

U.S. DOT Federal Transit Administration TPM-20 Office of Capital Project Management Project Management Oversight

Oversight Procedure 26 – Lessons Learned

1.0 PURPOSE

The purpose of this Oversight Procedure is to describe the analysis and reporting requirements that the Federal Transit Administration (FTA) expects from the Project Management Oversight Contractor (PMOC) with regard to sharing the experiences gained in all phases of major capital transit projects with a wider audience. The application of Lessons Learned by sponsors of future transit projects can potentially produce better project outcomes while saving time and cost, thereby increasing the effectiveness of FTA's capital investment.

2.0 BACKGROUND

The Lessons Learned program has existed for more than a decade and was developed with the assistance of the Project Sponsors, FTA, and its PMOCs. However, the central repository of lessons was not been kept up to date and some lessons were shared with project team members only. When lessons were shared with a wider audience, the timing of the publication was often delayed and the impact of the lesson was reduced. FTA is renewing the emphasis on the Lessons Learned program so that it can be valuable to FTA and the transit industry.

Lessons can be derived from any phase of project implementation: design, real estate, construction, management, etc. The PMOC, in concert with the Project Sponsor, during each project phase, should create, add to, and maintain a list of Lessons Learned. The Lessons Learned list should include significant findings, recommendations, and new insights realized. Maintenance of the list ensures that lessons will not be forgotten and it provides ready material for inclusion in Lessons Learned reports to FTA in a timely manner. Project Sponsor participation ensures that the lessons are accurately portrayed with the proper perspective.

FTA will publish Lessons Learned on its public website. A hyperlinked table of contents will provide access to full documents (see sample in Appendix B below). The table of contents will be continuously updated as new Lessons Learned are reviewed and approved by the FTA. The FTA public website front page has the option for users to sign-up for email notification of changes or updates to the website including Lessons Learned.

3.0 OBJECTIVES

The objectives are:

- To define a simple process for capturing POTENTIAL lessons as they are encountered during the project execution without a major expenditure of time and resources ("mini-lessons");
- To provide a cumulative list of mini-lessons at the end of each project phase as a tool for the selection, full development, and formal issuance of those mini-lessons that are sufficiently robust to be developed into Project Lessons to be shared;
- To share Lessons Learned on major capital transit projects with the transit industry and other interested parties;
- To have the lessons readily available via the FTA public website;
- To increase awareness within the transit industry of pitfalls and impediments to the achievement of project goals;
- To recommend changes in FTA policies and practices when Lessons Learned on projects suggest that such changes may be advisable.

4.0 REFERENCES

The following are the principal, but by no means the only, references to Federal legislation, regulation and guidance with which the PMOC should have a good understanding as related to the Project Sponsor's project work being reviewed under this OP: The references in OP 01 (Administrative Conditions and Requirements) apply.

5.0 PROJECT SPONSOR SUBMITTALS

The PMOC should obtain documents and other materials from the Project Sponsor that are needed to support the development and preparation of the lesson. As mini-lessons are documented, the PMOC and Project Sponsor should consider the likelihood of future availability of the applicable Project Sponsor documents, and if it is expected that the records will become inaccessible before the completion of the project or other such time that mini-lessons may be developed into full Project Lessons, take action with the Project Sponsor to collect the documentation while it is still accessible.

6.0 SCOPE OF WORK

The PMOC shall document Lessons Learned in the following manner:

 Mini-Lessons: With each Comprehensive Monthly Report (refer to OP25), the PMOC should issue a separate document containing a cumulative list of briefly described POTENTIAL Lessons Learned to date ("Mini-Lessons") on the project(s) for which oversight is provided. With each subsequent issue of the Mini-Lessons document, the PMOC should note, in as little as a sentence or two each, the potential Lessons Learned during the preceding quarter. Mini-Lessons should track insights and remind the PMOC and Project Sponsor of hurdles crossed during the course of the project. Mini-Lessons should be characterized by project phase and by category. Refer to Appendix B of this OP for format. The cumulative list of Mini-Lessons will be reviewed later in the project to confirm the continued validity of the POTENTIAL lessons captured in the "Mini" write-ups. This process recognizes that not all "good" ideas result in positive outcomes after final invoices, change orders, and claims are reconciled at the end of the project.

2) Project-Lessons: These are the two or three most important lessons that have been learned over the course of each phase of the project. Near the end of each project phase the PMOC and the Project Sponsor should review the cumulative list of Mini-Lessons to identify those two or three Mini-Lessons that continue to stand out as significant when all aspects of the project have been taken into consideration. The PMOC and the Project Sponsor then should collaboratively develop these into a full Lessons Learned, writing them for the benefit the entire transit industry, as well as FTA. They will be posted to FTA's public website, and should therefore not be repetitive with Lessons Learned already posted, unless valuable different perspectives are presented.

7.0 REPORT, PRESENTATION, RECONCILIATION

Each Lessons Learned Report should be no more than two or three pages in length. The Lessons Learned Report should be descriptively titled to allow the reader to understand the lesson content through the title alone. They should include just enough project background information to facilitate understanding of the lesson. The Lessons Learned Report should follow the following outline:

- 1) Date
- 2) Project Name
- 3) Abstract (a summary or concentration of the essentials of a larger issue)
- 4) Project Phase (Project Development, Engineering, Procurement, Construction, Startup)
- 5) Category (Management, Scope, Schedule, Cost, Risk)
- 6) Background (type of project, geographic location, other pertinent information)
- 7) The Lesson (including condition, cause, effect, and remedy/resolution)
- 8) Applicability (types of projects, how lesson scan be applied, responsible party(ies) for action)
- 9) Contact Person/Info

APPENDIX A

Acceptable Quality Level

	DESIRED OUTCOME	PERFORMANCE REQUIREMENT	CHECK LIST	ACCEPTABLE QUALITY LEVEL	PERFORMANCE MEASURE	MONITORING METHOD
1	The PMOC shall identify, analyze, document and recommend to FTA Lessons Learned in conjunction with project experiences.	R1a. The PMOC shall develop and document a process for identification, analysis and documentation of Lessons Learned on each Project to which it is assigned.		Q1a. Process exists and has been followed.	M1a. Evidence of a documented process.	MM1a. Periodic review by FTA or its agent.
		R1b. The PMOC shall use its process to make recommendations regarding Lessons Learned for the benefit of future federally assisted projects.		Q1b. Assessment must be made and the PMOC provides internal verification that the process as documented has been followed.	M1b. Documented assessment and analysis of Lessons Learned.	MM1b. Periodic review by FTA or its agent.
2	The PMOC shall develop Lessons Learned in planning, design, construction, revenue operations and associated matters on capital transit projects for the benefit of future transit project sponsors to potentially produce higher quality	R2a. The PMOC shall, as an appendix to each quarterly report, develop and note mini-Lessons Learned organized by project phase and category which occurred during the preceding quarter.		Q2a. Professional opinion of minilessons with appropriate discussions.	M2a. Documented evidence of mini-lessons developed by the PMOC supported by professional opinion.	MM2a. Periodic review by FTA or its agent.
2	projects and to improve the effectiveness of future FTA capital investments.	R2b. The PMOC shall, near the end of each project phase, develop Project-Lessons collaboratively with the Project Sponsor drawing upon mini- lessons and reflective discussions with the Project Sponsor.		Q2b. Written report of Project- Lessons learned and coordination with Project Sponsor.	M2b. Documented evidence of Project- Lessons and collaboration with Project Sponsor.	MM2b. Periodic review by FTA or its agent.
3	The PMOC shall provide written Project-Lessons Learned Reports in accordance with the prescribed format to FTA for publication on FTA's public website.	R3. The PMOC shall present its findings, conclusions, recommendations, and Lessons Learned in Project-Lessons Learned Reports to the FTA in the prescribed format.		Q3. Reports and presentations are professional, clear, concise, and well written. The findings and conclusions have been reconciled with Project Sponsor to the extent possible.	M3. PMOC's findings, conclusions, recommendations with respect to Project- Lessons Learned.	MM3. Periodic review by FTA or its agent.

APPENDIX B

Sample – "Mini-Lessons" Learned Table

LL #	Date	Phase	Category	Subject	Lesson Learned
1	Jan-09	Final Design	Schedule	Problems with getting D/B contractor to submit CPM schedules.	Future contracts need to include stronger language dealing with a contractor's failure to submit accurate CPM schedules and failure to follow their schedule. <u>Http://www.hillintl.com/fta/lessonslearned/SouthFloridaPBDT</u>
2	Apr-09	Final Design	Cost	D/B contracts can have extra costs the same as sealed bid.	For future design/build projects, the budget needs to include a larger contingency amount to allow for issues that arise during the final design stage. <u>Http://www.hillintl.com/fta/lessonslearned/SouthFloridaPBDT</u>
3	Jul-09	Final Design	Cost	Bids are coming in high on many projects nationwide.	Grantees should consider use of early completion incentives to stimulate greater bidder interest (more bids) and lower bids. <u>Http://www.fta.dot.gov/TPM-20</u> <u>Recommendations</u>