CITYWIDE INTERNAL CONTROLS SELF-ASSESSMENT

August 28, 2024

Honorable Karen Bass, Mayor
Honorable Hydee Feldstein Soto, City Attorney
Honorable Members of the Los Angeles City Council

The City's ongoing budgetary challenges have left departments scrambling to do more with less resources. Of particular concern is the weakening of the administrative and financial infrastructure that supports departmental operations—the City eliminated a significant amount of accounting and financial analysis positions during the last budget cycle. Remaining staff are often asked to take on additional work or step into new roles without adequate training, support, or supervision.

These conditions, combined with the City's decentralized financial controls, increase opportunities for fraud and financial reporting errors. In November 2023, the Controller's Office launched the Citywide Internal Controls Self-Assessment to evaluate departmental risks and identify potential areas for improvement. The self-assessment, which was administered by Crowe LLP, contained survey questions and supporting documentation requests related to departmental internal controls (e.g., cash receipts, receivables, revenue, expenditures, procurement, payroll, grants, information technology).

The self-assessment was not an audit of the effectiveness of departmental controls or intended to single out individual departments. Crowe LLP analyzed departmental responses and developed risk scores to highlight potential control weaknesses.

- The three functional areas with the highest level of risk were revenues, procurement & contracting compliance, and monitoring activities.
- Several departments initially reported having comprehensive safeguards in place, but those claims were not always substantiated through follow-up questions and risk-based reviews of supporting documentation.

These findings and other insights from the self-assessment will be used to guide future training opportunities and audits of City functions and departments. Our Office's ability to carry out this important oversight work remains hamstrung by a lack of resources, but we will continue our efforts to identify practical and collaborative solutions.

While the Controller's Office is primarily tasked with protecting the integrity of the City's financial operations, building an organizational culture of strong internal controls is a shared responsibility across all departments and elected offices. We are grateful to staff across the City who took the time to engage on this important project while carrying out their daily duties.

We welcome questions, feedback and the opportunity to discuss ways we can partner to strengthen areas of concern to ensure we've done all we can to ensure fiscal integrity for your department and citywide.

Respectfully submitted,

KENNETH MEJIA
City Controller

Smart decisions. Lasting value.™

Office of the City Controller – Audit Services Division

Citywide Internal Controls Self-Assessment

August 28, 2024

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Executive Summary

The Office of the City Controller's Audit Services Division (ASD) engaged Crowe LLP (Crowe), a public accounting firm, to administer a Citywide self-assessment of internal controls. The self-assessment was administered in the form of a survey with the aim of incorporating lessons learned from previous assessments and maintaining uniformity in the internal controls and functional areas being evaluated. Crowe modernized the self-assessment with a technology-focused approach to enhance the response collection and data analytics process, improve user experience, and increase departmental participation.

Objectives & Scope

The primary objective of this engagement was to substantiate the existence of internal controls at City departments and identify potential areas for improvement. To achieve this, Crowe distributed a self-assessment survey and conducted targeted validation testing to better understand the extent to which departments have implemented controls over fiscal operations and stewardship of public funds. **These efforts highlighted preliminary indicators of risk, but future audits are needed to actually test the effectiveness of departmental internal controls.**

This Citywide control self-assessment was led by the Controller's Office, with the support of the Office of the City Administrative Officer. The intent was to take a modernized, technology-driven approach to helping the City evaluate and strengthen its controls over financial reporting and fiscal operations. Subject matter experts across City departments provided their knowledge and experience of existing controls and processes to help identify the current state of the control environment.

The data obtained through the assessment was used to identify Citywide practices and positive trends in controls. It was also used to identify resource needs and areas where control improvements or process standardization may be needed. In addition, the responses were analyzed to develop conclusions and recommendations on areas for the City to focus or prioritize as it continually works to strengthen internal controls and fiscal responsibility.

The Citywide self-assessment was distributed to 60 departments and offices, including its three proprietary departments (Airports, Harbor, and Water and Power). Crowe received submissions from 43 departments and offices, which was a 73% response rate. The data obtained from the self-assessment provided valuable insights into common practices and positive trends in the City's existing controls, while also highlighting areas in need of additional resources, control enhancements, or process standardizations.

Procedures Performed

The self-assessment process was organized in four main phases: 1) creation of the survey; 2) distribution and collection of the survey; 3) validation of survey responses; and 4) reporting of results.

1. *Creation of the Survey.* Crowe and ASD collaborated to update and refine the survey content and approach, including the risk scoring methodology and criteria for response validation. The self-assessment survey was developed using applicable standards (i.e., Committee of Sponsoring Organizations (COSO)), self-assessment practices for large and complex

organizations, and Citywide policies and procedures. Once the content was finalized, Crowe transferred the survey from its previous format to an online application developed by Crowe.

2. *Distribution and Collection of the Survey.* The self-assessment survey was provided to designated City department liaisons. In addition to answering survey questions, departmental liaisons were instructed to provide supporting documentation to demonstrate the existence of each control. To help them prepare, the liaisons were given information and trainings through live and recorded sessions, interactive Q&A forums, and comprehensive participant guides.

   Upon completion of the survey and upload of corresponding supporting documentation, General Managers/Departmental Heads were instructed to certify departmental responses and confirm their accuracy. As the self-assessment surveys were submitted, Crowe reviewed the responses, comments, and supporting documentation to verify that they were reasonably substantiated as described in the validation process below.

3. *Validation of Survey Responses*. ASD categorized the City departments into three validation groups based on their size and risk profile.

   a. Validation Group 1 included the largest departments with higher risk profiles. Departments in this group had Fiscal Year (FY) 2022-23 authorized expenditures of $1.75 billion or greater.

   b. Validation Group 2 included those with moderate size and risk profiles. Departments in this group had FY 2022-23 authorized expenditures from $250 million to $1.75 billion.

   c. Validation Group 3 consisted of the smaller departments with mid-lower risk profiles. Departments in this group had FY 2022-23 authorized expenditures of less than $250 million.

   As each department submitted their self-assessment results, Crowe completed a validation process to confirm that the responses within each applicable section were reasonably supported. Items that were unclear or lacked supporting documentation were returned to the department with a follow-up request for clarifying information.

   All responses from Group 1 and 2 departments went through the validation process, whereas for Group 3, a judgmental sample of responses were validated. Crowe indicated agreement with department assertions if the presence of the control was adequately explained or supported; otherwise, nonresponses or responses without adequate evidence were noted as controls that were unable to be validated.

4. *Reporting Results.* Once responses were collected and validated, the response data was aggregated, and risk scores were computed. Utilizing Microsoft Power BI, the data was then transformed into dynamic visual formats, such as graphs and tables, to clearly convey trends and patterns. These visuals were analyzed and summarized to clearly present the City's control environment, highlighting strengths, areas in need of attention, and common themes.

Conclusions

The Citywide self-assessment process was completed, and submissions were compiled to produce data related to the City's internal controls and risk management practices. Results were analyzed by comparing departments, validation groups, COSO principles, functional areas, and key risk and control scores. These comparisons were visualized using graphs that identified the underlying trends

and patterns throughout the data.

Overall, we identified no components of the City's control environment which we would consider to be of significant concern. But our analysis did support the need for further education across departments on City fiscal policies and control expectations, and also indicated that the City may benefit from strengthening its third line of defense (i.e., independent control assessments and audits) to test management's assertions and confirm that controls are operating as expected. We summarized and organized our conclusions into the four key areas shown below.

1. **Citywide Trends. Among departments with high inherent risk levels, the control scores highlighted which departments may benefit from additional support and which departments may be used as an example to help others.**

   The analysis identified two notable trends that departments exhibited in relation to their inherent and residual risk scores. These trends reveal patterns that highlight specific departments that, due to their distinct risk profiles, provide valuable insights that could be instrumental in strengthening the City's internal controls.

   The first trend was related to departments that face both high inherent risks due to the nature of their operations and high residual risks, indicating that the current controls may not be adequately reducing these risks. Departments that fit this trend include Airports (LAWA), Animal Services, General Services (GSD), Harbor, LACERS, LAFPP, Police, PW – Engineering, PW – Sanitation, Recreation and Parks, and Water and Power. Understanding the risk and control environment related to these departments can help the City understand where implementing control enhancements and process standardizations may be the most beneficial.

   The second trend is related to departments that have high inherent risk scores but low residual risk scores, indicating these departments operate in a high-risk environment but have implemented strong and impactful controls that significantly lower the level of risk. Departments that fit this trend include Building and Safety, EWDD, Finance, Fire, Housing, Planning, and Transportation. Replicating the control environments established in these departments can help the City develop control improvements that will help other high-risk departments lower their risk.

2. **Functional Areas with High vs. Low Residual Risk. The analysis identified Procurement & Contract Compliance, Revenue, and Monitoring Activities as the three functional areas with the highest residual risk, and Accounts Receivable, Grants, and Information Technology were found to have the lowest residual risk.**

   A comparative analysis over the four COSO principles and thirteen control activities was performed for the departments in Validation Groups 1 and 2. This analysis focused on three key metrics: inherent risk, control score, and residual risk. By examining the inherent risk within a functional area alongside its corresponding control score, the residual risk score is calculated. This score reflects the level of risk that persists even after control measures are in place. A low residual risk score, assuming controls are functioning optimally, highlights areas with effectively managed risks, while a high score points to areas where risks are still prominent despite control efforts.

3. **Departmental Assertions vs. Validated Controls. Group 1 and 2 Departments' self-assessment responses indicated that on average, 86% of applicable internal controls were in place; however, through the validation process, an average of only 59% of applicable controls could be reasonably verified.**

   Departments initially reported that a high level of applicable internal controls are in place and operating effectively. Subsequently, the validation process of reviewing documentation and explanation to substantiate the existence of these controls showed previously unreported gaps. This significant drop suggests a potential overestimation by departments of their control

environment and/or highlights a need for improvements in record-keeping and documentation to ensure controls are documented and verifiable.

4. **Key Controls Analysis. Key controls were not widely implemented across departments in Groups 1 and 2.**

    The Crowe team identified nineteen key controls critical for preventing financial errors and assessed their implementation across all departments. The analysis focused on Group 1 and 2 departments and was instrumental in determining the presence or absence of these vital controls. Among these key controls, only three were found to be in place in more than 85% of the applicable departments within Groups 1 and 2. This finding suggests that a significant number of key controls are either missing or could not be validated, highlighting areas where internal control improvements and standard requirements could be beneficial and have significant impact.

Recommendations

Based on the self-assessment results and the conclusions noted above, Crowe recommends that City departments and ASD take the following actions to help protect the integrity of City operations.

1. **Standardize and Update Citywide Policies and Procedures Related to Key Controls with Low Implementation Rates**

    During the validation process, we noted that four of the nineteen key controls identified were implemented in just over half or less of applicable Group 1 and 2 departments, which we consider to be relatively low rates of implementation. These key controls are specified in the table below.

    To increase the adoption of these controls, we recommend ASD allocate resources to standardize and update Citywide policies and procedures, prioritizing those related to internal controls with the lowest rate of implementation. Standardization and updated language clarify expectations for these key controls, and make it more likely for departments to implement them.

Key Controls with Low Implementation Rates

Functional Area	Question	Number of Applicable Departments	Number of Departments with this Control	Percentage of Departments with this Control
Capital Assets and Inventory	Does the Department complete physical counts of inventory on a cyclical basis using a blind or double-blind counting method?	9	5	56%
Revenue	Are the responsibilities for (1) receiving payments, (2) updating individual accounts, and (3) performing collections on delinquent accounts separated to ensure that no individual may perform more than one of the listed functions?	10	4	40%

Functional Area	Question	Number of Applicable Departments	Number of Departments with this Control	Percentage of Departments with this Control
Expenditures	Are the functions of vendor selection and maintenance assigned to different personnel to ensure that no individual performs more than one of the following functions: (1) vendor selection in the purchasing or procurement process, (2) creation and/or modification of vendor records in the vendor master file, (3) review and approval of creation or modification to vendor records, (4) creation of payment requests, and (5) approval of payment requests?	10	4	40%
Grants	Does the Department require a legal and/or technical review and approval of subrecipient agreements to confirm whether the agreements contain the necessary terms and conditions (e.g. proper indemnification, insurance, return of funds stipulations, and requirements that subrecipients comply with the primary grant requirements and City's standards)?	6	2	33%

In addition to the previously mentioned key controls, there are thirteen internal controls that either received a "No" response or could not be validated by seven or more of the ten departments in Groups 1 and 2. These controls are specified below.

COSO Principle / Functional Area	Question	Number of Departments
Risk Assessment	Does the Department perform a fraud risk assessment at least once every three years?	8
Cash	Does the Department utilize automated banking services (e.g. Positive Pay) to deter check fraud and limit access to the bank transmittal file of issued checks to authorized personnel only?	7
Cash	Are authorized check signatories limited to no more than three key personnel and are signatories immediately changed if they transfer or leave City service?	7
Accounts Receivables	Does the Department utilize the City's FMS Accounts Receivable (AR) module to record accounts receivable?	7
Revenue	Are all revenue source documents and revenue-related expenditure documents retained for at least three years, or until audited by the appropriate agencies?	7
Revenue	Are credit balances in the accounts receivable reviewed and resolved prior to year-end financial closing	7

COSO Principle / Functional Area	Question	Number of Departments
	procedures?	
Procurement and Contract Compliance	Does the Department periodically evaluate third party service providers' operational performance and internal control procedures?	7
Procurement and Contract Compliance	Are contractor evaluation forms completed at the conclusion of each contract?	7
Procurement and Contract Compliance	Are TOS responses, including TOS contractor selection records, retained on file?	7
Payroll	Are performance evaluations performed at least annually for all personnel?	7
Payroll	Are bonuses justified and reviewed periodically to ensure that the bonuses are still applicable?	7
Information Technology	Does the Department have access to system-generated logs or 'audit trails', which document user access and actions taken within key financial systems or databases containing sensitive or personally identifiable information?	7
Financial Reporting	Has management identified accounts which are at risk of misstatement and developed policies and procedures to address those risks?	7

We advise that ASD prioritize the standardization and updating of the internal controls listed above, as it addresses the most immediate gaps in the City's risk management framework. By clarifying and reinforcing the guidelines for these specific controls, ASD may help facilitate their broader implementation throughout Group 1 and 2 departments.

2. Enhance Training and Internal Resources for Departments

During the distribution and collection of the self-assessment survey, we conducted ten Q&A sessions and maintained an open mailbox to address technical and content related questions from department liaisons. The volume and nature of inquiries indicated a need for enhanced training and resources to help departments understand the necessary internal controls and their purpose.

To address this, we recommend that ASD develop Citywide trainings focused on the importance of internal controls, individual responsibilities, implementation, and resources for further information or inquiries. Additionally, ASD could offer specialized trainings on complex internal controls related to the COSO principles and functional areas with which departments had expressed uncertainty. Procurement and Contract Compliance, Capital Assets & Inventory, and Grants were areas that generated the most questions during Q&A and through the mailbox.

Furthermore, ASD could establish an anonymous Q&A mailbox, providing departments with the ability to seek guidance on implementing internal controls, evaluating the sufficiency of existing controls, exploring ways to enhance their risk mitigation strategies, and adapting Citywide policies to fit their department's unique structure and resources. This mailbox may encourage open communication and continuous improvement in the City's internal control and risk management efforts.

3. Perform Additional Assessments and Testing in High-Risk Functional Areas

Given the relatively substantial ratio of controls that could not be verified during validation, we recommend that ASD use a risk-based approach to conduct assessments and operating effectiveness testing, starting with Group 1 and 2 departments. Based on the assessment results, the focus should be on certain components of the COSO framework (i.e., Risk Assessment, Information and Communication) and on functional areas (i.e., Revenue, Grants, Procurement and Contract Compliance) which indicated the greatest change in pre-validated to validated control scores.

Five Largest Changes in Pre-Validated to Validated Control Score (Group 1 and 2 Departments)			
COSO Principle / Functional Area	Pre-Validated Control Score	Validated Control Score	Change from Pre-Validated to Validated Control Score
Revenue	0.75	0.90	0.15
Grants	0.73	0.87	0.14
Procurement & Contract Compliance	0.73	0.86	0.13
Information & Communications	0.74	0.86	0.12
Risk Assessment	0.78	0.9	0.12

4.

Acknowledgements

The body of this report includes additional analysis and recommendations for structuring future control self-assessments. This report is intended to be used as a baseline for measuring the City's progress in its efforts to strengthen its risk mitigation and control activities. The analysis is not intended to "single-out" any department or group, but its purpose is to be used as a tool, a reference, and a guide.

Thank you to all who participated and supported this initiative.

Introduction

The Citywide controls self-assessment was distributed to 60 total departments and offices, including its three proprietary departments (Airports, Harbor, and Water and Power). Crowe received submissions from 43 total departments and offices, which is a 73% response rate.

Self-Assessment Structure

City departments, including proprietary departments, were separated into three groups, as shown below. These groupings were based on various department attributes such as headcount, budget, actual expenditures, services offered, and level of institutional knowledge. The Office of the City Controller's Audit Services Division (ASD) conducted this assessment to categorize the departments into groups of similar size and risk profile. Departments in Group 1 were identified as the largest with attributes indicative of a higher risk profile. Departments in Group 3 had attributes indicative of a smaller department and mid-lower risk profile, and departments in Group 2 fell somewhere in between, indicative of a moderate size and risk profile.

Figure 1

Departments		
Group 1	Group 2	Group 3
Airports (LAWA) Water and Power Harbor Police	Fire General Services (GSD) LACERS LAFPP PW - Sanitation Recreation and Parks	Remaining Departments

The assessment questions were developed to address the five principles of the COSO Integrated Control framework, which is one of the most recognized and utilized control frameworks in the world.[1] The framework elements include: 1) Control Environment, 2) Risk Assessment, 3) Control Activities, 4) Information and Communication, and 5) Monitoring Activities. The primary focus was on the Control Activities principle which was divided into thirteen (13) functional areas. Each COSO principle and the thirteen Control Activities functional areas had a set of related questions. These groups of related questions turned into areas of self-assessment, as shown below.

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[1] The Committee of Sponsoring Organizations of the Treadway Commission (COSO) Internal Control—Integrated Framework, originally issued in 1992 and refreshed in 2013 (ICIF-2013 or Framework), was developed as guidance to help improve confidence in all types of data and information.

Figure 2

COSO Principles Assessed	
Control Environment	Risk Assessment
Information and Communications	Monitoring Activities

The fifth COSO principle, Control Activities, was broken down into thirteen functional areas rather than being analyzed as a single category. This segmentation was performed to allow for a more comprehensive and detailed analysis.

Figure 3

Thirteen Functional Areas Assessed	
A - Cash	H - Grants
B - Accounts Receivable	I - Debt Financing
C - Revenue	J - Investments
D - Monitoring Activities	K - Capital Assets & Inventory
E - Expenditures	L - Information Technology
F - Procurement & Contract Compliance	M - Financial Reporting
G - Payroll	

Each department was tasked with responding to a range of 50 to 250 questions in a Yes/No style format. The actual number of questions each department was required to answer depended on the applicability of the functional area. For example, if a functional area was not applicable to a department, then the questions related to that area would be omitted from their survey. This tailored approach allowed departments to concentrate on responding to questions relevant to them, thus reducing the effort to navigate through sections of not applicable content, thereby increasing the rate of submission.

Risk and Control Rating Methodology

Due to the volume of questions and the variation in department size, budget, and services offered, it was essential to establish a standard methodology for assessing and rating the department's risk and control levels. Although the methodology involves a level of subjective analysis and professional judgment, it provides a baseline and consistent criteria that enables the City to measure trends at the Citywide level across departments and over time, as future surveys are conducted.

The methodology is based on the following calculations:

1. *(Monetary Exposure Score + Non-Monetary Risk Score) / 2 = Inherent Risk Score*
2. *Total Yes Responses / Total Applicable Questions = Control Score*
3. *Inherent Risk Score * Control Score = Residual Risk Score*

Each variable in the calculation is defined below.[2]

- **Monetary Exposure Score.** This represents the level of financial risk a COSO principle or functional area poses to a department. For functional areas, this score is based on a five-point scale (i.e., 5 = Greatest Exposure and 1 = Least Exposure) and is directly related to the department's response to certain questions within the survey. Each functional area was designated a monetary exposure question and a set of five answer choices were offered. These answer choices were proportionate to the department's size. For example, the question for the expenditures functional area asked, "How much in total expenditures does the department incur annually?" with answer choices framed as a percentage of the department's annual operating expense budget. This allowed for the comparison of monetary exposure scores across assessment areas that were relative to the department's own size.

  For COSO principles, the monetary exposure score was based on the validation group, which was in turn based on the departments' size and risk profile. Departments in validation group 1 received a monetary exposure score of 5 for all COSO principles. Similarly, departments in validation group 2 received a score of 3 and departments in validation group 3 received a score of 1. The monetary exposure score for the COSO principles were determined and assigned with the understanding that as departments grow in size (i.e., budget, headcount, operations, actual expenditures, etc.), the risks associated with the control environment, information and communications, monitoring activities, and risk assessment also grow.

- **Non-Monetary Risk Score.** This represents the level of operational, compliance, strategic, reputational, or risk of fraud-waste-abuse each assessment area poses to the City. Crowe assigned each COSO principle and functional area with a static non-monetary risk score based on industry knowledge and professional judgement, as shown below. This score is based on a five-point scale (i.e., 5 = Greatest Risk and 1 = Least Risk).

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[2] The variables in the calculation are analyzed at the COSO principle or functional area level. In instances where a functional area encompasses several sections, each pertaining to distinct but related processes, the variable for the calculation is derived from the average of these sections. For example, "E – Expenditures" has five sections, related to expenditure management, advance payments, foreign vendors, petty cash, and travel expenses. The variable used for the E – Expenditures area is the average of those five sections, producing a single, consolidated score for the functional area. Using the non-monetary risk score as an example, expenditure management has a score of 5, advance payments a score of 3, foreign vendors a score of 4, petty cash a score of 2, and travel expenses a score of 4. The average of these five sections produces a non-monetary risk score of 3.6 for the E – Expenditures functional area.

Figure 4

COSO Principle / Functional Area	Non-Monetary Risk Score
Control Environment	5
Information and Communications	4
Monitoring Activities	4
Risk Assessment	4
A - Cash	4.5
B - Accounts Receivable	3
C - Revenue	4
D - Monitoring Activities	4
E - Expenditures	3.6
F - Procurement and Contract Compliance	4
G - Payroll	4
H - Grants	4
I - Debt Financing	4
J - Investments	4
K - Capital Assets and Inventory	4
L - Information Technology	5
M - Financial Reporting	4

- **Inherent Risk Score.** This represents the risk score when factoring in all major and applicable risk factors (i.e., financial, operational, compliance, strategic, reputational, or risk of fraud-waste-abuse) to the City before considering the controls in place to mitigate them. It is a measure of the operating environment. This score is based on a five-point scale (i.e., 5 = Greatest Risk and 1 = Least Risk).

- **Control Score.** This represents the impact that the Department's controls have on mitigating the associated inherent risk (i.e., as the control score decreases, the associated risk decreases). This score is based upon the ratio of "Yes" responses to total applicable controls in each section of the assessment with a 3-choice scale.

  o The self-assessment questions were designed such that a "Yes" response indicates that a control is present, while a "No" response signifies the absence of a control. Thus, the ratio of "Yes" responses serves as a quantitative indicator of the control environment's strength. A greater number of "Yes" responses implies a more robust set of controls are in place.

  o If the ratio of "Yes" to total applicable controls is less than 50%, then the control score equals 1.0. *This score means that controls have essentially no effect on mitigating overall risk.*

  o If the ratio of "Yes" to total applicable controls is 50% or greater, but less than 75%, then the control score equals 0.8. *This score means that controls have a relatively moderate effect on mitigating overall risk.*

  o If the ratio of "Yes" to total applicable controls is 75% or greater, then the control score equals 0.7. *This score means that controls have a relatively significant effect on mitigating overall risk.*

- Departments that deemed certain questions as not applicable were required to provide an explanation that was confirmed by Crowe during the validation process.
- When calculating the control score, all questions are equally weighted, ensuring no single question disproportionately influences the score. This approach accommodates the variability in how certain controls may affect different departments, where some controls may have a larger impact on one department's risk environment compared to another. By standardizing the questions to all hold equal weight, we can fairly compare the control environment data across departments and functional areas. For a deeper understanding on the key controls that may have a more critical impact on financial risk mitigation, please refer to the **Analysis of Key Controls** section.

- **Residual Risk Score.** This represents the net effect of the Inherent Risk Score, less the Control Score. This score is based on the same five-point scale as Inherent Risk (i.e., 5 = Greatest Risk and 1 = Least Risk). However, please note that this score is intended to act as a Key Risk Indicator (KRI) based on assessment responses. Further inquiry may be necessary before concluding if control gaps or weaknesses exist.

Below is an example to assist with understanding the risk scoring methodology. In this example, the risk scoring methodology will be applied to the Debt Financing functional area.

Step 1 – Identify monetary exposure score. At the start of each assessment section, respondents answer a question to assess the monetary exposure of the functional area, with answer choices corresponding to different levels of monetary exposure and associated scores from 1 to 5. For instance, in the example below, a response of "Zero" would correlate to a monetary exposure score of 1, a response of "Less than 10% of budgeted operating expenses but not zero" would equate to a 2, and responses of "Greater than 30% of budgeted operating expenses" and "I do not know" both yield a score of 5. In the given example, the respondent chose "Greater than 30% of budgeted operating expenses" resulting in a monetary exposure score of 5.

Step 2 – Identify non-monetary risk score. This risk score is static and does not change from department to department. In this case, Debt Financing has a non-monetary risk score of 4 regardless of department.

Step 3 – Calculate inherent risk score.

(Monetary Exposure Score + Non-Monetary Risk Score) / 2 = Inherent Risk Score

(5 + 4) / 2 = **4.5**

Step 4 – Calculate control score. There are six questions in the debt financing functional area that are applicable to the respondent. For this example, please assume that 4 are answered "Yes" and 2 are answered "No".

Total Yes Responses / Total Applicable Questions = Control Score

4 / 6 = 66.66% = **0.8 control score** (This is a moderate control score. See the control score definition above for a breakdown on the relationship between the percentage of yes responses to the control score)

Step 5 – Calculate residual risk score.

Inherent Risk Score * Control Score = Residual Risk Score   4.5 * 0.8 = **3.6**

Distribution and Collection Approach

The Citywide self-assessment survey was administered online through a proprietary application developed by Crowe built on the Microsoft Power Platform. Live and recorded training sessions, interactive Q&A forums, and comprehensive participant guides were provided to assist respondents with software and content related questions. Weekly status reports were provided during the survey live dates to recommunicate the deadline, identify upcoming training sessions, and distribute the most recent FAQs.

The survey interface required certain questions to be answered prior to submitting the survey, and once completed, the department's designated point of contact, department head, or designee was required to certify that all questions had been reviewed and confirmed to be accurate. Those factors helped reduce the number of incomplete surveys and inaccurate responses, thus expediting the validation process.

As the self-assessment surveys were submitted, Crowe reviewed the responses, comments, and documents to confirm that they were reasonably substantiated. Items that were unclear or lacked the proper level of supporting documentation were returned to the department with a follow-up request for clarifying information. Crowe performed two rounds of follow-up for all Group 1 and 2 departments, and one round of follow-up for all Group 3 departments.[3]

Validation Approach

Each of the thirteen functions were broken up into sections so that departments were able to limit responses to applicable areas. For the applicable sections, departments were asked to provide documentation to substantiate their "Yes" responses (e.g., policies and procedures, samples of transactions, etc.).

As each department submitted their self-assessment results, Crowe completed a validation process to confirm that the responses within each applicable section were reasonably supported. Items that were unclear or lacked supporting documentation were returned to the department with a follow-up request for clarifying information. Group 1 and 2 departments (departments with higher risk profiles) had all responses validated. Group 3 departments had their responses validated according to a judgmental sampling approach. The lesser of 10% of responses or 5 assessment areas was validated. Additionally, the responses chosen for validation were determined based on the assessment area with the highest inherent risk and professional judgement.

After completing the validation process, Crowe provided its own response alongside the departments' response to indicate whether we agreed with the departments' assertion that a control was in place. Generally, Crowe agreed with the responses which were adequately explained and supported and did not agree with those responses which were not. See **Assessment Results** included below for detailed trends

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[3] Due to time restrictions caused by a delayed response from the department, Recreation and Parks did not receive a follow-up after their initial submission.

and analyses on the validation results.

Validation Example:

Based on management's responses, a department's Cash Management process had an inherent risk score of 4, which is high risk. Management responded "Yes" to all control questions, which substantially lowered the score to a residual risk of 2.8. Despite the low residual risk rating, Crowe reviewed responses to confirm that the department provided adequate documentation or explanations to substantiate the existence and effectiveness of those controls. If management provided adequate support, Crowe would agree with the Control and Residual Risk Scores. If management did not provide adequate support, Crowe would not validate that residual risk score. This would result in a higher Control Score, and thus a higher Residual Risk Score (e.g., residual risk may be elevated from a 2.8 to a 3.2 or 4, depending upon how many responses were deemed invalid).

Assessment Results

The trends and analyses in this section are intended to provide insight on internal controls over financial reporting at the Citywide level, the validation group level, functional area level, department level, and control level. The visualizations, graphs, and tables below should be used to inform decisions regarding where to enhance resources and training to improve controls, and where monitoring the effectiveness of current controls may be warranted.

Participating Departments

The Citywide self-assessment was distributed to 60 total departments and offices, including its three proprietary departments (Airports, Harbor, and Water and Power). Crowe received submissions from 43 total departments and offices. Departments and offices that did not submit survey responses were deemed as non-responsive and data for their departments were not included in these assessment results.

City departments, including proprietary departments, were separated into three validation groups, as shown below. These groupings were based on various department attributes such as headcount, budget, services offered, and level of institutional knowledge. ASD conducted this assessment to categorize the departments into groups of similar size and risk profile. Departments in Group 1 were identified as the largest with attributes indicative of a higher risk profile. Departments in Group 3 had attributes indicative of a smaller department and mid-lower risk profile, and departments in Group 2 fell somewhere in between, indicative of a moderate size and risk profile.

Please see below for a list of participating departments and their associated validation group.

Figure 5

Department	Validation Group
Los Angeles World Airports (Airports)	1
Police	1
Harbor	1
Water and Power	1
Fire	2
General Services Division (GSD)	2
LA City Employees' Retirement (LACERS)	2
Fire and Police Pensions (LAFPP)	2
Public Works (PW) - Sanitation	2
Recreation and Parks	2
Aging	3
Animal Services	3
Board of Public Works (BPW)	3
Building and Safety	3
Cannabis Regulation (Cannabis)	3

Department	Validation Group
Council District 1 (CD1)	3
Council District 4 (CD4)	3
Council District 13 (CD13)	3
Chief Legislative Analyst (CLA)	3
City Administrative Officer (CAO)	3
City Clerk	3
City Tourism	3
Civil, Human Rights, and Equity	3
Community Investment for Families	3
Controller	3
Cultural Affairs	3
Disability	3
El Pueblo	3
Emergency Management (EMD)	3
Economic and Workforce Development (EWDD)	3
Finance	3
Housing	3
Information Technology Agency (ITA)	3
Neighborhood Empowerment	3
Personnel	3
Planning	3
Public Works (PW) - Contract Administration	3
Public Works (PW) - Engineering	3
Public Works (PW) - Street Lighting	3
Public Works (PW) - Street Services	3
Transportation	3
Youth Development	3
Zoo	3

Please see below for a list of departments deemed as non-responsive.[4]

Figure 6

Department	Validation Group
Council District 2 (CD2)	3
Council District 3 (CD3)	3
Council District 5 (CD5)	3
Council District 6 (CD6)	3
Council District 7 (CD7)	3
Council District 8 (CD8)	3
Council District 9 (CD9)	3
Council District 10 (CD10)	3
Council District 11 (CD11)	3
Council District 12 (CD12)	3
Council District 14 (CD14)	3
Council District 15 (CD15)	3
Employee Relations Board	3
Ethics	3
Library	3
Mayor	3
Public Accountability	3

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[4] The Office of the City Attorney refused to participate in this engagement and did not assign a liaison. As a result, they were not included in the pool of departments that received a survey. We strongly encourage the City Attorney's Office to participate in future self-assessments as internal controls are a shared responsibility across all City departments and elected offices.

Citywide Trends and Analysis[5]

The analysis presented in this section is dedicated to examining the collective data from all departments that took part in the self-assessment. The subsequent graphs and tables offer a citywide perspective on the data by comparing departments, functional areas, key risk, and control scores. These data visualizations are designed to clearly highlight trends, patterns, significant outliers, and any other notable metrics. By presenting the data in this manner, stakeholders will be better able to pinpoint where controls are most effective, where there may be opportunities for improvement, and areas that may require additional research. This citywide analysis will aid with high-level strategic planning and the prioritization of initiatives related to the City's fiscal and operational framework.

Crowe completed a validation process to confirm that the responses within each applicable section were reasonably supported. Items that were unclear or lacked supporting documentation were returned to the department with a follow-up request for clarifying information. If the response could not be validated, Crowe rejected the response. All responses from departments in Validation Groups 1 and 2 went through the validation process, whereas departments in Validation Group 3 had responses validated using a risk-based sampling approach. **Please note that the validated assessment results were used in the analysis throughout the report.**

The three key metrics we will be using for our analysis are the inherent risk score, the control score, and the residual risk score. The inherent risk score quantifies the level of risk that exists in the absence of any implemented controls, providing a baseline measure of the initial risk exposure. Conversely, the residual risk score quantifies the level of risk that remains after the application of controls, essentially the post-control risk exposure. The gap between these two scores is the control score, which measures the strength and impact the controls have on each department's risk levels.

To understand the baseline for these three metrics, please see the three histograms below (next pages). These show the distribution of departments relative to the inherent risk score, the control score, and the residual risk score, respectively.

---

[5] Validated assessment responses were used in the trend analyses. Groups 1 and 2 had every response validated, while Group 3 responses were validated on a risk-based sampling approach. See the **Risk and Control Methodology** and **Validation Approach** for more information.

Number of Departments per Inherent Risk Score Bin

The histogram below distributes inherent risk scores into five equal-sized bins, each representing a range of inherent risk scores within the population. The bar represents the count of departments whose inherent risk score falls within these intervals. For instance, as illustrated below, there are nineteen departments with inherent risk scores that fall in the 3.21 to 3.50 range. The distribution of inherent risk scores across these bins appears to follow a distribution that skews towards the upper end. This pattern suggests that most departments have risk scores that cluster around the mean and higher, with fewer departments exhibiting low inherent risk scores.

Essentially, this shows that the departments in scope are relatively similar units in terms of their risk environment and related attributes and are suitable for comparative analysis.

Figure 7
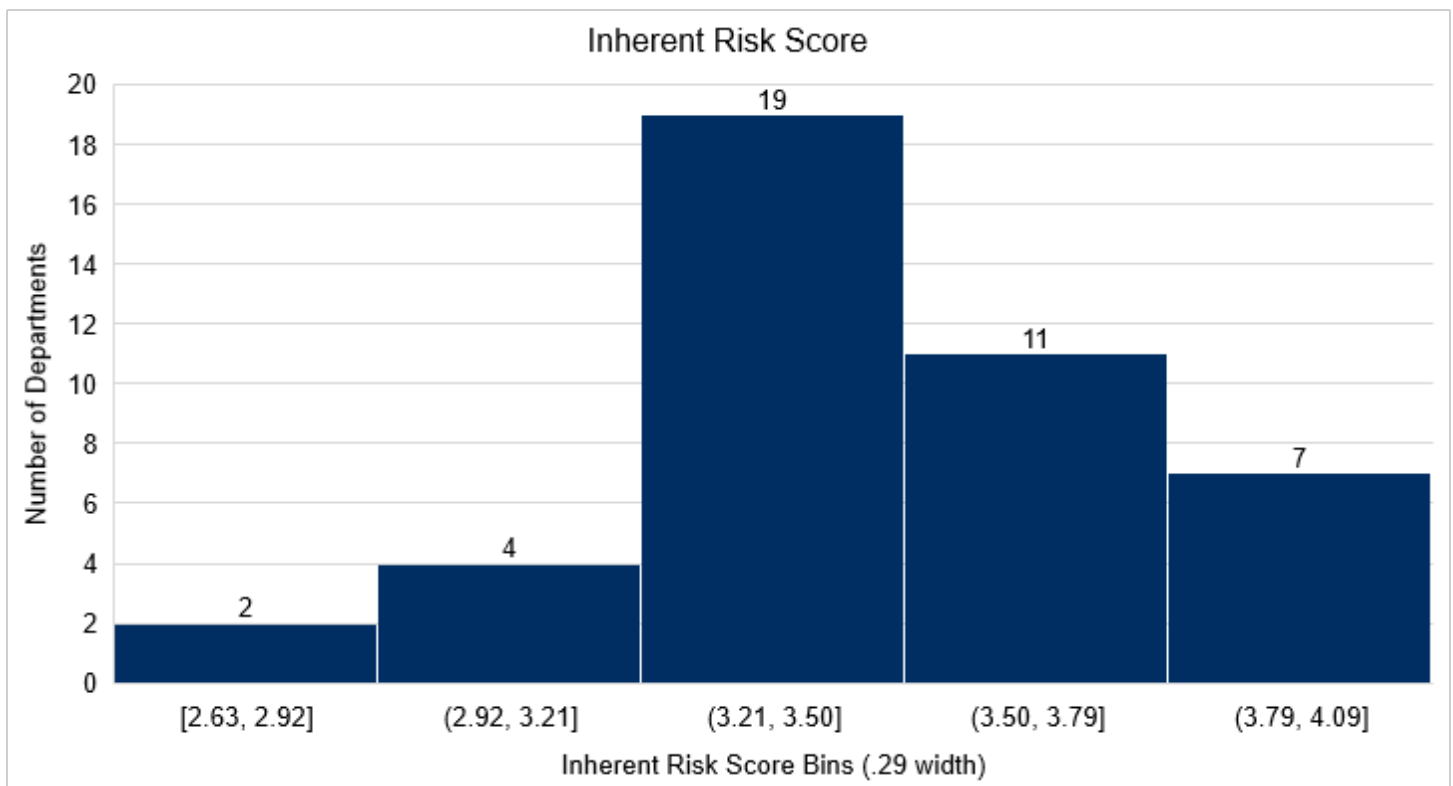
Number of Departments per Validated Control Score Bin

The validated control score histogram reveals a distribution that deviates from the normal distribution pattern. There is a noticeable skew of departments that fall in the lower end of the validated control score bins, with fewer departments populating the higher score bins. Meaning, the population of departments have lower validated control scores relative to the entire spectrum of potential scores.

Since lower controls scores are indicative of stronger controls, this distribution suggests that departments, on average, have relatively effective control environments.

Figure 8
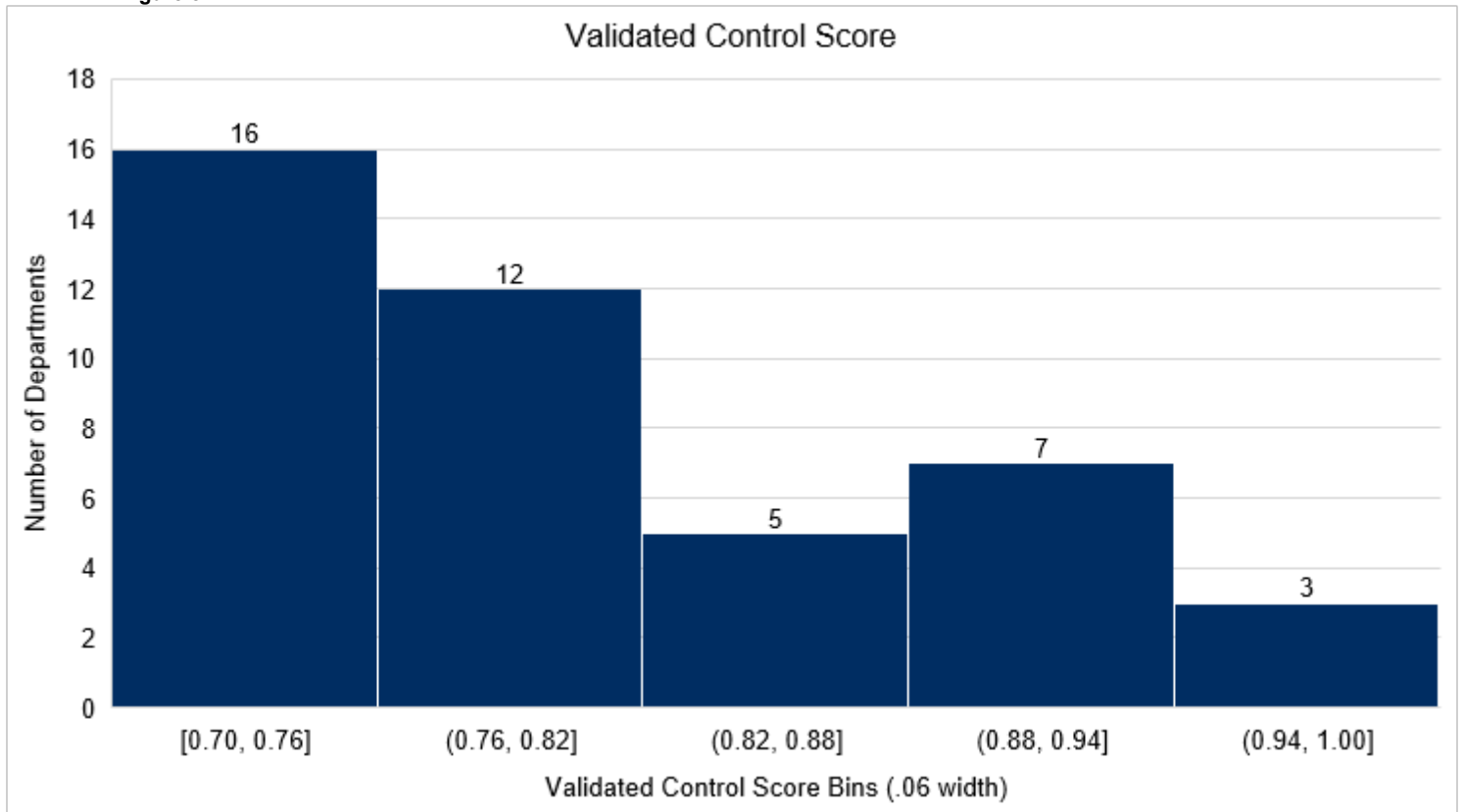
Number of Departments per Residual Risk Score Bin

The residual risk score histogram, like that of the validated control score, displays a clustering of departments within the lower score bins. This pattern indicates that a significant number of departments fall within the lower residual risk scores. Given that the inherent risk score distribution was the opposite, the observed skew in the residual risk histogram can be directly attributed to the impact of validated controls.

This analysis assumes that the controls in place are generally effective in mitigating risk; however, the controls should be tested or corroborated further to verify their operative effectiveness. Testing of controls was outside the scope of this study.

Figure 9
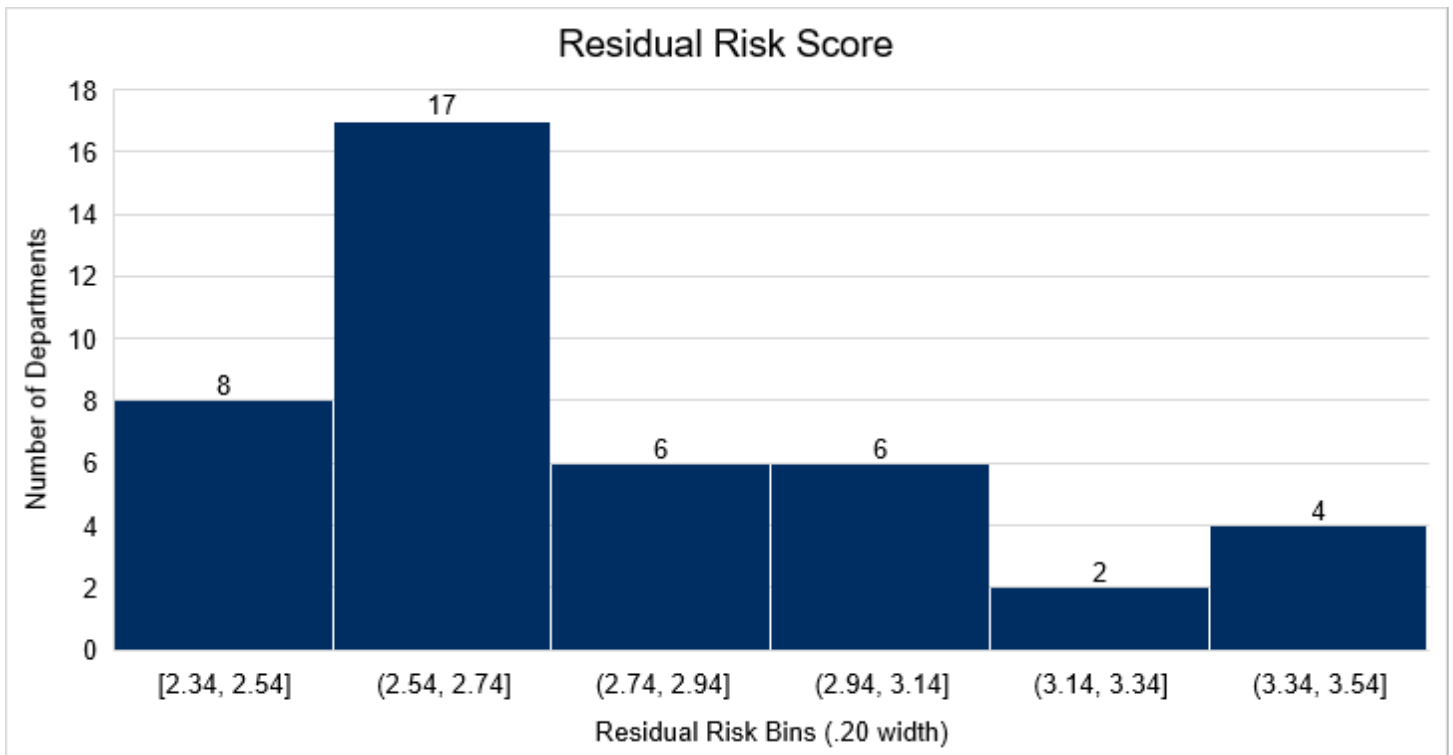
Inherent Risk Score Versus Residual Risk Score by Department in a Bar Chart

The graph below (next page) offers a comparative analysis of the average inherent risk score, represented by the blue bar, against the average residual risk score, represented by the orange bar, across the participating departments.

The departments are arranged in descending order based on their inherent risk scores, positioning those with higher average inherent risks at the top of the graph and those with lower average inherent risks towards the bottom. Departments with larger orange bars reflect higher average residual risks; and departments with smaller orange bars reflect lower average residual risks.

The comparison of the residual risks against the inherent risks is performed to illustrate the effectiveness of controls by department. The disparity between the inherent and residual risk scores highlights the degree to which controls have mitigated risk. A larger gap between the two scores suggests a robust set of controls that significantly reduce risk, while a smaller gap might indicate that controls are missing. The graph below provides a visual on the variance between inherent and residual risks by department.

In summary, for each department, as the disparity in length between the blue and orange bars increases, so does the indication of a strong control design (i.e., a shorter orange bar = a lower residual risk level); however, the controls should be tested or corroborated further to verify their operative effectiveness.

Figure 10

Inherent Risk Score and Residual Risk Score by Department

● Inherent Risk Score ● Residual Risk Score
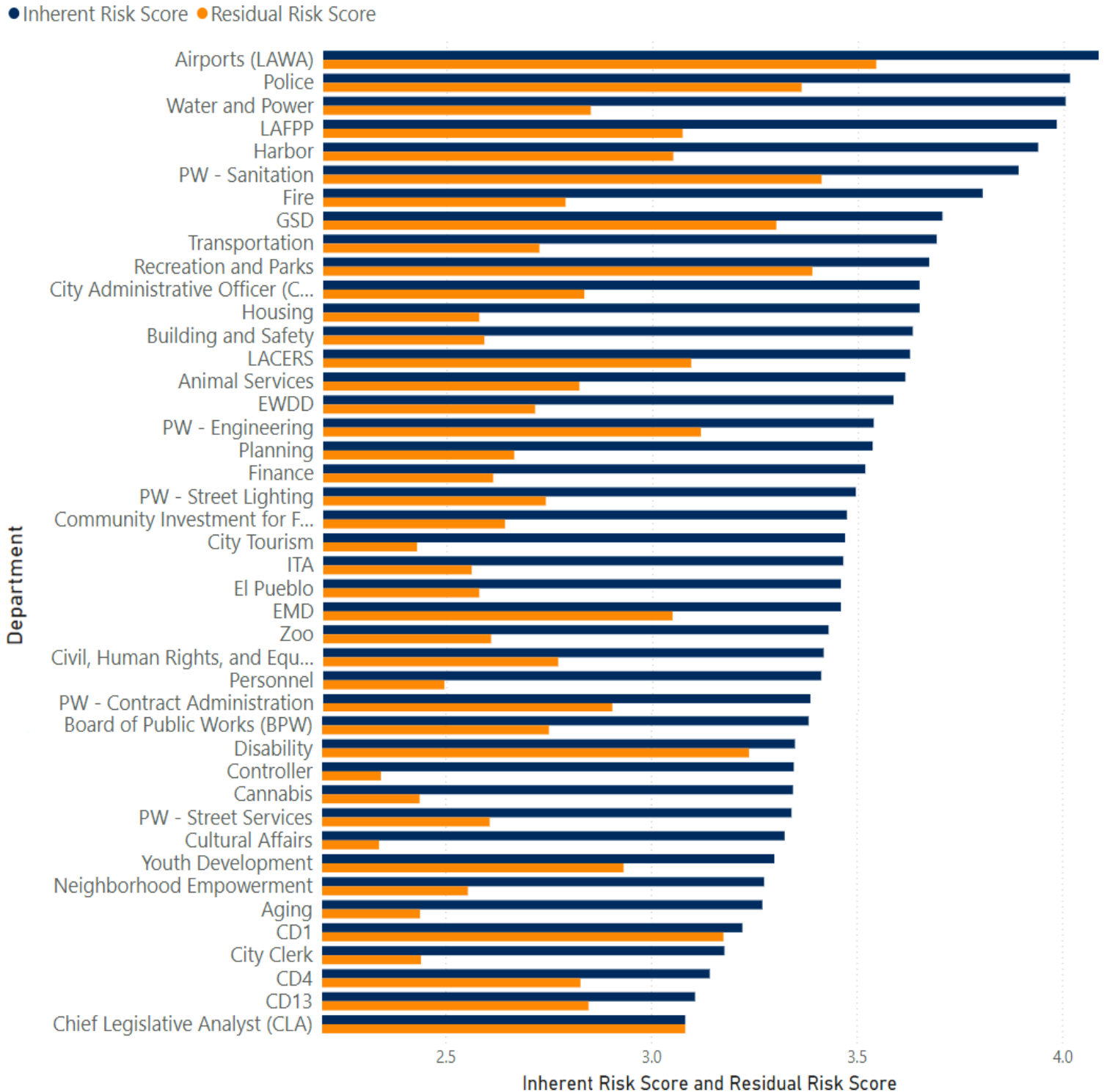
Delta Between Inherent Risk Score and Residual Risk Score by Department

The risk delta, or difference between inherent and residual risk scores, is arranged in descending order in the graph below (next page). This visual is similar to the previous graph but illustrates the data in a slightly different format. Instead of comparing the inherent and residual risks for each department, this graph highlights just the change between the two risk levels among the 43 departments that responded to the assessment.

Departments at the top had larger gaps between inherent and residual risk scores, indicating strong control environments in high to moderate risk environments, and departments at the bottom had smaller gaps or no gap between inherent and residual risk scores, indicating weaker control environments.

As the graph indicates, there are relatively substantial differences in the control environments among Group 1 and Group 2 departments. Using Aging to indicate the end of the top half of the graph, one can see that most Group 1 and 2 departments fall in the bottom half (i.e., two Group 1 and two Group 2 departments were included in the top half), indicating relatively weaker control environments. However, these departments were subject to more stringent validation procedures than Group 3 so it may be more appropriate to compare the Group 1 and 2 departments separately from the Group 3 departments.

Figure 11

Risk Score Delta by Department and Validation Group

Validation Group ● 1 ● 2 ● 3
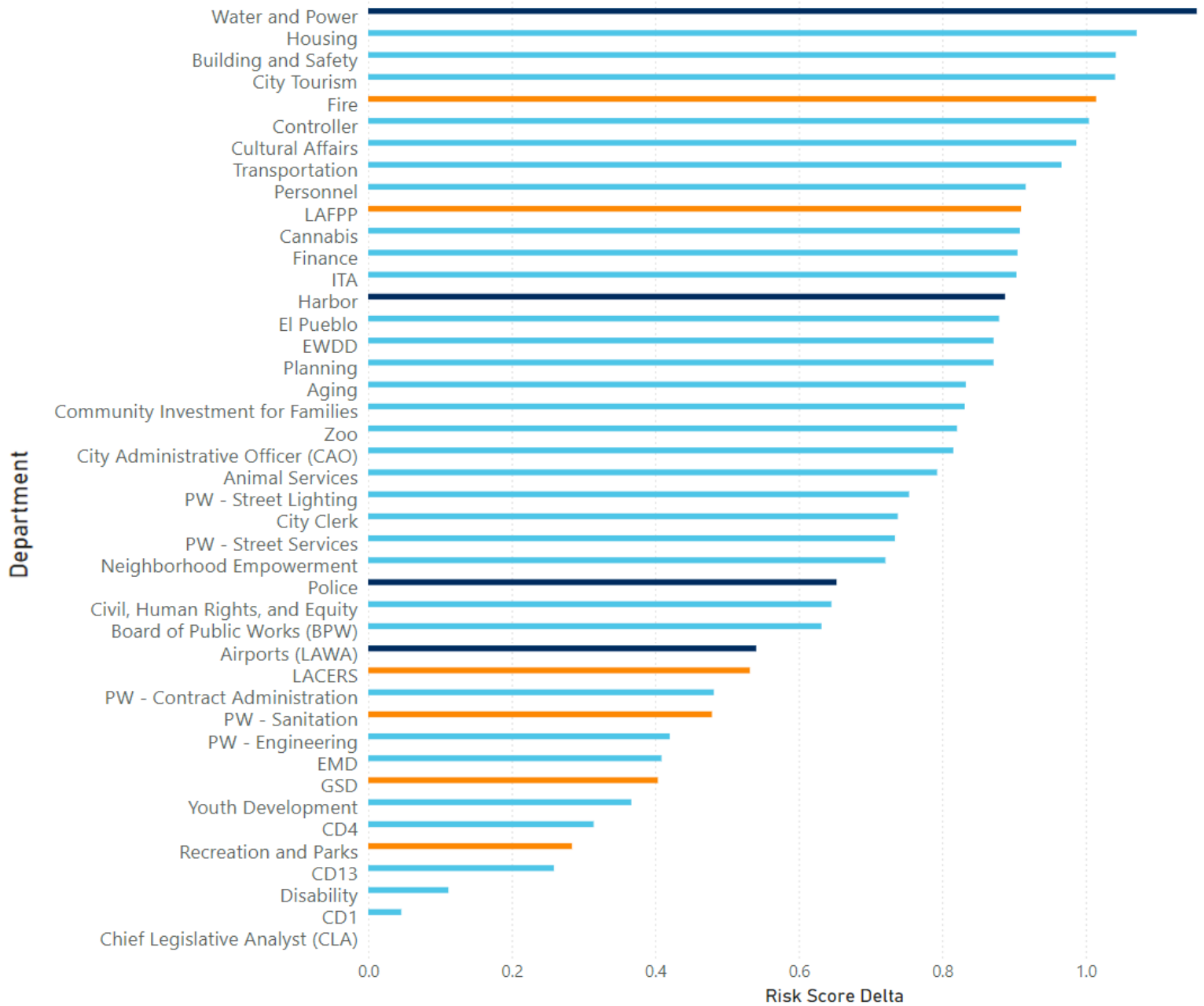
Validated Control Score by Department

Control scores play a pivotal role in bridging the gap between inherent and residual risk scores. They are the determining factor in assessing the extent of the change – or lack thereof – between the level of risk before and after controls are applied. Essentially, the control score reflects the strength and comprehensiveness of a department's control environment. The graph below (next page) provides a detailed breakdown of control scores by department.

There is an inverse relationship between control score and control strength. A higher control score, which approaches the upper threshold of 1.0, is indicative of a weaker control environment. Departments with higher control scores may need to undertake a comprehensive review and enhancement to improve the effectiveness of their risk mitigation controls. Conversely, a lower control score, which approaches the lower threshold of 0.7, reflects a stronger control environment. Departments with lower control scores have effectively reduced their risk and could potentially serve as a model for best practices.

The inverse relationship between control score value and strength of environment is due to the risk and control scoring methodology. The inherent risk score is multiplied by the control score, resulting in the residual risk score. The control score is a value between 0.7 and 1.0, with a lower score indicating a more effective control environment and thus a lower residual risk. For instance, if the inherent risk score is 4.0 and it is multiplied by a control score of 0.7, the resulting residual risk score would be 2.8; whereas, with a control score of 1.0, the residual risk score would be 4.0 instead. A higher control score reflects a smaller change between inherent and residual risk and thus, suggests the controls in place are not effective in significantly mitigating risk.

The next graph lists the departments which had indicators of relatively weaker control environments toward the top and those with indicators of relatively stronger control environments toward the bottom. Again, please note:

- *Group 1 and 2 departments were subject to more stringent validation procedures than Group 3 so it may be more appropriate to compare and contrast the Group 1 and 2 departments separately from the Group 3 departments.*

- *The analysis assumes that the controls in place are generally effective in mitigating risk; however, the controls should be tested or corroborated further to verify their operative effectiveness.* **Testing of controls was outside the scope of this study.**

Figure 12

Validated Control Score by Department and Validation Group

Validation Group ● 1 ● 2 ● 3
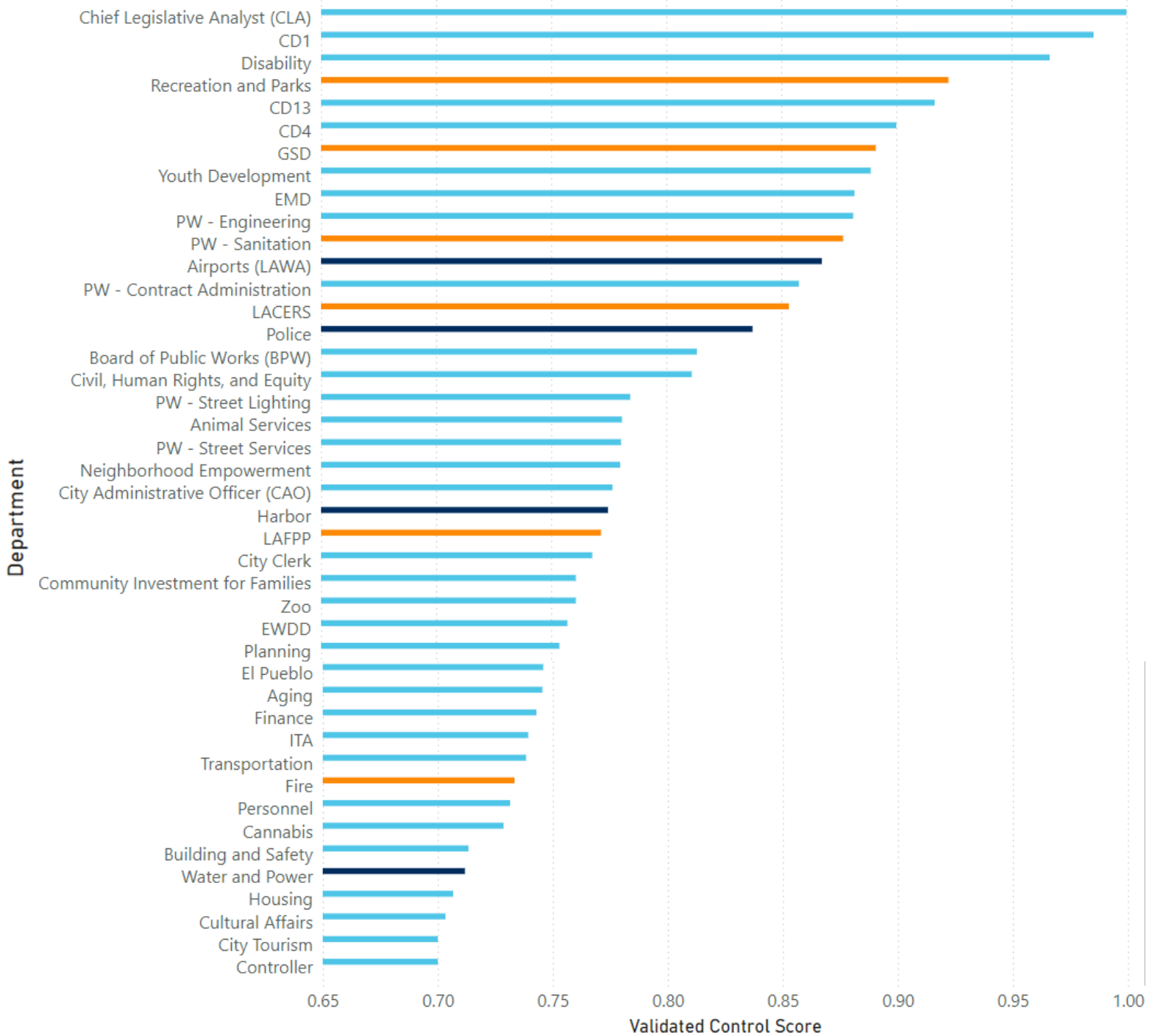
Inherent Risk Score Versus Residual Risk Score by Department in a Scatter Graph

By plotting a scatter graph with all departments listed on a plane with the residual risk score on the Y axis and the inherent risk score on the X axis, we are further able to analyze the relationship between these two risk scores and what they mean. Dots closer to the top have an above average residual risk score, and dots closer to the bottom have a below average residual risk score. Similarly, dots further to the right have an above average inherent risk score, and dots further to the left have a below average inherent risk score.

The graph below **(next page)** is designed with three critical trend lines that serve to highlight important metrics within the data. The grey vertical line represents the median inherent risk score, and the yellow horizontal line marks the median residual risk score. Both trend lines provide a benchmark for departments to compare comparison across all departments. The black diagonal line illustrates the average trend between residual and inherent risk scores, indicating the general relationship between these two metrics.

Dots to the left of the grey vertical line have inherent risk scores that fall below the median when compared to their peers, and dots to the right are above. Similarly, dots positioned above the yellow horizontal line have residual risk scores that exceed the median, whereas dots below are under the median.

The placement of dots in relation to the black diagonal line reveals the relative change from inherent to residual risk. Dots situated above this line indicate a smaller change and dots below this line represent a larger change from inherent to residual risk. As mentioned above, a larger change typically signifies a stronger control environment with more effective risk mitigation.

These trend lines distinctly separate and aggregate departments into four main categories, represented by quadrants 1 through 4. Each quadrant corresponds to a combination of inherent and residual risk levels, as well as the effectiveness of controls. Please see the red numbers in the visual above to identify which quadrant is which.

Each quadrant represents a distinct theme that these departments may fall under and the number of departments in each quadrant will help identify which themes are most prevalent to the City. A higher concentration of departments in a particular quadrant suggests that the theme it represents is more common across the City. Additionally, any significant outlier is representative of a department that is an extreme case of the quadrant's theme.

The illustration on this page summarizes what the four quadrants mean in terms of their risk and control environments and include the generally recommended approach needed in each situation. Please note that these are high-level recommendations based on the information available and additional analysis should be conducted to reach a decision on specific next steps based on the unique circumstances and profiles of each department.

Risks are generally categorized for the purpose of illustration as High, Moderate (MOD), or Low.

For a detailed explanation and analysis of this scatter graph, please see the preceding page and the pages that follow.

Figure 13
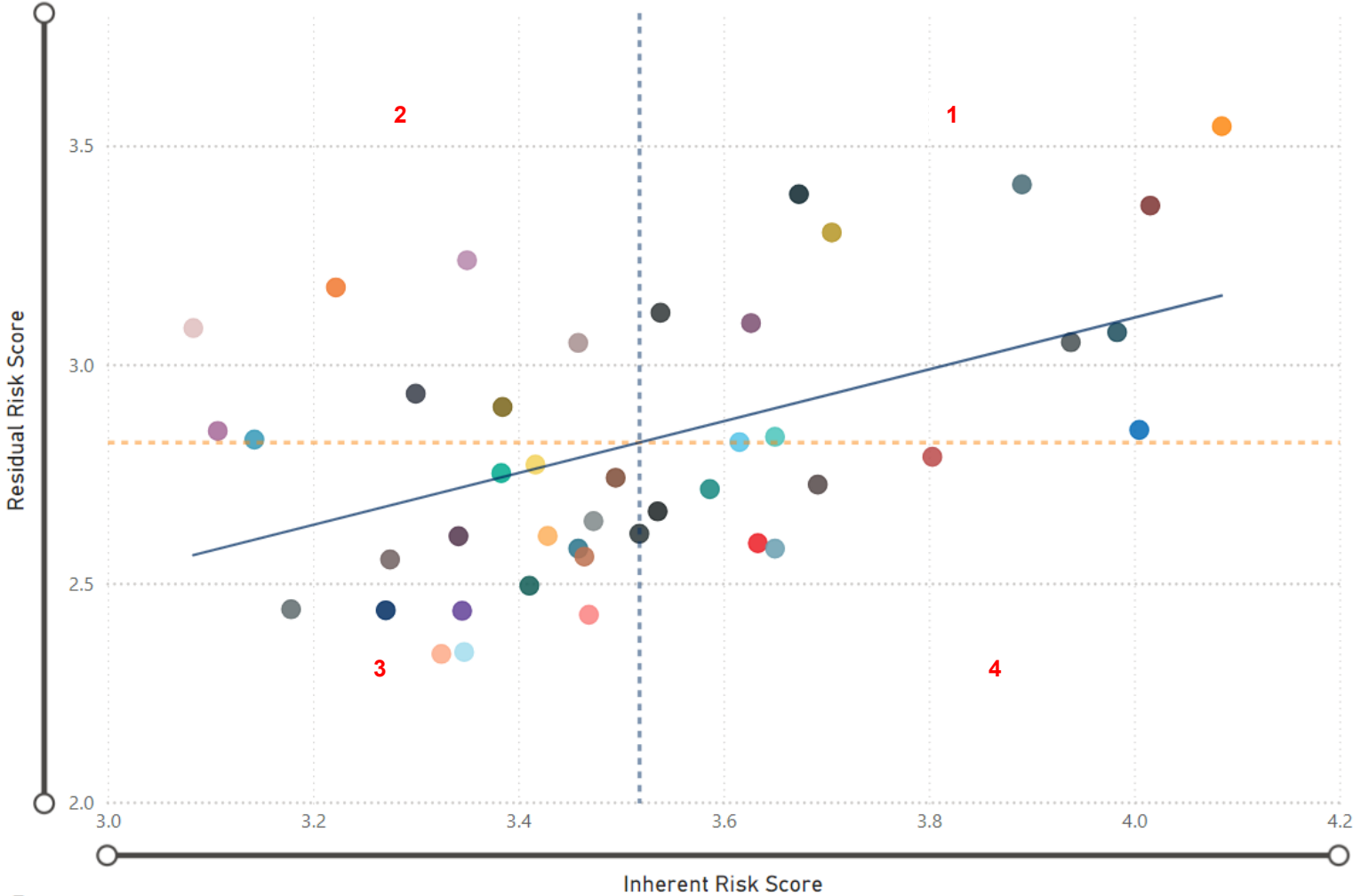
Department

- Aging
- Airports (LAWA)
- Animal Services
- Board of Public Works (BPW)
- Building and Safety
- Cannabis
- CD1
- CD13
- CD4
- Chief Legislative Analyst (CLA)
- City Administrative Officer (CAO)
- City Clerk

- City Tourism
- Civil, Human Rights, and Equity
- Community Investment for Families
- Controller
- Cultural Affairs
- Disability
- El Pueblo
- EMD
- EWDD
- Finance
- Fire
- GSD

- Harbor
- Housing
- ITA
- LACERS
- LAFPP
- Neighborhood Empowerment
- Personnel
- Planning
- Police
- PW - Contract Administration
- PW - Engineering
- PW - Sanitation

- PW - Street Lighting
- PW - Street Services
- Recreation and Parks
- Transportation
- Water and Power
- Youth Development
- Zoo

## Quadrant 1 – Top Right Quadrant

Figure 14
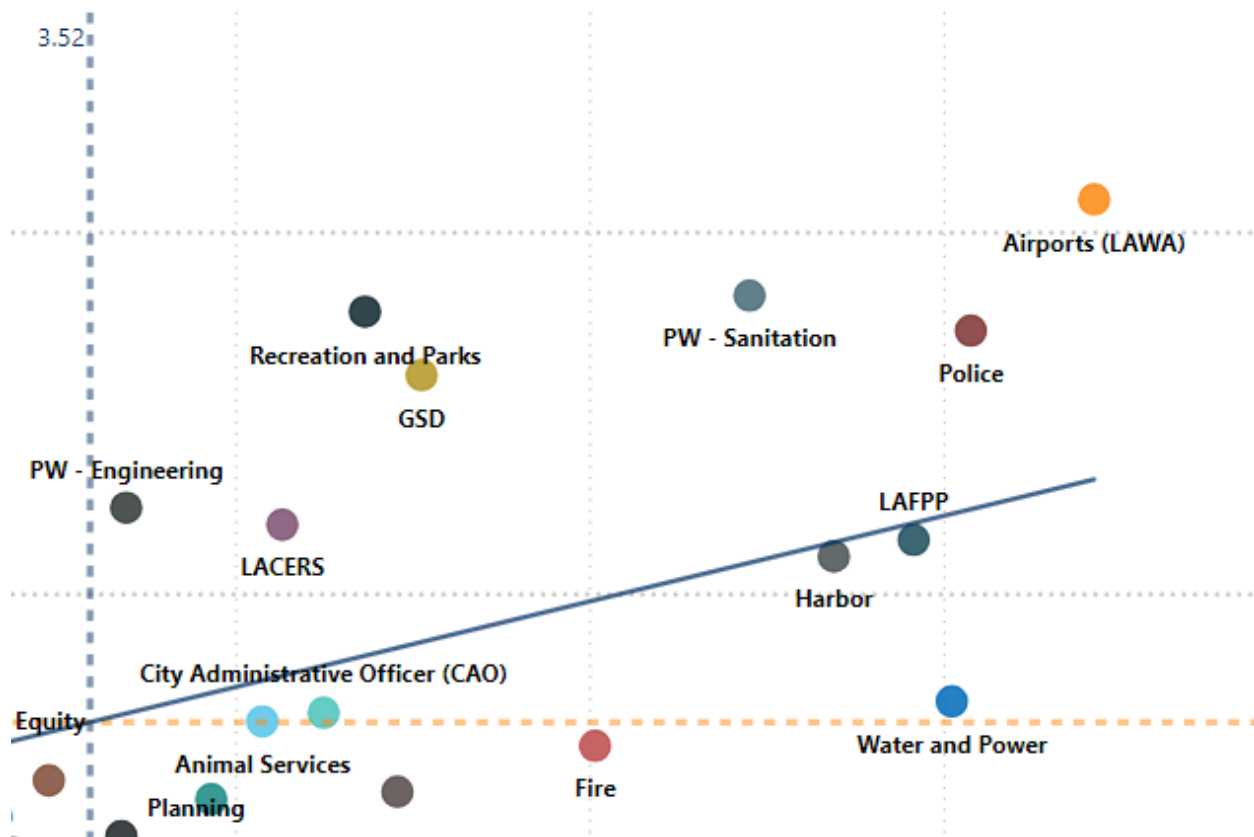
Quadrant 1 is where departments find themselves in a challenging position, facing both high inherent risks due to the nature of their operations and high residual risks, indicating that the current controls may not be adequately reducing these risks. Understanding the risk and control environment related to these departments can help the city understand where implementing control enhancements and process standardizations may be the most beneficial. Actions to strengthen the control environment, such as introducing new technologies, revising procedures, and increasing training and budget for staff and control activities, can be taken to significantly benefit these departments. By taking these steps, departments can strengthen their control environments, thereby reducing their residual risk.

Departments in Quadrant 1			
Airports (LAWA)	Animal Services	City Administrative Officer (CAO)	GSD
Harbor	LACERS	LAFPP	Police
PW – Engineering	PW – Sanitation	Recreation and Parks	Water and Power

Quadrant 2 – Top Left Quadrant

Figure 15
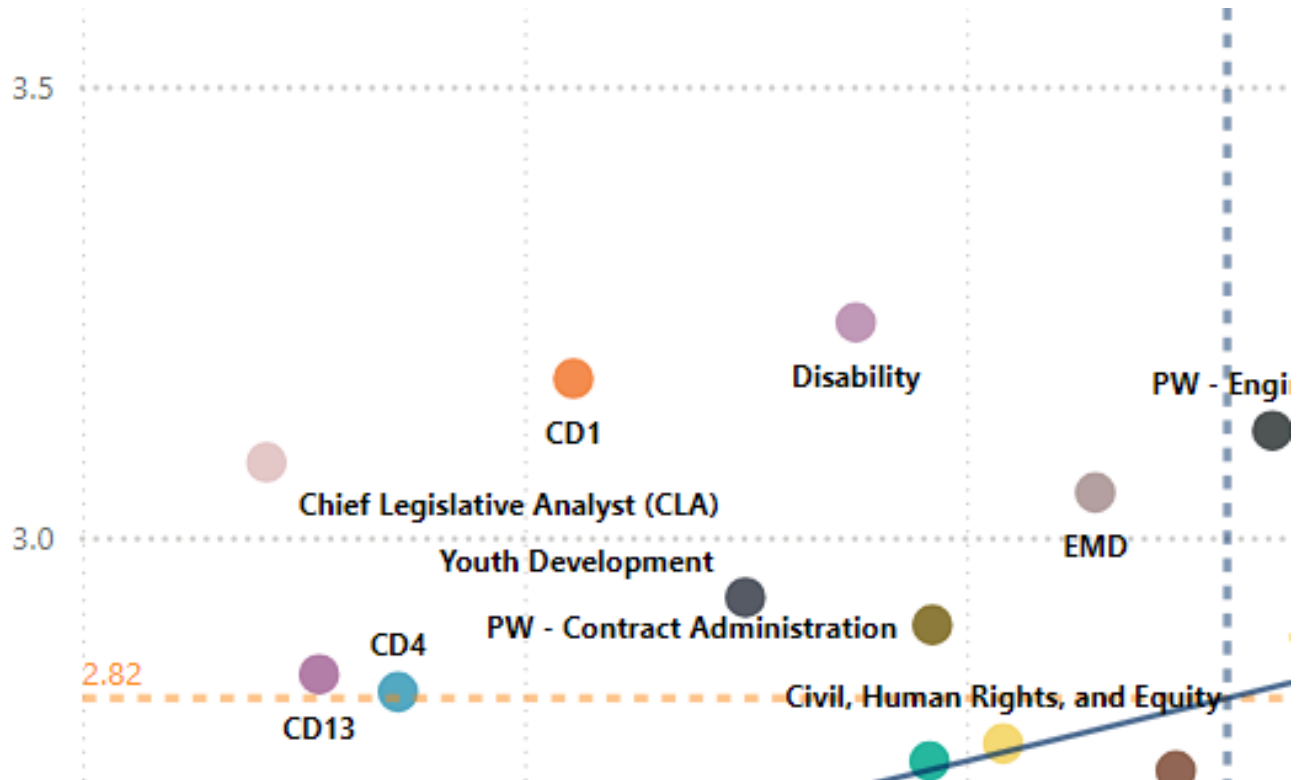
Quadrant 2 captures departments that, while not inherently operating in high-risk settings, still report higher-than-average residual risks. This discrepancy suggests that the controls currently in place may not be comprehensive in mitigating risks these departments face. Like Quadrant 1, analyzing these departments can help the city understand where there is a lack of standard citywide processes. However, because the inherent risk is below the median, the urgency of updating the control environment is lower than it is for departments in Quadrant 1. The presence of fewer departments in this quadrant suggests that the associated theme may not represent a widespread trend across the city.

Departments in Quadrant 2			
CD 1	CD4	CD13	Chief Legislative Analyst (CLA)
Disability	EMD	PW – Contract Administration	Youth Development

## Quadrant 3 – Bottom Left Quadrant

Figure 16
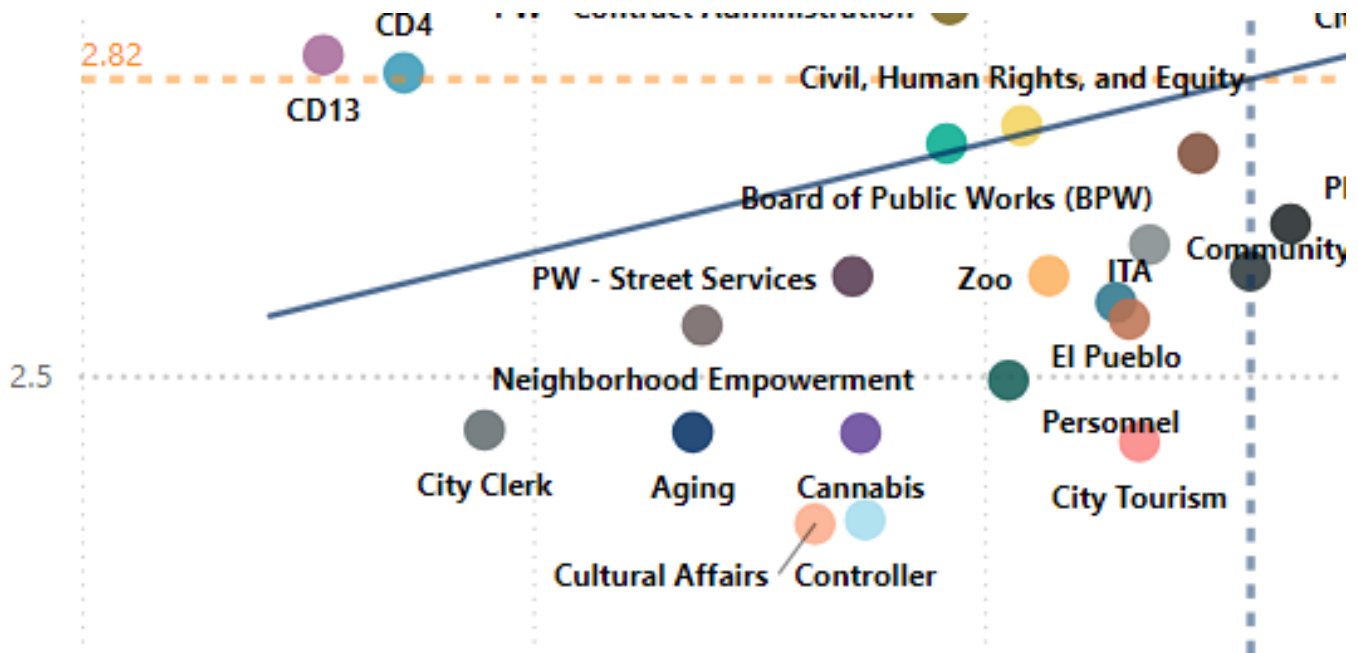
Quadrant 3 is characterized by departments that have both inherent and residual risk scores below the median. Departments in this quadrant possess a below average initial risk environment and possess strong controls that effectively reduce risk to a minimal level. These departments have the lowest risk profiles. The city can learn from these department's approaches to risk management, control implementation, and ongoing control monitoring to fully understand best practices used to mitigate risk. However, because the risk levels were lower than the median to begin with, it is possible that the controls they have in place may not be adequate for departments in inherently higher risks.

Departments in Quadrant 3			
Aging	Board of Public Works (BPW)	Cannabis	City Clerk
City Tourism	Civil, Human Rights, and Equity	Controller	Community Investment for Families
Cultural Affairs	El Pueblo	ITA	Neighborhood Empowerment
Personnel	PW – Street Lighting	PW -Street Services	Zoo

Quadrant 4 – Bottom Right Quadrant

Figure 17
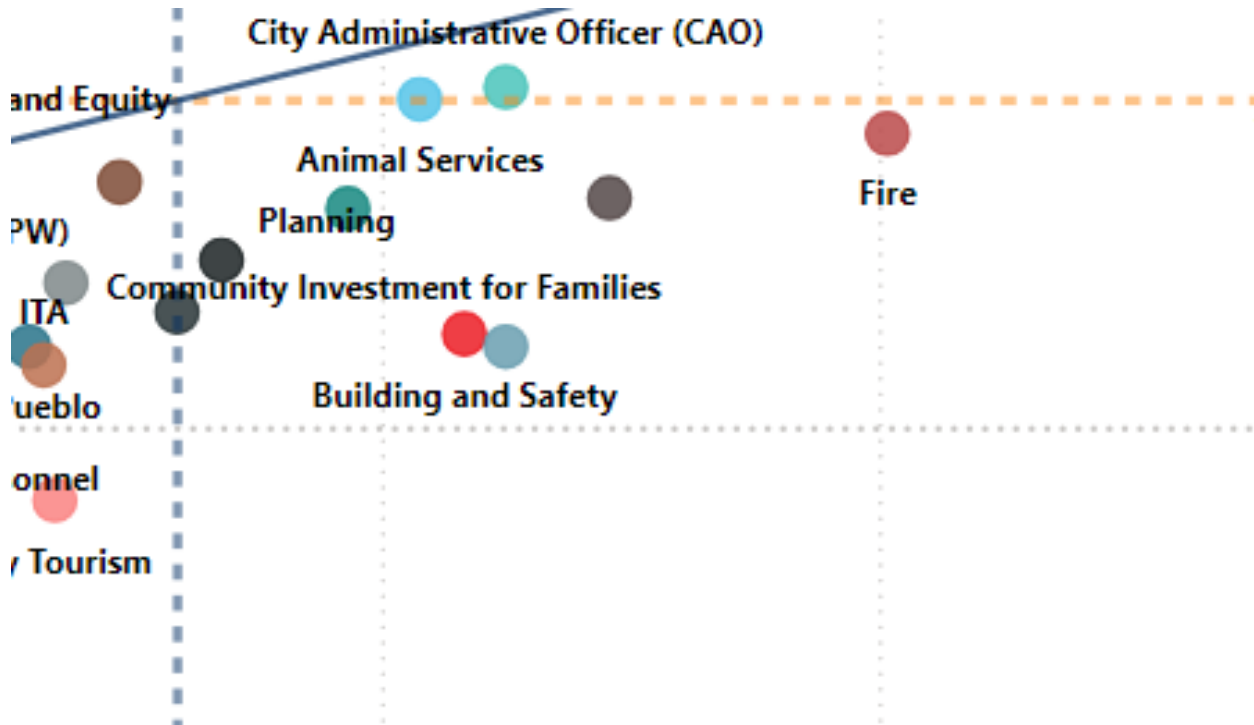
Quadrant 4 represents departments with above-average inherent risk scores but below-average residual risk scores. This pattern indicates departments that operate in high-risk environments but have implemented strong and impactful controls that significantly lower the level of risk. Departments in this quadrant demonstrate that even in the face of high inherent risks, effective controls can have a profound impact on reducing risk to more manageable levels. Fully understanding the control environments established in these departments can help the City develop control improvements that will help other high-risk departments lower their risk. The presence of fewer departments in this quadrant suggests that the associated theme may not represent a widespread trend across the city.

Departments in Quadrant 4			
Building and Safety	EWDD	Finance	Fire
Housing	Planning	Transportation	

Validation Group Trends and Analysis

City departments, including proprietary departments, were grouped into three (3) validation groups based on various department attributes such as headcount, budget, actual expenditures, services offered, and level of institutional knowledge. Departments in Group 1 were identified as the largest with attributes indicative of a higher risk profile, departments in Group 3 were smaller and had attributes indicative of a mid-lower risk profile, and departments in Group 2 fell somewhere in between, indicative of a moderate size and risk profile. Please see below for a breakdown.

Figure 18

Group 1	Group 2	Group 3
Airports (LAWA) Harbor Police Water and Power	Fire General Services (GSD) LACERS LAFPP PW – Sanitation Recreation and Parks	All Remaining Departments

## Inherent Risk Score Versus Residual Risk Score by Validation Group

The three validation groups' average inherent risk and residual risk scores are compared below. The average inherent risk score, represented by the blue bar, and the average residual risk score, represented by the orange bar, are decreasing from Group 1 to Group 3. This pattern indicates that departments in Group 1 have an overall higher risk profile than departments in Groups 2 and 3; and departments in Group 2 have an overall higher risk profile than departments in Group 3.

In addition to the different risk levels, these validation groups are also differentiated by the similarity in department size and the types of services they provide. This distinction allows a comparative analysis of various department groupings' risk levels across the four COSO principles and thirteen control activity functional areas.

The graph below indicates a downward trend in the risk profile of each validation group from Group 1 to Group 3, with Group 1 departments having a high average risk profile and Group 3 departments having a low average risk profile.

Figure 19

Inherent Risk Score and Residual Risk Score by Validation Group

● Inherent Risk Score ● Residual Risk Score
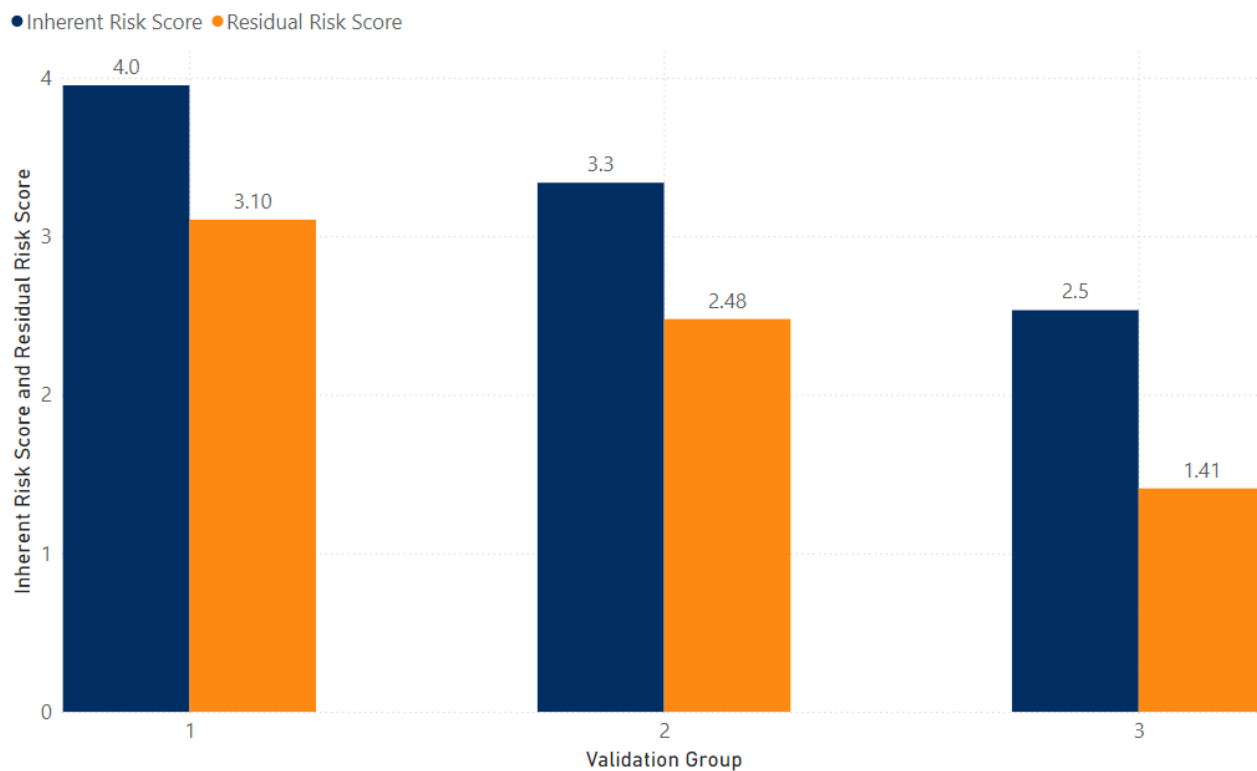
Inherent Risk Score by COSO Principle and Validation Group

In the graph below, the three validation groups' inherent risk scores are being compared across the four COSO principles. Validation group 1 is the dark blue bar, group 2 is the orange bar, and group 3 is the light blue bar. This color scheme is consistent throughout the remainder of the section when comparing validation groups to one another. The longer the bar, the higher the inherent risk score.

Figure 20
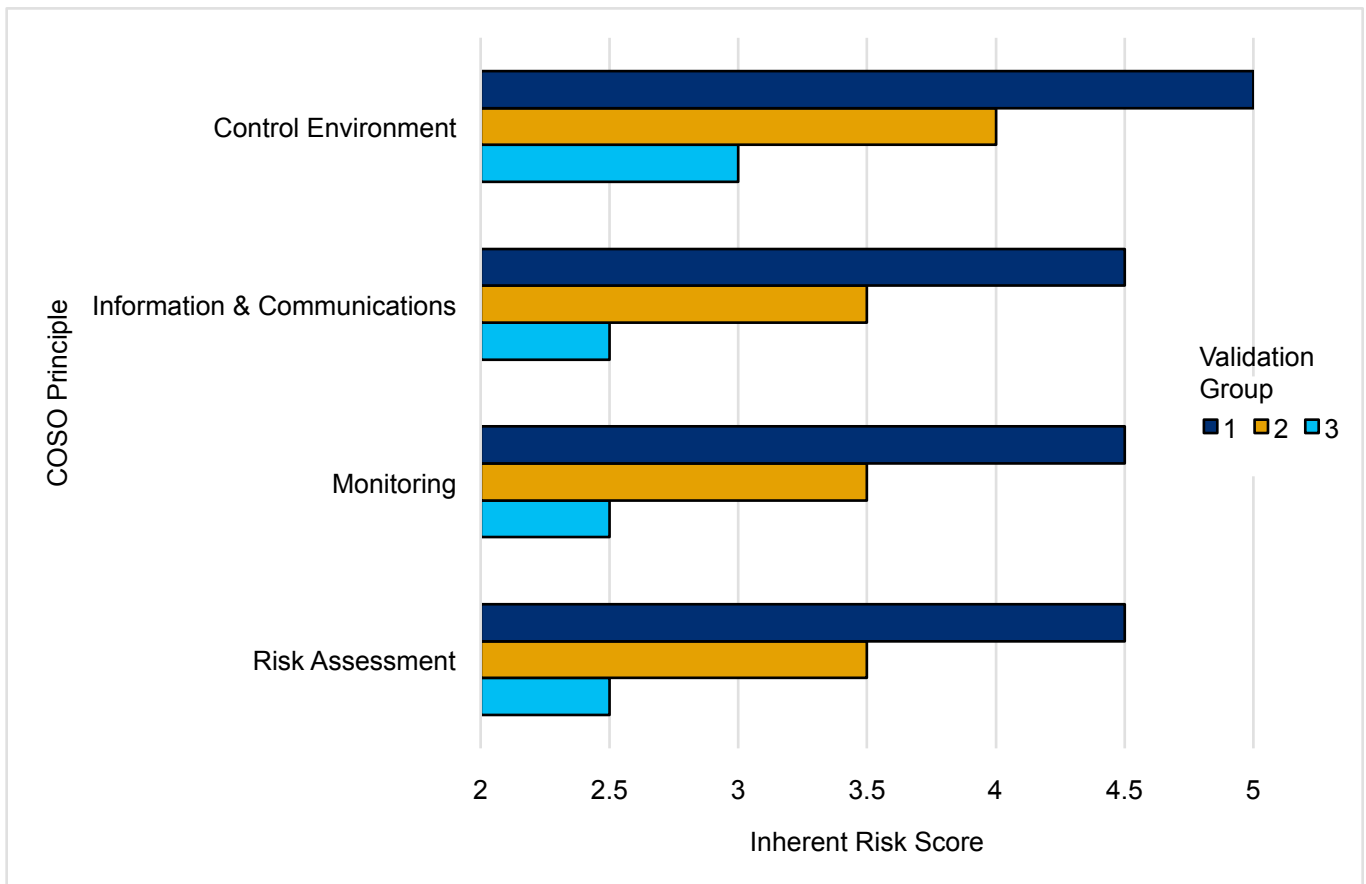
Inherent Risk Score by Functional Name and Validation Group

In the graph below, the same analysis is performed as in the graph above, except the controls scores are compared across the thirteen functional areas.

Common themes include Procurement & Contract Compliance, Revenue, Investments, and Debt Financing as functional areas with higher inherent risk across the groups, while Accounts Receivable and Grants were lower risk functional areas.

Figure 21
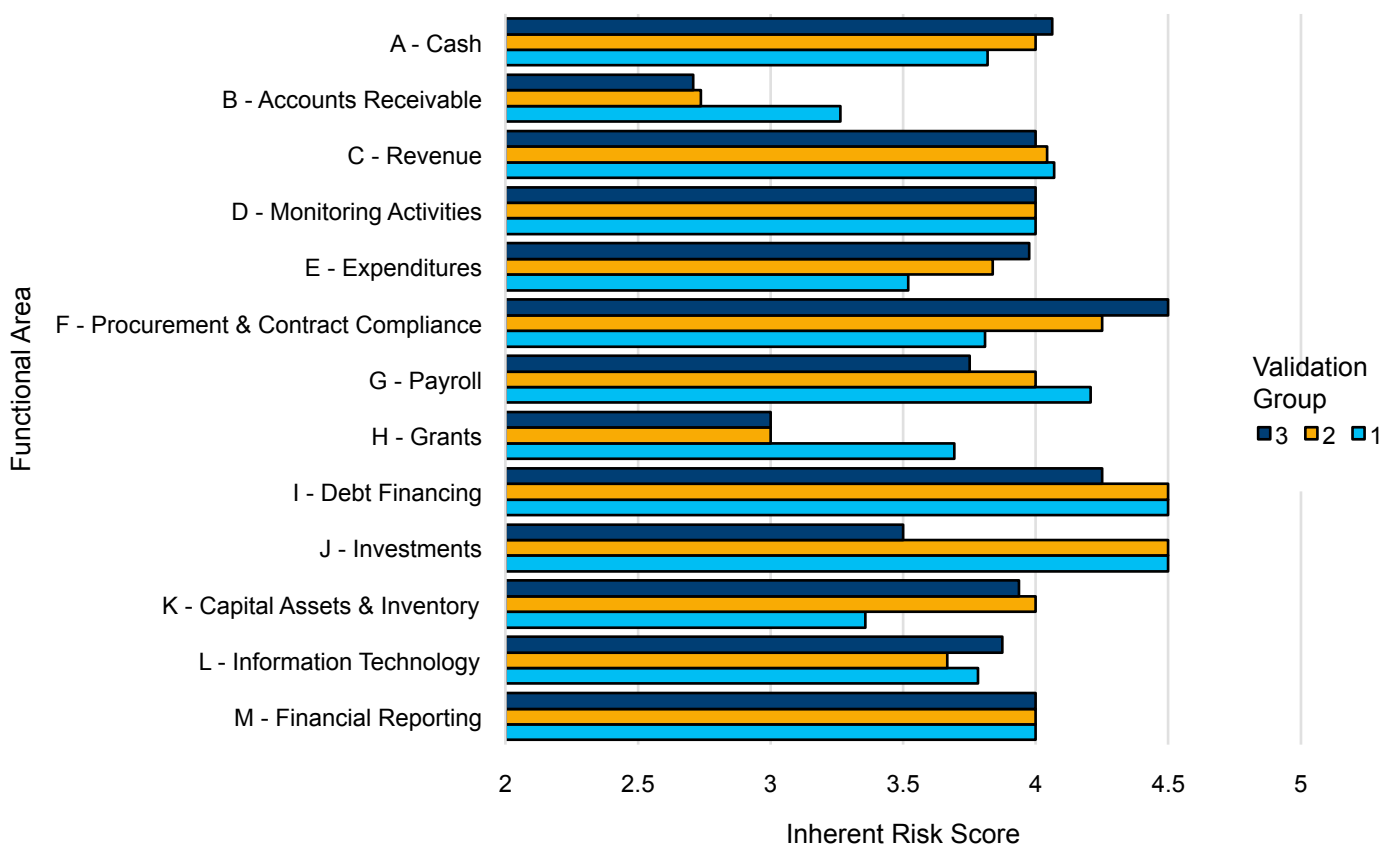
- **Higher Inherent Risk Areas for Group 1:** Procurement & Contract Compliance, Debt Financing, Cash Management, and Revenue
- **Lower Inherent Risk Areas for Group 1:** Accounts Receivables, Grants, and Investments
- **Higher Inherent Risk Areas for Group 2:** Debt Financing, Investments, and Procurement & Contract Compliance
- **Lower Inherent Risk Areas for Group 2:** Accounts Receivables and Grants
- **Higher Inherent Risk Areas for Group 3:** Debt Financing, Investments, Payroll, and Revenue
- **Lower Inherent Risk Areas for Group 3:** Accounts Receivable, Capital Assets & Inventory, and Expenditures

Validated Control Score by COSO Principle and Validation Group

The comparison of control scores for each validation group across the COSO principles and functional areas reveals the strength or weakness of the control environment, as shown below. Shorter bars represent a stronger control environment, whereas longer bars suggest a weak control environment.

Across groups 1 through 3, the Control Environment COSO principle appears to be well-managed with strong controls and Risk Assessment is weaker and less comprehensive. This suggests that process standardizations related to Risk Assessment could be implemented to significantly mitigate risk citywide.
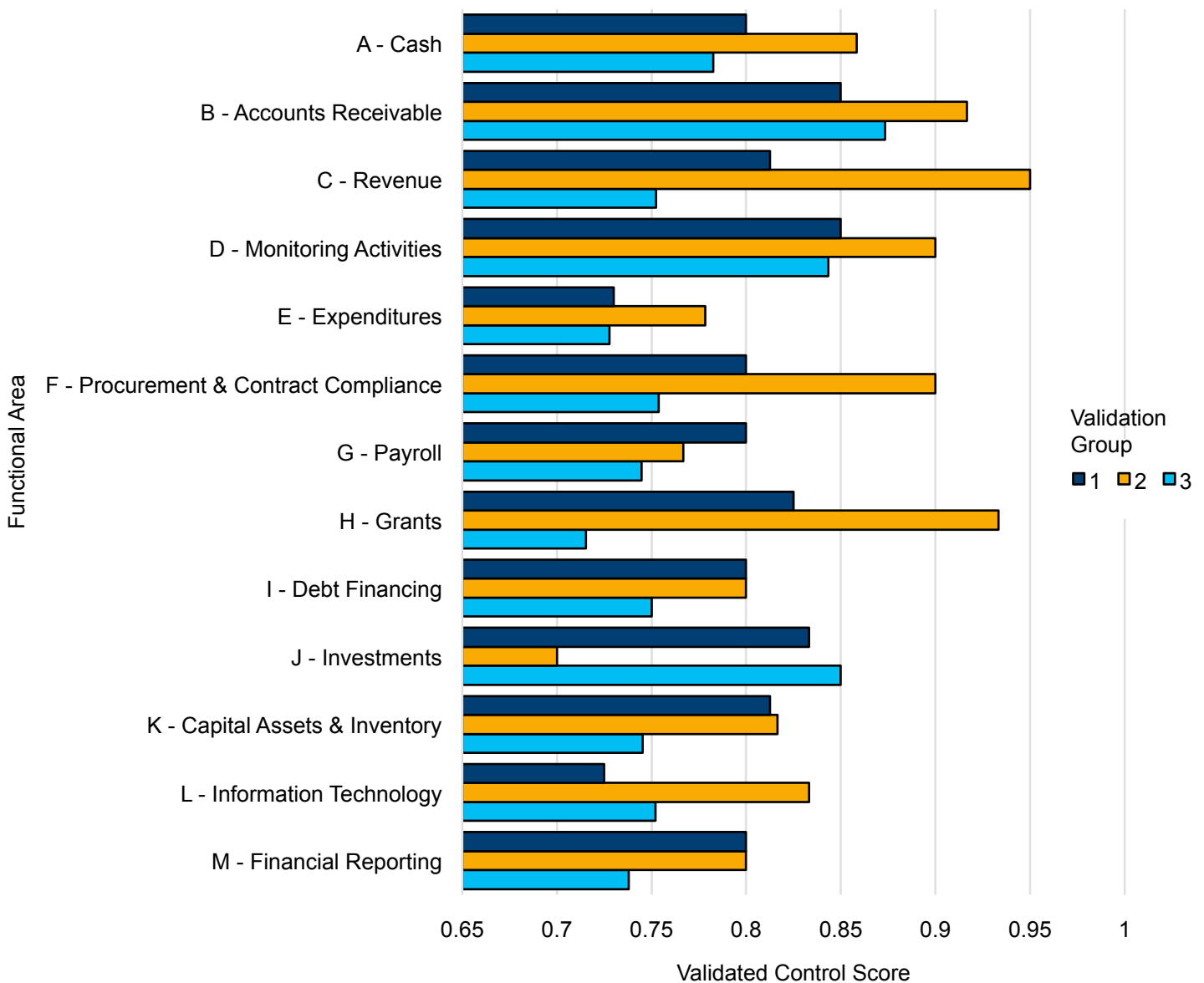
Figure 22
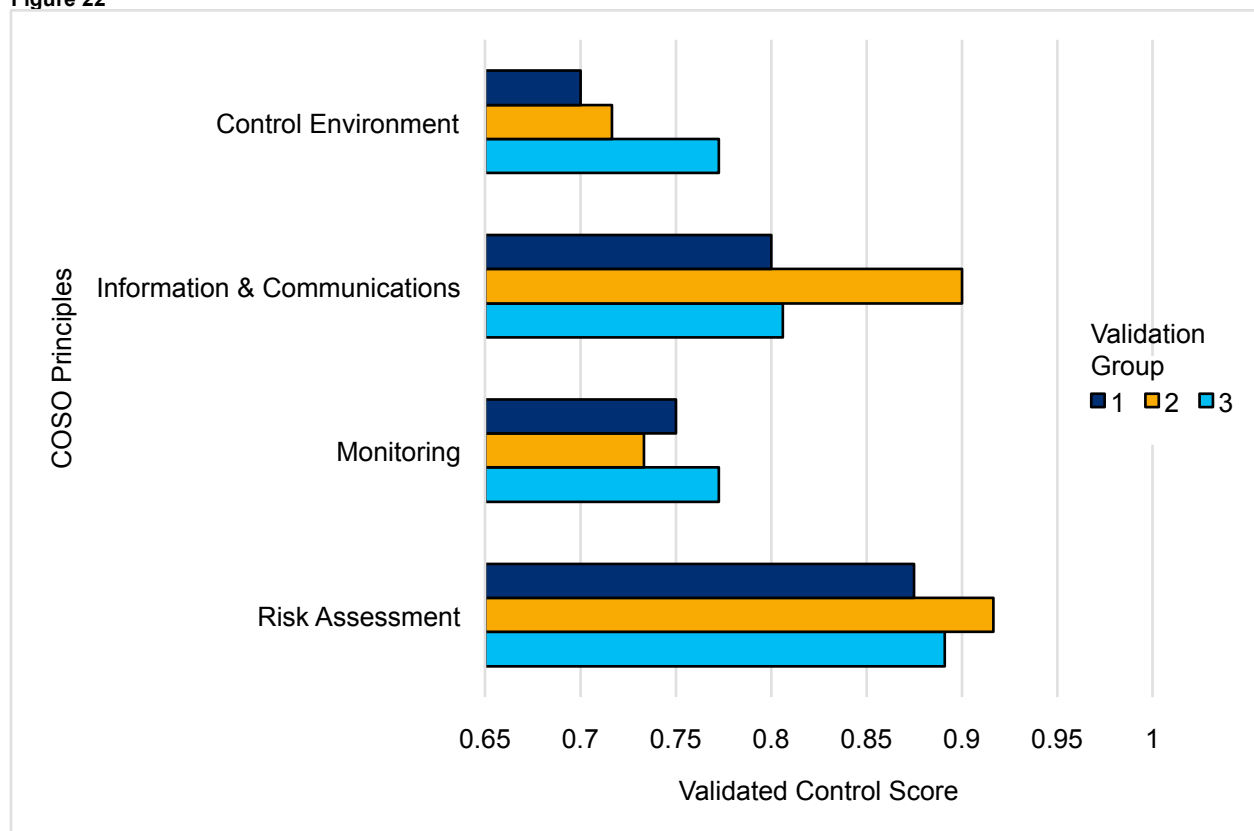
Validated and Pre-Validated Control Scores by Functional Area and Validation Group

In the graph below, the same analysis is performed as in the graph above, except the controls scores are compared across the thirteen functional areas.

Figure 23

Shorter bars represent a stronger control environment, whereas longer bars suggest a weak control environment. Notably, functional areas such as Accounts Receivables, Revenue, and Grants are represented by longer bars, suggesting weaker controls, whereas Expenditures, Payroll, Debt Financing and Financial Reporting are depicted with shorter bars, indicating stronger controls.

COSO principles or functional areas with high inherent risk rely more heavily on controls that function effectively to mitigate that high risk, compared to areas with lower inherent risk where the potential impact

of control failure is less severe.

As seen in the graph above (previous page) and the inherent risk score graph, Accounts Receivables and Grants were both identified as functional areas with low inherent risk and weak controls. This could imply that departments perceive less monetary exposure or financial risk in these areas and, consequently, may not prioritize the strengthening of controls there. These represent areas that the City should monitor, as any changes that increase risk in these currently lower-risk areas could necessitate a reevaluation of control strength requirements. Conversely, Debt Financing stands out as a functional area with both a high inherent risk score and a strong control environment. Effective controls in this area are crucial due to the risk involved. The analysis of validated controls scores assumes that the existing controls are functioning as intended, however it is prudent for the City to regularly test these controls to ensure that they are indeed operating as designed. As such, Debt Financing, a functional area with both high inherent risk and strong controls, represents an ideal candidate to receive closer examination, to ensure the controls are operating effectively.

These graphs indicate that the validated control score for group 2 is higher than in comparison with groups 1 and 3. This could potentially stem from challenges in validating responses, as the graph below shows the pre-validated control score for group 2 is much more in line with groups 1 and 3. The inability to validate responses could be indicative of missing controls, poor record keeping, or insufficient documentation practices.

Figure 24
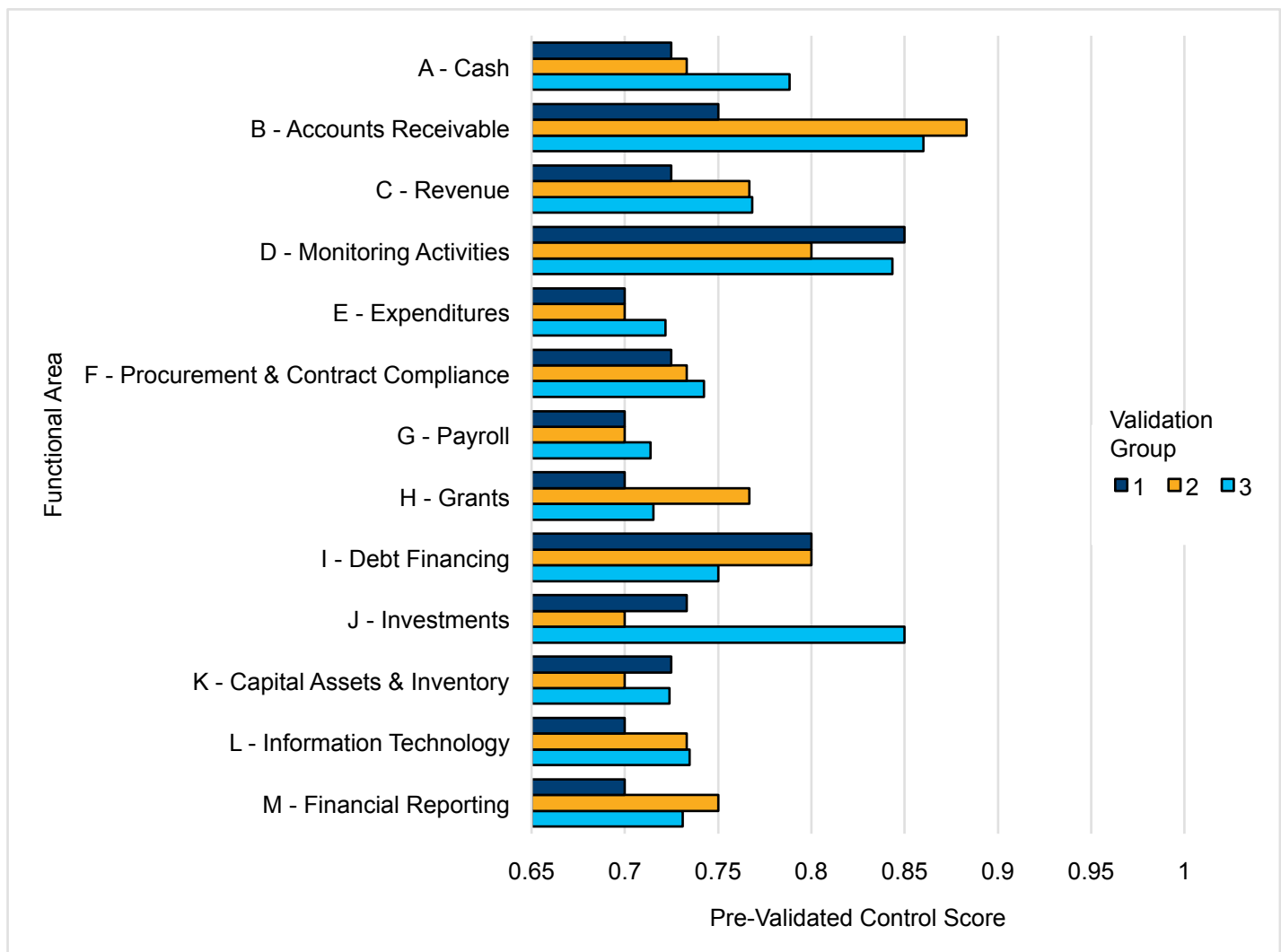
Residual Risk Score by COSO Principle and Validation Group

The calculation of the residual risk scores for the three groups was achieved by applying the control score to the inherent risk score, as depicted in the graph below.

A longer bar signifies a higher residual risk score, indicating a relatively significant amount of risk, even after factoring in the risk mitigated by the controls in place. For these areas, management should consider what level of residual risk they are comfortable with, based on the COSO principle or functional area and what is at stake (e.g., monetary exposure, compliance with rules and regulations, loss of public trust, etc.).

Figure 25
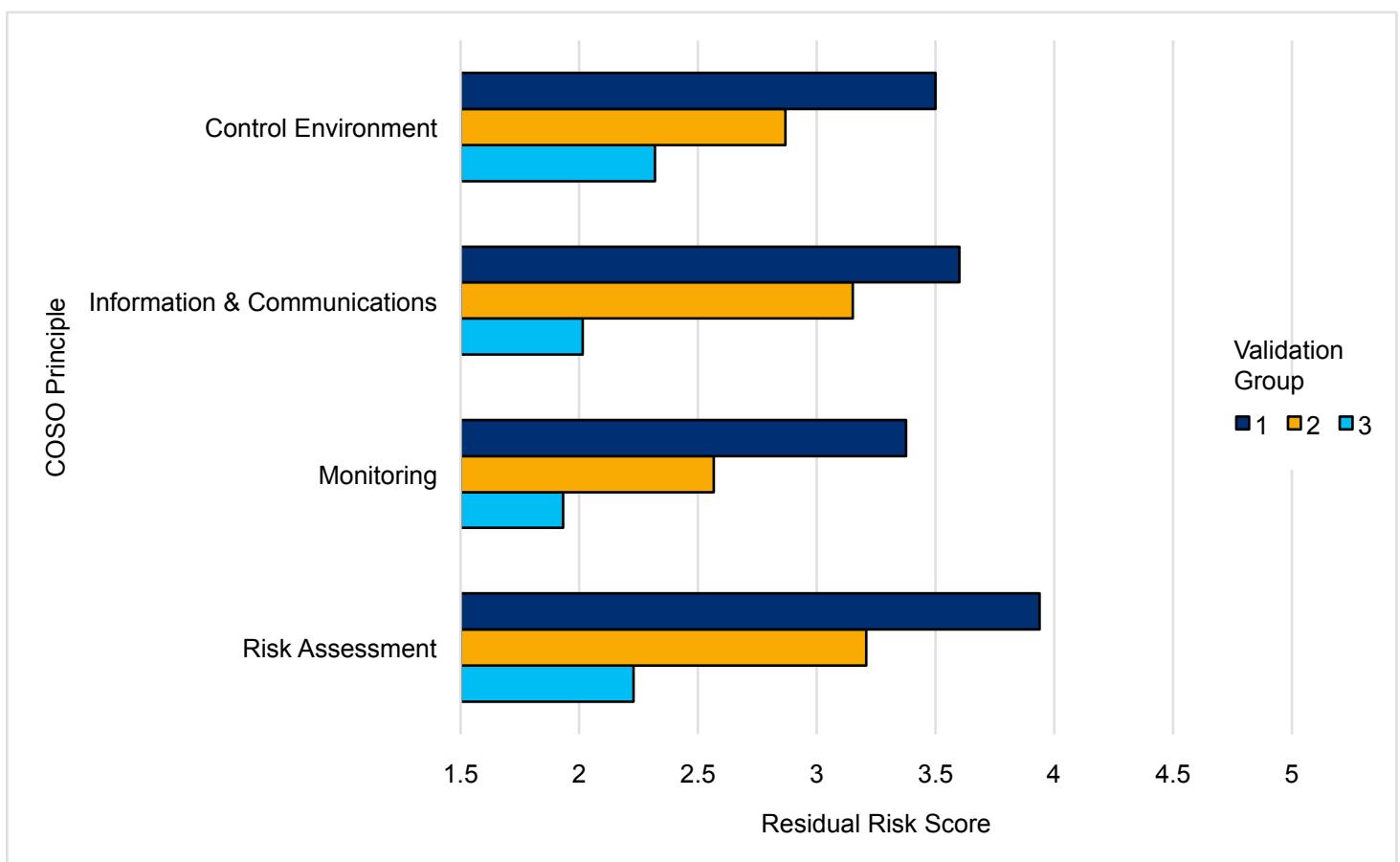
Residual Risk Score by Functional Area and Validation Group

In the graph below, the same analysis is performed as in the prior graph, except the residual risk scores are compared across the thirteen functional areas.

Common themes again include Procurement & Contract Compliance, Revenue, Debt Financing, and Monitoring Activities as functional areas with higher residual risk, and Accounts Receivables, Grants, and Expenditures as functional areas with lower residual risk.

Figure 26
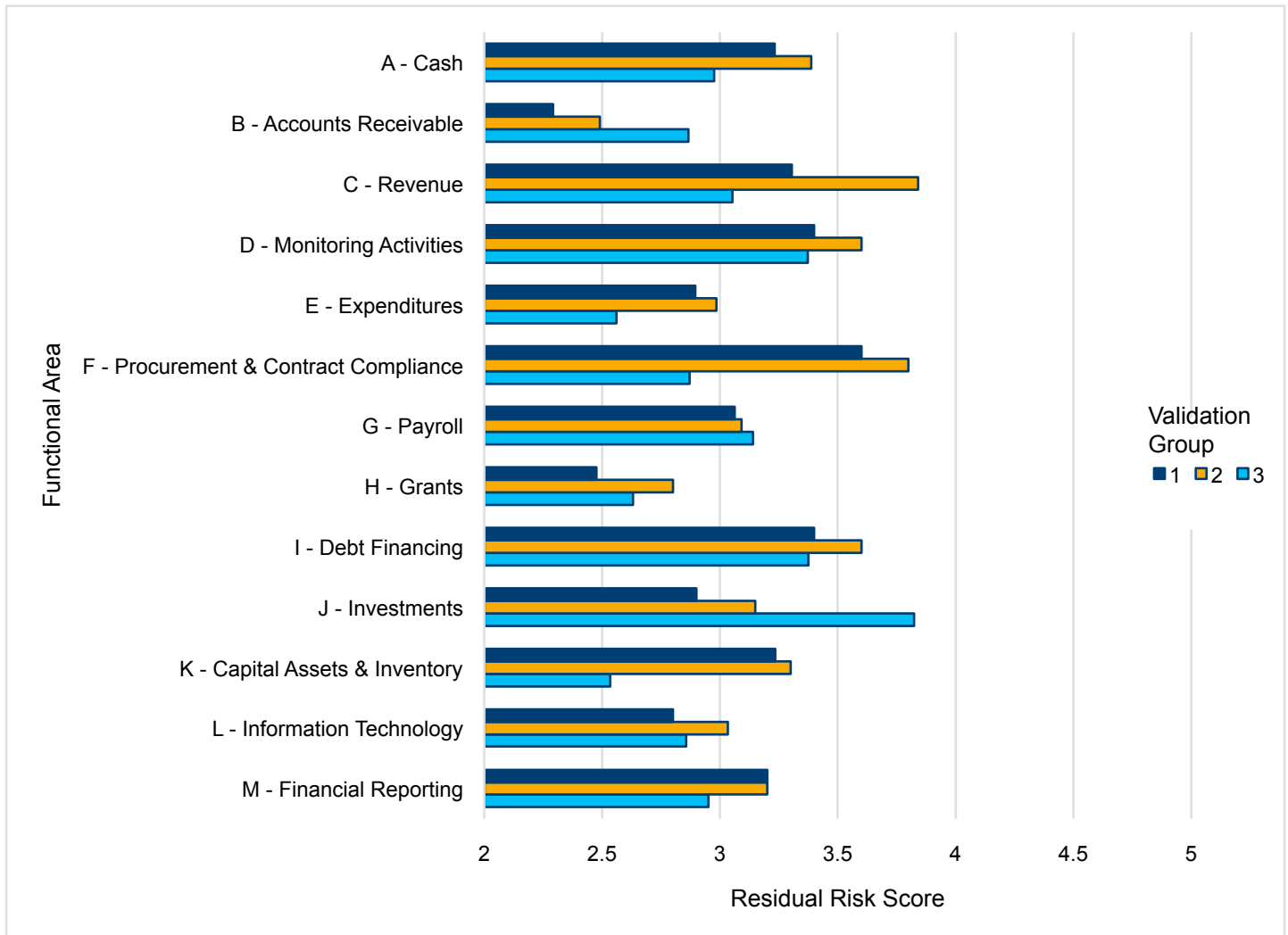
- **Higher Residual Risk Areas for Group 1:** Procurement & Contract Compliance, Debt Financing, Monitoring Activities, and Revenue
- **Lower Residual Risk Areas for Group 1:** Accounts Receivables and Grants
- **Higher Residual Risk Areas for Group 2:** Revenue, Procurement & Contract Compliance, Monitoring Activities, and Cash Management
- **Lower Residual Risk Areas for Group 2:** Accounts Receivables, Grants, Information Technology, and Expenditures
- **Higher Residual Risk Areas for Group 3:** Investments, Debt Financing, and Monitoring Activities
- **Lower Residual Risk Areas for Group 3:** Capital Assets & Inventory, Expenditures, and

Accounts Receivables

# Department Level Trends and Analysis (Groups 1 and 2 Only)

This section focuses in on the Group 1 and 2 departments, which are considered higher priority based on departmental attributes. Responses from these groups underwent a more comprehensive validation process, and any controls lacking sufficient explanation or documentation were deemed pre-validated and scored as a "No."

Number of Pre-Validated "Yes" vs. "No" Responses

Below is a listing of the Group 1 and 2 departments, along with a count of their "Yes" versus "No" responses before validation (i.e., this is the Departments' self-assessment of controls). The blue bar signifies pre-validated **Yes** responses and the yellow bar signifies pre-validated **No** responses. The pre-validated "Yes" responses greatly outnumber the "No" responses, suggesting that these departments self-reported a substantial presence and functionality of applicable controls.

Figure 27

Number of Pre-Validated Yes vs. No Responses by Department

Pre-Validated Yes ■ Pre-Validated No ■
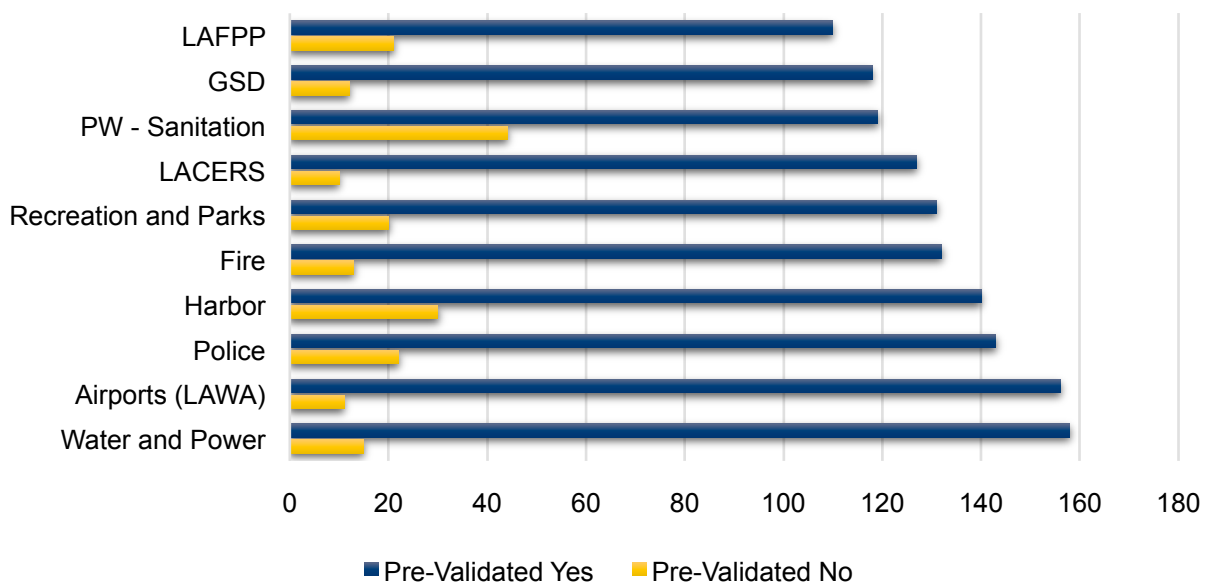
Number of Validated Yes vs No Responses

Large discrepancies between pre-validated and validated responses indicate areas that may warrant further investigation.

The narrative from the graph above changes substantially after the validation process occurs. Initially, the ratio of pre-validated "Yes" to "No" responses, was 86% to 14%, respectively. However, this balance shifts to 59% "Yes" and 41% "No" when the ability (or lack thereof) to validate is factored in.

Although the departments self-reported having these controls in place, they could not be substantiated during validation. This could be due to various factors, including time constraints during the validation period, inadequate record-keeping practices, insufficient documentation processes, or limited resources to thoroughly engage with the self-assessment process. It is important to note that an inability to validate

does not necessarily mean the controls are absent, rather it means their existence could not be confirmed. Therefore, it may be advantageous to determine whether these controls are actually in place.

Figure 28

Number of Validated Yes vs. No Responses by Department
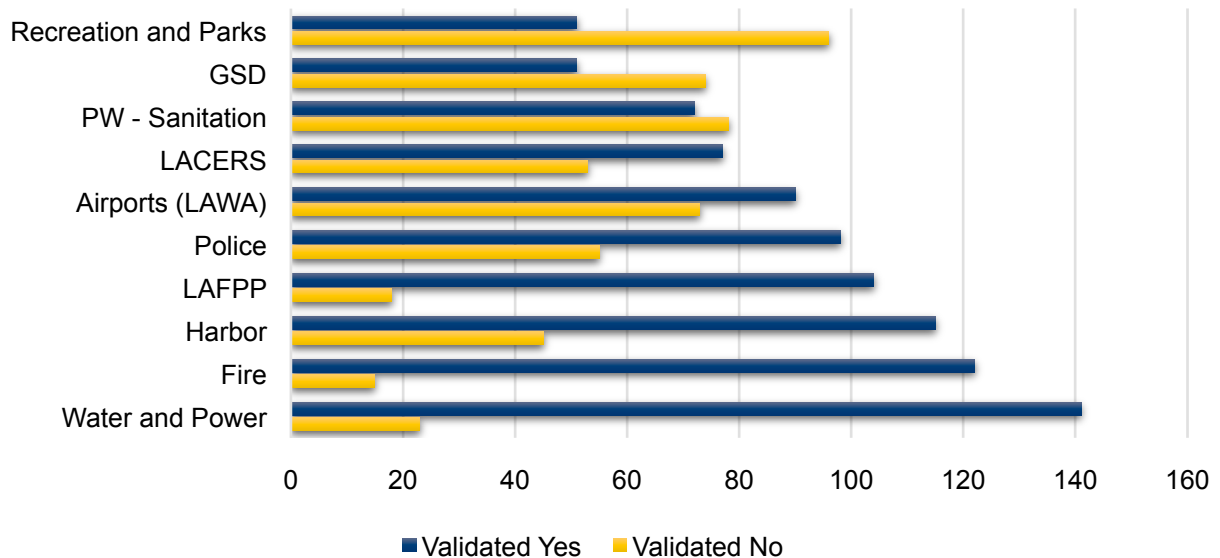
Figure 29

Difference in Pre-Validated vs Validated Yes by Department			
Department	Pre-Validated Yes	Validated Yes	Percent Change in Number of Yes Responses
Recreation and Parks	131	51	-61.07%
GSD	118	51	-56.78%
Airports (LAWA)	156	90	-42.31%
PW - Sanitation	119	72	-39.50%
LACERS	127	77	-39.37%
Police	143	98	-31.47%
Harbor	140	115	-17.86%
Water and Power	158	141	-10.76%
Fire	132	122	-7.58%

Difference in Pre-Validated vs Validated Yes by Department			
LAFPP	110	104	-5.45%

Figure 30
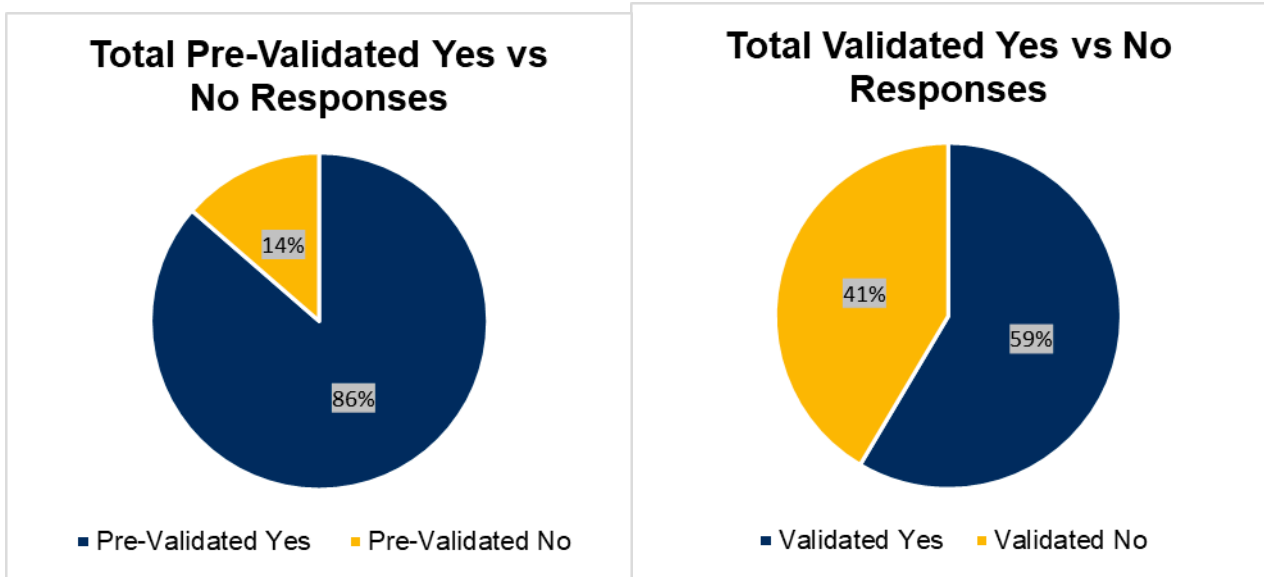
*The increase in the yellow portion of the pie graph is a strong indicator of the need for further review and assessment of the existence and operating effectiveness of controls that departments reported as having been implemented.*

Pre-Validated Control Score Versus Validated Control Score by Group 1 and 2 Departments

For groups 1 and 2, the control score increased significantly after all responses underwent validation, as a substantial number of the self-reported controls could not be verified. This gap between pre-validated and validated responses had a direct effect on the control scores, as illustrated in the graph below.

Remember, control scores are inversely related to the strength of the control environment. As the control score increases, the strength decreases. As such, long bars are indicative of weak controls.

Figure 31

Control Scores by Department
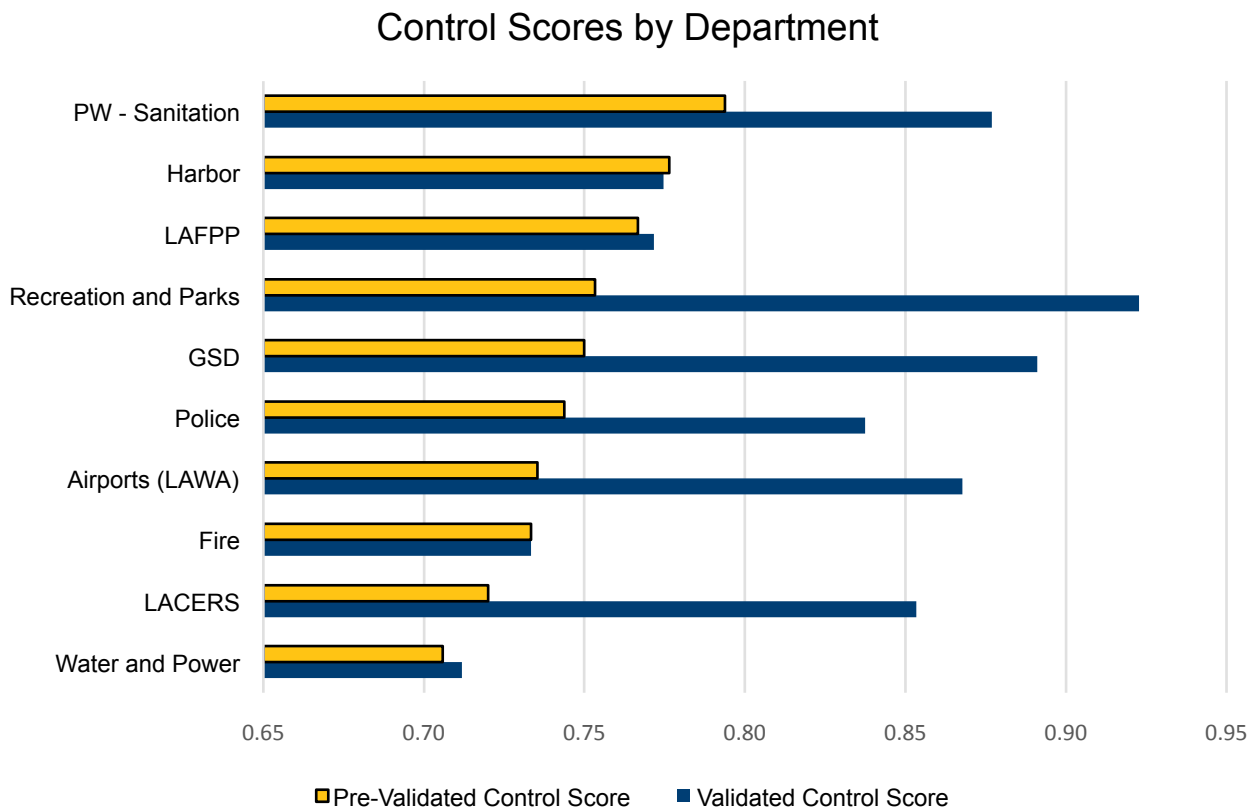
Questions Answered "Yes" by All Group 1 and 2 Departments

While the validation process resulted in a reduction of confirmed controls, there remained several controls that were both self-assessed and validated as being in place. The table below highlights the questions that were responded with "Yes" by all departments in Groups 1 and 2, indicating the most common controls by these departments.

Figure 32

COSO Principle / Functional Area	Question
Control Environment	Does the Department have a written code of conduct and/or ethics policy that has been communicated to all staff, board members, and outsourced service providers?
Control Environment	Does the Department have documented lines of authority and responsibility in a department level organizational chart or similar document?
Control Environment	Does the Department provide training opportunities or continuing education to develop and retain sufficient and competent personnel?
Expenditures	Does the Department assign personnel to document the receipt and acceptance of goods and services by either signing the invoice (services) or by recording it in the FMS Receiver (RC) document (goods)?
Expenditures	Are advance payments reviewed and approved to verify that it is being made in accordance with the associated contract or agreement terms?
Expenditures	As long as there is no advance payment provision in the contract or agreement, does the Department assess the risk of non-recovery, document the reason for advance payment, and work with the City Attorney to ensure the City will have recourse if vendor fails to deliver on the advance payment?
Expenditures	Does the Department maintain actual cash on hand and/or maintain a bank account for petty cash purposes?
Capital Assets	Does the Department have personnel assigned to maintain detailed capital asset records and schedules (e.g. description, identification number, location, value, depreciation, acquisition date, disposal date, etc.)?

Questions Most Commonly Answered "No" by Group 1 and 2 Departments

In contrast, there were also controls that were consistently self-assessed or validated as being absent. The following list details the most commonly answered "No" questions, along with the number of times the "No" response was given. These are the controls that were most commonly missing from these departments.

Figure 33

COSO Principle / Functional Area	Question	Number of No
Risk Assessment	Does the Department perform a fraud risk assessment at least once every three years?	8

COSO Principle / Functional Area	Question	Number of No
Cash	Does the Department utilize automated banking services (e.g. Positive Pay) to deter check fraud and limit access to the bank transmittal file of issued checks to authorized personnel only?	7
Cash	Are authorized check signatories limited to no more than three key personnel and are signatories immediately changed if they transfer or leave City service?	7
Accounts Receivables	Does the Department utilize the City's FMS Accounts Receivable (AR) module to record accounts receivable?	7
Revenue	Are all revenue source documents and revenue-related expenditure documents retained for at least three years, or until audited by the appropriate agencies?	7
Revenue	Are credit balances in the accounts receivable reviewed and resolved prior to year-end financial closing procedures?	7
Procurement and Contract Compliance	Does the Department periodically evaluate third party service providers' operational performance and internal control procedures?	7
Procurement and Contract Compliance	Are contractor evaluation forms completed at the conclusion of each contract?	7
Procurement and Contract Compliance	Are TOS responses, including TOS contractor selection records, retained on file?	7
Payroll	Are performance evaluations performed at least annually for all personnel?	7
Payroll	Are bonuses justified and reviewed periodically to ensure that the bonuses are still applicable?	7
Information Technology	Does the Department have access to system-generated logs or 'audit trails', which document user access and actions taken within key financial systems or databases containing sensitive or personally identifiable information?	7
Financial Reporting	Has management identified accounts which are at risk of misstatement and developed policies and procedures to address those risks?	7

The controls that were most frequently absent across departments represent prime candidates for the development and implementation of standardized processes. Establishing uniform guidelines for these particular controls could significantly enhance consistency, compliance, and overall effectiveness within the City's financial framework.
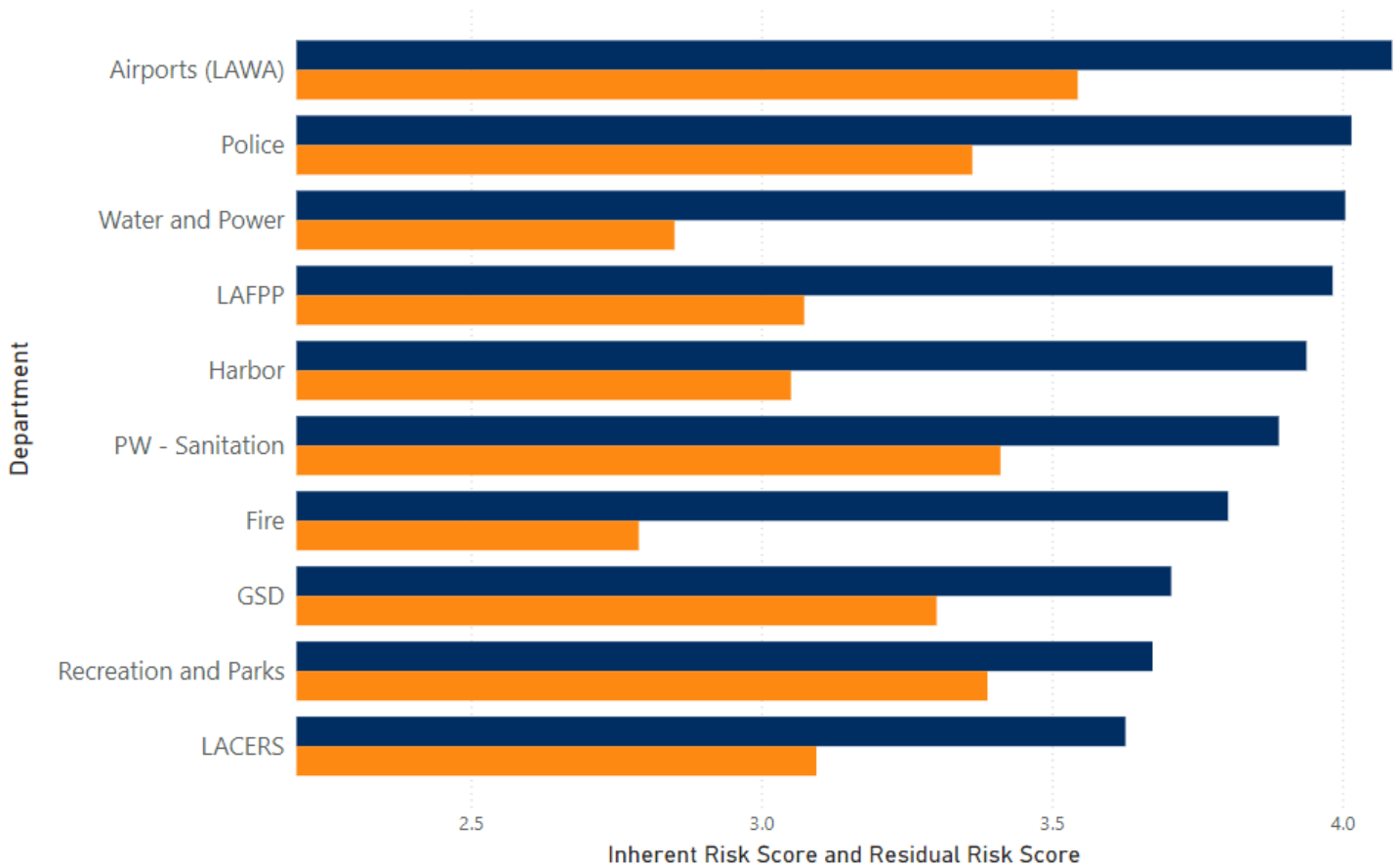
Inherent Risk Score Versus Residual Risk Score by Group 1 and 2 Departments

Like the broader citywide analysis on pages 18-19, the control score plays a crucial role in determining the gap between inherent and residual risk scores. The graph below illustrates this relationship by comparing the two risk scores across departments in Groups 1 and 2.

Figure 34

Inherent Risk Score and Residual Risk Score by Department

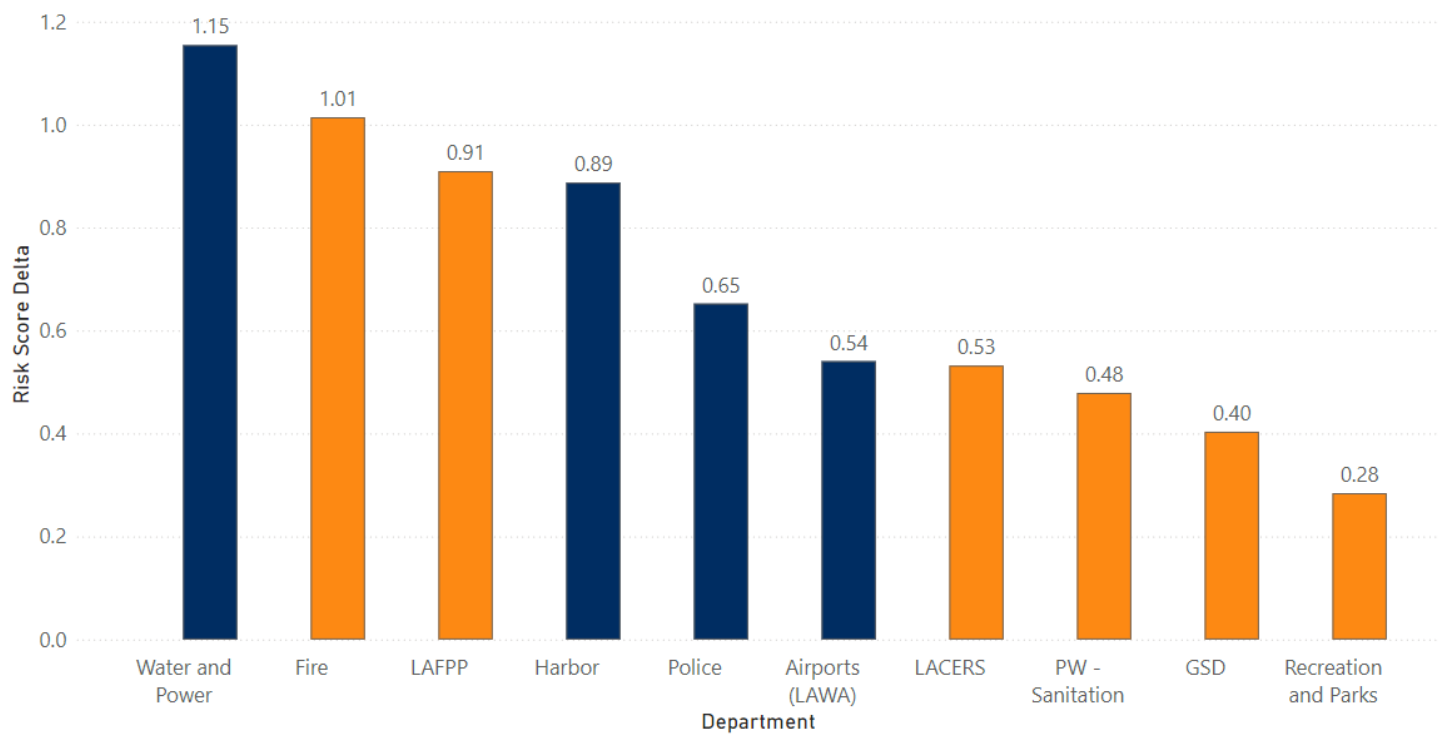● Inherent Risk Score ● Residual Risk Score

Delta Between Inherent Risk Score and Residual Risk Score by Group 1 and 2 Departments

The delta, or difference, between the inherent and residual risk scores is indicative not just of strong controls, but of controls that are significantly influencing risk levels. In environments where inherent risks are already low, functioning controls will result in a smaller delta, as there is less risk to mitigate. The same quality and quantity of controls applied in a high-risk environment will yield a larger delta, reflecting a more substantial reduction in risk due to the greater initial risk present.

Figure 35

Risk Score Delta by Department and Validation Group

Validation Group ● 1 ● 2

The departments toward the left of this graph indicate are more indicative of a strong, impactful control environment than the departments further to the right.

Inherent Risk Score, Control Score, and Residual Risk Score for Group 1 and 2 Departments by COSO Principle and Functional Area

The following three graphs present the inherent risk score, control score, and residual risk score for Groups 1 and 2 departments, broken down by COSO principle and functional area. These graphs utilize the same format as above. In the case of inherent and residual risk, a higher score corresponds to a longer bar, indicating a greater level of risk. For control score, a higher score corresponds to a longer bar, signaling a weaker control environment.

The graphs serve as tools to uncover trends and patterns within the COSO principles and functional areas, highlighting where risk is most prevalent, where controls are either robust or deficient, and where residual risks remain despite control efforts. This information is critical for pinpointing areas that may require additional risk management resources or control enhancements.
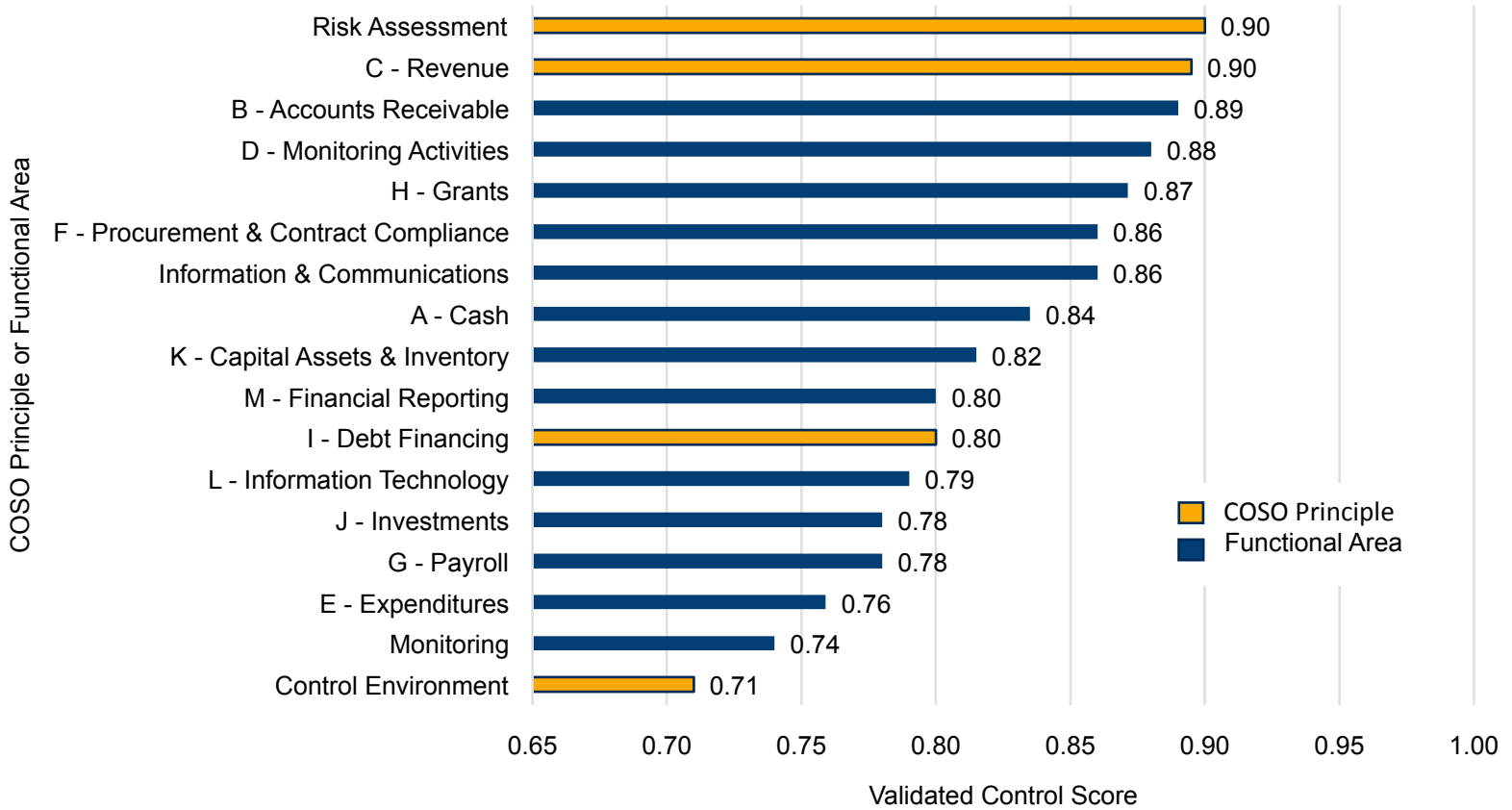
Inherent Risk Score by COSO Principle and Functional Area

Figure 36
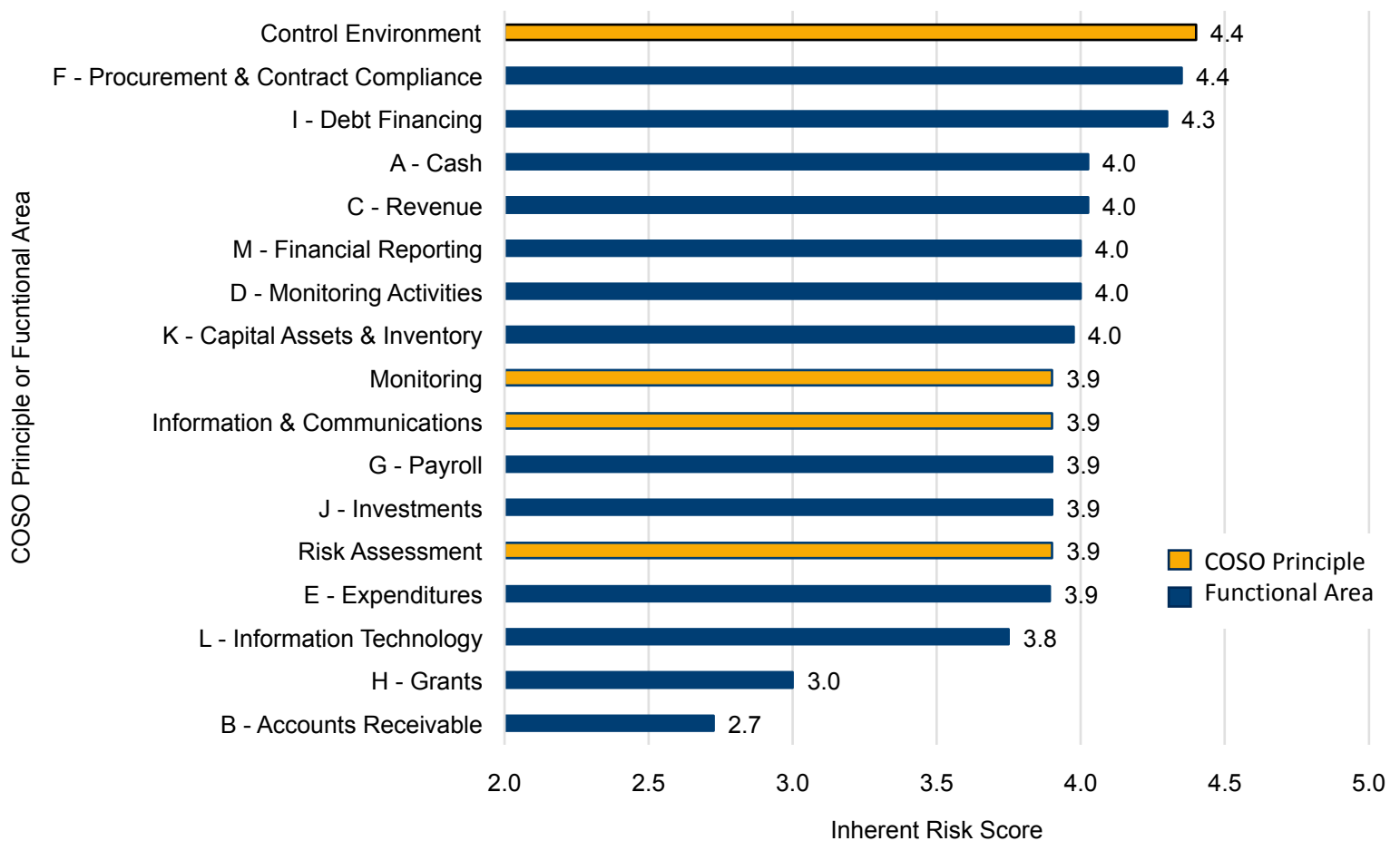
Control Score by COSO Principle and Functional Area

Figure 37

Residual Risk Score by COSO Principle and Functional Area

Figure 38

Functional Areas with the Two Highest and Two Lowest Average Residual Risk Scores by Department

The graph below provides a closer look at the functional areas with the two highest, Procurement & Contract Compliance and Revenue, and two lowest, Accounts Receivables and Grants, average residual risk scores by department.

Generally, the functional areas with the highest average residual risk received correspondingly high scores from the majority of departments, and those with the lowest risk were associated with lower scores. However, there are exceptions from this general trend, with some departments showing high scores in areas typically associated with low risk, and vice versa.

While the average scores being analyzed do reflect overarching trends, they may not hold true for every individual department. These high-level patterns provide a broad perspective on the City's risk profile in these functional areas, but a more granular analysis may be necessary to fully understand each department's unique risk and control dynamics.

Figure 39

Functional Areas with the Two Highest and Two Lowest Average Residual Risk Score
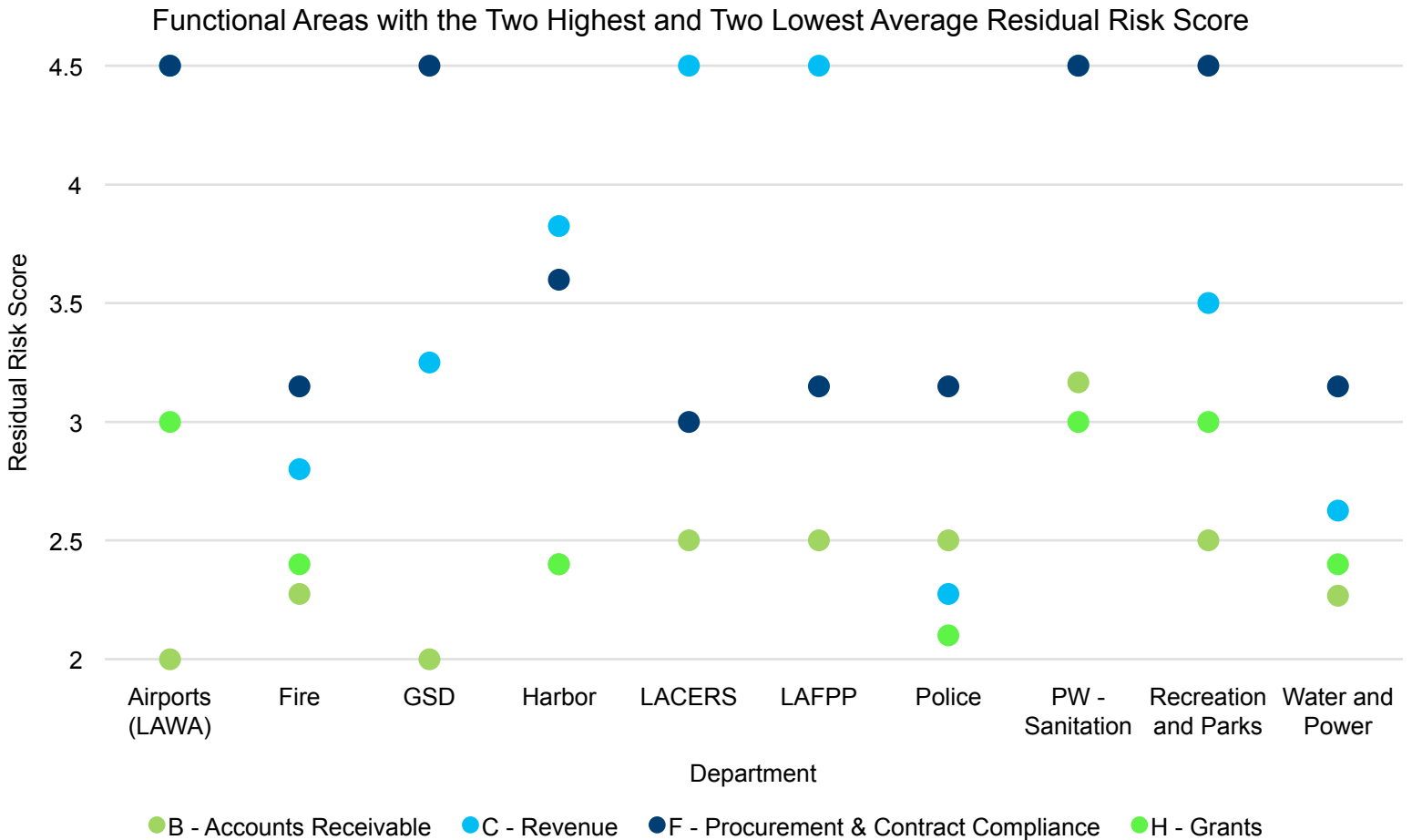
Analysis on Key Controls (Groups 1 and 2 Only)

Departments were tasked with responding to a variety of questions that assessed the existence of controls in processes related to functional areas. Nineteen (19) key controls were chosen to signify controls that are the primary, and most essential, controls needed to reduce risk to an acceptable level. Without these key controls, the risk of financial misstatement significantly rises.

Please reference below for a list of questions that were used to assess key controls.

Figure 40

Functional Area	Question
Cash	Are bank account reconciliations prepared and approved by different people (e.g. the same person cannot prepare and approve the reconciliation)?
Cash	Are daily cash receipts reconciled and approved by a supervisor daily, with variances investigated prior to approval?
Accounts Receivables	Does the Department prepare, and conduct a review on, a report of uncollectible intergovernmental receivables at least twice per year?
Revenue	Are the responsibilities for (1) receiving payments, (2) updating individual accounts, and (3) performing collections on delinquent accounts separated to ensure that no individual may perform more than one of the listed functions?
Expenditures	Have the responsibilities been separated, so that no individual may perform more than one of these functions, for: (1) procuring goods and services, (2) approving 'Authority for Expenditure' documents, (3) receiving goods and services, (4) reviewing/approving invoices, (5) recording payments, and 6) reviewing/approving payments?
Expenditures	Are the functions of vendor selection and maintenance assigned to different personnel to ensure that no individual performs more than one of the following functions: (1) vendor selection in the purchasing or procurement process, (2) creation and/or modification of vendor records in the vendor master file, (3) review and approval of creation or modification to vendor records, (4) creation of payment requests, and (5) approval of payment requests?
Expenditures	Does the Department require travelers to: (1) submit reimbursement requests for review and approval using Form Gen. 16, Personal Expense Statement (PES), (2) note any exceptions to the City Travel Policy, and (3) substantiate the expenses with receipts?
Procurement and Contract Compliance	Does the Department solicit competitive bids (e.g. Request for Proposals - RFP, Request for Qualification - RFQ, etc.) from vendors based on established monetary thresholds?

Functional Area	Question
Procurement and Contract Compliance	Prior to executing contracts, contract amendments, or change orders, does the Department require review and approval by individuals who are proficient in the technical area of the goods or services to be procured (e.g. to assess/confirm best value), City procurement rules, and applicable contract/legal terms and conditions?
Payroll	Are payroll and personnel functions adequately separated to ensure that no one individual controls all key aspects of a payroll transaction (hiring, approval of hours worked, distribution of warrants and direct deposit notices, and termination)?
Grants	Does the Department have assigned personnel who are responsible for preparing and filing grant-related financial and program reports required by the grantor?
Grants	Does the Department require a legal and/or technical review and approval of subrecipient agreements to confirm whether the agreements contain the necessary terms and conditions (e.g. proper indemnification, insurance, return of funds stipulations, and requirements that subrecipients comply with the primary grant requirements and City's standards)?
Debt Financing	Are the responsibilities separated, so that no individual may perform more than one of these functions, for: (1) issuing debt, (2) recording debt-related transactions, and (3) reviewing and reconciling debt-related general ledger accounts?
Investments	Does an individual, not involved in the investment purchase/sale, conduct a review and reconciliation to the custodian bank report on securities?
Capital Assets and Inventory	At least once every two years, does the Department conduct a complete physical count of its capital assets to verify the completeness and accuracy of the capital asset and inventory records?
Capital Assets and Inventory	Does the Department complete physical counts of inventory on a cyclical basis using a blind or double blind counting method?
Information Technology	Does Department management review IT/software system access rights granted to employees, to verify that the employee's access is still appropriate?
Information Technology	Is a network security review conducted at least annually by system security personnel, and are the results reported to management and are actions taken to resolve any security weaknesses?
Financial Reporting	Does the Department require manual journal entries to be reviewed, approved, and supported by descriptions and documentation?

The analysis concentrated on key controls to determine which were uniformly implemented across departments and which were frequently absent. The table below provides details on each key control, including the number of departments for which the control was relevant, how many of those departments had the control established, and the percentage representation of these figures.

Figure 41

Functional Area	Question	Number of Departments this Control is Applicable to	Number of Departments with this Control	Percent of Departments with this Control
Grants	Does the Department have assigned personnel who are responsible for preparing and filing grant-related financial and program reports required by the grantor?	7	7	100%
Payroll	Are payroll and personnel functions adequately separated to ensure that no one individual controls all key aspects of a payroll transaction (hiring, approval of hours worked, distribution of warrants and direct deposit notices, and termination)?	10	9	90%
Cash	Are bank account reconciliations prepared and approved by different people (e.g. the same person cannot prepare and approve the reconciliation)?	8	7	88%
Expenditures	Have the responsibilities been separated, so that no individual may perform more than one of these functions, for: (1) procuring goods and services, (2) approving 'Authority for Expenditure' documents, (3) receiving goods and services, (4) reviewing/approving invoices, (5) recording payments, and 6) reviewing/approving payments?	10	8	80%
Expenditures	Does the Department require travelers to: (1) submit reimbursement requests for review and approval using Form Gen. 16, Personal Expense Statement (PES), (2) note any exceptions to the City Travel Policy, and (3) substantiate the expenses with receipts?	10	8	80%
Procurement and Contract Compliance	Prior to executing contracts, contract amendments, or change orders, does the Department require review and approval by individuals who are proficient in the technical area of the goods or services to be procured (e.g. to assess/confirm best value), City procurement rules, and applicable contract/legal terms and conditions?	10	8	80%

Functional Area	Question	Number of Departments this Control is Applicable to	Number of Departments with this Control	Percent of Departments with this Control
Information Technology	Does Department management review IT/software system access rights granted to employees, to verify that the employee's access is still appropriate?	10	8	80%
Debt Financing	Are the responsibilities separated, so that no individual may perform more than one of these functions, for: (1) issuing debt, (2) recording debt-related transactions, and (3) reviewing and reconciling debt-related general ledger accounts?	4	3	75%
Capital Assets and Inventory	At least once every two years, does the Department conduct a complete physical count of its capital assets to verify the completeness and accuracy of the capital asset and inventory records?	10	7	70%
Cash	Are daily cash receipts reconciled and approved by a supervisor daily, with variances investigated prior to approval?	10	6	60%
Accounts Receivables	Does the Department prepare, and conduct a review on, a report of uncollectible intergovernmental receivables at least twice per year?	5	3	60%
Procurement and Contract Compliance	Does the Department solicit competitive bids (e.g. Request for Proposals - RFP, Request for Quote - RFQ, etc.) from vendors based on established monetary thresholds?	10	6	60%
Investments	Does an individual, not involved in the investment purchase/sale, conduct a review and reconciliation to the custodian bank report on securities?	5	3	60%
Information Technology	Is a network security review conducted at least annually by system security personnel, and are the results reported to management and are actions taken to resolve any security weaknesses?	10	6	60%
Financial Reporting	Does the Department require manual journal entries to be reviewed, approved, and supported by descriptions and documentation?	10	6	60%

Functional Area	Question	Number of Departments this Control is Applicable to	Number of Departments with this Control	Percent of Departments with this Control
Capital Assets and Inventory	Does the Department complete physical counts of inventory on a cyclical basis using a blind or double-blind counting method?	9	5	56%
Revenue	Are the responsibilities for (1) receiving payments, (2) updating individual accounts, and (3) performing collections on delinquent accounts separated to ensure that no individual may perform more than one of the listed functions?	10	4	40%
Expenditures	Are the functions of vendor selection and maintenance assigned to different personnel to ensure that no individual performs more than one of the following functions: (1) vendor selection in the purchasing or procurement process, (2) creation and/or modification of vendor records in the vendor master file, (3) review and approval of creation or modification to vendor records, (4) creation of payment requests, and (5) approval of payment requests?	10	4	40%
Grants	Does the Department require a legal and/or technical review and approval of subrecipient agreements to confirm whether the agreements contain the necessary terms and conditions (e.g. proper indemnification, insurance, return of funds stipulations, and requirements that subrecipients comply with the primary grant requirements and City's standards)?	6	2	33%

The percentage of key controls that were actively in place within each department is shown below. Controls deemed as not applicable to a particular department were excluded from the analysis. A lower percentage on this graph suggests that a department has fewer of the identified key controls established within its operational framework.

Figure 42

Percent of Applicable Key Controls by Department

Department	Percent
Water & Power	94%
LAFPP	93%
Fire	88%
Airports	83%
Harbor	79%
LACERS	67%
Police	59%
Rec & Parks	44%
PW - Sanitation	29%
GSD	29%

Legend: Group 1, Group 2