

LTPP Data Analysis

Task Order #03

“Effect of Multiple Freeze Cycles and Deep Frost Penetration on Pavement Performance and Cost”

Quarterly Progress Report

April, May, June 2006

Prepared for:

US Department of Transportation
Federal Highway Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

Detailed Technical Summary of NCE Task Order #03 “Effect of Multiple Freeze Cycles and Deep Frost Penetration on Pavement Performance and Cost”

NCE has completed most of the work on Phase 2 of this project. During the quarter, an additional model was developed that better fit the fatigue damage models for flexible pavements in the NCHRP 1-37A design procedures. The fatigue model as well as the transverse cracking and ride models were used to conduct local calibration of the 1-37A Pavement Design Guide (PDG) for a typical site in North Carolina. This sample calibration was used to demonstrate how the performance models developed for this project can be used to calibrate the 1-37A PDG damage models for local environments where agencies do not have measured pavement performance data available.

The rigid pavement prediction models were modified based on preliminary review comments received from panel members. These revised models along with the new fatigue damage model were incorporated into the final report. Additionally, all comments received from the Pooled Fund Panel members were addressed in the final report, which was submitted to FHWA on May 25, 2006.

Resources Used

Figure A.1 in Appendix A shows the current work schedule for Task Order #03 through June 2006. All primary tasks have been completed and NCE is awaiting final copy-edit comments that will need to be addressed in preparation for publication.

Figure A.2 in Appendix A shows the planned costs versus actual costs for Task Order #03 through June 2006. The current expenditure rate is below the budget rate through the time extension period.

Appendix A

Task Order #03

Work and Costs Summaries

Through June 2006

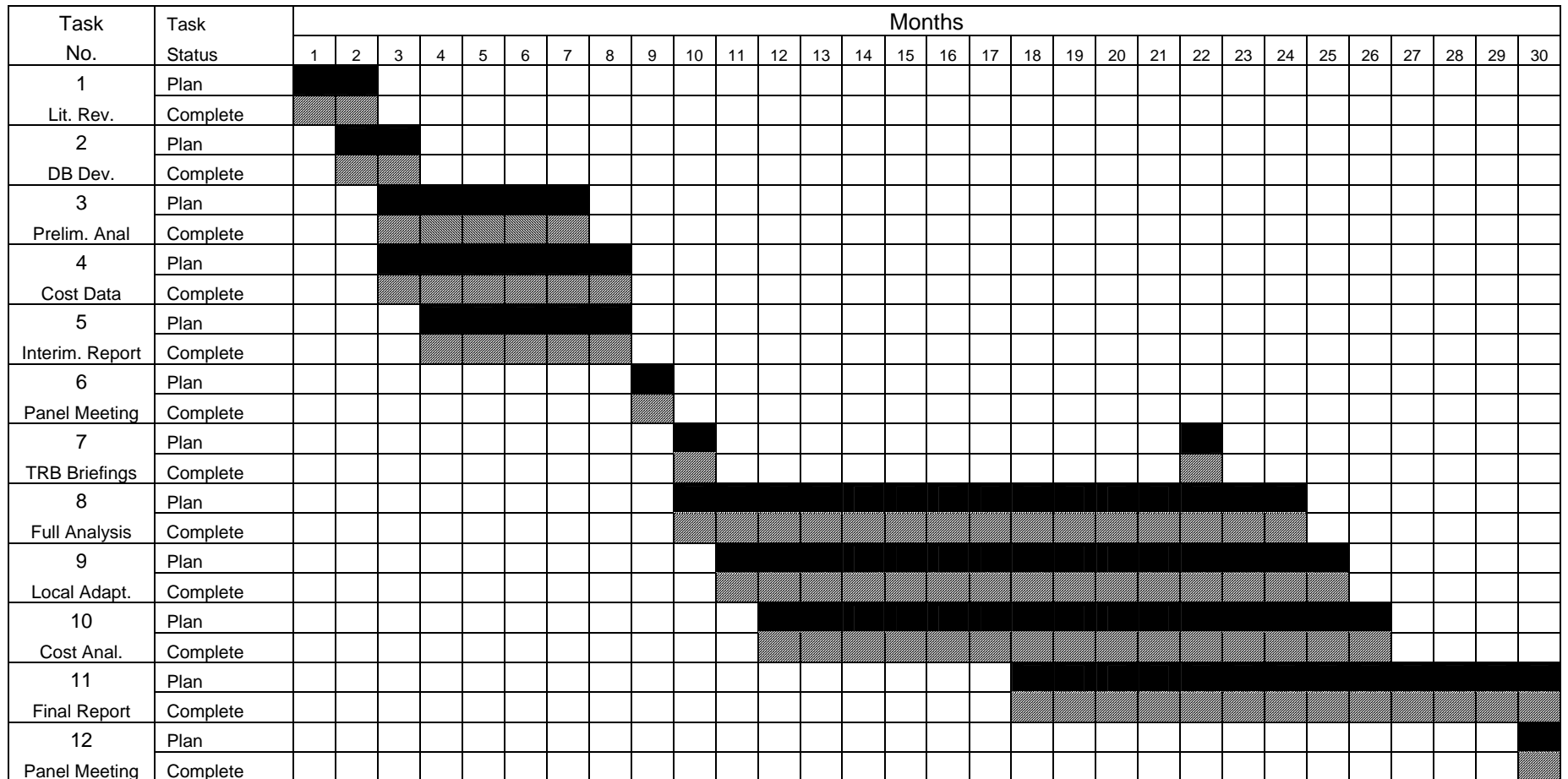


Figure A.1. Work schedule for Task Order #03 through June 2006.