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</table>
The Arizona Department of Transportation (ADOT) Traffic Operations Center (TOC) in Phoenix is the statewide control center for traffic operations. Construction started in 1990 and was completed in 1992. Tunnel operations for Interstate 10 were moved to the center in 1995.

The TOC assists the Arizona Department of Public Safety (DPS) with incidents on a statewide basis 24 hours per day. The operations staff is also responsible for handling all requests for information, assistance, and response from the public, ADOT personnel, or other agencies in the Phoenix area on a 24-hour-a-day basis. During non-business hours, the staff will also coordinate all requests for ADOT services statewide and maintain up-to-date information on issues affecting ADOT facilities and traffic flow.

This manual contains TOC policies and procedures and is designed to assist TOC employees by providing consistent procedures and guidance for handling all types of responsibilities. Should there be a conflict between a policy in this manual and a policy in the ADOT Procedures Manual, the agency manual policy takes precedence and the Intelligent Transportation System (ITS) Manager is to be notified of the discrepancy.

In addition to being familiar with its contents, TOC personnel are encouraged to participate in the process of developing policies and procedures. Employee suggestions are welcome and can be submitted to the Operations Supervisor and ITS Manager by E-mail. All policies and procedures will be provided to TOC employees for review and comment before implementation to ensure they are clear, concise, and consistent with actual operations.
2.0 ADOT TOC MISSION

2.1 INTRODUCTION

It is the mission of the TOC to gather, interpret, and disseminate traffic and roadway information in a timely and accurate manner. This is accomplished by utilizing available technology with well-trained staff who are committed to excellence in service and performance.

Arizona Department of Transportation has embarked on an aggressive program to update its transportation infrastructure, traffic management capabilities, and Intelligent Transportation Systems (ITS). The changes are designed to enhance safety, give motorists better information on a timely basis, improve management of congestion, and improve management of incidents that effect the roadway system. The development of traffic operation centers is a major step by ADOT to coordinate these efforts.

With ITS coming on line throughout Arizona, policies in this manual may change frequently. The manual is available in electronic form to facilitate the update process. The ITS Manager is responsible for the entire center, is the approving authority for all policy changes, is responsible for maintaining the manual, and for the prompt distribution of revisions to manual holders. All changes will be dated to facilitate the updating of employee manuals. This manual will be provided to and maintained by each TOC employee and will be available in the TOC during all employee shifts.

The Operations Supervisor will ensure that the policies are adhered to, make recommendations on policy upgrades, keep all employees informed of changes, and ensure they are posted in each manual.

Arizona Department of Transportation is also developing additional TOC’s in Tucson and Flagstaff. When they become operational, this manual will be used as a basis for developing operations policies for those centers.

AZTech is an example of a major effort to improve traffic conditions on major surface streets that cross jurisdictional boundaries. It will be linked to the traffic management centers and public safety dispatch centers for city, county, and state agencies. Policies in this manual will require review and possible modification when the AZTech program is completed.
2.2 OPERATOR’S MISSION

The operator’s primary mission is to assure the safety of the motoring public. The operator must understand the system, be able to make sound decisions, and quickly implement the proper procedures for routine and emergency actions. This is accomplished through a thorough understanding and working knowledge of TOC policies and procedures. Timely and accurate responses to all reports of incidents and requests for information, services, or ADOT equipment is required at all times.

The operator must provide quality information in a prompt and courteous manner to the public, public agencies, and ADOT personnel. When a situation arises that the operator cannot resolve, the TOC Supervisor or designee will be advised immediately and a proper response will provided as rapidly as possible.

The Traffic Management System (TMS) is a computerized system designed to assist with management of traffic occurrences. The system cannot react to emergencies without input from the operator. The TMS must be monitored continuously to enable the operator to give timely and accurate notification to the proper agencies.
2.3 ADOT “GUIDING VISION”

The Arizona Department of Transportation is recognized and respected as:

- The model of efficient, effective, responsive government.
- The preferred partner of business and industry.
- The employer of choice, attracting and retaining the best and the brightest.

Continuous improvement is our way of life!

To achieve our Mission and Guiding Vision, we, as employees, will pursue the following six Supporting Visions.

MANAGEMENT SUPPORT/LEADERSHIP

We are a team-oriented, quality organization committed to respecting and valuing all employees. Leadership is by example and employees are given the authority to do their jobs. Resources, recognition, and rewards are provided for accomplishing the mission.

CUSTOMER RELATIONS

We know our customers. We are proactive, flexible, and courteous in understanding and meeting their requirements and have their trust and respect.

SUPPLIER PARTNERSHIPS

We are the customer of choice for our suppliers. We have a win-win relationship based on good faith and fair dealing. We monitor, measure, and continuously improve our processes to ensure we receive high quality products and services.

BUSINESS, PRODUCTS AND SERVICE PROCESSES

Processes are customer-focused, consistently applied, and fully documented with owners identified. We are dedicated to customer-friendly, error-free processes that are continuously benchmarked, measured, and improved.

MEASURE AND DOCUMENTATION

Processes are measured to validate quality performance. Results are documented, clearly understood, and shared with employees, customers, and suppliers.
EDUCATION AND TRAINING

All employees receive job-related training and coaching. Individual, team, and organization training plans are developed and implemented. Opportunities for career development, education, and mentoring are provided.
This chapter contains procedures for internal operation of the TOC. The operators will become familiar with each policy and will be responsible for keeping their personal policy manual up-to-date. Recommendations for improvement in policies or procedures are encouraged and may be submitted by E-mail to both the Operations Supervisor and ITS Manager.
3.1 DAILY SHIFT RESPONSIBILITIES

To maintain 24-hour coverage requires a variety of shift configurations. The operators will bid shifts based on seniority in the TOC. Shifts will be bid for a six-month period, beginning June 1st and December 1st of each year.

Shifts range from 8 to 12 hours per day and result in either a 4 or 5 day workweek.

At the start of each shift, each operator will:

- Discuss any ongoing incidents or issues with the operator going off-shift.
- Access and read E-mail.
- Scan all monitors to determine traffic conditions and verify the status of any incident.
- Review closed incidents for previous 24 hours on the Operator Workstation (OW).
- Review Highway Closures and Restrictions System (HCRS) status. Check for any incidents that are being worked by other districts.
- Check HCRS entries for quality

At the end of each shift, every operator will:

- Verify that the OW incident logs are completely up-to-date.
- Advise the incoming operator of any pending issues.
- Leave the work area in a clean and orderly condition.
- Make sure all customer inquiries received during their shift have been handled.

All operators may be assigned additional duties as necessary by the Operations Supervisor.
3.2 HIGHWAY CLOSURES AND RESTRICTIONS SYSTEM (HCRS)

(For more detailed instructions, please refer to the HCRS Training Document)

Highway Closures and Restrictions System is a Windows-based, real-time information system designed to collect statewide roadway information from a variety of sources. The information includes:

- Current and planned road closures and alternate routes
- Current restrictions, such as closed lanes and speed reductions
- Incident or accident location and status
- Current roadway conditions, including weather information

Each authorized HCRS agency will maintain information within their defined jurisdictions and contribute to the statewide database on an as needed basis. Before operating the HCRS, all employees will attend a formal training program approved by the ITS Manager.

The Department of Public Safety (DPS) will have HCRS consoles in their three dispatch centers. If DPS handles the closure without response from ADOT, DPS is responsible for entering the information. If ADOT responds or initiates closures, ADOT is responsible for entering the information into the HCRS. The TOC operator will check every closure in the HCRS to insure the information has been correctly entered.

The TOC staff is responsible for operation of the statewide system including the accuracy of the information, that reports are clear and concise, and changes in status are reported properly. HCRS information is available on the Internet, Voice Remote Access System (VRAS), and at kiosks. It is used by the media, commercial transportation, transit, public carriers, and motorists. IT IS CRITICAL THAT THIS SYSTEM’S INFORMATION IS CURRENT AT ALL TIMES.

The operator will ensure that the system is monitored on a continuous basis. Events that have significant impacts on traffic, such as emergency closures due to serious accidents, will be entered into the system within five minutes of notification. The operator will also determine who authorized the closure. Scheduled closure information for future dates will be entered during the shift received if time permits.

Times for each event’s occurrence, ADOT response, arrival, and clearance will be entered. An approximate expiration time, based on input from DPS, will also be entered. When an expiration time warning message appears, the operator will seek input to verify the status of the event. Events that have ended will be cleared from the system. It is the operator’s responsibility to keep the system current and to make sure that the system remains operational on a 24-hour basis.

Detailed guidance for HCRS operations is contained in the HCRS training manual.
3.0 ADMINISTRATIVE PROCEDURES

VOICE REMOTE ACCESS SYSTEM (VRAS)

Every five minutes, HCRS automatically produces a computerized voice message containing traffic information. The public can access it by dialing 1-888-411-ROAD (7623). The system provides a menu of highways by number and gives all closures and restrictions.
3.0 ADMINISTRATIVE PROCEDURES

3.3 VIDEO MONITOR POLICY

Video monitors in the TOC allow the operator to detect, verify, manage, and document traffic incidents. They also allow the operator to provide concise traveler information on a timely basis. VIDEO CAMERAS MUST BE PROPERLY OPERATED AT ALL TIMES to maintain agency performance and credibility. Still frame images and video feeds to the media and internet are viewed on a regular basis by the public. The following procedures will be adhered to unless specific approval is granted by the Operations Supervisor to alter procedures.

INCIDENT SITES

When incidents have been detected via the monitors or when a report of an incident has been received, the operator must determine what resources are needed and that information is to be conveyed to the DPS dispatchers. After initial evaluation of the scene, the cameras will be used to monitor incident related congestion. Upon DPS’s request, the camera may be used to verify further details of the scene. Care will be taken to avoid close-up views that may contain injured persons, vehicle license numbers, or other identifiable characteristics that would allow viewers to determine the parties involved.

LAW ENFORCEMENT ACTIONS

Police activities, such as foot pursuits, may occur within the area covered by cameras. Operators may monitor and track these activities at the request of the law enforcement agency. The Operations Supervisor or designee may approve the use of cameras to search for vehicles or specific subjects at the request of law enforcement. Officers may come to the TOC to view cameras during police actions.

VIDEO RECORDING REQUESTS

Video recording will be limited to special requests from DPS or upon approval of the Operations Supervisor. Requests from DPS will be entered into the Incident Log and are to include the name and the badge number of the requesting officer. The log will also be updated when the tape is provided to DPS along with the evidence or case number from the incident.

Tapes used for training opportunities will be copied from the tapes supplied to DPS. Tapes made at the request of the Operations Supervisor, which do not contain footage of an investigation site, will not require a log entry.

The video monitors are organized to enhance the operator’s ability to scan traffic conditions throughout the system. The following list of cameras will be maintained to ensure consistent coverage and enable operators to know at a glance which location they are observing.
### TABLE 3-1. CLOSED CIRCUIT TELEVISION CAMERA LOCATIONS

<table>
<thead>
<tr>
<th>Cam. #</th>
<th>Route</th>
<th>Location</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I-10</td>
<td>71st Avenue</td>
<td>75 Ave. Exit = WB, 67 Exit = EB</td>
</tr>
<tr>
<td>2</td>
<td>I-10</td>
<td>63rd Avenue</td>
<td>67 Ave. Exit = WB, 59 Exit = EB</td>
</tr>
<tr>
<td>3</td>
<td>I-10</td>
<td>55th Avenue</td>
<td>59 Ave. Exit = WB, 51 Exit = EB</td>
</tr>
<tr>
<td>4</td>
<td>I-10</td>
<td>47th Avenue</td>
<td>51 Ave. Exit = WB, 43 Exit = EB</td>
</tr>
<tr>
<td>5</td>
<td>I-10</td>
<td>39th Avenue</td>
<td>43 Ave. Exit = WB, 35 Exit = EB</td>
</tr>
<tr>
<td>6</td>
<td>I-10</td>
<td>31st Avenue</td>
<td>35 Ave. Exit = WB, 27 Exit = EB</td>
</tr>
<tr>
<td>7</td>
<td>I-10</td>
<td>25th Avenue</td>
<td>35 Ave. Exit = WB, I-17 Exit = EB</td>
</tr>
<tr>
<td>8</td>
<td>I-10</td>
<td>7th Avenue</td>
<td>Ped. Crossing = WB, Tunnel = EB</td>
</tr>
<tr>
<td>11</td>
<td>I-10</td>
<td>West of 7th Street</td>
<td>13 St. VMS = WB, 202/51 Exit = EB</td>
</tr>
<tr>
<td>12</td>
<td>I-10</td>
<td>16th Street</td>
<td>13 St. VMS = WB, 202/51 Exit = EB</td>
</tr>
<tr>
<td>13</td>
<td>I-10</td>
<td>SR 51/SR 202 Loop</td>
<td>Thomas = 51 N., 24 St. = 202 E.</td>
</tr>
<tr>
<td>14</td>
<td>I-10</td>
<td>Van Buren</td>
<td>202 E. = WB, Jefferson VMS = EB</td>
</tr>
<tr>
<td>15</td>
<td>I-10</td>
<td>Buckeye/South of Grant</td>
<td>SR 202/Jefferson = WB, S. Mtn. = EB</td>
</tr>
<tr>
<td>16</td>
<td>I-10</td>
<td>I-10/I-17 Split</td>
<td>7 St. = NB17, B’eye = WB10, rt.= EB1</td>
</tr>
<tr>
<td>17</td>
<td>I-10</td>
<td>University/ Salt River Bridge</td>
<td>Bridge = EB, Lotto = WB</td>
</tr>
<tr>
<td>18</td>
<td>I-10</td>
<td>34th Street</td>
<td>40 St. = EB, University = WB</td>
</tr>
<tr>
<td>19</td>
<td>I-10</td>
<td>44th Street</td>
<td>48 St. = EB, 40 St. = WB</td>
</tr>
<tr>
<td>20</td>
<td>I-10</td>
<td>48th Street</td>
<td>Butte = EB, 48 St. = WB</td>
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<tr>
<td>30</td>
<td>I-17</td>
<td>12th Street</td>
<td>7 St. = NB, 16 St. = SB</td>
</tr>
<tr>
<td>31</td>
<td>I-17</td>
<td>Central</td>
<td>7 Ave. = NB, 7 St. = SB</td>
</tr>
<tr>
<td>32</td>
<td>I-17</td>
<td>15th Avenue</td>
<td>19 Ave. = NB, 7 Ave. = SB</td>
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<tr>
<td>33</td>
<td>I-17</td>
<td>Durango Curve</td>
<td>Adams Ave. = NB, Lotto = SB</td>
</tr>
<tr>
<td>34</td>
<td>I-17</td>
<td>Grant Road</td>
<td>Adams = NB, Durango = SB</td>
</tr>
<tr>
<td>35</td>
<td>I-17</td>
<td>Van Buren</td>
<td>Stack = NB, Jefferson = SB</td>
</tr>
<tr>
<td>36</td>
<td>I-17</td>
<td>Stack Ramp (North Side)</td>
<td>McDowell = NB, Jefferson = SB</td>
</tr>
<tr>
<td>37</td>
<td>I-17</td>
<td>McDowell</td>
<td>Thomas Exit = NB, Stack = SB</td>
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<tr>
<td>58</td>
<td>I-10</td>
<td>19th Avenue</td>
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<tr>
<td>62</td>
<td>I-10</td>
<td>79th Avenue</td>
<td>83 Ave. VMS/Exit = WB, 75 Exit = EB</td>
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<td>63</td>
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<tr>
<td>64</td>
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</tr>
<tr>
<td>66</td>
<td>SR 143</td>
<td>McDowell (North of SR 202 Loop)</td>
<td>Exit 2 = 52 St. + EB 202</td>
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<tr>
<td>67</td>
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<td></td>
<td>McDowell = 44 St. =</td>
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<td>68</td>
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<tr>
<td>69</td>
<td>SR 202</td>
<td>24th Street</td>
<td>I-10 W. = WB 202, 32 St. = EB</td>
</tr>
<tr>
<td>70</td>
<td>SR 202</td>
<td>32nd Street</td>
<td>32 St. VMS &amp; Exit = WB, 40 = EB</td>
</tr>
<tr>
<td>71</td>
<td>SR 202</td>
<td>44th Street</td>
<td>44 St./Skyline = WB, 52/Van B = EB</td>
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### CLOSED CIRCUIT TELEVISION CAMERA LOCATIONS (Continued)

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<tr>
<td>75</td>
<td>SR 143</td>
<td>Washington</td>
<td>202 W. to 10/51 = NB, VMS = SB</td>
</tr>
<tr>
<td>76</td>
<td>SR 143</td>
<td>Sky Harbor</td>
<td>202 = NB, University = SB</td>
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<tr>
<td>77</td>
<td>SR 143</td>
<td>University</td>
<td>University = NB, I-10 =SB</td>
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<td>78</td>
<td>SR 51</td>
<td>No. of Cypress Street</td>
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<td>SR 51</td>
<td>No. of Osborn Road</td>
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<td>SR 51</td>
<td>No. of Indian School Road</td>
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<td>So. of Colter Street</td>
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<td>SR 51</td>
<td>So. of Bethany Home Road</td>
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<td>SR 51</td>
<td>No. of Maryland Avenue</td>
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<td>SR 51</td>
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3.4 RADIO COMMUNICATIONS PROCEDURES

Radio communications at the TOC give ADOT the capability to communicate statewide. Simulcast statewide is possible through the use of 33 repeaters. Major weather related emergencies can be managed from the center and real-time travel information can be distributed through the Internet, VRAS, kiosks, and media outlets.

Operators are responsible for keeping appropriate managers and ADOT field units informed. They are also the link to all city, county, state, and federal agencies that participate in emergency response.

MONITORING

Maintaining consistent monitoring of the radio system is required. The volume on talk group 2C and channel 17 on the old VHF radio will be kept at sufficient levels that allow the operator to hear incoming traffic on the simulcast statewide radio console. The SELECT CHANNEL SHOULD BE ON HIGH VOLUME and the UNSELECT CHANNEL ON LOW VOLUME. Additional talk groups may be monitored during specific events, major incidents, inclement weather, or for other needs as determined by the TOC Supervisor.

THE SECOND RADIO CONSOLE VOLUME WILL BE KEPT AT OR NEAR MAXIMUM LEVEL ON THE UNSELECT CHANNEL. THE SELECT CHANNEL VOLUME WILL BE KEPT VERY LOW. This allows the operator to monitor the unselected channels in the background in case an emergency arises with an ADOT field unit.

Monitoring is more critical than in the past due to the reduced staffing at DPS. They cannot guarantee monitoring of all ADOT channels outside of normal working hours.

OPERATING PROCEDURES

Radio traffic will be kept to the minimum necessary. Messages will be clear and concise. Each radio transmission received and each message sent will be acknowledged by the field unit. Call signs will be used for every radio conversation.

The phonetic alphabet and codes in Appendix 10.2 and 10.3 will be used at all times. Operators will be professional, responsive, and helpful. The radio will not be used for other than official business. Operators should be aware that the public and news media may monitor ADOT radio channels.
3.0 ADMINISTRATIVE PROCEDURES

RADIO MALFUNCTIONS

When problems occur with the radio system during the workday, contact the radio technician. If the problem occurs during non-business hours, advise DPS Communications what the problem is and give them the TOC telephone number. The DPS Communication Supervisor will call back and determine if the problem can be fixed. If it cannot be solved at that level, they will dispatch a radio technician.
3.0 ADMINISTRATIVE PROCEDURES

3.5 COMPLAINT PROCEDURES

Complaints from the public or other agencies must be handled in a fair, consistent, and polite manner. When a complaint is received, the operator will record the name, work telephone, home telephone, and details such as date, time, place, and allegations and give them to the Operations Supervisor. The operator’s first name will be given to the complainant if requested.

Complaints received about procedures, such as ramp metering or lane closures for maintenance, will be forwarded to the traffic engineers or appropriate staff. Complaints about specific ADOT employees or employees of contractors working on ADOT projects will be forwarded by the Operations Supervisor, through the ITS Manager, to the appropriate Division Manager. Calls from the public regarding road hazards or traffic signals will be given to DPS for verification by the TOC.

Complaint follow-up is strongly encouraged. The Operations Supervisor will make follow up calls to complainants within 24 hours to give them reassurance that the issue is being addressed.

Anonymous complaints will be given to the Operations Supervisor to determine if there appears to be any merit in forwarding them.

Complaints, even if they are anonymous, about activities that are possible violations of law shall be forwarded to the appropriate division manager or agency.
3.6 ADOT FREEWAY MANAGEMENT SYSTEM (FMS)
INTERNET HOME PAGE

The ADOT FMS Internet home page is now on-line. It provides the media, public, and commercial transportation with up-to-date HCRS road and weather information. The web page address is www.azfms.com.

The home page also provides live video stream from the TOC. Camera still images are captured approximately once every 7 minutes. Operators will scan the cameras frequently to ensure they are focused, pointed at traffic, and do not display anything derogatory or inappropriate.

A graphic map of freeway conditions is also available on the Internet Operator’s workstation and shows the exact display as it appears in the TOC. If the map window is closed on the monitor, it is not being displayed on the Internet. Every effort will be made to keep the map window open, especially during peak traffic hours.
3.7 STATEWIDE TRANSPORTATION MANAGEMENT SYSTEMS (TMS) POLICY

Traffic Management System devices, such as Variable Message Signs (VMS), are being installed throughout the state to improve safety and to enhance our ability in providing accurate real-time traffic information. The devices consist of but are not limited to: ramp metering, loop detectors, highway advisory radio (HAR) video surveillance, automated weather stations, and other applications of technology. As these systems are activated, they will become part of our statewide network of ITS devices and will be monitored at the TOC.

District offices will maintain control of the VMS systems in their areas during normal working hours. After-hours control will revert to the TOC. After-hours changes implemented by the TOC will be recorded and the information provided to the districts at the start of the next business day.
3.8 TELEPHONE AND FAX USE

TELEPHONE AND FAX EQUIPMENT IS FOR OFFICIAL USE ONLY. Telephones will always be answered, “ADOT Operations,” followed by the name of the operator taking the call. Every effort will be made to supply the required information to the caller. LONG DISTANCE CALLS ARE FOR OFFICIAL BUSINESS ONLY. Personal calls will be kept brief. Social calls are prohibited except during authorized breaks.

Long distance Faxes will be made from the Fax machine in the Operations Room. All out of state Faxes will be recorded in the log next to the machine prior to being sent. Faxes containing items of interest for the Supervisor and Manager will be copied and placed in their “in box.”

Requests for road and weather information from federal agencies, other states, counties, and cities may require long distance Fax or telephone response and are authorized as part of our commitment to supporting regional and national real-time travel information.
4.0 INCIDENT PROCEDURES

The Traffic Operations Center facilitates response by ADOT resources to any type of incident in the Phoenix area 24 hours per day and in the rest of the state during non-business hours. Timely and accurate information relayed to the appropriate responders and decision-makers is required. The proper use of technology is also required to provide rapid and accurate incident warning to motorists. This chapter contains the procedures operators are to follow in responding to incidents, roadway damage, and other emergencies.
4.0 INCIDENT PROCEDURES

4.1 INCIDENT LOG REQUIREMENTS

All incidents reported to the TOC will be documented in the Automated Incident Log. Detailed information including times of response, clearance, and each transaction will be recorded as they occur. Each incident log will be completed before the end of each shift unless it is still ongoing.

A data field will be completed on each incident. N/A (not applicable) will be entered in fields not needed for a specific incident. UNK (unknown) will be entered if the operator is unable to obtain that particular information.

Handwritten logs will not be maintained except for notes taken to support the completion of the incident screen. Another exception to this rule is system failure or malfunction. If this occurs, the details of the incident will be recorded on an E-mail and forwarded to the next shift, Operations Supervisor, and ITS Manager. When the system is back on-line, the on-duty shift will enter the information and list which employees actually worked the incident in the “Comments” section.

The following data entry procedure will be followed:

1. Enter the name of the reporting party in the “DR #” box.
2. Enter the incident type, characteristic, level of security, route, reporting party, lanes involved, and vehicle types. Hit the CONFIRM key to time and date stamp the incident.
3. Hit EMERGENCY NOTIFICATION key.
4. Read the message to verify the system has formulated and make any needed corrections.
5. Select the APPROPRIATE PERSONNEL from the list and hit the PLACE CALL button or use the ALFIE system.
6. Return to INCIDENT LOG SCREEN and select the appropriate VMS, select the APPROPRIATE MESSAGE and APPLY.
7. Record the message and the board(s) on which the message was displayed in the “Comments” section of the log.
8. Record responding personnel along with any additional comments in the “Comments” section of the log.
9. When the incident has been cleared, clear the VMS and note the time in the “Comments” section.
10. Select TERMINATE which will time and date stamp the incident log.
11. Notify all parties originally contacted that the incident has been cleared.

INFORMATION REQUESTS

All requests for copies of incidents or information from those logs will be approved by the Operations Supervisor prior to release. A copy of the information that is released
will be provided to the ITS Manager. The shift that handled the incident will be charged with completing any requests for information.
4.2 ACCIDENT REPORTING BY ADOT PERSONNEL

Arizona Department of Transportation employees reporting accidents to the TOC will be asked to follow a standard format. Code 10-33 will be used for emergencies. The information will be recorded by the operator on the incident screen and consist of the following:

Unit call sign: 
Highway route: 
Mile post: 
Direction: 
# of vehicles involved: 
# of lanes blocked: 
# and type of injuries: 
Other: 

(tows needed, highway damage, traffic control needs, hazardous materials involved, etc.)
4.0 INCIDENT PROCEDURES

4.3 CALLOUT PROCEDURES

Arizona Department of Transportation has several responses to call outs, as detailed in the following sections. Most call outs come from DPS dispatch for incidents requiring ADOT response. The operator will ask if response is required immediately or can wait for regular business hours. In each case, the operator will gather details in order to determine what response is appropriate. The operator is to obtain the Document of Record Control Number (DR#) from DPS in all cases where one has been issued. The Operations Supervisor will ensure that all telephone contact lists are kept up to date.

In the Phoenix area, the Arizona Local Emergency Response Team (ALERT) will usually respond. In outlying areas, the Maintenance Supervisor will designate who is on call.

ALERT TEAM

The ALERT is designed to provide rapid response in order to relieve traffic congestion or hazards caused by incidents. The criteria for using ALERT is, “One or more lanes closed for one or more hours.” DPS is the responsible agency in requesting ALERT; however, ALERT may also be dispatched by ADOT Operations based on the type of incident, verification of the incident on cameras, or by ADOT supervisory personnel.

The DPS dispatch will provide the following information to ADOT Operations with the initial callout request for ADOT personnel:

- The route, direction, and milepost location of the incident
- The type of incident that has occurred
- The type of equipment and the number of personnel requested
- Number of lanes blocked by the incident
- Name and call sign of the officer-in-charge and, if possible, the cellular telephone number
- Location of the command post and best route to it
- Name and telephone number of the dispatcher

Requests for ALERT from other agencies will be referred to DPS. When DPS determines that ALERT is needed, the agencies will be advised to have an officer stay at the location until the arrival of the first ALERT unit. DPS will also be asked to provide the exact location, nature of the request, and the name of the officer.

The ALERT will respond to frontage roads for traffic control when the incident may have adverse traffic effects on the freeways. The TOC will advise city or county police agencies when ALERT is being used on frontage roads or ramps that will cause impacts on traffic in their jurisdictions.

When a request for ALERT is received, the operator will determine the number of ALERT team members to call. If the request is for closure of one exit or entrance ramp, two
members will be called. For traffic control on the mainline of any freeway, or closure of one direction, four members will be paged. For closures of entire freeway sections, all eight members will be called.

**ALFIE MESSAGES**

The ALFIE system can page up to six responders at once. The page will be on an FYI (for your information) basis. The Maintenance Supervisor for the area where the incident occurred will be paged in the first page group.

ALFIE messages will include:
1. Who requested the response
2. Location
3. Type of incident
4. First name of the operator

Times for pages and responses will be noted on the Incident Log.

When team members answer a page, they will be given the type, location, and severity of the incident. They will also be given the location of the command post, best route of approach, and the name and badge number of the officer to contact. The TOC operator will relay any other details from DPS as obtained.

The operator will determine an estimated time of arrival (ETA) from the responders and the radio frequency that will be used for the incident. The ETA and radio frequency will be given to the DPS dispatcher. **THE OPERATOR WILL MONITOR THE DESIGNATED FREQUENCY THROUGHOUT THE INCIDENT.**

Fifteen minutes after the first page, the operator will provide a summary of the responses (number of personnel and their ETA) to the responders on the radio and to the DPS dispatcher. The ALERT team leader will determine if an additional response is needed.

After the Arrival of ALERT at the incident, the operator will monitor the radio for traffic information from ALERT members. Requests from ALERT members will be given priority and updates will be logged.

**AFTER HOURS**

Call outs made between 1800 and 0600 will be based on the location of the ALERT members’ homes. The operator will locate the incident and determine from the map which four team members live nearest to the incident. The DPS may request a specific response for specific circumstances, or
the first ALERT member responding to the call may determine if additional or fewer members are needed.

The Area Maintenance Supervisor will be paged along with the first group and will be given an overview of the situation.

CONSTRUCTION AREAS

The TOC will maintain a list of the Resident Engineers for all construction projects. If DPS requests an ADOT response for incidents occurring in construction zones, the Resident Engineer will be notified. The Resident Engineer will contact the contractor to initiate a response. ALERT may also be used if the Resident Engineer is unable to get a proper response from the contractor. The contractor is responsible for sweeping, damage repair to construction traffic control devices, and damage repair to the roadway and barriers.

The Resident Engineer will advise the TOC if the roadway is blocked, a significant traffic hazard exists, and/or the resident engineer cannot get a sufficient response in a timely manner. The operator will notify the Operations Supervisor who will work with the appropriate maintenance supervisor to determine how to resolve the issue.

DISTRICTS

A specific callout procedure for each district may be located in the telephone Rolodex in the TOC. Since ALERT does not exist outside the Phoenix area, the maintenance supervisor or on call staff will be notified.

ROADWAY ELEMENTS

Under normal circumstances, malfunctions affecting a single camera, VMS or node can be repaired during the normal workday. If a traffic signal system fails or other failure is creating a hazard, a callout is authorized. If it’s unclear whether a callout is necessary, call or page the Operations Supervisor.

If the operator is unable to verify the malfunction from the TOC, a DPS officer may be requested to make a visual inspection of the problem.

Roadway elements consisting of cameras, VMS, ramp meters, and nodes are the responsibility of the on call TOC technicians. Interchange traffic signals are the responsibility of the on call Signal Technician. All other repairs will be initiated by a call to the area’s maintenance supervisor.
4.0 INCIDENT PROCEDURES

RISK MANAGEMENT

The Risk Management Investigator (RMI) will be notified by page whenever there is a confirmed traffic fatality on a state route or when requested by DPS or an ADOT supervisor. Fatalities of less than five that occur more than seventy-five miles from Phoenix, between the hours of 2200 and 0600 will not be reported until the beginning of the next workday. The notification will include the same information that is provided to the ALERT team. If the RMI will not respond until the next day, the operator will also obtain the location of any deceased or injured persons, location and a description of the vehicles, and the tow company that removed them from the collision site. The name, badge, and telephone number of the Primary Investigator will also be forwarded to the RMI.

If the investigator is responding, an ETA will be provided to the requestor. Non-callout information will be sent by E-mail. All notifications are to be logged.

If the RMIs are unavailable and other ADOT personnel have not been sent or requested, notify the appropriate Maintenance Supervisor to respond.
A. Introduction

The Variable Message Sign (VMS) is an integral part of the day-to-day operations of the Intermodel Transportation Division (ITD) of the Arizona Department of Transportation (ADOT) as well as local municipal and county Traffic Operation Centers. A VMS provides information related to highway and/or traffic conditions. The VMS is used in highway construction to advise motorists of road restrictions and detours. A VMS is used to advise of accidents, congestion, delays, and closures during normal traffic flow. Weather conditions effecting traffic flow, such as snow, ice, and blowing dust, are transmitted to drivers via a VMS. Messages deployed on a VMS can specify conditions at a specific location and provide alternative routing or actions to take to minimize any negative impacts on traffic. Messages are deployed on VMS boards that are located sufficiently far enough away to allow for ample recognition and decision time for the motorist to understand the message and to react to the message. Messages can be deployed several miles from an incident, as well as on connecting highways.

Unless noted otherwise the guidelines contained in this document apply to both portable and fixed VMS boards.

In this document a VMS system can be composed of a single or multiple, fixed or portable sign boards.

B. Responsibility for Operation of a VMS System

The responsibility for the operation of a VMS system is delegated to the organization that has physical control over the system itself. The system can be composed of anything from a single portable board to multiple fixed and remotely activated boards or combinations of portable and fixed. In the case of local jurisdictions that are unmanned overnight, VMS control can be shared with the Freeway Management System. In most instances the organization is also responsible for the maintenance of the VMS system. Usually an organization has responsibility for a specific geographic area that includes specific sections of roadways. These organizations are as follow:

1. **ADOT Districts** have one or more portable VMS boards and can have several fixed and remotely activated boards under their responsibility. The portable boards are usually used in conjunction with routine road maintenance or construction while the larger, fixed and remotely activated boards are usually used for advisories on major highways. The fixed boards can deploy messages about weather that effects driving conditions, or incidents that restrict the highway at some point upstream, or detours due to major road closures.

In some circumstances a District might request messages be deployed on
VMS boards that are under the responsibility of another organization, such as the Traffic Operations Center (TOC). The requesting District should contact the responsible District to make these requests.

2. **Traffic Operations Center (TOC)** is an organization that monitors and manages the Phoenix Freeway Management System, and other ITS devices throughout the state – such as RWIS (Rural Weather Information System), VMSs, CCTV (Closed Circuit Television), etc. Data from various roadway field devices are transmitted to this central location where operators monitor the data. Based on road conditions and traffic flow the operators implement actions to maintain a smooth traffic flow. One type of roadway field device utilized to manage the traffic flow is a VMS board. The VMS is used to display messages deployed by the operator to advise motorists of traffic and/or road conditions. The message usually includes recommended action to be taken by the motorists. Frequently the VMS boards of a TOC are used to display messages pertaining to the activities of other organizations such as ADOT Districts, or local municipal and county government agencies.

3. **Local Traffic Operation Centers (LTOC)** operate and maintain similar types of ITS devices specific to their geographic boundaries such as VMSs, CCTVs, Roadway sensors, and Traffic Controllers.

Local jurisdiction VMS boards can also serve to advise motorists of traffic and/or road conditions that exist on state operated facilities.

C. **When to Use A VMS**

The manner in which the VMS system is used will vary depending on the nature of the associated road or traffic condition. Various categories of road and traffic conditions are described below, along with specific information on the appropriate use of the VMS system.

1. **Traffic Restrictions**

In this context, traffic restrictions refer to the prohibition of vehicles from using a portion of a roadway. Generally this refers to the closure of one or more traffic lanes. These restrictions may be planned or unplanned, short or long duration, and specific or general. The restriction may be due to construction, or maintenance, or due to an incident on the roadway. VMS messages for this situation can be deployed by the responsible ADOT District, by the TOC, or by the LTOC, on portable or fixed, remotely activated VMS boards.

2. **Road Closures**

A VMS can be used for warning of road closures for either emergencies or for scheduled construction and maintenance operations. Usually the messages will contain detour or rerouting information. In urban areas with heavy
3. Incidents

An incident can be any happening on a roadway that results in the disruption of the smooth or continuous flow of traffic. A vehicular accident, spillage of hazardous material onto the right of way, mechanical failure of the roadway or roadway structures, snow or ice on the pavement, blowing dust, etc. are all incidents which might warrant the deployment of appropriate messages on a VMS system. The use of the VMS messages for incident information requires close monitoring by personnel. The use of a VMS system for incident information has the greatest potential for increasing or decreasing our VMS credibility. If VMS messages are accurate and timely we increase our credibility.

4. Construction and Maintenance Information

The VMS system can be an effective supplement to construction traffic control, but should not be used in lieu of adequate traffic control planning. Anticipated VMS use for construction and maintenance should be included in their traffic control plans and scheduled in advance with the responsible jurisdiction’s office. The VMS system should be used when construction activities require drivers to perform complex maneuvers, for major impacts, or in cases where traditional signing methods are impractical.

5. Special Event Messages

a) VMS messages may be used to manage freeway traffic destined for high impact events (such as sports events located in the downtown Phoenix area) when traffic conditions warrant such messages.

b) Special event related VMS messages should be coordinated prior to the event with the TOC.

c) Message information will be limited to event-related traffic impacts and their duration.

6. Test Messages

It can be necessary to run test messages on a VMS sign in order to assure correct operations or to “burn-in” a new sign. It is vital that test messages not misdirect traffic, so non-message formats will be used. Acceptable test messages should either state “TEST MESSAGE”, display a portion of the alphabet or a sequence of numbers, or non-message test patterns such as moving columns or rows, etc.

D. Rural and Non-TOC Managed Urban Areas

The responsibility for VMS systems in rural and non-TOC managed urban areas...
belongs to the local ADOT District. In most instances these VMS systems are portable VMS boards, but there are some fixed and remotely activated VMS systems being controlled by a local ADOT District.

1. Deployment of messages on a VMS system is the sole responsibility of the local ADOT District.

2. Message format and content should conform to any specification or recommendation promulgated by the appropriate ADOT organization. This includes this document.

3. Where the capability exists the TOC may provide off-hours, interim operation of fixed and remotely activated VMS boards normally operated by an ADOT District.

During this interim operation the TOC should be contacted in reference to using these VMS boards.

E. TOC/LTOC Managed Urban Areas

1. The TOC/LTOC is responsible for the operation of fixed and remotely activated VMS boards in its area of operation. The TOC/LTOC create, schedule, coordinate, and display all deployed messages.

2. Where the capability exists the TOC may provide off-hours, interim operation of fixed and remotely activated VMS boards normally operated by an ADOT District or a local municipal TOC, or a local county TOC.

During this interim operation the TOC should be contacted in reference to using these VMS boards.

3. Deploying Traffic Management Messages

a) A VMS should be used only when an incident is visually confirmed or when requested by DPS, local law enforcement agencies, ALERT, or an Emergency Operations Center.

b) Deployment of messages based upon sightings by a “Traffic Watch” organization, such as Metro Networks, will be determined on a case-by-case decision.

c) Messages should be removed once the incident is no longer blocking traffic.

d) Messages describe the general nature of the situation (e.g. Accident at 7th St.) and traffic impacts (e.g. Congestion 3 Miles Ahead)

e) Specific alternate routes included only if alternate is another State Route or with approval from route operator (e.g. Cities of Phoenix, City of Tucson, Maricopa County, etc.)

f) Messages describing severe incident-related traffic conditions may be continued at the discretion of the TOC Operator.
4.0 INCIDENT PROCEDURES

4.5 Portable Variable Message Sign Use

4.5.1 Portable Variable Message Sign Use

4) A VMS message should not be used to describe recurrent congestion (i.e. normal day-to-day backups).

h) Requested messages

1) ADOT Organizations

VMS system may be used to display information on lane, ramp, or road closures; detours; and advanced notice for high impact closures. Construction-related VMS use should be coordinated with the TOC. Message information is limited to the nature of the construction impact and the effect on drivers:

*Impacts include:* Left Lane Closed; Exit 145 Closed

*Driver effects include:* Use Caution; Use Alternate Route; Follow Detour (only if signed detour provided); Expect Delays (no specific duration)

2) Non-ADOT Organizations

ALL VMS usage will be coordinated with the responsible TOC. The TOC will have the final say on the format and structure of any messages deployed at the request of any non-ADOT organization.

F. VMS System Priorities

1. **Safety related.** The first priority is safety. This means that any message that is directly related to a specific safety incident is given first priority for deployment. Notable examples of this type of message are emergency closures of a tunnel or highway.

2. **Roadway closures.** The second VMS priority is a message related to an active road or ramp closure, regardless of the reason for the closure (accident, construction, etc.). This information is important because such a closure directly impacts the route a driver would take.

3. **Minor traffic impacts.** The third priority is information on minor traffic impacts. Minor traffic impacts include construction lane closures, blocking incidents, and delay information.

4. **Pre-Warners.** The fourth priority for the VMS system is the deployment of pre-warning messages for planned, major highway closures. A closure will totally block or substantially restrict traffic flow on the highway. A pre-warner will be deployed for no more than 4 days prior to the closure and will be replaced immediately with an appropriate message when the closure commences.

5. **Test messages.** Test messages may be used to check sign operation for maintenance, testing the operating system, and prior to new signs being placed.
F. Public Service Announcements

Public Service Announcements will not be deployed for an extended duration unless applicable to a specific highway locale or traffic condition.

A few examples of these PSAs are:

“Buckle-Up” - or any variation thereof will not be deployed
“Icy Roads” – will not be deployed unless specific locales are designated
“Fire Hazard” – this type of message is much too general. A derivation of this message might be appropriate if smoke is obscuring motorists’ vision or flames present an immediate hazard to vehicles or motorists
“Pollution Warning” – a derivation of this message might be appropriate if pollution results in reduced visibility at a specific locale(s)

NOTE: PSAs may be used for a short duration during testing as described in Section C.6 (above).

G. Documentation of VMS Usage

It is important to document VMS benefits as operational needs increase and resources dwindle. As a minimum, operations staff must maintain a log of VMS usage for traffic restrictions, incidents, construction and maintenance activities. Documentation of when messages are deployed, changed, closed, etc. is critical if enforcement is to be supported and for possible tort defense. Such documentation, in conjunction with traffic flow data (which is available from the FMS traffic detector stations), can be used to evaluate the effectiveness of board location, messages, message duration, etc.

H. Procedure for Changing these Guidelines

These guidelines have been, and will continue to be, developed over time. Factors such as changing areas of responsibility, new VMS technologies, and changing personnel and philosophies will necessitate the revision of these guidelines. Any revisions should be well thought out and discussed with all involved parties, including county and municipal agencies, other ADOT agencies, and, if necessary, adjacent State agencies that need to maintain compatible VMS operations, prior to implementation. Prior to implementation, all parties involved with operation of the VMS system should be notified of the revision. As a minimum, these guidelines should be reviewed annually to identify any weaknesses or ambiguities. Suggestions for revisions to these guidelines may be directed to the Transportation Technology Group at (602) 712-7282.

4.5 PORTABLE VARIABLE MESSAGE SIGN USE
Portable VMS use is recommended for long-term events with expected closures of two or more hours and motorist delays of one hour or more. The requests for these signs will be forwarded to the maintenance supervisors who are responding to/or are aware of the closures in their area.

Portable VMS may be requested for special events by event sponsors, DPS, or other government agencies. The request will be forwarded to the Operations Supervisor to coordinate the process with maintenance, the event sponsor, and the appropriate government agencies. All portable VMS locations and messages not associated with construction will be tracked within the Phoenix districts by the TOC. Portable VMS used at the request of the TOC outside the Phoenix district will also be tracked.
4.0 INCIDENT PROCEDURES

4.6 HAZARDOUS MATERIALS (HAZ MAT) INCIDENTS OR ACCIDENTS

Hazardous materials spills, or accidents involving vehicles transporting hazardous materials, require special response. When an incident is reported, as much information as possible must be obtained. In addition to the normal details, the size of the vehicle, any information obtainable from placards, the name of the company, how much material is spilled, and the location of the driver must be obtained.

If the incident is within camera coverage, the operator may be requested to analyze the scene to determine:

- Type of placards and the numbers displayed on them
- Amount of spill
- Type of vehicle(s)
- Status of drivers and passengers (injured, ambulatory, etc.)
- Weather conditions and wind direction

If the TOC is notified by DPS and it is a rural district callout, notify the appropriate maintenance supervisor. Then, notify the ADOT HAZ MAT Team and advise them of the details as well as who has been notified.

If the incident is in the Phoenix district, notify the HAZ MAT Team and the Maintenance Supervisor at the same time.

If the spill is diesel fuel or oil and is less than 50 gallons, do not notify HAZ MAT until maintenance is able to determine if HAZ MAT is still needed.

The HAZ MAT responder will notify the TOC if the incident escalates and further notification or assistance is needed.

All hazardous materials including medical waste on ADOT right-of-way needs HAZ MAT inspection before ADOT personnel can clean it up.
4.7 ADOT OR DPS VEHICLE COLLISIONS

When ADOT vehicles become involved in accidents, the appropriate police agency will be notified immediately. The appropriate supervisor, safety office, and district engineer will also be notified.

If an ADOT employee has sustained life threatening or fatal injuries, additional notifications will be required. They are:

- Risk Management
- Deputy State Engineer
- Assistant State Engineer for the Transportation Technology Group
- Deputy Director
- Director

If there are injuries or other vehicles or property involved, the ADOT Risk Management Coordinator will be notified. The supervisor responding to the location will determine if any other response is required.

Accidents involving DPS vehicles may require substantial investigation. Operators will maintain contact with DPS to determine the impact on traffic and implement traffic control plans as needed.
4.0 INCIDENT PROCEDURES

4.8 NEWS MEDIA PROCEDURES

Arizona Department of Transportation has a responsibility to provide accurate and timely information to the public on road and traffic conditions, closures, detours, and restrictions. The HCRS system is used extensively by the media through the Internet. Camera links also keep Phoenix area media current on traffic conditions.

When the media seeks further information on routine events, the operator can provide them updates or refer them to the appropriate office for an answer. When the media inquires about closures due to police activities or investigations, they will be referred to the appropriate agency. OPERATORS MAY PROVIDE DELAY OR DETOUR INFORMATION BUT WILL NOT COMMENT ON CAUSE OR GIVE ESTIMATED TIME OF CLEARANCE.

Inquiries about ADOT policies or procedures will be referred to the ADOT Headquarters Community Relations Office. Inquiries about potential claims of negligence or possible employee misconduct will be referred to the ITS Manager.

If an ADOT employee is involved in an accident or is the victim of an accident or crime, media inquiries will be referred to the agency conducting the investigation. In all cases, the ITS Manager and Operations Supervisor will be notified as soon as possible of media inquiries.

MEDIA ACCESS TO THE OPERATIONS ROOM

Metro Media has entered into a public-private agreement with ADOT to have staff members assigned to the Operations Room. They will provide information to their network on traffic conditions throughout Arizona. Their staff will adhere to the applicable policies in this manual (Security, etc.) while working in the facility.

Television crews are welcome in the operations room to do live broadcasts of traffic conditions. If, however, major incidents are in progress and the staff cannot accommodate the media, their access may be restricted to the Conference Room with a view of the Operations Room.
4.9 COORDINATION WITH CITY AND COUNTY AGENCIES

(This policy is in effect until the AZTECH project is completed)

Incidents, construction, or maintenance activities can alter traffic patterns significantly. Cities and Counties with adjacent roadways are often impacted by these activities. The TOC staff will contact the appropriate police organization whenever traffic volumes caused by incidents, construction, or maintenance activities create congestion on adjacent roadways. The call will be made as soon as possible to allow for signal timing adjustments.

City and County agencies will be encouraged to advise the TOC when they have activities that may impact traffic flows on freeways. They may also enter this information in the Roadway Closure and Reporting System (RCRS).

Cameras will be used to check the adjacent arterial and ramp areas to keep police departments and traffic information outlets apprised of any changes in conditions.
4.10 ARIZONA DIVISION OF EMERGENCY SERVICES (ADES)

Major disasters may require the participation of the Arizona Division of Emergency Services (ADES). They will normally be contacted through DPS; however, there may be a need to contact them directly. The telephone numbers will be maintained in the TOC Rolodex.

The Division of Emergency Services has a HCRS computer. It is not set up to enter or amend information, but it is designed for monitoring and tracking closures. Any requested changes will be called into the Operations Supervisor.
4.11 EMERGENCY OPERATIONS CENTER (EOC) ACTIVATION

Emergency operations for large floods, severe snow storms, or other major incidents may result in activation of the Emergency Operations Center (EOC). A team of ADOT Intermodal Transportation Division Managers will be mobilized and will occupy the Conference Room behind the Operations Room. Eight telephones, a large state highway map, two large status boards, a weather radio, and other equipment is in storage and can be activated to facilitate operation of this center.

The ITS Manager and Operations Supervisor will be notified immediately upon request to activate the EOC. The TOC staff will work with Central Maintenance personnel to set up the EOC. They will also provide clerical and communications support for EOC.

REFER TO THE EMERGENCY OPERATIONS CENTER MANUAL FOR MORE SPECIFIC DETAILS
4.12 CAPITOL POLICE

Arizona Department of Transportation Headquarters’ facilities are located on the Capitol Complex and are in the Capitol Police jurisdiction. In the case of non-business hours emergencies arising at the complex, the Capitol Police have a notification procedure for personnel assigned to that facility. If they are unable to contact anyone from their on call list, they will advise the TOC. The operator will page the following personnel in the order given. If a page is not answered in 10 minutes, page the next person on the list and give them the information.

- Head of Facilities
- State Engineer
- Deputy Director
- Director
4.13 SCHOOL BUS ACCIDENTS

Incidents involving school buses can be of significant interest to the media and public. The DPS has the responsibility to respond to all accidents involving school buses statewide. If the TOC becomes aware of a school bus accident, verify with DPS that they have been informed of the incident.

Advise the Federal Highways Administration - Phoenix Office whenever a school bus accident results in injuries. They will need the location, school district, number of injured, severity of injuries, investigating agency, officer’s name, and a description of what occurred.

The ADOT Director, State Engineer, and appropriate District Engineer will be notified of school bus accidents with injuries that occur on ADOT roadways.
4.14 ROADWAY DAMAGE REPORTING AND REPAIR

Roadway damage reports are vital to maintenance in order to make repairs. Operators will obtain as much information as possible whenever they become aware damage has occurred and ADOT is not involved in the response. Timely reporting allows timely repair and also allows ADOT to seek compensation from the responsible party for the cost of the repairs.

There are two categories for repairs: emergency repairs due to hazardous conditions, such as stop signs down or other damage that could potentially be a hazard to motorists; and scheduled repairs for damage not presenting an immediate hazard to motorists.

EMERGENCY REPAIRS (STOP SIGN DOWN, TRAFFIC SIGNAL OUT, LIGHT POLES DOWN, ETC.)

Reporting parties will be encouraged to provide as much information as possible. Date, time, location, type of damage, calling party information, and if police or other agencies are investigating are all required details. If DPS or ALERT has been utilized and can effect minor repairs, then maintenance can repair the damage on a scheduled basis. If emergency repairs are required, ask the response agency to stay at the location until the appropriate maintenance supervisor can respond or send assistance. The name and badge number of the officer should be provided to the responding ADOT personnel. The DPS DR #s or police report case numbers should be included whenever possible on the E-mail report to the originator.

Stop signs or other critical devices will require immediate response. Call the Sign Technician from the appropriate district. If they don’t reply within 30 minutes, call the Maintenance Supervisor.

SCHEDULED REPAIRS

All details of highway damage will be E-mailed to the appropriate maintenance organization as soon as obtained. If a DR # was issued, it will be included. The information sent and who received it will be included in the incident report. The same data is required for both types of repairs. When information is received at a later time, immediately forward it to the appropriate organization.

Damage may be reported to the TOC for roadways that belong to other jurisdictions. If it is a probable emergency repair based on the caller information, the information will be taken and passed on to the appropriate police agency for their response. If DPS determines the damage can be repaired on a scheduled basis, the information will be forwarded to the appropriate maintenance agency.
4.15 LAW ENFORCEMENT CLOSURES

Law enforcement actions occasionally reduce capacity or require closures of roadways for reasons other than collision investigations. Some types of closures are:

**Suicides:** Bridges and overpasses are sometimes used by suicidal subjects to threaten or commit suicide. Closures may occur for that roadway as well as roadways below the structure. Length of closures are difficult to estimate.

**Armed standoffs on or near a freeway:** Police may request DPS to close ramps or freeways when confronted with armed suspects in stopped vehicles or barricaded in structures near a freeway. When this occurs, a command post is usually established by the lead agency.

**Searches for fleeing suspects:** Searches for fleeing subjects will sometimes result in roadway closures. Police dogs are susceptible to traffic and handlers may request road closures to increase safety for the dogs and handlers.

**Hazardous materials incidents:** Fire departments or police may require closures when hazardous materials are known or suspected. Illegal drug manufacturers transport dangerous substances in cars or vans in amounts that can be extremely explosive.

ALERT callout should be considered if there are lane or roadway closures. Variable Message Signs should indicate congested areas and alternate routes. Contact with DPS or the police agency involved should be maintained.

Cameras will be used primarily to determine the extent of congestion and may be used to assist police with law enforcement issues at their request.

The impact of incidents on city or county traffic agencies should be considered and relative information should be provided to them.
4.16 CLOSED CIRCUIT TV PROCEDURES

AZTECH OPERATIONS

COORDINATION OF CCTV CAMERA OPERATIONS

When monitoring and controlling the numerous CCTV cameras that are now incorporated into AzTech a protocol should be established to minimize or eliminate operational conflicts between agencies. Each AzTech operational entity has the capability to control cameras located in other jurisdictional areas. This capability, if used imprudently, can result in personal as well as job conflicts. Examples of potential conflicts are:

- Interruption of visual observations during incident management operations
- Interruption of preprogrammed camera movement by the authorized agency
- Interruption of routine or periodic traffic monitoring by traffic technicians
- Interruption of VCR recordings used for data gathering, training, etc.
- Interruption of traffic surveillance for media reports
- Interruption of surveillance for law enforcement operations

The following protocol is recommended:

1. Any AzTech operations member may VIEW the image of any camera in the AzTech system at any time.
2. An AzTech operations member may NOT TAKE CONTROL of a camera that is in the jurisdictional area of another AzTech member until:
   a) The AzTech operations member has requested control from the jurisdictional area operations control center. The request should be documented via the Free Form Message system on the AzTech Workstation. If the Free Form Message system is not available, then a telephone request is acceptable. And,
   b) The jurisdictional area operations control center has given approval for the AzTech operations member to take control of the camera. This approval has been documented via the Free Form Message system. If the Free Form Message system is not available, then telephone approval is acceptable.
3. After an AzTech operations member no longer requires control of a camera in another jurisdictional area, then it will return the camera to its original preset and relinquish control.
4. After repositioning the camera and relinquishing control the AzTech operation member will send a Free Form Message to this effect to the jurisdictional area control center.
4.0 INCIDENT PROCEDURES

COORDINATION OF CCTV CAMERA OPERATIONS

During Non-Manned Hours

At this point in time the only AzTech Member which operates its control center on a 24/7 basis is ADOT. ADOT’s Traffic Operations Center (TOC) will probably be the only AzTech control center which may have a reason to use another jurisdictional area camera during the non-manned hours of the jurisdictional area operations control center. If and when the TOC performs such an operation, it will use the Free Form Message system to advice the jurisdictional area control center when it takes control of a camera and when it relinquishes control of the camera. The messages will be available to the jurisdictional area control room operators when they return to work.

Hours of non-jurisdictional Control;

Monday thru Friday  6:00 PM to 6:00AM
Saturday and Sunday  24 hours

VIDEO MONITOR POLICY

Video monitors in the TOC allow the operator to detect, verify, manage, and document traffic incidents. They also allow the operator to provide concise traveler information on a timely basis. VIDEO CAMERAS MUST BE PROPERLY OPERATED AT ALL TIMES to maintain agency performance and credibility. Still frame images and video feeds to the media and internet are viewed on a regular basis by the public. The following procedures will be adhered to unless specific approval is granted by the Operations Supervisor to alter procedures.

INCIDENT SITES

When incidents have been detected via the monitors or when a report of an incident has been received, the operator must determine what resources are needed and that information is to be conveyed to the DPS dispatchers. After initial evaluation of the scene, the cameras will be used to monitor incident related congestion. Upon DPS’s request, the camera may be used to verify further details of the scene. Care will be taken to avoid close-up views that may contain injured persons, vehicle license numbers, or other identifiable characteristics that would allow viewers to determine the parties involved.

LAW ENFORCEMENT ACTIONS

Police activities, such as foot pursuits, may occur within the area covered by cameras. Operators may monitor and track these activities at the request of the law enforcement agency. The Operations Supervisor or designee may approve the use of cameras to search for vehicles or specific subjects at the request of law enforcement. Officers may come to the TOC to view cameras during police actions.

VIDEO RECORDING REQUESTS

Video recording will be limited to special requests from DPS or upon approval of the Operations Supervisor. Requests from DPS will be entered into the Incident Log and are to include the name and the badge number of
the requesting officer. The log will also be updated when the tape is provided to DPS along with the evidence or case number from the incident.

Tapes used for training opportunities will be copied from the tapes supplied to DPS. Tapes made at the request of the Operations Supervisor, which do not contain footage of an investigation site, will not require a log entry.

The video monitors are organized to enhance the operator’s ability to scan traffic conditions throughout the system. The following list of cameras will be maintained to ensure consistent coverage and enable operators to know at a glance which location they are observing.
This chapter pertains to procedures for handling maintenance calls for service. Using the information received and following the procedures in this section, the operator will determine who and when to advise for each type of notification.

Page the Operations Supervisor or ITS Manager for input when an issue arises that is not covered in this manual or there is a concern regarding whom should be notified. Timely and accurate information flow will increase the effectiveness of the TOC and provide better service to the motoring public and ADOT employees.
5.0 MAINTENANCE PROCEDURES

5.1 ANIMALS ON THE ROADWAY

Animals on a highway right-of-way can cause serious problems. Drivers may stop to look at or try to save them from being injured. Large animals can cause major damage and/or serious injuries when struck by a vehicle.

Reports of animals on the roadway will be handled as follows:

Small animals along the highway that do not appear to present a hazard to motorists will be handled as a non-emergency call to maintenance. If DPS considers the animal to be a hazard, notify the on call employee for that district.

Large domestic animals within the right-of-way will be reported to maintenance immediately.

Dead large animals lying on the roadway or a roadway shoulder, such as elk or deer, are considered a hazard to motorists and should be reported to the on call maintenance office immediately. Dead livestock will be reported to the state livestock commission.

Advise the responder of the location by route, direction, milepost, which side of roadway, and type of animal.

Reports of livestock along highways in areas other than open rangeland require verification by DPS or other agencies. An attempt to locate the owner of the livestock may be requested and a good source for this information is the County Agriculture Extension Agent or County Sheriff’s Office.
5.2 ROCKS OR OTHER DEBRIS ON ROADWAY

Calls regarding rocks or other debris on roadway may come from the public, DPS, or police agencies. If the report is from a police agency, obtain the name and call sign of the reporting officer. Obtain a concise location including route number, milepost, and direction of travel. Determine the size and approximate amount of debris requiring immediate removal. Determine if any roadway or guardrail was damaged and is in need of repair. Ascertain if the officer has established any type of traffic control or if traffic control is needed. Try and ascertain what, if any, equipment will be needed. If traffic is obstructed or restricted, enter the information in the HCRS.

If the report is from a motorist, obtain as much information as possible. Consider having an officer verify if the situation warrants a callout. If officers are not available, call the appropriate supervisor and provide him/her with the information and tell them that the call came from a motorist.

Rocks that have been cleared from a roadway without calling upon maintenance personnel may indicate a problem location that needs to be evaluated by maintenance during normal working hours. Debris cleared from the roadway by officers or others still must be reported to the appropriate maintenance facility; however, the reporting can be done by E-mail. Include a description of the problem for maintenance so the cleanup needs may be determined.
5.0 MAINTENANCE PROCEDURES

5.3 BROKEN WATERING SYSTEMS

Broken sprinkler heads or water pipes require immediate response. Determine the following information from the reporting party:

- The exact details of the problem (If possible, use the cameras to verify the magnitude and location of the leak.)
- If water is flooding the roadway
- Who is the appropriate landscape organization, if possible

After the above has been accomplished, do the following:

- Page the Supervisor for the proper organization
- Obtain an ETA from the Supervisor
- Notify DPS of the ETA

If the roadway is wet but the sprinkler is off, send the details by E-mail to the appropriate Maintenance Supervisor. The Supervisor will notify the appropriate contractor or have maintenance personnel make the repairs.
5.0 MAINTENANCE PROCEDURES

5.4 SNOW REMOVAL AND SNOW CLOSURES

Snow and ice problems are usually reported to the TOC by DPS. The operator will advise on-duty personnel in the affected area that snow removal is being done. If a callout is necessary, refer to the district procedure for guidance.

The operator will give the information to the appropriate supervisor and ascertain if a “snow desk” will be available at the district level. If a snow desk has been established and is taking calls, all future calls will go to that location. The DPS will be given the number and will contact them directly. The snow desk personnel will inform operations when they will be closing down the desk.

If emergency road closures are implemented by law enforcement, the call sign and the name of the officer who closed the roadway will be included in the “Comments” section of the Incident Log. The operator is to find out if ADOT is at the scene. If not, the operator will ensure that the appropriate maintenance supervisor has been informed of the road closure.
5.5 PERMIT ROAD CLOSURES

Permits for construction road closures are obtained from the District Permit Office. A copy of the permit will be forwarded to the TOC. When a contractor notifies the TOC they will be implementing the closure or restriction, they must provide a 24-hour telephone number, the name of the person to contact, and a permit number.

Permit road closure notification must be received 24 hours in advance. Road closure requests for weekends and before 9:00 a.m. on Mondays must be received by 7:00 a.m. the proceeding Friday. All closure information will be entered into the HCRS system immediately.
5.6 ROADWAY OR RAMP CLOSURES

Accidents and incidents, whether man-made or acts of nature, can result in road closures. Notification of personnel can vary depending on the type and projected length of closure. Information received from DPS and/or other sources will be evaluated and forwarded immediately to the appropriate personnel.

In all cases, immediate notification of the Maintenance Organization is required. Details of the incident will be as complete as possible. HCRS will be updated as soon as a closure is verified. Periodic updates will be sought from the maintenance responder or DPS to keep key managers and the public advised.

The TOC is the focal point for these actions unless the district sets up their own temporary TOC for the incident. The support the TOC provides is crucial to the success of the overall agency.

Roadway or ramp closures of an hour or more estimated duration in the Phoenix area will require the notification of ALERT.

The operator is to determine what VMS signs should be used in notifying motorists of the closure and is responsible for recording each incident in the Workstation Incident Log.

BRIDGE DAMAGE OR COLLAPSE

In the case of bridge damage, the appropriate District/Maintenance Engineer will determine load restrictions prior to reopening the roadway. Emergency load restrictions will be forwarded to the DPS Communications Center in writing.

In regard to bridge damage or collapse, adjacent districts may need notification so restrictions can be posted at “decision points” or on VMS as soon as possible. Alternate route designations are to be provided and disseminated for the public. HCRS will be kept up-to-date.

FLOOD CLOSURES

Flash floods may be predicted by the National Weather Service. Notification is usually provided to DPS and other emergency service providers. When informed of possible flash flood warnings, operators will notify the appropriate maintenance organization. Roadways in the affected area are to be monitored for flooding and possible closure. The operators will keep HCRS current about any closures or restrictions in effect. Operators are also to consider using any and all resources, such as VMS signs, to inform motorists of flooded areas and/or road closures.
WATER RELEASES

Water is released periodically from flood control dams. These releases are performed on a scheduled basis. When notification of a release is received, the operator will obtain the name of the facility, the caller’s name and telephone number, the duration, and cubic feet per second of the release. The caller will be advised to provide any changes and also to call again when the release is completed. The HCRS will be used for any closures or restrictions to ADOT roadways. The Maintenance Supervisor responsible for areas below the release will be notified. They may respond based on the cubic feet per second of the release.

WILDFIRES

Wildfires can become major incidents on highways because of poor visibility from smoke, damage to roadway signs or structures, and reduced road capacity and/or reduced speeds due to the presence of emergency equipment and vehicles. State and federal agencies may request support from ADOT in the form of road restrictions, traffic control, or emergency approval to move oversized loads such as heavy equipment.

Every effort will be made to support these agencies’ endeavors. The operator will notify the District Permit Office of the requests for emergency movements and will make sure the requestor is put in contact with them.

TRAIN DERAILMENTS

Notification of train derailments will be forwarded to the Maintenance Supervisor or on call personnel. Requests for assistance from the railroad or other response agencies will be forwarded to the area’s Maintenance Supervisor.

SPECIAL EVENTS CLOSURES

Events such as bicycle races, marathons, movie or commercial filming projects, motorcycle rallies, and parades require a permit from the District Permit Office. Event sponsors are required to have adequate traffic control to handle closures and detours. Permit holders and event participants must comply with the conditions of the permit and adhere to all laws. ADOT may use VMS signs to assist in event traffic control if their use will improve safety or reduce congestion.
5.7 TRAFFIC AND RAMP METER SIGNALS

Traffic signal systems on state routes are maintained by the signal troubleshooter. Timing can be changed by notifying the District Traffic Engineer. Signals under the control of other jurisdictions by contractual agreement, will be maintained by those agencies.

When inquiries or concerns about ramp metering are received, obtain the route, direction of travel, reporting party, time of day, and any other pertinent details. If the ramp area can be viewed with the cameras, check to determine if the information can be verified. If the problem is verified or cannot be observed, notify the emergency repair office at #7378. If the incident occurs after 1530 but before 0700, record the information in the Incident Log. The morning operator will notify Emergency Repair after 0700 the next regular workday.

If DPS or a local government agency requests the problem to be looked into, notify the TOC Repair and enter the information in the “EAGLE” system, which will initiate notification of the TOC on call Technician. EAGLE is the maintenance management system for field hardware.

Document any calls for information regarding signal timing including the details on any related congestion, time of day it occurs, or other issues concerning the ramp meters. Record the name, and home and work telephone number of the caller. Email all of this information to the Systems Manager for a response. Also provide a copy of this information to the Operations Supervisor. The TOC may videotape the problem area for the Systems Manager.
5.0 MAINTENANCE PROCEDURES

5.8 ELECTRONIC TECHNICIANS

The electronic technicians are responsible for maintaining the following equipment:

- ALFIE
- E-mail
- Javelin
- PCs
- PC Software
- Telephones within the TOC

The ADOT Systems Analysts are responsible for the SUN Mainframe, FMS Software, and operator workstations.

Outside of normal working hours, callout is authorized for repairing any of the listed equipment that cannot wait until the next scheduled workday. Inform the on call technician of the specific problems being experienced with the equipment.

If the on call technician does not call back within 10 minutes, call the next technician on the On Call List. E-mail the details of the callout to the Operations Supervisor.
5.9 MOTORIST ASSISTANCE AND WRECKER REQUESTS

Arizona Department of Transportation field personnel helping stranded motorists will determine what type of assistance is necessary and summon the proper aid. If it is determined that a tow is needed, they will be asked to follow a standard format for requesting assistance. They will inform the driver that DPS will send a tow truck. If the vehicle driver has a preference for a particular tow company or is an automobile club member, that information will be provided to the DPS dispatcher as well. The tow request will be forwarded to DPS for response. Ascertain, if possible, an ETA and the name of the tow company from DPS for the motorist.

If the motorist requests a telephone call, the operator will place the call and relay the message.

The operator will record the following information into the Incident Log:

- Unit call sign: ____________________________
- Highway route: ___________________________
- Mile post: ______________________________
- Direction: _______________________________
- Blocking: _______________________________
- Number of occupants: _____________________
- Tow preference: __________________________
- Auto club member #: _____________________
- Vehicle Description: _______________________
  - Color: _________________________________
  - Year: _________________________________
  - Make: _________________________________
  - Model: ________________________________
  - License #: ____________________________
  - State: ________________________________
5.10 TOW REQUESTS FOR ADOT EQUIPMENT

1. Note route, direction, which side of the roadway, if the vehicle is blocking, call sign of reporting party, size of vehicle (one ton or more), and the vehicle and license plate number. Include a brief description of the nature of the problem.

2. If the request is made after 0600 but before 1600 on a weekday, notify ADOT Equipment Services (#7575) with the above information.

3. If the request is made outside of the hours listed in Item #2, consult the Rolodex file for the appropriate towing company according to the size of the vehicle. The numbers are under “TOW TRUCK.”

4. Call the towing company with the information gathered in Item #1 and request ETA if possible.

5. Notify the requesting party that the towing company has been notified and give ETA if available.
5.11 TRAFFIC CONTROL REQUESTS

PHOENIX AREA

Emergency traffic control requests are often received from DPS or other police agencies and will be handled as follows:

1. Ask for the name, call sign, and location of the officer in charge.
2. Log the caller’s name and telephone number.
3. Log the type of incident, direction of travel, route, milepost, crossroad, and/or ramp if involved.
4. Determine what type of traffic control is requested and who is now at the location.
5. Request the officer standby for the contact with the ADOT responder.
6. Dispatch the closest four ALERT team members.
7. Use the appropriate VMS signs.
8. Monitor the incident through radio and cameras.

Traffic control requests from other sources will be referred to DPS for review prior to dispatching ADOT resources.

OUTSIDE PHOENIX AREA

The operator is to record the same information as outlined above and inform the appropriate organization supervisor of the situation.
5.12 FREEWAY MANAGEMENT SYSTEM (FMS) TROUBLESHOOTERS

PHOENIX DISTRICT

Variable Message Sign Technicians are responsible for the following equipment:

- VMS
- Nodes
- Roadway Cameras
- Re-Set Traffic Loops

If an incident occurs outside of normal working hours, notify the on call Sign Technician. If a call back is not received within 10 minutes, notify one of the other Sign Technicians on the Callout List.

OUTSIDE THE PHOENIX DISTRICT

When troubleshooter support is requested outside the Phoenix area, locate the area on the statewide map. There are four primary districts that troubleshooters are dispatched from: Phoenix, Flagstaff, Prescott, and Tucson.

Follow the procedures as listed under the “District” tab of this manual for Callout.
Incidents in tunnels present specific problems for resolution by response agencies and maintenance personnel. For example, motorists may react differently when confronted with emergencies in tunnels than they would on standard roadways. Operators will maintain a close watch on tunnel traffic and be prepared to implement changes as prescribed in the *I-10 Deck Tunnel User’s Manual*.

The manual will be maintained at the Tunnel Console and will be available to the operator at all times.

Operators are responsible for the operation and monitoring of:

- 8 Vent Room fans
- 25 Closed Circuit TV Cameras
- Tunnel Lighting
- Emergency Roadway Telephone Assistance Lines
- Carbon Monoxide Sensors
- Roadway Loop Detectors
- Fire and Life Safety System
- Non-interruptible Power Supplies
- Utility Power to Tunnel and Vent Rooms

The operator, via closed circuit television camera (CCTV), must verify a tunnel fire before notifying the Fire Department. In addition, the operator will: notify DPS, display warning messages on the pertinent VMS’s, switch fans to high exhaust, step-up lighting, and display lane closure signals over roadway lanes leading into the tunnel. Operator interface is necessary in all of the foregoing actions to insure public safety in the tunnel area.

The Phoenix Fire Department (PFD) has prepared a procedure for handling tunnel emergencies. The procedure is contained in the Appendix 10.4. The Phoenix Fire Department will establish a unified command post for incidents and send a liaison to the TOC. A fire department representative will monitor the cameras, maintain communications with the Incident Commander, and provide information to the ADOT operator for ADOT and DPS personnel. The TOC will advise ADOT responders where the command post is and how to access it if traffic is extremely congested.
Traffic Operations Center security is a challenge due to its 24-hour operations and its multiple work units, work areas, entrances, and exits. The ITS Manager is responsible for the overall security of the facility during regular working hours. During non-business hours it is the responsibility of the TOC operator. All employees are responsible for keeping doors locked, signing in visitors, and being alert to potential security problems. The TOC also handles security concerns for other ADOT facilities after normal business hours. See specific policies for each location to determine the TOC level of involvement.
7.1 SECURITY FOR ADOT HEADQUARTERS

The Capitol Police are the agency responsible for ADOT Headquarters security issues. They have a callout list for ADOT and will normally not inform the TOC of problems unless they are unable to contact anyone from the callout list.
7.2 SECURITY FOR ADOT DISTRICT FACILITY

R & M Security Control is the alarm agency for the Phoenix District complex. During the hours of 1700 through 0700, they will advise the TOC if there are alarms in the complex. If an alarm is received during the hours of 1700 through 0100, the operator will contact the Custodial Foreman via voice pager at 280-2245 to verify that the custodial crew has not set off the alarm. The alarm company will contact the Phoenix Police Department if the foreman cannot be contacted or the crew did not set off the alarm. The after-hours Callout List will be consulted and a contact will be called to communicate with the police at the alarm location.
7.3 PARKING LOT GATES

Access to the TOC parking areas is controlled, for security purposes, by two electric gates. Both gates have key access pads and a buzzer that alerts the operations room staff of visitors. All employees have an access code for use during non-business hours when the gates are kept locked. Employees entering the gates during non-business hours will ring the bell in addition to using the keypad to notify the operations room staff that they will be entering the building.

The first day-shift employee to arrive at the TOC will open the parking lot gate on Durango Street. It will remain open during normal business hours. The gate will be locked at 1700.

After hours visitors will be identified by the operations room staff and entered on the Visitor Log.

Gate malfunctions will be reported to the Operations Supervisor.
7.4 TOC SECURITY

The TOC Control Room is “off limits” to visitors unless approved by the ITS Manager or Operations Supervisor. Visitors will sign in at the front desk and will be accompanied by a TOC employee at all times while present within the facility. Unless previously approved by the Supervisor or Manager, visits during non-business hours will be restricted to official business only.

A TOC operator will tour the building daily between the hours of 1800 and 1900 to verify all doors and gates are closed and locked and that non-employees are not present in the building. Employees still in the building will be reminded they are responsible for ensuring that the doors are locked upon their departure. The operator will periodically monitor the TOC exterior by use of the security camera.

AFTER-HOURS TOC ACCESS

Response agencies requesting access to the TOC after business hours will be asked to call ahead to notify operators who they are and their reason for needing access. If the operator is not sure access should be allowed, the Operations Supervisor or ITS Manager may be paged for a decision. All after-hours visitors are to be logged in and out of the building.
7.0 TOC SECURITY PROCEDURES

7.5 FIRE ALARMS

The fire alarm system for the TOC is monitored by Select Security Systems. Their telephone number is in the Rolodex. When an alarm is verified as “false,” the operator will call Select Security to cancel any fire response that may have been initiated.

FLOOR MONITOR BACK-UP

The TOC Operator is the designated “back-up floor monitor” for fire drills or for actual fire alarm purposes, because the TOC will always have an operator on duty even if other designated monitors may not be present.

In an emergency it is the operator’s duty to quickly check both floors to verify that everyone is out of the building.

CONTROL ROOM EVACUATION PROCEDURES

Upon verifying that the building has been evacuated, or upon activation of the halon suppression system, the operator will inform the DPS Communications Center that the TOC will be down until further notice. The operator will also call the Operations Supervisor and/or ITS Manager to let them know the TOC status. The operator will close all interior and exterior doors and vacate the control room. If the fire department is responding, make sure the parking lot gate is open for them. Meet them in the parking lot and inform them of any pertinent details you may know, including that the halon system control valve is near the doorway leading into the ITS Manager’s office.

The fire department will secure the building and must verify it as safe to enter before any employees will be allowed to return.
7.0 TOC SECURITY PROCEDURES

7.6 COMPUTER SECURITY

All TOC computer systems are subject to a variety of problems that can degrade performance or compromise the integrity of the system. There are safeguards that every employee must take to maintain the system in proper working order. There are also ethical and legal issues related to equipment use by ADOT employees. The following policies and procedures outline the proper use of ADOT computers.

COMPUTER SOFTWARE POLICY

“Software piracy” is the illegal copying or use of copyrighted software programs. Federal law prohibits reproducing, transmitting, transcribing, storing in any retrieval system, or translating material into any language by any means without the written permission of the author.

Department employees are not to use computer software in violation of the law. They are not to copy, possess, or use illegally copied (pirated) software in any department facility nor on any department owned or issued computer equipment. This policy includes any copyrighted software purchased by a section or division of the agency that is restricted to a single site.

COMPUTER VIRUS

A computer virus is a computer program written to alter the way a computer operates without the permission or knowledge of the user. A computer virus may become active when an infected program is executed or the computer is started from an infected disk. Once activated, the virus spreads by attaching copies of itself to other files.

To safeguard against viruses, ALL TOC STAFF will use the anti-virus program on all files received from outside sources, new programs, and files imported from floppy disks. Backing-up data on a regular basis will allow storage of files away from the possibility of virus contamination.

If a virus is suspected, stop using the computer and advise the Electronics Technician and Operations Supervisor. DO NOT SHUT THE COMPUTER OFF.

Internet services are essential to the Center’s operation. There is a large amount of unwanted and unethical information readily available. EMPLOYEES WILL NOT DO PERSONAL BUSINESS ON THE COMPUTERS AND WILL NOT ACCESS THE INTERNET OR ANY OTHER ONLINE SERVICE UNLESS IT IS DIRECTLY RELATED TO ADOT BUSINESS. All TOC employees will sign the ADOT computer security form which will be provided to the ITS Manager.
8.0 TOC MAINTENANCE PROCEDURES

8.1 DMAC REPAIR

DMAC is the software system for the I-10 tunnel operating system. All electrical and mechanical malfunctions will be reported to the District Maintenance Supervisor. All systems or software repairs and maintenance are the responsibility of the TOC Technicians.
8.2 HEATING AND AIR CONDITIONING REPAIR

Problems that occur with the building’s heating and air conditioning systems will be referred to the Operations Supervisor or ITS Manager. They will be responsible for obtaining service or repairs. If problems occur during non-business hours, page the Operations Supervisor first and if there is no reply, page the ITS Manager.
9.0 DISTRICT PROCEDURES

The telephone directory for the district contains procedures with callout numbers and pagers for district personnel in each area. If difficulty is encountered in obtaining a response, the operator may call or page the appropriate Maintenance Supervisor.
## 10.1 DEFINITIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ADES</td>
<td>Arizona Department of Emergency Services</td>
</tr>
<tr>
<td>ADOT</td>
<td>Arizona Department of Transportation</td>
</tr>
<tr>
<td>ALFIE</td>
<td>A programmable page messaging systems capable of up to six simultaneous pages</td>
</tr>
<tr>
<td>ALERT</td>
<td>Arizona Local Emergency Response Team</td>
</tr>
<tr>
<td>ATMS</td>
<td>Advance Traffic Management Systems – includes traffic control systems, incident detection systems, highway and corridor control systems and ramp metering systems.</td>
</tr>
<tr>
<td>ATRC</td>
<td>Arizona Transportation Research Center</td>
</tr>
<tr>
<td>AVCS</td>
<td>Automatic Vehicle Control Systems – technological displays to help drivers perform certain vehicle control functions.</td>
</tr>
<tr>
<td>AVI</td>
<td>Automatic Vehicle Identification</td>
</tr>
<tr>
<td>AZTech</td>
<td>A partnership of public agencies and private companies using federal and private funds to develop transportation technology</td>
</tr>
<tr>
<td>CB</td>
<td>Citizens Band Radio, channel 9 is the emergency channel</td>
</tr>
<tr>
<td>CCTV</td>
<td>Closed Circuit Television Camera</td>
</tr>
<tr>
<td>C/M</td>
<td>Congestion Management, managing recurring congestion along interstate and arterial networks.</td>
</tr>
<tr>
<td>DM</td>
<td>Demand Maintenance (Unscheduled Maintenance)</td>
</tr>
<tr>
<td>DMAC</td>
<td>I-10 tunnel communication interface</td>
</tr>
<tr>
<td>DPS</td>
<td>Department of Public Safety</td>
</tr>
<tr>
<td>DR</td>
<td>Document of Record Control/Number</td>
</tr>
<tr>
<td>Detection</td>
<td>An electronic means to determine that an incident or delay of some nature has occurred. This information is processed by computers and compared to historical data.</td>
</tr>
<tr>
<td>Acronym</td>
<td>Definition</td>
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<tr>
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<tr>
<td>EAGLE</td>
<td>Maintenance management systems for field hardware</td>
</tr>
<tr>
<td>EMS</td>
<td>Emergency Medical Support</td>
</tr>
<tr>
<td>ES</td>
<td>Elk Signs</td>
</tr>
<tr>
<td>ETA</td>
<td>Estimated Time of Arrival</td>
</tr>
<tr>
<td>FHWA</td>
<td>Federal Highway Administration</td>
</tr>
<tr>
<td>FMS</td>
<td>Freeway Management System</td>
</tr>
<tr>
<td>F/O</td>
<td>Fiber-optic cable, tiny individual fibers bundled together to permit communications, video and light transmission.</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographical Information Systems – databases tied to maps, and large amounts of data referenced to geography. For example, a map could be displayed locating all construction zones in the state, or all slat domes, or all signal systems.</td>
</tr>
<tr>
<td>HAR</td>
<td>Highway Advisory Radio – also called TRA</td>
</tr>
<tr>
<td>HAZ MAT</td>
<td>Hazardous Material</td>
</tr>
<tr>
<td>HCRS</td>
<td>Highway Closures and Restrictions System</td>
</tr>
<tr>
<td>HOV</td>
<td>High Occupancy Vehicle</td>
</tr>
<tr>
<td>ILD</td>
<td>Induction Loop Detector</td>
</tr>
<tr>
<td>I/M</td>
<td>Incident Management, managing non-recurring incidents such as accidents, spills, environment hazards, disabled vehicles, etc.</td>
</tr>
<tr>
<td>ITI</td>
<td>Intelligent Transportation Infrastructure</td>
</tr>
<tr>
<td>ITS</td>
<td>Intelligent Transportation Systems</td>
</tr>
<tr>
<td>Incident</td>
<td>Any non-recurrent event that causes reduction of roadway capacity or abnormal increase in demand, such as accidents, load spills, and severe weather.</td>
</tr>
<tr>
<td>Information to</td>
<td>Activation of various means of communicating incident site traffic Motorist conditions to motorists, such as public radio and television, Variable Message Signs, Travelers Advisory Radio, and cooperative agreements with commercial trucking organizations.</td>
</tr>
<tr>
<td>Acronym</td>
<td>Definition</td>
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<tr>
<td>---------</td>
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</tr>
<tr>
<td>IVHS</td>
<td>Intelligent Vehicle Highway Systems, an effort in the US to launch a large-scale, public-private initiative that will demonstrate the value of advanced technology in highways, provide applications that could provide short-term relief from current congestion and safety problems, and advance the technology so that more sophisticated and effective systems could eventually be built.</td>
</tr>
<tr>
<td>JAVELIN</td>
<td>Manual interface from the TOC to the cameras</td>
</tr>
<tr>
<td>MCSAP</td>
<td>The Motor Carrier Safety Assistance Program which continues under ISTEA Title IV.</td>
</tr>
<tr>
<td>MDI</td>
<td>Model Deployment Initiative</td>
</tr>
<tr>
<td>MP</td>
<td>Mile Post</td>
</tr>
<tr>
<td>N/A</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>Operations and Maintenance</td>
</tr>
<tr>
<td>OPS</td>
<td>Operations</td>
</tr>
<tr>
<td>OW</td>
<td>Operator Workstation</td>
</tr>
<tr>
<td>ORG.</td>
<td>Maintenance Organization</td>
</tr>
<tr>
<td>PECOS</td>
<td>Performance Evaluation Cost System</td>
</tr>
<tr>
<td>PM</td>
<td>Preventive Maintenance</td>
</tr>
<tr>
<td>PSA</td>
<td>Public Service Announcement</td>
</tr>
<tr>
<td>PLACARDS</td>
<td>A uniform signing and marking program for use on vehicles and containers containing dangerous goods.</td>
</tr>
<tr>
<td>Non-Recurring</td>
<td>Something that does not recur, a single event such as a traffic incident.</td>
</tr>
<tr>
<td>RCRS</td>
<td>Roadway Closure and Reporting System</td>
</tr>
<tr>
<td>RMI</td>
<td>Risk Management Investigator</td>
</tr>
<tr>
<td>RWIS</td>
<td>Road and Weather Information System</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Ramp Meter</td>
<td>See Traffic Flow Meter</td>
</tr>
<tr>
<td>Removal/Restoration</td>
<td>Removal of wreckage, debris, spilled materials, etc. from the roadway and restoring the roadway capacity to its pre-incident condition.</td>
</tr>
<tr>
<td>Response</td>
<td>The activation, coordination and management of the appropriate personnel, equipment, and communication links and motorist information media.</td>
</tr>
<tr>
<td>TCP’s</td>
<td>Traffic Control Devices</td>
</tr>
<tr>
<td>TMC</td>
<td>Traffic Management Center</td>
</tr>
<tr>
<td>TMS</td>
<td>Traffic Management Systems Traffic Operations Center (TOC), a statewide 24-hour operating center to handle the Phoenix area at all hours and other districts during non-business hours.</td>
</tr>
<tr>
<td>Traffic Flow Meter</td>
<td>(a.k.a.: Ramp Meter) Monitors mainline traffic flow and meters vehicles entering the mainline to reduce friction and balancing capacity.</td>
</tr>
<tr>
<td>Traffic Signal</td>
<td>Device by which traffic is alternately directed to stop and permitted to proceed.</td>
</tr>
<tr>
<td>Traffic Signal System</td>
<td>A series or network of traffic signals integrated together to manage the flow of traffic.</td>
</tr>
<tr>
<td>TSS</td>
<td>Traffic Signal Synchronization</td>
</tr>
<tr>
<td>UNK</td>
<td>Unknown</td>
</tr>
<tr>
<td>VDS</td>
<td>Vehicle Detection System</td>
</tr>
<tr>
<td>VMS</td>
<td>Variable Message Sign, a message can be infinitely changed to display on a sign any configuration of characters or symbols, within the limits of the sign. Also called Changeable Message Sign.</td>
</tr>
<tr>
<td>VRAS</td>
<td>Voice Remote Access System</td>
</tr>
<tr>
<td>WIM</td>
<td>Weigh In Motion</td>
</tr>
</tbody>
</table>
10.2 PHONETIC ALPHABET

A  ADAM
B  BOY
C  CHARLES
D  DAVID
E  EDWARD
F  FRANK
G  GEORGE
H  HENRY
I  IDA
J  JOHN
K  KING
L  LINCOLN
M  MARY
N  NORA
O  OCEAN
P  PAUL
Q  QUEEN
R  ROBERT
S  SAM
T  TOM
U  UNION
W  WILLIAM
X  X-RAY
Y  YOUNG
Z  ZEBRA
### 10.3 HIGHWAY DIVISION RADIO “10” CODES

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-1</td>
<td>Receiving Poorly</td>
<td>10-7</td>
<td>Out of Service</td>
</tr>
<tr>
<td>10-2</td>
<td>Receiving Well</td>
<td>10-8</td>
<td>In Service</td>
</tr>
<tr>
<td>10-3</td>
<td>Stop Transmitting</td>
<td>10-9</td>
<td>Repeat, Conditions Bad</td>
</tr>
<tr>
<td>10-4</td>
<td>Okay – Message Received</td>
<td>10-10</td>
<td>–</td>
</tr>
<tr>
<td>10-5</td>
<td>Relay</td>
<td>10-11</td>
<td>Dispatching Too Rapidly</td>
</tr>
<tr>
<td>10-6</td>
<td>Busy</td>
<td>10-12</td>
<td>Officials &amp; Visitors Present</td>
</tr>
<tr>
<td>10-7</td>
<td></td>
<td>10-13</td>
<td>Advise Weather &amp; Road Conditions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10-13.1</td>
<td>Convoy or Escort</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10-14</td>
<td>Message Delivered</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10-15</td>
<td>Ready to Message</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10-16</td>
<td>In Route</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10-50</td>
<td>Payroll Check In Office</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10-95</td>
<td>Reserve Room for ___</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10-96</td>
<td>Arrive at Scene</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10-97</td>
<td>Finished with Last Assignment</td>
</tr>
<tr>
<td>10-17</td>
<td>Complete Present Assignment as Quickly as Possible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-18</td>
<td>Return to Your Station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-19</td>
<td>What is your Location</td>
<td></td>
<td></td>
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<tr>
<td>10-20</td>
<td>Call by Telephone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-21</td>
<td>Take no Further Action Last Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-22</td>
<td>Standby Until No Interference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-88</td>
<td>Does Not Conform to Rules &amp; Regulations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-89</td>
<td>Emergency Traffic This Station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-90</td>
<td>Confidential Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-91</td>
<td>Correct Time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-92</td>
<td>Operator On Duty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-93</td>
<td>No Traffic Your Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-94</td>
<td>Meet ___ at Location</td>
<td></td>
<td></td>
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<tr>
<td>10-95</td>
<td></td>
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<td></td>
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</tbody>
</table>

**Accident Type**

- **961** Accident No Injuries
- **962** Accident With Injuries
- **963** Accident involving Fatality
- **964** Accident, unknown if injuries
  *Add “A” to indicate DPS involvement*
  *Add “D” to indicate ADOT involvement*

**Road Conditions Due to Weather**

- Code 11 Roadway is Closed
- Code 12 Icy – Traffic Severely Affected With Ice
- Code 13 Snow Packed and Icy
- Code 14 Roads Are Wet
- Code 15 Roads Are Dry and Normal

**Disabled Vehicle Codes**

- Code 34 Disabled Vehicle
- Code 34 Blocking
Code 34 with 101 (female)
Code 34 with 101 with child
10.4 PHOENIX FIRE DEPARTMENT I-10 TUNNEL RESPONSE PLAN

**SCOPE**

Freeway incidents commonly involve multiple vehicles, multiple patients, and often with vehicle fires. A major potential also exists for flammable liquid spills, fires or hazardous materials incidents.

This plan provides specific information and procedures to be used in handling incidents occurring on the freeway system. Unless specifically superseded by this plan, all other Phoenix Fire Department procedures shall be used in operations occurring on freeways.

**DISPATCH INFORMATION**

When dispatching an incident on a freeway, Dispatch will provide the following information:

1. Type of Incident
2. Location
   a. Freeway or access frontage
   b. I-17 or I-10 (Black Canyon or Maricopa), Papago I-10, SR-51 Squaw Peak, SR-202 East Papago, SR-143 Hohokam
   c. Cross street
3. Direction of Travel
   a. If information indicates difficulty can be expected in reaching or locating the scene, Dispatch will dispatch a second company in the opposite direction from the first.
4. Traffic Conditions (if known)

**RESPONSE**

Dispatch may receive information on a freeway incident from the Department of Public Safety (D.P.S.) or a variety of other sources. Communications must be established early and maintained with D.P.S. to assure that needed information is exchanged regarding the incident. If possible, the DPS channel should be monitored in Dispatch and Deployment during a freeway incident.

In most cases, a freeway incident will be reported by the Arizona Department of Public Safety (D.P.S.). Additionally, D.P.S. may arrive first at an incident and may be able to provide updated information on traffic conditions and access. Any information received from D.P.S. must be relayed immediately to responding fire companies.

The Company Officer on a responding unit is responsible for redirecting other companies or having the Dispatch Center dispatch additional companies if it becomes apparent that the first company will be unable to reach the incident due to traffic congestion. If access problems are anticipated, or if the direction of travel is unknown, the Dispatch Center may dispatch companies to approach the reported scene from opposite directions.
CANCELLED ENROUTE

When responding to freeway emergencies when the D.P.S. is on scene and has assumed command, it will be the responsibility of the D.P.S. Command Officer to evaluate the following factors before cancelling any fire units.

Auto Accident (962)

- Mechanism of injury
- Loss of consciousness
- Slurred speech
- Pregnant females
- Ejected patients
- Fractures
- Neck pain
- Paralysis of any type
- Numbness
- Chest pain
- Other hazards: fuel, unknown substances, etc.

If the D.P.S. Command Officer does not feel comfortable evaluating these medical triage decisions, the officer will have the first due company respond for medical evaluation.

If fire units are cancelled enroute, they should not proceed into the scene unless re-dispatched. This creates unnecessary congestion and other traffic problems at the scene.

APPROACH AND STAGING

Units responding to calls on the Freeway will respond Code 2 while on the Freeway mainline. However, alternating headlights and rear flashers may be used. Units should attempt to reach the scene in the direction of the reported incident unless otherwise instructed by D.P.S.

In some cases, D.P.S. may advise the best access is via the access frontage or by traveling against the normal traffic flow. Units should proceed in the opposite direction of normal flow only at the specific request of D.P.S. when it is assured that all traffic has been stopped. Fire units should confirm traffic is stopped before entering the freeway against traffic.

On multiple unit responses, the first unit approaching or entering the freeway within a mile of the incident will report its identity, location and direction. Other units approaching will then stage Level 1, preferably near an on-ramp to avoid premature commitment to the mainline or access frontage. Where appropriate to do so, these companies may block the access road to prevent additional traffic congested from entering the freeway.

It is the responsibility of the first unit to direct other units via alternate access if unable to reach the scene. Specific directions should be given regarding approach and direction for other companies when problems are encountered.

COMMAND

The first unit arriving on the scene of a multiple unit incident will determine of the D.P.S. has established a Command post. If the Incident Command is in place, the first arriving

#5884
fire department unit shall meet with the D.P.S. Incident Commander for a briefing. The following should be covered:

1. Traffic Conditions
   a. Stopped
   b. One lane open
   c. All lanes open

2. Fire/No Fire (smoke showing, working fire, fully involved) A follow-up report should indicate:
   a. Injuries/Number
   b. Extrication Needed
   c. Evacuation
   d. Hazardous Materials Spill
   e. What's Burning, including any hazardous product

3. Call for Necessary Help and/or Dispatches
   a. Stage additional assistance as needed

COMMAND POST LOCATION
The Command Post location should be carefully chosen for major incidents to provide access and a good view of the scene.

The access frontage or an overpass provides a view of the scene for incidents on depressed roadway sections.

UNIFIED COMMAND
It's important to establish a single “Unified Command” Post as soon as possible. Key agencies at this Command Post will be the fire department, the Arizona Department of Public Safety (DPS), the Arizona Department of Transportation (ADOT), and if freeway traffic is being diverted to city streets, the Phoenix Police Department will need to be party to the Command Post operation.

It's important to physically assemble all representatives at a single location as soon as possible in the incident. This may require the initial fire department commander to search out the DPS and ADOT representatives. Once a physical location for the Command Post is determined, all agencies should advise their dispatchers of that location.

Dispatch/Alarm centers must be advised of any changes in the Command Post location (i.e. moving into the fire department's Command Van and its physical location).

When the fire department is first to arrive, the Incident Commander must announce the command vehicles identity (i.e. E14, Battalion 3) and the vehicle’s location (i.e. 50 feet east of the accident). Dispatch will relay the location to DPS. Dispatch must be advised of any transfer of Command Post locations.
LIAISON WITH DPS

In some occasions, particularly early in the incident, it may be more appropriate for a fire department representative to serve as a liaison officer to the DPS Incident Commander. This liaison should be a temporary function and should end when all agency representatives assemble Command Staff at a unified Command Post.

When the need to shut down freeway traffic is indicated, Command must make a joint assessment of conditions with the D.P.S. and Phoenix Police. The logistical and traffic congestion problems created by a complete shut down of freeway traffic may last for hours and affect a large area of the city. A shut down decision must recognize these factors in relation to the safety of the incident.

SPECIAL CONSIDERATIONS

Each company officer is responsible to research or know the location of hydrants and access to the freeway. Water supplies and other problems must be pre-planned by the first due officers. Some typical problems which must be considered:

EXAMPLES:
1. Early call for additional companies to handle lines that may have to be extended long distances over obstacles.
2. Relay pumping probabilities.
3. Special equipment needs (tankers, foam, sand, diking materials, wreckers, etc.).
4. Early call for traffic control.
5. Sewers and drains (when dealing with spilled products).
6. Peak traffic hours create congestion and delays.
7. Access to the freeway (ladders, on/off ramps, etc.).
8. Hazards Materials Team.

APPARATUS PLACEMENT

Whenever possible, place apparatus between oncoming traffic and operating personnel in order to protect the scene from approaching vehicles. Warning lights must be visible to oncoming traffic. Avoid unnecessary blocking of traffic lanes that will permit DPS to move traffic and relieve congestion.

Employ rear lights, flares, reflectors, or cones as required or as directed by the D.P.S. Traffic control and warning devices should be left to the D.P.S. whenever possible. Communicate with the D.P.S. whenever flammable liquid leaks, spills, etc., are present with regard to using flares.
Leave one crew member (usually the Engineer) to watch the traffic and set up warning devices until the D.P.S. arrives. Parking brakes are to be set, and the apparatus set with the wheels at an angle to the side.

A. Consider parking above or below (on access frontage) if the traffic conditions are such that entry is impossible or difficult.

B. A booster line or other hose line may be employed as a rope to ascend or descend to the freeway proper.

C. Where the freeway is elevated, a ladder is an effective means to gain access and to effect evacuation from above.

D. Only the apparatus that is absolutely necessary shall be taken onto the freeway, under the direction of Command. The first due unit will proceed into the scene. All other units will stage off of the freeway (if possible) to await an assignment.

E. Position apparatus in the emergency parking lane or on the shoulder, as far off the traffic lanes as possible.

F. Do your job as rapidly as possible and then clear the traffic lanes.

G. A ladder company spotted on the access frontage will usually provide the best method of advancing a line to elevated sections of the freeway.

H. In sections of depressed roadway, it is faster to have a company above “drop” a line than one advanced up the slope.

I. Several sections of the freeway have no access frontages and will require laying hose for long distances from on-ramps if a supply line is needed. Relay pumping and tankers should be considered in these cases.
<table>
<thead>
<tr>
<th>TERM</th>
<th>DEFINITION</th>
<th>OTHER NAMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Access Road&quot;</td>
<td>Road parallel to freeway</td>
<td>&quot;Frontage Road&quot;</td>
</tr>
<tr>
<td>&quot;Against the Wall&quot;</td>
<td>Area around the median barrier wall</td>
<td>&quot;Inside Shoulder&quot;</td>
</tr>
<tr>
<td>&quot;Median Wall&quot;</td>
<td></td>
<td>&quot;Inside Shoulder&quot;</td>
</tr>
<tr>
<td>&quot;The Curve&quot;</td>
<td>Usually refers to the I-17 Durango Curve; may also refer to the Broadway Curve on I-10 or the I-10 curve at Squaw Peak interchange</td>
<td>&quot;Durango Curve&quot;</td>
</tr>
<tr>
<td>&quot;Distress Lane&quot;</td>
<td>Usually refers to the area between the median barrier wall and the number one traffic lane; may also refer to the emergency lane</td>
<td>&quot;Emergency Lane&quot;</td>
</tr>
<tr>
<td>&quot;Gore Point&quot;</td>
<td>Area around freeway entrance and exit</td>
<td>&quot;Gore&quot;</td>
</tr>
<tr>
<td>&quot;H.O.V. Lane&quot;</td>
<td>High Occupancy Vehicle lane</td>
<td>&quot;Car Pool Lane&quot;, &quot;Bus Lane&quot;, or &quot;Diamond Lane&quot;</td>
</tr>
<tr>
<td>&quot;Main lane&quot;</td>
<td>Controlled access freeway</td>
<td></td>
</tr>
<tr>
<td>&quot;Mini-Stack&quot; +</td>
<td>Squaw Peak interchange to I-10, SR-51 and SR-202, near 20th Street and Roosevelt and McDowell Road</td>
<td>&quot;Short Stack&quot; +</td>
</tr>
<tr>
<td>&quot;Shoulder&quot;</td>
<td>Usually refers to the area off the roadway to the right of the emergency lane; may also refer to the median area near the left side of the roadway</td>
<td></td>
</tr>
<tr>
<td>&quot;The Split&quot;</td>
<td>The Maricopa Interchange (I-10/I-17) traffic interchange west of the airport</td>
<td></td>
</tr>
<tr>
<td>&quot;The Stack&quot;</td>
<td>The Papago (I-10)/Black Canyon (I-17) interchange, between 19th Avenue and 27th Avenue area</td>
<td></td>
</tr>
</tbody>
</table>
### Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>Other Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;The Tunnel&quot;</td>
<td>The portion of the Papago freeway (I-10) under Central Avenue, 3rd Street to 3rd Avenue.</td>
<td>&quot;The Deck&quot;</td>
</tr>
<tr>
<td>&quot;Unified Command&quot;</td>
<td>Command post consisting of more than one agency</td>
<td></td>
</tr>
</tbody>
</table>

* Request specific location from reporting party.  
+ Use of term discouraged.

Lane numbering sequence: No. 1 is the traffic lane nearest the median or center, excluding the H.O.V. lane.

### Phoenix Metropolitan Freeways

<table>
<thead>
<tr>
<th>Name</th>
<th>Designator</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Canyon</td>
<td>Interstate 17</td>
<td>Begins at the Durango Curve and continues north through Phoenix</td>
</tr>
<tr>
<td>East Papago</td>
<td>State Route 202</td>
<td>Begins at I-10/SR-51/SR-202/ interchange and continues east to the Price Freeway</td>
</tr>
<tr>
<td>Hohokam</td>
<td>State Route 143</td>
<td>Begins at I-10 and 48 Street and continues north to McDowell Road.</td>
</tr>
<tr>
<td>Maricopa</td>
<td>Portions of I-17</td>
<td>I-17 south (east) of the Durango Curve to the Maricopa Interchange and I-10 continuing east</td>
</tr>
<tr>
<td>Papago</td>
<td>Interstate 10</td>
<td>Entering Phoenix from the west to the Maricopa Interchange where it becomes the Maricopa Freeway</td>
</tr>
<tr>
<td>Squaw Peak</td>
<td>State Route 51</td>
<td>Begins at the I-10/SR-202/SR-51 interchange and continues north</td>
</tr>
<tr>
<td>Superstition</td>
<td>State Route 360</td>
<td>Begins at the I-10/SR-360 interchange and continues east to US-60</td>
</tr>
</tbody>
</table>