Massive Investment

- 4 Million Miles of Roads
- 2/3 are Paved (1/3 Unpaved)
- 94% of Paved have an Asphalt Surface
- Long Lasting and Cost/User Effective
Some Considerations

• **Superpave design and material system**
• **Search for fundamental mixture test**
• **Ability to analyze/predict distress (ME & AMPT)**
• **BMD - balance performance aspects/quick**
• **Recycling/re-use materials**
• **Construction equipment & processes**
• “**Most important element**”
Superpave Design and Materials
Today’s materials are stretching the limits of volumetric design

We need Performance Tests:

- Rutting
- Fatigue Cracking
- Low-temperature Cracking (addressed by Binder Spec)
- Moisture Damage
Search for Fundamental Mixture Performance Test

- SST, Bending Beam, IDT, AMPT .......
Ability to Analyze & Predict Pavement Distress

- AMPT and ME-Design
• Lot of discussion, really just trying again to predict performance for various distress concerns, but in a more real time/during construction process.
FHWA Policy:

“Recycling presents environmental opportunities and challenges, which, when appropriately addressed, can maximize the benefits of re-use.”

http://www.fhwa.dot.gov/pavement/
<table>
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<th>Year</th>
<th>Accepted</th>
<th>Landfilled</th>
<th>Used in Other</th>
<th>Used in Cold Mix</th>
<th>Used in Aggregate</th>
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Construction Equipment & Processes
Partnership
Shared-Risk Opportunities

- Structural Design
- Mixture Design
- Production / Construction
- Preservation
- Assessment
Expert Task Groups

- Asphalt Mixture & Construction ETG
  - POC – John Bukowski

- Asphalt Binder ETG
  - POC – Matthew Corrigan

- Sustainable Pavements TWG
  - POC – Gina Ahlstrom

www.asphaltetgs.org

Open Meetings
All are Welcome!
Thank You!!

Thoughts and Questions?

FHWA’s Mobile Asphalt Testing Trailer
Office of Asset Management, Pavement, and Construction

www.fhwa.dot.gov/pavement/asphalt