Traffic Sign Life Expectancy

Investigation LAB943

Project TAP Meeting #4 05/06/2014

Project Team

Matt Lebens, MnDOT PI
Howard Preston Co-PI
Allen Gallistel, MnDOT
Maureen Jensen, MnDOT



Project Update and Meeting Overview

- Project Schedule (*Workplan Amendment*)
- Task 1 Complete
- Task 2 Complete Information (on Website)
- Task 3 Now Tasks 3, 4 and 5; In Progress till 2016
- Task 4 (now task 6) complete Complete
- Task 5 (now task 7) In Progress; Due June 2014
 - CH2M Hill Draft Final Report Presentation
- MnROAD Info & Tour Test Deck (if feasible)

Task 1: Survey of Practice Complete

- Survey local agencies, other states
 - Types, colors and fabrication method of sheeting
 - Known, quantifiable drivers of sign replacements
 - Agencies with sign management data that could be used
 - All information that can be used from state studies, evaluations and databases
 - List of sign replacement projects scheduled that can provide signs for test deck
 - Potential set of in-field control signs for ongoing measurements

Task 2: Test Deck & Data Collection Plan Complete

- Identify in-service signs that will be measured
 - Agency data collection preliminary schedule on website;
 - http://www.dot.state.mn.us/materials/signretroreflectivity.html
- Select Spreadsheet Database
 - Useable sign inventory database Posted on website
- How-to videos for data collection
 - Gamma922 Retroreflectometer manufacturer training videos available: http://www.pppcatalog.com/922-training/
 - Project-specific video Posted on website
- Determine need for additional equipment
 - New retroreflectometer purchased, checked and in operation.
- Develop test deck plan for MnROAD
 - MnROAD Test Deck installed and in operation, layout on website

Task 3: MnROAD Data Collection

2014 Amendment OLD TASK 3 is new Tasks 3, 4, and 5

- (New) Task 3 Complete;
 - Construct vertical and 45^o accelerated decks
 - 45⁰ deck and vertical decks Installed and Operational
 - Populate with Sign Materials
 - New 2013 DG3 panels installed June 2013
 - Collect retroreflectivity and color FY 2013-2014
 - Initial Readings Taken Prior to Install
- (New) Task 4 Planned;
 - Collect retroreflectivity and color FY 2015
 - Retest In place signs
 - Populate with Additional Sign Materials
 - Initial Readings Taken Prior to Install

Task 3: MnROAD Data Collection

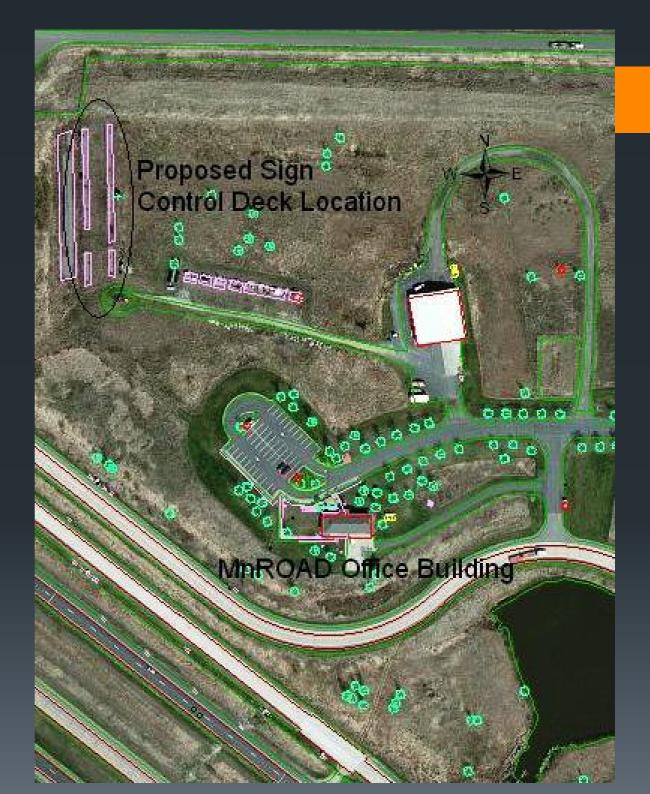
2014 Amendment OLD TASK 3 is new Tasks 3, 4, and 5

- (New) Task 5 Planned;
 - Collect retroreflectivity and color FY 2016-2017
 - Retest In place signs
 - Populate with Additional Sign Materials
 - Initial Readings Taken Prior to Install

- Share Data on Website
 - http://www.dot.state.mn.us/materials/signretroreflectivity.html

Task Schedule July 1, 2013 – Nov, 2016

Sign Test Deck Location at MnROAD



MnROAD Test Deck Pics



Task 4: System Data Collection

2014 Amendment OLD TASK 4 is new Task 6
Complete

- Provide Training at MnDOT Lab
- Coordinate shared retroreflectometers
 - Retro meter to be shared out has been cross-checked to Maplewood lab's meter and will be again annually
- Provide stickers for field control signs
- Annually calibrate purchased equipment
- Review data, collate into database, prepare results, summarize on webpage

Task Schedule May 1, 2013 – Dec 30, 2013

Task 5: Data Analysis and Final Report

2014 Amendment OLD TASK 5 is new Task 7
In Progress

- Being Prepared by CH2M Hill
- Compilation of Results of Previous Tasks and Expert Panel Decisions
- Technical Memorandum/Report
- Suggested Sign Life and Sign Maintenance Policy

Task Schedule January 1, 2014 – June 30, 2014

Next Steps

- Comments for Draft Report to CH2M Hill
- Complete Final Report and Publish
- Continue MnROAD Test Deck New Sign panels installation and testing
- Continue salvaging of sign panels, testing, and install
- Update Website as Needed

Questions?



Thank You

Stay for a Short Tour of the Test Deck (& other MnROAD areas if possible)