RELIABILITY BASED BRIDGE INSPECTION INTERVALS

Student: Becky Reising

PI: Robert Connor

Sponsor: Indiana Department of

Transportation (INDOT)





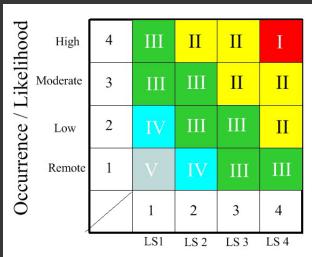
Research Objectives

- Improve safety and reliability of bridges
- Optimize resources for bridge inspection
- Fundamental Basis:
 - What can go wrong?
 - How likely is it?
 - What are the consequences if it happens?



Research Tasks

- Develop criteria & procedure for reliability assessment
- Verify developed criteria & procedure using historical data
- Prepare implementation plan



Consequence

Category	Maximum Interval
I	12 months or less
II	24 months
III	48 months
IV	72 months
V	96 months



Reliability Based Bridge Inspection

The objective of this project is to develop reliability based inspection practices to improve the safety and reliability of bridges and optimize resources for bridge inspection. The proposed methodology asks: What can go wrong? How likely is it? What are the consequences if it happens? Answers to these questions are then used to determine a bridge inspection interval based upon a reliability matrix. Historical data is being used to verify the methodology, and an implementation plan is being developed.

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Faculty Investigator: Robert Connor

Graduate Student: Becky Reising

