SHRP 2, Striping Turntable, International Scans

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SHRP 2: Renewal Technical Coordinating Committee

- SHRP 2: Strategic Highway Research Project, Version 2.0
- TCC: Technical Coordinating Committee – guides the selection of research projects and helps monitor research

- Goals
- Projects
- Need help on Expert Task Groups (ETGs)
SHRP 2: Renewal

- The overall goal of the SHRP 2 Renewal program is to develop a consistent, systematic approach to performing highway renewal that is rapid, causes minimum disruption, and produces long-lived facilities. The renewal scope applies to all classes of roads.
SHRP 2: Renewal

Suggested Criteria for Selection and Prioritization of First Year Projects

- Critical downstream dependencies
- More fundamental and informative to later projects
- Potential for early products
- Significant to sponsors
- Unaddressed in other programs
- Long-term project
- Affordable – does not lead to over-obligation.
- Programming for the first year should provide for obligation of $3M to $6M in each focus area.
- Projects should be prioritized
- Look for cost reduction or project segmentation into smaller units based of significant milestones or unrelated activities.
Projects underway:

Round 1

- Encouraging innovation in locating and characterizing underground utilities. Researcher: Louisiana Tech University
- A plan for developing high-speed, nondestructive testing procedures for both design evaluation and construction inspection. Researcher: Texas A&M Research Foundation
- Performance specifications for rapid highway renewal. Researcher: Trauner Consulting
- Strategies for integrating utility and transportation agency priorities in renewal projects. Researcher: ICF International
Projects underway

- Round 2
  - Geotechnical solutions for soil improvement, rapid embankment construction and stabilization of the pavement working platform
  - Innovative bridge designs for rapid renewal
  - Guide for the process of managing risk on rapid renewal contracts
  - Bridges for service life beyond 100 years
  - Composite pavement systems
Round 3

- Modular pavement technology
Opportunities

- Looking for people to serve on the ETGs
  - Review and evaluate the proposals
  - Recommend selection
- Watch for announcements on TRB website
- Google: SHRP2
NCHRP 20-7 (219): the Wheel
NCHRP 20-7 (219): the Wheel

- Slow off the mark
- Original plan:
  - Test American striping materials on the Spanish (AETEC) Wheel
  - Ship striping material to Spain, where AETEC would use a controlled process to place on platens and test on the wheel under controlled conditions
- Industry hesitation and near (anti) resolution
- Now have industry acceptance that the research is happening
NCHRP 20-7 (219): the Wheel

- New factorials complicate discussion
  - Combine field and lab testing (Expand platens by factor of two)
  - Paint platens in the field and in the AETEC Lab
  - How to raise the striping machines to simulate field application? This has never been done before, so what new unknowns are introduced?
  - How to test multiple suppliers (Expand platens by factor of two) in multiple states (Expand platens by factor of two or three)?
  - Multiple colors (Expand platens by factor of two)
  - How to do this on very limited funds?
NCHRP 20-7 (219): the Wheel

- **Confusion**
  - The Wheel and Test Decks don’t correlate; but then, Test Decks don’t correlate to other Test Decks, either
  - Wheel: highly controlled testing with strongly controlled variables
  - Test Decks: highly uncontrolled testing with highly variation in variables (weather, traffic hits, sanding, wander, application rates, etc)

- **European Study**
  - Variation on wheels and on multiple test decks and general lack of uniform results

- **Real question:**
  - Which methods predicts reasonable performance and quickly returns results?
  - Wheel: three weeks
  - Test decks: two years
NCHRP 20-7 (219): the Wheel

- Next steps
  - Complete the multiple step research plan, choose what additional variables can be accommodated
  - See what we can afford
  - Do the testing at AETEC, the Spanish Turntable outside Madrid
Special Committee on International Activity Coordination: Scan Tours
Scan Tours

- **AASHTO** - Scan proposals may be submitted by any AASHTO committee or subcommittee dealing with road transportation. Each proposal must be endorsed by the relevant committee or subcommittee chairman. Proposals may be submitted for co-sponsorship by two or more AASHTO committees or subcommittees (i.e., cross-cutting scans). In such case, the proposal must have endorsement from each of the corresponding committee chairmen.
Scan Selection Criteria

- represents a current issue that needs exploring
- the topic is of nationwide interest
- the topic has not been sufficiently covered on previous scans
- no duplication of other efforts already underway
- topic must have the potential to produce technologies and/or practices that the U.S. highway community could adopt/adapt
- Topic has a probability of being successful
- Favorable return on investment
- Need support of an FHWA Program Office willing to fund and sponsor the FHWA portion of the scan
Special Committee on International Activity Coordination: Scan Tours

- 2007 Scan
  - Warm Mix Asphalt
- 2009 Scan Proposals
- Work through your technical section or send directly to me or Mark Felag
- DUE: September 28, 2007
SOM Scan Taskforce

- See me if you want to join
- We will brainstorm and research Scan proposals
- If you serve on the TF you are guaranteed a place on a Scan (not really)