How well do we meet the user requirements?
Panel members

- Joralf Aurstad  NPRA, Norway
- Frank Holt  Dynatest, USA
- Amy Simpson  AMEC, USA
- David Woodward  University of Ulster, Northern Ireland
- Alex Wright  TRL Ltd, England
How well do we meet the user requirements?

From the tire and vehicle’s perspective

- Much development of tire and vehicles
- For tires - much compromise between
  - Wear
  - Rolling resistance
  - Wet grip
  - Noise
- Now time for pavement to contribute?
  - More inter-industry cooperation needed?
How well do we meet the user requirements?

From the highway manager’s perspective

- Construction acceptance
- Safety management
- Asset management
- Environmental monitoring
- Performance management
Measurement/Indicator requirements

- **Full coverage**
- Relevant
- **Accurate and consistent**
- Harmonised measures
- Low cost sensors
- Probe vehicles
- **Construction acceptance**
- Safety management
- Asset management
- Environmental monitoring
- Performance management
Interpretation requirements

- Minimum measurements with maximum usage
  - E.g. deriving proxies for noise, rolling resistance, splash and spray, friction from 3d profile – a unified model of surface characteristics
Application requirements

• Relevant measures and thresholds
  • e.g. which link accidents to measurement parameters
Key points from selected sessions
Session A2

- Need to define a consistent and reliable method to document infrastructure health
  - Definition of measures
  - Common approaches to collection
  - Different data sources tell us what?
Session B1

- New approach to harmonizing friction devices by establishing speed gradients using texture levels
Session B1

- 3D imaging to look at texture and tire footprints
Session B4 & C1

- Low costs sensors can now measure water depth
- New low cost system for profile using two accelerometers – however first patented 20 years ago? Lower quality data?
Session C1 & C6

- **Probe vehicles can provide profile but of lower quality than purpose made equipment**
Session B3

• Alternative to PSV test enables comparison between laboratory testing and in-situ testing
Critical water depth can be defined and used with sensors to reduce wet skid accidents.
Session B4

- Method under development for the prediction of splash and spray
Session C4

• 3D views over whole lane at 1mm resolution now possible
• 3D views over several lanes + at less resolution
• but can we make best use of them?
Session C5

- Rolling noise assessment needs improved standards and non-ageing test tyres
Session C5

- Need more work on measuring sound absorption of pavement surfaces
Session B6

- Need for more sophisticated indicator for asset management
Thank you for all your contributions to SURF2012!