



# APWA Conference

## Work Zone Safety – Update on Regulations & Requirements for Employee Protection

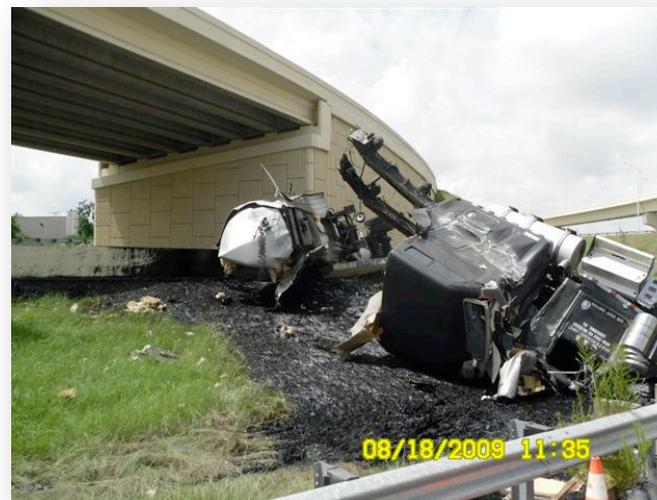
September 16, 2009  
Columbus, Ohio

Presenter: John J. Meola, CSP, ARM  
Safety Manager, Transfield Services  
Richmond, VA



**Partners for change**

# The Problem



Partners for change

# Work Zone Complexity



720 Work Zone Fatalities in 2008  
About 50% of total in TX, FL, CA, GA, IL

## Work Zone Hazards

- Impaired drivers
- Distracted drivers
- Youthful drivers
- Compressed reaction time
- Moving equipment
- Fatigue
- Complacency
- 800 work zone fatalities per year- most to motorists



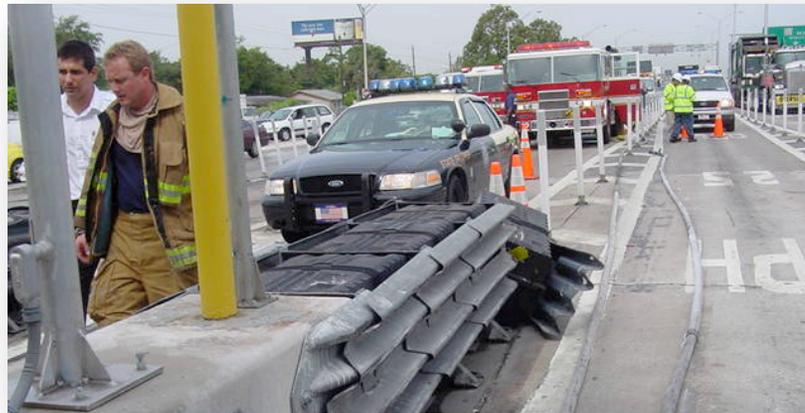
# US Dept. of Labor Occupational Safety & Health Administration – OSHA ([www.osha.gov](http://www.osha.gov))

- General duty clause: “Employers shall provide a workplace free from recognized hazards”
- Requires high visibility apparel by reference to ANSI
- Requires compliance with MUTCD
- 10 Hour Work Zone Safety training course
- Requires training – fall protection, confined space, equipment operators, other specific tasks
- [http://osha.gov/doc/highway\\_workzones/index.html](http://osha.gov/doc/highway_workzones/index.html)



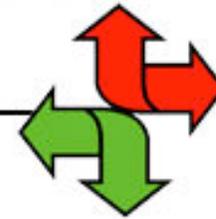
# National Incident Management System Transportation Incident Management System (NIMS & TIMS)

- Unified incident command
- Emergency response organization coordination
- Courses are on line and free
- [www.fema.gov/emergency/nims/NIMSTrainingCourses.shtm](http://www.fema.gov/emergency/nims/NIMSTrainingCourses.shtm)



# US DOT

Manual on Uniform Traffic  
Control Devices (MUTCD)



- <http://mutcd.fhwa.dot.gov/>
- Chapter Six – Standards and Guides for Traffic Controls for Street and Highway Construction, Maintenance, Utility, and Incident Management Operations
- Section 6 G-10 Control of Traffic Through Incident Areas
- Latest notice on web site: firefighter exemption for wearing polyester high viz. apparel at incident scenes
- Latest version of Manual is 2003 (Nov. 2004 revision)
- Recommendation: Plan to exceed the provisions in this manual, based on design & observation



**National Highway Traffic Safety Administration**  
Our Mission: Save lives, prevent injuries, reduce vehicle-related crashes

- Tough New Braking Rules For Large Trucks Issued
- Nationwide Enforcement Crackdown on Impaired Driving
- <http://www.nhtsa.gov/>
- This agency helps make vehicles and drivers safer

# Federal Highway Administration (FHWA)

- The FHWA Office of Safety's mission:
  - Reduce fatalities by making roads safer
  - Apply the “4Es” of safety:
    - Engineering
    - Education
    - Enforcement
    - Emergency medical services.
- <http://safety.fhwa.dot.gov/>

- [Road Safety Audits](#)
- [Rumble Strips and Rumble Stripes](#)
- [Median Barriers](#)
- [Safety Edge](#)
- [Roundabouts](#)
- [Left and Right Turn Lanes at Stop-Controlled Intersections](#)
- [Yellow Change Intervals](#)
- [Medians and Pedestrian Refuge Areas in Urban and Suburban Areas](#)
- [Walkways](#)

# National Inst. For Occupational Safety & Health (NIOSH)

Research Arm of OSHA

Part of Center For Disease Control (CDC)

- [www.cdc.gov/niosh/topics/highwayworkzones/](http://www.cdc.gov/niosh/topics/highwayworkzones/)
- Researching Driver Blind Spot – backing accident prevention (Construction Equipment Visibility)
- Examples of NIOSH study areas:
  - Safety of workers on foot around traffic vehicles
  - Safe operation of construction vehicles and equipment in highway work zones
  - Planning for safe operations within work zones
  - Issues associated with night work in highway construction.

# Industry Groups

- American Public Works Association ( APWA)
- ARTBA- Road construction and related industry groups
  - [www.artba.org](http://www.artba.org)
- ATSSA – Flagger, Traffic Control Design and other certifications
  - [www.atssa.com](http://www.atssa.com)
- National Work Zone Safety Information Clearing House
  - <http://www.workzonesafety.org>
  - American Trucking Association
    - Specialized Carriers & Rigging Association ( SCRA)
  - American Automobile Association (AAA)
  - Institute for Transportation Research and Education (ITRE) at North Carolina State University
    - <http://www.itre.ncsu.edu/>



- Work Zone Safety for Highway Construction (ANSI A10.47-20XX)
  - Traffic Control Safety
  - Flagger Safety
  - Runover/ Backover Prevention
  - Equipment Operator Safety
  - Nine other sections including PPE, Night work, Electrical, Excavation, etc.
  - [www.ansi.org](http://www.ansi.org)



- *Reduction of Musculoskeletal Problems in Construction* (ANSI A10.40-2007)
  - Identification of Hazardous Tasks
  - Identification of Potential Solutions
  - Implement and Evaluate Solutions
  - Training for workers and supervisors
  - Employee Participation
  - Injury Management Program
  - Checklists

# Apply The Work Zone Safety Concept of “Equal To or Greater Than”

- Exceed the standard where it makes sense to do so
- Examples:
  - Provide relevant safety training to employees
  - Increase use of high visibility apparel – day & night ops
  - Increase use of reflective materials during night work
  - Adjust (add to) the traffic control plan when conditions change (i.e., more cones, longer taper)
  - Law enforcement presence in work zone
  - Multiple advance warning signs, message boards
  - Use fixed overhead message boards when available
  - Use multiple TMA’s to protect work zone.
  - Choreograph the placement and movement of TMA’s and work vehicles
  - Equip TMA’s with CB radios to advise approaching truckers



# Summary

- Fatal vehicle accidents trended downward last year
- Work zone accidents trended down
- Prepare for the long term
- Institute safety policies and programs where it makes sense to do so
- Do not rely on regulation or any other group to assure your organizations' safety

