WHAT IT IS

• Structured program to facilitate technology transfer
• Face-to-face information sharing and knowledge building among transportation agency professionals on selected timely topics
• 3 to 5 scan tours per year covering virtually every area of DOT business and operations

GOALS

• Broad information dissemination, i.e. spread the word
• Accelerated implementation of new technologies and best practices
Typical scan process
NCHRP 20-68A: Domestic Scan History

- Mar 2005: SCOR approves concept ($250,000 FY ’05)
- July 2005: Business Plan completed (Cambridge Systematics, Inc.)
- Nov 2006: Pilot scans (2) completed (Reports published as web documents; FHWA support +$75,000)
- Dec 2007: Full program initiated (Arora & Associates, Inc.; 6-yr contract)
- Six years of funding approved by SCOR through FY 2012 ($500,000/yr for scans, $3.0 million total + FHWA support, $224,000)
- Dec 2012: 14 scans completed, 5 in process (Dec’ 13: Initial 6-year program ends)
- Mar 2012: SCOR notionally commits to 2nd Phase program @ $600,000/yr
- Sept 2012: NCHRP Panel selects Arora & Associates for next phase (up to 6 years)
NCHRP 20-68: U.S. Domestic Scan Program

• **Domestic Scan:**
  - Limited number of technical experts exist
  - Offers direct personal contact with early adopters
  - Accelerate adoption of leading-edge practices that could offer widespread benefits if adopted by others
  - Nurture knowledge networks and diffusion of innovations
Tony’s DOT saved $10 million in the 1st year of full rollout MDSS for winter maintenance operations.
Scan types:

1. Scan team visits host (early adopter) agencies, approximately 2 weeks of travel

2. Scan team and early adopters meet in 2 to 3 central locations for group discussions, approximately 1 week of travel

3. Host-agency representatives and scan team participate in workshop or peer exchange, possibly linked to another event
Team Members’ Home States

Note: Team members came from 42 states and District of Columbia (FHWA HQ & USEPA)
Host States

Note: Total 40 states and District of Columbia were interviewed through scan visit, webinar or reverse scan.
**Dissemination**

- Scan reports
- Webinars, articles, presentations
- Scan-team members from 42 states and DC
- 40 states and DC have hosted

**Implementation**

- Post-scan assessments
- Scan-team web site operational
- Comparative analysis
- Pilot-implementation support
Companion Studies → NCHRP 20-68B/C

- Assess the impact, cost-effectiveness of domestic scans
- Better understand the “diffusion” of innovations between state DOTs
- Explore alternatives to team-travel-based scan
- Enhance dissemination → community of innovators, networks of innovation
Information dissemination to broad audiences - examples

- Papers published in *Transportation Research Record* series (e.g. Bridge Management Scan)
- Articles in *Focus* and *Public Roads* (Accelerated Construction Scan)
- National Highway Institute (NHI) webinar (Accelerated Construction Scan)
Technology implementation at the state and national level – examples

- “Based on information brought back from the scan our agency has piloted 4 different initiatives, acquired 3 different types of equipment…[We] are in the process of changing 3-4 policies or procedures related to snow removal practices and material applications.” (Winter Maintenance Scan)

- “We are implementing a stormwater retrofit program using the asset management efforts from MD and NC DOTs.” (Water Quality Scan)

- “Many of the recommendations and options in EDC…grew out of and were supported by the findings of this scan.” (Project Management Delivery Scan)
Select high-profile implementation examples

- Water Quality scan led to the creation of a national working group on stormwater policy
- Bridge Management scan served as the basis of a follow-up NCHRP study to develop a handbook and software for maintenance and preservation of bridges
- Findings from at least two scans have been incorporated into National Highway Institute (NHI) courses
Ongoing panel challenge: Manage the program to maximize real impacts…

- Selection of team members
- Increased support from our contractor for dissemination and implementation activities
- Use of a portion of the program funds for implementation
Upcoming Scans – 2nd Phase Program, Teams Identified

- **12-01** Advances in State DOT Superload Permit Processes and Practices
  - Team chair: Matt Farrar, ID DOT.

- **12-02** Advances in Strategies for Implementing Integrated Corridor Management (ICM)
  - Team chair: Dennis Motiani, NJ DOT.

- **12-03** Advances in Safety Program Practices in “Zero Fatalities” States
  - Team chair: Priscilla Tobias, IL DOT.

- **12-04** Advances in Transportation Agency Knowledge Management
  - Team chair: John Halikowski, AZ DOT
Upcoming Scans – Programmed December 2012

• 13-01 Leading Management Practices for Developing a Cross-Trained Workforce

• 13-02 Advances in Civil Integrated Management (CIM)

• 13-03 Leading Practices in the Use of FRP Composites in Transportation Infrastructure
NCHRP 20-68: Domestic Scan Program – Project Panel

- Glenn Roberts, NH DOT (chair)
- Randy Battey, MS DOT
- Shane Brown, WA State University
- Nancy Chinlund, CalTrans
- Darryll Dockstader, FL DOT
- Rick Kreider, KS DOT
- Tracy Larkin-Thomason, NV DOT
- Amy Schutzbach, IL DOT
- Mark Van Port Fleet, MI DOT

- Andy Lemer, NCHRP Staff
- Marty Vitale, AASHTO liaison
- Mike Burk, FHWA liaison