

# HIGHWAY FACTORS GROUP CHAIRMAN'S FACTUAL REPORT

Highway Attachment – Federal Highway Administration (FHWA) response to a list of questions submitted by NTSB investigators on November 4, 2016

Palm Springs, CA

**HWY17MH005** 

(9 pages)

This response addresses questions by Daniel Walsh, NTSB to the Federal Highway Administration in an email dated Friday, November 4, 2016.

Question #1: Would traffic breaks (rolling roadblocks) be considered a significant project under the rule on work zone safety and mobility (23 CFR 630 Subpart J)? If the answer is no, would the traffic breaks (rolling roadblocks) be considered a state responsibility?

The regulations define a "significant project" as a project meeting one of two conditions as defined in 23 CFR §630.1010, as follows:

- (a) one "anticipated to cause sustained work zone impacts... that are greater than what is considered tolerable based on State policy and/or engineering judgement", such determination being based on "The State's work zone policy provisions, the project's characteristics, and the magnitude and extent of the anticipated work zone impacts.", or
- (b) "All Interstate system projects within the boundaries of a designated Transportation Management Area (TMA) that occupy a location for more than three days with either intermittent or continuous lane closures."

For the subject crash, the project specified a series of intermittent short-duration full roadway closures over a three-hour period. As such, condition "(b)" above does not apply. Therefore, the determination of "significant project" status relies upon State policy which defines a "significant traffic impact" as one causing an "individual traffic delay of 30 minutes or more above normal recurrent travel time on the existing facility" (Caltrans Deputy Directive 60-R2, Appendix A of the Caltrans Transportation Management Plan Guidelines, November 2015,

http://www.dot.ca.gov/trafficops/tm/docs/TMP\_Guidelines.pdf). According to the Encroachment Permit submitted to Caltrans for this work, the traffic break duration was to be limited to five minutes. According to the NTSB On-Scene Investigation Narrative, the actual duration of the traffic break was eight minutes, both of which are below the threshold for identification as a "significant project" according to State policy.

Based on the above, the use of traffic breaks as used for this project would not be considered "significant projects" within the definition of 23 CFR 630 §630.1010.

Question #2: Does the MUTCD address traffic breaks (rolling roadblocks) under Part 6 Temporary Traffic Control? Are there any references in the MUTCD pertaining to traffic breaks (rolling roadblocks)?

Neither Part 6 of the Federal MUTCD (<a href="http://mutcd.fhwa.dot.gov/">http://mutcd.fhwa.dot.gov/</a>) nor the California MUTCD (<a href="http://www.dot.ca.gov/trafficops/camutcd/">http://www.dot.ca.gov/trafficops/camutcd/</a>) specifically addresses rolling roadblocks. Both the Federal and California MUTCD provide guidance that would require a temporary traffic control plan (TTCP) for this type of activity but do not provide specifics for the types and location of any traffic control devices that should be used. Chapter 6B of the Federal MUTCD outlines fundamental principles of temporary traffic control that should be followed in development of a TTCP, including consideration of the types and volumes of traffic, type of work activity, and duration of the activity.

Question #3: The number of traffic break related permits over the last 3 years in Caltrans District 8 was approximately 306 permits. We are in the process of receiving the total number of traffic break related permits for the entire state of California.

Acknowledged, FHWA does not have a comment.

Question #4: What is FHWA's experience with traffic break (rolling roadblocks) in other states? Is this a fairly common occurrence in other states? Please cite specific examples and contact information. Listed below is a link to FHWA supported material regarding "Guidelines on Rolling Roadblocks for Work Zone Applications". <a href="https://www.workzonesafety.org/training-resources/fhwa\_wz\_grant/atssa\_rolling\_roadblocks/">https://www.workzonesafety.org/training-resources/fhwa\_wz\_grant/atssa\_rolling\_roadblocks/</a>

The FHWA Office of Operations placed an inquiry to FHWA Division offices on November 8, 2016, soliciting feedback regarding State-specific practices regarding rolling roadblocks and what policies, standards, or institutional practices are in place

regarding their use. The response included information on practices for 27 State transportation agencies, summarized as follows:

Of all 28 states that responded:

23 (82%) Do use traffic breaks or rolling roadblocks

5 (18%) Do not use traffic breaks or rolling roadblocks

Of the 23 states that use traffic breaks or rolling roadblocks:

16 (57%) do so as common practice

6 (21%) do so infrequently

1 (4%) do so only when initiated by police

13 (46%) Have some written policy, specification, or standard regarding their use

Of the 13 states that have a policy regarding the use of rolling roadblocks:

1 (4%) Policy requires upstream static signs

13 (46%) Policy requires upstream static signs and/or PCMS

4 (14%) Require additional supplementary traffic control, pilot car upstream with signs, rumble strips, etc.

6 (21%) Specify public involvement component in policy for rolling roadblocks

A compilation of responses from all Divisions is included as an attachment.

Question #5: What is FHWA's thought on whether the states should provide advance warning for traffic breaks (rolling roadblocks)? As a result of this crash, Caltrans District 8 indicated they will be reviewing internal procedures to require advance warning for all future traffic break (rolling roadblock) permits.

The FHWA encourages the use of traffic control devices placed in advance of the back of traffic queues that develop upstream of capacity-constrained work zones, with messages such as "Stopped Traffic Ahead" to warn drivers of the need to respond to a stopped traffic queue. The determination of what traffic control is appropriate should be made based on specific project conditions during the development of a Transportation Management Plan (TMP), as described in 23 CFR §630.1012b and incorporating the broader requirements of Part 6 of the MUTCD.

### Use of Rolling Roadblocks for Short-Duration Road Closures by State

Compiled from responses received from FHWA Division offices (November 15, 2016)

Total responses: 28

#### Of all 28 states that responded:

23 (82%) Do use traffic breaks or rolling roadblocks 5 (18%) Do not use traffic breaks or rolling roadblocks

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|       |            |              |                  |                             |         |             | _              |                      |                                |  |  |                   |                 |   |
|-------|------------|--------------|------------------|-----------------------------|---------|-------------|----------------|----------------------|--------------------------------|--|--|-------------------|-----------------|---|
|       |            |              |                  | Summary of supplementary    |         |             |                | Dublis               | 04                             |  | Does agency<br>have standard<br>policies or<br>specifications<br>for traffic |                   |                 |   |
|       | Agency (if | Uses rolling |                  | traffic control upstream of |         |             | Static signs + | Public information / | Other Advance<br>Supplementary |  | control for<br>rolling road  |                   |                 |   |
| State | specified) | roadblocks   | Frequency        | closure                     | LE only | Static sign | _              | TMC coordination     | Traffic Control                | Detail of Agency Practice for Rolling Road Closures  | closures?  | Policy citation   | FHWA Contact    | State Contact   |
| AL    | ALDOT      | Yes          | Uncommon         | PCMS, TMA, arrow            | ·       | _           | X              | Х                    |                                | ALDOT utilizes rolling road blocks periodically during emergency operations. They have also been utilized  |  |                   | Linda Guin      |   |
|       |            |              |                  | boards HAR, etc.            |         |             |                |                      |                                | under warranted circumstances for overhead utility work and specific road construction, and there are  |  |                   |                 |   |
|       |            |              |                  |                             |         |             |                |                      |                                | specific steps in Hurricane Contra-flow plan for the use of rolling road blocks. They are utilized to set up and break down TCPs; as well as escort initial contra-flow traffic into and out of the contra-flow lanes. We have |  |                   |                 |   |
|       |            |              |                  |                             |         |             |                |                      |                                | utilized rolling road blocks during winter weather operations, but I am unaware of any specific parameters.  |  |                   |                 |   |
|       |            |              |                  |                             |         |             |                |                      |                                | I am unaware of any specific parameters related to overhead utility work or road construction. I believe it is   |  |                   |                 |   |
|       |            |              |                  |                             |         |             |                |                      |                                | usually utilized under engineering judgment or best safety practices for the execution of the work activity.  Dependent of the application or operation, we may utilize any number of traffic control devices/equipment.       |  |                   |                 |   |
|       |            |              |                  |                             |         |             |                |                      |                                | This may include shadow vehicles with truck mounted attenuators and arrow boards; portable CMS or Arrow  |  |                   |                 |   |
|       |            |              |                  |                             |         |             |                |                      |                                | Boards; Highway Advisory Radio systems; standard drum/cone lane closures etc   |  |                   |                 |   |
| AR    | AHTD       | Yes          | Uncommon         | LE only                     | X       |             |                | X                    |                                | For maintenance activities, we rarely use rolling road blocks. If we have an emergency and need quick access   |  |                   | Joseph Heflin   | Joe A. Sartini P.E.   |
| An    | Anib       | res          | Uncommon         | LE OITIY                    | ^       |             |                | ^                    |                                | to a lane or part of a lane, we use law enforcement to assist. We very quickly make any repairs that will hold   |  |                   | Joseph Heilin   | State Maintenance Engineer  |
|       |            |              |                  |                             |         |             |                |                      |                                | until we can set up the proper traffic controls to close a lane or shoulder. What comes to mind first is when  |  |                   |                 | 2   |
|       |            |              |                  |                             |         |             |                |                      |                                | we have a failure in a lane or bridge deck that is bad enough to cause an accident or damage vehicles if they  |  |                   |                 |   |
|       |            |              |                  |                             |         |             |                |                      |                                | cross the damaged area. We respond rapidly with the aid of law enforcement, temporarily repair the area to an extent based on how long it will be before we can return and make proper repairs.                                |  |                   |                 |   |
|       |            |              |                  |                             |         |             |                |                      |                                | No written policy-generally worked out between law enforcement, contractor, RE, and District. The AWIS   |  |                   |                 |   |
|       |            |              |                  |                             |         |             |                |                      |                                | system detects the slower moving traffic and posts the warning messages about the slow down on the   |  |                   |                 |   |
|       |            |              |                  |                             |         |             |                |                      |                                | message boards, but I am not aware of any special messages that we may use on the message boards. In addition, we normally work with Public Information and issue a press release advising the public of the events            |  |                   |                 |   |
|       |            |              |                  |                             |         |             |                |                      |                                | (usually at traffic switch).   |  |                   |                 |   |
|       |            |              |                  |                             |         |             |                |                      |                                | During and after an icing event that puts the structure through several freeze thaw cycles with abundant   |  |                   |                 |   |
|       |            |              |                  |                             |         |             |                |                      |                                | moisture available, we may make repairs that we hope will hold long enough for conditions to improve to repair the location with permanent techniques. In some cases we have to return to the location several times           |  |                   |                 |   |
|       |            |              |                  |                             |         |             |                |                      |                                | if the weather does not improve to the point that dry conditions exist long enough to make our repairs. Again,   |  |                   |                 |   |
|       |            |              |                  |                             |         |             |                |                      |                                | this is emergency type work, not planned work.   |  |                   |                 |   |
| CA    | Caltrans   | Yes          | Routine          | Not specified               |         |             |                |                      |                                | California Vehicle Code (CVC) assigns the authority to conduct rolling roadblocks to the California Highway Patrol (CHP). The CHP usually does the roadblocks for short term events like debris removal from a freeway         |  |                   | Steve Pyburn    |   |
| CT    |            | Yes          | Routine          | Mobile PCMS 1/2             |         |             | Х              |                      |                                | lane Caltrans usually is not involved with the roadblocks Connecticut DOT has allowed the use of these for many years; however, only recently was a documented   | Yes  | CD-2016-2         | Robert Turner   |   |
|       |            |              |                  | mile upstream of            |         |             |                |                      |                                | policy developed as Connecticut DOT Construction Directive No. CD-2016-2, dated April 11, 2016, "Work Zone   |  |                   |                 |   |
|       |            |              |                  | back of queue               |         |             |                |                      |                                | Safety Rolling Road Block Procedure" available at: http://www.ct.gov/dot/lib/dot/documents/aec/CD-2016-2.pdf   |  |                   |                 |   |
| DE    | DelDOT     | Yes          | Routine          | Public Information          |         |             |                | Х                    |                                | DelDOT occasionally uses rolling road blocks. The supplementary traffic control has been public notices to warn of traffic delays associated with them.  |  |                   | Patrick Kennedy |   |
| FL    |            | Yes          | Uncommon         | PCMS                        |         |             | Х              |                      |                                | Policy on use dictated by Index 655 (http://www.fdot.gov/roadway/DS/18/IDx/00655.pdf) and Section 10.12.8  | Yes  | Index 655 and     | Kevin Burgess   |   |
|       |            |              |                  |                             |         |             |                |                      |                                | of the PPM (http://www.fdot.gov/roadway/PPMManual/2017/Volume1/Chap10.pdf  |  | Section 10.12.8   |                 |   |
|       |            |              |                  |                             |         |             |                |                      |                                |  |  | of the PPM        |                 |   |
| GA    | GADOT      | Yes          | Routine          | Static sign                 |         | Х           |                |                      |                                | We do allow rolling roadblocks which we refer to as pacing traffic. Please see that attached section from our  | Yes  | SP 1250 - Traffic | Greg Morris     | John D. Hancock, P.E.   |
|       |            |              |                  | w/flashers                  |         |             |                |                      |                                | traffic control specification.   |  | Pacing            |                 | State Construction Engineer   |
|       |            |              |                  | upstream of                 |         |             |                |                      |                                |  |  |                   |                 | Office of Construction  |
|       |            |              |                  | queue                       |         |             |                |                      |                                |  |  |                   |                 | Phone: 404-631-1971   Cell: 404-293-7413   Fax: 404-  |
|       |            |              |                  |                             |         |             |                |                      |                                |  |  |                   |                 | 631-1941<br>jhancock@dot.ga.gov   |
|       |            |              |                  |                             |         |             |                |                      |                                |  |  |                   |                 | Jiminosake dodgargov  |
| н     |            | Yes          | Routine          |                             |         |             |                |                      | Х                              | HDOT does execute rolling blocks on the State's three interstate routes and multi-lane roadways. With  | Yes  | HI MUTCD TA-      | Clifford Chew   | Steven Yoshida P.E.   |
|       |            |              |                  |                             |         |             |                |                      |                                | regards to supplementary traffic control, aside from law enforcement, the HDOT performs mobile operations as indicated on TA-35 of the current MUTCD without deviation.  |  | 35                |                 | Traffic Design Project Manager  |
|       |            |              |                  |                             |         |             |                |                      |                                | as malested on 17-55 of the current mores without deviation.   |  |                   |                 | Highways Division, Traffic Branch, Traffic Design Section<br>State of Hawaii Department of Transportation |
|       |            |              |                  |                             |         |             |                |                      |                                |  | 1  |                   |                 | 601 Kamokila Blvd.  |
|       |            |              |                  |                             |         |             |                |                      |                                |  |  |                   |                 | Room 602  |
|       |            |              |                  |                             |         |             |                |                      |                                |  |  |                   |                 | Kapolei, Hawaii 96707   |
|       |            |              |                  |                             |         |             |                |                      |                                |  | 1  |                   |                 | Phone:<br>(808) 692-7682  |
| 1     |            |              |                  |                             |         |             |                |                      |                                |  |  |                   |                 | (808) 692-7682<br>Fax:  |
| 1     |            |              |                  |                             |         |             |                |                      |                                |  |  |                   |                 | (808) 692-7690  |
|       |            |              |                  |                             |         |             |                |                      |                                |  |  |                   |                 | Email: steven.yoshida@hawaii.gov  |
|       |            |              |                  |                             |         |             |                |                      |                                |  |  |                   |                 |   |
| IA    | ISP        | Yes          | Ad-hoc when      | Unspecified                 |         |             |                |                      |                                | Many years ago the ISP used rolling closures for overhead work on I-35/80. We started to develop a standard  |  | +                 | Paul LaFleur    | DANIEL E. SPRENGELER, P.E.  |
| IA.   | 135        | 163          | initiated by ISF | 1                           |         |             |                |                      |                                | for using them but found that there are way too many variables to include in a formal plan. The lowa DOT   |  |                   | i dui Lai ICui  | WORK ZONE TRAFFIC CONTROL ENGINEER  |
|       |            |              | ,                |                             |         |             |                |                      |                                | does not include them in projects plans. Contractors are not allowed to do them.   | 1  |                   |                 | OFFICE OF TRAFFIC AND SAFETY  |
|       |            |              |                  |                             |         |             |                |                      |                                | If rolling blockades are used they are done by law enforcement (ISP) with assistance from the TMC.   |  |                   |                 | lowa Department of Transportation   |
|       |            |              | ,                |                             |         |             |                |                      |                                | in rouning brockages are used they are done by law empirement (15r) with assistance from the TMC.  |  |                   | 1               | Office: 515-239-1823  |
| ID    | 1          | No           | n/a              |                             |         |             | 1              | 1                    |                                |  | I .  |                   | Lance Johnson   |   |

Compiled from responses received from FHWA Division offices (November 15, 2016)

| State<br>IL | Agency (if specified) | Uses rolling<br>roadblocks<br>Yes | <b>Frequency</b><br>Routine | Summary of<br>supplementary<br>traffic control<br>upstream of<br>closure<br>PCMS, rumble<br>strips on freeways | LE only | Static sign | Public Static signs + information / PCMS (optional)  X | Other Advance<br>Supplementary<br>n Traffic Control<br>X | Detail of Agency Practice for Rolling Road Closures  Illinois does so, mainly for short-duration situations like bridge beam setting, with ISP and appropriate lane closures, warning signs, and at times PCMS, rumble strips, etc. require advanced message boards and rumble strips along with ISP. We have done actual rolling blocks with pace cars a few times for utility cable pulls. In those instances, we added message boards.  On Arterials, we use the attached special provision. Matt has a similar one for expressways, but It is a little different and a more involved with closer oversight.  We perform 15 minute full stops of expressways for work that cannot be done any other way, such as bridge   | Does agency<br>have standard<br>policies or<br>specifications<br>for traffic<br>control for<br>rolling road<br>closures? | Policy citation 701-08Tb "Keeping the Expressway Open To Traffic" spec   | FHWA Contact<br>Dean Mentjes | State Contact  Juan David Pava, P.E.  Work Zone Safety Engineer  Bureau of Safety Programs and Engineering Illinois Department of Transportation juan.pava@illinois.gov   |
|-------------|-----------------------|-----------------------------------|-----------------------------|--|---------|-------------|--|--|--|--|--|------------------------------|---|
|             |                       |                                   |                             |  |         |             |  |  | beam setting and removal. When doing this work, the Contractor is required to close all but one lane on the expressway, during specified allowable hours for lane closures. The highway is then allowed to be closed for a maximum of 15 minutes to complete the proposed work. There are liquidated damages that can be assessed to the contract is the expressway is closed for longer than 15 minutes. The Contractor is also required to submit a traffic control plan and narrative of the proposed work prior to the full closures being allowed. The complexity of the traffic control plan varies depending on the roadway geometry, equipment to be used, and work being performed. IDOT District 1 Traffic has staff on site to coordinate between Construction and the State Police.  If possible, we can completely close and detour mainline expressway traffic onto adjacent routes. This only works for low volume locations and works really well on diamond interchanges.   |  |  |                              |   |
| MA          | MassDOT               | Yes                               | Routine                     | Static signs, PCMS (optional)  |         |             | X X  |  | Our typical spec is attached.  RRBs are conducted for short-term work that requires working in or above live travel lanes on facilities of high volume, (freeways, etc.) for durations of less than 20 minutes. Rolling Slowdowns are used on such facilities due to the impracticality of a full highway closure and detour. Cases where a rolling slowdown is valuable include the installation of permanent, overhead changeable message signs (CMS), replacement of sign bridges and signs hung from them, installation of bridge girders; and, demolition and removal of structures, etc.  At a minimum, Rolling Road Blocks involve the use of a number of items, including but not limited to: Police Cruisers, Contractor Pilot Car and Chase Vehicle (typically Police Cruiser);  Police Details/Flaggers (at all closure points and one police cruiser per lane to be controlled);  Traffic Control Supervisor (Contractor or Resident Engineer) located at the work site;  Temporary signs (closure & detour signing at on-ramp terminals and at all crossroads);  Type III Barricades;  PCMS (one at each highway access closure, at least one in each direction on Roadway being closed); and  Reflectorized Drums (at all closure points). | Yes  | Work Zone<br>Safety &<br>Mobility Policy,<br>Chapter H: A<br>Policy on teh<br>Use of Rolling<br>Road Blocks<br>(RRB) | Wilfred Hernandez            |   |
| MD          | MDSHA                 | Yes                               | Routine                     | Static signs, PCMS (optional)  |         |             | х  |  | Commonly used for work where there is a fall hazard occurring over travelway such as setting bridge beams, installing high-mast lighting structures, etc. Where anticipated their use is accounted for in project TMP and constraints on application addressed in project specifications (typically limited to late night off-peak hours). Activity is coordinated through state TOC (CHART) with information on pending and active closures broadcast through PI channels and VMS network.  |  | MD Standard for<br>Highways and<br>Incidental<br>Structures<br>104.06-12   | Breck Jeffers                |   |
| МО          | MoDOT                 | Yes                               | Routine                     | CMS  |         |             | х  |  | Attached is link to MoDOT's EPG for "Traffic Pacing". MoDOT uses the term "Traffic Pacing" vs. "Rolling Roadblock". I've also attached the following documents for your reference:  • Traffic Pacing Worksheet  • Staging Plan Details  • Traffic Pacing Changeable Message Signs Layout  http://epg.modot.org/index.php?title=616.13_Work_Zone_Capacity%2C_Queue_and_Travel_Delay#616.13.7_Traffic_Pacing  Dan Smith is MoDOT's POC for Work Zones, his contact information is provided below:  | Yes  | 616.13.7.2<br>616.13.7.3   | Marc Thornsberry             | Daniel J. Smith, P.E. Traffic Management and Operations Engineer MoDOT – Traffic/Highway Safety Division 830 MoDOT Drive P.O. Box 270 Jefferson City, MO 65102 Office: (573) 526-4329 Daniel.Smith@modot.mo.gov |
| МТ          | MDT                   | Yes                               | Uncommon                    | Not specified  |         |             |  |  | MDT has used a "rolling roadblock" on a few rare occasions. A couple examples where this concept has been implemented are:  • Moving Equipment – moving equipment from one side of a roadway to the other without loading and hauling. Driving slow moving heavy equipment across the highway by slowing traffic with "rolling roadblock" is one use.  • Utility Work – at times traffic has been "blocked" while power lines or other utility lines are strung across the roadway. This is quicker, less expensive, and more efficient as compared to setting up traffic control to stop traffic for a very short period of time ( 5 to 10 minutes).  |  |  | Marcee Allen                 | Jim Wingerter, P.E. Construction Traffic Control Engineer Montana Department of Transportation jwingerter@mt.gov Office: 406-454-5897 Cell: 406-461-4663 Fax: 406-454-5932                                      |

| State<br>NC | Agency (if specified) NCDOT | Uses rolling<br>roadblocks<br>Yes | Frequency<br>Uncommon | Summary of<br>supplementary<br>traffic control<br>upstream of<br>closure<br>Static signs, PCMS<br>(optional), TMA | LE only | Static sign | Public information / PCMS (optional) TMC coordination | Other Advance<br>Supplementary<br>Traffic Control<br>TMA | Detail of Agency Practice for Rolling Road Closures  Have used Rolling Road Blocks for various traffic control scenarios.  1) They aren't a common occurrence, but sometimes pacing the traffic is necessary when there's no room on the shoulder to pull off and set up lane closure devices. They also can be used to pace traffic to a stop for short term road stoppages needed to traffic shifts, overhead sign installation, bridge girder installation, etc. However, rarely do we prescribe their required useit's something that's available for use when the situation arises. We have a Standard Drawing that details the set up. RSD 1101.03, sheet 9/9  2) We don't have supplementary traffic control but as described above we do have requirements on the set up and do use portable changeable message signs and permanent dynamic message signs when available. Law Enforcement will sometimes provide this traffic control, but our Drawing allows the Contractor to self-perform it provided he has the proper equipment (ie TMA trucks, CMS's, Radio Communication between all vehicles, signs, etc.)  3) Currently, we don't have a policy regulating their use, since we would encourage their use when appropriate.  Not sure how many projects have used this set up, but I'm almost positive the Fortify project is currently using  |     | Policy citation Standard Drawing RSD 1101.03, sheet 9/9 | FHWA Contact<br>Aaron Williams | State Contact  Steve Kite, PE, CPM State Work Zone Engineer & Eastern Regional Project Engineer Work Zone Traffic Control Section North Carolina Department of Transportation  919 814 4937 office 252 290 0396 mobile skite@ncdot.gov  1561 Mail Service Center 750 North Greenfield Parkway Garner, NC 27529-6949 |
|-------------|-----------------------------|-----------------------------------|-----------------------|---|---------|-------------|---|--|--|-----|---|--------------------------------|---|
|             |                             |                                   |                       |   |         |             |   |  | them to set up and remove their nightly lane closures since the shoulders are too narrow to pull off and set   |     |   |                                |   |
| ND          | NDDOT                       | No                                | n/a                   |   |         |             |   |  | The Department has not used this method of traffic control. We do use law enforcement on occasion for a shadow vehicle for Snow and Ice control on occasion. We do have traffic control requirements for mobile  |     |   | David Ferrell                  | Brad Darr<br>bdarr@nd.gov   |
| NM          |                             | Yes                               | Uncommon              | Not specified   |         |             |   |  | Operations. Used to install mast arms for signals.   |     |   | Marilyn Valdez                 | Afshin Jian P.E. State Traffic Engineer New Mexico Department of TRANSPORTATION Phone: (505) 827-5490 Cell: (505) 795-5993  |
| NY          | NYSDOT                      | Yes                               | Routine               | Not specified   |         |             |   |  | NY uses Rolling Road blocks very frequently. Especially to hang steel, utility crossings, and other work types where distance to interchanges and infrequent intersections between the beginning of the rolling roadblock and the work area allow.   |     |   | Emmett McDevitt                |   |
| ОН          | OHDOT                       | Yes                               | Routine               | Static signs w/<br>flashers + PCMS  |         |             | Х   |  | Ohio DOT does allow it, but restricts it to 15 minutes between midnight and 5 am or other non-peak periods as noted on the MT-99.60 standard drawing. I believe it's a fairly infrequent occurrence, used mainly for removing or setting bridge beams.   | Yes | TEM 641-20<br>MT-99.60                                  | Ron Garczewski                 | Duane Soisson, P.E. Traffic Control Design Engineer Ohio DOT, Office of Roadway Engineering 1980 W. Broad Street, Mail Stop 1230 Columbus, OH 43223 Phone: 614-466-3649 Duane.Soisson@dot.ohio.gov  |
| OK          | 2 227                       | No                                | n/a                   | C: ::   |         |             |   |  | December in the allowed to the second | ,,  | D 11: 1: 242  | Huy Nguyen                     | 0 101 10 1015   |
| PA          | PennDOT                     | Yes                               | Routine               | Static sign, PCMS<br>(optional)   |         |             | X   |  | Pennsylvania has allowed temporary rolling slowdowns or stoppages since 2009. Attached are two<br>Pennsylvania Typical Applications (PATA) from the Department's Publication 213. The use of a rolling<br>roadblock or stoppage is a relatively common practice in Pennsylvania during activities (such as bridge work)<br>that do not exceed 15 minutes. Law enforcement can be used as a supplement but are not required during<br>these types of operations.  | Yes | Publication 213<br>PATA 407 &<br>PATA 408               | Michael Castellano             | Ryan J. Palman   Senior Civil Engineer PA Department of Transportation   Bureau of Maintenance and Operations Temporary Traffic Control Unit 400 North Street - 6th Floor   Harrisburg PA 17120 Phone: 717.787.6993   Fax: 717.705.0686 www.penndot.gov   |
| SD          |                             | No                                | n/a                   |   |         |             |   |  |  |     |   | Sharon Johnson                 |   |
| TN          | TNDOT                       | Yes                               | Routine               | II sel  |         |             | X   | X  | this is a common occurrence on our projects, especially projects that require blasting or very short term work. For example, blasting for rock excavation is usually scheduled daily for small blasts and as required by State Fire Marshall's office, traffic must be stopped when blasts are within 300 ft of the roadway. Usually police, THP, and contractors traffic control vehicles are used to pace traffic to a slow pace, and then once the blast happens and no debris is in the roadway, traffic is released. Message boards and electronic DMS are utilized with construction signs usually in place informing motorists of blasting operations ahead, expect delays. This practice is also utilized when setting a structure such as beams or overhead signs over the roadway. Contractors also place signs on vehicles similar to that of a pilot car.  | W   | Tantiis Claus   | David Martin                   | Shay Deason Shay.Deason@tn.gov  |
| UT          |                             | Yes                               | Routine               | LE only   |         |             |   |  |  | Yes | Traffic Slow<br>Down                                    | Roland Stanger                 |   |
| VA          | VDOT                        | Yes                               | Routine               | Static signs, PCMS<br>(optional)  |         |             | х   |  | VDOT uses rolling roadblocks "slow roll" http://www.virginiadot.org/Business/resources/Wrk_zone/Chapter6G_R1.pdf Activities which may warrant the use of Slow Roll TTC on Limited Access highways include, but are not limited to: setting of bridge beams, pulling wires or cables across the roadway, placing overhead or cantilever signs, and performing traffic switches from one half of the roadway to the other half. Typical Application http://www.virginiadot.org/Business/resources/Wrk_zone/Chapter6H_R1.pdf  | Yes | specification VDOT MUTCD Chapter 6G & 6H                | Karen King                     |   |

## Use of Rolling Roadblocks for Short-Duration Road Closures by State

Compiled from responses received from FHWA Division offices (November 15, 2016)

|      |            |              |           |                  |         |             |                 |                  |                 |   | Does agency    |                 |                    |               |
|------|------------|--------------|-----------|------------------|---------|-------------|-----------------|------------------|-----------------|---|----------------|-----------------|--------------------|---------------|
|      |            |              |           |                  |         |             |                 |                  |                 |   | have standard  |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 |   | policies or    |                 |                    |               |
|      |            |              |           | Summary of       |         |             |                 |                  |                 |   | specifications |                 |                    |               |
|      |            |              |           | supplementary    |         |             |                 |                  |                 |   | for traffic    |                 |                    |               |
|      |            |              |           |                  |         |             |                 | 5 11:            | 0.1             |   |                |                 |                    |               |
|      |            |              |           | traffic control  |         |             |                 | Public           | Other Advance   |   | control for    |                 |                    |               |
|      |            | Uses rolling |           | upstream of      |         |             | Static signs +  | information /    | Supplementary   |   | rolling road   |                 |                    |               |
|      | specified) | roadblocks   | Frequency | closure          | LE only | Static sign | PCMS (optional) | TMC coordination | Traffic Control | Detail of Agency Practice for Rolling Road Closures   | closures?      | Policy citation | FHWA Contact       | State Contact |
| WA   | WSDOT      | Yes          | Routine   | TMA + Truck      |         |             | X               |                  | X               | Fairly common, accompanied by an approved plan and a calculated starting location to ensure traffic will not    | Yes            | Work Zone       | Liana Liu          |               |
|      |            |              |           | mounted PCMS +   |         |             |                 |                  |                 | be stopped. Supplementary traffic control includes Advanced PCMS, traffic control vehicles at least 1 per 2     |                | Traffic Control |                    |               |
|      |            |              |           | PCMS (trailer,   |         |             |                 |                  |                 | lanes, and coordination with the Washington State Patrol (usually they are involved with the operation).        |                | Guidelines      |                    |               |
|      |            |              |           | static location) |         |             |                 |                  |                 |   |                | Manual,         |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | From the WSDOT Design Manual  |                | Chapter 6 - TCD |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 |   |                | 7 Rolling       |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | 1010.06(5)(g) Rolling Slowdown  |                | Slowdown        |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | Rolling slowdowns are commonly practiced by the Washington State Patrol (WSP) for emergency closures.           |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | They are a legitimate form of traffic control for contractors or utility and highway maintenance crews for very |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | specific short-duration closures (to move large equipment across the highway, to pull power lines across the    |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | roadway, to switch traffic onto a new alignment, and so on). They are not to be used for routine work that can  |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | be addressed by lane closures or other formal traffic control strategies. Traffic control vehicles, during off- |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | peak hours, form a moving blockade, which reduces traffic speeds and creates a large gap (or clear area) in     |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | traffic, allowing very short-term work to be accomplished without completely stopping the traffic.              |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | Consider other forms of traffic control as the primary choice before the rolling slowdown. A project-specific   |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | traffic control plan (TCP) must be developed for this operation. The TCP or contact provisions should list the  |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | work operations in which a rolling slowdown is allowed. The gap required for the work and the location where    |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | the rolling slowdown begins needs to be addressed on the TCP. Use of the WSP is encouraged whenever             |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | possible. Refer to the Standard Specifications and Work Zone Traffic Control Guidelines for additional          |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | information on rolling slowdown operations.   |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | From the WSDOT Standard Specifications  |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | 1-10.3(2)B Rolling Slowdown   |                |                 |                    | ļ             |
|      |            |              |           |                  |         |             |                 |                  |                 | Rolling slowdown traffic control operations are not to be used for routine Work that can be addressed by        |                |                 |                    | 1             |
|      |            |              |           |                  |         |             |                 |                  |                 | standard lane or shoulder closure traffic control. When a short-term roadway closure is needed for an           |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | infrequent, nonrepetitive Work operation such as a sign bridge removal or utility wire crossing, the Contractor |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | may implement a rolling slowdown on a multilane roadway, as part of an accepted traffic control plan.           |                |                 |                    |               |
| WY   | WYDOT      | No           | n/a       |                  |         |             |                 |                  |                 | Wyoming does not use rolling roadblocks during construction/work zone activities. WYDOT Maintenance will        |                |                 | Samantha Pratt     |               |
| VV T | WIDOI      | INU          | II/ d     |                  |         |             |                 |                  |                 | occasionally use modified versions of rolling roadblocks for snow plow operations. Maintenance will use a       |                |                 | Sallialitila Flatt |               |
|      |            |              |           |                  |         |             |                 |                  |                 | shadow vehicle for new snowplow operators or when introducing tow plow operations to new areas. The             |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | shadow vehicle will have a message board indicating snow removal is taking place and do not pass. Once a        |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | queue builds up behind the plowing operation they will pull over and allow traffic to clear. There are no       |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | specific details or policies in place for this application.   |                |                 |                    |               |
|      |            |              |           |                  |         |             |                 |                  |                 | specific details of policies in place for this application.   |                |                 |                    |               |