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Road Surveying Equipment and Data Collection Technology Overview

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Road Survey Data

• What is it?
• Why collect it?
• Who uses it?
What is it?

- Road survey data is composed of sensor data and images used to assess the condition of a road or network of roads.
Why Collect It?

• Road survey data is used to maximize the efficiency of materials, manpower and resources within an agency to guarantee the safest and most cost effective means of road travel

• Road survey data collection is both a responsive and proactive means of maintaining a network of roads
Who Uses It?

• Road survey data is used by agencies to gather information about the location and condition of maintained roads

• This information is used to assess funding, planning, repairs, performance and future projects
Technology Overview

• Inertial Profiler
• GPS Data
• Road Geometry Data
• Surface Condition Analysis
• Sub-grade Road Condition Analysis
• Multi-sensor Reporting
Sophisticated Equipment

• Inertial Profile Measurement Equipment
• Macrotexture Measurement
• High Precision Gyrometric Measurement System with Integrated GPS Positioning
• Roadway Imaging System
• Automated Crack Detection and Rut Measurement With 3D Laser Imaging System
Inertial Profiler

Laser Mounted to Vehicle

Profile of Road Surface

Road Surface
Macrotecture Measurement System

• Measure Mean Texture Depth (MTD) and Mean Profile Depth (MPD)
• ASTM E1845
Gyrometric Measurement System

- High Precision Measurement of Pitch, Roll, Cross-slope, and Heading
- Integrates GPS Location
Roadway Imaging System

• HD Imaging System
Roadway Imaging
Automated Crack Detection With 3D Imaging System
Automated Crack Detection With 3D Imaging System

Identify Lane Width
Automated Crack Detection With 3D Imaging System
Asset Inventory
Data Collection
Data Transfer to Work Station

Data Drive
Process Data In Work Station

REPORT

3.25/2.5

Data Drive

4

45%
QUESTIONS?