification as city code stipulates. According to Section 2-1194 of the city code, an ITB, RFP, or any other solicitation may be canceled when it is "in the best interest of the city." The code also

states that the reasons shall be made part of the contract file. The standard operating procedures further explain that the chief procurement officer may elect to reject any or all offers, in whole or in part when doing so is in the best interest of the city. When this occurs, the procurement professional is responsible for ensuring that all respondents or offerors are notified in writing of the reason(s) for the cancellation or rejection of offers. This notification and all supporting confirmation notices should be part of the contract file. Strengthening documentation of the procurement process could better protect the city against fraud and the appearance of corruption.

The United States Government Accountability Office (GAO) encourages a reasonable basis for cancelling a solicitation, stating that the agency should provide a coherent and consistent rationale. The use of standard language such as “best interest of the city” without a specific justification could be an indicator of fraud. Proponents lose faith in the integrity of the process and time is wasted when a project is cancelled, especially without a specific reason. According to Transparency International, effective record-keeping of decisions and the reasons for those decisions enables others to review the decisions and promote accountability.

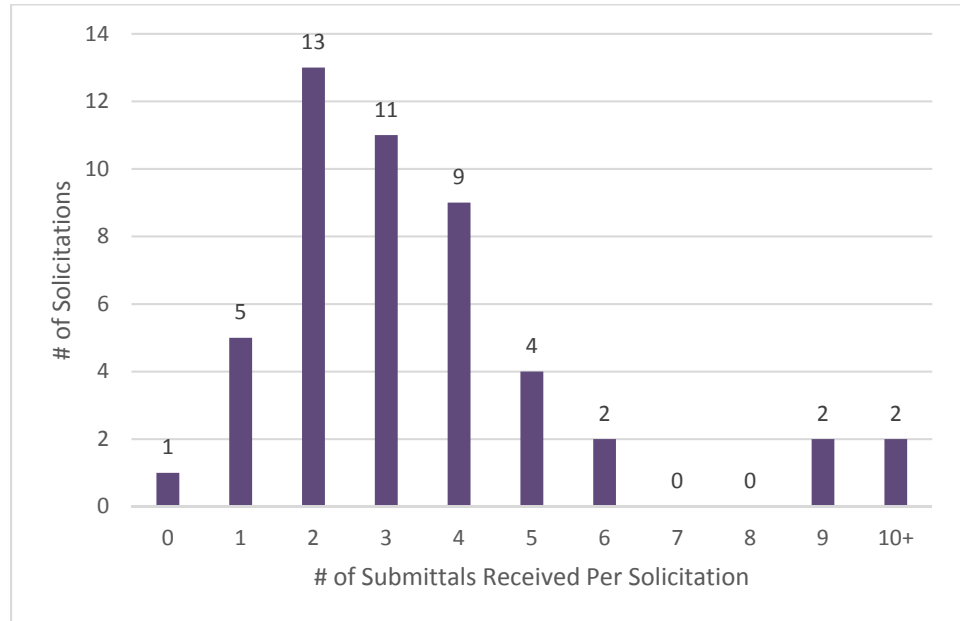
We recommend that the chief procurement officer provide specific justification for the cancellation of a solicitation in the management file to promote accountability and transparency within the process. We also recommend that the department verify all required documentation is in the project file, as city code and procurement procedures require.

### **Limited Competition Could Affect Fair Bidding**

Our review of 49 solicitations required to be competitively bid found that 39% had fewer than three bids. Also, bids received for seven of the ITBs had bid percentage differences of more than 20%, ranging from 28% to 61%. This could indicate possible collusion or vendors not understanding the scope of the work.

Of the 49 solicitations required to be competitively bid, 19 (39%) had fewer than three submittals. According to city code, the city shall select no less than three submittals solicited from a RFP that it deems as the most responsible and responsive; provided, however, that if three or less submittals respond to the solicitation, this requirement will not apply. Our review of the solicitations indicated that the city received an average of four submittals and a median of three submittals per solicitation. Thirteen solicitations received two submittals for the solicitation (see Exhibit 11).

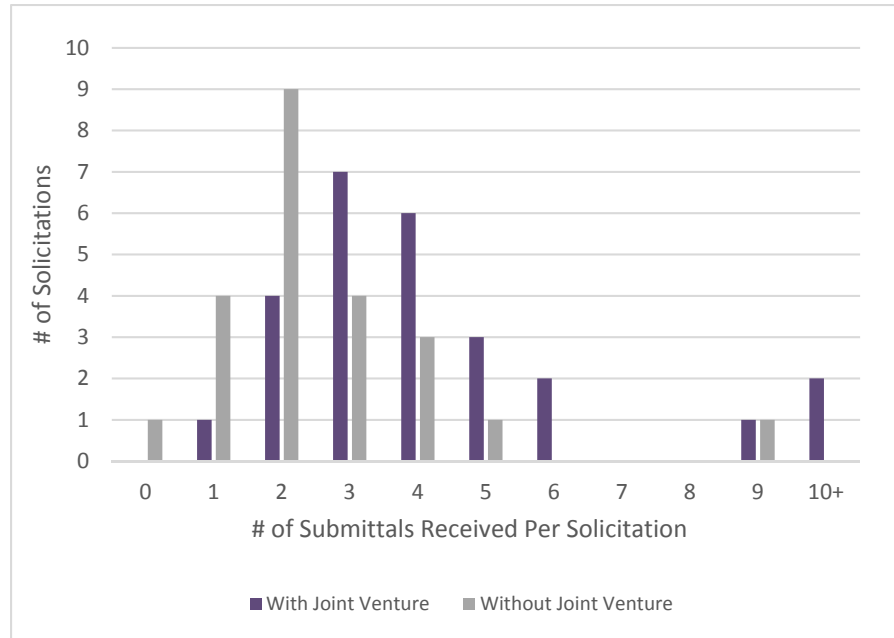
**Exhibit 11 39% of Solicitations Received Fewer Than 3 Submittals**



**Source:** Compiled by audit staff using records from our audit sample of 2014 – 2016 aviation construction solicitations received from the Department of Procurement.

The city received almost twice as many submittals when the solicitation mandated a joint venture. We found that solicitations with the joint venture mandate received an average of almost two more submittals per solicitation (see Exhibit 12). According to Office of Contract Compliance staff, the city began using joint ventures to open the procurement process to minorities as primes rather than as subcontractors in the contracting of the large projects.

**Exhibit 12 Joint Venture Mandated Solicitations Received More Submittals on Average**



**Source:** Compiled by audit staff using records from our audit sample of 2014 – 2016 aviation construction solicitations received from the Department of Procurement.

Distribution of bid amounts could potentially indicate collusion. The difference between the lowest and highest bid was more than 20% for 7 of the 20 ITBs that we reviewed. Two solicitations had one submittal, which is reflected in the zero percent difference (see Exhibit 13). According to the International Anti-Corruption Resource Center, bids that are too close together (less than 1%) or too far apart (more than 20%) could be indicators of collusive bidding. Collusive bidding can increase prices within the market, preventing the city from receiving the best prices for taxpayers’ dollars. It occurs most frequently in industries with high startup costs and entry costs that have relatively few bidders.



**Exhibit 13 Seven Solicitations Had Differences of 20% or More**

ITB Solicitation Number	% Difference Between Highest and Lowest Bid	# of Bids
FC-7467	61%	4
FC-7489	43%	6
FC-8746	42%	3
FC-8932	39%	4
FC-6863	33%	2
FC-6668	30%	4
FC-8314	28%	4
FC-7057	19%	4
FC-9060	18%	3
FC-9001	17%	5
FC-9142	14%	4
FC-7911	9%	4
FC-7970	9%	2
FC-6922	6%	2
FC-8751	6%	2
FC-8676	4%	2
FC-7757	3%	2
FC-6901	3%	2
FC-7036	0%	1
FC-6902	0%	1

**Source:** Compiled by audit staff using records from our audit sample of 2014 – 2016 aviation construction solicitations received from the Department of Procurement.

Although estimated costs are not made available to the public, each ITB contains a project contingency. Project contingencies are a common industry practice. It is a percentage of estimated costs added to the cost estimate to compensate for unexpected expenses resulting from uncertainties in the project. Staff told us that a 10% contingency based on the estimated project value is a common industry practice. With this information, proponents could estimate project values based on the contingency and agree among themselves in advance who would present the winning submittal, which the International Anti-Corruption Resource Center (IACRC) refers to as collusive bidding. Differences in bid amounts could also be due proponents not understanding the scope of services for the project. According to aviation, they collect and maintain historical data and use it to develop estimates for projects. In assessing the award of a project, the Federal Highway Administration

construction and management team suggests comparing bids to project estimates, reviewing the number of bids submitted for each solicitation, and reviewing the range of bids received. Data patterns could identify areas for improvement and for mitigating fraud risks. We recommend that procurement evaluate bid patterns to detect potential fraud.

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## Recommendations

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To ensure transparency and facilitate accuracy quality control reviews, the chief procurement officer should:

1. perform a quality assurance review of the scoring methodology, ensure that it is consistent with procedures, and use a tool to automate the calculations.
  - a. once the automated spreadsheet is developed, Procurement ensure that all evaluation score inputs into the spreadsheet are verified
2. record evaluation scores using a standardized memorandum template and provide a copy to the user department at the end of the scoring session
3. record the final determination of responsiveness, and the name and date of the person conducting the review.
  - a. In cases when a submittal is deemed non-responsive, document the reason for the determination on the responsive checklist
4. to evaluate bid patterns to detect potential fraud.

To ensure transparency and completeness of the contract file, the chief procurement officer should:

5. implement an e-procurement system that allows all submissions and required documents to be received, reviewed, evaluated and stored within the system
6. provide the specific justification for the cancellation of a solicitation in the management file
7. verify all required documentation is maintained in the project files according to city code and procurement procedures.



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# Appendix

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## Appendix A: Management Review and Response to Audit Recommendations

<b>Report # 17.04</b>	<b>Report Title: Airport Construction Contract Solicitations</b>	<b>Date: Feb 2017</b>
<p><b>Recommendation 1:</b> We recommend the chief procurement officer perform a quality assurance review of the scoring methodology, ensure that it is consistent with procedures, and use a tool to automate the calculations. Once the automated spreadsheet is developed, Procurement should ensure that all evaluation score inputs into the spreadsheet are verified.</p>		
<p><b>Proposed Action:</b> A standardized Excel Evaluation Matrix Template was developed and sent to the Procurement Officers to discuss with contracting officers. The formulas on the template were vetted and locked. The template allows the Contracting Officer the ability to change the weights of the criteria and validate that the aggregate weight does not exceed 100 and the aggregate score does not exceed 1000. This ensures accuracy of the scores. In addition to this, a manual calculation is conducted to compare the scores.</p>		<p><b>Response:</b> Agree</p>
<p><b>Person Responsible:</b> Joyce Webb</p>		<p><b>Implementation Date:</b> November 2017</p>
<p><b>Recommendation 2:</b> We recommend the chief procurement officer record evaluation scores using a standardized memorandum template and provide a copy to the user department at the end of the scoring session.</p>		
<p><b>Proposed Action:</b> We will develop a memo template and append it to the Evaluation Matrix referenced in Recommendation One after review from the Department of Law. This memo and matrix will be distributed to the user departments at the appropriate time in the procurement cycle.</p>		<p><b>Response:</b> Agree</p>
<p><b>Person Responsible:</b> Jill Watkins</p>		<p><b>Implementation Date:</b> April 2018</p>
<p><b>Recommendation 3:</b> We recommend the chief procurement office record the final determination of responsiveness, and the name and date of the person conducting the review. In cases when a submittal is deemed non-responsive, document the reason for the determination on the responsive checklist.</p>		
<p><b>Proposed Action:</b> In June 2017, DOP developed a Non-Responsiveness Determination Form as tool to record non-responsive documentation. We will modify and standardized the template used to record the initial responsive review. This revised template will be affixed to the Non-Responsiveness Determination Form to provide a comprehensive record of responsive and non-responsiveness submittals.</p> <p><b>Additional Comments:</b> The Non-Responsiveness Determination Form is posted on DOP's website as tool to educate potential offerors on the reasons for non-responsiveness.</p>		<p><b>Response:</b> Agree</p>
<p><b>Person Responsible:</b> Lloyd Richardson</p>		<p><b>Implementation Date:</b> April 2018</p>

<b>Recommendation 4:</b> We recommend the chief procurement officer evaluate bid patterns to detect potential fraud.	
<b>Proposed Action:</b> We will solicit the assistance from Internal Audit for methods to detect potential fraud. The Audit conducted by Internal Audit referenced two (2) sources.  <b>Additional Comments:</b> Schedule a meeting by EOM February with Audit	<b>Response:</b> Agree
<b>Person Responsible:</b> Darryl Matthews	<b>Implementation Date:</b> July 2018
<b>Recommendation 5:</b> We recommend the chief procurement officer implement an e-procurement system that allows all submissions and required documents to be received, reviewed, evaluated and stored within the system.	
<b>Proposed Action:</b> DOP recognizes value of an e-procurement system. We have engaged in conversation with DAIM for a solution. The Oracle Upgrade will provide more e-procurement functionalities. To design a system for all submissions will require Code and Procedures changes. <ul style="list-style-type: none"> <li>• Benchmark other cities to determine what e-procurement systems are used and how they are used</li> <li>• Identify best practices</li> <li>• Conduct on-line demos for solutions</li> </ul>	<b>Response:</b> Agree
<b>Person Responsible:</b> Bret Swenson, Annette Bettis, Keith Brooks	<b>Implementation Date:</b> September 2018
<b>Recommendation 6:</b> We recommend the chief procurement officer provide the specific justification for the cancellation of a solicitation in the management file.	
<b>Proposed Action:</b> We currently request user agencies to provide written reasons when requesting cancelation of a solicitation. We will meet with DOL for its opinion and recommendation to determine the department's course of action.	<b>Response:</b> Agree
<b>Person Responsible:</b> Susan Garrett, Keith Brooks	<b>Implementation Date:</b> May 2018
<b>Recommendation 7:</b> We recommend the chief procurement officer verify all required documentation is maintained in the project files according to city code and procurement procedures.	
<b>Proposed Action:</b> The Project File Checklist will be updated to include new forms and procedures. Staff will be trained on the Checklist and the first audit will occur by March 2018. We will also reinstitute the quarterly review of project files.	<b>Response:</b> Agree
<b>Person Responsible:</b> Mimie Woods	<b>Implementation Date:</b> March 2018