Performance Audit of Development Services' Accela Permitting System Implementation

Department of Information Technology Should Have Greater Authority to Avoid Cost Overruns and Delayed Implementations Similar to Those Encountered During the Accela Implementation

Office of the
City Auditor

City of San Diego

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November 2018

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THE CITY OF SAN DIEGO

November 16, 2018

Honorable Mayor, City Council, and Audit Committee Members
City of San Diego, California

Transmitted herewith is a performance audit report of the Development Services' Accela Permitting System Implementation. This audit was conducted in accordance with the City Auditor's Fiscal Year 2016 Audit Work Plan, and the report is presented in accordance with City Charter Section 39.2. The Results in Brief are presented on page 1. Audit Objectives, Scope, and Methodology are presented in Appendix B. Management's responses to our audit recommendations are presented after page 33 of this report.

We would like to thank staff from the Development Services and Information Technology Departments for their assistance and cooperation during this audit. All of their valuable time and efforts spent providing us information both in the office and in the field is greatly appreciated. The audit staff members responsible for this audit report are Steve Gomez and Danielle Knighten.

Respectfully submitted,

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Results in Brief

The Development Services Department (DSD) provides review, permit, inspection, and code enforcement services for private and public development projects throughout the City of San Diego (City) to ensure healthy, safe, and livable neighborhoods. DSD also serves as the administrative agent, reviews and approves applications, issues permits and collects fees, for several other departments that play a role in the City's development and permitting process. Some of these departments include Transportation and Storm Water, Public Works, and Environmental Services. DSD generated approximately $63.4 million in revenue and expended $79.4 million in Fiscal Year (FY) 2018 to facilitate its operations in support of these services.

DSD's vision is to employ an engaged workforce and utilize superior technology in the streamlined delivery of services. DSD has heavily relied on its homegrown Project Tracking System (PTS), developed in the 90's, to enact this vision.

We performed this audit to confirm that the implementation followed standards as defined by COBIT 5 and informed by the lessons learned from the SAP implementation to reduce the likelihood of project delays, cost overruns, or a failed implementation

Finding 1 We found DSD and City management skipped fundamental steps early in the implementation to speed up the process, which resulted in an over-reliance on the PTS system's architect as the project manager and technical lead, and compounded previously identified issues with a poorly documented home-grown system. This over-reliance has resulted in a prolonged system implementation, which initially had insufficient department involvement by users during the creation of the Accela blueprints. The implementation sustained further delays when the project manager, with the institutional knowledge, retired prior to completing the most complicated portions of the blueprints. Shortly after, the Accela project manager also left the project, further setting it back.

Recommendations

We identified weaknesses in the implementation governance that has significantly increased the cost and implementation timeline for replacing the existing system. These weaknesses exist throughout the City's Information System Governance of System Implementations.

Auditor Review of Management Response

We made a total of 4 recommendations to address the issues identified above. Management agreed to fully implement all of these recommendations

Background

In accordance with the City Auditor's Fiscal Year (FY) 2016 through FY2019 Information Technology (IT) Audit Work Plans, we conducted an IT audit of the Accela Permitting Implementation. Accela is a tracking system that the Development Services Department has procured in order to manage its permitting, code eforcement, and invoicing activities. We performed this audit to determine whether the implementation followed standards as defined by COBIT 5[1] and was informed by the lessons learned from the SAP implementation to reduce the likelihood of project delays, cost overruns, or a failed implementation. Additionally, we reviewed the implementation to ensure that it addressed prior audit recommendations for the Project Tracking System (PTS). The overall objectives were to: 1) assess pre-implementation controls to ensure that the project risks are appropriately mitigated through planning; and 2) Assess implementation risk to ensure that key risks to the project addressing auditor recommendations are mitigated.

Development Services Department Information System Overview

The Development Services Department (DSD) provides review, permit, inspection, and code enforcement services for private and public development projects throughout the City of San Diego (City) to ensure healthy, safe, and livable neighborhoods. DSD also serves as the administrative agent, reviews and approves applications, and issues permits and collects fees for several other departments that play a role in the City's development and permitting process. Some of these departments include Transportation and Storm Water, Public Works, and Environmental Services. DSD generated approximately $63.4 million in revenue and expended $79.4 million in FY2018 to facilitate its operations in support of these services.

DSD's vision is to employ an engaged workforce and utilize superior technology in the streamlined delivery of services. DSD has heavily relied on its homegrown Project Tracking System (PTS) to enact this vision. PTS has facilitated DSD's operations and services to residents and internal customers since its first module went live in 2001, after undergoing design and development in the late 1990s. Currently, DSD is in the process of replacing PTS with Accela.

[1] COBIT 5 is a leading international framework and standard for governance and management of enterprise it.

Previous Performance Audits of DSD

The Performance Audit of the Accela Implementation focuses on the recommendations from two previously released audit reports, that the implementation would address. These include the Performance Audit of the Development Services Department's Project Tracking System, and the Performance Audit of the Code Enforcement Division.

The Performance Audit of the Development Services Department's Project Tracking System (#12-015)

The Office of the City Auditor (OCA) performed an Audit of the Development Services Department (DSD) Project Tracking System (PTS) in Fiscal Year 2012. This audit included the following findings:

Finding 1: DSD has not Implemented Sufficient Controls over its Project Tracking System to Adequately Mitigate the Risk of Improper Activity;

Finding 2: DSD Staff does not Consistently Charge Accurate Permit Fees and Deposits due to Multiple Issues Including Deficiencies in PTS;

Finding 3: PTS' Current Reporting Capabilities do not Facilitate Effective Operational Management for Client Departments; and

Finding 4: DSD has not Developed a Long-Term Information Technology Strategy to Meet Business and Customer Needs Cost-Effectively.

The OCA made 13 recommendations to address the deficiencies identified. DSD has addressed all of these issues, except three recommendations addressing security and long-term strategic planning for PTS to ensure that it met the needs of DSD's operations and customers in a cost-effective manner. These recommendations included identifying and documenting the current functionality of PTS and determining the required functionality to meet DSD's current and medium term operational requirements over the next five years.

Performance Audit of the Code Enforcement Division (#16-006)

During the Accela implementation, in October 2015, the OCA released a report addressing the Code Enforcement Division of DSD's operations, which were negatively impacted by a lack of functionality in PTS. The recommendations in this report required that Code Enforcement actively participate in the configuring of Accela, ensuring that the system includes the following features necessary for efficient code enforcement management:

1) The capability to assign priorities to each case and assign initial inspection due dates for high-priority cases.
2) The capability for Code Enforcement Division management and staff to generate reports for essential performance metrics on-demand, including those listed below. The system should produce reports on these metrics by case priority, investigator, and inspection district:
    a) Percent of initial inspections completed on time;
    b) Average days to achieve voluntary compliance;
    c) Average days to achieve non-voluntary compliance; and
    d) Percent of cases achieving voluntary compliance.
3) Mobile access for investigators, to reduce the need to travel to the Development Services Department to enter case information.
4) The capability to upload relevant case documentation such as photographs, correspondence, administrative citation and penalty notices, thus eliminating the need for hardcopy files.
5) The capability to invoice and track administrative citations and penalties.

DSD went live with the Accela code enforcement module in January 2018. According to the Code Enforcement Division management, Accela has greatly increased their operational effectiveness and allows them to enter and access digitized, reliable data from wherever they require access, including remotely in the field. Code Enforcement management was very impressed with the final product and the improvements it facilitated to their operations.

Reports Issued with Accela Action Items Outside Initial Project Scope

The Office of the City Auditor has released three additional reports with recommendations that require the implementation of Accela to address:

1) 16-011 Performance Audit of The City's Street Preservation Ordinance;
2) 17-003 Performance Audit of The San Diego Housing Commission – Affordable Housing Fund; and

3) 17-010 Performance Audit of The Affordable / In-Fill Housing and Sustainable Buildings Expedite Program.

Some recommendations made in these reports require the successful implementation of the Accela project; however, they also require additional work after the system is live to complete them. As a result, the recommendations in these audits will not be addressed until after 2020.

Accela Project Initiation

DSD made known its intent to replace its PTS system when it issued a request memorandum to Council on August 21, 2015, requesting to approve the contract and funding prior to September 30, 2015, to obtain a discount of approximately $1.3 million over the term of the five-year contract. The total cost of the five-year contract was anticipated to be approximately $7 million for the first year, and approximately $967,000 for each following year, for a total contract cost of approximately $10.91 million. The request to fund and accept the Accela contract went before the City Council on September 22, 2015 and was approved.

Early Project Communication

During the entrance conference with DSD and City management, we provided DSD with the Accela Audit Work Plan, shown in **Appendix E**, which detailed the components and documentation we intended to review during our audit. The audit plan mapped to COBIT 5's new system implementation requirements and lessons learned from the City's SAP implementation, shown in **Appendix C and D**. At that point, DSD management informed us that they did not intend to complete the first several components we intended to audit, including Project Requirements Definitions, As-Is process definitions, and Business Process Re-Engineering plans. The intent behind skipping these components was to move the project along faster and build PTS functionality into Accela without re-evaluating business processes. In our 2012 report regarding PTS, we found weaknesses in current process documentation, lack of system controls, and an over reliance on the PTS architect, who served as both the City's Project Manager and the technical lead who was responsible for the design and implementation of the new Accela system. DSD and City management acknowledged these risks and stated that these risks were acceptable to move the project forward.

Audit Results

Finding 1: DSD's Decision to Bypass Critical Early Project Steps Resulted in Additional Costs and A Significantly Delayed Implementation

Successful implementation of a major system such as Accela requires extensive, careful planning to execute on-time and within budget. We found that Development Services Department (DSD) and the City of San Diego's (City) management skipped fundamental steps early in the implementation to speed up the process, which resulted in an over-reliance on the Project Tracking System's (PTS) architect as the project manager and technical lead for the Accela implementation, and compounded previously identified issues with a poorly documented home-grown system. This over-reliance has resulted in a prolonged system implementation, which initially had insufficient department involvement by users during the creation of the Accela blueprints. [2] The implementation sustained further delays when the project manager, who was the only City staff member with substantial institutional knowledge regarding the PTS system and Accela implementation, retired prior to completing the most complicated portions of the blueprints.

The new project team has executed nine change orders since the exit of the initial project manager, attempting to rescope, redefine, and adjust the project implementation. According to DSD, five of the nine change orders are at "no cost" and were created at the request of DSD to further clarify the statement of work, resulting in a phased approach implementation instead of the original full system implementation.

[2] Blueprints, as used in this report, refer to IT Architectural documents such as the Functional Specifications (which include items such as business, technical, data, and other functional requirements), Non-Functional Specifications (which include items such as security, performance, capacity requirements), as well as Key Use Cases, Operational Reference Models, architectural artifacts and other technical documents defining the functionality of the product being implemented.

As a result, DSD's original go-live date of May 2017 was delayed by several years; full implementation is now planned for February 2020, near the end of the initial 5-year contract. Additionally, the originally approved $10.9 million budget for the purchase and implementation of Accela is now projected to reach $17.7 million.

COBIT 5 Standards require that system and business processes are documented and analyzed prior to beginning a system implementation to prevent over reliance on a single individual or small group of individuals, as well as to facilitate an appropriate analysis of current capabilities against desired capabilities to facilitate and maximize operational efficiencies. Additionally, the Government Accountability Office (GAO) found that federal government Chief Information Officers (CIO) often lack authority to manage system implementations, to ensure compliance with best practices, as happened with the City of San Diego.

We made four recommendations to provide the CIO sufficient authority to enfore Enterprise IT Governance, to meet best practice implementation standards, maintain a repository for current system documenation, and provide appropriate training to ensure system implementation executives are aware of best practices.

DSD And City Management Skipped Fundamental Steps Early in The Implementation to Speed Up the Process, Resulting in Poorly Defined Process Definitions

DSD and City Management elected to bypass fundamental steps early in the implementation to speed up the process. The initial steps are meant to reduce reliance on institutional knowledge and facilitate transparency of work to ensure that the entire implementation team is aware of planned system capabilities and the steps required to successfully implement them. The implementation team failed to document their business processes and system requirements to determine the required functionality for the new system and how to enact those requirements.

The lack of these documents was exacerbated by the lack of current PTS documentation and an over-reliance on the original system architect to maintain the current system, in addition to recreating these undocumented processes without documenting them for the new system.

An earlier audit completed by the OCA found that the PTS system was poorly documented, and operations and updates primarily relied on the institutional knowledge of the former project manager, who initially designed DSD's permitting system (PTS) in the 1990's. Over-reliance on a single individual, without sufficient

system document greatly increased the risk to the current PTS system, or the Accela project should he leave during the system implementation. On April 11, 2018, the City's project manager retired without prior notice, leaving the implementation incomplete and taking all institutional knowledge of both the PTS system and Accela implementation project with him. According to DSD, since that time the project has been further impacted by multiple changes in project management on both the City and Accela's side.[3]

Additionally, key detailed process designs, in the form of central process blueprints, were not documented or completed prior to his departure, leaving several significant design issues unresolved for the new project team to address. To rescope, redefine, and adjust the project, the new project team has executed nine change orders since the departure of the original project manager. As a result, full implementation will not be realized until the initial 5-year contract[4] is near completion. DSD has indicated February 2020 as the new go-live date for full implementation which is approximately 3 years later than the original May 2017 date.

The new project team has taken this opportunity to redefine the Accela implementation by expanding the project's original scope to include changing DSD's business processes and customer experience through the using digital technologies. DSD refers to this change as "Digital DSD."

The City's System Implementation Process Requires Stronger Governance

DSD failed to maintain current documentation on their Project Tracking System (PTS), which facilitates most aspects of their operations, and was designed in house in the 1990's. Compounding this issue, they moved forward with a large-scale system replacement without documenting their core business requirements based on their current operations and medium-term future operational requirements.

[3] According to DSD, Accela's original project manager leaving around the same time as the City's project manager, and subsequently the replacement Accela project manager also left taking institutional knowledge with them.

[4] The Accela contract was initially signed in September 2015 for a five-year initial term through September 2020, for approximately $7 million in the first year for implementation, and $967,000 for each of the remaining four years for maintenance.

DSD was able to circumvent these implementation steps by taking their request directly to the City Council giving parties responsible for compensating controls less than a month before the council hearing. According to DSD, the decision to direct-docket DSD's request for City Council approval of the Accela agreement was intended to enable the City to qualify for a discount of approximately $1.3 million which would be applied over the 5-year contract if the agreement was awarded by September 30, 2015 which was close of the quarter for Accela.

DSD bypassed the former Information Technology Business Leadership Group's (ITBLG) review of business and technical alignment prior to purchasing, which would have required the initial analysis and required documentation. These organizations did not have sufficient authority to ensure that DSD went through the appropriate steps prior to going before council and requesting funding and approval of the Accela contract. While DSD did contract Accela to perform a business process analysis early in the project, the consultant could not deterine the core functioning of DSD's PTS centered processes without sufficient system documentation, which did not exist. The only person with the full knowledge of these processes was the system architect; who left the core blueprints for the system unfinished when he retired. These processes are currently being redesigned.

The federal government has encountered similar governance issues with their implementation projects. The GAO found that the federal government spent billions on failed information system implementations, which failed due to ineffective management, poor project planning, lack of requirements definition, program oversight, and governance.

The CIO Doesn't Have Sufficient Authority to Enforce IT Governance Across the Organization

DSD bypassed ITBLG oversight and could still bypass its successor committee, STAC,[5] in the same manner due to insufficient CIO authority to implement a process preventing the circumvention of controls. Currently, the CIO relies on departments to semi-voluntarily go through their processes. According to the City's Governance and Portfolio Management Program Manager, the Department of Information Technology (DoIT) has worked diligently with other departments to push these projects through their processes with a fair amount of success; however, this relies on cooperation from other department directors that may change

[5] The City's Strategic Technology Advisory Committee (STAC) replaced their former Information Technology Business Leadership Group in 2015 in an effort to increase their governance of information technology projects.

in the future. Currently, controls can still be circumvented by going directly to Council, as DSD did to initially bypass the controls at the time under its former management.

The City and Department of Information Technology are in The Process of Developing and Defining Best Practices, But They Are Not Fully Implemented, And Can Be Circumvented or Ignored

The City and DoIT had controls in place at the time Accela bypassed them; however, at that time, they primarily focused on project approval. According to DoIT, they have worked with City leadershipto redesign their IT Governance Process which now includes:

- Replacement of the Business Leadership Group (IT BLG) in 2016, whose focus was solely on review and approval of projects, into the Strategic Technology Advisory Committee (STAC) organization. This organization includes all the department directors in the City taking part in reviewing all the strategic IT initiatives during the budget cycle to ensure alignment with the city's business strategy. The STAC prioritizes the IT budget requests to ensure funds are strategically allocated.
- Creation of four Governance Gates that span the system implementation process. During these gates, reviews are conducted to evaluate the technology alignment, project plan, architecture design and deployment readiness.

Though DoIT has also improved controls throughout the system implementation process; they still require additional control development at their various approval gates to ensure compliance with best practice.

System Implementations Require Strong Governance to Ensure Success and Reduce Risk Along the Way

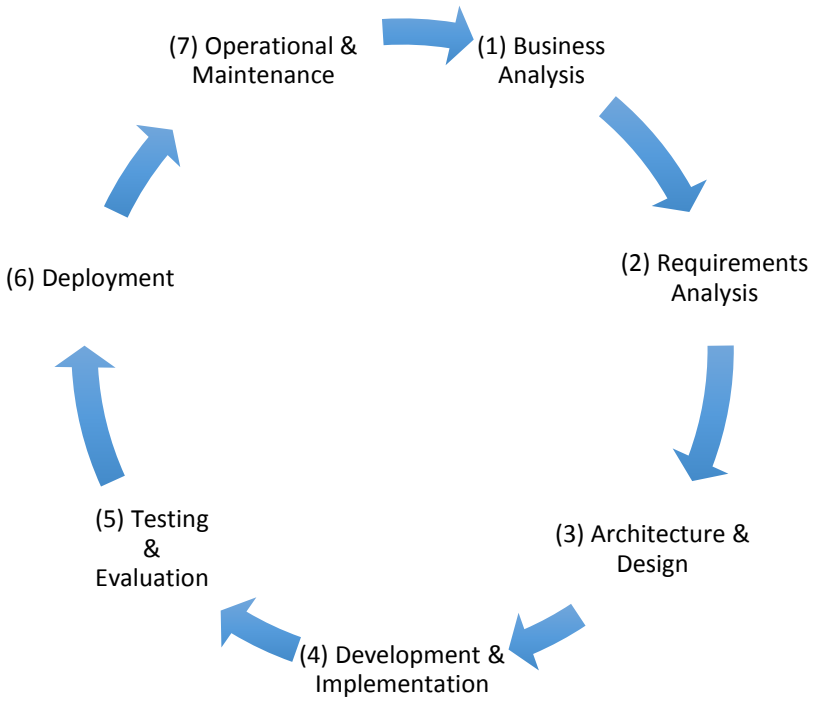
COBIT 5 Standards require that information systems are sufficiently documented to reduce reliance on institutional knowledge of a few individuals.

Defining business and system requirements is an early phase of documenting the current and replacement system functionality, including identifying the gap between the current system and the additional functionality desired in the new system. Business and system requirements must be defined prior to procuring systems to ensure that all needed operational functions are known and comparable to the functions included in the new system during the selection process. This analysis should include reviewing current processes and potential modifications to those processes to improve overall efficiency and in alignment with overall business goals for all impacted entities (departments).

During the architecture and design phase, these requirements are then built out into the blueprints/detailed system components for the new system, which define how the requirements are met. The new system is consistently measured against these requirements through completion of the project to ensure it meets the initial needs and intent of the system implementation as shown in **Exhibit 1**.

Exhibit 1:

System Requirements Throughout the Development Process



Source: Auditor Generated Based on System Development Lifecycle and COBIT 5 Activities.

For details on each of these steps in the process, see **Appendix F**. These system specifications, derived from the initial business requirements, through development, should be maintained in a centralized location with other relevant system information throughout the development process through final go-live. Additionally, relevant information from the implementation process should form the core of the information systems documentation, which should be tracked and updated as required throughout the system's lifecycle in a centralized tracking repository to prevent system documentation becoming outdated as in the case of PTS.

IT Management's Role in System Implementations

Enterprise IT standards require that appropriate organizational management are involved in acquiring and implementing an information system. As Information system implementations require multi-disciplinary teams from both the operational department and the information systems department, both business and IT management must be involved in the sytem planning, acquition, and implementation, through the supporting phases of the project. Throughout the project lifecycle, the business leader is responsible for ensuring alignment with the business strategic vision, and the CIO ensuring alignment with the Enterprise IT Strategic Vision.

GAO IT Project Implementation Report

The federal government has also encountered issues with management of information system implementations. The Federal Government Accountability Office (GAO) found that the federal government has spent billions of dollars on failed IT investments. These investments often suffered from a lack of disciplined and effective management, such as project planning, requirements definition, and program oversight and governance.

The GAO found that many of these projects have failed due to a lack of oversight and governance. Executive-level governance and oversight across the federal organization has often been ineffective, specifically including governance from federal CIOs. However, they found that this lack of oversight significantly resulted from insufficient CIO authority over information system implementations as CIOs' authority is often limited without the authority to review, approve, and manage the entire agency IT portfolio. Many times, an agency would procure a system, partially implement it, and leave it to IT to maintain it without the opportunity to ensure it aligns with the organization's information system strategic vision.

Due to these failures, Congress enacted a law requiring action to:

1) Consolidate federal data centers;
2) Enhance transparency and improve risk management;
3) Enhance agency CIO authority;
4) Review IT investment portfolios;
5) Expand training and use of IT acquisition cadres;
6) Purchase software government-wide; and
7) Maximize the benefit of federal strategic sourcing.

Increased Cost, Delayed Implementation, Increased Complexity of Project Management, and Potentially Reduced Functionality

The Accela implementation maintained open core blueprints through the initial completion dates as the core processes and several key interfaces were undefined and in-flux during the initial development of the system. Ultimately, when the project manager left, these core blueprints remained unfinished due to their complexity, and were left to the new project team to resolve.

The project Go-Live date has been modified several times from the original May 2017 objective and is currently February 2020. The implementation phase has now increased from one year of employee and vendor time, to almost five years of the original five-year contract to fully implement the system.

Further, this delay has resulted in nine additional change orders,[6] shown in **Exhibit 2**, modifying the contract terms with varying impacts to the project and will likely require additional change orders to complete the project, as the most recent Change Order (#14) completes the first wave of the second phase of remaining blue print analyses.

Change Orders one through five occurred during the initial implementation. Change order one defined deliverable without cost, Change Orders two through four addressed a separate Accela module outside of the scope of DSD's implementation, Change Order 5 added an interface at a cost of $19,320 and Change Order #7 was generated specifically for DSD's use of the City's master service contract with CGI Group ("CGI"), the City's application vendor. As part of the contract, CGI serves as a "pass-through" for the City enabling it to obtain technical resources in a faster, more cost-effective way. As shown in **Exhibit 2**, the total cost of these change orders is $821,029.

[6] Five of the nine change orders are "no cost" and were created at the request of DSD to formalize information intended to further clarify the statement of work.

Exhibit 2:

Accela Change Orders Post PTS Architect Departure

#	Change Order Summary	NTE Cost	Date
5	Integrates ePlanSoft tool instead of using Accela EDR for electronic plan review and mark-up.	$19,320	2/16/17
	City Project Manager Retires / Loss of PTS Design and Accela Project Institutional Knowledge.		4/11/17
6	Addresses loss of Institutional Knowledge of City's Project Manager. Initially rescheduled go-live from May 2017 to June 2017. Now reschedule Go-Live for July 2017 from June 2017, and add 95 Accela staff hours at $210, not to exceed $84,000.	$19,950	7/14/17 Signed: 7/14/18
7	Resulted from the departure of the City and Accela project managers and the resulting loss of institutional knowledge (of the original system and its translation to Accela). This change order would result in an estimated increase of $548,100 to the initial project cost, move the Trust Accounting interface to post production, create numerous configuration adjustments, add one development item, and provide business process documentation.	N/A	8/8/17 Signed: 8/9/17
8	Note: This this is a duplicate of Change Order #7 which, according to DSD, was used to leverage the City's master service contract with CGI Group.	$548,100	Signed: 9/14/17
9	This change order (09) primarily resulted from the departure of the City and Accela project managers and the resulting loss of institutional knowledge (of the original system and its translation to Accela). This change order results in no additional costs, removes the trust accounting interface and several formerly contractually required reports.	0	8/28/17 Signed: 9/14/17
10	Deliverable 4 has been redefined as 4a through c, while deliverables 5a through c has been redefined as 5.	0	11/3/17 Signed 11/27/17
11	Addresses incremental changes to facilitate a Go-live revision data, and revises Go-live date to 1/16/2018	$67,200	11/12/17 Signed: 12/5/17
12	Provides clarity on specific deliverables, or modify the scope and/or responsibilities of specific deliverables, from the original SOW	0	12/27/17 Signed: 1/12/18
13	Defines the following modules and permit types to go-live on 1/16/18 • Code Enforcement • News rack • Single Family Residential/Photovoltaic (Paper and Electronic) • Single Family Residential/Photovoltaic Self-Certify (Professional Certification) (Paper and Electronic) • Street Tree • Traffic Control Plan • Transportation	0	12/17/17 Signed: 1/12/18
14	Continue Analysis of remaining record types (blue prints); Initiate phase 2 on completion.	$166,454	5/24/18 Signed: 6/13/18
	Total	$821,024	

Source: Auditor Generated Based on Project Change Orders 5 through 14.

On September 22, 2015 the City Council approved DSD's purchase of Accela for a total not to exceed $10,910,974.38. The Council approved 1st year expenses not to exceed $7,043,291.28 and $966,920.60 for the remaining 4 years of the contract, shown in **Exhibit 3**.

Exhibit 3:

Council Approved Accela Contract Expenditures

	Year 1 - FY2016 Approved	Year 2 - FY2017 Approved	Year 3 - FY2018 Approved	Year 4 - FY2019 Approved	Year 5 - FY2020 Approved	Total
Council Approved a not to exceed amount for the 1st year of the contract	$7,043,291.98					$7,043,291.98
Annual Maintenance		$966,920.60	$966,920.60	$966,920.60	$966,920.60	$3,867,682.40
Total Approval by Council						$ 10,910,974.38

Source: Auditor Generated Based On Council Approved Accela Contract Expenditures

To date, the Accela implementation is expected to cost $17.7 million before going completely online, more than twice the expected implementation cost of the planned $7 million for year one with implementation, and $ 6.9 million more than the original projected 5-year cost of $10.9 million. Additionally, these amounts do not take into account staff time spent on implementation activities over the five-year project or payments made in addition to, or exceeding the contract and change order costs.

Accela has received payments totaling $10.8 million in the form of cash or from the loan[7] taken out by the City.

[7] The City entered into a software lease-purchase agreement on December 29, 2015. The agreement provided instructions and direction to disburse the principal amount of $9,300,623.12 to Accela. The City's annual payments of $1,984,942.93 include principal and interest payments ($9,300,623.12 and $624,091.53 respectively for a total of $9,924,714.65). The City has made three annual loan payments totaling $5,954,828.79.

DSD has notified us they will be using CGI's professional services to help supplement DSD IT's implementation team and its work on the remaining design phase which includes 7,305 working hours. According to DSD Management, Accela would charge approximately $5 million for these hours, while CGI's technical resources would equate to $1.1 million for the same effort, while providing stronger integration into the City's team than Accela.

Further, according to the new project management, the overall scope of the project has been modified and expanded from the initial intent to move existing PTS functionality into the new system, to a comprehensive operational upgrade to facilitate digitized processes and move to a paperless process. Specifically, the new vision is "to change DSD's business processes and customer experience using digital technologies."

Code Enforcement Division Management have realized significant process improvements using Accela and have fully adopted it into their operations after it went live approximately 9 months after the unexpected exit of the original project manager.

Recommendation #1

The Office of the Chief Operating Officer (COO) should develop an Administrative Regulation (AR) defining the authority of the Chief Information Officer (CIO). Specifically, the AR should provide the CIO with sufficient authority to define and enforce Enterprise IT Governance in accordance with standards across the entire user environment of the City through the information system lifecycle, including the procurement, implementation, maintenance, and retirement of information systems. (Priority 1)

Recommendation #2

The Chief Information Officer (CIO) should expand their System Implementation Governance model to facilitate best practice system implementations for City Departments. This model must meet COBIT 5's Build, Acquire, and Implement Domain requirements to ensure compliance with best practice. Specifically, the CIO should:

a) Provide required steps to implement a new system that cannot be bypassed;

b) Further develop guidance for each phase of a system implementation appropriate to its scope and impact to the City;

c) Track alignment of business IT controls and enterprise IT controls throughout the system development lifecycle with a high-level review at key points in the implementation process; and

d) Analyze process impacts to current Department of IT Team staffing and allocate resources appropriately to ensure additional implementation process requirements do not overly burden existing staff workload. (Priority 1)

Recommendation #3

The Department of Information Technology (DoIT) should maintain a central repository to track current system information to establish controls to maintain current system documentation. Additionally, DoIT should analyze this process impact to current IT Team staffing and allocate resources appropriately to minimize impact to their operations. This repository should:

a) Track Information System Data from cradle to grave in a centralized, searchable, tracking repository system; while DoIT is automating this process, they should record this information using available resources; and

b) Integrate with the system implementation process data created during the implementation phase. (Priority 1)

Recommendation #4

The Chief Information Officer (CIO), working with Chief Operating Officer (COO), should develop a training program for system implementations executive project management within the City's training application, based on best practices, to ensure project management are sufficiently aware of best practices embedded into the City's information system implementation process prior to acquiring new systems. (Priority 2)

Conclusion

The Development Services Department (DSD) provides review, permit, inspection, and code enforcement services for private and public development projects throughout the City of San Diego (City) to ensure healthy, safe, and livable neighborhoods. DSD also serves as the administrative agent, reviews and approves applications, issues permits and collects fees, for several other departments that play a role in the City's development and permitting process. DSD relies heavily on their current information system, which they are in the process of replacing, to provide these services.

We identified weaknesses in the implementation governance that has significantly increased the cost and implementation timeline for replacing the existing system. These weaknesses exist throughout the City's Information System Governance of System Implementations. We made four recommendations to address these weaknesses and management agreed with all the recommendations.

Our initial audit scope included assessing implementation risk to ensure that key risks to the project addressing auditor recommendations are mitigated; however, we require the system implementation to be completed to complete this objective. The system implementation is now scheduled for completion in 2020, and as a result, this portion of our audit will be addressed through the standard recommendation follow-up process for the remaining outstanding recommendations.

Recommendations

Recommendation #1

The office of the Chief Operating Officer (COO) should develop an Administrative Regulation (AR) defining the authority of the Chief Information Officer (CIO). Specifically, the AR should provide the CIO with sufficient authority to define and enforce Enterprise IT Governance in accordance with standards across the entire user environment of the City through the information system lifecycle, including the procurement, implementation, maintenance, and retirement of information systems. (Priority 1)

Recommendation #2

The Chief Information Officer (CIO) should expand their System Implementation Governance model to facilitate best practice system implementations for City Departments. This model must meet COBIT 5's Build, Acquire, and Implement Domain requirements to ensure compliance with best practice. Specifically, the CIO should:

a) Provide required steps to implement a new system that cannot be bypassed;

b) Further develop guidance for each phase of a system implementation appropriate to its scope and impact to the City;

c) Track alignment of business IT controls and enterprise IT controls throughout the system development lifecycle with a high-level review at key points in the implementation process; and

d) Analyze process impacts to current Department of IT Team staffing and allocate resources appropriately to ensure additional implementation process requirements do not overly burden existing staff workload. (Priority 1)

Recommendation #3

The Department of Information Technology (DoIT) should maintain a central repository to track current system information to establish controls to maintain current system documentation. Additionally, DoIT should analyze this process impact to current IT Team staffing and allocate resources appropriately to minimize impact to their operations. This repository should:

a) Track Information System Data from cradle to grave in a centralized, searchable, tracking repository system; while DoIT is automating this process, they should record this information using available resources; and

b) Integrate with the system implementation process data created during the implementation phase. (Priority 1)

Recommendation #4

The Chief Information Officer (CIO), working with Chief Operating Officer (COO), should develop a training program for system implementations executive project management within the City's training application, based on best practices, to ensure project management are sufficiently aware of best practices embedded into the City's information system implementation process prior to acquiring new systems. (Priority 2)

Appendix A: Definition of Audit Recommendation Priorities

DEFINITIONS OF PRIORITY 1, 2, AND 3

AUDIT RECOMMENDATIONS

The Office of the City Auditor maintains a priority classification scheme for audit recommendations based on the importance of each recommendation to the City, as described in the table below. While the City Auditor is responsible for providing a priority classification for recommendations, it is the City Administration's responsibility to establish a target date to implement each recommendation taking into consideration its priority. The City Auditor requests that target dates be included in the Administration's official response to the audit findings and recommendations.

Priority Class[8]	Description
1	Fraud or serious violations are being committed. Significant fiscal and/or equivalent non-fiscal losses are occurring. Costly and/or detrimental operational inefficiencies are taking place. A significant internal control weakness has been identified.
2	The potential for incurring significant fiscal and/or equivalent non-fiscal losses exists. The potential for costly and/or detrimental operational inefficiencies exists. The potential for strengthening or improving internal controls exists.
3	Operation or administrative process will be improved.

[8] The City Auditor is responsible for assigning audit recommendation priority class numbers. A recommendation which clearly fits the description for more than one priority class shall be assigned the higher priority.

Appendix B: Objectives, Scope, and Methodology

Objectives

In accordance with the City Auditor's Fiscal Year (FY)2016 through FY2019 IT Audit Work Plan, we conducted an Informational Technology (IT) audit of the Accela Permitting SaaS Implementation. We performed this audit to ensure that the implementation followed standards as defined by COBIT 5 and informed by the lessons learned from the SAP implementation to reduce the likelihood of project delays, cost overruns, or a failed implementation. Additionally, we reviewed the implementation to ensure that it addressed prior audit recommendations for the Project Tracking System (PTS). The overall objectives were to: 1) Assess Pre-Implementation Controls to Ensure that the Project Risks are Appropriately Mitigated through Planning; and 2) Assess Implementation Risk to ensure that key risks to the project addressing auditor recommendations are mitigated.

Scope and Methodology

Our overall audit scope included recommendations from our FY2012 The Performance Audit of the Development Services Department's Project Tracking System and FY16 Performance Audit of the Code Enforcement Division. We tested various components during their implementation phases between September 2016 and October 2018. Specifically,

To assess pre-implementation controls to ensure that the project risks are appropriately mitigated through planning, we:

- Interviewed Department and Project Management and Staff;
- Reviewed contractual documentation;
- Reviewed available system and process documentation;
- Reviewed staffing models and availability strategies;
- Reviewed available project definition documentation for sufficiency;
- Reviewed pre-implementation deliverables; and
- Reviewed approvals for pre-implementation deliverables.

To assess implementation risk to ensure that key risks to the project addressing auditor recommendations are mitigated, we:

- Interviewed Department and Project Management and Staff;
- Reviewed Change Orders to assess their impact to the project and its deliverables;
- Evaluated project management strategies and implementation;
- Assessed financial impact of project delays and modifications; and
- Assessed deliverable impact of project modifications.

Internal Controls Testing

Our internal controls testing was limited to controls related to the implementation and project management necessary to successfully implement the Accela platform as a replacement to DSD's PTS, and to ensure the final product met the requirements defined in our recommendations. Specifically, we tested internal controls around system implementation procurement and selection processes, pre-implementation, and implementation of the software solution.

Compliance Statement

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. COBIT 5 IT Governance framework in addition to the National Institute of Standards and Technology framework were also utilized for planning and testing during the audit.

Appendix C: Accela System Implementation Overview & Lessons Learned from SAP Implementation

Phase	Associated Implementation Practices	Purpose of Practice	Lessons Learned from the SAP Implementation
Pre-Procurement	Business Case Identification & Review	Ensure that the software is required and aligned with business strategy/ goals/ objectives.	Business case was documented and approved; this stage was only partially in scope for the auditor assessment of the implementation.
Pre-Procurement	Business Process Re-Engineering (BPR)/ (Documenting, Analyzing and Streamlining Processes into new system)	Ensure that processes are documented and analyzed for efficiency and effectiveness prior to system selection. Business can then confirm compatibility with selected system and modify process to best fit with the selected system. Additionally, all user departments can be identified, as well as their current and anticipated use of the system to streamline the implementation of the new system	The City implemented its Enterprise Resource Planning (ERP) system without performing a BPR process prior to implementing the system and instead decided to document and analyze the City's processes during the implementation design phase to save time. As a result, the implementation was consistently pushed back and ultimately had to go through multiple reboots to save the project due to challenges encountered with documenting current processes and building them into SAP.
Pre-Procurement	Requirements Definitions	Define the core functionality that the new system will need to facilitate.	The requirements documentation was managed only at a high level prior to procurement with the assumption that more detailed requirements would be identified during the implementation. This would not have been an issue if the Citywide processes were documented and analyzed at the previous/partner stage of implementation; however, the as-is processes were not documented, which resulted in project delays, increased costs and ultimately a smaller project implementation scope.

Phase	Associated Implementation Practices	Purpose of Practice	Lessons Learned from the SAP Implementation
Procurement	Bid Process/ Acquire Software / Define contractually required product and services	Ensure the City receives the best deal possible on the software an implementation. Define responsibilities, deliverables, timelines and recourse to ensure that the procuring party and hired party have definitions of expectations to safeguard both sides.	Numerous challenges arose in poorly defined or unenforceable areas in the contract; while others, such as the design approval process, were not adhered to. Further, the contract did not provide safeguards to ensure that the personnel with the necessary institutional knowledge would provide the requisite time to document the as-is processes needed to define how the system would work This further compounded the impact of the decision to not document the as-is processes prior to implementation.
Implementation	Design Specifications	Build the requirement definitions and streamlined processes into the blueprints for the new system.	The SAP implementation delays were consistently noted at this point due to the lack of documentation of the current processes and unavailability of the staff with institutional knowledge at critical stages. Further, as a result of these project delays and the final reboot, the procurement functionality of SAP was partially sidelined and not fully implemented. This resulted in challenges continuing to the present.

Source: OCA generated based on SAP Implementation Audit Lessons Learned.

Appendix D: Review of the Accela System Implementation

Project Phase	Implementation Phase	Review Activity	Purpose of Review
Pre-Procurement	**Requirements Gathering**	System Requirements Definitions	Confirm that requirement definitions include key parties requirements and address auditor concerns
Pre-Implementation	**Process Analysis/ Business Process Reengineering**	As-Is Process Documentation	Confirm that processes that will be designed into the system are documented and available for implementation team evaluation and "to-be" process evaluation
Pre-Implementation	**Procurement**	The Contract SOW & Relevant Exhibits	Confirm contractually required components address auditor recommendations
Implementation	**To-Be process analysis**	Design Specifications	Ensure that designed components meet contractual requirements and address auditor recommendations
Implementation	**Build/ Integration Testing**	Design Changes	Confirm implemented design specifications have not been significantly modified during build & testing of system
Implementation	**Data Migration**	Data Migration Strategy	Confirm data migration strategy follows best practices
Implementation	**User Acceptance Testing**	User Acceptance Testing Plan & Participants List	Confirm that all impacted parties are involved in application testing
Implementation	**User Acceptance Testing**	User Acceptance Testing Sign-off	Confirm that all impacted parties have signed off on application testing

Source: OCA generated based on Standard Implementation Practices.

Appendix E: Accela Audit Work Program

Objective Description	Risk Description	Control Description / Best Practice	Testing Summary Sheets Description (Review Activity phase)
Assess Pre-Implementation Controls to Ensure that the Project Risks are Appropriately Mitigated through Planning	Pre-implementation planning fails to mitigate risks to implementation timelines and unnecessarily increases budget	The City (management) ensure that key personnel are available at least full-time during analysis and part-time during the technical implementation stage. (Contract Exhibit1, pg4) Identify business and IT resource needs for the project and clearly map appropriate roles and responsibilities, with escalation and decision-making authorities agreed on and understood. Identify required skills and time requirements for all individuals involved in the project phases in relation to defined roles. Staff the roles based on available skills information (e.g., IT skills matrix). (COBIT BAI01.12)	Ensure knowledgeable staff are available for as-is and to-be design phase. (As-is process documentation) Recommendations: 12-015 #01 12-015 #02 12-015 #13 16-006 #12
		The City (management) ensure that key stakeholders within the enterprise and IT agree on and accept the requirements for the project, including definition of project success (acceptance) criteria and key performance indicators (KPIs). (Cobit BAI01.07)	Ensure requirements gathering occurred and is approved by key stakeholders and include components to address auditor recommendations. (Systems requirements definitions) Recommendations: 12-015 #01 12-015 #02 12-015 #13 16-006 #12

	Pre-implementation planning fails to mitigate risks resulting in the failure to deliver planned services and fails to address previous audit recommendations	Define and document the programme plan covering the project, including what is needed to bring about changes to the enterprise; services; business processes; people skills and numbers; relationships with stakeholders, customers; technology needs; and organizational restructuring required to achieve the programmes expected enterprise outcomes. (Cobit BAI01.04)	Ensure process as-is documentation is available to implementation team. (As-is process documentation) Recommendations: 12-015 #01 12-015 #02 12-015 #13 16-006 #12
		Confirm acceptance of key aspects of the requirements, information controls, legal and regulatory compliance, auditability, operability and usability, and supporting documentation. (Cobit BAI02.01)	Confirm the requirements definitions address auditor concerns. (Systems requirements documentation) Recommendations: 12-015 #01 12-015 #02 12-015 #13 16-006 #12
Assess Implementation Risk to ensure that key risks to the project addressing auditor recommendations are mitigated.	System implementation fails to meet timelines and unnecessarily increases budget	The City (management) ensure that key personnel are available at least full-time during analysis and part-time during the technical implementation stage. (Contract Exhibit1, pg4) Identify business and IT resource needs for the project and clearly map appropriate roles and responsibilities, with escalation and decision-making authorities agreed on and understood. Identify required skills and time requirements for all individuals involved in the project phases in relation to defined roles. Staff the roles based on available skills information (e.g., IT skills matrix). (COBIT BAI01.12)	Ensure that key personnel with institutional knowledge of undocumented "as-is" processes are available to draft "to-be" specifications. (Design specifications) Recommendations: 12-015 #01 12-015 #02 12-015 #13 16-006 #12

		Management assesses the effect of any customizations made without formal design specifications to ensure overall functionality of solution is unaffected. (Cobit BAI03.05) Assess the impact of all solution change requests on the solution development, the original business case and the budget, and categorize and prioritize them accordingly. (Cobit BAI03.09) With the approval of stakeholders, maintain the project definition throughout the project, reflecting changing requirements. (Cobit BAI01.07)	Confirm changes undergo management review to ensure changes do not impact auditor recommendations or the delivery of planned services. (Design changes) Recommendations: 12-015 #01 12-015 #02 12-015 #13 16-006 #12
		Confirm that all test plans are approved by stakeholders, including business process owners and IT, as appropriate. Examples of such stakeholders are application development managers, project managers and business process end users. (Cobit BAI07.03)	Confirm that all impacted parties are involved in application testing (User acceptance testing plan and participants list) Recommendations: 16-006 #12
		Approve the acceptance with formal sign-off by the business process owners, third parties (as appropriate) and IT stakeholders prior to promotion to production. (Cobit BAI07.05)	Confirm that all impacted parties have signed off on application testing (User acceptance testing sign-off) Recommendations: 16-006 #12
		Plan business process, system and data conversion. (Cobit BAI07.02 - 9 Activities Listed) Management performs quality assurance of legacy data to ensure accurate transfer of data. (Contract Exhibit1, pg10)	Confirm data migration strategy follows best practices. (Data migration strategy) Recommendations: 12-015 #01 12-015 #02 12-015 #13 16-006 #12

	System implementation fails to deliver planned services and fails to address auditor recommendations	Establish a high-level design specification that translates the proposed solution into business processes, supporting services, applications, infrastructure, and information repositories capable of meeting business and enterprise architecture requirements. (Cobit BAI03.01) Assess and document the degree to which acquired solutions require adaptation of business process to leverage the benefits of the acquired solution. (Cobit BAI03.04) Classify data inputs and outputs according to enterprise architecture standards. Specify the source data collection design, documenting the data inputs (regardless of source) and validation for processing transactions as well as the methods for validation. Design the identified outputs, including data sources. (Cobit BAI03.02)	Ensure that designed components meet contractual requirements and address auditor recommendations. (Design specifications) Recommendations: 12-015 #01 12-015 #02 12-015 #13 16-006 #12
		Consider when the effect of cumulative customizations and configurations (including minor changes that were not subjected to formal design specifications) require a high-level reassessment of the solution and associated functionality. (Cobit BAI03.05)	Confirm cumulative design changes do not impact auditor recommendations or the delivery of planned services. (Design changes) Recommendations: 12-015 #01 12-015 #02 12-015 #13 16-006 #12

		Consider all relevant information control requirements in solution component integration and configuration, including implementation of business controls, where appropriate, into automated application controls such that processing is accurate, complete, timely, authorized and auditable. (Cobit BAI03.05) Configure acquired application software to meet business processing requirements. (Cobit BAI03.05)	Ensure that configured components meet contractual requirements and address auditor recommendations. (Design changes) Recommendations: 12-015 #01 12-015 #02 12-015 #13 16-006 #12

Source: OCA Audit Work Plan.

Appendix F: System Requirements Throughout the Development Process

1) Determine the strategic benefits of implementing the system either in productivity gains or in future cost avoidance, identify and quantify the cost savings of a new system, and estimate a payback schedule for costs incurred in implementing the system. Further, intangible factors such as readiness of the business users and maturity of the business processes will also be considered and assessed. This business case provides the justification for proceeding to the next phase.
2) Define the problem or need that requires resolution and define the functional and quality requirements of the solution system. This can be either a customized approach or vendor-supplied software package, which would entail following a defined and documented acquisition process. In either case, the user needs to be actively involved.
3) Based on requirements defined, prepare a request for proposal outlining the entity requirements to invite bids from prospective suppliers, in respect of those systems that are intended to be procured from vendors or solution providers.
4) Use the design specifications (from requirements) to begin programming and formalizing supporting operational processes of the system. Various levels of testing also occur in this phase to verify and validate what has been developed. This generally includes all unit and system testing and several iterations of user acceptance testing.
5) Establish the actual operation of the new information system, with the final iteration of user acceptance testing and user sign-off conducted in this phase. The system also may go through a certification and accreditation process to assess the effectiveness of the business application in mitigating risk to an appropriate level and providing management accountability over the effectiveness of the system in meeting its intended objectives and in establishing an appropriate level of internal control.
6) Capture and maintain core system documentation from the implementation centrally for future maintenance.
7) Update central system documentation as modifications occur to system configurations, versions, capabilities and other changes that impact the system over time.

Source: ISACA Software Development Life Cycle Phase Activities Overview.

THE CITY OF SAN DIEGO

M E M O R A N D U M

DATE: November 15, 2018

TO: Kyle Elser, Interim City Auditor, Office of the City Auditor

FROM: Jonathan Behnke, Chief Information Officer, Department of Information Technology

SUBJECT: Management's Response to the Performance Audit of Development Services' Accela Permitting System Implementation

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This memorandum is management's response to recommendations reported in the Performance Audit of Development Services' Accela Permitting System Implementation conducted by the Office of the City Auditor.

Recommendation #1
Ensure the Department of Information Technology has sufficient authority to Enforce IT Governance Best Practices

The office of the Chief Operating Officer (COO) should develop an Administrative Regulation (A.R.) defining the authority of the Chief Information Officer (CIO). Specifically, the A.R. should provide the CIO with sufficient authority to define and enforce Enterprise IT Governance in accordance with standards across the entire user environment of the City through the information system lifecycle, including the procurement, implementation, maintenance, and retirement of information systems. (Priority 1)

Management Response: Agree with Recommendation.

The office of the Chief Operating Officer will work with the Department of Information Technology (IT) and Strategic Technology Advisory Committee (STAC) to develop an A.R. to define the authority of the CIO and enforce Enterprise IT Governance. The A.R. will provide the authority required to enforce the IT Governance and STAC Governance processes that were developed with best practices from the Information Technology Infrastructure Library (ITIL) framework through the information system lifecycle.

Anticipated Completion: June 30, 2019.

Recommendation #2
Implement System Procurement and Implementation Best Practices in Compliance with COBIT 5 Procurement and Implementation Requirements

The Chief Information Officer (CIO) should expand their System Implementation Governance model to facilitate best practice system implementations for City departments. This model must meet COBIT 5's Build, Acquire, and Implement Domain requirements to ensure compliance with best practice. Specifically, the CIO should:

a. Provide required steps to implement a new system that cannot be bypassed;
b. Further develop guidance for each phase of a system implementation appropriate to its scope and impact to the City;
c. Track alignment of business IT controls and enterprise IT controls throughout the system development lifecycle with a high-level review at key points in the implementation process; and
d. Analyze process impacts to current Department of IT Team staffing and allocate resources appropriately to ensure additional implementation process requirements do not overly burden existing staff workload. (Priority 1)

Management Response: Agree with Recommendation.

Over the past two years, the CIO has implemented an IT governance model for system implementation aligned with the ITIL framework, which is the industry standard for aligning IT services with the needs of businesses. As mentioned in the audit report, this includes replacement of the Information Technology Business Leadership Group (ITBLG) with the Strategic Technology Advisory Committee (STAC) and creation of four governance gates that span the system implementation process. These gates review technology alignment, project planning, architecture design, and deployment readiness. The governance model is continually evaluated for effectiveness and undergoes continuous improvement. In light of this audit recommendation, the Department of IT has aligned the ITIL framework used in the current IT governance model to the COBIT 5 framework and will ensure all functions are covered.

Anticipated Completion: April 30, 2019.

Recommendation #3
Track System Information from Cradle to Grave in a Central Repository

The Department of Information Technology (DoIT) should maintain a central repository to track current system information to establish controls to maintain current system documentation. Additionally, DoIT should analyze this process impact to current IT Team staffing and allocate resources appropriately to minimize impact to their operations. This repository should:

a. Track Information System Data from cradle to grave in a centralized, searchable, tracking repository system; while DoIT is automating this process, they should record this information using available resources; and
b. Integrate with the system implementation process data created during the implementation phase. (Priority 1)

Management Response: Agree with Recommendation.

The Department of IT (DoIT) will evaluate options for an automated repository that integrates with system implementation processes and data. As an interim measure, DoIT will create a file-share location where IT staff and vendors can store blue print documentation and data. In addition, DoIT will enhance the IT governance model to include a validation check with the implementation team when new systems are developed and/or when existing systems are updated.

Anticipated Completion:

- Interim Manual Process for System Documentation: April 30, 2019.
- Automated Repository Solution: September 30th, 2020, to allow for an RFP process, budget requests for funding, and implementation.

Recommendation #4
Provide Training for Executive Management Responsible for Owning and Overseeing IT Projects

The Chief Information Officer (CIO), working with Chief Operating Officer (COO), should develop a training program for system implementations executive project management within the City's training application, based on best practices, to ensure project management are sufficiently aware of best practices embedded into the City's information system implementation process prior to acquiring new systems. (Priority 2)

Management Response: Agree with Recommendation

The Department of IT has already begun developing the training for executive sponsors and will provide it on the City's training portal. The Department of IT will also update the IT governance model to include a communication to the executive sponsor with the training information.

Anticipated Completion: June 30th, 2019.

Thank you,

Jonathan Behnke
Chief Information Officer

JB/jl

cc: Honorable City Attorney, Mara Elliot
Andrea Tevlin, Independent Budget Analyst
Kris Michell, Chief Operating Officer
Stacy LoMedico, Assistant Chief Operating Officer
Ronald H. Villa, Acting Assistant Chief Operating Officer
Rolando Charvel, Chief Financial Officer
Johnnie Perkins, Deputy Chief Operating Officer, Infrastructure/Public Works
Erik Caldwell, Interim Deputy Chief Operating Officer, Smart & Sustainable Communities
Robert Vacchi, Deputy Chief Operating Officer, Neighborhood Services
Chief David Nisleit, Chief of Police
Chief Colin Stowell, Fire Chief, Fire-Rescue
Elyse Lowe, Director, Development Services Department