Overview

• Why GPR

• GPR for Infrastructure Evaluation

• Implementation
Why is the Maryland State Highway Administration pursuing GPR?

• Technology advancements
• Multi antenna systems
• Modern processor speeds
• Low cost data storage
Infrastructure Evaluation

• 20 miles of pavement thickness data in one evening
• 65 metro structures in 21 days
• Cost is approx 1/3 of traditional methods
• Data set is a complete coverage of the structure
A. Close coupled DXG antenna

B. Wheel-mounted Distance Measuring Instrument (DMI)
Bridge Deck Degradation
Implementation

Support Agency Mission

Next Steps

- **Short Term**
  - Equipment funding
  - Process approximately 100 structures per year
  - Reports will include degradation and coverage maps
  - Identify internal & external resources to meet this goal

- **Long Term**
  - Develop annual field collection program
  - Develop Long-term GPR program with in-house and consultant resources
  - Develop Structure preservation program
  - Process approximately 300 structures per year
Contact

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