Highway Manager Requirements for Pavement Surface Characteristics

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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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