

**Lessons Learned**  
**(Also, See Project Controls Policy Manual)**




Deval L. Patrick, Governor  
Timothy P. Murray, Lt. Governor  
Jeffrey B. Mullan, MassDOT Secretary & CEO  
Richard A. Davey, General Manager  
and Rail & Transit Administrator



## MEMORANDUM

**TO:** Directors, Deputy Directors and Project Managers

**FROM:** Edmond F. Hunter  
Acting Assistant General Manager  
for Design and Construction 

**DATE:** June 27, 2011

**RE:** Lessons Learned

---

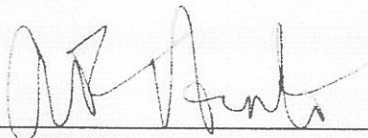
In accordance with Federal Transit Administration (FTA) requirements of sharing experiences gained in the planning, design, construction and revenue operations of major capital transit projects, the Design and Construction Department is mandated to incorporate Lessons Learned on every project.

Lessons Learned can potentially produce higher quality projects while saving time and cost and help the project team share knowledge gained from experience so that the entire organization may benefit. A successful Lessons Learned program will help project teams:

- Repeat desirable outcomes
- Avoid undesirable outcomes

Project Managers are required to record Lessons Learned throughout the life cycle of each project. The form attached, should be submitted quarterly - an exception of this would be when there is a safety incident, in which case, the form will need to be filled out immediately. The data that is compiled will be available for Project Managers and design consultants to review as they are assigned new projects or projects enter new phases. This information will be collected and should be sent to Project Controls.

Thank you for your adherence to this matter. Feel free to contact me if you have any questions.



---

Edmond F. Hunter  
Acting Assistant General Manager for  
Design and Construction

Massachusetts Bay Transportation Authority  
Ten Park Plaza, Boston, MA 02116  
[www.mbta.com](http://www.mbta.com)



## Lessons Learned

The objective of Lessons Learned (LL) is to document aspects of each project that did not go well and recommend a strategy or solution to avoid or reduce the probability of the event occurring in future projects. Some lessons are positive. Document reasons attributed to the positive outcome.

Project Managers are required to record LL throughout the life cycle of each project. The LL form is the means that MBTA will use to record LL. Lessons Learned forms can be completed at anytime within a quarter. At the end of each quarter, the PM shall submit the LL created within the quarter to Project Controls. A minimum of one (1) LL is required each quarter for each project. Project Controls will organize all the data by project classification and phase. The LL data will be available for PMs and design consultants to review as they are assigned new projects or projects enter new phases.

During project closeout, PMs are required to archive LL with the project records.



### Lessons Learned Form

QTR. 20\_\_\_\_

- |   |  |
|---|--|
| <input type="checkbox"/> 1. Jan. - Mar. | <input type="checkbox"/> 3. Jul. - Sept. |
| <input type="checkbox"/> 2. Apr. - June | <input type="checkbox"/> 4. Oct. - Dec.  |

1. Project Title: \_\_\_\_\_

2. Contract #: \_\_\_\_\_

3. Lessons Learned #: \_\_\_\_\_

4. Date: \_\_\_\_\_

5. Project Delivery Method

- Design - Bid - Build
- Design Build
- CM @ Risk

6. Phase:

- Conceptual Design of 15%
- Preliminary Design 15% - 60%
- Final Design 60% - 100%
- Procurement
- Construction

7. Project Classification:

- |  |   |
|--|---|
| <input type="checkbox"/> System Improvement    | <input type="checkbox"/> Maintenance Facility Improvement |
| <input type="checkbox"/> Parking Lot           | <input type="checkbox"/> New Elevator                     |
| <input type="checkbox"/> Roadway               | <input type="checkbox"/> Replacement Elevator             |
| <input type="checkbox"/> Commuter Rail         | <input type="checkbox"/> Parking Garage                   |
| <input type="checkbox"/> Bridge                | <input type="checkbox"/> Light Rail Right-of-Way          |
| <input type="checkbox"/> Station Renovation    | <input type="checkbox"/> New Vertical Construction        |
| <input type="checkbox"/> New Capital Expansion | <input type="checkbox"/> Environmental                    |
| <input type="checkbox"/> Noise Wall            | <input type="checkbox"/> Heavy Civil                      |
| <input type="checkbox"/> Building Demo         | <input type="checkbox"/> Signal/Comm./Power               |

8. Lessons Learned Affected Category:

- |                                |                                     |
|--------------------------------|-------------------------------------|
| <input type="checkbox"/> Scope | <input type="checkbox"/> Time       |
| <input type="checkbox"/> Cost  | <input type="checkbox"/> Management |

9. Is this a safety related lesson?  Yes  No



Massachusetts Bay Transportation Authority  
Design & Construction Department

10. Title of Lessons Learned: \_\_\_\_\_

11. Background:

12. Lessons Learned Challenges (what needs improvement or what went well?):

13. Lessons Learned Recommendations (how would you improve or avoid or why do you think it went so well?):

14. Applicability:

Submitted by: \_\_\_\_\_

Telephone #: \_\_\_\_\_

Email: \_\_\_\_\_



### Instructions for Lessons Learned Form

Limit one (1) form per Lesson Learned.

Project Managers are encouraged to document as many lessons learned as possible in an effort to share their experiences with others.

Lessons Learned are submitted quarterly to Design & Construction Project Controls. Only new lessons learned, created within the corresponding quarter are submitted.

**QTR:** Provide year and appropriate quarter.

**Project Title:** Self-explanatory.

**Contract #:** If project is in design, provide design contract number. If project is in construction, provide construction contract number.

**Lessons Learned #:** For the duration of design, each lesson learned shall have a unique designated number. Numbering shall be sequential. The same applies to projects in construction.

**Date:** Indicate date Lessons Learned is recorded.

**Project Delivery Method:** Self-explanatory.

**Phase:** Choose one phase Lessons Learned applies to.

**Project Classification:** Choose appropriate project classification.

**Lessons Learned Category:** Determine which category the Lessons Learned issue applies to. What was the root cause of the issue? Choose one.

**Title of Lesson Learned:** The project lessons should be descriptively titled to allow the reader to understand the lesson content through the title alone.

**Lessons Learned:** Describe the issue surrounding the lesson. This should include just enough information to facilitate understanding the lesson.

**Background:** Briefly describe product. What happened during the execution of the project that brought to light the deficiency or need to create or modify a process, procedure, plan and/or specification?

**Lessons Learned Recommendation:** How would you improve or avoid the situation? What would you do differently?

**Applicability:** When or where can this particular Lessons Learned be used?

**Submitted By:** Individual completing the Lessons Learned form.

**Telephone # & Email:** Self-explanatory.