

Nondestructive Testing for Concrete Bridge Decks (R06A)

ALDOT Summary

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January 30 – 31, 2019



Objectives and Goals

1. To use non-destructive (ND) technology to detect deterioration on bridge decks
 - To identify which ND technology to use
 - Validate results

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 - To identify which ND technology to use
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2. Use ND technology as a maintenance tool
 - Identify
 - Quantify
 - Track

ND Technology



ND Technology



ND Technology



ND Technology



ND Technology



Implementation



Validation



What We Learn

1. Does the ND Technology used identify deterioration?
 - Steel reinforcement location and concrete cover
 - Bridge deck thickness
 - Horizontal cracks and Delamination
 - Vertical cracks
 - Honeycomb and voids
2. Which ND Technology is the best?
 - Each technology has its limitations
 - ND Technology provides best results when used together

What is Next at ALDOT?

1. Mockup bridge

- Imbedded defects
- Training of new personnel
- Calibration of Equipment
- Testing of other ND technologies

2. Use ND technology as a maintenance tool

- Maintenance Bureau – Identify bridges
- Training other personnel

QUESTIONS

