

AUDIT REPORT

Technology Services

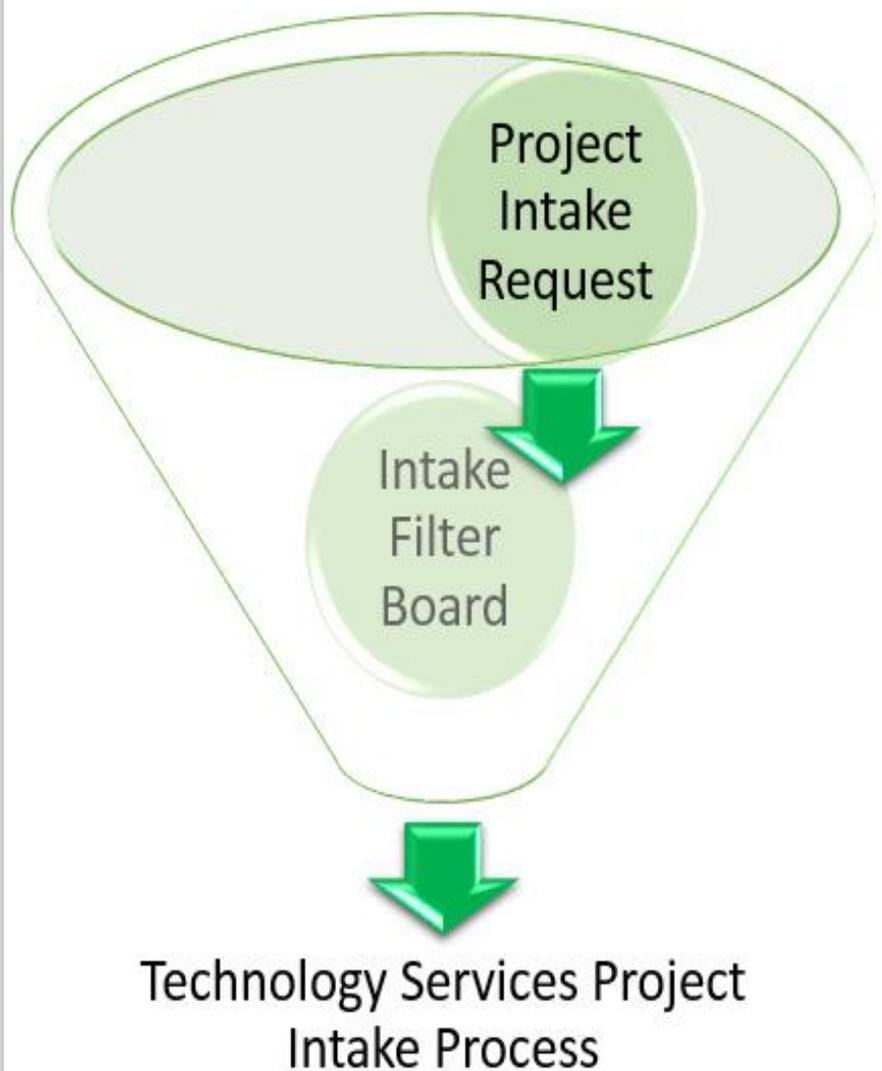
IT Project Intake

August 2017

**Office of the Auditor
Audit Services Division
City and County of Denver**



**Timothy M. O'Brien, CPA
Denver Auditor**



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Report year: **2017**



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August 17, 2017

AUDITOR'S REPORT

We have completed an audit of the City and County of Denver's information technology (IT) project intake process. The objective of the audit was to determine the efficaciousness of projects that go through the IT project intake process prior to being accepted for implementation.

As described in the attached report, our audit indicated that the IT project intake process needs fine tuning to fully mature the policies, procedures, and tools that support projects, which are accepted by Technology Services (TS). Additionally, the current policies and procedures have not been signed by individuals in positions of authority, such as owners of the intake process and members of TS executive management to give credence to the project acceptance process.

Through a more fully developed intake process, TS will be able to ensure that agencies understand what to expect when requesting assistance from TS with their projects. This will create a more collaborative environment so that the TS Program Management Office and requesting agencies have a mutual understanding of project expectations.

This performance audit is authorized pursuant to the City and County of Denver Charter, Article V, Part 2, Section 1, *General Powers and Duties of Auditor*, and was conducted 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.

We extend appreciation to TS, the Program Management Office, and the personnel who assisted and cooperated with us during the audit.

Denver Auditor's Office

A handwritten signature in black ink, appearing to read "Timothy M. O'Brien".

Timothy M. O'Brien, CPA
Auditor



IT Project Intake August 2017

Objective

The objective of the audit was to determine the extent to which Technology Services effectively manages all aspects of its information technology (IT) project intake process, including compliance, requirements, and documented policies and procedures, which should support the intake process.

Background

Denver Technology Services (TS) is the primary IT department for the City and County of Denver (City), providing many different services for City employees and residents, such as emergency (911) and non-emergency (311) telephone services. The department also provides technology infrastructure, solution development and IT support for all City departments. The Program Management Office (PMO) within TS oversees projects from initiation through to completion. The number of project intake requests has been increasing. In 2015 and 2016, the PMO handled 140 and 177 project-intake requests, respectively. In the same period, the PMO formally oversaw nearly 100 projects.

REPORT HIGHLIGHTS

Highlights

Our review of the IT project intake process identified three areas for improvement.

- **Policies and Procedures**

- The TS Intake Filter Charter does not align with the process flow listed at the end of the document.
- Anticipated start and end dates listed for individual project charters do not reflect an accurate representation of the timeframes.
- There is no mandate to ensure that all project requests submitted by agencies follow the project intake process.
- There are no published IT criteria specified for the project intake process.

- **Lack of Authority**

- There is no evidence that the TS Intake Filter Charter and the Intake Purpose and Process document have been approved by TS executive management or the process owner.
- Evidence of approval for individual project charters and individual project closure documents could not be provided for the audited samples.
- The individual project charter template is outdated.

- **Project Toolset**

- The current project management tools do not offer the functionality needed to manage IT project intake requests and current projects.
- Evidence of documentation is not retained in a central repository.

We offer nine recommendations to TS to enhance the maturity of the IT project intake process.

For a copy of this report, visit www.denvergov.org/auditor or contact the Auditor's Office at 720.913.5000.

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BACKGROUND

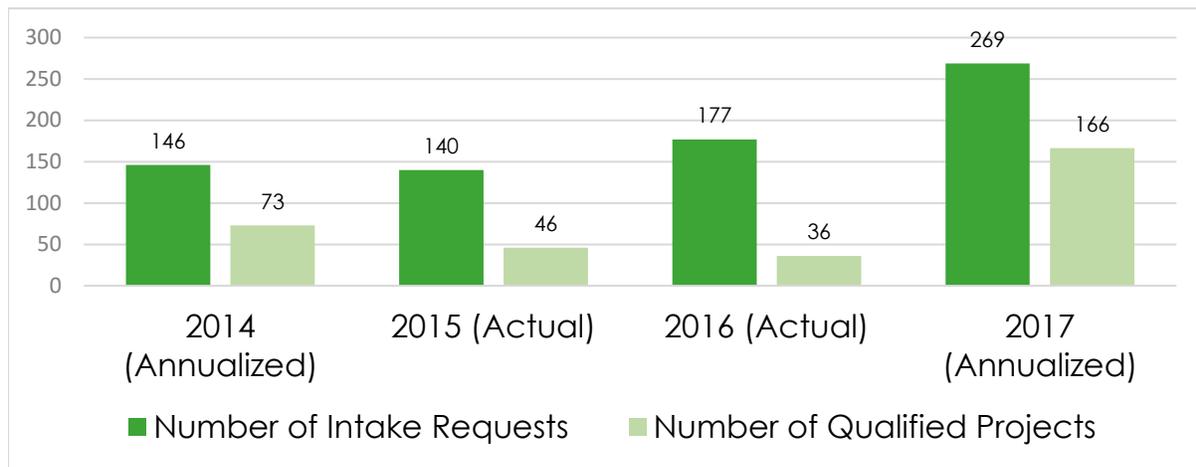
Information Technology Project Intake

An information technology (IT) project is a temporary collaborative effort designed to create a unique product, service, or solution related to technology. IT projects are temporary because each project has a definite beginning and end, when the new product, service, or solution is up and running. Projects can be complex, such as a replacement of an accounting system that involves multiple teams, third-party vendors, and different technologies, with the project duration lasting several months or even years. Alternatively, simple IT projects, such as enabling a feature within an established application, can be completed in a brief period and require few resources. Because IT projects can be expensive, it is important that they are completed as effectively and efficiently as possible.

IT projects are often initiated by an agency that is seeking a solution to a problem. These problems generally stem from a business need. For example, an increasing number of 911 call centers are modernizing their operations to accept text messages, and wireless providers are required to offer 911 texting capabilities. In 2014, the Federal Communications Commission (FCC) adopted rules requiring text messaging providers to enable the hearing-impaired public to text 911 in an emergency. Recognizing the growing use of text-to-911 nationwide, the City's Department of Safety sought an IT solution and submitted a project request through TS's IT project intake process.

The City first initiated the IT project intake process approximately six years ago to manage IT project requests more efficiently. Prior to instituting a formalized process, agencies would at times initiate projects directly through the City's purchasing department. Without an assigned TS Project Manager, these purchases often resulted in cost overages, project delays, and security vulnerability issues. Since adoption, the intake process has been maturing and evolving, becoming more efficient and effective. Agencies that follow the intake process have a better success rate of completing projects on time and within budget. Figure 1 illustrates the number of project intake requests that were initiated from 2014 through 2017 and the number of requests that were carried forward to become qualified projects.

FIGURE 1. Number of Project Intake Requests and Number of Qualified Projects from 2014 – 2017



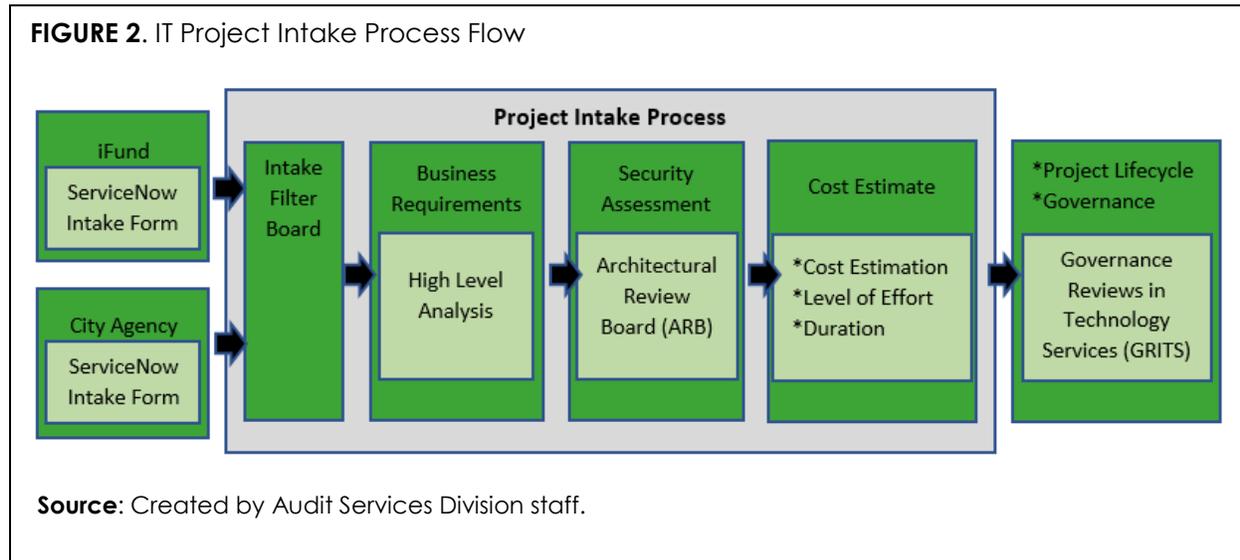
Source: Created by Audit Services Division staff.

IT Project Intake Requests May Come from an Agency or the Innovation Fund

There are two types of project intake requests: those that come from agencies and those that come from the City's Innovation Fund (iFund). Agency project requests are initiated by an agency representative and submitted through a City system called ServiceNow. Once submitted, the request is reviewed by the Intake Filter Board consisting of representatives from TS. The board confirms funding availability, overall objectives, and the path the request will take to determine whether it will become a qualified project. If the Intake Filter Board approves the project request to move forward, further reviews are performed by TS personnel to analyze the IT security requirements and architectural solutions to ensure that the project conforms to City IT requirements. During this stage of the project, a proposed project timeline is also reviewed for scheduling purposes and to ensure adequate resource assignments. If a project is approved after completing the intake process, it moves into the project lifecycle process the result of which is implementation.

IT projects that are funded by the iFund enter the process in a slightly different way. The iFund was designed to fund improvement projects that would measurably improve operations and service delivery within the City. The iFund is chaired by the Executive Director of the Budget office, Chief Information Officer from Technology Services, and a Mayor's office representative. It is comprised of eleven standing committee members that are responsible for reviewing and approving proposed iFund projects. Members of the iFund include representatives from the Mayor's Office, the Budget and Management Office, the City Attorney's Office, and the Departments of Finance, Technology Services, Human Resources, Community Planning and Development, Human Services, Parks and Recreation, Public Works, and Safety. Given the large number of project requests and limited iFund dollars, iFund Committee members extensively review and approve funding for projects based on specific criteria. Once an iFund request is approved by the iFund for funding, Technology Services submits a project intake request and goes through the same intake process as a regular agency request. However, because iFund dollars are already secured,

available funding is not assessed by the Intake Request Board. Figure 2 illustrates the IT project intake process flow.



IT Project Intake Is Essential for a Successful IT Project Lifecycle

The established global standards for project management are called the Project Management Body of Knowledge (PMBOK). This is a collection of processes, best practices, terminologies, and guidelines that are accepted as a framework within the project management industry. Once a request is approved through the intake process, there are five phases of the IT Project Management Lifecycle, as follows:

- **Initiation Phase** – Defines and authorizes the project.
- **Planning Phase** – Defines the course of action required to attain the objectives and scope.
- **Executing Phase** – Integrates the resources required to carry out the project management plan.
- **Monitoring Phase** – Regularly measures and monitors progress to identify variances from the project management plan.
- **Closure Phase** – Formalizes acceptance of the project and ensures that deliverables have been achieved.

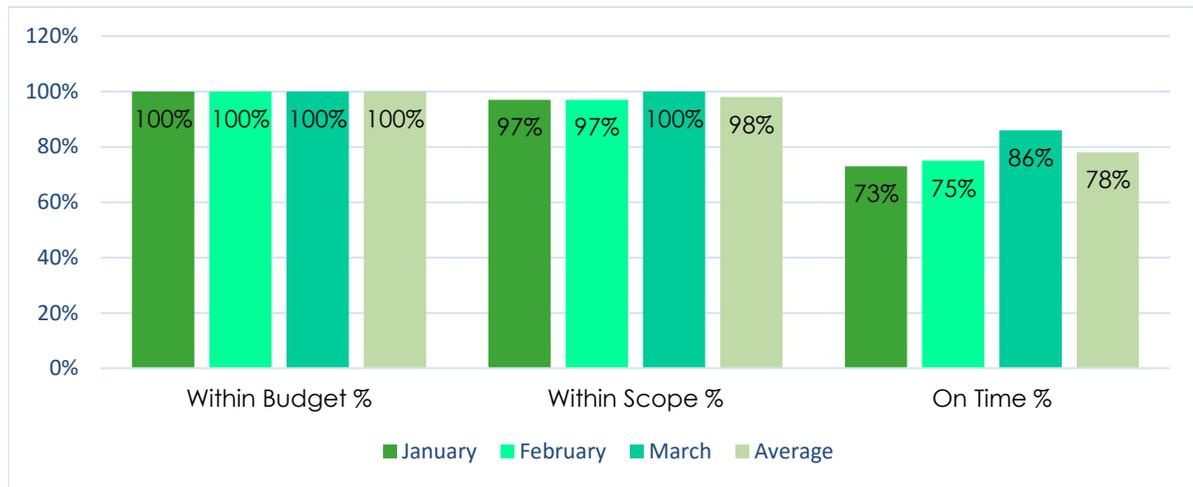
Steps taken during the project intake process are used to inform these phases of the project lifecycle.

Role of the Program Management Office

Technology Services reviews the status of projects weekly and reports status to City management monthly. During this time, individual project metrics are reviewed to determine whether projects are within budget, within scope, and on time. If the review reveals any anomalies or characteristics that might indicate that the project is about to go over budget, for example, the PMO works directly with the project sponsors to develop a solution. In the first quarter of 2017, on average, 100 percent of projects were completed within their budgeted allotment, 98 percent stayed within

their scope, and 78 percent were delivered on time. Figure 3 illustrates these metrics for projects in the first quarter of 2017.

FIGURE 3. Metrics for Projects in Q1 2017



Source: Created by Audit Services Division staff.

Technology Services utilizes a multitude of tools to manage their intake requests and projects. ServiceNow, was originally designed as an Information Technology Service Management system to handle technology issues, is used as a repository to store documents related to projects, and the Program Management office is currently using the Project Management module in Service Now as well.¹ At the end of March 2017, Microsoft SharePoint became the primary repository for all projects. Additionally, Microsoft Excel and Project are used to manage projects.

¹ SupportNow is the web-based user interface to the customer service module of ServiceNow. SupportNow allows City and County of Denver users to request projects, report and track technology related issues.

OBJECTIVE

The objective of the audit was to test the efficacy of the City's IT project intake process. This included a review of the policies and procedures, compliance with the intake process, administration of the intake process, and the review of security requirements for project requests.

SCOPE

The scope of this audit was limited to a review of the TS project intake process. We evaluated a sample of 5 accepted and completed projects from a total population of 27 from 2016 and 2017, excluding iFund projects.

METHODOLOGY

To achieve the objectives of the audit, we employed the following tools and techniques:

- Reviewing prior Audit Service Division audit reports and relevant reports from other audit shops
- Reviewing the policies and procedures from TS project intake phase and project lifecycle
- Conducting interviews with project management personnel within TS
- Inspecting a sample of projects that have been through the project intake process to conduct a post-implementation review
- Reviewing qualifications of project managers hired by TS to perform project management duties
- Inquiring about whether projects involving sensitive information are reviewed by the TS Information Security team
- Determining whether project timelines, quality metrics, scope, benefits, and requirements are identified in projects
- Reviewing project-specific documents for compliance with Project Management Office (PMO) requirements
- Analyzing metrics related to projects that were initiated with the intake process
- Consulting best practice standards, including the Project Management Body of Knowledge (PMBOK)
- Reviewing and assessing project documentation
- Evaluating a sample of projects for documentation completeness and accuracy
- Inspecting the capabilities of the ServiceNow Information Technology Service Management system relative to the project intake process.

FINDING

Opportunities Exists to Improve the Maturity of the Information Technology Project Intake Process

In assessing whether the City's Technology Services agency, has an effective and efficient information technology (IT) project intake process, auditors identified improvements that have been made since the re-engineering of the process over five years ago. However, the audit also identified three areas where Technology Services can further evolve the intake process, which would increase the likelihood of successful project outcomes and resource stewardship. First, we found that the IT project intake policies and procedures and accompanying project documents are not up to date. Second, evidence that projects are approved by management is not consistently maintained. Third, the PMO does not have a robust project management tool by which to effectively manage projects.

Policies and Procedures Need Improvement

In assessing the policies and procedures that are used to manage the IT project intake process, we determined that they have not been formalized, have not been updated to reflect changes in practice, and are not always being used by agencies. Furthermore, the individual project charters that are used to capture important information about each potential project include unnecessary information that should be captured in a different document.

No Evidence of Management Sign-Off – The Intake Filter Charter, which was created by Technology Services, has not been authorized by TS management or the owner of the project intake process (Director of Application Planning and Analysis). We also found no evidence of formal approval of the Purpose and Process document, which details the steps of the IT project intake process. Additionally, the Purpose and Process document, which was created during the audit, has not been disseminated to agencies and thus has not likely been available for use by agencies. In the absence of formal documented review and approval on these key documents, agencies may not view the intake process as being mandatory. When agencies view a process as optional, they are more likely to try to bypass the process and make an IT system decision without the expert guidance of the Technology Services.

Sections within the Intake Filter Charter Do Not Align – In addition to not being signed, we found that some of the content within the Intake Filter Charter is conflicting. The document includes a process flow diagram to show the steps of the process, but we found that those steps do not align with the process as explained in the first part of the document. When asked about the discrepancy, PMO personnel explained that the process was changed after the document was originally created and the flow diagram was updated accordingly, but the rest of the document was not.

Some Agencies Are Bypassing the Project Intake Process – During our audit work, we found that some agencies bypassed the IT project intake process. Project Management staff reported that agency representatives were concerned that following the process would take too much time. Executive Order 18 requires TS to approve technology purchases, however it is difficult for Technology Services to mandate that an agency follows the intake process since this Executive Order does not specify project intake requests.

Agencies Are Not Fully Informed of Intake Process Requirements – As a potential project moves through the intake process, various subject matter experts from TS assess the project request for compatibility with the City's IT infrastructure and security requirements. If any concerns arise, the project may not be passed for implementation. Although this step in the process appears to be successfully identifying potential incompatibilities, the criteria being used to make those determinations is not available to agencies when initiating a project request. Not having these criteria available at the outset of the intake process can cause unnecessary delays.

Individual Project Charters Include Dates That Are Not Followed – In addition to reviewing the Intake Filter Charter, we also reviewed individual project charters, which authorize the beginning of the project to proceed. The template used to create these individual charters includes a field to assign anticipated start and end dates. However, our review determined that these dates were inaccurate based on the timelines that the projects went through, and they also conflicted with other required project documentation. Ultimately, the audit team determined that it would be more valuable and less confusing to estimate a project duration in an individual project charter rather than assigning dates that end up being arbitrary.

Best Practices Emphasize the Importance of Policy, Procedure, and Documentation

Practitioners in the field of project management promote a process known as Project Quality Management, which ensures that all project activities necessary to design, plan, and implement a project are effective and efficient. Undertaking Project Quality Management includes creating and following policies and procedures so that the project will satisfy the needs for which it was undertaken. Best practices in IT project management emphasize the importance of documenting formal processes. The Project Management Body of Knowledge (PMBOK) suggests that project documentation should be updated and signed off on a regular basis.

IT project intake policies and procedures need to be followed by both the Technology Services and City agencies, but agencies cannot follow procedures that they do not know exist. Therefore, it is important for the IT Project Filter Committee to make them more readily available. These documents should be published where agencies can easily access the information to gain an understanding of what information is required when asking for assistance from the Intake Filter Board. Accordingly, we make several recommendations to enhance the policies and procedures surrounding the IT project intake process.

RECOMMENDATION 1.1

The Director of Application Planning and Analysis should update the Technology Services Intake Filter Charter and the process flow to align with one another.

Agency Response: Agree – October 31, 2017

RECOMMENDATION 1.2

The Program Management Office Director should ensure that project scheduling is referenced as a separate document and not incorporated into each individual project charter. Each individual project charter should only reference the project milestones and the anticipated duration to achieve them.

Agency Response: Agree – Completed

RECOMMENDATION 1.3

The Technology Services Intake Filter Board should consider creating a procedural memorandum attachment to Executive Order 18 to require that all technology project needs, and technology purchases made by the City be reviewed and approved by Technology Services.

Agency Response: Agree – October 31, 2017

RECOMMENDATION 1.4

The Technology Services Intake Filter Board should specify and publish the criteria they use for evaluating projects.

Agency Response: Agree – August 31, 2017

RECOMMENDATION 1.5

The Technology Services Intake Filter Board should ensure the Technology Services Intake Filter Charter and the Intake Purpose and Process documents are signed by appropriate management.

Agency Response: Agree – August 11, 2017

Documentation Lacks Authority

Best practices suggest that any governing policy or procedure be signed by management. In the case of the Intake Filter Charter and the Purpose and Process document, having these signed by the appropriate authority within TS would give the Project Intake Filter Board the authority necessary to carry out the intake process. We also determined that individual project charters and closure documents were lacking appropriate signature authority.

Individual Project Charters Lacked Signatures – In order for a project to be authorized to proceed, a signature approval within each project charter is required by three individuals: the Business Sponsor, the Agency Sponsor, and the PMO Director. Our audit found that all of the projects we

selected for testing were missing two of the three required approvals. In some projects, auditors were told that only verbal confirmation was communicated. However, we were unable to verify this due to insufficient documentation. We also found that all individual project charters include a line for signature approval by the City's Chief Information Officer. After inquiring about this fourth signature line, auditors were informed that this executive level position is not a required authorizer.

Closure Documents Lacked Signatures – In seeking to determine whether project objectives were achieved, we reviewed the closure documents for each project selected. A signature approval or email confirmation would represent that a project met all the acceptance criteria as defined in the individual project charter. For the five projects we selected for testing, we were unable to determine whether the project objectives were achieved because evidence of approval could not be obtained for all the stakeholders involved. We were informed by TS personnel that three of the five projects we tested involved either a verbal confirmation or did not have any evidence of a signature.

RECOMMENDATION 1.6

The Technology Services Program Management Office should ensure key documents such as the individual project charters and closure documents are signed by the appropriate authorized individuals.

Agency Response: Agree – Completed

RECOMMENDATION 1.7

The Technology Services Intake Filter Board and Director of Application Planning and Analysis should ensure that the Technology Services Intake Filter Charter and the Intake Purpose and Process documents and individual project charter template are updated to reflect the required authorizing individuals.

Agency Response: Agree – October 31, 2017

The Project Management Toolset Does Not Provide Robust Functionality

The PMBOK recommends the use of standardized automated tools. Technology Services utilizes a combination of tools including ServiceNow, SharePoint, Microsoft Project, and Microsoft Excel to meet the complex needs associated with project management. Collectively, these tools manage and house critical project documentation, the project lifecycle, metrics for program management, and individual project tracking documentation. However, auditors found that this combination of tools does not provide an automated comprehensive or collaborative solution. We found several examples of inefficiency and inconsistency.

ServiceNow Cannot Produce Desired Reports – The PMO indicated that the ServiceNow project management tool does not provide the reporting capabilities that are needed to create metrics and management reports. As a result, the PMO Managers duplicate the Project Managers efforts by updating the ServiceNow tool and then re-entering the same information into an Excel

spreadsheet that is used to create reports. This is a time-consuming effort. This manual process can also lead to discrepancies between statuses reported in the project management tool and the Excel-generated report. All status reports are updated on a weekly basis.

Project Documents Incomplete – The use of multiple tools also makes it more challenging to ensure that all project documents are completed and approved. During audit work, we identified some projects that were lacking one or more required documents. In addition, the templates that were used for the required project artifacts were not completed consistently. For example, in some project closure documents, Project Managers did not complete every section of the document to indicate project costs, deliverables, and completion times. The lack of consistent data in the project closure document can make analysis more difficult to determine whether a project met all stated objectives.

Approvals Lacking – Evidence of approvals could not be obtained from the ServiceNow project module for all sample projects selected by the auditor team. Technology Services indicated that approvals for project charters and project closure documents were difficult to record using ServiceNow because agencies did not have access to it because the licensing required for agency business partners to access the tool was cost prohibitive. Consequently, project managers obtained signatures on hardcopy documents, requested approval via email, or received verbal approvals during project meetings. This practice was reflected in the sample of projects we tested. Email approvals and an electronic copy of a signature were attached to the ServiceNow project record for two of the five projects in our sample.

Archived documentation is necessary to verify agreement between the PMO and agencies regarding project outcomes and objectives. In addition, without project documentation, it can be difficult to research and perform root cause analysis, which is needed when providing continuous support for projects.

The PMBOK suggests that policies should provide standardized guidelines that describe where all project information should reside. The PMBOK also supports communication management as a best practice, asserting that all documentation should be collected and stored centrally to ensure good communication throughout a project. We make two recommendations to this end.

RECOMMENDATION 1.8

The Program Management Office Director should implement a robust project management toolset with comprehensive functionality.

Agency Response: Agree – March 2018

RECOMMENDATION 1.9

As part of the project closeout, the Project Manager assigned to the project should ensure that all required project artifacts, as defined in the PMO Playbook, should be retained in the approved Project Management toolset.

Agency Response: Agree – Completed

RECOMMENDATIONS

We make the following recommendations to Technology Services to improve its project intake process.

- 1.1 **Technology Services Intake Filter Charter** – The Director of Application Planning and Analysis should update the Technology Services Intake Filter Charter and process flow to align with one another.

Auditee Response: Agree, Implementation Date – October 31, 2017

Auditee Narrative: Technology Services (TS) agrees with this recommendation. Since July 2017, TS engaged Grant Thornton Consulting firm to assess the end to end Intake and Project Governance process. TS intends to incorporate recommendations from this engagement into all associated processes and documentation, including the Intake Filter Charter.

- 1.2 **Project Scheduling** – The Program Management Office Director should ensure that project scheduling is referenced as a separate document and not incorporated into each individual project charter. Each individual project charter should only reference the project milestones and the anticipated duration to achieve them.

Auditee Response: Agree, Implementation Date - Completed

Auditee Narrative: TS has removed the reference to project milestone dates in the Project Charter and has replace with duration. The Project Schedule, created during the Planning Phase, is a separate document.

- 1.3 **Policy & Procedure** – The Technology Services Intake Filter Board should consider creating a procedural memorandum attachment to Executive Order 18 to require that all technology project needs, and technology purchases made by the City be reviewed and approved by Technology Services.

Auditee Response: Agree, Implementation Date – October 31, 2017

Auditee Narrative: TS will review Executive Order 18 and will consider the creation of a procedural memorandum.

- 1.4 **Information Technology Acceptance Criteria** – The Technology Services Intake Filter Board should specify and publish the criteria they use for evaluating projects.

Auditee Response: Agree, Implementation Date – August 31, 2017

Auditee Narrative: TS agrees and will publish the currently available evaluation criteria. These criteria will be updated as changes or additions are made.

- 1.5 **Authority of Process** – The Technology Services Intake Filter Board should ensure the Technology Services Intake Filter Charter and the Intake Purpose and Process documents are signed by appropriate management.

Auditee Response: Agree, Implementation Date – August 11, 2017

Auditee Narrative: TS agrees and will add formal signatures to the documentation that governs the Intake Process.

- 1.6 **Approvals of Key Documents** – The Technology Services Program Management Office should ensure key documents such as the individual project charters and closure documents are signed by the appropriate authorized individuals.

Auditee Response: Agree, Implementation Date - Completed

Auditee Narrative: TS agrees with this recommendation. The PMO has started conducting compliance reviews of project documentation to ensure appropriate approvals are in place and will continue to do so on an ongoing basis.

- 1.7 **Update Project Charter Template** – The Technology Services Intake Filter Board and Director of Application Planning and Analysis should ensure that the Technology Services Intake Filter Charter and the Intake Purpose and Process documents and individual project charter template are updated to reflect the required authorizing individuals.

Auditee Response: Agree, Implementation Date – October 31, 2017

Auditee Narrative: TS agrees and will ensure these documents are updated with appropriate approvals. Furthermore, the PMO has updated the signature lines in the individual project Charter template to reflect the appropriate approvers.

- 1.8 **Project Management Toolset** – The Program Management Office Director should implement a robust project management toolset with comprehensive functionality.

Auditee Response: Agree – March 2018

Auditee Narrative: TS agrees with the recommendation. While we already invested in a Portfolio and Project Management (PPM) system, it is acknowledged that it does not meet all of TS' requirements. We will conduct an analysis of the current PPM system to identify functionality gaps and determine the best approach to mitigate those gaps. Furthermore, TS will also look to implement any improvements to the current PPM system that are identified by the Grant Thornton Assessment.

- 1.9 **Document Repository** – As part of the project closeout, the Project Manager assigned to the project should ensure that all required project artifacts, as defined in the PMO Playbook, should be retained in the approved Project Management toolset.

Auditee Response: Agree – Completed

Auditee Narrative: TS agrees with this recommendation. As of June 1, 2017, all project managers use the PMO SharePoint site as the centralized repository for all project documentation.

AGENCY RESPONSE



Technology Services
201 West Colfax Avenue
Department 301
Denver, CO 80202

August 7, 2017

Auditor Timothy O'Brien, CPA
Office of the Auditor
City and County of Denver
201 West Colfax Avenue, Dept. 705
Denver, Colorado 80202

Dear Mr. O'Brien,

The Office of the Auditor has conducted a performance audit of the Information Technology intake process.

This memorandum provides a written response for each reportable condition noted in the Auditor's Report final draft that was sent to us on July 14, 2017. This response complies with Section 20-276 (c) of the Denver Revised Municipal Code (D.R.M.C.).

AUDIT FINDING 1

Opportunities Exist to Improve the Maturity of the Information Technology Project Intake Process

RECOMMENDATION 1.1		
Technology Services Intake Filter Charter – The Director of Application Planning and Analysis should update the Technology Services Intake Filter Charter and process flow to align with one another.		
Agree or Disagree with Recommendation	Target date to complete implementation activities (Generally expected within 60 to 90 days)	Name and phone number of specific point of contact for implementation
Agree	October 31, 2017	Chad Mitchell 720-913-4953

Narrative for Recommendation 1.1

Technology Services (TS) agrees with this recommendation. Since July 2017, TS engaged Grant Thornton Consulting firm to assess the end to end Intake and Project Governance process. TS intends to incorporate recommendations from this engagement into all associated processes and documentation, including the Intake Filter Charter.

RECOMMENDATION 1.2 Project Scheduling – The Program Management Office Director should ensure that project scheduling is referenced as a separate document and not incorporated into each individual project charter. Each individual project charter should only reference the project milestones and the anticipated duration to achieve them.		
Agree or Disagree with Recommendation	Target date to complete implementation activities (Generally expected within 60 to 90 days)	Name and phone number of specific point of contact for implementation
Agree	Completed	Andrea Denis 720-913-4810

Narrative for Recommendation 1.2

TS has removed the reference to project milestone dates in the Project Charter and has replace with duration. The Project Schedule, created during the Planning Phase, is a separate document.

RECOMMENDATION 1.3 Policy & Procedure – The Technology Services Intake Filter Board should consider creating a procedural memorandum attachment to Executive Order 18 to require that all technology project needs, and technology purchases made by the City be reviewed and approved by Technology Services.		
Agree or Disagree with Recommendation	Target date to complete implementation activities (Generally expected within 60 to 90 days)	Name and phone number of specific point of contact for implementation
Agree	October 31, 2017	Scott Cardenas 720-913-5236

Narrative for Recommendation 1.3

TS will review Executive Order 18 and will consider the creation of a procedural memorandum.

RECOMMENDATION 1.4 Information Technology Acceptance Criteria – The Technology Services Intake Filter Board should specify and publish the criteria they use for evaluating projects.		
Agree or Disagree with Recommendation	Target date to complete implementation activities (Generally expected within 60 to 90 days)	Name and phone number of specific point of contact for implementation
Agree	August 31, 2017	Chad Mitchell 720-913-4953

Narrative for Recommendation 1.4

TS agrees and will publish the currently available evaluation criteria. These criteria will be updated as changes or additions are made.

RECOMMENDATION 1.5 Authority of Process – The Technology Services Intake Filter Board should ensure the Technology Services Intake Filter Charter and the Intake Purpose and Process documents are signed by appropriate management.		
Agree or Disagree with Recommendation	Target date to complete implementation activities (Generally expected within 60 to 90 days)	Name and phone number of specific point of contact for implementation
Agree	August 11, 2017	Chad Mitchell 720-913-4953

Narrative for Recommendation 1.5

TS agrees and will add formal signatures to the documentation that governs the Intake Process.

RECOMMENDATION 1.6 Approvals of Key Documents – The Technology Services Program Management Office should ensure key documents such as the individual project charters and closure documents are signed by the appropriate authorized individuals.		
Agree or Disagree with Recommendation	Target date to complete implementation activities (Generally expected within 60 to 90 days)	Name and phone number of specific point of contact for implementation
Agree	Completed	Andrea Denis 720-913-4810

Narrative for Recommendation 1.6

TS agrees with this recommendation. The PMO has started conducting compliance reviews of project documentation to ensure appropriate approvals are in place and will continue to do so on an ongoing basis.

RECOMMENDATION 1.7 Update Project Charter Template – The Technology Services Intake Filter Board and Director of Application Planning and Analysis should ensure that the Technology Services Intake Filter Charter and the Intake Purpose and Process documents and individual project charter template are updated to reflect the required authorizing individuals.		
Agree or Disagree with Recommendation	Target date to complete implementation activities	Name and phone number of specific point of

	(Generally expected within 60 to 90 days)	contact for implementation
Agree	October 31, 2017	Chad Mitchell 720-913-4953 Andrea Denis 720-913-4810

Narrative for Recommendation 1.7

TS agrees and will ensure these documents are updated with appropriate approvals. Furthermore, the PMO has updated the signature lines in the individual project Charter template to reflect the appropriate approvers.

RECOMMENDATION 1.8 Project Management Toolset – The Program Management Office Director should implement a robust project management toolset with comprehensive functionality.		
Agree or Disagree with Recommendation	Target date to complete implementation activities (Generally expected within 60 to 90 days)	Name and phone number of specific point of contact for implementation
Agree	March 2018	Andrea Denis 720-913-4810

Narrative for Recommendation 1.8

TS agrees with the recommendation. While we already invested in a Portfolio and Project Management (PPM) system, it is acknowledged that it does not meet all of TS' requirements. We will conduct an analysis of the current PPM system to identify functionality gaps and determine the best approach to mitigate those gaps. Furthermore, TS will also look to implement any improvements to the current PPM system that are identified by the Grant Thornton Assessment.

RECOMMENDATION 1.9 Document Repository – As part of the project closeout, the Project Manager assigned to the project should ensure that all required project artifacts, as defined in the PMO Playbook, should be retained in the approved Project Management toolset.		
Agree or Disagree with Recommendation	Target date to complete implementation activities (Generally expected within 60 to 90 days)	Name and phone number of specific point of contact for implementation
Agree	Completed	Andrea Denis 720-913-4810

Narrative for Recommendation 1.9

TS agrees with this recommendation. As of June 1, 2017, all project managers use the PMO SharePoint site as the centralized repository for all project documentation.

Please contact Tricia Scherer at 720-913-4869 with any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Scott Cardenas".

Scott Cardenas
Chief Information Officer

cc: Andrea Denis, IT Director of the Program Management Office CMC
Chad Mitchell, Director of Application Planning and Analysis
Christine Binnicker, Deputy Chief Information Officer
Valerie Walling, Deputy Auditor, CPA
Kevin Sear, Information Technology Audit Manager, CPA, CIA, CISA, CFE,
CGMA
Shannon Kuhn, Information Technology Audit Supervisor, CISA