



INDOT Guidelines for Portable Changeable Message Signs (PCMS)



INDOT GUIDELINES FOR PORTABLE CHANGEABLE MESSAGE SIGNS

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Section I POLICY STATEMENT

This policy provides specific requirements and guidelines for the use of portable changeable message signs (PCMS) on the Indiana highway system. PCMS's provide an excellent means to communicate with motorists since they are easily noticed and command attention. It is for these reasons that PCMS's must be used appropriately. Therefore it is INDOT's policy that these principles be followed when considering a PCMS message:

PRINCIPLE #1- RELEVANCE

PCMS's *shall* convey only accurate, pertinent and up to date roadway or emergency information. The display of a message like "CAUTION/CAUTION/CAUTION" is not relaying specific information and as such is not an acceptable use of a PCMS. (*Recommendation 2011 IMUTCD 2L.02*)

PRINCIPLE #2- CLARITY

PCMS messages *shall* be conveyed in a standard, non-confusing manner. Drivers must be able to both read and react to the information given in a timely fashion. (*Recommendation 2011 IMUTCD 2L.02*) Messages shall be one or two phases (display screens) in length; three phase messages are not acceptable.

PRINCIPLE #3- SINGULARITY

PCMS's *should not* display messages for an extended period of time that can be effectively conveyed with static signing (panel or sheet signs). The display of standard highway sign messages on a PCMS over an extended time diminishes the ability of PCMS to command attention. (*Variation on the recommendation 2011 IMUTCD 6F.60*)

PRINCIPLE #4- IMPARTIALITY

PCMS's *shall not* display messages that in any way advertise commercial events or entities (*Requirement 2011 IMUTCD 2L.02*). Messages shall be for the benefit the general motoring public.

Section II AUTHORITY AND RESPONSIBILITIES

A. Contracted Activities

For contracted activities the Contractor or designated-sub will:

- Supply the PCMS
- Maintain the PCMS
- Relocate the PCMS
- Enter messages (except when the TMC controls)
- Verify message correctness (except when the TMC controls)
- Change messages (except when the TMC controls)

The contractor is not responsible for selecting messages, but rather the designer or District Construction or Technical Services office will determine the appropriate message(s) for each phase of construction or change of conditions. The designer will:

- Show the approximate location(s) in the bid MOT plans
- Determine all foreseeable standard messages associated with the bid MOT plan
- Develop all foreseeable non-standard messages associated with the bid MOT plan or coordinate with District Traffic or the Traffic Management Center to do so
- Include all planned messages, standard and non-standard, in the bid plans
- Develop programming sheets for all non-standard, planned messages
- Include the programming sheets in the contract proposal

If the maintenance of traffic plan is changed after letting the engineer will determine the applicability of the original messages. The engineer may also direct the contractor to display applicable standard messages when the plans do not address a need (see Table VII, page 19). These messages will not supersede applicable higher priority messages detailed in the plans.

For contracted activities in Advanced Traffic Management System areas the District Construction office and the Traffic Management Center (TMC) may agree to control the PCMS through the TMC. This decision will be made during the design process as part of the Traffic Management Plan. In these cases the TMC will generate and change the messages and ensure that the correct message is displayed.

B. Non-Contracted Activities

For non-contracted activities the District Technical Services office will determine the message(s) to be displayed. The PCMS deployer will enter/change messages and ensure that the correct message is displayed.

The TMC may also provide messages for contracted work outside of the ATMS areas or non-contracted activities. However, in these cases it is the Engineer’s or PCMS deployer’s responsibility to ensure that the message is correct and the highest priority message is displayed.

Section III PLACEMENT

Typical placement of PCMS’s are given in tables I and 2 for various work zone conditions. Engineering judgment should be applied to specific temporary traffic control plan to best locate the PCMS’s.

TABLE I: PCMS PLACEMENT FOR FREEWAYS

Event	Duration	Min. # required per approach	Location of 1 st PCMS	Location of 2 nd PCMS
Road Closure	any length	2	1 mile in advance of the detour exit (if detour is provided) or the closure	1000’ in advance of the detour exit (if detour is provided) or the closure
Ramp Closure	less than 1 week (or less than 1 month for unplanned closure)	2	1 mile in advance of detour exit (if detour is provided) or the closed ramp	1000’ in advance of the detour exit (if detour is provided) or the closed ramp
Lane Closure w/ Anticipated Queuing	any length	2	1 mile in advance of the previous exit upstream of the anticipated queue length	1000’ in advance of anticipated queue length
Lane Closure	mobile or stationary at any one location less than 2 weeks	2	2500’ in advance of previous exit upstream of the closure	1000’ in advance of the first construction sign
Frequent or Intermittent changes in Alignment	any length	1	1000’ in advance of the first construction sign	n/a
Frequent or Intermittent Changes in Pavement Condition	any length	1	1000’ in advance of the first construction sign	n/a
Speed Limits reduced by 15 mph or more for Work Zone	any length	1	1000’ in advance of the first construction sign	n/a
Location with a Significant Crash History	any length	1	1000’ in advance of the first construction sign	n/a

TABLE 2: PCMS PLACEMENT FOR NON-FREEWAY STATE HIGHWAYS

Event	Duration	Min. # required per approach	Location of 1 st PCMS
Road Closure	less than 2 weeks	1	500' in advance of the first construction sign
Side Road Closure	less than 1 week (or less than 1 month for unplanned closure)	1	500' in advance of the closed side road
Lane Closure w/Peak Hour Delay > 5 minutes	any length	1	1500' in advance of the first construction sign
Lane Closure	mobile or stationary at any one location less than 2 weeks	1	500' in advance of the closed side road
Frequent or Intermittent Changes in Alignment	Any length	1	500' in advance of the first construction sign
Frequent or Intermittent changes in Pavement Condition	Any length	1	500' in advance of the first construction sign
Speed Limits reduced by 15 mph or more for Work Zone	Any length	1	500' in advance of the first construction sign
Location with a Significant Crash History	Any length	1	500' in advance of the first construction sign

Further guidance on the spacing and placement of PCMS's:

- Where possible, PCMS's should be placed behind barrier wall, guardrail or outside the construction clear zone provided that the area can be accessed and the PCMS can be leveled without undue effort. Where it is not practical to positively protect or place outside the construction clear zone the minimum lateral offset should be 6 feet or 12 feet where shoulders are 6 feet or less in width.
- Where possible, PCMS's should be on the right side of the road with the following exceptions:
 - On divided highways the preferred placement for PCMS's is in the median behind protection as might be found at a bridge pier or overpass.
 - In the case of a left lane closure on freeway where the median is at least 30' in width PCMS's should be placed off the left shoulder.
- On curve alignments the angle of placement should be determined by the direction of approaching traffic rather than the roadway edge at the PCMS location.
- Placement in sag curves and just beyond crests should be avoided.
- For work zones in place for at least 1 week the locations of PCMS's used to display queuing/delay information should be adjusted from the planned location according to field observations of actual maximum queue.

- If more than two phases (or screens) are required for a message then the PCMS’s shall be used in series.—that is two consecutive PCMS’s displaying the first and last part of the message. For freeways PCMS’s used in series shall be placed on the same side of the roadway and spaced at approximately 1000’- for non-divided roads the spacing should be approximately 500’.
- PCMS’s oriented for the same direction of travel should not be placed opposite one another on both the left and right sides of the road.
- Drums should be placed at the corners of the trailer for proper delineation.

Section IV MESSAGE TYPE AND PRIORITY

Portable PCMS’s may be used to display messages as indicated in Table 3. Priority level 1 messages take precedence over level 2, level 2 over level 3, and so on. In the event that more than one message of the same priority level is needed judgment must be used as to which is most beneficial. The District Traffic office, the Work Zone Safety Section or the Traffic Management Centers may be consulted to make this determination.

TABLE 3: MESSAGE PRIORITY

<u>PRIORITY LEVEL</u>	<u>MESSAGE TYPE</u>
1 (highest)	Road Closure
2	Ramp Closure/Access Restriction
3	Hazardous Conditions
4	Real-time traffic information
5	Advance notice for scheduled events.
6 (lowest)	Public information pertinent to highway safety

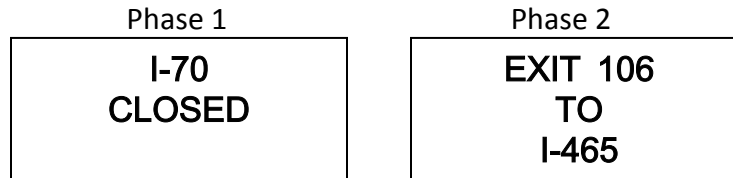
Message types:

1. **Road Closure** – These are events where complete traffic diversion is required and the closures or effect of the closures will be of sufficient duration for the PCMS to be deployed and programmed.

Examples:

- The Department of Homeland Security conducting nuclear or hazardous material evacuation
- The military requiring road closure for major troop/equipment transport

- Closure of the facility due to a crash, damaged structure, pavement failure or toxic spill
- Roadway closures resulting from hazardous conditions such as landslides, flooding, blizzards, whiteouts, or other severe weather that greatly affects visibility or driver ability
- Road closure due to setting of overhead structures or signals.

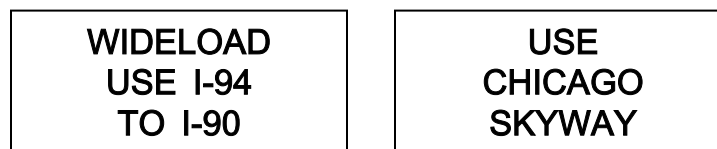


In an emergency where another agency is in command of the situation that agency may direct specific use of PCMS's. In all likelihood, the command agency will rely on INDOT for locating and programming signs and developing the exact messages.

2. **Ramp Closure/Access Restriction** – If planned detours are to be in place for more than a week, conventional detour signing should be used. If the detour was not planned, the PCMS can be used as an alternate to conventional signing; however, if the detour is expected to remain in place for more than a month, conventional signs should be installed as soon as possible. These messages can be especially useful for a partial audience for which no other signing is in place. Care must be taken to keep these messages updated with correct information.

Examples:

- Detour for specific audience such as over-width vehicles that cannot traverse a construction zone with barriers
- Overnight ramp closure for which no detour is given because it is assumed that motorists know alternate routes
- Closing of an intersecting roadway adjacent to mainline



3. **Hazardous Conditions** – These messages warn of hazardous conditions that do not result in road closure and that cannot be effectively signed for statically by panel or sheet signs. The majority of information relevant to the motorists would fall into this category, therefore it is extremely important for all parties to cooperate and ensure that motorists are receiving the most important information at any particular time. Examples:

- Crash and/or emergency vehicles in a lane or on the shoulder within or adjacent to the work zone
- Unplanned or short term lane/shoulder closures or blockages
- Extreme weather that impairs driving ability and/or visibility such as ice, snow, fog, flooding
- Unusual roadway conditions for the roadway type such as lane shifts, rough pavement or narrow lanes on a freeway due to construction or maintenance
- Workers or construction equipment in close proximity to an open travel way
- Speed reduction (e.g. caused by congestion)

CRASH
I-65 N
AT SR 47

PASS ON
RIGHT
SHOULDER

RIGHT
LANE
CLOSED

1/2 MILE

RIGHT
LANE
CLOSED

VEHICLE
ON
SHOULDER

LEFT
LANE
CLOSED

WORKERS
NEXT
2 MILES

LEFT
LANE
CLOSED

TRUCKS
ENTERING

4. **Real-Time Traffic Information** – Information about real-time traffic conditions will help motorists to avoid congestion and delays. In order for motorists to react to this type of information they must trust that it is accurate or they will not change their route of travel. Unless facilities for real-time data collection are provided in the contract or delays are visually confirmed by the Engineer or District Traffic office, the Traffic Management Center will provide this type of information and may recommend the corresponding messages. Identification of alternate routes must be coordinated with District Traffic. Local routes will not be used as alternates without the prior approval by the agency of jurisdiction.

Examples:

- Real-time travel delay; allowing motorists to consider an alternate route
- Suggested alternate route(s)
- Combination of the above
- Suggested routes to a large traffic generator
- Amber Alerts (these alerts are provided only through the TMC).

**SLOW
TRAFFIC**

**NEXT
3 MILES**

**20 MIN
DELAY
ON I-69**

**ALT
I-469**

**GAME
TRAFFIC**

**LEFT
LANES**

**ABDUCTED
CHILD**

**BLUE
FORD
49A 1234**

5. **Advance Notice of Special Events** – If a planned event such as a road/ramp/lane closing is expected to occur, motorists should be warned ahead of time to avoid that area during the event.

Examples:

- Large, traffic-generating sports event
- Scheduled lane closure with a heavy traffic impact

HEAVY
TRAFFIC
SUN 1-4

PLAN
AHEAD

LANE
CLOSURES
7PM-6AM

BEGINS
APRIL 20

6. **Public Information Pertinent to Highway Safety** – This type of message requires an action by drivers and shall only be displayed with the District Traffic/Maintenance & Operations Engineer's or their designee's approval. The intended use for this message type is to improve safety and mobility, and to reduce congestion.

Example:

- License, DUI, seat-belt or weight check by law enforcement.

LICENSE
CHECK
AHEAD

Section V MESSAGE SELECTION & NON STANDARD MESSAGE DEVELOPMENT

To promote consistency in INDOT work zones, pre-approved, standard messages are provided on pages 20 - 23.

The Designer, District Technical Services Office, or Traffic Management Center will create non-standard messages. The Traffic Management Centers and the Work Zone Safety Section may be consulted for advice on non-standard messages. For contracted work a “Programming Sheet for Changeable Message Sign Use” will be included in the special provisions for each non-standard message identified in the maintenance of traffic plans.

Components of a Message

When designing a message, enough information needs to be given to the motorists to enable them to react and possibly make a decision. If this is not done, the message may be ignored. The message can be broken down into the 5 W’s (what, where, when, who and why). All of these components are not necessarily needed for each and every message. They may often be implied. Generally the message can address any of the following:

- **What** action should be taken
- **Where/When** is the event
- **Who** is affected
- **Why** the action is needed

If a message or element of a message is not addressing one or more of these points then it should not be used.

- **What?** – What action is required by the motorist?
 1. This is the instruction you want motorists to follow. It could be to reduce speed, divert to a specific route, begin to merge, etc. The motorists will tend to ignore a simple WHAT statement unless they are also given a WHY. Motorists need to have as much information as possible so they can make an informed decision.
 2. The WHAT component of a message may be implied. The following future event message is an example:

This message gives the motorists a WHY and WHEN, but it implies that they need to plan to be elsewhere at that time. If the driver population is very familiar with an area, a WHY and WHERE may be given as:

**HEAVY
TRAFFIC
SUN 1-4**

**KEYSTONE
AVE
CLOSED**

This implies that motorists must find an alternate route for Keystone Avenue.

The **WHAT** component is the most important piece of information given that will affect drivers' decisions. They must be clear, comprehensible and recognizable. For example:

WHAT:

**DETOUR
EXIT 247**

WHY:

**ROAD
CLOSED**

WHATs include MERGE RIGHT, MERGE LEFT, KEEP RIGHT, KEEP LEFT, PREPARE TO STOP, REDUCE SPEED, DO NOT PASS, STAY IN LANE, SLOW TO xx MPH, STAY IN VEHICLE, TUNE RADIO 530 AM, EXIT 1 MILE, FOLLOW DETOUR, FOLLOW ALT ROUTE, etc..

- **Where?** – Where is the decision point at which motorists must take an action. The following guidelines should be observed on WHERE messages:
 1. When giving a location, only use major points of reference such as exit numbers. Interchange names may be use in combination with an exit number. Overpass or underpass names should not be used.
 2. When the majority of motorists are interstate travelers who are not familiar with the names of local cross-streets, locations should be described in distances to the nearest ½ mile.
 3. If the majority of motorists are local, use the local street names. Most urban drivers are more familiar with street names than route numbers, SR numbers, mile markers, or reference markers.
 4. AHEAD is not a WHERE; it's a filler word. For notices of an incident, lane closure or heavy congestion, an actual distance should be given instead of just the word AHEAD. This will give the driver a point of reference and the opportunity to divert based on the driver's knowledge of the area.

WHERE includes xx MILES, AT MOREHEAD ST., NEAR (LANDMARK), EXITS xx TO xx.

- **When?** – When will an event occur for which drivers should change their actions?

For future events, give specific data for its traffic disruption only if it is certain to occur. The PCMS's will lose their credibility if they advertise traffic conditions that never occur. An example is a major, traffic-generating sports event. Do not make the message specific if real time information cannot be kept current. This type of message is usually required to be combined with a WHERE.

An example of a **message not to display** is:

**ROAD
OPENS
21 DAYS**

The road may not open as planned. WHEN can be a date, time, holiday, or weekend.

- **Who?** – If only a partial audience is required to take an action, who are they?

A partial audience could potentially include:

1. Over-width vehicles.
2. Motorists with a particular destination; such as in a secondary road or ramp closure detour situation.
3. Traffic en-route to a specific event such as:

**GAME
TRAFFIC**

**USE
LEFT
LANES**

WHO includes ALL TRAFFIC, THRU TRAFFIC, CARS, TRUCKS, BUSES, WIDELoad, EMER VEH/ONLY, highway/road name with a direction, LOCAL/TRAFFIC, etc.. Downstream cities and destinations (e.g. CHICAGO TRAFFIC) identify an audience also.

- **Why?** – Additional information to assist and/or spur motorists' decision making.

This is intended to encourage motorists to make a change to their driving and follow the message instruction. The following are examples:

**AVOID
20 MIN
DELAY**

**USE
US 20
TO BEACH**

**REDUCE
SPEED**

**WATER
ON
ROAD**

Without the WHY statements the motorists will most likely ignore the instruction, but with the additional information they will make an informed decision. WHY includes LEFT LANE CLOSED, RIGHT LANE CLOSED, RAMP CLOSED, xx MILE BACKUP, xx MIN DELAY, SLOW TRAFFIC, RIGHT SHOULDER CLOSED, EXPECT DELAYS.

Word Usage

Avoid filler words such as AHEAD or CAUTION. Both of these words can be implied in most instances. Drivers will realize that if you are giving a warning you are also advising caution. They will also assume that they would only be advised of situations ahead of them. However, there are times where AHEAD is beneficial as it can differentiate between the distance to a lane restriction versus the length of a lane restriction. For example, RIGHT/LANE /CLOSED|5 MILES/AHEAD makes it clear that the right lane is closed 5 miles ahead, not that the right lane is closed for 5 miles. The word, TRAFFIC, when addressing a specific audience, may be deleted when space considerations do not allow.

When using more than one phase, repeat key words. Do not use potentially contradictory terms. For instance both LEFT and RIGHT should not be used in the same sequence, such as RIGHT/LANE/CLOSED|MERGE LEFT. Inattentive drivers will scramble the message. A better message is RIGHT/LANE/CLOSED|PREPARE/TO/ MERGE or the basic standard message (no 13) RIGHT/LANE/CLOSED.

Use vocabulary familiar to the driver population. Express Lanes, for instance, are not utilized in Indiana except in Chicago and Indianapolis metro areas, so the message THRU/TRAFFIC|USE/ EXPRESS/LANE could be confusing outside of those locales.

The use of abbreviations should be kept at a minimum. When space will not allow all key words to be spelled out the standard abbreviations found on pages 16-18 should be used.

Additional requirements for PCMS messages

The standards and guidelines found in the Manual on Uniform Traffic Control Devices (MUTCD) regarding portable changeable message signs shall be observed. Only upper case letters shall be used. Alternating a line and leaving the other lines the same between the first and second phase of a two phase message is not permissible.

Limits to message size

At normal highway speeds motorists are limited in the amount of information they can read on one sign. This was recognized in the current MUTCD in which greater limits have been placed on message size. As a result it is INDOT's policy to limit the amount of information displayed on a PCMS per the MUTCD and as follows:

- A maximum of 8 characters per line (including spaces) shall be used
- PCMS's shall display no more than 3 lines per phase
- No more than two phases per message. One phase should be used when possible.
- When two phases are used to create a message each phase should be understandable on its own
- Each phase should be limited to three units of information (or data items used for decision making). As an example standard message #1 (see page 20) consists of 1 phase with two units of information- the first unit is "ROAD WORK" the second is "XX MILES"
- Each message should be limited to 4 units of information

If the message exceeds these limitations then the amount of information in the message should be reduced by deleting the least significant or the lowest priority information. In general the priority based on type of information is:

- 1 Why
- 2 Where
- 3 When (if applicable)
- 4 What (may be implied in many instances)
- 5 Who (if applicable)

Multiple Messages

It may be necessary to relay multiple pieces of information to motorists. This can be accomplished by careful message design. For instance, if a segment of I-70 is closed due to an overhead bridge collapse; a priority 1 message will result. If, at the same time, the truck that hit the bridge is on fire and billowing smoke on to the alternate route, I-465, a priority 3 message may be necessary. In the following example, three phases are used to inform motorists that there is an emergency requiring action on their part and to warn of a potentially hazardous condition that could be encountered after taking the action.

<p>I-70 CLOSED EXIT 90</p>

<p>DETOUR EXIT 90</p>

<p>EXPECT HEAVY SMOKE</p>
--

Three phases should only be used if there is no reasonable way to convey critical information on two. When three phases are needed multiple PCMS's should be used in series to convey the message in order to satisfy the MUTCD and INDOT policy regarding the maximum number of phases per message.

Approval of Non-Priority Messages

PCMS's shall only display messages that pertain to highway safety or congestion. Special use of PCMS may be requested, but messages must still conform to policy and special messages must be approved by the District Traffic Engineer.

Message Types to Avoid

Message types that are not permitted:

1. PCMS's shall not display messages that in any way advertise commercial events or entities. An example of a **message not to display** is:

RCA
CHMPSHPS
TRAFFIC

USE
EXIT
79A

An acceptable message is:

TENNIS
TRAFFIC

USE
EXIT
79A

Although the same information is relayed, no names are used. This awareness will prevent businesses from being able to accuse INDOT of advertising their competitors.

The placement of advertisements in advance notification messages should also be avoided. The following is a message warning motorists of expected heavy traffic due to a planned athletic event. INDOT cannot be accused of advertising the event or any of its teams because this message does not include names.

HEAVY
TRAFFIC
SUN 1-4

USE ALT
ROUTE
US 40

2. PCMS's should not be used to convey a message for an extended period of time, approximately two weeks or more, that could be conveyed with a conventional warning or guide sign. An example of this is **ROAD/WORK/AHEAD** being displayed for more than two weeks while the standard construction sign could have been used.

3. PCMS's should not display generic messages that convey non specific information about the work zone or road conditions (e.g. **CAUTION/CAUTION/CAUTION**).

Section VI STANDARD ABBREVIATIONS

These easily understood Standard abbreviations may be used:

TABLE 4: STANDARD ABBREVIATIONS

<u>Word</u>	<u>Abbr.</u>	<u>Word</u>	<u>Abbr.</u>
Afternoon/Evening	PM	Lane	LN
Alternate	ALT	Left	LFT
Avenue	AVE/AV	Maintenance	MAINT
Bicycle	BIKE	Morning	AM
Boulevard	BLVD	Normal	NORM
Cannot	CANT	Northbound	N-BND
CB Radio	CB	Parking	PKING
Center	CNTR	Right	RHT
Circle	CIR	Road	RD
Crossing	XING	Route	RTE
Do Not	DONT	Service	SERV
Eastbound	E-BND	Shoulder	SHLDR
Emergency	EMER	Slippery	SLIP
Entrance, Enter	ENT	Southbound	S-BND
Expressway	EXPWY	Speed	SPD
Feet	FT	Street	ST
Freeway	FRWY, FWY	Temporary	TEMP
Hazardous	HAZ	Traffic	TRAF
Highway	HWY	Travelers	TRVLRS
Hour(s)	HR	Vehicle	VEH
Information	INFO	Warning	WARN
It Is	ITS	Westbound	W-BND
Junction	JCT	Will Not	WONT

Other abbreviations may be used with approval of the District Traffic/Maintenance & Operations Engineer.

Other abbreviations are easily understood whenever they appear in conjunction with a particular word commonly associated with it. These words and abbreviations are as follows:

TABLE 5: ABBREVIATIONS ACCEPTABLE WITH PROMPT WORD

<u>Word</u>	<u>Abbr.</u>	<u>Prompt</u>
Ahead	AHD	Fog*
Blocked	BLKD	Lane
Bridge	BRDG	[Name]
Chemical	CHEM	Spill
Condition	COND	Traffic*
Congested	CONG	Traffic*
Construction	CONST	Ahead
Downtown	DWNTN	Traffic
Exit	EX, EXT	Next
Frontage	FRNTG	Road
Interstate	I	[Number]
Major	MAJ	Crash
Mile(s)	MI	[Number]*
Minor	MNR	Crash
Oversized	OVRSZ	Load
Minute(s)	MIN	[Number]*
Prepare	PREP	To Stop
Pavement	PVMT	Wet*
Quality	QLTY	Air*
Roadwork	RDWK	Ahead [Distance]
Route	RTE	Best*
Vehicle	VEH	Stalled*
Cardinal Directions	N, E, S, W	[Number]*

* These prompt words should precede the abbreviation.

TABLE 6: ABBREVIATIONS THAT ARE UNACCEPTABLE

<u>Abbreviation</u>	<u>Intended Word</u>	<u>Common Misinterpretations</u>
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

Section VII STANDARD MESSAGES

The following table lists messages that are considered standard and as such may be displayed when appropriate without authorization as specified in the “AUTHORITY AND RESPONSIBILITIES” section on page 2:

TABLE 7: STANDARD MESSAGES

<u>Number</u>	<u>First Phase</u> <u>Line 1/Line 2/ Line 3</u>	<u>Second Phase</u> <u>Line 1/Line 2/ Line 3</u>
1	ROAD/WORK/xx MILES	n/a
2	WORK/ZONE/xx MILES	n/a
3	NIGHT/WORK/xx MILES	n/a
4	DETOUR/xx MILES	n/a
5	MEDIAN/WORK/xx MILES	n/a
6	SIGNAL/xx MILES	n/a
7	CRASH/xx MILES	n/a
8	YIELD/xx MILES	n/a
9	STOP/xx MILES	n/a
10	WATER/ON/ROAD	n/a
11	FOG/xx MILES	n/a
12	FLAGGER/xx MILES	n/a
13	RIGHT/LANE/CLOSED	n/a
14	LEFT/LANE/CLOSED	n/a
15	CENTER/LANE/CLOSED	n/a
16	RIGHT 2/LANES/CLOSED	n/a
17	LEFT 2/LANES/CLOSED	n/a
18	MERGE/xx MILES	n/a
19	MERGE/LEFT	n/a
20	MERGE/RIGHT	n/a
21	KEEP/LEFT	n/a
22	RIGHT/LANE/NARROWS	n/a
23	KEEP/RIGHT	n/a
24	PASS/LEFT	n/a
25	PASS/RIGHT	n/a
26	TRUCK/CROSSING	n/a
27	ROAD/CLOSED/xx MILES	n/a
28	ALL/TRAFFIC/EXIT RHT	n/a
29	CRASH/AHEAD/SLOW	n/a
30	USE/LEFT/LANE	n/a
31	USE/RIGHT/LANE	n/a
32	DO/NOT/PASS	n/a
33	ROAD/CLOSED/xx MILES	n/a

TABLE 7: STANDARD MESSAGES (continued)

Number	First Phase Line 1/Line 2/ Line 3	Second Phase Line 1/Line 2/ Line 3
34	ROAD/WORK/xx MILES	RIGHT/LANE/CLOSED
35	ROAD/WORK/xx MILES	RIGHT 2/LANES/CLOSED
36	ROAD/WORK/xx MILES	LEFT/LANE/CLOSED
37	ROAD/WORK/xx MILES	LEFT 2/LANES/CLOSED
38	ROAD/WORK/xx MILES	CENTER/LANE/CLOSED
39	WORK/ZONE/xx MILES	RIGHT/LANE/CLOSED
40	WORK/ZONE/xx MILES	RIGHT 2/LANES/CLOSED
41	WORK/ZONE/xx MILES	LEFT/LANE/CLOSED
42	WORK/ZONE/xx MILES	LEFT 2/LANES/CLOSED
43	WORK/ZONE/xx MILES	CENTER/LANE/CLOSED
44	NIGHT/WORK/xx MILES	RIGHT/LANE/CLOSED
45	NIGHT/WORK/xx MILES	RIGHT 2/LANES/CLOSED
46	NIGHT/WORK/xx MILES	LEFT/LANE/CLOSED
47	NIGHT/WORK/xx MILES	LEFT 2/LANES/CLOSED
48	NIGHT/WORK/xx MILES	CENTER/LANE/CLOSED
*49	RIGHT/LANE/CLOSED	PREPARE/TO/STOP
*50	LEFT/LANE/CLOSED	PREPARE/TO/STOP
*51	CENTER/LANE/CLOSED	PREPARE/TO/STOP
*52	RIGHT 2/LANES/CLOSED	PREPARE/TO/STOP
*53	LEFT 2/LANES/CLOSED	PREPARE/TO/STOP
54	CRASH/AHEAD	DETOUR/AT/EXIT xxx
55	CRASH/ON/BRIDGE	DETOUR/AT/EXIT xxx
56	CRASH/AT/EXIT xxx	FOLLOW/DETOUR/EXIT xxx
57	CRASH/AT/EXIT xxx	PASS ON/RIGHT/SHOULDER
58	CRASH/AT/EXIT xxx	SLOW/MOVING/TRAFFIC
59	CRASH/AT/EXIT xxx	ALL/LANES/CLOSED
60	CRASH/AT/EXIT xxx	RIGHT/LANE/CLOSED
61	CRASH/AT/EXIT xxx	RIGHT 2/LANES/CLOSED
62	CRASH/AT/EXIT xxx	LEFT/LANE/CLOSED
63	CRASH/AT/EXIT xxx	LEFT 2/LANES/CLOSED
64	CRASH/AT/EXIT xxx	CENTER/LANE/CLOSED
65	CRASH/AT/MILE xxx	FOLLOW/DETOUR/EXIT xxx
66	CRASH/AT/MILE xxx	PASS ON/RIGHT/SHOULDER
67	CRASH/AT/MILE xxx	SLOW/MOVING/TRAFFIC
68	CRASH/AT/MILE xxx	ALL/LANES/CLOSED
69	CRASH/AT/MILE xxx	RIGHT/LANE/CLOSED
70	CRASH/AT/MILE xxx	RIGHT 2/LANES/CLOSED

TABLE 7: STANDARD MESSAGES (continued)

Number	First Phase Line 1/Line 2/ Line 3	Second Phase Line 1/Line 2/ Line 3
71	CRASH/AT/MILE xxx	LEFT/LANE/CLOSED
72	CRASH/AT/MILE xxx	LEFT 2/LANES/CLOSED
73	CRASH/AT/MILE xxx	CENTER/LANE/CLOSED
74	ROAD/CLOSED	USE/DETOUR/EXIT xxx
75	ROAD/CLOSED/DATE	USE/EXIT xxx
76	BRIDGE/CLOSED	USE/DETOUR/EXIT xxx
77	BRIDGE/CLOSED/DATE	USE/EXIT xxx
78	EVENT/TRAFFIC	USE/RIGHT 2/LANES
79	GAME/TRAFFIC	USE/RIGHT/LANE
80	CONCERT/TRAFFIC	FOLLOW/SIGNS
**81	EXIT xx/CLOSED	DATE (e.g. DEC 4-7)
**82	EXIT xx/CLOSED	DAY(S) (e.g. MONDAY)
83	ICY/BRIDGE	REDUCE/SPEED
84	SLIPPERY/ROAD	REDUCE/SPEED
85	DENSE/FOG	REDUCE/SPEED
86	HIGH/WINDS	REDUCE/SPEED
87	ROAD/FLOODED	REDUCE/SPEED
88	BLOWING/SNOW	REDUCE/SPEED
89	ROAD/FLOODED	SLOW/MOVING/TRAFFIC
90	TRUCK/CROSSING	WATCH/FOR/TRUCKS
91	TRAVEL/ LANE/CLOSED-	USE/SHOULDER
92	LOAD/SPILL	FOLLOW/DETOUR/EXIT xx
93	LANE/MARKING	EXPECT/DELAYS
94	LANE/MARKING	SLOW/MOVING/TRAFFIC
95	LANE/MARKING	LEFT/LANE/CLOSED
96	LANE/MARKING	CENTER/LANE/CLOSED
97	LANE/MARKING	RIGHT/LANE/CLOSED
98	LANE/MARKING	Duration (e.g. 10AM-3PM)
***99	TRAFFIC/ADVISORY	TUNE/TO/530 AM (or 1610 AM)
100	FLAGGER/AHEAD	PREPARE/TO/STOP
101	ROAD/WORK	SLOW/MOVING/TRAFFIC
102	DEBRIS/ON/ROAD	RIGHT/LANE/BLOCKED
103	DEBRIS/ON/ROAD	CENTER/LANE/BLOCKED
104	DEBRIS/ON/ROAD	LEFT/LANE/BLOCKED
105	DEBRIS/ON/ROAD	MERGE/RIGHT
106	DEBRIS/ON/ROAD	MERGE/LEFT

TABLE 7: STANDARD MESSAGES *(continued)*

<u>Number</u>	<u>Number</u>	<u>Number</u>
107	EMER/VEHICLES/AHEAD	MERGE/RIGHT
108	EMER/VEHICLES/AHEAD	MERGE/LEFT
109	NEW/TRAFFIC/PATTERN	LANES/SHIFT/xxx FT
110	EXIT xx/CLOSED	DETOUR/xxMILES/AHEAD
111	EXIT xx/RAMP/CLOSED	FOLLOW/DETOUR/EXIT xx

Notes:

* Messages 49 through 53 should be use only during times when queuing is occurring. Queuing can be detected by real time technologies, observed by personnel on site, or by inference as queuing has been previously detected or observed at the same location during the same time of day and day of week.

** Message #81 is preferred when displayed 7 days or more in advance or when the closure will be longer than one week. Message #82 is preferable when the closure will occur within 7 days.

*** The use of message #99 must be coordinated with the Traffic Management Center