Pipe Inspection
PROJECT DEVELOPMENT & CONSTRUCTION CONFERENCE 2020

AARON PEREZ, NDDOT
JON STORK, NDDOT
Objectives

- Pipe inspection equipment
- Pipe inspection projects
- Data collection software
- Future program outlook
Pearpoint P350 Crawler System
Crawler - Capabilities
Crawler - Multiple Configurations
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Crawler - Command Module & Powered Drum
Crawler - On Screen Details

- Distance Counter
- Pitch Angle
- Mimic Controls
Hydraulic Inspection Vehicle Explorer (HIVE)
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The Hydraulic Inspection Vehicle Explorer (HIVE) is an enhanced radio-operated car, which allows MnDOT to inspect culverts and pipes to determine if any repairs or replacement is needed. Often the culverts and pipes are too small or difficult for a person to enter to visually inspect it, so the vehicle is operated via radio control with a camera and lights to record and view conditions with just one specialist at the site. It has discovered damage in culverts underneath roads long before the problem becomes an emergency. The device was modified by Rochester MnDOT workers in the inventory department, who are experienced radio-operated car hobbyists. They have built a HIVE device for each MnDOT district and created an online guide for parts, repairs and operation to allow all MnDOT users to access the information when issues arise.
HIVE - FHWA Road Inspections Near Max, ND
HIVE - Capabilities
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I-29 Landslide, Grand Forks
I-29 Landslide, Grand Forks
US 85 Horseshoe Bend Landslide
US 85 Horseshoe Bend Landslide
US 85 Horseshoe Bend Landslide
I-94 to River Road, Bismarck
I-94 to River Road, Bismarck
I-94 to River Road, Bismarck
I-94 to River Road, Bismarck
I-94 to River Road, Bismarck, 2nd Try
Corridor Pipe Inspections and Data Management
Field Data Collection & Management
Why?

• Safety
• Cost Savings
• Data-Driven Decision Making
• Condition Monitoring
• Maintenance
• Post-Construction Inspections
• GIS Viewer
What’s Next?
Questions?

Jon Stork  
NDDOT Materials & Research  
jstork@nd.gov  
701-328-6903  

Aaron Perez  
NDDOT Materials & Research  
asperez@nd.gov  
701-328-6911