Long Term Pavement Performance

North Dakota SPS-2 Tech Day
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LTPP’s GOAL

To Provide Data and Answers to

WHY and HOW

Pavements Perform as they Do.
LTPP Studies

In-service Pavements Studies

• General Pavement Studies (GPS)
  • Existing Pavement

• Specific Pavement Studies (SPS)
  • New Pavements

• Seasonal Monitoring Program (SMP)

• Dynamic Load-Response Study (DLR)
General Pavement Studies

GPS-1 → Asphalt Concrete (AC) on Granular Base
GPS-2 → AC on Bound Base
GPS-3 → Jointed Plain Concrete Pavement
GPS-4 → Jointed Reinforced Concrete Pavement
GPS-5 → Continuously Reinforced Concrete Pavement
GPS-6A → Existing AC Overlay on AC Pavements
GPS-6B → New AC Overlay on AC Pavements
GPS-7A → Existing AC Overlay on Portland Cement Concrete (PCC) Pavements
GPS-7B → New AC Overlay on PCC Pavements
GPS-9 → Unbounded PCC Overlays on PCC Pavements
Specific Pavement Studies (SPS)

- **SPS-1** → Structural Factors for Flexible Pavements
- **SPS-2** → Structural Factors for Rigid Pavements
- **SPS-3** → Preventative Maintenance Effective for Flexible Pavements
- **SPS-4** → Preventative Maintenance Effective for Rigid Pavements
- **SPS-5** → Rehabilitation of AC Pavements
- **SPS-6** → Rehabilitation of Jointed PCC Pavements
- **SPS-7** → Bonded PCC Overlays on Concrete Pavements
- **SPS-8** → Environmental Effects in the Absence of Heavy Loads
- **SPS-9** → Validation of SHRP Asphalt Specification and Mix Design (Superpave)
- **SPS-10** → Overlay of Asphalt with Warm Mix Asphalt
LTPP Sites in North America
Data Collection

- Manual Distress Survey
- FWD
- Longitudinal Profile
- Texture
- Transverse Profile
- Materials
- Traffic
- Weather (MERRA, VWS & AWS)
Material Reference Library

- Storage of Materials from LTPP Experiments
- Material used on Research Projects of National Significance
LTPP Information Management System

- Data Collected by Data Collection Contractor (DCC)
- DCC enters Data into LTPP IMS and QCs Data
- Technical Support Service Contractor (TSSC) manages IMS and QCs data
- Data uploaded annually into InfoPave
Disseminating LTPP Data

https://infopave.fhwa.dot.gov/
LTPP Products

Most Recent Additions:

- LTPPBind
- MERRA Weather
The Future of LTPP
Questions and Comments

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