

FDOT's Work Zone Fatality Reduction Strategies

- Motorist Awareness System (MAS)
- Temporary Raised Rumble Strips for Flagging Operations
- In-depth Process Reviews/Training
- Public Service Announcements



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FDOT's Motorist Awareness System (MAS)



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What is the Motorist Awareness System (MAS)?

- Addition of 5 components to a standard lane closure
- Goal: Achieve same respect for Work Zones that Florida's School Zones currently received.
Reduce speed in work zone where workers are present



When to use MAS?

(All conditions must be met)

- Multilane facility
- Posted speed limit is 55 mph or greater
- Work operation requires a lane closure
- Workers are present



What Devices are used?

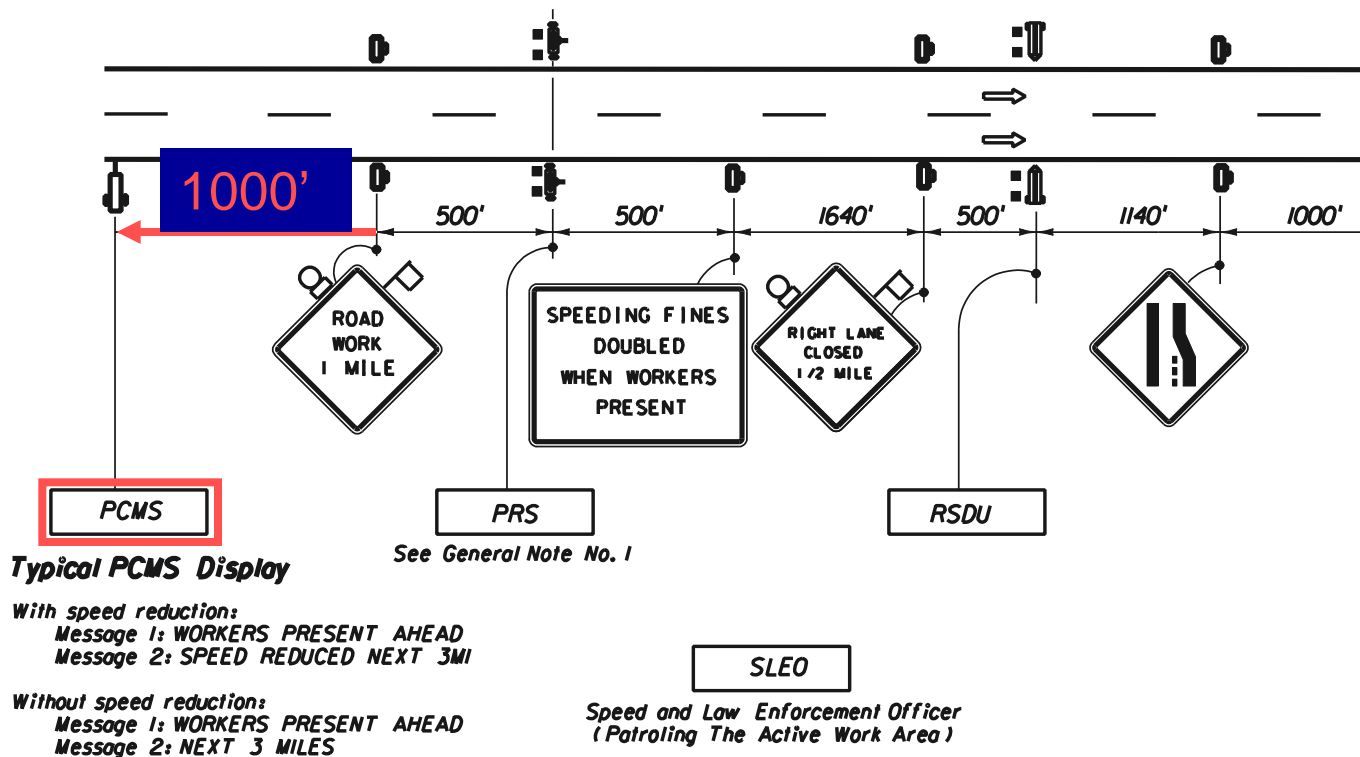
Changeable Message Sign
notifies motorist of speed
reduction



**WORKERS
PRESENT
AHEAD**

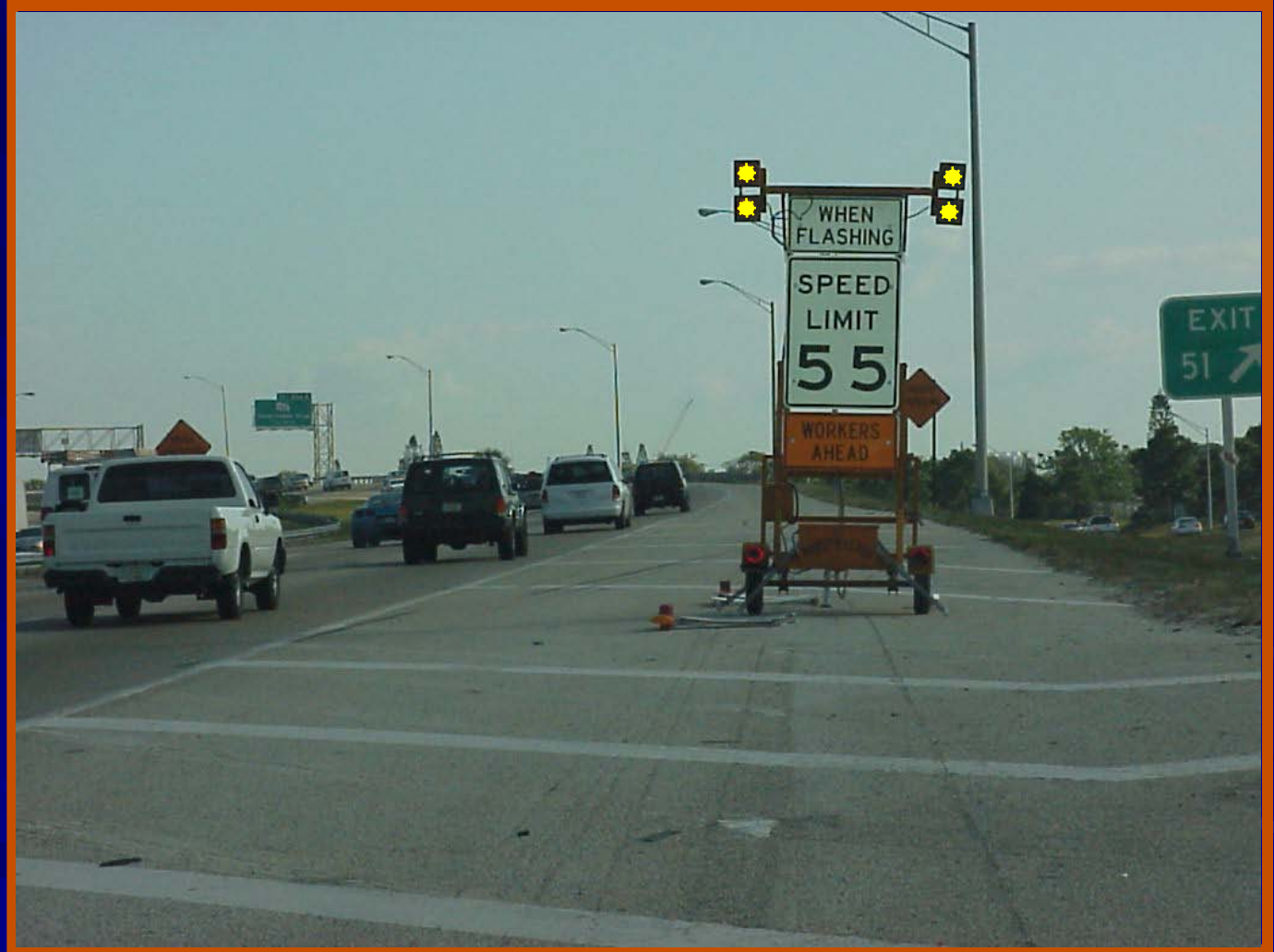
**SPEED
REDUCED
NEXT 3MI**

Where to place CMS device



What devices are used?

Portable
Regulatory
Sign
(PRS)



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What devices are used?

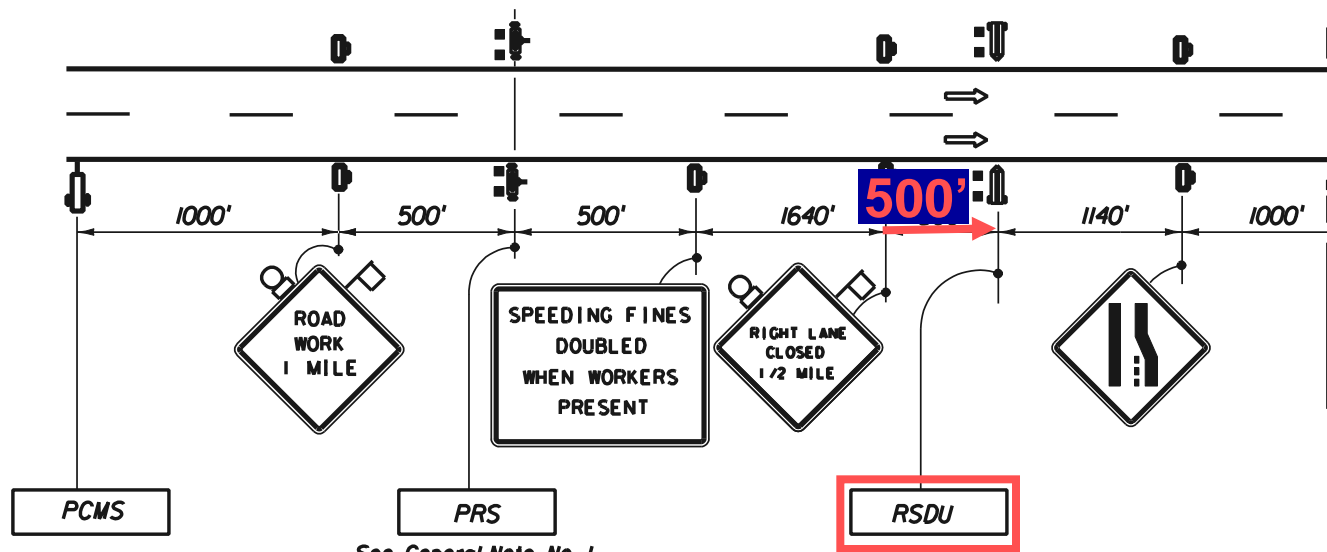
Radar
Speed
Display
Unit
(RSDU)



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Where to place RSDU devices



Typical PCMS Display

With speed reduction:

Message 1: WORKERS PRESENT AHEAD
 Message 2: SPEED REDUCED NEXT 3MI

Without speed reduction:

Message 1: WORKERS PRESENT AHEAD
 Message 2: NEXT 3 MILES

See General Note No. 1

SLEO

Speed and Law Enforcement Officer
 (Patrolling The Active Work Area)

Motorist Awareness System

Speed and law enforcement officers are used randomly to enforce the reduced speed in the work zone



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Costs of Devices for FDOT's MAS

- Changeable Message Signs
 - \$12.30 per day
- Portable Regulatory Signs
 - \$6.03 per day per sign
- Radar Speed Display Units
 - \$6.31 per day per sign

Research Study Evaluating FDOT's MAS

- Speed reduced average of 4 to 5 mph
- Research Study Link:

http://www.dot.state.fl.us/research-center/Completed_Proj/Summary_SF/BD500/BD500_v4_rpt.pdf

Where to get more information on the MAS

- FDOT Design Standard Index 670:

<http://www.dot.state.fl.us/rddesign/DS/12/IDx/00670.pdf>

- State Construction Office:

<http://www.dot.state.fl.us/construction/memos/2005/DCE06-05.pdf>

Temporary Raised Rumble Strips for Flagging Operations



Temporary Raised Rumble Strips for Flagging Operations

■ PLANS PREPARATION MANUAL

10.12.16 Temporary Raised Rumble Strip Sets

Temporary raised rumble strips should be considered in addition to normally used warning signs/devices on the approach to flagging operations where additional alertness is desired of drivers approaching flagging operations. Work zones in an isolated location or with sharp horizontal or vertical curves may benefit from the additional advance warning by alerting drivers visually, audibly, and tactilely of the approaching work zone.



FDOT's In-depth Process Reviews/Training

- Multidiscipline team performs review
- Review 3 projects per district and 4 districts per year
- Conduct hands on training in districts
 - Current training topic – crash cushions




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Public Service Announcements

<http://www.itseveryonesjob.com/index.shtml>

WORK ZONE SAFETY AWARENESS



**DRIVE TO SURVIVE
IN THE CONE ZONE**

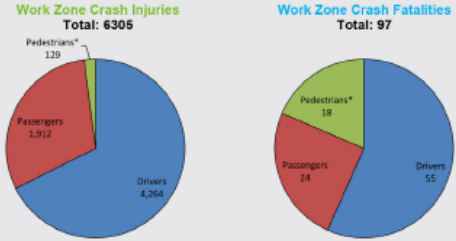
ItsEveryOnesJob.com

Funding provided by the
Florida Department of Transportation

**DRIVE TO SURVIVE
IN THE CONE ZONE**

2009 Florida Work Zone Crash Statistics

Category	Total
Work Zone Crash Injuries	6305
Work Zone Crash Fatalities	97



1. BE ALERT
Expect anything to occur when entering a work zone.

2. DON'T TAILGATE
Unexpected stops frequently occur in work zones.

3. DON'T SPEED
Note the posted speed limits in and around the work zone.

4. DON'T CHANGE LANES IN THE WORK ZONE
Any time saved just isn't worth the chance.

5. MINIMIZE DISTRACTIONS
Avoid changing radio stations and using cell phones while driving in the work zone.

6. EXPECT THE UNEXPECTED
Keep an eye out for workers and their equipment.

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Fatality Analysis Reporting System (FARS)

Work Zone Fatalities

<u>Year</u>	<u>US</u>	<u>FL</u>
2005	1074	162
2006	1004	118
2007	835	92
2008	720	81
2009	680	82
2010	576	43

Questions ???



Contact for more information

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