

U.S. Domestic Scan Program

Scan 08-04—Work Zone

Assessment, Data Collection and Performance Measurements

Conducted March 7-13 and March 21-28, 2010



Closeout Webinar for

NCHRP Project 20-68B, Tracing Scan Impacts

April 25, 2012

Facilitators

- ❑ Pat Casey, Investigator
Principal, CTC & Associates
- ❑ Brian Hirt, Co-Investigator
Manager, CTC & Associates

Scan Participants

- ❑ J. Stuart Bourne, North Carolina DOT, Scan Co-Chair
- ❑ Chung Eng, FHWA, Scan Co-Chair
- ❑ Diana Gomez, Caltrans
- ❑ David Holstein, Ohio DOT
- ❑ Ronald Lipps, Maryland SHA (retired)
- ❑ Denise Markow, New Hampshire DOT
- ❑ K.C. Matthews, Colorado DOT
- ❑ Tracy Scriba, FHWA
- ❑ Reynaldo Stargell, Ohio DOT
- ❑ Brian Zimmerman, Michigan DOT (retired)
- ❑ Gerald Ullman, Texas Transportation Institute, Subject Matter Expert

NCHRP Domestic Scan Project Panel

- Harold R. Paul, Director LTRC (chair)
- Andrew Lemer, TRB
- Shane Brown, Washington State University
- David M. Burk, FHWA
- Nancy L. Chinlund, Caltrans
- Marsha Fiol, Virginia DOT
- Rick Kreider, Kansas DOT
- Jim McDonnell, AASHTO
- Mark R. Norman, TRB
- Keith M. Platte, AASHTO
- Glenn Roberts, New Hampshire DOT
- Amy Schutzbach, Illinois DOT
- Mark Van Port Fleet, Michigan DOT

Webinar outline

1. NCHRP project 20-68B (Tracing Scan Impacts) overview
2. Results of nonparticipant survey
3. Open discussion: Successes and challenges related to
 - Implementing scan technologies and practices
 - Sharing scan findings

Webinar goals

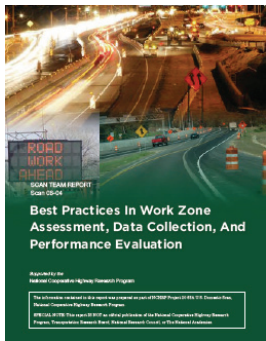
- ❑ Discuss scan outcomes with fellow team members and 20-68 panel members
- ❑ Highlight effective implementation and information sharing strategies
- ❑ Discuss opportunities to accelerate impacts of the scan

NCHRP Project 20-68B overview

- ❑ Accelerating Innovation—Tracing Domestic Scan Impacts
- ❑ Continuation of in-depth review completed for two pilot scans and first six scans
 - Reports are online at domesticscan.org
 - Document the effectiveness of the U.S. Domestic Scan Program in fostering the implementation of innovative technologies and practices
- ❑ Document technology transfer beyond core participants to secondary audiences (“nonparticipants”)

NCHRP Project 20-68B overview

- Starting point documents for tracing scan impacts



Final scan report

Implementation plan coordinated by Arora and Associates ▼

Domestic Scan 08-04 Implementation Strategy

The scan team identified 7 potential dissemination avenues for the results of this scan. These avenues are listed below.

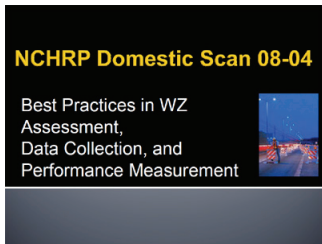
- Presentation of scan findings at relevant conferences and meetings
- Publication of summary article(s) regarding the scan findings in pertinent journals and trade publications
- Development and presentation of webinars
- Development of research problem statements and inserting them as appropriate into the funding cycles of various research sponsors
- Development of a summary brochure that can help "market" the scan report and its findings to agencies

Scan Findings Presentations

As of 10/18/10

Coordinator: Tracy Scriba and Denise Markow

Venue	Date	Location	Team Member Presenting	Status	Audience
National Events					
AASHTO SSOM Meeting	May 2-5, 2010	Houston	Tracy	Done	State Ops
AASHTO SCOTE	June 27-30, 2010	Chicago	KC	Done - presented to WZ task force with subsequent discussion, and to whole SCOTE.	State Traffic
AASHTO Construction AASHTO Design AASHTO Maintenance ITE ARTBA IMSA		Vancouver, BC		Summary report distributed to overall SCOTE chair and SCOTE WZ task force chair	



Final scan presentation

NCHRP Project 20-68B overview

- Tracing scan impacts tasks
 - Scan 08-04 participant interviews (5 of 8 active participants interviewed to date)
 - Nonparticipant surveys (19 responses to date)
 - Today's closeout webinar
 - Final report on tracing scan impacts for this scan (forthcoming)
 - Update of 08-04 scan page on domesticscan.org

Results of nonparticipant survey

- Surveyed groups
 - AASHTO SCOTE members, including Work Zones Subcommittee members
 - September 2010 NHI webinar attendees
 - Individuals identified by scan participants (Stargell, Markow) during one-on-one phone interviews
 - Three additional individuals identified in responses to survey question 6 (“Please provide names of colleagues or peers you spoke with about the scan tour results”)
- 119 survey invitations total
- 19 responses to date (16 percent response rate)

Results of nonparticipant survey

Introductory text to online survey:

The National Cooperative Highway Research Program sponsors the [U.S. Domestic Scan Program](#) to facilitate technology transfer among state DOTs. As part of the program, CTC & Associates is conducting this survey on behalf of NCHRP to evaluate how the technologies and practices identified through the scans are being used by transportation practitioners beyond the scan participants.

You were identified as having received information about **Scan 08-04: Work Zone Assessment, Data Collection and Performance Measurements** (see the [project Web page](#) or [final scan report](#) [PDF]). Your feedback about how you learned about this scan—and how the scan findings are being used at your agency—will be of great value to NCHRP and the transportation community.

Thank you for taking the time to complete this short seven-question survey.

Results of nonparticipant survey

2. HOW YOU LEARNED ABOUT THIS SCAN. The scan findings were disseminated and presented through a number of channels. How did you learn about the scan results? (Check all that apply.)

Conversation or email with a colleague at my organization	3	16%
Conversation or email with a scan participant or host state member	5	26%
Received final scan report from an email distribution	4	21%
TRB Annual Meeting	1	5%
AASHTO SCOTE meeting (June 2010, Chicago)	4	21%
NHI webinar (September 2010)	1	5%
Another national or regional conference (please describe in the "Other" box below)	2	11%
Journal paper or trade publication article	0	0%
I don't remember learning about this scan tour prior to this survey	4	21%

(continued)

Results of nonparticipant survey

2. HOW YOU LEARNED ABOUT THIS SCAN. The scan findings were disseminated and presented through a number of channels. How did you learn about the scan results? (Check all that apply.)

<p>Other</p> <ul style="list-style-type: none">• Assisted host state member to present California's practices.• This was some time ago. We did not have the resources to get involved.• INDOT participated in the scan webinar, providing information on our queue analysis and queue data collection methods.• WSDOT participated in the scan.• National Work Zone Safety Clearinghouse.• The scan was mentioned during the Web conference on Work Zone Transportation Management Plan Changes During Construction.• Our department participated.• My director informed me that NJ was participating in the work zone safety scan.• Asked another in this office if he was aware of the scan. He wasn't either.	9	47%
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Results of nonparticipant survey

3. SOUGHT MORE INFORMATION. If you sought more information about the findings of the scan tour, please indicate how. (Check all that apply.)

Obtained or read the scan report	9	47%
Visited the website domesticscan.org	5	26%
Contacted a scan participant	2	11%
Contacted someone from one of the states visited in the scan	1	5%
Other	0	0%
Specific technologies or practices discussed		
<ul style="list-style-type: none">• Examination of the sensor data reliability from NHDOT Smart Work Zone data review study• What stood out in my mind was 1) the need to collect crash data specific to work zone beyond what the current NJTR-1 crash report collects, and 2) the need for quicker data collection.		

Results of nonparticipant survey

4. SHARED INFORMATION WITH OTHERS. If you shared information about one or more of the technologies or practices identified through the scan, please describe how. (Check all that apply.)

Shared information with a colleague at my organization	11	58%
Shared information with other stakeholders in my state	5	26%
Recommended a change in practice at my organization	2	11%
Other	0	0%
Specific technologies or practices discussed		
<ul style="list-style-type: none">• Set work zone safety goal as part of statewide strategic highway safety plan. Collecting additional field data at freeway work zones on lane capacity and traffic diversion. Using Bluetooth technology to collect data. Intend to collect additional sampling/monitoring of predicted and actual work zone delays.• We are in the process of establishing work zone performance measures now.• Referenced the data reliability/accuracy from side-fire radar traffic detectors.• 1. Discussed about piloting an additional appendix to the NJTR-1 for work zone crashes. 2. Discussed modifying NJTR-1 crash report to include additional fields of data associated with work zones.		

Results of nonparticipant survey

5. IMPLEMENTED SCAN FINDINGS. If you used information from the scan tour to make or recommend a change to your agency's practices, please indicate how.

Proposed implementation	4	21%
Planned implementation	0	0%
In-progress implementation	4	21%
Completed implementation	0	0%

Please provide details on the implementation

- See response to question 4 (“Set work zone safety goal as part of statewide strategic highway safety plan....”)
- Standardizing Lane Closure database, developing PeMS [Highway Performance Measurement System] training to district traffic managers for real time data evaluation.
- Working with University of Virginia in developing work zone performance measures and will be using the information in the scan report to assist us.
- Collection of crash and speed data for the development of performance measures to assist the DOT in applying effective traffic management strategies during construction.
- As indicated by the scan, our department is involved in the work zone scan methods.
- FHWA does not have the ability to implement changes—just influence the partner agencies to see the benefits and make changes.
- No progress has been made as of yet.

Results of nonparticipant survey

7. OTHER COMMENTS. Please use this space to provide any additional comments about your use of the findings of the scan tour.

Open-ended response	3	16%
<ul style="list-style-type: none">• I assisted my supervisor, Diana Gomez (a scan member), to present California's practices in May 2010. However, with other workload and absence from the job for three months due to health in 2011, I did not read the final results or consciously begin to develop a plan. Thank you for this survey as it raised the flag again. I realize we are developing some items to assist in work zone assessment, but more is needed and I hope to establish goals and objectives for Work Zone Safety and Mobility.• None at this time• As the person responsible for evaluation of work zone impacts for all projects that are administered by this state, I sought information on ways that others may have undertaken that effort.		

Results of nonparticipant survey

- ❑ Questions, comments about nonparticipant survey?
- ❑ Do you have names of others to survey (colleagues or peers you spoke with about the scan tour results)?

Open discussion: Successes and challenges

- ❑ Implementing scan technologies and practices
(see list of examples at www.domesticscan.org/implementation)
 - Sharing scan findings
 - Putting findings into practice

Which approaches were particularly effective?

What were the challenges?

What could be done differently?

Other thoughts or comments?

- ❑ Thank you for your time today!