Work Zone Traffic Control

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**Work Zone Traffic Control**

Update from presentation 2 years ago.

Things to remember in this discussion:

- Work zones on ODOT projects have good safety records – but we can always do better.

- National data recommends against posted speed reductions in work zones.

- Traffic Control Plans are “Engineered” documents – not one size fits all.
Work Zone Traffic Control

What Type of Work Zone are we focusing on?

- High-speed Freeway type highways
- Workers in one lane, traffic in adjacent lane
- No positive separation between workers and travel lane with traffic
- Traffic in free flow situations
- Typically nighttime, moving operation
  • Example: nighttime paving operation
Work Zone Traffic Control

• Challenges

– OSP short handed; some times of year, some locations they can’t guarantee their availability
– OSP worried about public perception- Did public see this as a high priority while short handed?
– Limited money to pay for OSP – cannot use gas tax dollars (troopers are working on OT – Fed dollars)
– Limited room for extra TCD with Freeway paving
– Reduced speed zone TCD’s need to travel with paving train – not left behind as paving progresses.
Work Zone Traffic Control

Conclusions from Research:

- Use Law Enforcement when we can
- Use Speed Reductions in work zone
- Supplement with advisory speed signs in work area
- Use PCMS, with specific messages (*Workers in Road*)
  – on trailers and on rollers
- Use Radar Speed Reader Trailers
- Consider Temporary Transverse Rumble Strips
- Wear Class III clothing for nighttime work
- Manage the Construction Zone signing better
**Speed Reduction Measures / TCD**

**Traditional Single Lane Closure**

**Standard Drawing TM 861**

**Nighttime paving TTC**

**Standard Drawing TM 880**
Speed Reduction Measures / TCD

**Speed Reductions: Speed Limit & Advisory Signs**

- **65 MPH**
- **55 MPH**
- **35 MPH - Advisory**

- Advanced Warning
- Transition
- Activity
- Termination

**Images and Diagrams**

- Radar Speed Trailer Display Panel
- Start of Moving Operations
- Abrupt Edge
- End of Moving Operations

**Additional Information**

- Worker Next X Miles
- Reduce Speed X MPH
- Road Work Ahead
- End of Road Work
- Slow to X MPH
- Workers in Road
- Workers in Lane
- POMS (Panel of Motion Signs)
- 2-lane POMS (Mount on Fairway Roller)
- 2-lane POMS (Mount on Intermediate Roller)

**Office of Transportation Development**
Radar Speed Reader Trailers

Advanced Warning

Transition

Activity

Termination

Speed Reduction Measures / TCD
Speed Reduction Measures / TCD

[Image of a road work ahead sign and speed limit signs displaying speeds such as 28, 50, and 51.]
Portable Changeable Message Signs (PCMS)

- **Advanced Warning**: Reduce speed in workzone.
- **Transition**: 65 MPH to 55 MPH.
- **Activity**: 55 MPH to 35 MPH - Advisory.
- **Termination**: 35 MPH to 55 MPH.

**2-line PCMS**
- **Mount on Finish Roller**
- **Mount on Intermediate Roller**

**Portable Changeable Message Signs (PCMS)**

- **Workers**: Next X miles, Reduce Speed in Workzone.
- **Speed**: 65 MPH, 55 MPH, 35 MPH - Advisory.
- **Signage**: Workers in road, Slow to XX MPH.
Safety Apparel

**Apparel**

**Day**
Class II or III

**Night**
Class III or
Class II + E Pant or gaiters
Other Measures

Traffic Control Supervisor dedicated to the additional TCD.

Temporary Transverse Rumble Strips
Requires specific approval
Better management of Signs / TCD

• Signs up long after work complete, not covered when not needed
• Reduced speed signs not covered when not appropriate
• Ground mounted signs left up at end of shifts
**Temporary Traffic Control**

**Summary:**

Directions to Traffic Control Designers that ODOT’s goal is to slow traffic down in work zones.

Designer to initiate speed reduction order during design and design plans showing the signing for reduced speed.

Designer to investigate site conditions - sufficient conditions for additional TCD?

- Strategic use of Law Enforcement
- Speed Limit reductions plus Advisory Speed signs plus TCS
- PCMS, trailer mounted, roller mounted for paving operations
- Radar Speed Reader Trailers
- Class III safety apparel
- Temporary Transverse Rumble Strips when appropriate
- Manage Construction signing appropriately
Speed Limit Enforced by Aircraft
New Speed Reduction Measures