



Program Evaluation and Audit

**Document Management
Central Corridor Light Rail Transit**

11 December, 2008

INTRODUCTION

Background

“Document management”—being able to identify, classify, store, and easily retrieve significant project documents—is a critical part of managing federally funded transit projects. Section 8.c of the FTA *Master Agreement* requires recipients of federal grants “to maintain intact and readily accessible all data, documents, reports, records, contracts, and supporting materials relating to the Project as the Federal Government may require During the course of the Project and for three years thereafter from the date of transmission of the final expenditure report.” Recipients need not only to produce significant documents when federal auditors come to call--sometimes years after the project office has closed--they need also to be able to track their own progress on the project, recalling what was decided and when. As the Central Corridor Light Rail Transit (CCLRT) *Document Management Handbook* explains the need for compliance, with it, “users can do more than access documents as needed.” The broader purpose of a fully functioning or compliant document management system is “to help employees do their jobs.”

The risk of a partially or malfunctioning document management system is that the FTA may judge a recipient as lacking the “technical capacity” to manage the project. (This nearly happened on the Northstar project when, in November 2005, the FTA gave the project office a “courtesy warning” to get its document management in order before it could enter final design.) The FTA delivers this opinion not only on the recipient’s absolute technical capacity, but also on the project office’s adherence to its own internal procedures. The CCLRT’s internal procedure about document management, 225-01, commits the Central Corridor Project Office (CCPO) to retaining “the official project record file” of “significant” documents on the project. In practice, this means that documents are copied, stored, and managed in a project-specific folder within the Metropolitan Council’s electronic Document Management Center (DMC), a software program called ApplicationXtender (AX).

Expecting that the FTA will audit CCPO’s technical capacity in spring 2009, as part of its application to enter final design, in summer 2008 CCLRT’s Project Director and Manager of Administration asked Internal Audit to evaluate the CCPO DMC.

Purpose

The purpose of this audit is to determine whether documents that should be in the DMC are in the DMC. In the broadest terms, that means evaluating the technical capacity of the DMC.

Methodology

Audit's method for assessing document management compliance was to compare what should be in the system to what is in the system. To measure what should be in the system--because it numbered at least 3000 documents--we took a judgmental sample of 103 documents. To measure what is in the system, we searched for the documents in this sample in the CCPO DMC.

The basis of the sample was a checklist that the CCPO administrative team put together in April 2008 to prepare for a possible FTA audit of unknown purpose or scope. The checklist consists of a series of document *types* across functional areas within the project office: a grant application from the Grants and Agreements area, for example, or an Independent Cost Estimate (ICE) required of all Met Council purchases over \$2500 made with federal funds from Procurement/Contract Administration.

We selected specific documents to sample from these types by randomly generating a series of dates (month, day, and year) within the time period described in the "Scope" section below; then searched in the project's administrative files, especially in meetings of the Project Management Oversight Committee (PMOC) and the Project Management Team (PMT), for documents around these dates. In nearly every case, there were several documents mentioned in these meetings that could have made it into our sample. The ones that did were, in our judgment, the most significant documents mentioned around these dates.

Interviews with project principals, from both the Council and the consultant side, were an important addition to the searching that made up the bulk of the audit. These people gave us documents to search for, and, when we could not find a document, they gave us their opinions about why, and about how to improve compliance with the system.

The results of our search, and a description of the documents we searched for, are shown in Table 1. It should be noted that this is not a statistically valid sample. The idea of statistical validity makes little sense in this context, where documents can range from a relatively insignificant receipt to a critical memorandum of understanding, and where the universe of documents that could be retained is so large and unknown.

Scope

Auditing what should be in the system also requires specifying *when* those documents should be in the system: taking a "snapshot" of the project at a specific point in time. One would not look for a construction contract, for example, during the preliminary engineering phase of the project. Audit stipulated the publication of the Notice of Availability for the Supplemental Draft Environmental Impact Statement (SDEIS) in the Federal Register on July 11, 2008 as its cut-off point for documents to be in the system. We did not look for documents that were initiated past this point. We also did not hold the DMC accountable for documents produced before December 13, 2006, the official

start of preliminary engineering on the Central Corridor project, and the official opening of CCPO.

We searched for documents from September 10 to September 24, 2008. When we could not find documents on our own, we asked others for help searching. A few documents were added to the DMC because of or after these initial searches. However, for the purpose of the audit we counted them as not found.

Assurances

This audit was conducted in accordance with the Institute of Internal Auditors' *Standards for the Professional Practice of Internal Auditing* and the US Government Accountability Office's *Governmental Audit Standards*.

OBSERVATIONS

When preliminary engineering started on the Central Corridor project, the project office was housed (along with the Northstar project) in the Ceresota building in downtown Minneapolis, and documents were stored in a less feature-rich DMC based on Microsoft's Access database. It was only after the project moved to its dedicated project office that project managers began to move document management functions to AX—a program that will eventually become the DMC for the Metropolitan Council.

Therefore, electronic document management at CCPO was still in development when our audit began. Project principals were new to the system. There was considerable awareness but less experience about the importance of the document management function to the overall success and technical capacity of the project. There were no project-specific precedents for handling and classifying ambiguous documents. Until the draft application for final design of CCLRT was submitted to the Project Management Oversight Committee (PMOC) on September 5, 2008, the project's *Document Management Handbook* existed only in draft form, not easily accessible to those charged with filing documents, or sending them to the Document Management Analyst to be filed. The developing nature of the CCPO DMC left many on the project concerned that the system was not capturing all the documents that the government may require. One project principal warned that “it is easy for the FTA to say ‘gotcha’” on a malfunctioning DMC, and observed that, at the time at CCPO, “We have a problem” with compliance.

Even in draft form, we found the *Handbook* to be a useful reference in our audit. It defines what constitutes “significant” documents on the project, and outlines a procedure for getting them into the DMC. Significant documents are those that “meet both of the following conditions: 1) They are made or received by CCPO in connection with project relevant business; **and** 2) They are preserved or are appropriate for preservation as evidence of agency organization and activities or because of the value of the information they contain.” The *Handbook* also lists the types of documents that should be considered significant. To get significant documents into the DMC, the *Handbook* divides responsibility between those who send them and the Analyst who files them. It is the responsibility of the document sender to name the document correctly, and there is an extensive section on file naming conventions that are meant to guide the document to its proper place. (E-mails are a special case because, if they are copied to the DMC, the system classifies and files them automatically based on the information in the “received from,” “sent to,” and “subject” lines.) It is the responsibility of the Analyst to input these documents into the DMC.

FINDINGS

Some documents are “missing” from the DMC because they were not created.

The peculiar nature of this audit--looking for something that *should* be there, rather than something that was assuredly there—means that some documents that are missing from the DMC may not have been created or have not yet been finalized. The results of our search are shown in Table 1. Overall, we failed to find 32 of the 103 documents we looked for. Seventeen of these 32 missing documents were procurement documents, a result that will be addressed in a separate finding. Of the remaining 15 documents, we found 13 elsewhere: as hard copies on people’s desks, or in the consultant’s electronic project library. But we did not find two of these 15 non-procurement documents, even as hard copies:

- Audit worked with CCPO’s DBE Specialist to arrive at a list of documents that should be in the system, including what was described as a “Quarterly Report for CCPO” on DBE activities. We could not find the specific Quarterly Report that we looked for (item #50 in Table 1, for the first quarter of 2008). We confirmed that Quarterly DBE Reports on the project have not yet been created.
- Minutes of the Consultant Coordination group describe a meeting with University of Minnesota officials on September 14, 2007 “to discuss tunnel versus at-grade alignment” (item #90). CCLRT’s *Document Management Handbook* lists “Meeting notes” as one “of the types of significant documents CCPO staff members should give” to the DMC. The meeting was significant enough to be anticipated by the Coordinators group, but Audit could find no minutes or other record of it in the DMC.¹ We found an e-mail referring to a September 19 meeting on the subject, but confirmed that minutes of the meeting were not created.

Two documents out of 103 may seem a small number, but this is only a sample of a larger document universe, and each missing document carries the risk of a significant activity or decision on the project not being documented.

Several document searches were made more difficult because of inconsistent indexing.

What makes a document management system important is its status as the official repository of significant documents on a project. What makes a DMC *useful* is how “readily” (in the terms of the FTA *Master Agreement*) those documents can be accessed. We found that it took considerable searching to find some documents. Often this was the result of our own lack of information about the document being searched for, and we

¹ We were told that, in meetings like these with stakeholders, the person responsible for filing the minutes is the Council (rather than consultant) employee, and that at least one Council employee should always be present at such stakeholder meetings.

gained more information as we kept searching. But it was hard to find some documents because of errors in indexing. That is, the search terms that eventually produced the document from the DMC were not, in our judgment, the most intuitive terms under which it could be filed in the system, or were not the same terms used to produce other, similar documents. Audit would describe the errors that it found in three ways: as errors of 1) consistency, 2) definition, and 3) classification or filing.

- Errors of Consistency:** When it searched for monthly DBE progress reports on Contract 07P171 (item #51), Audit noted that one was filed under the subject line “DBE PROGRESS REPORT HDR7/1/07 THROUGH 3/29/08” and another was filed under the subject line “DBE PROGRESS/PROJECT REPORT 22.” Someone searching for these reports with the search terms “DBE progress report” would turn up the first report but not the second, and at any rate similar types of documents should be filed with identically stated subject (and other field) terms. Similarly, Audit noted that, when it searched under the type “notice of grant award” for documents pertaining to the grant agreement MN-03-0087, only one of the four documents that the search produced had “MN-03-0087” filled in for the field “significant number,” and none of the four had the grant agreement number filled in for the field “agreement number.” Errors of consistency can be as simple (and as understandable) as the typographical error “UF of M” for the abbreviation “U of M.” They are not errors of consistency in *indexing*, but Audit obtained from the consultant’s project controls team—the group that handles its document management function—a “document deficiency report” of “clerical inconsistencies” that they have found in the controlled documents that the Council distributes to project principals. Examples of these inconsistencies are a work order without a date, or a plan without a full set of appendices. We mention these inconsistencies here because they are analogous to the errors of consistency that we found in indexing, but we acknowledge that they concern the documents that are entered in the DMC, not the way they are entered.
- Errors of Definition:** When it searched the document type “meeting materials” for a Business Advisory Council meeting on May 19, 2008 (item #28), Audit’s search turned up two documents from that meeting: an agenda and a presentation. The agenda, however, had the subject line “Business Advisory Council” and the presentation had the subject line “Business Advisory Council Meeting.” In Audit’s judgment, the documents should be distinguished from each other, perhaps by including “agenda” in one subject line and “presentation” in the other. Similarly, Audit had a difficult time finding one of the most critical documents on the CCLRT project, the letter from the FTA granting approval to enter into preliminary engineering (item #1). Searching on the document type “correspondence—not email” and the wild card subject *fta* actually produced 27 documents, but not that December 13, 2006 letter from the FTA. A search on that date finally produced the document, with the subject line “PRELIMINARY ENGINEERING APPROVAL FOR CENTRAL CORRIDOR LIGHT RAIL NEW STARTS PROJECT,” which is the actual subject line of the formal correspondence from Marisol Simon, the FTA’s Regional Administrator for Region 5, to the Council’s Brian Lamb. The *Document Management Handbook*

- **Errors of Classification or Filing:** Audit looked in the DMC for a resolution passed by the Council on September 12, 2007, described in the Council’s minutes as an “Authorization for Sole Source Procurement of AutoCAD Software and Other Specialized Engineering and Project Management Software” (item #6). We found that resolution at the back of a procurement package for the AutoCAD software that it authorized. In our judgment, this resolution was misfiled, both because “resolution” is a separate document type in AX, and because the document type “procurement package” does not include a “resolution” in its list of documents that constitute such a package. Similarly, Audit looked for a request for information on the project initiated in March 2008 by a citizen named Scott Halstead (item #27). We found that request under the document type “correspondence—not email” and with the subject “SCOTT HALSTEAD DATA REQUEST DOCUMENTATION.” The subject descriptor seems accurate, but “request for information” is a separate document type in AX, and in our judgment should have been used to classify this request. Again, Audit found a document with the subject line “WHITE PAPER - ISSUE 1 HIAWATHA LRT CONNECTION” (item #95) filed under the document type “transmittal,” and the letter of transmittal does indeed preface the report itself. Still, we think a more appropriate document type for a white paper is “report” or “technical memorandum.” Documents like these may eventually be found in the DMC, but such misclassifications slow their retrievability, especially for those less familiar with the project, like external auditors.

Several searches were made more difficult because AX does not reliably search .pdf documents.

There is an apparent “glitch” in the AX program that makes it difficult to find certain documents: full-text searches do not always work if the document being searched is entered in AX as a .pdf document. As an illustration: the DMC contains .pdf versions of all the contracts entered into on the project, which rightfully turn up by searching on the document type “contract.”

- Contract 06P171 with DMJM-Harris, the prime preliminary engineering consultant on the project, appears as document ID number 711. It is a .pdf file that is not searchable. One can enter the term “contract” in the “find” box of the search window, for example, and the system will return the finding that the term is “not found.”
- Contract 07P126 with Gary Erickson, the civil engineer who is serving as Assistant Project Director, however (document ID number 1227), *is* searchable. Entering the term “contract” will result in innumerable hits within the body of the document.

This glitch negatively affects the system's search capacity. Audit turned up a copy of Contract 07P171 (item #85, the contract with HDR Engineering), for example, by searching on the document type "contract" and the subject wild-card term "hdr," but the same document did *not* appear when we searched on the type "contract" and the full-text term "hdr." In other words, the system did not recognize the search term "hdr" within the body of the contract.

We asked about this glitch, and were told that the AX vendor, Mid-America, is "working on sorting out .pdf files."

Compliance was poor for procurement packages.

Audit's sample of 103 documents that should be in the CCPO DMC included 27 separate procurement documents. We say "separate," because to evaluate procurement's compliance with the DMC, we did not pull entire packages and count whether each contained the required elements. Rather, we began by defining those individual required elements—from a purchase order to a sole source authorization--and looked for them within entire procurement packages. We reasoned that, by looking at individual elements, we could better discern what would need to be added to a procurement package to make it complete.

Procurement/Contract Administration merits a separate finding because its compliance with the DMC was poor. Of the 27 procurement documents that Audit searched for, 17—or 63 percent--were missing. Of the 32 documents that were missing from our overall sample of 103, in fact, procurement documents made up 53 percent of them. Table 1 lists the specific procurement documents that Audit looked for and the results of each search.

The kinds of documents that we typically found in these searches were the most basic elements of a procurement package: the disbursement approval form, the invoice, and the purchase order. We looked for three fair and reasonable statements and found two of them (items #54-56). Monthly p-card reports were all accounted for (items #59 and 60). We found the one contract change order that we looked for—a finding that bodes well for managing the construction phase of the project, when those orders will come in rapid-fire fashion (item #86). And the one sole source authorization that we looked for--an amendment to the original contract with URS Corporation to continue its evaluation of the Washington Avenue Bridge (item #79)—was found as well.

But there are many important elements to a procurement package that we did not find in our sampling of the DMC. To name three examples:

1. Metropolitan Council procedure requires that a purchaser obtain approval of all information technology hardware purchases through an "information technology request" (ITR) form. Audit did not find an ITR for a particular (randomly generated) IT purchase from the vendor En Pointe Technologies (item #61), although it did find an ITR for a much larger IT purchase from En Pointe. (After considerable searching, we did locate a hard copy of the ITR, but only in a project

file, not in the DMC.) The person who orders the IT equipment is responsible for filling out an ITR, and for submitting that ITR to the DMC.

2 and 3. FTA Circular 4220.1F *Third Party Contracting Guidance* requires “the recipient to perform a cost or price analysis in connection with every procurement action, including contract modifications. The method and degree of analysis depends on the facts and circumstances surrounding each procurement, but as a starting point, the recipient must make independent estimates before receiving bids or proposals.” Council policy interprets that clause in two ways:

- “An independent cost estimate is required for every procurement action, including contract modifications, and the estimate must be done before receiving bids or proposals.” Purchasers use this ICE as the basis of a more detailed cost or price analysis.
 - If the cost or price of a procurement is within 10 percent of the ICE, the ICE can serve as the cost or price analysis. If not, a procurement package should contain a separate cost or price analysis.
2. Audit found neither of the two ICEs it looked for, one for En Pointe Technology (item #62, for a different purchase than the one mentioned above) and one for Heavy Construction Systems, for a large purchase of \$14,143.20 made in June 2008 (item #63).
 3. Audit searched for one cost or price analysis as part of its sample of documents: for a purchase of \$23,430 from PTV America, Inc., also made in June 2008 (item #72). The procurement package on file for this purchase in the DMC contains a memo entitled “Independent Cost Estimate for PTV America,” but an analysis of this memo reveals that it actually constitutes a fair and reasonable statement, not an ICE or a cost analysis. The package also contains minutes from a Transportation Committee meeting (dated September 10, 2007) that authorize this purchase as part of a larger, sole source procurement, and those minutes include a detailed price breakdown that (according to CCPO’s Procurement/Contracts Specialist) is the start of an ICE. But even sole source procurements require a cost or price analysis, and this package does not contain one.

One other important fact about procurement is that we found more documents for purchases of non-technology items (furniture, for example) than for technology items (computers and peripherals). The two out of three fair and reasonable statements that we found, for example, were both for non-technology items; the one FAR that we did not find was for a “smart board” purchase. Both of the ICEs that were not found were for technology purchases. We did not find the one Information Technology Request (ITR) form that we searched for. In fact, except for one disbursement approval form and two purchase orders, we did not find any of the technology-related procurement items that we searched for. We have highlighted the technology-related procurement items that we did not find in Table 1 with a slightly grey fill.

Compliance to the DMC suffers because of “crossed” responsibilities between Council and consultant employees.

Although, as the FTA grantee on the project, the Council is clearly in charge of the project and ultimately responsible for compliance to the DMC, CCPO policies and procedures also state that consultants are to share in that responsibility. Those policies do not as clearly state *how* consultants are to share in it: whether, for example, they are to decide what documents get sent to the DMC, or whether Council employees are to decide that. From the beginning of this audit we have collected statements that compliance suffers from this lack of definition, or what we would call “crossed” responsibilities between Council and consultant. We heard that some consultants (and Council staff) “are diligent about submitting documents” to the DMC, and “some are not.” We heard dissension within Council and consultant ranks between employees responsible for similar document management functions, with one expecting the other to submit documents to the DMC autonomously, and the other expecting the Council to ask explicitly for documents to be submitted. We heard that documents recording “some of the biggest design decisions on the project” are not making it into the DMC, because the lines of responsibility are unclear.

The most important piece of evidence for this last claim is the difference between the relatively high rates of compliance for documents generated and controlled by Council personnel, versus the relatively low rate for preliminary engineering documents generated by many personnel and controlled by no one in particular. While the compliance of Grants and Agreements documents in our sample was a high 86 percent, the compliance of Preliminary Engineering and Design documents was a low 47 percent. Table 1 lists the Preliminary Engineering and Design documents that Audit searched for. Some examples of those it did not find in the DMC are:

- A February 19, 2008 document from the University of Minnesota entitled, *Planning for Light Rail Transit Through Campus* (item #94).
- A July 1, 2008 e-mail from Joe Sutherland to Gary Erickson, directing Erickson to give information to URS Corporation and the Ramsey County Regional Rail Authority (RCRRA) to help in their preparation of an environmental assessment (EA) of the Union Depot (item #97).
- An April 2008 report or white paper from civil engineer Dennis Mertz entitled, “Discussion of Loads, Load Fractures, and Their Combinations” (item #101).

CONCLUSIONS

1. *The CCPO DMC is adequately resourced.*

The CCPO organizational chart includes a Document Management Analyst who is charged specifically with putting documents into the system and maintaining it. CCLRT's *Document Management Handbook* is a useful guide to using the AX-based system, and has moved from draft to working status since the start of this audit. Employees are aware of the risks and are dedicated to improving the system.

2. *Compliance to the DMC—for all but the Procurement and Preliminary Engineering and Design functional areas—is reasonable. Compliance for Procurement and Preliminary Engineering and Design is deficient.*

As noted in “Findings,” of the 103 documents that Audit searched for, 32—slightly less than one-third--were missing from the system. The functional area totals in Table 1 show that some areas were more compliant than others. Contracts and Contract Changes, Invoicing, and Communications and Public Involvement performed the best, with compliance rates ranging from 100 to 93 percent. In contrast, the poor compliance of Procurement/Contract Administration merited a separate finding, and we attempt to explain it and the poor compliance of Preliminary Engineering and Design below. Here, we generalize that documents that make it into the DMC are:

- of central importance to the project, like contracts, contract changes, grant agreements, and strategic plans,
- the product of regular, methodical processes, like invoices and monthly reports.

Conversely, what characterizes the documents that do not make it into the system is that they are:

- the product of irregular processes, or processes that vary by type, like procurement,
- documents that lack a clear “owner,” such as minutes of ad-hoc meetings and technical memoranda produced by consultants but not specifically assigned or delivered to a Council person.

An example of the kind of document that Audit found was #23 in Table 1, a summary of comments made at a public meeting held in the Rondo neighborhood of St. Paul on June 27 and 28, 2008. While this may have counted as an ad-hoc meeting, not the product of a regular, methodical process (or series of meetings), the public involvement process itself is clearly the authority of the Council (not the consultant), and benefits from the strong expectation within it that reports will be filed and meetings will be summarized. Audit found this summary of comments within a larger summary of public meetings on the project from April to July 2007.

An example of the kind of document that Audit did not find, in this case under the general rubric of “Project Management,” was a document containing FTA’s comments on CCLRT’s “design criteria” (item #3), the series of engineering specifications that guide the face of the project. Audit searched extensively in the DMC for these comments, and did find a document with the subject line “DESIGN CRITERIA COMMENT RESOLUTION REVIEW – PMOC COMMENTS ON RED LINE VERSION.” A closer look at the document, however, revealed that it consists of the project office’s *replies* to the FTA’s original comments, not the original comments themselves. (The original comments are paraphrased in the matrix that comprises CCPO’s responses to the PMOC.) We can only speculate why this document did not make it into the DMC, but among the reasons may be that it was produced in April 2007, before the dedicated project office was opened and lines of authority were more strictly demarcated; it was received rather than produced by CCPO; and the person or entity that received it did not immediately think that he or she was responsible for submitting it to the DMC.

3. *Compliance for procurement packages is complicated by the divided nature of procurement at the Council.*

Much of the purchasing for the initial build out of the Central Corridor Project Office—a time during which many of the documents that are missing from the DMC were being produced—was done before CCPO hired a Procurement/Contracts Specialist in February 2008. The Specialist, who reports directly to Metro Transit’s Transit Procurement Office (TPO), purchases non-technology items for CCPO, from furniture for the last expansion of the Project Office to the professional services of the artists who will be designing public art for the CCLRT stations. The Specialist processes only non-technology procurements, however. Requests for information technology are initiated in the Project Office but sent to an IT Specialist in the Council’s Information Services Division, who checks the proposed purchase against existing state contracts and refines the request with IT professionals and Regional Administration’s Contract and Procurement Unit (CPU). The remaining paperwork is processed there, at CPU. In short, much of CCPO procurement has been and continues to be done off site. In addition, while CCPO’s documentation requirements have been communicated to CPU, the procurement staff there does not have the advantage of proximity, like CCPO’s Procurement Specialist, and they have not yet received CCPO’s *Document Management Handbook*. These facts may account for the poor compliance of procurement packages, especially of technology-related items.

In the next section of this report, we recommend indexing CCPO procurement files as they are copied into the DMC. But, even with indexing, CCPO will have to monitor its variety of procurements closely to ensure that the proper documentation is making it into the DMC.

4. *The poor compliance of Preliminary Engineering documents and others can be explained, in part, by the problem of crossed responsibilities between Council and consultant.*

To emphasize a point already made: many documents do not make it into the CCPO DMC because they lack a clear owner with a clear direction *to* submit them to the system. Consultants told Audit that, because the Council is the FTA's grantee on the project, it is the Council's responsibility to designate the documents it wants submitted and to ask for them. Conversely, a Council employee suggested that, with regard to technical engineering documents, the consultants know better than their Council overseers what needs to be submitted, and said that the Council clearly expects them to "comply with our procedure and . . . our system." At the Audit Entrance Conference, when we offered that the administrative team and the consultants seem to have different understandings of who is responsible for submitting documents to the system, the consultant's Project Controls Manager agreed, saying that the "process is well defined but the responsibilities are not." In truth, the problem appears to be twofold. The Council has not sufficiently demanded that the consultants act as the Council's representatives for submitting documents to the DMC, or has not sufficiently empowered them to do so—a matter of undefined responsibilities. But, even if the Council had made that requirement sufficiently clear to the consultants, it has not established anything but the broad outlines of a procedure for getting documents produced by the consultant into the system—an undefined process. That is the lack of definition that has caused the problem of crossed lines of responsibility.

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.

Note: CCPO management submitted detailed responses to Audit’s recommendations in the form of a table. It is attached in its entirety, together with an introductory memo from the CCPO Project Director, as Appendix A. Audit has summarized those responses in the text of the report below. CCPO management has reviewed and concurs with this summary.

General Compliance Recommendations

CCPO management should:

1. Regularly communicate to CCPO staff the requirement that they “submit significant documents to the DMC System.” (Essential)

For most employees not specifically charged with submitting documents to the DMC, compliance is a matter of developing a habit. The publication of this Audit Report could be used as an occasion to remind employees about the importance of submitting documents to the DMC. Management might also consider initiating a special campaign--like those used to encourage charitable donations—to renew compliance efforts.

2. Regularly communicate to CCPO staff—both Council and consultant employees—that project significant decisions and milestones must be documented and submitted to the DMC. (Essential)

3. Expedite the wide distribution of the CCLRT *Document Management Handbook*, and continue to provide training in AX to project staff who generate or command the most documents. (Significant)

Management Response: Agree with recommendations 1 through 3. CCPO management will:

- *Convey lessons learned from audit to CCPO staff, through campaigns and other venues.*
- *Increase training, both at project management and staff level.*
- *Continue individual and group training in DMC procedures and AX.*
- *“Roll-out” the latest version of the Handbook during the first quarter of 2009.*

Responsible: CCPO management

Estimated Completion: No later than the end of 1st quarter 2009

Recommendation Concerning Inconsistent Indexing

Inconsistent indexing is not a result of the structure of document management at CCPO. The system already benefits from a single point of entry (the Document Management Analyst), a comprehensive explanation of how to enter and retrieve documents into the system (the *Document Management Handbook*), and management’s commitment to cleaning up errors. During the course of document searching, Audit was told that some of the inconsistencies it found in the way that documents are indexed in AX would be “cleaned up,” and in fact from the start of searching to the end of the audit many were. But others remain. Take, for example, the inconsistencies found in this screen capture:

Doc...	DOCUMENT FILE TYPE	DOCUMENT DATE	SUBJECT	REVISION NUMBER	COMMENTS AND NOTES	SIGNIFICANT NUMBER
203	NOTICE OF GRANT AWARD	2007-05-23	CMAQ PE ON CENTRAL CORRIDOR NEW STARTS GRANT NO MN-95-X002			
207	NOTICE OF GRANT AWARD	2007-09-13	CENTRAL CORRIDOR PE CMAQ GRANT NO MN-95-X002	R01.00		
416	NOTICE OF GRANT AWARD	2007-09-13	NOTICE OF GRANT AWARD FOR PE - NEW START		THIS IS THE FIRST NOGA UNDER 65701	MN-03-0087
2240	NOTICE OF GRANT AWARD	2008-02-07	NOTICE OF GRANT AWARD	R02.00	FUNDING SOURCE CMAQ-FTA	
2641	NOTICE OF GRANT AWARD	2008-02-07	2005 STATE BOND FUND 726	R01.00		
2642	NOTICE OF GRANT AWARD	2007-09-13	2006 STATE BONDS FUND 724	R00.00		
2643	NOTICE OF GRANT AWARD	2008-06-26	2006 STATE BONDS FUND 724	R01.00		
2644	NOTICE OF GRANT AWARD	2007-06-11	MN 030200-00	R00.00		
2645	NOTICE OF GRANT AWARD	2008-06-26	MN 030200-01	R01.00		
2646	NOTICE OF GRANT AWARD	2008-02-07	RRA COOPERATIVE FUNDING AGREEMENT FUND 717	R00.00		
2668	NOTICE OF GRANT AWARD	2007-09-13	2005 STATE BOND FUND 726	R00.00		

Figure 1: Results of a Search on Document Type “Notice of Grant Award,” November 5, 2008

The eleven documents listed here were those that appeared when Audit searched on the document type “notice of grant award.” All eleven are properly indexed by type, calling up the Metropolitan Council “Notice of Grant Award” form. But two of the subject fields refer to the grant only by the vague “NOTICE OF GRANT AWARD”; two—“CMAQ PE ON CENTRAL CORRIDOR NEW STARTS GRANT NO MN-95-X002” and “CENTRAL CORRIDOR PE CMAQ GRANT NO MN-95-X002”)—refer to it by the title of the document as listed on the NOGA form itself; and five subject fields refer to the grant by the fund number it is channeled to rather than the grant number. This one type of document is indexed at least three different ways in AX. Audit also discovered during this cursory search (not one of its sample of 103) that the same document—with the subject field “2005 STATE BOND FUND 726”—was incorrectly entered into the system under two different document IDs and under the revision numbers R00.00 and R00.01. (This mistake was promptly corrected when we brought it to the attention of CCPO’s document managers.)

4. CCPO document managers should compare the subject and other fields of documents of similar type to continue identifying and cleaning up errors of consistency. (Essential)

This effort should include managers from CCPO functional areas, who can best determine index terms that make sense and can be applied consistently. We leave it to AX’s principal users to find other efficient ways to continue to identify and clear up errors. The effort, although tedious, is important, because future users of the DMC may not have the institutional memory that present users have, and inconsistent indexing can make documents difficult if not impossible for those without that memory to find.

Management Response: *Agree. CCPO management will:*

- *Add Chapter 6.0 “Index Templates for Input Consistency” to the Handbook.*
- *Continue to explore AX to improve consistency in indexing.*
- *Devise a plan to correct existing inconsistencies by first quarter 2009.*

Management emphasizes that standardization will never be absolute due to the unique nature of LRT project implementation.

Responsible: *CCPO management*

Estimated Completion: *Ongoing*

Procurement Recommendation

Most general, FTA's Circular 4220.1F requires recipients "to maintain and make available" to FTA "reasonable" documentation "detailing the history of each procurement," including the reasons for:

- 1) the method of procurement,
- 2) the contract type
- 3) the contractor selection
- 4) the cost or price.

CCLRT's *Document Management Handbook* interprets these criteria by listing the following items as the typical contents of the file type "procurement package":

- Addendum(s)
- Advertisements (required for IFBs and Proposals)
- Affirmative Action documentation
- Authorization Form
- Authorization to Award memo
- Authorization by Council (Council Business Items)
- Award letter
- Bidders' List
- Bids
- Bid form
- Bid summary of responsiveness, responsibility
- Certificate of Liability Insurance
- Check Requisition
- Conflict of Interest disclosure forms
- Contract Initiation Memo (CIM)
- Contract
- Contract Agreement (for construction)
- Contract Log (Updated database)
- Correspondence File
- Cost Analysis
- Customer Survey
- Document Execution Cover Sheet
- DBE Search
- Fair & Reasonable Statement
- FTA certifications (see Council procurement policy for list of possibilities, includes Debarment & Suspension, Lobbying certifications, Buy America, etc.)
- Five-points memo
- Independent Cost Estimate (ICE)
- Information Technology Request (ITR)
- Invitation for Bid (IFB)
- Invoices (*pre-20080701 documents only*)

- Notice of Award (to all bidders)
- Notice to Proceed
- P-Card Statements
- Packing Slip (*pre-20080702 documents only*)
- Payment Bond
- Performance Bond
- Pre-Bid or Pre-Proposal meeting materials including sign-in roster
- Post-submittal
- Price Analysis
- Proposal
- Purchase Order
- Questions and Answers / Clarifications
- Quote
- Request for Proposal (RFP)
- Request for Qualifications (RFQ)
- Requisition
- Scope of Work
- Sole Source Authorization
- Specification form
- Statement of Qualifications
- Summary of Negotiation

5. CCPO document managers should index procurement packages with a checklist listing the items above in the approximate order that they would be generated during a typical procurement. This checklist should stand as the first page of a procurement package. As items are added to the package, they can be checked off, and the index can also serve as a reference for a person accessing the file. (Significant)

Management Response: *Agree, with modifications.*

- *CCPO, facilitated by the Audit Department, will meet with senior staff of the Council's two procurement departments to negotiate procedures that will ensure that past, present, and future CCLRT procurement documents are transferred and retained in AX.*
- *CCPO will consider Audit's specific recommendation of a checklist upon advice from procurement staff.*

Responsible: *CCPO management and Program Evaluation and Audit*
Estimated Completion: *1st and 2nd quarter 2009*

Recommendations Concerning the Delegation of Responsibilities

Chapter 11 of the CCLRT Project Management Plan states that “All CCPO staff, including agency, ESC [Engineering Services] and EnSC [Environmental Services] must comply with the Document Management Procedures,” not distinguishing between the basic responsibilities of Council and consultant staff for submitting documents to the system. The first of those procedures, 225-01 *Document Control Management*, states that DMC staff “is responsible for storage of project documents and correspondence records,” but that “Design Consultants, Construction Contractor[s], and other Contractors” “are responsible for compliance with project procedures and standards.” Finally, the “unit charter” of the consultants’ project controls group states that it will assist the Council in developing “methods and procedures for document control functions.”

Although these criteria outline a chain of command where the consultant is answerable to the Council, they do not explicitly state that, in order to *be* answerable, the consultant must identify and submit project significant documents to the DMC. Again, what is lacking is a more explicit procedure for making this happen. We know that every week the consultant’s Document Control Manager produces a report of documents that have been entered into its electronic project library.

6. CCPO document managers should charge the consultant’s senior managers to review this list on a weekly basis, to identify project significant documents on it, and to direct the consultant’s Document Control Manager to send those documents to the CCPO DMC. (Significant)

In this way the Council can both draw on the expertise of the consultant in identifying those documents and yet assert its authority, as FTA grantee, to ask for them.

Management Response: *Agree, with modifications. CCPO management will:*

- *More clearly define requirements and processes for the Engineering Services (ESC) consultant to submit documents in Section 6.0 of CCPO’s Document Management Procedure.*
- *Charge the agency Project Controls Manager and the ESC Project Controls Manager with reviewing the ESC document list weekly to determine which documents should be submitted to the DMC.*
- *Charge the agency Project Controls Manager, the ESC Project Controls Manager, and the FEIS Oversight Contract Administrator to identify project activities with documents to be submitted.*

Responsible: *CCPO management*

Estimated Completion: *1st and 2nd quarter 2009*

7. CCPO's Document Management Analyst should use AX to generate a similar kind of weekly report of the documents that have been entered into the CCPO DMC. (Consideration)

It is possible to review the order of submission to AX by sorting on the field "document ID," but a more extensive report, listing (at a minimum) the subject of each document, from whom it was sent, to whom it was sent, and its date, would be useful for tracking submissions, and for alerting document managers what has and has not yet made it into the DMC.

Management Response: Agree, with modifications. CCPO will produce a weekly report of submissions to the DMC and use the report to improve indexing.

Responsible: Anne Taylor, Senior Project Administrator; Judith Phillips, Office Administrator; and Diane Peach, Document Management Analyst, CCPO

Estimated Completion: Start by January 15, 2009, ongoing

8. CCPO's Document Management Analyst and the consultant's Document Manager should meet on a weekly basis to review their reports and the most recent submissions to their respective document management systems and to exchange documents that should be in each other's systems. (Significant)

Management Response: Disagree. There is only one CCPO DMC. See response to Recommendation 6.0 for method of ensuring that ESC design documents are comprehensively submitted to the CCPO DMC.

Memorandum

Date: 2009 January 02
To: Kathleen Shea and Timothy Dykstal, Internal Audit
From: Mark W. Fuhrmann, Central Corridor Project Office (CCPO) Director
Subject: Document Management – Central Corridor Light Rail Transit
Response to Program Evaluation and Audit

Thank you for the thoughtful and thorough audit of the CCPO Document Management System. We have attached a table which articulates our management response to the eight recommendations in the audit report (Note: Recommendations 1, 2, and 6 are closely intertwined, so the response to Recommendation 2 is abbreviated).

While we are very proud of the many successes associated with being an early user of a document management system that may be used Council-wide in the future (Documentum Application Xtender), we are aware that we still have work to do before we can count the implementation as a total success. As you can see in the response table, CCPO document management staff will be focusing on establishing strong business processes with the design and engineering services group and with the Council's procurement departments. It will also continue its strong effort to provide consistent indexing and strong training support to all staff.

CCPO intends to use the audit recommendations to refine our document management processes, to better serve front line staff now and in the future, to prepare us for future audits and to enhance the functionality of the document management system.

CCPO Management Response

No.	Audit Recommendation	Level	Management Response	Staff Responsible for Implementation	Estimated Completion
1	Regularly communicate to CCPO staff the requirement that they “submit significant documents to the DMC System.”	Essential	<p>Agree.</p> <ul style="list-style-type: none"> • The final audit report will be presented to the PMT following Audit Committee Review. • Within 30 days of the Audit Committee’s final approval of the audit report, Management will email staff to convey the lessons learned and the importance of DMC compliance to the CCPO’s proficiency as an organization and technical capacity. • DMC will prepare an annual calendar of DMC events which will include presentations and training at the Project Management Team (PMT) level and to all of the units. DMC staff will periodically attend unit meetings to reinforce training. • DMC will continue individual training sessions with each agency staff member (including training as part of new staff orientation) and group training of various units using the Document Management Handbook as a training guide. Training will include both procedures for submitting documents to DMC and use of AX. • Each quarter, DMC staff will conduct a special campaign focusing on specific document types. 	<p>Berger/Phillips/ Taylor</p> <p>Fuhrmann</p> <p>Phillips</p> <p>Phillips/Taylor</p> <p>Phillips/ Peach</p>	<p>2009-01-20</p> <p>2009-02-09</p> <p>2009-01-20</p> <p>Ongoing</p> <p>Ongoing</p>
2	Regularly communicate to CCPO staff—both Council and consultant employees—that project significant decisions and milestones must be documented and submitted to the DMC.	Essential	<p>Agree.</p> <p>See response to Recommendation 6.</p>	<p>Berger/Beckwith/ Watz</p>	<p>Monthly</p>

3	Expedite the wide distribution of the CCLRT Document Management Handbook, and continue to provide training in AX to project staff who generate or command the most documents.	Significant	<p>Agree. With regard to providing training:</p> <ul style="list-style-type: none"> • The Document Management Handbook was submitted to the FTA/PMOC in September 2008 and has been used subsequently as a training tool for individual staff members and by the internal auditor in conjunction with this audit. • An updated version of the Document Management Handbook will be available for general circulation in January 2009. • Administration and IT will have a shortcut of a pdf version of the handbook placed on all current and future staffs' computers. DMC staff will maintain one version of the Handbook which will be accessible at this link. This will ensure that staff always has access to the current version. • The handbook will be rolled out in the email referred to in the response to recommendation 1 above. Hard copies will be available on a limited basis. • Primary users of ApplicationXtender will complete small group training sessions with the software vendor to enhance expertise and address technical issues. 	Phillips/Thao	<p>2009-01-15</p> <p>2009-02-09</p> <p>End of 1st Qtr 2009</p>
4	CCPO's document managers should compare the subject and other fields of documents of similar type to continue identifying and cleaning up errors of consistency.	Essential	<p>Agree.</p> <p>Consistency in indexing documents of similar types is a high priority of both the DMC and CCPO Managers. However, it is important to approach standardization of input realistically. A project such as CCLRT has both repetitive, similar documents and very unique documents that must be entered in the system. So that the standardization of indexing found in an area such as accounting will never be attained. Below are some of the steps that DMC is taking to create standardization of input.</p> <ol style="list-style-type: none"> 1. DMC has added Chapter 6.0 "Index Templates for Input Consistency" to the Document Management Handbook. When DMC discovers that there is a pattern of similarity of documents submitted, it will devise a template with the appropriate manager or staff member to guide future indexing and searching. Below is a sample template: 	Peach/Phillips/Taylor/Unit Managers	Ongoing

4	Con't		<p style="text-align: center;">Indexing for AX - Disadvantaged Business Enterprise DBE 11/11/08</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: black; color: white;">Fields</th> <th style="background-color: black; color: white;">Values</th> </tr> </thead> <tbody> <tr> <td>Document File Type*</td> <td>Report</td> </tr> <tr> <td>Document Date</td> <td>Date signed</td> </tr> <tr> <td>Subject</td> <td>Disadvantaged Business Enterprise DBE Progress/Project Report #</td> </tr> <tr> <td>Security*</td> <td>All</td> </tr> <tr> <td>Revision Number</td> <td></td> </tr> <tr> <td>Comments and Notes</td> <td>Company name report from date to date</td> </tr> <tr> <td>Additional Comments</td> <td></td> </tr> <tr> <td>Contract Number</td> <td></td> </tr> <tr> <td>Agreement Number</td> <td></td> </tr> <tr> <td>Significant Number</td> <td></td> </tr> <tr> <td>Author or Document Owner</td> <td></td> </tr> <tr> <td>Author Company</td> <td></td> </tr> <tr> <td>Sent To</td> <td></td> </tr> <tr> <td>Date Sent</td> <td></td> </tr> <tr> <td>Received From</td> <td></td> </tr> <tr> <td>Date Received</td> <td></td> </tr> <tr> <td>Document Use History</td> <td></td> </tr> <tr> <td>Hard Copy Media Type*</td> <td></td> </tr> <tr> <td>Photo</td> <td></td> </tr> <tr> <td>Bridge Number</td> <td></td> </tr> <tr> <td>Change Order Number</td> <td></td> </tr> <tr> <td>Drawing Set Number</td> <td></td> </tr> <tr> <td>Parcel ID Number</td> <td></td> </tr> <tr> <td>Segment Number</td> <td></td> </tr> <tr> <td>Submittal Number</td> <td></td> </tr> <tr> <td>Retention Type*</td> <td></td> </tr> </tbody> </table> <p style="font-size: small; margin-top: 5px;">*Drop-down index selections</p> <ol style="list-style-type: none"> 2. Though AX lacks a simple “copy/paste” mechanism, DMC staff has recently discovered that some of the AX function keys facilitate consistent indexing. For example, the F9 key duplicates index data from the last document index saved in a way that preserves both consistency and allows inputer to modify fields to preserve unique field elements. 3. As specified in the Document Management Handbook, the DMC will continue weekly meetings for consistency in indexing and other DMC issues. See response to recommendation 7 for report which will be used at these meetings. 4. DMC has begun meeting with various unit managers and staff to determine when standardized indexing might be relevant for types of documents associated with the unit’s area of expertise. Great progress has been made with the public involvement area. 5. By the end of 1st quarter 2009, DMC will have a plan to review and correct document indices that resulted from the conversion of the temporary document management system to AX and also documents entered prior to the publication of the Document 	Fields	Values	Document File Type*	Report	Document Date	Date signed	Subject	Disadvantaged Business Enterprise DBE Progress/Project Report #	Security*	All	Revision Number		Comments and Notes	Company name report from date to date	Additional Comments		Contract Number		Agreement Number		Significant Number		Author or Document Owner		Author Company		Sent To		Date Sent		Received From		Date Received		Document Use History		Hard Copy Media Type*		Photo		Bridge Number		Change Order Number		Drawing Set Number		Parcel ID Number		Segment Number		Submittal Number		Retention Type*			
Fields	Values																																																										
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5	CCPO document managers should index procurement packages with a checklist listing the items above in the approximate order that they would be generated during a typical procurement. This checklist should stand as the first page of a procurement package. As items are added to the package, they can be checked off, and the index can also serve as a reference for a person accessing the file.	Significant	<p>Agree, with modifications.</p> <ul style="list-style-type: none"> • CCPO, facilitated by the Audit Department, will meet with senior staff of Met Council's two procurement departments to negotiate and document procedures and business processes that will ensure that CCLRT procurement documents are transferred and retained in AX on an ongoing basis. • The business process will cover past and future procurement files. • CCPO will consider Audit's specific recommendation of a checklist upon advice from procurement staff. This checklist would be scanned as a cover to each package. • Successfully archive current and future procurement files. • Successfully archive past procurement files. 	Berger	<p>1st Qtr 2009 Early</p> <p>Within 30 days of meeting</p> <p>Ongoing after agreement</p> <p>2nd Qtr 2009</p>
6	CCPO's document managers should charge the consultant's senior managers to review this list [<i>the ESC's weekly list of documents submitted to the Consultant's system</i>] on a weekly basis, to identify project significant documents on it, and to direct the consultant's Document Control Manager to send those documents to the Council's DMC.	Significant	<p>Agree, with modifications.</p> <p>CCPO Procedure 225-01 <i>Document Control Management</i> will be revised to reflect more clearly state that in addition to final work products, there are many tasks performed by the Engineering Services Consultant (ESC) and Environmental Services Consultant (ENSC) as members of the CCPO team that should be documented and archived. This procedure will:</p> <ul style="list-style-type: none"> • More clearly define requirements and processes for the ESC to submit documents in Section 6.0 of the procedure. • In Section 4.0 of the procedure specifically charge the agency Project Controls Manager and the ESC Project Controls Manager with reviewing the ESC document list weekly to determine which documents should be submitted to the Project DMC with the underlying philosophy that when there is disagreement, they will error on the side of submitting. • In Section 4.0 specifically charge the Agency and ESC Project Controls Managers with reviewing monthly the 	<p>Berger</p> <p>Beckwith/Watz</p> <p>Beckwith/Watz</p>	<p>2009-01-15</p> <p>2009-02-02</p> <p>2009-02-16</p>

			<p>Integrated Project Master Schedule submitted to the FTA in the CCPO monthly report to determine which milestones and activities have associated documents which should be submitted.</p> <ul style="list-style-type: none"> In Section 4.0 of the procedure specifically charge the FEIS Oversight Contract Administrator with the responsibility for determining which EnSC documents should be submitted to the Project DMC with the same underlying philosophy. 	O'Brien	Ongoing
7	CCPO's Document Management Analyst should use AX to generate a similar kind of weekly report (see recommendation 6 above) of the documents that have been entered into the Council's DMC.	Consideration	<p>Agree, with modifications.</p> <p>DMC will convert AX documents to an Excel spreadsheet to produce a report of submissions made that week. DMC staff will design this spreadsheet to reflect the most significant index fields. This report process will be documented in the <i>Document Management Handbook</i>. The DMC team will use it as a review tool during their weekly meetings as noted in the response to recommendation 4.</p>	Taylor/Phillips/ Peach	2009-01-15
8	CCPO's Document Management Analyst and the consultant's Document Manager should meet on a weekly basis to review their reports and the most recent submissions to their respective DMCs and to exchange documents that should be in each other's systems.	Significant	<p>Disagree</p> <p>There is only one CCPO DMC. See response to Recommendation 6.0 for method of ensuring that ESC design documents are comprehensively submitted to the CCPO DMC.</p>	Peach	Ongoing