

Portable Changeable Message Sign (PCMS) Guide – Louisiana



Statewide Traffic Engineers Meeting
Baton Rouge
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Portable Changeable Message Sign (PCMS) Guide – Louisiana

- Purpose - To present basic regulations and guidelines for the use of Portable Changeable Message Signs (PCMS) on highways in Louisiana
- Where appropriate, standards or requirements of the MUTCD 2009 Edition are quoted verbatim with the reference included
- ***Not intended to be a standard itself, but to provide practical information to users of PCMS***

PCMS Standards and Guidance

- Manual on Uniform Traffic Control Devices (MUTCD) 2009 Edition
- Portable Changeable Message Sign Handbook, FHWA
- LADOTD Traffic Control Standard Plan TTC-00(A)



What is a PCMS?

- PCMS is a temporary traffic control (TTC) device that is capable of displaying a variety of messages to inform motorists of unusual driving conditions.
- This capability is achieved through elements on the face of the sign that can be activated to form letters or symbols.
- Differs from CMS since the message is limited by the size of the sign (usually three lines with eight characters per line)

PCMS is a Traffic Control Device !

Therefore, it must:



- A. Fulfill a need
- B. Command attention
- C. Convey a clear, simple meaning
- D. Command respect from road users
- E. Give adequate time for proper response

Advantages of PCMS

- Housed on a trailer or truck bed and can be deployed quickly
- Meets temporary requirements frequently found in work zones, incident areas, or for special events
- Captures motorists' attention.
- Relays information that is difficult to accomplish with static signing.
- Equipped with remote communications, messages can be programmed from a Traffic Management Center (TMC)

PCMS can be used for:

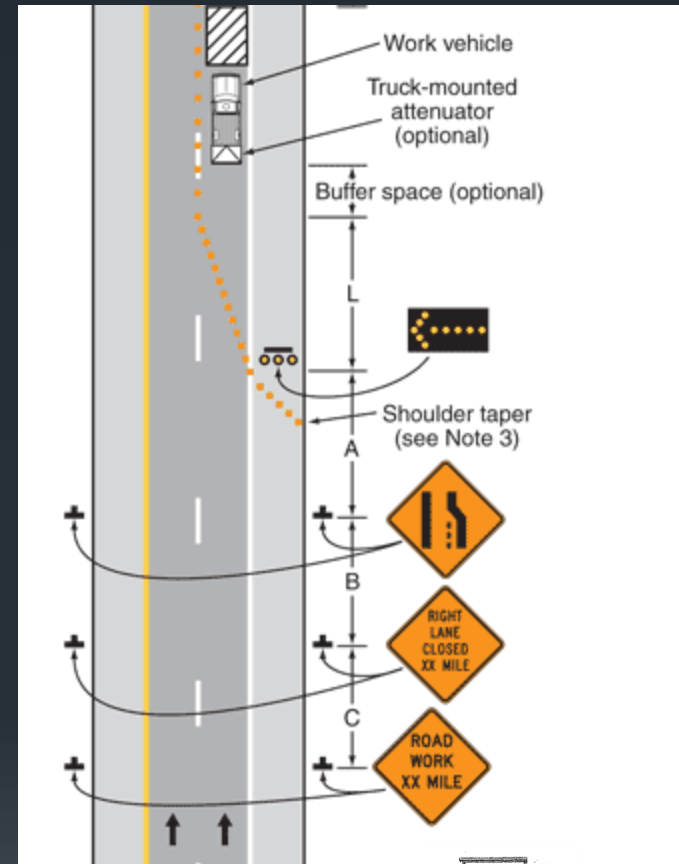
- Construction or maintenance (e.g., work zone).
- Incident management.
- Special event.
- Notification of future construction or event.



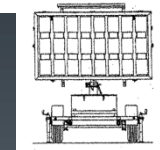
Louisiana Traffic Control Standard Plan

TTC-00(A) Provisions

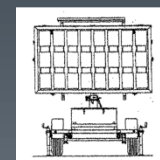
- PCMS shall be used on all Interstate Highways and other roadways with an ADT greater than 20,000 vehicles
- PCMS are paid per each under Item NS-713-00001
- Should be placed on the right side of the road a minimum of 2 miles in advance of the taper for lane closures and lane shifts
- If vehicles are queuing past the two mile PCMS an additional PCMS should be placed at five miles or the back of queue, whichever is greater



2 MILES
FROM TAPER



5 MILES
FROM TAPER
or BACK OF
QUEUE



Louisiana Traffic Control Standard Plan

TTC-00(A) Provisions

- PCMS messages shall conform to the LADOTD PCMS APPROVED MESSAGE POLICY (EDSM VI.2.1.10) or shall be approved by the District Traffic Operations Engineer!
- Messages shall be no more than three lines and two screens (phases)
- Place as far from the travel lane as possible and shield with guardrail or barriers



Louisiana Traffic Control Standard Plan

TTC-00(A) Provisions

- If shielding is not possible, PCMS shall be delineated with drums
- If placed on the shoulder, a shoulder closure shall be implemented
- When not displaying an appropriate message pertaining to ongoing work, shield the PCMS with guardrail or barriers, or remove from the clear zone



PCMS Messages – Design

- The message should be as brief as possible and should contain three thoughts (with each thought preferably shown on its own line) that convey:
 - The problem or situation that the road user will encounter ahead,
 - The location of or distance to the problem or situation, and
 - The recommended driver action.



PCMS Messages – Design



- If more than two phases are needed to display a message, additional portable changeable message signs should be used
- When multiple portable changeable message signs are needed, they should be placed on the same side of the roadway and separated from each other by at least 1,000 feet on freeways, 500 feet on other types of highways



PCMS Message Categories

- Advance Notice of Scheduled Work
- Notice of Current / Ongoing Work
- Incident Notices
- Weather / Environmental / Emergency / Special Events
- Public Service Messages

PCMS Message Categories

- Advance Notice of Scheduled Work



Condition	Sample Message	Sample Message	Notes	Alternate Message	Alternate Message
	Screen 1	Screen 2		Screen 1	Screen 2
Pending Road Work	LA XXXX	BEGIN	Normally no more than 6 days in advance May be displayed on 2 mile PCMS	2 LANES	8 PM SUN
	LANE	SUNDAY		TO BE	TO
	CLOSURES	NIGHT		CLOSED	6 AM MON
Pending Road Closure	LA XXXX	9/7/11	Normally 7 Days in advance	LA XXXX	MON 9/7
	TO BE	TO	See TTC-16	TO BE	TO
	CLOSED	9/13/11		CLOSED	SUN 9/13
Pending Road Closure	I-10 WEST	SUNDAY	Normally 6 days in advance	I -10 W	SUNDAY
	TO BE	9:00 AM -		FULL	9:00 AM-
	CLOSED	4:00 PM		CLOSURE	4:00 PM
Pending Bridge Closure	BRIDGE	9/7/11	Normally 7 days in advance		
	TO BE	TO	See TTC-16		
	CLOSED	9/13/11			
Pending Bridge Closure	US 11	9/7/11	Normally 7 days in advance		
	BRIDGE	TO	If significant detour use static sign up to 30 Days		
	CLOSURE	9/13/11			
Intermittent Lane Closures	LA XXXX	TONIGHT	Must be updated (at least weekly)		
	LANE	8PM –			
	CLOSURES	5 AM			
Intermittent Road Closures	15 MIN	SUNDAY	Up to 6 days in advance		
	BRIDGE	6:00 AM –			
	CLOSURES	2:00 PM			

Advance Notice of Scheduled Work

- Individual screens (phases) must make sense on their own
- Use “CLOSURE” or “CLOSURES” versus “CLOSED”
- Minimize blank periods between phases
- Driver must see at least one full cycle of the message, preferably two



PCMS Message Categories

- Notice of Current / Ongoing Work



Condition	Sample Message		Notes	Alternate Message	
	Screen 1	Screen 2		Screen 1	Screen 2
Current Road Work	RT LANE CLOSED AHEAD	SLOW TRAFFIC	<i>May be displayed on 2 and 5 mile PCMS</i>	LA XXXX LANE CLOSED	
Current Road Closure	ROAD CLOSED AHEAD	DETOUR US 61 SOUTH	<i>See TTC-16</i>	LA XXXX CLOSED AHEAD	STAY ON US 61 SOUTH
Current Road Closure	ROAD CLOSED AHEAD	UNTIL MONDAY 6:00 AM		LA XXXX CLOSED AHEAD	LOCAL TRAFFIC ONLY
Current Bridge Closure	BRIDGE CLOSED AHEAD	DETOUR I-10 EAST	<i>See TTC-16</i>	DULARGE BRIDGE CLOSED	12 MILES AHEAD
Intermittent Bridge Closure	US 11 BRIDGE DELAYS	ALT ROUTE I-10 E	<i>Must be monitored Normal max closure 15 minutes</i>		
Current Road Closure	I - 10 CLOSED AHEAD	ALL TRAFFIC EXIT			

PCMS Message Categories

- Incident Notices



Condition	Sample Message <i>Screen 1</i>	Sample Message <i>Screen 2</i>	Notes	Alternate Message <i>Screen 1</i>	Alternate Message <i>Screen 2</i>
Current Incident	RHT LANE CLOSED AHEAD		<i>May be displayed on 2 and 5 mile PCMS</i>	LA XXXX LANE CLOSED	
Incident with Road Closure	ROAD CLOSED AHEAD	DETOUR US 61 SOUTH	<i>See TTC-16</i>	LA XXXX CLOSED AHEAD	STAY ON US 61 SOUTH
Current Road Closure	ROAD CLOSED AHEAD	ALL TRAFFIC EXIT		LA XXXX CLOSED AHEAD	LOCAL TRAFFIC ONLY
Current Bridge Closure	BRIDGE CLOSED AHEAD	DETOUR I-10 EAST	<i>See TTC-16</i>	DULARGE BRIDGE CLOSED	12 MILES AHEAD
Incident on Bridge	US 11 BRIDGE DELAYS	ALT ROUTE I-10 E	<i>Must be monitored</i> <i>Normal max closure 15 minutes</i>		

PCMS Message Categories

- Weather / Environmental / Emergency / Special Events



Condition	Sample Message <i>Screen 1</i>	Sample Message <i>Screen 2</i>	Notes	Alternate Message <i>Screen 1</i>	Alternate Message <i>Screen 2</i>
FOG WARNING	FOG AREA NXT 12 MILES	DRIVE WITH CAUTION	<i>May be displayed on 2 and 5 mile PCMS</i>		
FOG ACTIVE	FOG AREA	REDUCE SPEED	<i>See TTC-16</i>	FOG AREA	LIGHTS ON - LOW BEAM
Special Event Parking	PGA TOUR EVENT PARKING	NEXT RIGHT →		SHUTTLE PARKING	TURN RIGHT 500 FT
Special Event Traffic	HIGHLAND ROAD ONE WAY	W-BND 1 – 3 PM SAT		POYDRAS RAMP CLOSURE	SUNDAY 11 AM – 10 PM

PCMS Message Categories

- **Public Service Messages**
- Must be part of an approved areawide effort in conjunction with other State agencies



Abbreviations

Table 1A-1. Acceptable Abbreviations

Word Message	Standard Abbreviation
Afternoon / Evening	PM
Alternate	ALT
AM Radio	AM
Avenue	AVE, AV
Bicycle	BIKE
Boulevard	BLVD*
Bridge	(See Table 1A-2)
CB Radio	CB
Center (as part of a place name)	CTR
Circle	CIR*
Civil Defense	CD
Compressed Natural Gas	CNG
Court	CT*

Table 1A-3. Unacceptable Abbreviations

Abbreviation	Intended Word	Common Misinterpretations
ACC	Accident	Access (Road)
CLRS	Clears	Colors
DLY	Delay	Daily
FDR	Feeder	Federal
L	Left	Lane (Merge)
LT	Light (Traffic)	Left
PARK	Parking	Park
POLL	Pollution (Index)	Poll
RED	Reduce	Red
STAD	Stadium	Standard
WRNG	Warning	Wrong

Abbreviations

Table 1A-2. Abbreviations that Shall be Used Only on Portable Changeable Message Signs

Word Message	Standard Abbreviation	Prompt Word That Should Precede the Abbreviation	Prompt Word That Should Follow the Abbreviation
Access	ACCS	—	Road
Ahead	AHD	Fog	—
Blocked	BLKD	Lane	—
Bridge	BR*	[Name]	—
Cannot	CANT	—	—
Center	CNTR	—	Lane
Chemical	CHEM	—	Spill
Condition	COND	Traffic	—
Congested	CONG	Traffic	—
Construction	CONST	—	Ahead
Crossing	XING	—	—
Do Not	DONT	—	—
Downtown	DWNTN	—	Traffic
Eastbound	E-BND	—	—

PCMS to remember

- ✓ Signs are the primary channel of communication to the motorist.
- ✓ PCMS credibility is crucial.
- ✓ The PCMS should communicate what action motorists need to take and when this action should occur.
- ✓ Unnecessary information should be avoided.
- ✓ PCMS should be left blank if there is nothing to report and moved if no longer needed.



Questions?

