Lessons Learned from the Long-Term Pavement Performance Program

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History is a vast early warning system
-- Norman Cousins
Lessons Learned from LTPP

- LTPP – A Capsule Summary
- Key Lessons
- Implications for LTBP
LTPP - Funding in a Nutshell

- SHRP (the original)
  - TRB Special Report 202
  - The Brown Book
- 1992 Transition
- 1997 TEA-21
- 2005 SAFETEA-LU
LTPP

- Experiments
- Data Collection
  - Inventory
  - Materials/Cross-section
  - Traffic
  - Performance
  - Climatic
LTPP - Responsibilities

**SHRP/FHWA**
- Experimental Design
- GPS Sampling & Testing
- Performance Monitoring
- Climatic Data
- Database
- National Analysis

**States**
- Test Sections
- Traffic Control
- Traffic Data Collection
- SPS Sampling & Testing
- Maintenance Reporting
- Local analysis
Key Lessons from LTPP

- Future funding $\leq$ current funding
- Experimental design is critical
- Data collection issues
  - Technology
  - Centralized vs dispersed responsibility
Key Lessons from LTPP, Continued

- The database can become a mine field
- Patience
- Cannot succeed without SHA champions
Implications for LTBP

- Don’t over-reach
- Design viable experiments
- Focus on critical variables
  - Minimize “nice to have”
- Nail down test methods & technology early
- Instrumentation for bridge research
  - NOT bridges for instrumentation research
Implications for LTBP

- Centralize data collection
- Pay attention to the database
  - Data quality & completeness, verification, access, use, record of comments, changes, corrections
  - Program managers as data users
Implications for LTBP

• Look for opportunities for early success

• Communication must be:
  – Constant
  – Substantive
  – Multi-faceted
Implications for LTBP

- Active SHA involvement will be critical
  - Periodic program assessment/adjustment
  - “Tough Love”
Lessons Learned from LTPP

History repeats itself, and that's one of the things that's wrong with history.

-- Clarence Darrow
Lessons Learned from LTPP

Thank you…