RAILROAD CROSSING SURFACE MATERIAL PERFORMANCE

Potential Benefits:
- Improve surface/ride quality
- Longer maintenance intervals
- Reduce maintenance costs
- Improve durability
- Better understanding of surface performance
- Guidance on preferred surface types

Problem Statement:
The State of Michigan has a large number of crossings with each type of surface, but there is a limited understanding on how each type has performed over time. Understanding performance over time is important, so that the most economical decisions can be made when determining crossing rehabilitations, or selecting materials for new crossings. Estimated Project Duration: Jan - Dec. 2013

Scope of Work:
- Gather crossing data from MDOT and other sources
- Development of deterioration estimates and data analysis
- Field visits to assess current crossing conditions
- Provide recommendations on crossing surface
- Develop guidelines for crossing surface evaluations
- Disseminate the project outcomes
- Data not sufficient to develop trends
- Field visits were completed over the summer.
- MDOT data insufficient for analysis
- Crossing surface evaluation and data collection program
- Once the remaining tasks are completed and the final

Crossing Before Reconstruction

Crossing After Reconstruction

Graph of Ratings vs Time

ETEC Rail Road Division:
Alex Summers – Construction Management
Charles Fobbs – Construction Management
Christopher Blessing – Civil Engineering
Nate Jurmu – Civil Engineering
Jack Klieber – Civil Engineering

Concrete Crossing Evaluation Sheet

Rehab Section of Data Collection Sheet

SPONSORS

Disclaimer: Information on Data Collection Sheet is for representative purposes only.