CRASHWORTHINESS OF WORK ZONE DEVICES

DATE: Thursday, December 8, 2016
TIME: 9:30 AM – 12:00 Noon CT (8:30 – 11:00 AM MT)
REGISTRATION DEADLINE: Thursday, November 24, 2016
DELIVERY: Video Conference
PRESENTATION HOURS: 2.5
AFE: 77G7

PRESENTATION DESCRIPTION
This presentation will report on crashworthy work zone device research conducted by the Midwest Roadside Safety Facility at the University of Nebraska-Lincoln. This presentation will include numerous video examples of work zone device crash testing.

The presentation will cover:
- An overview of the difference between NCHRP 350 and MASH, covering history, guidance, practices, and MASH implementation requirements.
- Review of various types of work zone devices and factors affecting their crashworthiness.
- Recent research and development regarding work zone devices.
- Crash test info will cover breakaway sign bases, portable sign systems, automated warning systems, portable traffic signals, portable barrier systems, etc.

SPEAKER
Robert (Bob) Bielenberg, MSME, EIT, is a research associate engineer at the Midwest Roadside Safety Facility located at the University of Nebraska-Lincoln where he has been responsible for the design, computer simulation modeling, and testing of various roadside safety features for the past 14 years. Bielenberg’s primary focus is the design of new roadside hardware through the use of computer simulation modeling including LS-DYNA and Barrier VII. Past design achievements include the thrie beam bullnose barrier system, a long-span guardrail system for spanning culverts, the Midwest Guardrail System and its various special applications, the SAFER barrier for high speed racetrack applications, and tie-down systems for constraining temporary concrete barriers on asphalt and concrete road surfaces. He has also been active in the design and testing of many of the other roadside safety devices developed at the Midwest Roadside Safety Facility. Bielenberg holds three patents and has published 94 research reports, 23 refereed journal articles, 7 technical papers, and given 45 technical presentations. He has received the Transportation Research Board A2A04 Committee Best Paper Award six times. Bielenberg received his bachelor’s and master’s degrees in mechanical engineering from the University of Nebraska, and he is currently working towards his Ph.D. in mechanical engineering.

TARGET AUDIENCE
Work zone designers, construction inspectors, contractors, consultants, district and regional DOT engineers, maintenance supervisors and county road superintendents/engineers.

REGISTRATION / FEES
Registration Information: Registration is free. Each individual must register using the TLN Registration System:
Each individual must go to http://tln.learnflex.net

1. If you do not have a TLN user account, click on “New Account” in the Login area (For help click on “Guide to Creating an Account” on the right side of the page.) Fill in all of your information to create a new account,
including the SDDOT location that you will attend TLN videoconferences from. After you have created your new account, you must wait until you receive a confirmation e-mail message from TLN before attempting to register for the class. This may take one full day to reach you. (If you do not have an e-mail account at work, you may enter a home e-mail address or the e-mail address of your supervisor or lead worker. E-mails about TLN courses will come to the e-mail address you specify.)

2. If you already have a TLN user account, please do not create a duplicate.

3. After you have created your account, Login using your User Name and Password.

4. When logged in, click on the “Courses/Registration” tab on the top left of the page. This tab will take you to the course calendar that defaults to your location based on your registration.

5. From the Calendar page, click on “name of course” on the date it is offered. This should take you to the course page where you will see all of the locations the course is being offered.

6. From the course page, select “More Info” for your location if you would like more information about the location of the course. Click on “Register” next to the location of your choice to register for the course.

7. A pop-up window will ask you if you are sure you want to register. If you want to register click “OK”.

8. You are now registered for the course and a copy will be sent to your email address. Don’t forget to put the course on your calendar and arrive at your video conference location on time.

9. If you have any questions or difficulties registering please contact Sue Hendrickson, TLN, 701.231.7766.

TLN Questions: TLN Helpdesk 701-231-1087
SDDOT Related Questions: Contact Amanda Olson 605.773.2371 or 605-295-1897  Amanda.Olson@state.sd.us

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