



Florida Department of Transportation

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JOSÉ ABREU
SECRETARY

March 30, 2005

This Memo Has Expired

DCE MEMORANDUM NO. 06-05
(FHWA Approval: 3/28/05)

TO: DISTRICT CONSTRUCTION ENGINEERS

FROM: Ananth Prasad, Director, Office of Construction 

COPIES: Brian Blanchard, Ed Rice, Sharon Holmes, Lap Hoang, David Sadler, Stefanie Maxwell, Ian Satter, Don Davis (FHWA), and Bob Burluson (FTBA)

SUBJECT: USE OF MOTORIST AWARENESS SYSTEM (MAS) – INTERIM INDEX # 0670 AND CHANGEABLE MESSAGE SIGNS (CMS)

Effective July 11, 2005, the Motorist Awareness System (MAS), Interim Index # 0670 dated 07/01/2005 of the Design Standards (see attached), shall be used on current and future construction contracts if all of the following conditions exist:

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

Please process a Field Supplemental Agreement/Work Order to incorporate this Interim Index. This Interim Index overrides Maintenance of Traffic requirements and speed reduction included in the Contract Documents with the exception of length of lane closure on active contracts. The maximum length of lane closure shall be limited to 2 miles per Index 600 and 670 unless otherwise stated in the Plans. Please ascertain from the Engineer of Record any geometric condition that may arise during the course of construction that would necessitate a longer term reduction of speed. This memorandum serves as a blanket approval to process this change and should be attached to the Field Supplemental Agreement/Work Order.

The Department's goal is to achieve the same respect for Work Zones that School Zones currently receive. The key to achieving this respect is to discontinue blanket speed limit reductions in work zones, increase enforcement, and to remove the MAS when the conditions requiring it no longer exist and restore the

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speed limit within the limits of the project to the posted speed limit. Specifically, MAS components are to be activated when the lane closure is setup and deactivated when the lane closure is taken down. All MAS components shall be moved outside of the clear zone or to be shielded by a barrier or crash cushion when not in use.

Reduce the posted speed limit 10 MPH, but not less than 55 MPH, when the above conditions exist and restore the posted speed limit when the conditions no longer exist. Posted Speed limit is defined as the speed limit that existed prior to construction.

Prior to the implementation of the MAS, the project personnel should coordinate with Florida Highway Patrol so that at the onset of MAS, these work zones are enforced aggressively and provide for subsequent periodic stepped-up enforcement. The Department will be conducting a Public Information Safety Campaign blitz during the next year to alert the drivers in the State of Florida of this change and the need to alter behavior.

On active construction contracts, the Department will compensate the Contractor for the following items.

- Portable Regulatory Signs (PRS) – 2 ED (each day) for each lane closure - \$ 40.00 ED
- Radar Speed Display Units (RSDU) – 2 ED (each day) for each lane closure - \$ 35.00 ED
- Portable Changeable Message Signs (CMS) – 1 ED (each day) for each lane closure - \$ 45.00 ED

The State Roadway Design Office will be providing further direction to the designers emphasizing the need to include MAS, where appropriate, in contracts to be let in January 2006 and beyond. As always, the Department's goal is to maintain posted speed limits except under conditions stated above or if temporary geometric design controls dictate a reduction. For contracts let in the period leading up to January 2006, please coordinate incorporating this change while recognizing production deadlines.

Furthermore, recent focus group discussion has indicated that Changeable Message Signs (CMS) are least effective in alerting drivers to work zones. The appropriate use of a CMS should be limited to managing travel, controlling and diverting traffic, identifying current and anticipated roadway conditions, or regulating access to specific lanes or the entire roadway. When these conditions no longer exist, the CMS should be turned off and moved outside of the clear zone. CMS displaying approved safety messages may also be used during the safety campaigns blitzes, with the use limited to a few weeks. To improve the effectiveness of these, the Department has published a list of approved motorist

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safety messages (see attached) to be displayed on such signs. Messages such as “Road Work Ahead”, “Use Caution”, etc should be discontinued immediately.

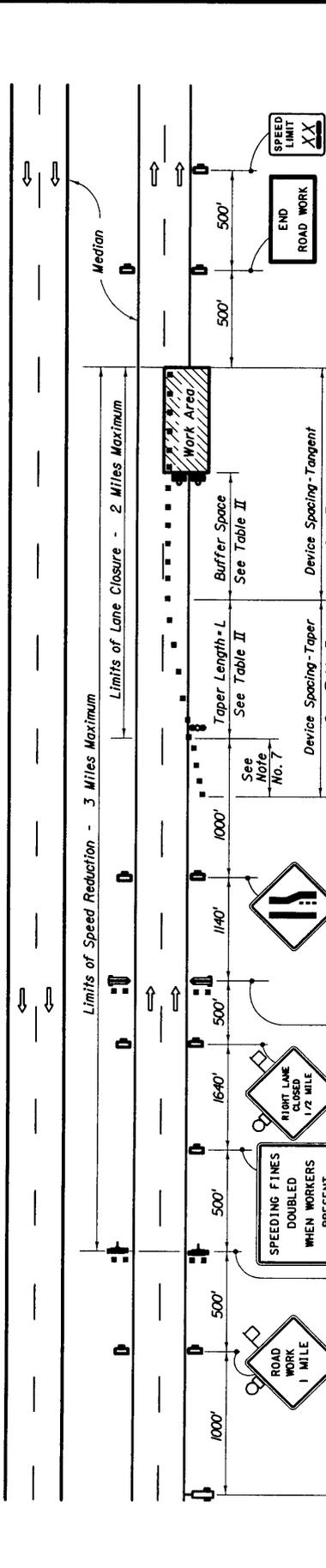
There will be a zero tolerance policy when enforcing timely activation/deactivation of the MAS and the use of CMS. The first occurrence will result in a verbal warning, and subsequent occurrences will result in issuance of Deficiency Warning and Deficiency Letter and may result in removal of the Worksite Traffic Supervisor from the project. Failure on the part of the CEI personnel to enforce these requirements should be reflected in their performance grades and may result in removal of such personnel.

If you have any questions, please contact Stefanie Maxwell at (850) 414-4314, SC 994-4314.

AP/mw

Attachments: Interim Index # 0670 (dated 7-1-05)

Approved Motorist Safety Messages for CMS



Typical PCMS Display

With speed reduction:
 Message 1: WORKERS PRESENT AHEAD
 Message 2: SPEED REDUCED NEXT 3M
 Without speed reduction:
 Message 1: WORKERS PRESENT AHEAD
 Message 2: NEXT 3 MILES

See General Note No. 1
 Speed and Low Enforcement Officer
 (Training The Active Work Area)

Table II
 Buffer Space and Taper Length

Speed (mph)	Buffer Space (ft)	Taper Length (L) (ft)		Notes (Merge)
		L	WS	
25	155	125		L = WS ² L = 60
30	200	180		
35	250	245		
40	305	320		
45	360	540		
50	425	600		
55	495	660		
60	570	720		
65	645	780		
70	730	840		

When Buffer Space cannot be attained due to geometric constraints, the greatest attainable length shall be used, but not less than 200 ft.

For lateral transitions other than 12', use formula for L shown in the notes column.
 Where:
 L = Length of taper in feet
 WS = Width of lateral transition in feet
 S = Posted speed limit (mph)

CONDITIONS

The MAS is intended to be used on multilane facilities with posted speeds of 35 MPH or greater where the work operations require a lane closure and workers are present.

GENERAL NOTES

- At lane closures where workers are present, reduce the posted speed limit (speed limit that existed prior to construction) by 10 MPH using the Portable Regulatory Sign (PRS), but not less than 55 MPH or to a speed warranted by geometric condition, whichever is lower. Taper lengths, buffer space and device spacing shall be selected using the posted speed, not the reduced speed.
- All Arrow Panels, Portable Changeable Message Signs, Portable Regulatory Signs and Radar Speed Display Trailers, shall be turned off and moved outside the clear zone or be shielded by a barrier or crash cushion when not in use.
- Work operations shall be confined to one traffic lane, leaving the adjacent lane(s) open to traffic.
- All vehicles, equipment, workers and their activities are restricted to one side of the roadway.
- When work is performed in the median lane on divided highways the barricading plan is inverted and left lane closed and lane reduction signs substituted for the right lane closed and lane reduction signs.
- When work is being performed on a multilane undivided roadway the signs and traffic control devices normally placed in the median (as shown) shall be omitted.
- When paved shoulders having a width of 8 ft, or more are closed, channelizing devices shall be used to close the shoulder. In advance of the tapering taper to direct vehicular traffic to remain within the travel way. See Index No. 612 for shoulder taper formulas.
- For general TCZ requirements and additional information refer to Index No. 600.

SYMBOLS

- Work Area
- Sign with 18" x 18" (Min.) Orange Flag And Type B Light
- Channelizing Device (See Index No. 600)
- Type I, Type II Or Type III Barricade Or Vertical Panel Or Drum (With Flashing Light)
- Work Zone Sign
- Advance Warning Arrow Panel
- Lane Identification + Direction of Traffic
- (1) PCMS + Portable Changeable(Variable) Message Sign
- (2) PRS + Portable Regulatory Sign - Speed Limit When Flashing
- (2) RSDU + Radar Speed Display Unit
- (1) SLEDU + Speed and Low Enforcement Officer (Do Not Bid)

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

MOTORIST AWARENESS SYSTEM

APPROVED BY: _____

THIS APPROPRIATE USE OF THE DESIGN STANDARDS, SYMBOLS AND MESSAGE SIGNS.

DATE: 07-01-05

1 of 1

**APPROVED MOTORIST SAFETY MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS
ON THE STATE HIGHWAY SYSTEM
Latest Revision Date: 4/23/04**

MESSAGE		MESSAGE		MESSAGE	
Phase One	Phase Two	Phase One	Phase Two	Phase One	Phase Two
BUCKLE UP	SAVE LIVES	DRINK AND DRIVE	GO TO JAIL	WARNING TROOPERS PATROL	IN PLAIN CARS
SPEEDING WRECKS YOUR DAY	SLOW DOWN	SPEED LIMIT ENFORCED	SLOW DOWN	SIGNAL BEFORE	CHANGING LANES
NO EXCUSE	BUCKLE UP	OBEY SPEED LIMIT		SLOWER TRAFFIC	KEEP RIGHT
CHECK POINT AHEAD	PREPARE TO STOP	AN ALERT DRIVER CAN	AVOID A CRASH	FOG OR RAIN	TURN ON LIGHTS
CRASH AHEAD	SLOW DOWN	HEAVY TRAFFIC	BE PATIENT	BUCKLE UP	"XXXX" COUNTY
CRASH AHEAD	ROAD CLOSED	HAVE A SAFE HOLIDAY	DRIVE SAFELY	DUI CHECK AHEAD	PREPARE TO STOP
CRASH AHEAD	PREPARE TO STOP	KEEP SAFE DISTANCE	STAY SAFE	DRIVERS LICENSE CHECK	PREPARE TO STOP
CRASH AHEAD	PREPARE TO MERGE	RADAR IN USE	ARE YOU SPEEDING	PREVENT A TRAGEDY	DON'T DRINK & DRIVE
DUI DECIDE BEFORE	YOU DRIVE	SPEEDING COSTS MONEY	SLOW DOWN	REPORT RECKLESS DRIVERS	DIAL *FHP
CHECK YOUR SPEED	WE ARE	AIRCRAFT SPEED CHECK	NEXT "XX" MILES	BUCKLE UP	JUST DO IT
BELTS WON'T WORK	UNLESS YOU USE THEM	REST AREA AHEAD	TAKE A BREAK	SPEED CHECK	NEXT "XX" MILES
REPORT IMPAIRED DRIVERS	DIAL *FHP	SEATBELT DUI CHECK	PREPARE TO STOP	NO WORK DURING HOLIDAYS	BUCKLE UP
NO WORK DURING HOLIDAYS	DON'T DRINK & DRIVE	NO WORK DURING HOLIDAYS	OBEY SPEED LIMIT	CLICK IT	OR TICKET

**APPROVED MOTORIST SAFETY MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS
ON THE STATE HIGHWAY SYSTEM** (Page 2)
Latest Revision Date: 4/23/04

PATROL IN PROGRESS	BUCKLE UP FLORIDA
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David Sadler/CO/FDOT

05/09/2005 07:27 AM

To FDOT-DCE

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cc Wiginton/CO/FDOT@FDOT, Cheryl
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Subject Motorist Awareness System - DCE Memo 06-05

In March of this year, DCE Memo 06-05, USE OF MOTORIST AWARENESS SYSTEM (MAS), was issued to provide guidance in the use of the MAS. In that memorandum, prices for compensation to the Contractor were quoted as follows:

"On active construction contracts , the Department will compensate the Contractor for the following items.

- **Portable Regulatory Signs (PRS) - 2 ED (each day) for each lane closure - \$40.00 ED**
- **Radar Speed Display Units (RSDU) - 2 ED (each day) for each lane closure - \$35.00 ED**
- **Portable Changeable Message Signs (CMS) - 1 ED (each day) for each lane closure - \$45.00 ED"**

The prices quoted in memo 06-05 were for furnishing the units and did not include allowable markups. Additionally, there may be costs associated with the set up and take down of these devices that should be considered.

If you have any questions about this, please contact Stefanie Maxwell at 850-414-4314 or by email

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Ananth Prasad/CO/FDOT

07/11/2005 10:59 AM

To Ananth Prasad/CO/FDOT, Brian M
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Sadler/CO/FDOT@FDOT, Frank O'Dea/D5/FDOT@FDOT,
cc Stefanie Maxwell/CO/FDOT@FDOT, BBurleson@ftba.com,
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Subject Motorist Awareness System Implementation - Follow-up to
DCE Memo 06-05

As a follow-up to the DCE Memo No. 06-05, we have contacted MPH and Wanco on the supply of the devices required by the MAS and have been assured that they are working diligently to meet the demand. Unfortunately, there have been some uncertainty on the part of the suppliers coupled with a few of the subcontractors waiting till the last moment to put in their orders. Any technical issues relating to these devices have been worked out with MPH and Wanco.

The only other issue pending is a minimum usage on a project for these devices to break even on the investment. We are still discussing this issue with Industry and will let you all know of the resolution. Initial review of the numbers indicate that this will not be an issue on vast majority of our contracts.

To that end, for contracts on which we have an agreement (either a SA or a Unilateral) with the Contractor and the Contractor has in his possession these devices, please start using these devices this week and compensate the Contractor for such use. Please ensure that we have aggressive enforcement at the onset of this system.

For all other contracts that meet the criteria mentioned in the DCE Memo, the Department shall expect this system to be in place and functioning no later than August 8, 2005. There will be no exceptions. Both MPH and Wanco have indicated that they should be able to meet this new deadline.

On August 8, 2005, for contracts that meet the criteria for use of MAS but do not have MAS in place and functioning, the Contractor will be not be allowed to set-up lane closures on such contracts and the Contractors will be issued a Deficiency Letter in Category 3 - Proper MOT and Minimize Impacts to Travelling Public. There may be further implications on the CPPR as a result of not meeting this deadline.

It is important that folks do not procrastinate the implementation any more than what we may have already done. The Department plans to launch a major Public Information Campaign on this subject and it is important, for the credibility of the Department and the Industry, that the work zones that meet criteria are appropriately signed.

If you have any questions, please feel free to call me.

Thanks - Ananth

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