DISTRICT OF COLUMBIA
OFFICE OF THE INSPECTOR GENERAL
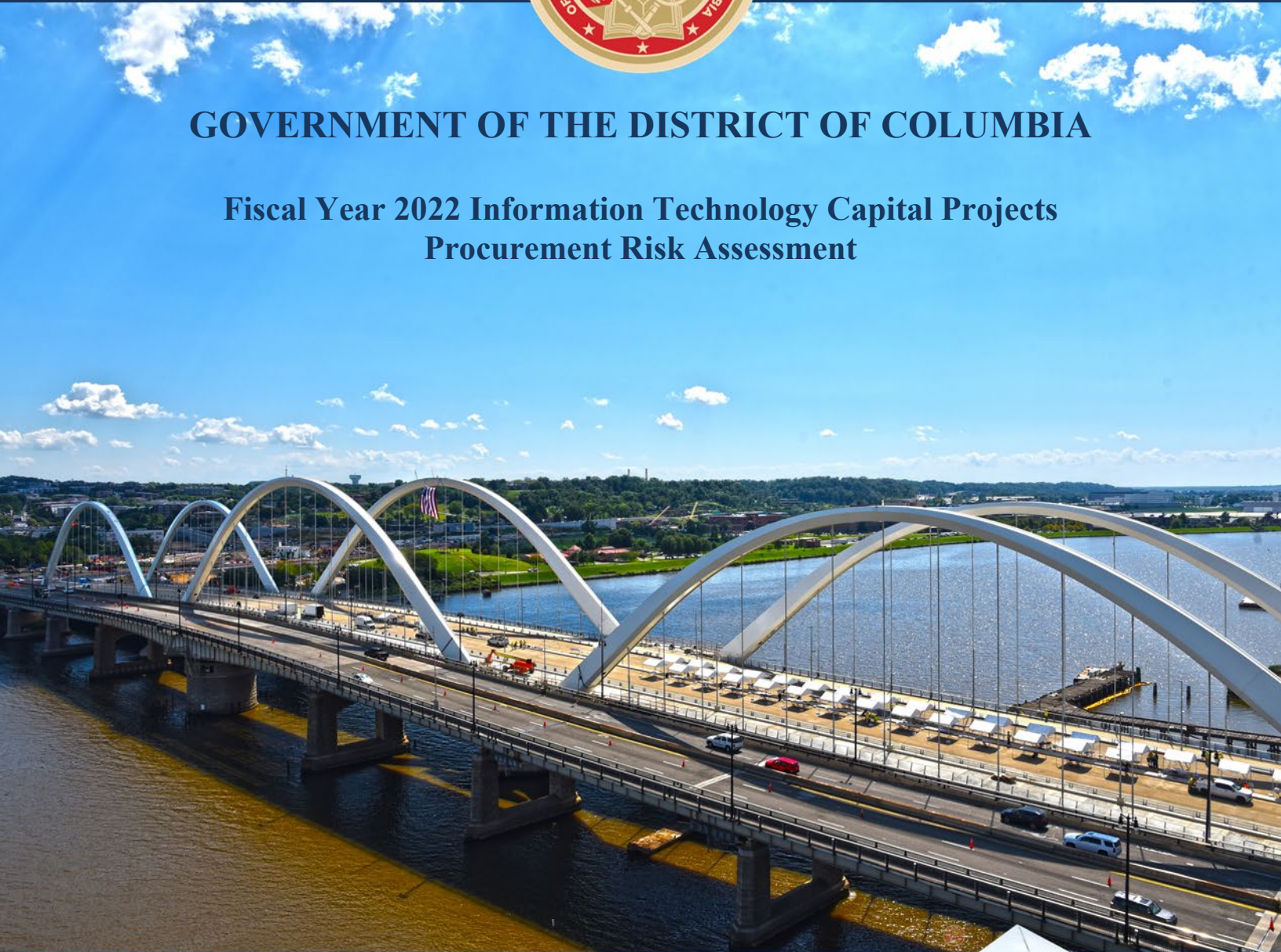
OIG Project No. 21-1-29MA(a)　　　　　　　　　　**June 2022**

GOVERNMENT OF THE DISTRICT OF COLUMBIA

Fiscal Year 2022 Information Technology Capital Projects Procurement Risk Assessment

Mission

Our mission is to independently audit, inspect, and investigate matters pertaining to the District of Columbia government in order to:

- prevent and detect corruption, mismanagement, waste, fraud, and abuse;

- promote economy, efficiency, effectiveness, and accountability;

- inform stakeholders about issues relating to District programs and operations; and

- recommend and track the implementation of corrective actions.

Vision

Our vision is to be a world-class Office of the Inspector General that is customer-focused and sets the standard for oversight excellence!

Core Values

Excellence * Integrity * Respect * Creativity * Ownership * Transparency * Empowerment * Courage * Passion * Leadership

GOVERNMENT OF THE DISTRICT OF COLUMBIA
Office of the Inspector General

★ ★ ★

OIG

Inspector General

June 23, 2022

The Honorable Muriel Bowser
Mayor of the District of Columbia Mayor's
 Correspondence Unit
John A. Wilson Building
1350 Pennsylvania Avenue, N.W., Suite 316
Washington, D.C. 20004

The Honorable Phil Mendelson
Chairman
Council of the District of Columbia
John A. Wilson Building
1350 Pennsylvania Avenue, N.W., Suite 504
Washington, D.C. 20004

Dear Mayor Bowser and Chairman Mendelson:

Enclosed is the Office of the Inspector General's (OIG) final report entitled *Government of the District of Columbia Fiscal Year 2022 Information Technology Capital Projects Procurement Risk Assessment* (OIG Project No. 21-1-29MA(a)). The OIG contracted with KPMG, LLP (KPMG) to perform a comprehensive risk assessment of the District of Columbia's procurement activities as required by D.C. Code § 1-301.115a (a)(3)(E).[1] The objectives of this risk assessment were to identify (1) the root causes of the rise in costs of capital IT procurement contracts; (2) the reason(s) agencies leave OCTO out of the capital IT acquisition process; (3) whether capital IT projects were adequately managed by respective agencies; and (4) whether the original capital IT procurement was appropriate or inflated.

KPMG identified the following three high-risk areas related to the District's procurement of large-scale IT capital projects.

- Inconsistent IT procurement policies and procedures across District agencies increase the risk for noncompliance and operational inefficiencies.

- Lack of centralized, expert oversight of IT capital procurements increases the risk that the District is not properly planning and spending IT funding.

---

[1] In order to meet this statutory mandate, the OIG conducts a risk assessment of the District's procurement system every 3 years. Using the procurement risk assessment results, the OIG then conducts follow-on engagements, which result in recommendations to District agencies that are designed to help mitigate the identified procurement risk area. Conducting the procurement risk assessment on a triennial basis affords District agencies adequate time to implement OIG recommendations prior to reevaluating the District's procurement system risks.

Mayor Bowser and Chairman Mendelson
FY 2022 Information Technology Capital Projects
  Procurement Risk Assessment
OIG Final Report No. 21-1-29MA(a)
June 23, 2022
Page 2 of 3

- The rise in project spending and significant subsequent procurement actions and award modifications are indicative of risks as to whether the initial budget, procurement process, and project management were adequate.

KPMG presented the assessment results during an exit meeting with the Chief Technology Officer (CTO) on February 24, 2022, and the Chief Procurement Officer (CPO) on February 28, 2022. KPMG provided the presentation with the assessment results to the CTO and CPO subsequent to the meetings. KPMG received no further evidence from the CTO and CPO to contradict the validity of the assessment results.

The OIG will conduct further engagements based on the risk areas KPMG identified. If you have any questions about this report, please contact me or Fekede Gindaba, Assistant Inspector General for Audits, at (202) 727-2540.

Sincerely,

Daniel W. Lucas
Inspector General

DWL/kh

Enclosure

cc: See Distribution List

Mayor Bowser and Chairman Mendelson
FY 2022 Information Technology Capital Projects
  Procurement Risk Assessment
OIG Final Report No. 21-1-29MA(a)
June 23, 2022
Page 3 of 3

DISTRIBUTION (via email):

Mr. Kevin Donahue, City Administrator for the District of Columbia, Office of the City
    Administrator
Mr. Barry Kreiswirth, General Counsel, Office of the City Administrator, District of Columbia
Mr. Eugene Adams, Director, Mayor's Office of Legal Counsel
Ms. Lindsey Parker, Assistant City Administrator, Office of the City Administrator
Mr. John Falcicchio, Deputy Mayor for Planning and Economic Development and Chief of Staff,
    Executive Office of the Mayor
Mr. George Schutter, Chief Procurement Officer, Office of the Chief Procurement Officer
The Honorable Kenyan R McDuffie, Chair Pro Tempore, Council of the District of Columbia
The Honorable Anita Bonds, At-Large Councilmember, Council of the District of Columbia
The Honorable Christina Henderson, At-Large Councilmember, Council of the District of
    Columbia
The Honorable Elissa Silverman, At-Large Councilmember, Council of the District of Columbia
The Honorable Robert C. White, Jr., At-Large Councilmember, Council of the District of
    Columbia
The Honorable Brianne K. Nadeau, Ward 1 Councilmember, Council of the District of Columbia
The Honorable Brooke Pinto, Ward 2 Councilmember, Council of the District of Columbia
The Honorable Mary M. Cheh, Ward 3 Councilmember, Council of the District of Columbia
The Honorable Janeese Lewis George, Ward 4 Councilmember, Council of the District of
    Columbia
The Honorable Charles Allen, Ward 6 Councilmember, Council of the District of Columbia
The Honorable Vincent C. Gray, Ward 7 Councilmember, Council of the District of Columbia
The Honorable Trayon White, Sr., Ward 8 Councilmember, Council of the District of Columbia
Ms. LaToya Foster, Director of Communications, Office of Communications, Executive Office
    of the Mayor
Ms. Jennifer Reed, Director, Office of Budget and Performance Management, Office of the City
    Administrator
Ms. Nyasha Smith, Secretary to the Council
The Honorable Karl Racine, Attorney General for the District of Columbia
Dr. Fitzroy Lee, Acting Chief Financial Officer, Office of the Chief Financial Officer
Mr. Timothy Barry, Executive Director, Office of Integrity and Oversight, Office of the Chief
    Financial Officer
The Honorable Kathy Patterson, D.C. Auditor, Office of the D.C. Auditor
Mr. Jed Ross, Director and Chief Risk Officer, Office of Risk Management
Mr. Geoffrey S. Plante, Partner Advisory, KPMG LLP

KPMG

District of Columbia

Office of the Inspector General

2022 Information Technology Capital Projects Procurement Risk Assessment

OIG Project No. 21-1-29MA(a)

kpmg.com

Contents

Background

The District of Columbia Code (D.C. Code) § 1-301.115a (a)(3)(E) requires that the Office of Inspector General (OIG) annually conduct an operational audit of procurement activities of the District of Columbia (the District). The OIG engaged KPMG LLP (KPMG) to assist in a qualitative risk assessment of the District's procurement processes to identify high-risk areas that will be subject to future in depth reviews by the OIG. The assessment provides a review of the District's procurement system, and identifies high-risk systemic issues, practices, and incongruent rules and regulations, and the status of high-risk areas and recommendations included in the Fiscal Year 2017 Procurement Assessment.

As part of the comprehensive assessment, KPMG was engaged to specifically address risks involved with the procurement of the District's large-scale information technology (IT) capital projects. This report provides our observations, risks, and recommendations pertaining to such procurements.

Project objectives

The objectives of our risk assessment regarding procurement of the District's large-scale IT capital projects were to determine:

— What are the root causes of the rise in costs of capital IT procurement contracts?

— Why do agencies leave OCTO out of the capital IT projects?

— What implications do Certified Business Enterprises/Small Business Enterprises (CBE/SBE) requirements have on project costs?

— Were capital IT projects adequately managed by respective agencies?

— Was the original capital IT procurement appropriate or inflated?

— What can be done to provide better oversight of the capital IT projects?

Summary of risk assessment procedures

We reviewed organization charts, procurement policies, management and audit reports, and any other relevant data, and compared policies to industry leading practices. On August 30, 2021, the OIG emailed an engagement letter to District agency heads to notify them of the upcoming procurement risk assessment and to ask them to identify a point of contact in each agency for the project. On September 15, 2021, we held a District-wide entrance conference for all District agency heads. The entrance conference was recorded. The project scope, workplan and deadlines were presented, and agency heads were asked again to designate a point of contact within each agency. We received agency points of contact on September 21, 2021, and the recording of the entrance conference was subsequently emailed to agency heads and their designated points of contact.

We sent a District-wide procurement survey to the designated points of contacts and received an 84 percent response rate. Please refer to Appendix A for the calculation of the response rate. We conducted site visits with 24 agencies, focusing on the agencies that did not respond to the survey, and those agencies for which we needed further clarification on the survey responses. Please refer to Appendix B, Table 16 for the 24 agencies for which site visits were conducted.

We presented our results during an exit conference with the Chief Technology Officer (CTO) on February 24, 2022, and the Chief Procurement Officer (CPO) on February 28, 2022. We provided the presentation with our results to the CTO and CPO subsequent to the meetings. We received no further evidence from the CTO or CPO to contradict the validity of the risks we identified in our procedures.

Procurement governance

The District of Columbia consists of 109 agencies that generally are subject to the following policies:

Policy	Version
Procurement Practices Reform Act (PPRA)	2010
Office of Chief Procurement (OCP) Policies and Procedures	2018
Individual Agency Policies and Procedures	Various

According to the fiscal year (FY) 2022 Budget Book, the District had 33 ongoing capital IT projects for 19 agencies that were subject to this assessment. For the purposes of this report, we grouped those 19 agencies into 2 categories: Core District and Independent. The grouping was based on the following:

— Core District Agencies are those required to follow the PPRA, are under the governance of the Chief Procurement Officer (CPO), and are therefore required to follow Office of Contracting and Procurement (OCP) policies and procedures.

— Independent Agencies are those that are required to follow the PPRA and their own policies and procedures but are not under the governance of OCP.

Below is the breakdown of the agencies subject to this IT assessment and the amount of the estimated full-funding cost of the IT projects per the District's FY 2022 Budget Book. None of the IT capital projects in the FY 2022 Budget Book[1] were administered by Exempt Agencies.

Governance arrangement	Referred to in this report as	Number of agencies	Estimated full-funding cost
Agencies following PPRA and subject to OCP policies and governance	Core District Agencies	15	$534,000,000
Agencies following PPRA but independent from OCP governance	Independent Agencies	4	$291,259,000

Results in brief

Risk observation 1: Inconsistent IT procurement policies and procedures across District agencies increase the risk for noncompliance and operational inefficiencies – IT procurement policies and procedures are not consistent across District agencies and some procedures are not followed as required.

---

[1] The District FY22 budget book, FY22-FY27 Capital Improvement Plan.

Currently, 78 out of 109 District agencies are Core District Agencies and fall under the CPO's authority and are therefore required to follow OCP's policies and procedures. The remaining 31 agencies (15 Independent and 16 Exempt with full, limited, and exempt PPRA applicability)[2] are required to follow their own policies and procedures. Inconsistent procurement policies and procedures may increase compliance risk and operational inefficiencies and may be the reason why some policies and procedures are not followed as required. Specifically, we noted the following:

— The Office of Chief Technology Officer (OCTO) Establishment Act (OCTO Act), effective March 26, 1999 (D.C. Law 12-175; D.C. Official Code § 1-1401 *et seq*. (2001) gives OCTO broad authority to regulate the acquisition, use, and management of information technology and telecommunications systems throughout District government. OCTO is authorized by the OCTO Act to review all IT procurements and recommend approval or disapproval to the Chief Procurement Officer; however, this policy is not consistently replicated in the policies and procedures of OCP and the independent agencies, nor is it consistently followed.

— OCP's procurement manual requires approval for all requisitions for IT goods and services exceeding $25,000 from OCTO and requires agencies to prepare a procurement information package (PIF) to be submitted for approval to OCTO.[3] However, the manual does not provide guidance on what should be included in the PIF nor does it have a requirement for OCTO to review the solicitations, awards, or subsequent modifications to the awards.

— OCP's procurement manual requires market research to be conducted to determine a price range for the solicitation; however, there are no policies and procedures for conducting the market research, and documentation of the market research is not consistently retained in the procurement files.[4]

— The PPRA does not have specific requirements for IT procurements; however, the PPRA does require District Council approval for multi-year contracts and contracts in excess of $1 million.

— The Office of the Chief Financial Officer (OCFO) procurement policy includes special IT requirements in that all IT procurements must comply with requirements set forth by OCTO and that all IT requisitions must be approved by OCTO.[5] However, there is no requirement for OCTO to review the solicitations, awards, or subsequent modifications to the awards. IT requisitions for three of the four projects we reviewed were not approved by OCTO as required.

We recommend the District establish and enforce consistent policies and procedures for procuring and managing IT capital projects across the Core District and Independent Agencies.

Risk observation 2: Lack of centralized, expert oversight of IT capital procurements increases the risk that the District is not properly planning and spending IT funding – A governance structure does not exist to allow for centralized, expert oversight of IT capital procurements.

Although the OCTO Act gives OCTO broad authority to regulate the acquisition of IT systems and to review IT procurements across the District, the OCTO Act is not consistently followed.

---

[2] D.C. OFFICE OF CONTRACTING AND PROCUREMENT, DISTRICT AGENCY PROCUREMENT AUTHORITY (Mar. 31, 2017).

[3] D.C. OFFICE OF CONTRACTING AND PROCUREMENT, PROCUREMENT PROCEDURES MANUAL, § 1.4.2 (undated).

[4] *Id.* § 1.2.1.

[5] OFFICE OF CHIEF FINANCIAL OFFICER OFFICE OF MANAGEMENT AND ADMINISTRATION, OFFICE OF CONTRACTS POLICY AND PROCEDURES MANUAL, § E.1. (undated).

Within the last 4 years, OCTO established the Information Technology Investment Review Board (IT IRB), which consists of representatives from OCTO and agency chief information officers (CIOs). The IT IRB is meant to centralize the planning and coordination of the District's IT capital projects. The charter for the IT IRB has been established; however, the charter does not dictate that the IT IRB can review the IT procurements or project modifications. Additionally, policies and procedures for how the IT IRB will operate across the District agencies have not been formally established.

The District Council's Committee on Government Operations and Facilities (the Committee) is charged with governance and oversight of the District's large-scale IT capital projects. However, the Committee is legislative in nature and lacks capacity and technical expertise to perform a substantive review and approval of the projects and subsequent project modifications.

For agencies under OCP's authority, OCTO receives notification of IT procurements when agencies enter the commodity codes for the purchase requisition in the Procurement Automated Support System (PASS). However, when the requisitioning takes place, it is not uncommon for agencies to enter incorrect commodity codes. Additionally, OCTO does not receive the purchase requisitions from all independent agencies because not all independent agencies use PASS.

We recommend the District establish a governance structure that facilitates accountability over the planning, procurement, and project management of the IT capital projects across the Core District and Independent District agencies, with one centralized agency with IT technical expertise.

Risk observation 3: The rise in project spending and significant subsequent procurement actions and award modifications are indicative of risks as to whether the initial budget, procurement process, and project management were adequate – IT projects have large spending swings and variances between the original and final budget and have a significant number of procurement actions throughout the lifecycle of the project. Specifically:

— Of the 33 ongoing IT capital projects in the District's FY22 Budget Book, 13 had initial budgets greater than $10 million, and 11 of those had 20% or larger budget increases throughout the lifecycle of the project.

— We selected four large-scale ongoing IT capital project procurement files for further review and analysis. We noted that the 4 project files had a total of 50 budget modifications, resulting in a net increase of $21,942,166 to the original awarded price. Three of those projects were administered by OCFO and one was administered by OCTO.

— One project's original budget estimate was between $14 million and $153 million, which the file indicated was based on market research; however, the file did not contain any documentation of how the market research was conducted or why there was such a large range between estimates.

We recommend the OIG expand procedures to further analyze the nature and underlying causes of the budget fluctuations and award modifications for the IT capital projects.

Scope

As previously stated, the scope of our assessment began with all 33 IT capital projects identified in the FY 2022 District Budget Book, as reflected in Appendix B to this report. From that population, we considered the following factors:

— **The project's threshold:** This factor considers the project's scale, link to other IT projects, and a value threshold of $10 million or more.

— **Significant appropriation changes:** Any increase or decrease by 20 percent in the current estimated budget compared to the original appropriated budget authority.

Based upon those factors, we selected four projects for further analysis as illustrated in Table 1 below:

Table 1: Selected IT Capital Projects[6]

IT Project	Implementing agency/Type of agency	Project No	Status	First appropriation FY	Estimated full-funding cost	Original 6-Year budget authority	Change from original %
CSP08C-Integrated Tax System Modernization	OCFO (Independent)	CSP08C	Ongoing Maintenance Contracts	2007	$81,501,897	$10,000,000	715%
HT0-MES23-DCAS RELEASE 3	OCFO (Independent)	MES23	Ongoing Subprojects	2017	$197,952,000	$62,175,000	218%
AT0-IFSMP-MP-DISTRICT INTEGRATED FINANCIAL SYSTEM (DIFS)	OCFO (Independent)	IFSMP	Ongoing Subprojects	2020	$163,000,000	$229,899,000	-29%
TO0-ESI00-MP – ENTERPRISE CYBER SECURITY INITIATIVES	OCTO (Core District)	ESI00	Ongoing Subprojects	2019	$8,000,000	$500,000	1600%

In addition, our assessment included a review of pertinent rules, regulations, and publications as reflected in the following table:

Table 2: Key Rules, Regulations, and Publications

Governance	Version/Effective date	Relevant excerpts
Procurement Practices Reform Act	2010	Prior to the award of a multi-year contract or a contract in excess of $1 million during a 12-month period, the Mayor or executive independent agency or instrumentality shall submit the proposed contract to the Council for review and approval.
Title 27 District Code of Municipal Regulations (DCMR)	Revised December, 2011	27-1205 A determination and findings (D & F) shall be used for an individual or class contract action and shall be retained in the contract file.
District of Columbia Home Rule Act (SEC. 424b. [D.C. Official Code 1-204.26])	Updated 07/16/2018	The CFO shall carry out procurement of goods and services for the OCFO through a procurement office or division which shall operate independently of, and shall not be governed by, the OCP established under the District of Columbia Procurement Practices Act of 1986 or any successor office.

---

[6] The District FY22 budget book, FY22-FY27 Capital Improvement Plan.

Governance	Version/Effective date	Relevant excerpts
OCFO Office of Contracts Policy and Procedures Manual – Special Approval Requirements – Information Technology	Version/effective date was not indicated on the policy	The Designated Approving Official is responsible for obtaining Chief Information Officer (CIO) and OCTO approval for information technology procurements. All approvals must be obtained prior to submitting the requisition to the CPA for processing. (Note that the CPA acronym was not defined in the policy.)
OCP Procurement Procedures Manual	Version/effective date was not indicated on the manual	Requisitions for Information Technology (IT) goods and services greater than $25,000 must be routed to OCTO for approval, the program manager must prepare a procurement information package (PIF) for review by the OCTO.
The Office of Chief Technology Officer (OCTO) Establishment Act, effective March 26, 1999 (D.C. Law 12-175; D.C. Official Code § 1-1401 et seq. (2001) (OCTO Act).	2001	OCTO is authorized to regulate the acquisition, use, and management of information technology and telecommunications systems throughout the District government. OCTO is authorized by the OCTO Act to review all IT procurements and recommend approval or disapproval to the Chief Procurement Officer
OCTO IT Procurement and IT Project Policy, § 4.2.[7]	Revised 05/25/2021	All IT projects within the Scope of Authority defined above must be approved by the District of Columbia CTO before money can be spent. The requesting agency is responsible for preparing and presenting to the CTO a request for approval and required documents, and for ensuring that related requisitions are submitted per the approval requirement.
Attachment G – Investment Review Board Charter	FY 2023 – 2028 Capital Improvement Plan	Establishes the Information Technology Investment Review Board (IT IRB).
NASPO State and Local Government Procurement: A Practical Guide	Third Edition, 2019	Centralize the IT procurement management process under one umbrella to increase and leverage the state's buying power; save the state time and money; and ensure clarity in roles, responsibilities, and best practices. Use centralization of IT procurement to increase awareness and

---

[7] OFFICE OF CHIEF TECHNOLOGY OFFICER, IT PROCUREMENT AND IT PROJECT POLICY (revised May 25, 2021), IT Procurement and IT Project Policy | octo (dc.gov).

Governance	Version/Effective date	Relevant excerpts
		visibility and to maintain and strengthen subject matter expertise in the state's enterprise architecture.

Consistent with the overarching objectives of this risk assessment, we also considered the *United States Government Accountability (GAO) Office Standards for Internal Control in the Federal Government* (Green Book).[8] The Green Book defines the standards through components and principles and explains why they are integral to an entity's internal control system. The Green Book clarifies what processes management considers part of internal control.

Data analytics, district-wide risk assessment survey, and site visits

Data analytics to support this assessment were conducted on spend data from March 2020 – September 2021.

A District-wide survey was conducted and sent to 94 agencies. The survey included questions specifically targeted to Capital IT procurements and projects. The purpose of our questions was to validate which agencies have ongoing Capital IT projects, gather an understanding of whether unique policies and procedures are in place for the procurement of these projects, develop some context into OCTO's role with these projects, and offer the respondents an opportunity to share their opinions regarding how these projects are managed and whether the respondents believe the process currently in place offers the best value for the District.

We determined that 13 of the surveys submitted were to agencies that did not have any expenditures subject to procurement. Our team reached out to the District agencies numerous times in an effort to encourage full participation and received 68 of the 81 survey submissions, which was an 84% response rate. (See Table 13 in Appendix D for details). Survey responses were structured using a 4-point Likert scale methodology, where survey scores were aggregated and compared against the average of the entire survey result in determining the risk levels of each agency's procurement practices.

Out of the 68 surveys completed, 24 agencies indicated they had ongoing IT capital projects, five of which were not included in the FY22 Budget Book as an IT capital project. As a result, the aggregated survey responses describing the IT capital procurements are representative of these 24 agencies. We asked the following questions during our District-wide procurement risk assessment survey:

---

[8] U.S. GOV'T ACCOUNTABILITY OFFICE, STANDARDS FOR INTERNAL CONTROL IN THE FEDERAL GOVERNMENT, GAO-14-704G (Sept. 2014), https://www.gao.gov/products/GAO-14-704G (last visited Apr. 6, 2022).

Table 3: Survey questions on IT Capital procurements and projects

#	Questions related to Capital IT projects
1	Does the agency have any ongoing IT projects?
2	Does the agency have policies and procedures in place to track and analyze the justification for project time extensions and/or price modifications to the original vendor award for IT projects?
3	Were the price modifications to the IT projects justified and was the ultimate price paid for the projects appropriate?
4	How much involvement does OCTO have in your agency's Information Technology related projects?
5	Please provide whether you can recommend OCTO have a more significant role in your agency's IT related projects.
6	What alternative resources can you recommend be provided to more effectively manage IT related projects?
7	In your opinion, what are the root causes of the cost overruns for the District's IT procurements? – Selected Choice

Lastly, we conducted site visits with the 24 agencies to obtain additional or clarifying information surrounding the survey responses.

Key risks

Risk overview

The following section presents the details of our observations and key areas of risk identified during this assessment.

Risk definition and analysis – Inconsistent IT procurement policies and procedures across District agencies increase the risk for noncompliance and operational inefficiencies

According to the District's FY 2022 Budget Book, the District allocated approximately $9 billion for capital projects for FY 2022-FY 2027 across its agencies. Of the $9 billion, the District identified 33 ongoing capital IT projects managed by 19 different agencies with total estimated full-funding cost of $826 million. Four of the 19 agencies are independent from OCP's authority, follow their own procurement policies, and are managing projects with a full funding cost totaling $291 million, or 35% of the IT capital projects total estimated full-funding cost.

Currently, 78 out of 109 District agencies fall under the CPO's authority and follow OCP's policies and procedures. Fifteen (15) agencies are independent agencies and are required to follow the PPRA but are independent from OCP's governance and, therefore, follow their own policies and procedures. The remaining 16 agencies are exempt agencies not subject to the CPO's authority or PPRA. Inconsistent procurement policies and procedures may increase compliance risk and operational inefficiencies and may be the reason why some policies and procedures are not followed as required. Specifically, we noted the following:

— The OCTO Act gives OCTO broad authority to regulate the acquisition, use, and management of information technology and telecommunications systems throughout the District government. OCTO is authorized by the OCTO Act to review all IT procurements and recommend approval or disapproval to the Chief Procurement Officer; however, this policy is not consistently replicated in the policies and procedures of OCP and the independent agencies, nor is it consistently followed.

— OCP's procurement manual requires approval for all requisitions for IT goods and services exceeding $25,000 from OCTO and requires agencies to prepare a procurement information package (PIF) to be submitted for approval to OCTO;[9] however, the manual does not provide guidance on what should be included in the PIF and the manual does not have a requirement for OCTO to review the solicitations, awards, or subsequent modification to the awards.

— OCP's procurement manual requires market research to be conducted to determine a price range for the solicitation;[10] however, there are no policies and procedures for conducting the market research, and documentation of the market research is not consistently retained in the procurement files.

— The PPRA does not have specific requirements for IT procurements; however, the PPRA requires District Council approval for multi-year contracts and contracts in excess of $1 million.

— OCFO's procurement policy includes special IT requirements in that all IT procurements must comply with requirements set forth by OCTO and that all IT requisitions must be approved by OCTO. However, there is no requirement for OCTO to review the solicitations, awards, or subsequent modifications to the awards. IT requisitions for three of the four projects we reviewed were not approved by OCTO as required.

While most agencies are mandated to follow the policies, procedures, and directions of OCP, others are governed by multiple models of procurement practices.

---

[9] OCP PROCUREMENT PROCEDURES MANUAL, *supra* note 3.
[10] *Id.* § 1.2.1.

In our survey, when asked, "Does the agency have policies and procedures in place to track and analyze the justification for project time extensions and/or price modifications to the original vendor award for IT projects?" we received the following responses:

— Twenty-three percent **(23%)** of survey respondents indicated, "The agency has **no policies and procedures** in place to track and analyze the justification for project time extensions/price modifications to the original vendor award for IT projects. Of those respondents, 60% were Core District Agencies, and the remaining 40% were Exempt Agencies.

— Eighteen percent **(18%)** responded, "The agency has **informal policies and procedures** in place to track and analyze the justification for project time extensions/price modifications to the original vendor award for IT projects. Of those respondents, 50% were Core District Agencies and 50% were Independent Agencies.

Additionally, many of the agencies we spoke to during our site visits indicated they did not have any formal policies and procedures on how to perform and document market research for their procurements, which is a key component to determine the project budgets and the reasonableness of the vendor submitted bids.

Both OCP's and OCTO's policies and procedures do not clearly document the version and effective date of the policies. During our interviews, some agencies indicated that each OCP procurement officer does things differently, sometimes in direct conflict with the policies, which creates confusion on what is required and results in inefficiencies in the overall procurement process.

Refer to Appendix A for the full description of the risk rating criteria. Risks are given two ratings: 1) the likelihood of occurrence, and 2) the impact on the organization; each based on a five-point scale. The highest risk is 25 points. The risk for noncompliance and operational inefficiencies as a result of inconsistent IT procurement policies and procedures across District agencies was rated a total of 16 (4 x 4 = 16) for the factors indicated below:

Likelihood rating: 4	Impact rating: 4
The event will probably occur in most circumstances The event has a 50–90 percent chance of occurring in any year-long period	The event will have a major impact on financial condition The event could be considered a significant deficiency in internal controls and in economy/efficiencies The event poses a significant risk of fraud The resolution is delegated to District Council and District agency heads

Recommendation/Resolution Level

In accordance with leading industry practices, we recommend the District establish and enforce consistent policies and procedures for procuring and managing IT capital projects across the Core District and Independent Agencies. The resolution is delegated to the District Council and District agency heads.

Leading practices defined by the National Association of State Procurement Officials (NASPO) recommend that chief procurement officers should publish and maintain appropriate manuals for procurement personnel that set forth public, entity-wide procurement goals and objectives and establish day-to-day procurement procedures in simple, concise language.

Policies and procedures are the backbone for achieving consistencies and efficiencies for all procurements, including large-scale IT capital projects. Policies and procedures should address the unique nature of IT procurements, including market research, developing a comprehensive scope of work, and incorporating all of the required terms and conditions and administrative requirements in the solicitation document. Policies and

procedures should be active documents – they are not meant to be put on a shelf and ignored. Training should be developed and required at a regular cadence for those involved in the procurement process.

Risk definition and analysis – Lack of centralized, expert oversight of IT capital procurements increases the risk that the District is not properly planning and spending IT funding.

A governance structure does not exist to allow for centralized, expert oversight of IT capital procurements.

The OCTO Act gives OCTO broad authority to regulate the acquisition, use, and management of information technology and telecommunications systems throughout the District government. OCTO is authorized by the OCTO Act to review all IT procurements and recommend approval or disapproval to the Chief Procurement Officer. Although the OCTO Act gives OCTO broad authority to regulate the acquisition of IT systems and to review IT procurements across the District, the OCTO Act is not consistently followed. During our interviews and site visits, several agencies indicated that they do not consult with OCTO for their capital IT procurements, and some were not aware of the requirement at all.

Within the last 4 years, OCTO established the Information Technology Investment Review Board (IT IRB), which consists of representatives from OCTO and agency chief information officers (CIOs). The IT IRB is meant to centralize the planning and coordination of the District's IT capital projects. The charter for the IT IRB has been established; however, the charter does not dictate that the IT IRB can review the IT procurements or project modifications. Additionally, policies and procedures for how the IT IRB will operate across the District agencies have not been formally established.

For agencies under the CPO's authority, OCTO receives notification of IT procurements when agencies enter the commodity codes for the purchase requisition in the Procurement Automated Support System (PASS). However, at times the requisitioning takes place after the procurement, and it is not uncommon for agencies to enter incorrect commodity codes. Additionally, OCTO does not receive the purchase requisitions from all independent agencies because not all independent agencies use PASS.

The District Council's Committee on Government Operations and Facilities (the Committee) is charged with governance and oversight of the District's large-scale IT capital projects. However, the Committee is legislative in nature and lacks the bandwidth and expertise to perform a substantive review and approval of the projects and subsequent project modifications, and none of the thirteen members have expertise in the information technology field.

Many of the packages submitted to the Committee are deemed approved. The deemed approval process allows contracts and modifications to be approved if no member of the Committee introduces a resolution to approve or disapprove the proposed contract or modification in 10 days, or if a resolution has been introduced and the Committee does not disapprove the contract during the 45-day review following its receipt by the Committee. While this process complies with the laws established by the District, it does not provide for the proper oversight of these complex, large-scale IT capital projects. During our project file review sessions, one agency's contracting officer stated that there has rarely been a case in which the Council disapproved a Council package. This raises a concern as to why this process is in place if the review is not substantive in nature.

Of the 4 IT contract files we reviewed, there were 13 Council packages submitted to the Committee for approval. Nine of those packages were for contract modifications totaling $62,923,208. Of those Council packages, 8 totaling $57,073,208 were deemed approved.

Our District-wide procurement survey asked, "How much involvement does OCTO have in your agency's IT related projects?"

— Fourteen percent (**14%**) responded, "OCTO **does not** have any involvement." Of those respondents, 33% were Core District Agencies and 67% were Exempt Agencies.

— Thirty-six percent **(36%)** responded that "OCTO has **some** involvement but **no ability** to exercise authority throughout any part of the project." Of those respondents, 63% were Core District Agencies and 37% were Independent Agencies.

— Twenty-three percent **(23%)** responded that "OCTO has **full** involvement but **no ability** to exercise authority throughout any part of the project." Of those respondents, 80% were Core District Agencies and 20% were Independent Agencies.

OCTO indicated they do get involved in the District's annual budget planning and can make recommendations on project budgets when notified, but the notification process is flawed. OCP must notify OCTO directly for input, or OCTO can receive notifications through PASS if the IT commodity code is chosen by the agency. OCTO indicated that the commodity codes are not used correctly, and therefore, they know that they do not receive notification of all IT procurements.

According to the District's FY 2022 Budget Book, the full-funding cost of all large-scale capital IT projects in the District is $826 million, which does not include other smaller IT projects, including hardware and software, procured by the other agencies. Proper management of the spend could have a significant impact to the overall spend of the District.

Refer to Appendix A for the full description of the risk rating criteria. Risks are given two ratings: 1) the likelihood of occurrence, and 2) the impact on the organization; each based on a five-point scale. The highest risk is 25 points. The risk rating for noncompliance and operational inefficiencies as a result of the risk that the District is not properly planning and spending IT funding due to lack of centralized, expert oversight of IT capital procurements is 25 based on the following:

Likelihood – 5	Impact – 5
The event is expected to occur in most circumstances The event has more than a 90 percent chance of occurring in any year-long period	The event has a critical impact on financial condition The event is a material weakness in internal controls and economy/efficiency The event has a significant risk of fraud The resolution is delegated to District Council and District agency heads

Recommendation/Resolution Level

We recommend the District establish a governance structure with one centralized agency with IT expertise to facilitate accountability over the planning, procurement, and project management of the IT capital projects across the Core District and Independent District agencies. Leading practices defined by the National Association of State Procurement Officials (NASPO) recommend centralizing the IT procurement management process under one umbrella. District-wide legislative change will be needed to drive substantive action and change.

The District should consider reviewing its guidance around procurement and clearly defining each agency's assigned responsibilities. The RACI (responsible, accountable, consulted, and informed) model is a tool used to define roles and responsibilities of key stakeholders. The sample RACI matrix below shows the roles and responsibilities for the strategic sourcing process delineation between lead agencies at the state and local government level. Per the sample matrix, lead IT procurement agency functions as the responsible and accountable body, while the Council and central procurement takes on the informed and consulted roles.

The purpose of this sample matrix is not to provide a definite solution, rather, it is to help guide the District to develop its own custom model with clearly defined roles and responsibilities around IT capital procurement.

RACI Matrix (Responsible, Accountable, Consulted, Informed)					
Function	**Process**	**Central procurement**	**Council**	**Single "Lead" agency OCTO**	**Supporting agencies**
Strategic Sourcing	Spend Analysis	I	I	R,A	C
	Requirement & Specifications Gathering	I	I	R,A	R
	Supply Market Analysis	I	I	R,A	R
	Sourcing Strategy Development	C	I	R,A	C
	RFP Development and Execution	C	C	R,A	C
	Supplier Evaluation & Selection	C	C	R,A	C

Risk definition and analysis – The rise in project spending and significant subsequent procurement actions and award modifications confirm the risk that proposals received from all vendors during the solicitation process would not have incorporated a response to the additional needs and requirements and the original award to the successful vendor may not have been the best value for the District.

IT projects have large spending swings and variances between the original and final budget and have a significant number of subsequent procurement actions throughout the lifecycle of the project. The spending increases, budget variances, and subsequent procurement actions could be indicative of risks as to whether the initial budget, procurement process, and project management were adequate.

The District's FY 2022 Budget Book revealed marked increases in the value of IT capital projects. Of the 33 ongoing IT capital projects in the District's FY 2022 Budget Book, 13 had initial budgets greater than $10 million, and 11 of those had 20% or larger budget increases throughout the lifecycle of the project. Generally, a 20% or larger budget increase during the lifecycle of a project is an indicator that there could be significant price modifications to the original procurement.

As part of our assessment, we selected four project files for a deeper review, based on their funding size and percentage changes in their budget. Below is a summary of those files:

Table 5: Capital IT projects' review summary

Project	Imple-menting agency	Original budget	FY22 estimated full funding cost	Independent Government Estimate for IT portion	Original bid	Total cost to date	Cost modification	% change from original bid amount
DIFS	OCFO	$229,899,000	$163,000,000	$109,000,000	$90,286,653	$112,448,784	$22,162,131	25%
CSP08	OCFO	$10,000,000	$81,501,897	$14m to $153m	$41,400,000	$62,122,000	$20,722,000	50%
DCAS-R3	OCFO	$62,175,000	$197,952,000	$101m to $121m	$109,900,000	$111,522,638	$1,622,638	1%
ESI00	OCTO	$500,000	$8,000,000	$7,730,000	$8,229,225	$10,119,390	$1,890,165	23%

The selection committee for each of the files included the following:

Project	Selection committee
DIFS	The technical evaluation panel consisted of members from the Office of the Chief Information Officer (OCIO) (COTR), Office of Budget and Planning, OCFO, Office of Finance and Resource Management, Department of Employment Services, and two non-voting members from OCIO.
CSP08	The technical evaluation panel consisted of members from OCFO, including the director of operations, the tax systems group (COTR), the program manager and a special advisor from OCFO that was a non-voting member
DCAS-R3	The technical evaluation committee consists of three members, two with Curam commercial, government and industrial solutions sector experience and one with business process reengineering experience.
ESI00	The technical evaluation committee consists of a contract specialist and a contract officer – the task order award was based on a master contract.

All of the projects appeared to have representation from the business owners, with the exception of project ES100, for which the selection committee included contract personnel. The notes on the evaluation indicated that the project ES100 award was made from a master contract. Two of the four project files we reviewed did not contain any support for the market research that was conducted, even though procurement policies clearly state market research and analysis should be part of the checklist of items that should be included in the contract files. One project's original budget estimate was between $14 million and $153 million. The documentation in the file indicated the estimate was based on market research and an independent government estimate. However, the file did not contain any documentation of the independent government estimate, how the market research was conducted, or why there was such a large range between the low and high estimate.

A summary of the types of project modifications found during our project file reviews is as follows:

Table 6: Project Modifications Summary

Description of modification	DIFS	CSP08	DCAS	ESI00
Administrative – contract language change, contract administrator changes, contract section change, etc.	2	6	7	0
Additions of certain terms, like living wage, e-invoicing and COVID requirements	1	1	6	0
Time Extension	1	0	1	0
Funding Reallocation	0	1	4	0
Scope change	3	6	7	1
Option year exercise	2	1	1	0
Total Number of Modifications	9	15	26	1

Explanations we received for the pattern of extensive scope modifications were that the project requirements were complex, or agency needs changed during the project. This could be an indication that the original procurement document may not have been comprehensive or may not have included all the project requirements. As a result, the proposals received from all vendors during the solicitation process would not have incorporated a response to the additional needs and requirements, and the original award to the successful vendor may not have been the best value for the District.

In addition, during our survey, when asked, "What are the root causes of the cost overruns for the District's IT Procurement?"

— 15% responded that it was lapsing of money from fiscal year to fiscal year, all of which were Independent Agencies.

— 15% responded that it was poor project management issues, of which 50% were Core District Agencies and 50% were Exempt Agencies.

— 15% responded that it was lack of vendor transparency in the original award, of which 50% were Core District Agencies and 50% were Independent Agencies.

— 8% responded that it was inadequate definition of scope between vendor and agency responsibilities during the procurement stage, all of which were Core District Agencies

— 8% responded that it was the District's policy decisions such as CBE/SBE requirement, all of which were Core District Agencies.

The number of other modifications, such as administrative items and additional terms added after the procurement is released, could indicate a risk that there are inefficiencies in the administrative procurement processes. Inadequate and incomplete contract terms and conditions result in an additional administrative burden on both the procuring agency and procurement staff, who must spend additional time fixing the procurement documents as opposed to focusing on other more important responsibilities.

Further evidence that there may be inefficiencies in the procurement process was gathered in our risk assessment survey question, "Were the price modifications to the IT projects justified, and was the ultimate price paid for the project appropriate?" Thirty-nine percent **(39%)** of the survey respondents answered "**No**" to this question. Of those respondents, 67% were Core District Agencies, 22% were Independent Agencies, and 11% were Exempt Agencies.

Others indicated that the business owners do not have a voice in the selection process. In one instance, against the business owner's request, procurement selected the lowest price vendor, which resulted in the purchase of software that was not compatible with what was being used. The business owner notified procurement staff when the purchase order was issued and was forced to use it even though it was not efficient for the purpose of the request.

Refer to Appendix A for the full description of the risk rating criteria. Risks are given two ratings: 1) the likelihood of occurrence, and 2) the impact on the organization; each based on a five-point scale. The highest risk is 25 points. The risk rating that proposals received from all vendors during the solicitation process would not have incorporated a response to the additional needs and requirements, and the original award to the successful vendor may not have been the best value for the District is 25 for the factors indicated below:

Likelihood – 5	Impact – 5
The event is expected to occur in most circumstances The event has more than a 90 percent chance of occurring in any year-long period	The event has a critical impact on financial condition The event is a material weakness in internal controls and economy/efficiency The event has a significant risk of fraud The resolution is delegated to District Council and District agency heads

Recommendation/Resolution Level

We recommend the District utilize personnel with the proper technical expertise to draft the scope of work, project requirements, and budgets for the IT procurements. As a secondary check prior to the release of the solicitations, the District could use an independent, outside party to review the procurement file to validate that the solicitation is clear and concise and that all procedures were followed and documented prior to its release. Another leading practice that has been embraced in the private sector is to offer incentives in the initial solicitations when milestones are met early and/or for vendors that consistently exceed the established service levels. The resolution is delegated to the District Council and District agency heads.

Appendices

Appendix A

**Risk criteria
and definitions**

Risk criteria and definitions

The purpose of this assessment is to help the District of Columbia OIG identify the principal body of procurement risks facing the District. As we conducted this assessment, we sought to focus on potential risk factors critical to the achievement of District agency objectives. Summarizing and analyzing the details gathered during this effort into a prioritized risk profile should help inform the Office's future procurement-related audit activities. As an orientation for this effort, we begin with introducing and outlining the key concepts around risk and the rating criteria and supporting scheme employed for this assessment.

What is risk?

— Risk identifies the potential of an event or action that may adversely affect an organization's ability to achieve its organizational objectives and execute its strategies successfully. This does not mean the condition operationally exists or that the agency is unaware or has not taken actions to mitigate the risk. Understanding risk in the context of a related operational area should help the subject agency address events or actions through risk management activities and hopefully minimize the probability of occurrence and consequences of an adverse event. Additionally, risk can be associated and identified for new opportunities the organization is exploring so that a more informed assessment of the success of the initiative can be considered. Every organization has risk, and there are fundamental risks and uncertainties that are common to all organizations.

How are risks mitigated?

— Risks are mitigated by internal controls–as defined in the *United States Government Accountability Office (GAO) Standards for Internal Control in the Federal Government* (Green Book), comprising 17 principles that include the entire system of (1) establishing the control environment, (2) assessing risk, (3) developing control activities and policies, (4) providing internal and external information and communication, and (5) monitoring and follow-up. The mitigating influence of controls is considered in determining the residual risks. The risk assessment process does not include testing of or a judgment on the effectiveness of internal controls.

How are risks identified and categorized?

— The risk assessment process sought to identify and gather the body of higher-level, portfolio-level procurement risks facing the District. These potential risks include those risks germane to this specific operational process are grouped using the attributes below:

- **Gross risk:** the threat that an event or action may adversely affect an organization's ability to achieve its organizational objectives and execute its strategies successfully or the positive opportunity that may be present. Business risk is a measure of risk before taking into consideration an evaluation of risk control techniques that are employed by management. Gross risk has two components: (1) the likelihood of occurrence or probability; and (2) the impact that the event or action would have on the organization.

- **Potential probability:** the likelihood of a risk occurring. The potential probability considers external and internal risk factors and is ranked from "Almost Certain" to "Rare."

- **Potential impact:** The type and magnitude of impact. The potential impact considers external and internal risk factors, such as finance, controls, fraud, economy and efficiency, and resolution level and is ranked from "Critical" to "Insignificant."

- **Risk Management Techniques (Controls):** the system of policies, methods, and procedures that reportedly, via inquiry, encompass the control environment instituted to manage the organization's activities and risks.

- **Residual Risk:** The risk remaining after considering the mitigating influence of the control environment/risk management techniques.

Table 7: Risk Rating Criteria – Likelihood Measures

Almost certain (5)	— **Event is expected to occur in most circumstances** — **More than a 90 percent chance of occurring in any year-long period**
Likely (4)	— Event will probably occur in most circumstances — 50–90 percent chance of occurring in any year-long period
Moderate (3)	— Event should occur at some time — 20–50 percent chance of occurring in any year-long period
Unlikely (2)	— Event could occur at some time — 5–20 percent chance of occurring in any year-long period
Rare (1)	— May occur but only in exceptional circumstances — Less than a 5 percent chance of occurring in any year-long period

Table 8: Risk Rating Criteria – Impact Measures

Critical (5)	— **Critical impact on financial condition**
	— **Material weakness in internal controls**
	— **Significant risk of fraud exists**
	— **Material weakness noted in economy/efficiency**
	— **Assigned to the board or agency head for resolution**
Major (4)	— Major impact on financial condition
	— Significant deficiency in internal controls
	— Significant risk of fraud exists
	— Significant deficiency noted in economy/efficiency, not reportable conditions
	— Delegated to board/agency head and senior management for resolution
Moderate (3)	— Moderate impact on financial condition
	— Deficiency in internal controls
	— Medium risk of fraud exists
	— Deficiency noted in economy/efficiency
	— Delegated to senior and middle management for resolution
Minor (2)	— Minor impact on financial condition
	— Process improvement opportunity noted in internal controls, not a reportable condition
	— Minimum risk of fraud exists
	— Process improvement opportunity noted in economy/efficiency, not a reportable condition
	— Delegated to middle management for resolution
Insignificant (1)	— Insignificant impact on financial condition
	— No gap in internal controls
	— No risk of fraud
	— No risk of inefficiency
	— Delegated to junior management and staff to resolve

Using the risk areas presented in the body of this report and the likelihood and magnitude assessment criteria outlined above, the table below depicts the risk scale ratings for the individual risk areas discussed earlier in this document.

Table 9: Summary Risk Area Ratings

Risk area	Likelihood	Impact	Total rating
Inconsistent IT procurement policies and procedures across District agencies increase the risk for noncompliance and operational inefficiencies	4	4	16
Lack of centralized, expert oversight over IT capital procurements increases the risk that the District is not properly planning and spending IT funding.	5	5	25
The rise in project spending and significant subsequent procurement actions and award modifications are indicative of risks as to whether the initial budget, procurement process, and project management were adequate.	5	5	25

Appendix B

Project approach

Project approach

The three phases of this assessment are summarized as follows:

Phase one: Project initiation and data gathering – Phase one consisted of a program initiation, documentation review, analysis of the District's capital IT spending, and an agency self-assessment survey.

Phase two: Fieldwork – Phase two consisted of agency on-site visits, including project document review, assessment of process level risks, identification of preliminary risk observations, and refinement and validation of risk observations.

Phase three: Reporting – Phase three entailed generating focus areas from the observations noted in the course of Phase two fieldwork.

Presented below in Figure 2 are the key steps of the project:

Figure 2: Key Project Steps

OIG

Data analysis	Agency survey	Agency visits	Reporting
— Develop data request memorandum (potential areas of focus, etc.) — Review supporting documentation — Request necessary transactional data — Aggregate the data and normalize data provided — Perform target analyses — Verify District agency non-personnel spend — Use results to help	— Refine assessment framework — Develop survey content — Establish and test survey platform — Agency webcast — Distribute survey — Compile survey results/use results to help refine agency site visit criteria	— Identify agencies for site visits using OIG approved criteria — Coordinate site visits — Document potential areas of risk noted during site visit activities	— Develop risk ranking criteria to help better define potential high-risk areas — Develop ancillary improvement recommendations — Assemble draft report — Revise draft report after stakeholder reviews

Capital IT project selection

We obtained the District of Columbia's Capital Plans (CFO Budget Book) for fiscal year (FY) 2022 and conducted a preliminary review of the D.C. IT capital projects using the data from FY 2022 to FY 2027 Capital Improvements Plan. We identified 33 ongoing, large-scale capital IT projects, of which 13 had a funding of $10 million and more. Out of those 13 projects, 11 showed more than a 20% increase in their estimated full-funding cost when compared to their original budget authority, as reflected in the table below:

Table 10: Capital IT Project Funding Changes:

	IT Project	Project No	Status	First appropriation FY	Estimated full-funding cost	Original 6-Year budget authority	Change from original %
1	UC0-UC302-MDC REPLACEMENT FOR MPD & FEMS	UC302	In multiple phases	2017	$21,272,000	$1,500,000	1318%
2	CSP08C-Integrated Tax System Modernization	CSP08C	In multiple phases	2007	$81,501,897	$10,000,000	715%
3	PO0-1PO01-ARIBA REFRESH	1PO01	In multiple phases	2019	$23,034,000	$3,881,000	494%
4	KV0-MVS16-DESTINY REPLACEMENT PROJECT	MVS16	In multiple phases	2016	$30,350,000	$9,000,000	237%
5	HT0-MES23-DCAS RELEASE 3	MES23	Ongoing Subprojects	2017	$197,952,000	$62,175,000	218%
6	GD0-GD001-DATA INFRASTRUCTURE	GD001	Ongoing Subprojects	2016	$13,562,000	$6,158,000	120%
7	TO0-N8005-DCPS IT INFRASTRUCTURE UPGRADE	N8005	In multiple phases	2014	$23,821,000	$13,000,000	83%

IT Project	Project No	Status	First appropriation FY	Estimated full-funding cost	Original 6-Year budget authority	Change from original %
8	HT0-MPM03-MMIS UPGRADED SYSTEM	MPM03	In multiple phases	2013	$94,191,000	$61,751,000	53%
9	CR0-ISM07-IT SYSTEMS MODERNIZATION – DCRA	ISM07	Ongoing Subprojects	2007	$25,097,000	$18,224,000	38%
10	TO0-DR018-DISASTER RECOVERY & COOP IMPLEMENTATION	DR018	In multiple phases	2018	$21,590,000	$16,766,000	29%
11	CF0-UIM02-UI MODERNIZATION PROJECT-FEDERAL	UIM02	Ongoing Subprojects	2012	$56,792,000	$45,844,000	24%
12	RL0-RL31A-CCWIS IMPLEMENTATION	RL31A	Ongoing Subprojects		$12,830,000	—	0%
13	AT0-IFSMP-MP-DISTRICT INTEGRATED FINANCIAL SYSTEM (DIFS)	IFSMP	Ongoing Subprojects	2020	$163,000,000	$229,899,000	-29%

In order to meet the Procurement Risk Assessment objectives, KPMG established an approach to identify a list of IT projects for further assessment. The following factors were taken into account when selecting IT projects:

— **The project's threshold:** This factor considers the project's scale, link to other IT projects, and a value threshold of $10 million or more.

— **Significant appropriation changes:** Any increase or decrease by 20 percent in the current estimated budget compared to the original appropriated budget authority.

Our team then selected the following projects for further analysis:

Table 11: IT Capital Projects Analyzed

IT Project	Implementing agency/Type of agency	Project No	Status	First appropriation FY	Estimated full-funding cost	Original 6-Year budget authority	Change from original %
CSP08C-Integrated Tax System Modernization	OCFO (Independent)	CSP08C	Ongoing Maintenance Contracts	2007	$81,501,897	$10,000,000	715%
HT0-MES23-DCAS RELEASE 3	OCFO (Independent)	MES23	Ongoing Subprojects	2017	$197,952,000	$62,175,000	218%
AT0-IFSMP-MP-DISTRICT INTEGRATED FINANCIAL SYSTEM (DIFS)	OCFO (Independent)	IFSMP	Ongoing Subprojects	2020	$163,000,000	$229,899,000	-29%
TO0-ESI00-MP – ENTERPRISE CYBER SECURITY INITIATIVES	OCTO (Core District)	ESI00	Ongoing Subprojects	2019	$8,000,000	$500,000	1600%

Reporting

We organized this report in the following manner:

— **Executive summary:** Summarizes the key observations from the work conducted and the risk assessment execution procedures performed.

— **Risk areas:** Each risk area discussion begins with a purpose/introduction section that provides some background of the topic. We then discuss each risk in the context of the risk evaluation criteria and the analysis performed in the course of fieldwork.

— **Appendices:** We included multiple appendices at the end of this report offering more details supporting our analysis and areas for additional OIG consideration.

Constraints and limitations

The following constraints and limitations should be considered in the interpretation of the observations offered in this assessment report:

— **Supporting evidence:** Supporting evidence obtained during the conduct of this project is largely observation and inquiry. No substantive test work was performed in the course of fieldwork.

— **Nature of engagement:** This engagement did not constitute a financial audit, performance audit, or attestation engagement as defined by Government Auditing Standards. Rather, the report is intended as an assessment of existing practices and select policies and procedures to help identify potential risk areas for the OIG to consider in its future procurement audit planning.

Appendix C

**IT Capital
Projects
Universe**

IT Capital Projects Universe

Table 12: Population of Large-Scale Capital IT Projects

	Agency (Type)	Implementing agency	Project No	Status	Estimated full-funding cost	First appropriation FY	Original 6-Year budget authority
1	OFFICE OF THE CHIEF FINANCIAL OFFICER (AT0) (Independent)	OFFICE OF THE CHIEF FINANCIAL OFFICER (AT0)	CIM01	In multiple phases	$1,811,000	2019	$661,000
2	OFFICE OF THE CHIEF FINANCIAL OFFICER (AT0) (Independent)	OFFICE OF THE CHIEF FINANCIAL OFFICER (AT0)	CSP10	Ongoing Subprojects	$4,942,000	2018	$3,500,000
3	OFFICE OF ZONING (BJ0) (Core District)	OFFICE OF ZONING (BJ0)	JM102	Ongoing Subprojects	$1,378,000	2007	$860,000
4	OFFICE OF THE CHIEF FINANCIAL OFFICER (AT0) (Independent)	OFFICE OF THE CHIEF FINANCIAL OFFICER (AT0)	IFSMP	Ongoing Subprojects	$163,000,000	2020	$229,899,000
5	DC PUBLIC LIBRARY (CE0) (Independent)	DC PUBLIC LIBRARY (CE0)	ITM37	Ongoing Subprojects	$2,392,000	2014	$1,150,000
6	DEPARTMENT OF EMPLOYMENT SERVICES (CF0) (Core District)	DEPARTMENT OF EMPLOYMENT SERVICES (CF0)	UIM02	Ongoing Subprojects	$56,792,000	2012	$45,844,000
7	DEPT. OF CONSUMER AND REGULATORY AFFAIRS (CR0) (Core District)	DEPT. OF CONSUMER AND REGULATORY AFFAIRS (CR0)	ISM07	Ongoing Subprojects	$25,097,000	2007	$18,224,000
8	DEPT OF SMALL & LOCAL BUSINESS DEVELOPMT (EN0) (Core District)	OFFICE OF THE CHIEF TECHNOLOGY OFFICER (TO0)	ENS16	Ongoing Subprojects	$2,320,000	2016	$1,200,000
9	METROPOLITAN POLICE DEPARTMENT (FA0) (Core District)	METROPOLITAN POLICE DEPARTMENT (FA0)	HRB30	Ongoing Subprojects	$3,850,000	2020	$1,650,000
10	METROPOLITAN POLICE DEPARTMENT (FA0) (Core District)	OFFICE OF THE CHIEF TECHNOLOGY OFFICER (TO0)	NWI01	In multiple phases	$2,500,000	2021	$2,500,000
11	DISTRICT OF COLUMBIA PUBLIC SCHOOLS (GA0) (Independent)	OFFICE OF THE CHIEF TECHNOLOGY OFFICER (TO0)	N8005	In multiple phases	$23,821,000	2014	$13,000,000
12	DISTRICT OF COLUMBIA PUBLIC SCHOOLS (GA0) (Independent)	DISTRICT OF COLUMBIA PUBLIC SCHOOLS (GA0)	T22DI	In multiple phases	$3,792,000	2020	$1,000,000
13	DISTRICT OF COLUMBIA PUBLIC SCHOOLS (GA0) (Independent)	DISTRICT OF COLUMBIA PUBLIC SCHOOLS (GA0)	AFM04	Ongoing Subprojects	$4,222,000	2020	$7,222,000
14	STATE SUPERINTENDENT OF EDUCATION (OSSE) (GD0) (Core District)	STATE SUPERINTENDENT OF EDUCATION (OSSE) (GD0)	GDMMS	New	$1,094,000	2022	$ —
15	STATE SUPERINTENDENT OF EDUCATION (OSSE) (GD0) (Core District)	STATE SUPERINTENDENT OF EDUCATION (OSSE) (GD0)	GD001	Ongoing Subprojects	$13,562,000	2016	$6,158,000

	Agency (Type)	Implementing agency	Project No	Status	Estimated full-funding cost	First appropriation FY	Original 6-Year budget authority
16	DEPARTMENT OF PARKS AND RECREATION (HA0) (Core District)	OFFICE OF THE CHIEF TECHNOLOGY OFFICER (TO0)	NPR15	Ongoing Subprojects	$3,083,000	2015	$3,539,000
17	DEPARTMENT OF HEALTH (HC0) (Core District)	DEPARTMENT OF HEALTH (HC0)	FSH01	Ongoing Subprojects	$250,000	2021	$250,000
18	DEPARTMENT OF HEALTH CARE FINANCE (HT0) (Core District)	DEPARTMENT OF HEALTH CARE FINANCE (HT0)	MES23	Ongoing Subprojects	$197,952,000	2017	$62,175,000
19	DEPARTMENT OF HEALTH CARE FINANCE (HT0) (Core District)	DEPARTMENT OF HEALTH CARE FINANCE (HT0)	DIM01	New	$3,674,000		$ —
20	DEPARTMENT OF HEALTH CARE FINANCE (HT0) (Core District)	DEPARTMENT OF HEALTH CARE FINANCE (HT0)	MPM03	In multiple phases	$94,191,000	2013	$61,751,000
21	DEPARTMENT OF HEALTH CARE FINANCE (HT0) (Core District)	DEPARTMENT OF HEALTH CARE FINANCE (HT0)	PBM01	New	$360,000		$ —
22	DEPARTMENT OF HEALTH CARE FINANCE (HT0) (Core District)	DEPARTMENT OF HEALTH CARE FINANCE (HT0)	PDM01	New	$400,000		$ —
23	DEPARTMENT OF ENERGY AND ENVIRONMENT (KG0) (Independent)	DEPARTMENT OF ENERGY AND ENVIRONMENT (KG0)	IFM20	Ongoing Subprojects	$5,777,000	2020	$5,777,000
24	DEPARTMENT OF MOTOR VEHICLES (KV0) (Core District)	DEPARTMENT OF MOTOR VEHICLES (KV0)	MVS16	In multiple phases	$30,350,000	2016	$9,000,000
25	OFFICE OF CONTRACTING AND PROCUREMENT (PO0) (Core District)	OFFICE OF CONTRACTING AND PROCUREMENT (PO0)	1PO01	In multiple phases	$23,034,000	2019	$3,881,000
26	CHILD AND FAMILY SERVICES AGENCY (RL0) (Core District)	CHILD AND FAMILY SERVICES AGENCY (RL0)	RL31A	Ongoing Subprojects	$12,830,000		$ —
27	DEPARTMENT OF BEHAVIORAL HEALTH (RM0) (Core District)	DEPARTMENT OF BEHAVIORAL HEALTH (RM0)	HX995	New	$500,000		$ —
28	OFFICE OF THE CHIEF TECHNOLOGY OFFICER (TO0) (Core District)	OFFICE OF THE CHIEF TECHNOLOGY OFFICER (TO0)	DSM20	In multiple phases	$6,975,000	2020	$5,575,000
29	OFFICE OF THE CHIEF TECHNOLOGY OFFICER (TO0) (Core District)	OFFICE OF THE CHIEF TECHNOLOGY OFFICER (TO0)	DR018	In multiple phases	$21,590,000	2018	$16,766,000
30	OFFICE OF THE CHIEF TECHNOLOGY OFFICER (TO0) (Core District)	OFFICE OF THE CHIEF TECHNOLOGY OFFICER (TO0)	ESI00	Ongoing Subprojects	$8,500,000	2019	$500,000
31	OFFICE OF UNIFIED COMMUNICATIONS (UC0) (Core District)	OFFICE OF UNIFIED COMMUNICATIONS (UC0)	DWB02	In multiple phases	$2,954,000	2018	$2,750,000

	Agency (Type)	Implementing agency	Project No	Status	Estimated full-funding cost	First appropriation FY	Original 6-Year budget authority
32	OFFICE OF UNIFIED COMMUNICATIONS (UC0) (Core District)	OFFICE OF UNIFIED COMMUNICATIONS (UC0)	UC302	In multiple phases	$21,272,000	2017	$1,500,000
33	OFFICE OF THE CHIEF FINANCIAL OFFICER (AT0) (Independent)	OFFICE OF THE CHIEF FINANCIAL OFFICER (AT0)	CSP08C	In multiple phases	$81,501,897	2007	$10,000,000

Appendix D

Agency survey responses – IT capital projects

The table below lists the District agencies invited to participate in the project Procurement Maturity Assessment survey and the status of their responses. A total of 94 surveys were sent out that covered the agencies listed in Table 13 below. Of those 94 surveys, thirteen agencies did not have any spend subject to procurement and was not required to complete the survey. We received 68 completed surveys, and our response rate was calculated at 84% (68/81).

Table 13: Survey Response Summary

Agency	Submitted	No Response
HT0 – Department of Health Care Finance	√	
GA0 – District of Columbia Public Schools	√	
GD0 – Office of the State Superintendent of Education	√	
JA0 – Department of Human Services	√	
GC0 – District of Columbia Public Charter Schools		√
FA0 – Metropolitan Police Department	√	
KE0 – Washington Metropolitan Area Transit Authority		√
HC0 – Department of Health	√	
AM0 – Department of General Services	√	
RM0 – Department of Behavioral Health	√	
FB0 – Fire and Emergency Medical Services Department	√	
BN0 – Homeland Security and Emergency Management Agency		√
ES0 – Washington Convention and Sports Authority		√
RL0 – Child and Family Services Agency	√	
JM0 – Department on Disability Services	√	
CF0 – Department of Employment Services		√
AT0 – Office of the Chief Financial Officer	√	
FL0 – Department of Corrections		√
HY0 – Housing Authority Subsidy	√	
KT0 – Department of Public Works	√	
KG0 – Department of Energy and Environment	√	
KA0 – District Department of Transportation	√	
CB0 – Office of the Attorney General for the District of Columbia	√	
EB0 – Office of the Deputy Mayor for Planning and Economic Development	√	
PO0 – Office of Contracting and Procurement	√	
DB0 – Department of Housing and Community Development	√	
EZ0 – Convention Center Transfer		√
GO0 – Special Education Transportation		√

Agency	Submitted	No Response
FD0 – Police Officers' and Firefighters' Retirement System	√	
GG0 – University of the District of Columbia Subsidy Account	√	
TO0 – Office of the Chief Technology Officer	√	
JZ0 – Department of Youth Rehabilitation Services	√	
CE0 – District of Columbia Public Library	√	
CR0 – Department of Consumer and Regulatory Affairs	√	
GX0 – Teachers' Retirement System	√	
FO0 – Office of Victim Services and Justice Grants	√	
HA0 – Department of Parks and Recreation	√	
DU0 – Medicaid Reserve		√
BY0 – Department of Aging and Community Living	√	
UC0 – Office of Unified Communications	√	
KV0 – Department of Motor Vehicles	√	
BX0 – Commission on the Arts and Humanities		√
FR0 – Department of Forensic Sciences		√
SB0 – Inaugural Expenses		√
SR0 – Department of Insurance, Securities, and Banking	√	
HI0 – Health Benefit Exchange Authority	√	
BG0 – Employees' Compensation Fund	√	
AB0 – Council of the District of Columbia		√
ZH0 – Settlements and Judgments		√
AA0 – Executive Office of the Mayor		√
KB0 – Green Finance Authority	√	
GW0 – Office of the Deputy Mayor for Education		√
AD0 – Office of the Inspector General	√	
EN0 – Department of Small and Local Business Development	√	
DH0 – Public Service Commission	√	
HP0 – Housing Production Trust Fund Subsidy		√
TC0 – Department of For-Hire Vehicles	√	
FK0 – District of Columbia National Guard	√	
HF0 – Housing Finance Agency	√	
HX0 – Not-for-Profit Hospital Corporation Subsidy	√	
CI0 – Office of Cable Television, Film, Music, and Entertainment		√

Agency	Submitted	No Response
FX0 – Office of the Chief Medical Examiner	√	
DL0 – Board of Elections		√
BD0 – Office of Planning	√	
AE0 – Office of the City Administrator		√
BE0 – Department of Human Resources		√
LQ0 – Alcoholic Beverage Regulation Administration		√
DJ0 – Office of the People's Counsel		√
FS0 – Office of Administrative Hearings	√	
NS0 – Office of Neighborhood Safety and Engagement	√	
GB0 – District of Columbia Public Charter School Board		√
CJ0 – Office of Campaign Finance		√
HM0 – Office of Human Rights		√
RJ0 – Captive Insurance Agency	√	
AC0 – Office of the District of Columbia Auditor	√	
BH0 – Unemployment Compensation Fund		√
BZ0 – Office on Latino Affairs	√	
FJ0 – Criminal Justice Coordinating Council	√	
BA0 – Office of the Secretary	√	
RK0 – Office of Risk Management	√	
CQ0 – Office of the Tenant Advocate	√	
UP0 – Workforce Investments Account	√	
AI0 – Office of the Senior Advisor		√
BJ0 – Office of Zoning	√	
AG0 – Board of Ethics and Government Accountability	√	
FH0 – Office of Police Complaints	√	
CH0 – Office of Employee Appeals		√
GE0 – State Board of Education	√	
HG0 – Office of the Deputy Mayor for Health and Human Services		√
RC0 – Office on Returning Citizen Affairs		√
DA0 – Real Property Tax Appeals Commission	√	
JR0 – Office of Disability Rights		√
AF0 – Contract Appeals Board	√	
FQ0 – Office of the Deputy Mayor for Public Safety and Justice	√	

Agency	Submitted	No Response
AH0 – Mayor's Office of Legal Counsel	√	
DX0 – Office of Advisory Neighborhood Commissions	√	
AP0 – Office on Asian and Pacific Islander Affairs		√
DR0 – Rental Housing Commission	√	
KO0 – Office of the Deputy Mayor for Operations and Infrastructure		√
CG0 – Public Employee Relations Board		√
GL0 – District of Columbia State Athletics Commission		√
FZ0 – District of Columbia Sentencing Commission		√
FI0 – Corrections Information Council	√	
VA0 – Office of Veterans' Affairs		√
MA0 – Criminal Code Reform Commission	√	
LA0 – District of Columbia Water and Sewer Authority	√	
EA0 – Metropolitan Washington Council of Governments	√	
DQ0 – Commission on Judicial Disabilities and Tenure		√
DV0 – Judicial Nomination Commission		√
AR0 – Statehood Initiatives		√
KC0 – Washington Metropolitan Area Transit Commission		√
AL0 – Uniform Law Commission		√
EM0 – Office of the Deputy Mayor for Greater Economic Opportunity		√
PE0 – Section 103 Judgments-Public Education System		√

Table 14: Agencies that answered IT Capital Project Questions
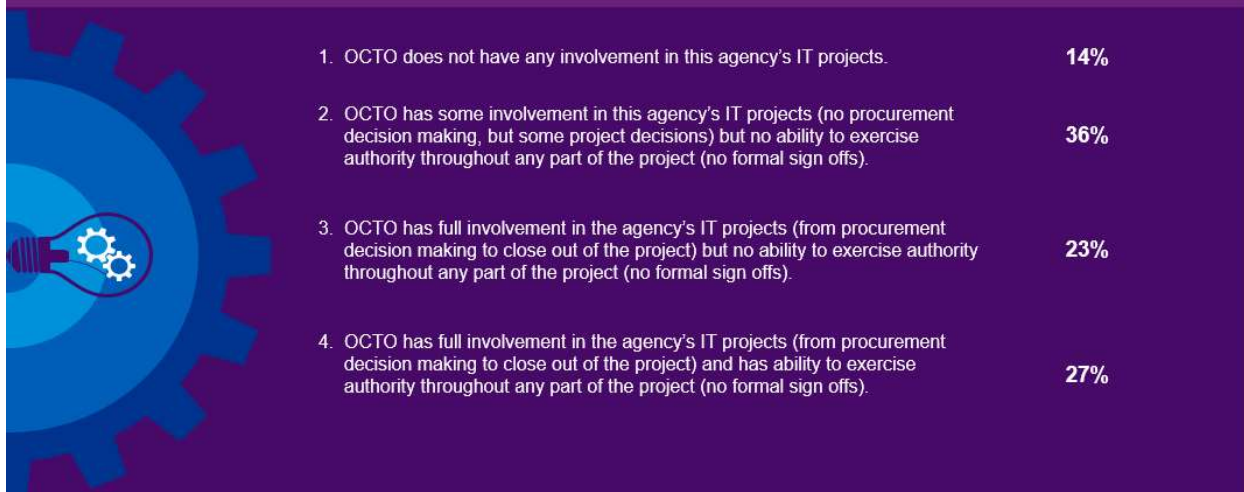
	Agencies that were presented questions on IT Capital Projects based on a qualifying question
1	D.C. Office of the Chief Medical Examiner*
2	Office of Zoning
3	Office of Unified Communications
4	Office of Neighborhood and Safety*
5	Department of Motor Vehicles
6	Depart of Behavioral Health
7	Office of the Attorney General*
8	District of Columbia Water and Sewer Authority*
9	Office of the Chief Financial Officer
10	District of Columbia Department of Health
11	DC Public Library
12	Department of Small and Local Business Development
13	Not for Profit Hospital Corporation*
14	The Metropolitan Police Department
15	Office of the State Superintendent of Education*
16	Department of Consumer and Regulatory Affairs
17	Department of Energy and Environment
18	District of Columbia Child and Family Services Agency
19	District Department of Transportation*
20	Office of Contracting and Procurement
21	Department of Health Care Finance
22	District of Columbia Public Schools
23	Office of the Chief Technology Officer
24	Criminal Justice Coordinating Council
	*IT project for this agency was not included in the FY2022 Budget Book

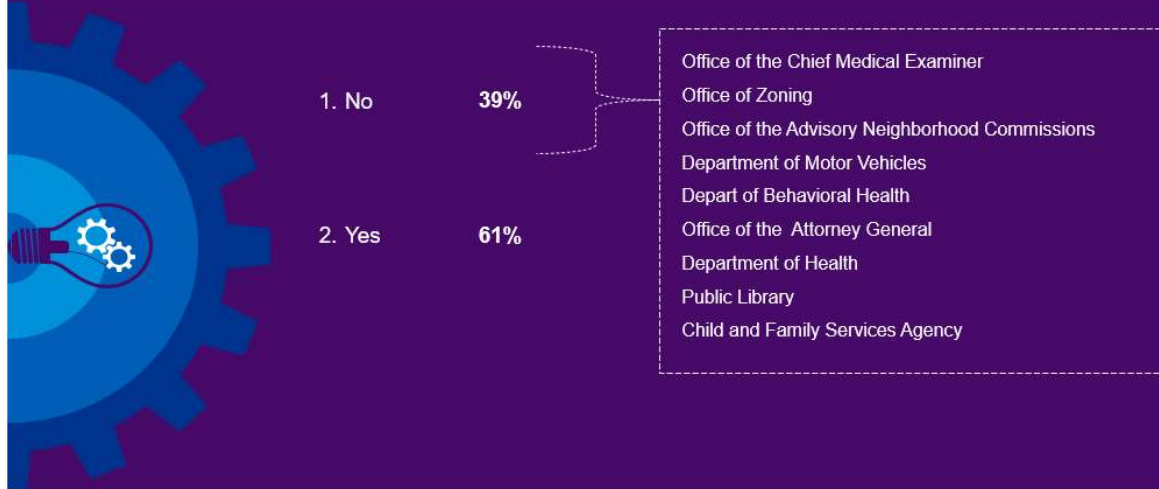# Agency survey responses breakdown regarding IT capital projects

Does the agency have policies and procedures in place to track and analyze the justification for project time extensions and/or price modifications to the original vendor award for IT projects?

1. The agency has no policies and procedures in place to track and analyze the justification for project time extensions/price modifications to the original vendor award for IT projects. — **23%**

2. The agency has informal policies and procedures in place to track and analyze the justification for project time extensions/price modifications to the original vendor award for IT projects. — **18%**

3. The agency has formal policies and procedures in place to track and analyze extensions for ongoing IT projects which is utilized routinely. — **59%**

- Office of the Chief Financial Officer
- Department of Motor Vehicles
- The Metropolitan Police Department
- Depart of Behavioral Health
- Office of the Chief Medical Examiner
- Office of the Advisory Neighborhood Commissions
- District of Columbia Department of Health
- Not for Profit Hospital Corporation
- District of Columbia Public Schools

How much involvement does OCTO have in your agency's Information Technology related projects?

1. OCTO does not have any involvement in this agency's IT projects. — **14%**

2. OCTO has some involvement in this agency's IT projects (no procurement decision making, but some project decisions) but no ability to exercise authority throughout any part of the project (no formal sign offs). — **36%**

3. OCTO has full involvement in the agency's IT projects (from procurement decision making to close out of the project) but no ability to exercise authority throughout any part of the project (no formal sign offs). — **23%**

4. OCTO has full involvement in the agency's IT projects (from procurement decision making to close out of the project) and has ability to exercise authority throughout any part of the project (no formal sign offs). — **27%**

Were the price modifications to the IT projects justified and was the ultimate price paid for the projects appropriate?

1. No — 39%
   - Office of the Chief Medical Examiner
   - Office of Zoning
   - Office of the Advisory Neighborhood Commissions
   - Department of Motor Vehicles
   - Depart of Behavioral Health
   - Office of the Attorney General
   - Department of Health
   - Public Library
   - Child and Family Services Agency

2. Yes — 61%

	Please provide whether you can recommend OCTO have a more significant role in your agency's IT related projects.	
1.	No recommendation beyond OCTO's current role.	*(All agencies with identified IT Capital Projects answered in alignment with this answer type, below are some of the descriptions around their comments)*
2.	Our agency and OCTO collaborate regularly for mutual projects; our agency generally handles intelligent transportation systems.	
3.	Our agency **voluntarily** partners with OCTO currently on both operating and capital transactions and it works out well. OCTO expertise in technology space pares well with our agency's expertise in programmatic need.	
4.	OCTO is already part of our decision making for Go-Live as it relates to security and approval of the architecture, they have no knowledge of our business operations as a result it will not be efficient for them to have a larger role.	
5.	OCTOs involvement for IT capital projects should be to approve the original project.	
6.	OCTO has sign off and OCTO OCP reviews our contracts prior to award. OCTO is more involved in some projects and less in others. Their involvement should be dictated based on the nature of the project.	

In your opinion, what are the root causes of the cost overruns for the District's IT procurement?	
1. There have been no cost overruns in the agency's IT procurements.	**38%**
2. Lapsing of money from fiscal year to fiscal year.	**15%**
3. Poor project management issues	**15%**
4. Lack of vendor transparency with what services were included in the original award price	**15%**
5. Inadequate definition of scope between vendor responsibilities and agency responsibilities during the procurement stage.	**8%**
6. District policy decision (i.e. CBE/SBE 30% requirement).	**8%**

What alternative resources can you recommend be provided to more effectively manage IT related projects?
1. We are not aware of any alternative resources that can be provided to more effectively manage IT-related projects.
2. Additional flexibility in hiring IT staff (i.e., special authority for 2210s, like some federal agencies, have).
3. Our agency has PMO operational ability that can support its IT projects.
4. For complex projects, our agency employs a third party vendor to independently validate and verify our IT related projects.
5. For the program to have a better understanding of their IT needs.
6. Have project review teams in the Agency clusters. We are a part of the HHS cluster and our IT projects relate to healthcare predominately. Expertise in healthcare IT systems is necessary to review projects.
7. Increased flexibility in multi-year funding and/or contract options.
8. More funding to our agency, and additional agency staff.
9. The addition of more business analysts on IT related projects would ensure that projects can be more effectively managed.
10. We recommend that the District adopt the DevOPS methodology for IT projects.

KPMG

Contact us

Geoffrey S. Plante
Partner, Advisory
518-225-3512
gplante@kpmg.com

Julie Barrientos
Director, Advisory
224-627-0510
jbarrientos@kpmg.com

www.kpmg.com

kpmg.com/socialmedia