

Highway Manager Requirements for Pavement Surface Characteristics

**7th International Symposium on
Pavement Surface Characteristics**

September 19, 2012



Presentation Overview

- Uses of Pavement Surface Characteristics (PSC) data
 - Types of PSC data to serve need
 - Data requirements
- Future Vision



Uses of PSC data

- Construction acceptance
- Safety management
- Asset management
- Environmental monitoring
- Performance management



Use: Construction Acceptance

- Longitudinal profile measurements
- Friction and Texture
- Measurement Requirements
 - Low extent
 - High precision/accuracy
- Future Vision



Use: Safety Management

- Friction
- Texture
- Transverse profile

- Measurement Requirements
 - High extent
 - High precision/accuracy
 - Legal concerns

- Future Vision



Use: Asset Management

- Longitudinal profile
- Transverse profile
- Cracking
- Deflection

- Measurement Requirements
 - High extent
 - Medium precision/accuracy
- Future Vision



Use: Environmental Monitoring

- Tire-Pavement noise measurement
- Rolling resistance
- Splash and spray

- Measurement Requirements
 - Low extent
 - High precision
- Future Vision



Use: Performance Management

- Pavement Condition
- Measurement Requirements
 - High extent
 - Relevancy
 - Consistency between agencies
 - Consistency over time
- Future Vision



Conclusion/Vision

- Unified model of surface characteristics
 - Relating responses to texture
- Crowd-sourcing
 - Widespread deployment of low cost sensors



Thank You

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