

NEW STARTS DOCUMENT MANAGEMENT REVIEW

Program Evaluation and Audit



February 2017

INTRODUCTION

Background

In an effort to expand ridership options, stimulate economic growth, and ease congestion - Metro Transit is currently in the planning and development phase of two multi-billion dollar light rail extension projects. The Southwest Light Rail Extension Project (SWLRT) will have trips originating in both Eden Prairie and St. Paul via a 14.5-mile extension of the current Green Line that terminates in downtown Minneapolis. The Bottineau Light Rail Extension Project (BLRT) will connect the Mall of America to Brooklyn Park via a 13-mile extension of the current Blue Line that terminates in downtown Minneapolis. The estimated cost of both lines is approximately \$3.28 billion with a federal contribution of about \$1.64 billion.

At the time of this audit, both Projects were in the Project Development phase and yet to receive a Full Funding Grant Agreement from the Federal Transit Administration (FTA). The FTA's Master Agreement for funding requires that the Council maintain certain files such as reports, leases, statistics, and other documents classified as records related to the light rail extension project. The Project Management Plan (PMP) submitted to the FTA as part of the Project Development phase included the Project Office's¹ plans and procedures for managing these required documents.

The Project Offices' document management procedures are in the Document Management Document Control Plan (DMDCP), which is an addendum to the Project Management Plan. The Document Management System (DMS) includes three components -- network drives, e-Builder, and Application Xtender (AX) -- and facilitates control, storage, and retrieval of all project related content. The network drive is a windows-based storage system, e-Builder is a web-based storage system with automation, and AX is an application-based content storage system.

In 2008, Audit reviewed the Central Corridor Project Office's document management and found inconsistent indexing, poor procurement compliance, and cross responsibilities for submittal to the DMC. Audit recommended a need for better communication amongst all staff about using the DMC and documenting significant project milestones while cleaning up errors of consistency.

In 2015, the consulting firm Accenture conducted a technical capacity review of the Southwest Project Office's (SPO) organizational structure and project management processes. Accenture recommended that SPO determine if a single document management system would improve document traceability and validate whether staff adequately understand the document management process.

This review of New Starts' Project Office document management is consistent with the Thrive MSP 2040 principles of accountability ("providing clear, easily accessible information and deploying the Council's authority"); and integration ("intentional combining of related activities to achieve more effective results, leveraging multiple policy tools to address complex regional challenges and opportunities.")

¹ Project Office's refers to both SWLRT and BLRT management offices.

Purpose

The purpose of this review is to ensure that the Project Offices adhered to the FTA Master Agreement, the Metropolitan Council document management policies, Project Office procedures and implemented recommendations from the 2008 Central Corridor Project Office Document Management Audit.

Scope

Audit reviewed documents and content within the three Document Management System components used by each Project Office. We reviewed documents created since the beginning of each of the Light Rail Extension Projects through the FTA application “Entry into Engineering.” As of the end of August 2016, the SWLRT Project Office had 8,615 folders with 49,826 files and the BLRT Project Office had 2,252 folders with 7,433 files maintained in e-Builder. These totals are inclusive of all documents housed within e-Builder at the time of this review.

Methodology

To collect information on the federal document management requirements as well as the Metropolitan Council’s policies and procedures, Audit reviewed the following documents:

- Federal Transit Administration Master Agreement, Section 9 Record Retention and Access to Sites of Performance;
- Federal Transit Administration Circular C5010.1D Grant Management Requirements;
- Federal Transit Administration Entry into Engineering Checklist;
- Metropolitan Council Procedure 2-6a Records Management.

To determine if the Project Offices were retaining required documents and following their own procedures for managing documents, Audit selected at random 91 documents from each Project Office to review. The sample size of records tracked was insignificant with respect to the total universe of documents in the DMS; however, tracking these records illustrates (1) if the required records are being saved and (2) if they are being saved in the correct location. The tracked records included, for example:

- Community Works Program Update;
- Meeting Notes, Agendas, Resolutions, and Handouts;
- Functional Work Units;
- TSD – 60 – 03 Municipal Consent Plan Review;

OBSERVATION

Use of documents systems is defined and secured

According to the PMP and the DMDCP, the network drives, e-Builder, and AX are to be used as follows:

- *The Project Offices' Network Drive allow for creation of less structured content --working documents as well as unstructured collaboration*
- *e-Builder allows for creation of, and collaboration on, content with a higher level of structure as well as distribution of content -- work flow process documents*
- *AX allows archiving of content -- final records*

Each of these DMS components are secured and accessible only through rights-based access.

Records Documentation and Retention

The DMDCP and Chapter 11 of each Project's individual PMP institutionalizes the DMS as a key component of project management and confers that it is a required Project responsibility.

Audit found most of the documents selected for review with the assistance of Project Office staff; however, many of the documents were difficult to find unassisted. Of the 91 documents checked at SPO, Audit was unable to independently identify 43 documents. Of those 43 documents, Audit later identified 10 after reviewing the Application to Enter Engineering package created by the Project Office Management Manager. The remaining 33 unidentified documents varied from certain task items such as 1030 and 2011 to the Record of Decision and Peer Review reports.

Of the 91 documents checked at Bottineau Project Office (BPO), Audit was unable to independently identify 28 documents. The 28 documents varied from certain task items such as 2011 and 2013 to Current Labor Relations Plans and Functional Work Unit Records.

The definition of "Record Document" is not clear

Audit inquired with Project Controls staff about the definition of Record Documents and other documents of significance related to the project as it relates to FTA Records Retention. A Project Controls Manager responded that record documents are "[a] list of items that are important in terms of document retention, outside of normal contract management being handled via e-Builder, is tricky as it is typically random correspondence where a decision is made or information is conveyed that is deemed important from the staff's perspective." The Manager referenced the DMDCP as guidance as a few examples of Record Documents are offered, however, the Plan is not exhaustive on what is or is not a Record Document. Based on Audit's observations, it appears senior staff know what is and is not a Record Document but how that knowledge is disseminated and used by other staff is unclear.

Document management and folder organization needs improvement

Audit spent a significant amount of time looking for certain documents and found it easier to inquire with the document creator on where the document is stored. Knowing where content is and easily accessing it is important to document management and is an FTA requirement. There is no procedure for folder management - individual owners may maintain their folders in a way that is suitable to them - this can create challenges for other staff to find and access files.

The files in each Project Office's network drive are maintained in a similar manner based off of root folders. Audit found that there are different types of documents maintained in similarly named folders. Within BPO, the intuitive naming of subfolders and files seems apt and navigable; while within SPO the file naming appears less apt and the contents more disaggregated. Both Project Offices acknowledge continuous improvement opportunities are available and could be implemented with regard to document management and folder organization.

The Project Offices include a paragraph on how to submit project documentation to the DMS and on accessing e-Builder if necessary for their role in the New Hire Handbook. During the course of this review, BPO provided to Audit a PowerPoint Presentation of an All-Staff Project update meeting in March 2016 with two slides that reiterated the information found in the New Hire Handbook in addition to providing an example of core documents.

Finally, BPO informed Audit of a newly created guideline that details how to access key project documents via e-Builder Reports. The key documents relate to Project Management Plans, Procedures, and Guidelines.

Contractually required documents are often entered into eBuilder late

In tracking required deliverables, Audit found that while those reviewed were properly stored within EB, some deliverables were not submitted as scheduled per the respective contract or work order. For example, Monthly Project Status Reports² are required five days after the end of the month but consultants on both Projects consistently submitted their monthly updates between two weeks to two months after the required date. Per Deputy Project Directors of both Project Offices, it is due to a close working relationship with the consultant Project Managers, that they are comfortable with the late submittal of certain deliverables and suggested that it is not practical to have such a tight turnaround on certain deliverables. For example, the SPO Deputy Project Director said that "due to the regular reporting by AECOM, the Design and Engineering team accepts the monthly status reports as correspondence and reviews the report contents against progress reported at weekly coordination meetings."

² Monthly Project Status Reports provide updates to Council project managers on the status of the consultants work each month. The report includes details on budget, schedule, work completed and anticipated, outstanding issues, significant activities, events, and project coordination.

Progress updates are not formally documented for work orders

A work order is required to have a progress update when the order is within 10% of its full expenditure. However, according to both Project Offices, it is implied that work is satisfactory with the issuance of a new work order even without a documented formal check-in. Without documented formal check-ins, it is possible for small issues to become larger if not caught early on. While the contracts with consultants require certain deliverables, and have certain expectations, there are times when requests to consultants are informally communicated via email or open dialogue as exemplified with the approval of additional work orders

Content indexing within AX is not intuitive

AX is the repository of finalized documents. Final documents describe important decisions and track the Project's progress and may include reports, contracts, press releases, e-mails, and photos.

Audit queried open-ended searches to find several documents that should have been finalized from the Entry into Engineering Checklist. Audit found that selecting "Document File Type" severely limited the results available though it is certain that a document exists and is stored somewhere within AX. When Audit searched the SPO AX system solely for a "Plan" under "Document File Type" the phased design plans do not populate. Removing the limitation of "Plan" and typing in "*90" as the subject to query information involving 90% Plans did not query any results. The "60% Plan" was not found in its entirety though a "75% Plan" was found. On the other hand, when using the same query fields under "Plan" BPO's 30% Plan appeared. A known final document for both Offices, the "Final Environmental Impact Statement" was found under "Report" for BPO while under the same query for SPO no document was found. Leaving the "Document File Type" nil and typing "*Final Environmental" returned no results, however "*Final Environmental Impact Statement" did return results, though, not the Final Environmental Impact Statement in full.

Documents submitted to the DMC may bypass storage in the network drive or e-Builder or vice versa

The DCDMP states "[a] system of checks and balances will be utilized to ensure all data is securely placed without duplication in the archival system AX" as it relates to the structure of workflow – Audit did not find the "checks and balances – if a document is sent to the DMC multiple times, it appears as if it is up to the document management analysts to know that it has already been submitted or to edit the indexing so that the document may be found in multiple queries.

The caveat of this process – the direct submittal to the DMC – is if one is searching for a document in the network drive or e-Builder it may not be evident that they should search in AX given its definition in the PMP and DCDMP as the final document repository. Some documents are stored in EB and are not transmitted to AX, some are stored in EB and AX, and others bypass EB and are sent directly to AX.

What belongs in AX and when is undefined

Audit found records of press releases, contracts, pictures, and e-mails amongst other content within AX but could not determine the rationale for submittals. For example, Today's News Online, a daily or near daily update of media related to the Metropolitan Council is saved, however, completed Work Orders are not. Outside of many e-mails, much of the same information in AX is stored in either EB or the network drives which leads to redundancies. Audit found no process procedure or guideline for when or who submits what to the DMC. This is confusing and potentially leads to inefficient usage of the repository.

CONCLUSIONS

The Project Offices are generally meeting the federal, state, and Council document management policies. There are steps that can be taken to ensure content is easily accessible and that DMS components are used in a manner that is both correct and efficient. Currently, work units use each DMS component as it suits their unit which makes each a challenge to navigate and be understood by other staff. Accessibility is a key aspect of document management. Defining procedures and processes for when documents migrate through each of the component systems and concretely what type of document belongs where could enhance accessibility and reduce potential redundancies.

It was noted that several contract deliverables were not in e-Builder within the contractually prescribed guidelines. If there is a reason for a delay in a deliverable being received, and it has been approved by the contract manager, it should be formally documented. E-Builder is a powerful tool that can assist users manage their contracts. Used to its full extent, delays can be managed and tracked formally within EB. If the contract is not reflective of business practices, it is suggested that contract language be amended to become more reflective of current practice.

RECOMMENDATIONS

Program Evaluation and Audit recommendations are categorized according to the level of risk they pose for the Council. The categories are:

- **Essential** – Steps must be taken to avoid the emergence of critical risks to the Council or to add great value to the Council and its programs. Essential recommendations are tracked through the Audit Database and status is reported twice annually to the Council's Audit Committee.
- **Significant** – Adds value to programs or initiatives of the Council, but is not necessary to avoid major control risks or other critical risk exposures. Significant recommendations are also tracked with status reports to the Council's Audit Committee.
- **Considerations** – Recommendation would be beneficial, but may be subject to being set aside in favor of higher priority activities for the Council, or may require collaboration with another program area or division. Considerations are not tracked or reported. Their implementation is solely at the hands of management.
- **Verbal Recommendation** – An issue was found that bears mentioning, but is not sufficient to constitute a control risk or other repercussions to warrant inclusion in the written report. Verbal recommendations are documented in the file, but are not tracked or reported regularly.

1. **Significant: Procedures for consistent usage of the Document Management System should be developed at the Transit Systems Development level.**

These procedures should address how each working unit will maintain documents and content within the Document Management System. The procedures should also include a timeline that reflects when and what types of documents are moved from one component to another.

***Management Response:** The Project Management staff agree that consistent usage of DMS should be developed at the TSD level. The Projects recommend that the DMDCP be updated to include additional detail on how each working unit maintains documents and content within the Document Management System, as well as include a timeline indicating when and what types of documents are moved from one component to another. The Document Management Document Control Plan (DMDCP) is an FTA required document included in the Project Management Plan. This document was created at the TSD level to improve consistency in document management across projects.*

Staff Responsible:

- Project Controls Manager, SWLRT
- Project Controls Manager, BLRT

Timetable: End of Quarter 3, 2017

2. **Significant: Contractually required deliverables should be in place prior to issuing new work orders and before payments are made to contractors unless otherwise formally directed in writing by the contract manager.**

To maintain the integrity of Council contracts, addressing and formally documenting delays or changes to contract deliverables is necessary

Management Response: *Project Management staff clarified with Audit that this recommendation is associated with two key findings: 1) Consultant Monthly Progress Reports are submitted late, and 2) There is a lack of documentation for tracking tasks complete under work orders.*

- 1) *Project Management staff have noted that the Consultants Monthly Progress Reports are sometimes submitted later than the contractually required deadline. Project Management staff have determined the schedule requirements for when the consultant must submit their monthly progress reports is unreasonable. Project Management staff will work with CPU on amending the contractual language requirement that states "Monthly Progress Reports are required five days after the end of the month", to provide the consultant with adequate time to submit this monthly report.*
- 2) *Project Management staff have noted that improvements can be made in how the projects track tasks and % completion of tasks within project procured contracts that authorize tasks through work orders. Project Management staff will implement a new recommendation where on a monthly basis the Contract Manager will provide documentation for status of tasks that are within 10% of the authorized amount of the current work order authorization for a given task that is being invoiced.*

Staff Responsible:

- *Project Controls Manager, SWLRT*
- *Project Controls Manager, BLRT*

Timetable: *End of Quarter 2, 2017*

3. **Consideration: Project management staff should consider working with Enterprise Content Management to identify ways to name files in AX to ensure efficiency in retrieving and/or searching for files.**

Management Response: *Project Management staff will work across the two LRT projects on consistent approaches to AX naming conventions and document identification numbering. Project Management staff will also reach out to the Enterprise Content Management unit for best practices and implement as applicable for both projects prior to start of construction.*

Staff Responsible:

- *Project Controls Manager, SWLRT*
- *Project Controls Manager, BLRT*

Timetable: *End of Quarter 2, 2017*



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