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*College of Engineering*

**KENTUCKY'S HIGHWAY INCIDENT  
MANAGEMENT STRATEGIC PLAN**





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**KENTUCKY'S HIGHWAY INCIDENT  
MANAGEMENT STRATEGIC PLAN**

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in cooperation with

Kentucky Transportation Cabinet  
Commonwealth of Kentucky

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## PREFACE

Kentucky's Highway Incident Management Strategic Plan was developed to provide a vision and strategy for significantly improving all aspects of incident management. The Plan was developed by the Kentucky Transportation Center using State Planning and Research (SPR) funding under the project, "Development of a Strategic Plan for Incident Management.". The full report, including a description of the methodology and findings of the project, can be found in Kentucky Transportation Center Report KTC-05-08/SPR288-05-01F, entitled, "Development of Kentucky's Highway Incident Management Strategic Plan".

The primary source of information for the Strategic Plan was input provided by incident management stakeholders in Kentucky. A literature review, a Traffic Incident Management (TIM) Self-Assessment (of both rural and urban regions in the State), and an analysis of Kentucky highway incident case studies were also used in the Strategic Plan development.

Kentucky's Highway Incident Management Strategic Plan consists of a mission statement, 4 goals, 16 objectives, and 49 action strategies. The action strategies are organized into three tables and are arranged by priority (high, medium, and low) and recommended time frame (immediate, mid-term, and long-term) for implementation. A quick-reference index is included at the end of the document to help locate key items within the action strategies.



# KENTUCKY'S HIGHWAY INCIDENT MANAGEMENT STRATEGIC PLAN

## Mission Statement

The mission of the Kentucky Transportation Cabinet, with regard to incident management, is to improve safety and reduce traveler delay by implementing an effective, multi-agency incident management program.

## Goals

Four basic goals have been identified as the focus of Kentucky's Highway Incident Management Strategic Plan. These goals reflect long-term, system-level aspirations and are based on the input of Kentucky's stakeholders and other national, state, and regional plans.

<b>GOALS OF KENTUCKY'S HIGHWAY INCIDENT MANAGEMENT STRATEGIC PLAN</b>	
<b>G1.</b>	<b>Improve Safety of Responders, Highway Workers, and Motorists</b>
<b>G2.</b>	<b>Reduce Traffic Delay</b>
<b>G3.</b>	<b>Improve Motorist Awareness</b>
<b>G4.</b>	<b>Improve Responder and Highway Worker Preparedness</b>

## Objectives

Sixteen objectives have been identified. Each of these objectives can be related to at least one goal. The objectives are intended to be measurable, although some are not easily measured. The objectives, along with their corresponding goals and performance measures, are summarized in the table below.

	<b>Objectives</b>	<b>Related to Goal(s)</b>	<b>Possible Performance Measures</b>
O1.	To improve safety of motorists and workers during construction and maintenance activities	G1	Number of injuries and fatalities in work zones or during maintenance activities
O2.	To reduce the number of secondary crashes	G1, G2	Number of secondary crashes
O3.	To increase the knowledge of motorists regarding the proper response to an incident	G1, G2	Driver opinion survey
O4.	To enhance training of responding agencies	G1, G2, G4	Changes to training; possible survey of responders
O5.	To reduce the number of responders	G1	Number of responders injured or

<b>Objectives</b>		<b>Related to Goal(s)</b>	<b>Possible Performance Measures</b>
	injured or killed while working at an incident scene		killed while working at an incident scene
O6.	To reduce delays for motorists during construction and maintenance activities	G2	Hours of traveler delay in work zones or during maintenance activities
O7.	To speed the clearing of incidents and reopening of the roadway	G2	Time to reopen the roadway for incidents
O8.	To improve planning and preparation for incidents	G4	Monitor frequency of training on the subjects
O9.	To detect incidents and assess what is needed on the scene more quickly	G2	Time to detect incidents
O10.	To speed the response and cleanup of hazardous material incidents	G2	Time to respond and clear hazardous material incidents
O11.	To reduce the response time of agencies to the scene of an incident	G2	Time to respond to the scene of an incident
O12.	To improve the communication and coordination of all responding agencies	G2	Monitor frequency of training on the subjects
O13.	To make more efficient and effective use of resources	G2	Conduct after action reviews on selected cases
O14.	To improve the quality and quantity of information available to the public	G3	Amount and type of information available to the public; motorists survey
O15.	To improve the flow of information between responding agencies (on the scene) and the statewide TOC or local traffic management center	G3	Record of incident information flowing to TOC or local TMC
O16.	To improve information dissemination	G3	Record of incident information passed to 511 system, VMS displays, HAR, media, etc.

### **Action Strategies**

The following items are action strategies that are recommended for implementation. Each strategy is summarized and includes information on the specific steps necessary to implement the strategy, along with potential obstacles. Each strategy is also related to one or more specific objectives.

**A1. Develop Emergency Vehicle Lighting Guidelines and Encourage Responding Agencies to Adopt their Own Policy**

Responders are at risk as they manage and clear an incident scene. To reduce the number of responders that are injured or killed while working at an incident, they need to be more visible to passing motorists. Care should be taken to provide adequate lighting for the scene without blinding motorists. Many agencies have developed emergency vehicle lighting plans that attempt to optimize the use of emergency lights. Motorists need to see that there is an incident, but should not be distracted by all of the flashing lights.

Specific Steps to Implementation

- A1.1 Develop guidelines for an emergency vehicle lighting plan and distribute to responders
- A1.2 Investigate ways to obtain statewide acceptance of these guidelines
- A1.3 Implement a statewide policy or encourage local incident management teams to work with their local responding agencies to adopt their own policies on emergency vehicle lighting

Potential Obstacles to Implementation

Requires policy change or development for responder agencies

Objectives Met Through the Implementation of this Strategy

O2, O4, O5

## **A2. Investigate the Use of Portable Barrier Curtains and Implement on a Pilot Project Basis**

Some agencies in other states are using barrier curtains to reduce the distraction of motorists during their management and clearance of a major incident. These portable “curtains” are strategically placed to block the view of passing motorists. The use of barrier curtains should be investigated and implemented on a pilot project basis. An evaluation should be conducted to determine the benefit received from using the barrier curtains. Additional implementation would be based upon the findings of the evaluation.

### Specific Steps to Implementation

- A2.1 Investigate the use of portable barrier curtains in other areas
- A2.2 Purchase portable barriers curtains and implement on a pilot project basis
- A2.3 Evaluate the benefits of using the barrier curtains

### Potential Obstacles to Implementation

Difficulty of use

### Objectives Met Through the Implementation of this Strategy

O1, O2, O5, O6

**A3. Better Understand the Problem with Secondary Crashes in Kentucky and Identify Means to Address these Problems**

The problem of secondary crashes is not well defined for Kentucky. It is estimated nationally, however, that about 20% of all crashes are secondary in nature. In addition, it is not uncommon for the secondary crash to be more severe than the original crash. The secondary crash problem in Kentucky should be better understood and steps should be taken to reduce the number and severity of secondary crashes.

Specific Steps to Implementation

- A3.1 Identify the problem associated with secondary crashes including how many occur, the circumstances under which they occur, and how serious they are
- A3.2 Identify operations, technology, and enforcement solutions to address these specific problems
- A3.3 Implement solutions to reduce the number of secondary crashes

Potential Obstacles to Implementation

Collision Reporting Analysis for Safer Highways (CRASH) Form change required to identify secondary crashes

Objectives Met Through the Implementation of this Strategy

O2

**A4. Improve the Warning System for the End of the Traffic Queue at Major Incidents and During Construction or Maintenance Activities**

There are two areas of major concern when working an incident scene: the scene itself and the end of the traffic queue. The end of the traffic queue, where traffic is unexpectedly coming to a complete stop, is often forgotten. Plus, this problem is complicated by the fact that the location of the end of the queue is constantly changing.

To address this issue, the Kentucky Transportation Cabinet (KYTC) may want to consider equipping their state highway trucks with citizens' band (CB) radios. This would allow KYTC to broadcast a message to anyone using a CB concerning stopped traffic. Another option is to equip law enforcement officers with CB radios. They can broadcast a message to CB users while using their lights to get the attention of other motorists. In both situations, the KYTC or law enforcement vehicle would need to move to stay at the end of the traffic queue.

Since tractor-trailers are often involved in the most serious secondary crashes, this practice may prevent or at least reduce the seriousness of some crashes. In addition, the drivers of the tractor-trailers could be encouraged to slow down early and make use of their hazard lights to inform other motorists of an impending situation. This practice could be implemented on a pilot project basis. The benefits should be identified and recommendations should be made regarding further implementation.

**Specific Steps to Implementation**

- A4.1 Identify one area and implement the use of CB radios in KYTC highway vehicles and/or law enforcement vehicles
- A4.2 Evaluate the benefits of using CB radios in KYTC highway vehicles and/or law enforcement vehicles

**Potential Obstacles to Implementation**

None identified

**Objectives Met Through the Implementation of this Strategy**

O1, O2

**A5. Identify and Address the Delays and Safety Problems Associated with Work Zones and Maintenance Activities**

Work zone and highway maintenance activities are considered incidents because of the negative impact they have on traffic flow. Proper planning for managing construction and maintenance activities is critical and can reduce delays and improve safety for motorists. KYTC needs a set of policies for reducing delay and improving safety in work zones and during maintenance activities. District personnel and KYTC's construction contractors should be trained in these policies in order to effect a change. KYTC should use construction contracts and conduct maintenance activities that make use of off-peak or full roadway closures to reduce impacts on traffic. In addition, incentives and disincentives should be used to keep contractors on schedule. Lane rental agreements may also be an effective way to minimize roadway closures. In some critical areas, KYTC may need to establish agreements with towing companies to clear incidents from work zones as quickly as possible.

Law enforcement presence in work zones can help reduce the speeds of motorists and improve safety for everyone. Their presence should be utilized whenever possible. For long-term construction projects, photo speed enforcement should be considered as an alternative to having law enforcement on site.

Specific Steps to Implementation

- A5.1 Identify the current delays and safety problems associated with work zones and maintenance activities
- A5.2 Develop a set of policies for reducing delay and improving safety in work zones and during maintenance activities
- A5.3 Train KYTC District personnel and contractors in the policies and institute changes
- A5.4 Evaluate the benefits after the changes in policy

Potential Obstacles to Implementation

- Requires policy changes
- Requires additional training for large number of personnel

Objectives Met Through the Implementation of this Strategy

O1, O2, O6

**A6. Initiate a Public Information Campaign for Motorists on the Proper Response to an Incident**

A public information campaign should be used to inform the motorists of incident management initiatives such as quick clearance legislation, move-over laws, crash investigation sites, 511, etc. KYTC should make use of current driver education and informational brochures, such as the Kentucky Drivers' Manual and Kentucky's official state highway map, to distribute this information. Incident management information should be provided to Drive Smart for distribution as well. Highway signs and billboards are also an effective way to communicate to motorists. In addition, an incident-related website should be established for public education and traveler information. Public service announcements pertaining to incident management should be issued on radio and television.

Specific Steps to Implementation

- A6.1 Develop a public information campaign to be run on radio and television
- A6.2 Incorporate "How to Respond to an Incident" in current driver information publications (maps, driver education information, etc.) and license test
- A6.3 Distribute information on "How to Respond to an Incident" via the Drive Smart program, KYTC's web page, etc.
- A6.4 Install additional roadway signage to promote incident management initiatives
- A6.5 Establish a website for incident information and public education

Potential Obstacles to Implementation

Change to Kentucky Drivers' Manual  
Change to Kentucky Drivers' License Test

Objectives Met Through the Implementation of this Strategy

O1, O2, O3, O5

## **A7. Develop and Implement Alternate Route Plans for All Critical Roadways**

Alternate routes provide motorists with the ability to move around the incident and continue their trip. Although there can be significant problems associated with implementing an alternate route, it is usually better to divert traffic than to leave motorists stranded due to the incident. Kentucky already has alternate route plans for all sections of its interstates and parkways. These plans need to be reviewed and updated on a regular basis to ensure the routes remain adequate for the traffic. Other critical routes should be identified based upon traffic volume and/or the number of incidents. These routes should also have designated alternate routes to be used in the event of a major incident. Design and/or traffic operations changes may be necessary to ensure the alternate routes can accommodate all types of traffic. It may also be necessary to adjust signal timing plans to accommodate the additional traffic.

Detour routes often require significant manpower to institute and maintain. Usually, law enforcement officers are assigned to mark the route in order to prevent motorists from becoming lost along the way. Trailblazing detour signs should be installed on the most frequently used alternate routes. These highway signs, when flipped down to “detour mode”, serve to designate the route without the excessive use of manpower. Flashers installed on the signs may make them more visible to passing motorists.

### Specific Steps to Implementation

- A7.1 Identify routes (other than interstates and parkways) that need alternate routes due to the number of incidents and/or the volume of traffic
- A7.2 Develop alternate routes for these “secondary” roadways
- A7.3 Review and update the current alternate routes for all interstates and parkways
- A7.4 Make improvements to the routes as necessary in order to handle all types of traffic and to help motorists find their way
- A7.5 Install trailblazing detour signs on key alternate routes
- A7.6 Disseminate detour information to appropriate responders and media
- A7.7 Educate motorists on alternate routes and trailblazing signs

### Potential Obstacles to Implementation

Road-worthiness of flip-down detour signs  
Multi-agency effort

### Objectives Met Through the Implementation of this Strategy

O1, O2, O6, O8, O13, O14

## **A8. Implement Emergency Response Vehicle Parking Plans**

Emergency response vehicle parking plans allow for a more organized scene and provide easier access and departure for responding agencies. These plans may also address ways to protect the scene using responder vehicles. A guideline for this should be distributed to each local incident management team. Each team should adopt their own policy on emergency response vehicle parking.

### Specific Steps to Implementation

- A8.1 Develop guidelines for emergency response vehicle parking and distribute to local incident management teams
- A8.2 Encourage local incident management teams to adopt their own policy on emergency response vehicle parking at the scene of an incident

### Potential Obstacles to Implementation

Multi-agency effort  
Change in policy

### Objectives Met Through the Implementation of this Strategy

O5, O7, O8, O12

## **A9. Develop an Open Roads Policy for Interstates and Parkways**

Many areas have established an open roads policy in order to keep roadway closures at a minimum. Kentucky currently has no official policy regarding the closing and opening of the roadway by emergency response personnel for incidents. (The Secretary of Transportation is authorized to close the roadway for emergencies.) Fire, law enforcement, and KYTC need to work together to develop a statewide policy for opening the roadway. One part of the policy would include a timeline for reopening the roadway based upon the type of incident that occurred. Local incident management teams could work with their local responders to adopt this policy.

### Specific Steps to Implementation

- A9.1 Work with fire, law enforcement, and KYTC to develop an open roads policy for Kentucky
- A9.2 Work through the local incident management teams to get responding agencies to adopt this policy

### Potential Obstacles to Implementation

- Multi-agency effort
- Policy change
- Concerns about the safety of responders

### Objectives Met Through the Implementation of this Strategy

O2, O7, O8

## **A10. Implement a Statewide Policy Concerning the Cleanup of Small Fuel Spills**

Hazardous material (HAZMAT) spills require more time and effort than most incidents because of the extra precautions and procedures that are taken for cleanup. However, many HAZMAT spills are actually just small fuel spills. This type of hazardous material could be handled differently in order to open the roadway more quickly. Kentucky needs to investigate the requirements for small fuel spills and then evaluate what other states or regions are doing to quickly handle them. For instance, it may be possible to make use of contractors with short turnaround times for small spills. It may also be necessary to implement a statewide policy for addressing this issue and train responders appropriately.

### Specific Steps to Implementation

- A10.1 Identify the requirements regarding the cleanup of small fuel spills
- A10.2 Identify best practices of other states and regions with regard to small fuel spills
- A10.3 Develop a policy for addressing the small fuel spill problem and establish the necessary agreements to implement the changes
- A10.4 Provide training to responders

### Potential Obstacles to Implementation

- Multi-agency effort
- Policy change

### Objectives Met Through the Implementation of this Strategy

O7, O8, O10

## **A11. Develop and Implement Hazardous Material Ordinances for Every County**

It is not unusual for hazardous material carriers or owners to use their own cleanup company when their load has spilled. Many times this creates a problem since their cleanup company may be hours away from the incident. In order to speed up the cleanup of HAZMAT spills, every county needs to have a signed HAZMAT ordinance and understand how to use it. This ordinance would allow local government agencies to call a HAZMAT cleanup contractor of their choice in the interest of safety. The local agencies would be entitled to receive payment from the carrier or owner of the material for the cleanup.

### Specific Steps to Implementation

- A11.1 Provide information to each county regarding the significance of a HAZMAT ordinance and how it can be used
- A11.2 Identify the counties that do not have a HAZMAT ordinance
- A11.3 Contact and provide assistance to counties who need to develop their HAZMAT ordinance
- A11.4 Make other responders aware of the HAZMAT ordinance and how it can be used

### Potential Obstacles to Implementation

Passage of Ordinance

### Objectives Met Through the Implementation of this Strategy

O4, O7, O8, O10

**A12. Implement Quick Clearance and Vehicle Removal Laws that Include Clauses for Limiting Liability to Responders**

Quick clearance and vehicle removal laws improve safety for motorists by improving traffic flow and getting people out of the lanes of travel as quickly as possible. Quick clearance may be in the form of a policy, but is usually more successful when legislated. These laws require motorists to move their vehicles when it is within their ability to do so. They also limit the liability of responding agencies who are acting under the direction of the incident commander to remove vehicles or cargo in the interest of safety. Vehicle removal laws pertain to abandoned vehicles and establish legislation for the removal of vehicles within a certain amount of time of being identified and marked as abandoned.

Specific Steps to Implementation

- A12.1 Identify the benefits of quick clearance and vehicle removal laws in other states
- A12.2 Formulate a policy or potential legislation for implementation
- A12.3 Implement a quick clearance policy or present quick clearance information to the General Assembly and recommend passage of the legislation

Potential Obstacles to Implementation

Legislative or policy change needed  
Resistance from insurance companies

Objectives Met Through the Implementation of this Strategy

O2, O7

### **A13. Update the CRASH Reporting Form to Encourage Quick Clearance**

Kentucky's CRASH reporting form is not set up to promote quick clearance. Ideally, information that is needed before vehicles are moved should be placed in one section of the form. Once this information is recorded, the vehicles and debris could be moved to another location and the report finished.

#### Specific Steps to Implementation

A13.1 Identify the information that needs to be recorded prior to reopening the roadway

A13.2 Work to implement quick clearance changes to the CRASH form

#### Potential Obstacles to Implementation

Change required for CRASH form

#### Objectives Met Through the Implementation of this Strategy

O7

#### **A14. Implement Push Bumpers for Responder Vehicles**

Often minor crashes or stalled motorists block lanes of traffic and cause traffic flow problems and safety hazards for other motorists. By equipping responder vehicles with push bumpers, vehicles can be removed from the lanes of traffic with very little effort. Some agencies in Kentucky currently use push bumpers to remove vehicles from the lanes of travel. The benefits received through the use of this equipment should be documented and presented to other agencies in Kentucky. Using this information, agencies should be encouraged to deploy push bumpers on their own vehicles.

##### Specific Steps to Implementation

- A14.1 Identify agencies that currently use push bumpers and document the benefits received
- A14.2 Summarize information on push bumpers for presentation to local incident management teams and inclusion in training programs
- A14.3 Encourage agencies to implement push bumpers on their vehicles

##### Potential Obstacles to Implementation

Liability concerns

##### Objectives Met Through the Implementation of this Strategy

O2, O7

**A15. Identify Crash Investigation Sites and Educate Responders in the Benefits of Moving the Incident off the Roadway**

Crash investigation sites allow responders to move an incident from the roadway to a safer location. Specific crash investigation sites may be built or certain areas (such as parking lots) may be designated for this purpose. The areas should be identified (or built, when necessary) in locations where there are high volumes of traffic and/or high incident rates. Responders will need to be informed of these locations and educated on their use.

**Specific Steps to Implementation**

- A15.1 Identify possible locations (off the roadway) for crash investigation in high incident areas
- A15.2 Educate responders in the benefits of moving incidents off the roadway and identify possible areas that could be used for crash investigation

**Potential Obstacles to Implementation**

- Multi-agency effort
- Lack of adequate space for sites
- Policy changes may be required

**Objectives Met Through the Implementation of this Strategy**

O2, O4, O5, O7, O8

## **A16. Perform a Comparative Analysis of Crash Reconstruction Equipment and Make Recommendations for Implementation**

Frequently, crash sites need to be investigated thoroughly to determine exactly what occurred. Investigating the crash can be a time consuming task that often frustrates those delayed in traffic and can be a safety hazard for motorists. Currently, most law enforcement agencies in Kentucky use either a tape measure or total station surveying equipment to record and document the crash scene measurements. Photogrammetry is a new method of reconstruction that appears to take less time on scene. A comparative analysis should be conducted of all the primary reconstruction methods and recommendations should be made regarding implementation of these methods.

### Specific Steps to Implementation

- A16.1 Perform a comparative analysis of total station, photogrammetry, and global positioning systems (GPS) equipment for crash reconstruction
- A16.2 Make recommendations on the use of crash reconstruction equipment to help clear the scene of an incident more quickly
- A16.3 Incorporate the findings on crash reconstruction equipment into the basic training for law enforcement and the Highway Crash Site Management (HCSM) course

### Potential Obstacles to Implementation

Reluctance of law enforcement community

### Objectives Met Through the Implementation of this Strategy

O7

**A17. Implement an Incident Response Team as a Pilot Project in a High Incident Area or on a Critical Route**

Some areas use incident response teams for major incidents. These interdisciplinary teams have specialized training in incident management and can often reduce the time required to clear a major incident. A high incident area or critical route should be identified to implement an incident response team as a pilot project. Further implementation should be based on an evaluation identifying the benefits received from the incident response team.

Specific Steps to Implementation

- A17.1 Identify a high incident area or critical route for implementation of an incident response team
- A17.2 Identify and train a group of responders to be an incident response team
- A17.3 Use the incident response team at a few major incidents
- A17.4 Evaluate the benefits of using the incident response team and make recommendations on further implementation

Potential Obstacles to Implementation

Multi-agency effort

Objectives Met Through the Implementation of this Strategy

O7, O8, O12

**A18. Expand the Freeway Service Patrols in Urban Areas and Consider Implementation on Some Rural Corridors**

Freeway service patrols (FSP) help to remove vehicles involved in minor incidents from the roadway and assist stranded motorists. These programs are reported to be extremely popular with the public everywhere they are implemented. Guidelines, based upon the number of incidents and the volume of traffic, should be established to determine where FSPs should be implemented or expanded.

Specific Steps to Implementation

A18.1 Establish guidelines for the use of FSPs and identify areas or corridors that are in need of them

A18.2 Implement FSPs

Potential Obstacles to Implementation

None identified

Objectives Met Through the Implementation of this Strategy

O2, O7, O9, O11

**A19. Implement a Pilot Project That Makes Use of an On-Scene Traffic Manager at all Major Incidents**

Often the duty of traffic management gets lost in all the efforts undertaken at the scene of an incident. By designating an on-scene traffic manager, the movement of traffic becomes a more critical issue. The result is better traffic flow, fewer delays, and improved safety for motorists. One location should be identified and a pilot project should be conducted making use of an on-scene traffic manager. This method of traffic management should be evaluated and recommendations made for further implementation.

Specific Steps to Implementation

- A19.1 Identify a location for a pilot project concerning the use of a traffic manager
- A19.2 Identify the duties of an on-scene traffic manager and the type of incident that might require the use of an on-scene traffic manager
- A19.3 Work with the local incident management team in the identified area to begin implementing a traffic manager at all major incidents
- A19.4 Evaluate the benefits of using a traffic manager and make recommendations for further implementation
- A19.5 Provide guidelines for involvement of appropriate KYTC personnel

Potential Obstacles to Implementation

Multi-agency effort  
Convincing responders to change the way they do things

Objectives Met Through the Implementation of this Strategy

O2, O4, O5, O7

## **A20. Implement a Towing Incentive Program as a Pilot Project and Study the Benefits**

Some areas have implemented towing incentive programs to reduce the response time by towing companies and clear the roadway of incidents more quickly. There are several actions that may need to be taken to improve towing response times, including changes to towing regulations and contracts. An investigation of the best practices regarding towing response times should be conducted. These findings should be used to conduct a pilot project for one area or critical corridor in the state. The project should be evaluated and the findings used to determine further implementation.

### Specific Steps to Implementation

- A20.1 Identify an urban area or corridor that needs improved response time by towing
- A20.2 Identify best practices in other states and regions with regard to towing response times
- A20.3 Develop a towing incentive program for the area or corridor identified
- A20.4 Implement the towing incentive program as a pilot project
- A20.5 Evaluate the benefits of the towing incentive program

### Potential Obstacles to Implementation

Possible policy or legislative change required

### Objectives Met Through the Implementation of this Strategy

O1, O2, O6, O7, O11

## **A21. Change in Policy or Legislation Regarding the Removal of Deceased Victims**

In many areas, deceased victims are left in the roadway until claimed by the medical examiner or coroner. This is unfortunate for the victim's family and can be a source of distraction to passing motorists. In addition, this practice leads to unnecessary delay in reopening the roadway. Many areas have changed their policy or legislation to prevent these delays. Other state and local policies should be reviewed in order to identify the best practices with regard to removal of deceased victims. An agreement should be reached with state and local medical examiners to reduce the time taken to remove a deceased victim from the scene of an incident.

### Specific Steps to Implementation

- A21.1 Identify best practices regarding the removal of deceased victims from the roadway
- A21.2 Work with state and local medical examiners to develop a policy (or legislation) regarding the removal of deceased victims from the roadway
- A21.3 Present this information to Kentucky's General Assembly and recommend passage or work with medical examiners to institute a policy change

### Potential Obstacles to Implementation

Policy or Legislative Change

### Objectives Met Through the Implementation of this Strategy

O7, O8

## **A22. Implement a Highway Incident Reporting Hotline for Motorists**

An influx of calls to report a highway incident can overwhelm 911 call-takers. A separate phone line to report incidents would be beneficial. The 511 system could be used to not only receive incident information, but to report incident information. The first option on the system could to receive or report incident information. If a caller wishes to report an incident, the call should be transferred to an operator.

### Specific Steps to Implementation

- A22.1 Setup the 511 system to take incident reports
- A22.2 Establish a system of 511 call-takers in the TOC
- A22.3 Implement changes to the 511 system

### Potential Obstacles to Implementation

Additional staffing and hardware may be required  
Prank calls create a verification problem

### Objectives Met Through the Implementation of this Strategy

O9

## **A23. Implement a Pilot Project Using Automatic Cargo Identification Technology on Hazardous Material Vehicles**

Automatic cargo identification can be used to quickly and accurately identify the material on a commercial vehicle. In the event of an incident, quick and accurate identification means a safer working environment for responders and a quicker cleanup. The technologies that are available for automatic cargo identification need to be investigated. Also, there are many federal requirements regarding the transport of hazardous material. These requirements need to be investigated to determine how an automatic cargo identification system could be implemented. A small pilot project should be implemented to test the use of automatic cargo identification equipment. The benefits should be evaluated and recommendations made for further implementation.

### Specific Steps to Implementation

- A23.1 Investigate the technologies available for automatic cargo identification
- A23.2 Investigate the requirements (federal and state) that would need to be in place (or changed) to implement an automatic cargo identification system
- A23.3 Implement a small pilot project displaying automatic cargo identification
- A23.4 Evaluate the benefits of using automatic cargo identification

### Potential Obstacles to Implementation

Possible resistance from trucking industry

### Objectives Met Through the Implementation of this Strategy

O9, O10

**A24. Implement Reference and Ramp Markers in High Incident Areas or on Critical Routes**

One of the biggest problems with motorists reporting incidents is that many can not accurately report their location to the call-taker. Reference and ramp markers can help to remedy this problem. Reference markers are a detailed form of mile markers that are spaced anywhere from 1/10 of a mile to ½ of a mile apart, depending on the region. These signs also include information on the route number and direction of travel. Ramp markers identify the entrance or exit ramp of travel. These types of reference and ramp markers should be implemented in Kentucky in high incident areas and on critical routes.

Specific Steps to Implementation

- A24.1 Identify critical areas or routes that need detailed reference and ramp markers
- A24.2 Implement reference and ramp markers where needed

Potential Obstacles to Implementation

None identified

Objectives Met Through the Implementation of this Strategy

O9, O11

## **A25. Implement Barrier Openings or Emergency Crossovers where Needed**

Lack of adequate access to an incident on parkways and interstates can be a serious problem for responders. Response times are increased when the scene is difficult to access. It may be necessary to locate barrier openings or emergency crossovers on parkways and interstates if there are long distances between exits.

### Specific Steps to Implementation

A25.1 Evaluate best practices regarding barrier openings and emergency crossovers, including how to provide limited access

A25.2 Identify locations where barrier openings or emergency crossovers are needed

A25.3 Implement barrier openings or emergency crossovers as necessary

### Potential Obstacles to Implementation

Limitations with some terrain

Safety concerns

### Objectives Met Through the Implementation of this Strategy

O11

**A26. Evaluate Automatic Vehicle Location and Computer Aided Dispatch for Response Vehicles**

Automatic vehicle location (AVL) and computer aided dispatch (CAD) systems can help dispatchers route the closest emergency vehicle to the scene of an incident. The intent is to reduce the time taken to respond to the incident while making the most efficient use of resources. One responding agency already using this technology should be identified for this effort. The AVL and CAD equipment should be evaluated to determine the benefits received by the responding agency and motorists. Further implementation should be based upon the findings of the evaluation.

**Specific Steps to Implementation**

A26.1 Identify one agency using AVL and CAD for emergency response vehicles for an evaluation

A26.2 Evaluate the benefits for agencies that have vehicles equipped with AVL and CAD

A26.3 Make recommendations for further implementation of AVL and CAD

**Potential Obstacles to Implementation**

Privacy issues

Lack of communications infrastructure to support AVL/CAD

**Objectives Met Through the Implementation of this Strategy**

O11, O13

## **A27. Identify Best Practices with Regard to Communications Interoperability and Implement Changes**

Improved communication among responding agencies is a critical way to improve the management and clearance of an incident scene. Unfortunately, there are many barriers to effective communication among responding agencies. For instance, most agencies have different radio systems and use their own language or “lingo” that might not be understandable to other agencies. To address these issues, the best practices for improved interagency communication should be identified. These findings should be distributed to responders and they should be encouraged to implement changes to improve communication among responding agencies. Local agreements may need to be established to solidify these changes.

### Specific Steps to Implementation

- A27.1 Identify best practices from other states and regions with regard to communications interoperability
- A27.2 Develop and distribute information to responding agencies
- A27.3 Work with incident management teams to develop local agreements concerning communications interoperability

### Potential Obstacles to Implementation

Multi-agency effort

### Objectives Met Through the Implementation of this Strategy

O12

## **A28. Make Use of Equipment Storage Sites as a Pilot Project in One Critical Area**

Equipment storage sites are used to provide easier access to resources in critical areas. Equipment typically stored may include traffic cones or barrels, portable message signs, and cleanup materials. A test location should be identified and an equipment storage site established. The benefits of using the storage site should be documented and recommendations made for further implementation.

### Specific Steps to Implementation

A28.1 Identify an area for a pilot project for equipment storage sites

A28.2 Implement the pilot project for equipment storage sites

A28.3 Evaluate the benefits of using equipment storage sites and make recommendations for further implementation

### Potential Obstacles to Implementation

Multi-agency effort

Lack of adequate space

### Objectives Met Through the Implementation of this Strategy

O7, O8, O13

**A29. Provide 24-Hour Incident Response by All KYTC District Offices**

Although KYTC does respond to an incident whenever called upon, personnel may not respond as quickly as needed. KYTC needs to evaluate the current response time by all KYTC district office personnel and establish a standard for responding to incidents 24-hours a day. A policy may be needed to establish the appropriate response times by KYTC.

Specific Steps to Implementation

- A29.1 Evaluate the current response times by all KYTC district offices
- A29.2 Develop a policy for incident management response by the KYTC
- A29.3 Evaluate KYTC's response times after implementation of the policy

Potential Obstacles to Implementation

- Policy change
- Insufficient resources

Objectives Met Through the Implementation of this Strategy

O7, O11

**A30. Enhance the Capability of Current Traffic Management Centers and Implement Other Centers, As Needed**

Traffic management centers (TMC) play a critical role in the detection and verification of incidents. Quick detection and verification allow for a quick, appropriate response by agencies. Currently there are four regional TMCs and a statewide Transportation Operations Center (TOC). The four regional TMCs are located in Lexington, Louisville, Middlesboro, and Northern Kentucky / Cincinnati. These TMCs (or the TOC) may need to expand their capabilities or their service areas in order to improve incident detection and verification. It is also possible that other small urban areas in the state may need their own traffic management centers.

Specific Steps to Implementation

A30.1 Identify the most critical needs of the regional TMC and statewide TOC

A30.2 Implement enhancements to the systems or establish new systems as needed

Potential Obstacles to Implementation

None identified

Objectives Met Through the Implementation of this Strategy

O9, O14, O15, O16

**A31. Develop an Architecture for Sharing Incident Information among Responding Agencies, with the Statewide TOC, and (where applicable) with Local TMCs**

When incident information is shared among responding agencies and also shared with the statewide TOC and the associated TMC, appropriate and timely information can be provided to motorists. Sharing appropriate information also leads to less confusion about the incident and quicker response times for agencies. The first step in sharing incident information is to identify what information is available from each agency and the associated traffic operations center. Next, it is important to identify what information is needed by each agency. For example, emergency response dispatchers may want to access video feeds from the traffic management centers in order to determine more precise information about an incident.

An architecture (or plan) should be established for sharing the appropriate incident information among agencies. Kentucky's Statewide ITS Architecture can be used as a starting point for this effort, but additional detail about the specific information (and when it needs to be distributed) should be identified. Agreements should be drafted and signed by participating agencies to solidify the sharing of information.

Specific Steps to Implementation

- A31.1 Identify what are the critical pieces of information, who can provide them, and who needs them
- A31.2 Develop an architecture for sharing incident information among the appropriate agencies
- A31.3 Work on the state level and with the local incident management teams to develop agreements among responding agencies and traffic management centers to share the appropriate information

Potential Obstacles to Implementation

Multi-agency effort  
Possible change to the Condition Acquisition and Reporting System (CARS)

Objectives Met Through the Implementation of this Strategy

O6, O7, O8, O9, O10, O11, O12, O13, O14, O15, O16

**A32. Identify and Address the Issues with Providing Timely Incident Information to the Public**

Traveler information needs to be readily available to the public, either on demand or when an emergency warrants it. Depending on the situation, it can be very difficult to get timely information to motorists. This may be due to the lack of appropriate infrastructure, changes in motorists' behavior, or some other reason. In many parts of the state, there are areas without cell phone coverage. Intelligent Transportation Systems (ITS) technology is not as accessible in some of the rural regions. There is also a significant decline in the use of the radio in vehicles. All these challenges make it more difficult to provide timely information to the public. This problem should be studied, and appropriate recommendations should be developed and implemented. For example, a statewide radio channel and web site may be needed to provide incident information to motorists.

Specific Steps to Implementation

A32.1 Identify the critical issues with providing timely information to the public

A32.2 Implement improvements to address these critical issues

Potential Obstacles to Implementation

Isolated areas of the State

Objectives Met Through the Implementation of this Strategy

O14, O16

**A33. Identify Critical or “Decision Point” Locations Where ITS Technology should be Located to Disseminate Incident Information**

To provide incident information to motorists in an effective manner, “decision point” locations need to be identified. These “points” refer to places where motorists can receive incident information and still have time to take an alternate route or postpone their trip before becoming stranded in backed-up traffic. The key is to locate variable message signs (VMS) or highway advisory radio (HAR) in these places as a means to communicate with motorists.

**Specific Steps to Implementation**

A33.1 Identify high incident areas that also have good alternate routes

A33.2 Identify the “decision point” locations and the alternate routes for each of these areas

A33.3 Implement VMS and/or HAR in the “decision point” locations

**Potential Obstacles to Implementation**

Physical or jurisdictional barriers to installing equipment

**Objectives Met Through the Implementation of this Strategy**

O6, O13, O14, O16

### **A34. Partner with the Media for Incident Information Dissemination**

The media can be very effective in getting incident information to the public. Therefore it is essential that relationships with the media be established prior to a major incident. For each major incident, a single public information officer (PIO) should be identified to communicate the appropriate information to the media. PIOs should be trained to provide information including: the location of the incident, how long the roadway will be closed or adversely affected, and information on detour routes (if applicable). Information should be updated at regular intervals.

#### Specific Steps to Implementation

- A34.1 Identify local media contacts for all local incident management teams and include them as part of the team
- A34.2 Designate a single PIO for each incident
- A34.3 Develop and provide training for the PIOs
- A34.4 Develop a dissemination plan

#### Potential Obstacles to Implementation

Multi-agency effort

#### Objectives Met Through the Implementation of this Strategy

O12, O13, O14, O16

### **A35. Identify the Current Problems with the 511 System and Implement Strategies for Improving the System**

Although the 511 system has been very beneficial in disseminating incident information to the public, there are ways the service could be improved. To identify the improvements that are needed, an operator survey and user survey should be conducted. The operator survey should be conducted with agencies that operate the system and/or provide information to the system. It may be that some agencies are not entering or cannot enter the appropriate data into the system. Some agencies may have implemented changes that would make additional information available. The user survey should focus on the functionality of the system and the quality of the information received. The 511 system could also be utilized as an incident reporting hotline for motorists. The findings from these surveys can be used to enhance the current 511 system.

#### **Specific Steps to Implementation**

- A35.1 Conduct a user survey regarding the 511 system
- A35.2 Conduct an operator survey regarding the 511 system
- A35.3 Develop a strategy for making improvements to the 511 system and establish agreements with responding agencies as needed
- A35.4 Implement changes to the 511 system

#### **Potential Obstacles to Implementation**

Multi-agency effort

#### **Objectives Met Through the Implementation of this Strategy**

O9, O14, O15, O16

### **A36. Promote the Use of the National Incident Management System**

The National Incident Management System (NIMS) is the national framework for interagency coordination and command for incident management. States are required to be compliant with NIMS by September 30, 2005. Unfortunately, many responders do not currently use or understand this system. Simple information on this system needs to be developed and disseminated to responding agencies. All responding personnel need to be trained in NIMS.

#### Specific Steps to Implementation

- A36.1 Develop simple informational brochures on NIMS and the importance of using it at the scene of an incident
- A36.2 Distribute and present information on NIMS to responding agencies
- A36.3 Require on-going training on NIMS by all responding personnel (paid and volunteer)

#### Potential Obstacles to Implementation

None identified

#### Objectives Met Through the Implementation of this Strategy

O4, O12

**A37. Sponsor the National Highway Institute Course on Incident Management for Responders**

The National Highway Institute (NHI) Course entitle, “Managing Traffic Incidents and Roadway Emergencies” addresses the institutional and technical aspects of the safe and efficient resolution of traffic incidents. The focus of the course is on developing interagency understanding and cooperation. This course should be offered to every local incident management team that has not already attended.

Specific Steps to Implementation

- A37.1 Identify local incident management teams that have not participated in the NHI course
- A37.2 Encourage the local incident managements that have not taken the NHI course to do so

Potential Obstacles to Implementation

None identified

Objectives Met Through the Implementation of this Strategy

O4, O8, O12

**A38. Provide Local Interagency Incident Management Training for All Responding Agencies**

Interagency training provides a good opportunity to bring responders together and help them understand the importance of a unified, coordinated effort when managing and clearing an incident scene. It is also a good opportunity for agencies to share information regarding personnel, procedures, and resources that might be helpful with the management and clearance processes. Kentucky already has a successful interagency incident management course called, “Highway Crash Site Management”. This course needs to be available to all responders throughout the state. To reach all the responders, it may be necessary to develop a train-the-trainer program for this course.

Specific Steps to Implementation

- A38.1 Provide the HCSM Course for all local incident management teams
- A38.2 Establish regional programs and trainers for the HCSM course
- A38.3 Make the HCSM workshop available to all responders

Potential Obstacles to Implementation

- Multi-agency effort
- Availability of trainers

Objectives Met Through the Implementation of this Strategy

O4, O8, O12

**A39. Develop a Course on Traffic Control for Emergency Response Personnel and Train Responders**

Emergency responders, with the exception of law enforcement, get little or no training in traffic control but yet by nature of their job often have to perform such duties. The Manual on Uniform Traffic Control Devices (MUTCD) establishes certain guidelines that need to be followed for the safety of the responders and motorists. Unfortunately, many responders are unaware of these guidelines. By developing a course on traffic control specifically for emergency responders, the safety of those responders working on-scene, as well as the traveling motorists near the scene, will be improved. This effort may include the development of a quick-reference handbook. It may also be beneficial to conduct a full-scale exercise using traffic control equipment.

Specific Steps to Implementation

- A39.1 Develop a course on traffic control for emergency response personnel
- A39.2 Provide the traffic control course for all local incident management teams
- A39.3 Incorporate this training into the basic training of emergency response personnel

Potential Obstacles to Implementation

- Change to basic training curriculum
- Conflicts with jurisdictional procedures

Objectives Met Through the Implementation of this Strategy

- O2, O4, O5

#### **A40. Enhance Training for Dispatchers**

Call-takers or dispatchers often serve as the channel through which incident information flows from agency to agency. The job done by the call-taker or dispatcher will directly affect the efforts of the responders on the scene. To improve the training of dispatchers, the current training requirements first need to be identified. From this, additional training needs should be identified. Informational checklists or flowcharts may be needed to ensure the appropriate information is collected and distributed.

##### Specific Steps to Implementation

A40.1 Identify the current training requirements for dispatchers

A40.2 Identify additional information or training that is needed and work with the dispatchers' training program to implement

##### Potential Obstacles to Implementation

Change in curriculum

##### Objectives Met Through the Implementation of this Strategy

O4, O9, O12, O15

#### **A41. Incorporate Incident Management Training into the Basic Training of All Responders**

Most responders do not receive specific training on highway incident management. This type of training needs to be incorporated into their basic training. The first step would be to identify the basic training programs for all the major emergency response agencies. Next, the basic incident management information needed for each agency would need to be identified. Then each training program would need to be contacted and asked to incorporate this incident management training into their basic curriculum.

##### Specific Steps to Implementation

- A41.1 Identify the basic training programs for all key emergency response agencies that need the training
- A41.2 Identify the incident management information that is needed by each agency
- A41.3 Work with each of the key training programs to incorporate incident management information into their basic curriculum

##### Potential Obstacles to Implementation

Multi-agency effort

##### Objectives Met Through the Implementation of this Strategy

O4

**A42. Establish a Statewide Incident Management Task Force to Coordinate Statewide Efforts and Provide Leadership and Direction for Incident Management on a Statewide Level**

A statewide incident management task force would serve to lead Kentucky's highway incident management program. Many of the action strategies within the Strategic Plan require a multi-agency effort. As such, it is important that an interagency task force is created to oversee the implementation of these strategies. The incident management task force should be composed of the heads of the state-level responding agencies. Local incident management teams should also have a representative on the incident management task force. An incident management champion within KYTC should be identified to preside over the task force. The group would meet on a regular basis (every two to three months) and review the findings of the post incident debriefings, the efforts of local incident management teams, review initiatives in other states or regions, and work on Kentucky's Highway Incident Management Strategic Plan action strategies.

**Specific Steps to Implementation**

- A42.1 Identify the agencies that should be invited to participate on the incident management task force
- A42.2 Work with the incident management task force to adopt Kentucky's Highway Incident Management Strategic Plan
- A42.3 Identify key strategies from Kentucky's Highway Incident Management Strategic Plan and work on implementation

**Potential Obstacles to Implementation**

Multi-agency effort

**Objectives Met Through the Implementation of this Strategy**

O8, O12

#### **A43. Establish or Enhance Local Incident Management Teams and Cultivate Their Development**

Local incident management teams are used in many parts of the country. These teams help to improve communication and coordination among local responders. They typically meet anywhere from every month to three or four times a year. These meetings serve as a good opportunity to promote new initiatives in incident management, like open roads policies, emergency lighting policies, etc. An effective incident management team should have representation from all local responding agencies (including the private sector). The most appropriate place to develop these teams is in large urban areas or along critical corridors. “Meet and greet” meetings may be an effective way to establish a team in a new area.

It may also be possible to expand on existing relationships through Kentucky Emergency Management (KyEM). KyEM is currently required to have an incident management team within each county that focuses on all types of incidents. Some of these teams are more active than others, and most do not have a strong focus on highway incidents. These teams should be encouraged to incorporate highway incident management into their program.

#### **Specific Steps to Implementation**

- A43.1 Identify areas where a local incident management team is needed
- A43.2 Identify and work with a local agency to foster the development of that team
- A43.3 Host a local “Meet & Greet” to kick off or reintroduce a local incident management team
- A43.4 Develop a list of critical incident management initiatives that would be beneficial to local incident management teams
- A43.5 Work with the local incident management teams to implement critical incident management initiatives
- A43.6 Work with KyEM to incorporate highway incident management initiatives into the county incident management team’s program

#### **Potential Obstacles to Implementation**

Local champion needed to keep team active  
Turf issues

#### **Objectives Met Through the Implementation of this Strategy**

O4, O7, O8, O12

#### **A44. Encourage and Aid Incident Management Teams in the Development of an Incident Response Manual**

Incident response manuals are often used by a local group of responders to document a planned response to incidents. These manuals typically designate the people and resources that are available to assist with an incident. Incident response manuals may also include special procedures that may need to be followed. These manuals are most effective when they are small, handheld reference books that can be used at the scene of an incident. Web-based response manuals can also be very useful for responders that have internet access within their vehicle. Kentucky has a Checklist for HCSM that serves as a statewide incident response manual. Local incident management teams could take the Checklist and tailor it into their own local incident response manual.

Other areas have incident response manuals that are much more detailed and include such things as a flashing lights policy, mutual aid agreements, and an open roads policy. This is not necessarily a tool to be used on scene, but a reference for responders to review prior to working an incident scene. These types of incident response manuals are also very effective in improving a multi-agency response to an incident.

#### **Specific Steps to Implementation**

- A44.1 Develop a template for an incident response manual that can be used by local incident management teams
- A44.2 Encourage and aid in the development of an incident response manual for each incident management team
- A44.3 Present and distribute the manual to local responders

#### **Potential Obstacles to Implementation**

Multi-agency effort

#### **Objectives Met Through the Implementation of this Strategy**

O8, O12, O13

#### **A45. Sponsor Post Incident Debriefings for All Major Incidents**

Post incident briefings are widely used around the country to review the actions taken during a major incident. These debriefings bring together all the responding agencies to review their actions in an effort to identify successes and opportunities for improvement. These meetings are most effective when held soon after the incident while memories are still fresh about the details. It is also beneficial to summarize the findings from the meeting and distribute them to the responding agencies. It is necessary to establish a local person who is responsible for hosting the meeting and reporting the findings. The statewide incident management task force should be informed of the findings from these meetings in order to disseminate critical information to all responding agencies across the state.

##### Specific Steps to Implementation

- A45.1 Establish criteria for the post incident debriefing meetings
- A45.2 Identify an agency or person in each Kentucky Emergency Management region and/or KYTC district who will be responsible for setting up post incident debriefings for all major incidents
- A45.3 Establish a reporting system that requires post incident debriefing meetings be summarized for the incident management task force

##### Potential Obstacles to Implementation

Multi-agency effort  
Local champion is needed

##### Objectives Met Through the Implementation of this Strategy

O4, O7, O8, O12

**A46. Incorporate a Mock Disaster Exercise as Part of the Annual Training for Responders**

Mock disasters help responders better prepare for an incident. They are able to identify potential problem areas and address them before a real incident is encountered. The type of exercise could be incorporated into the local incident management team's activities.

Specific Steps to Implementation

A46.1 Develop a mock disaster exercise

A46.2 Work with local incident management teams to incorporate the mock disaster exercise into their annual training

Potential Obstacles to Implementation

Multi-agency effort  
Logistical issues

Objectives Met Through the Implementation of this Strategy

O4, O8

**A47. Share Kentucky’s Highway Incident Management Strategic Plan with Responders and Update the Plan Regularly**

Kentucky’s Highway Incident Management Strategic Plan provides a mission and goals for the incident management program. The success of the program is very much dependent on the involvement of local incident management responders. Therefore it is critical that Kentucky’s responders are familiar with the Strategic Plan. Also, the Plan needs to be updated on a regular basis, perhaps every two years, to reflect the changing needs of the Commonwealth.

Specific Steps to Implementation

- A47.1 Present Kentucky’s Highway Incident Management Strategic Plan to all local incident management teams and encourage them to create their own local strategic plan (goals, objectives, action strategies)
- A47.2 Present Kentucky’s Highway Incident Management Strategic Plan at the statewide incident management conference
- A47.3 Setup a website to disseminate information on Kentucky’s Highway Incident Management Strategic Plan
- A47.4 Update Kentucky’s Highway Incident Management Strategic Plan every two years

Potential Obstacles to Implementation

None identified

Objectives Met Through the Implementation of this Strategy

O8

#### **A48. Establish a System for Ranking the Seriousness of Incidents**

In order for response personnel to better understand the response required by an incident and the possible affects on traffic, incidents should be ranked based upon their seriousness. This ranking should take into consideration the number and nature of injuries or fatalities, the type and number of vehicles involved, the presence of hazardous material, and the expected length of closure. This information can be used by agencies to make the appropriate response to an incident.

##### Specific Steps to Implementation

A48.1 Establish a system for ranking the seriousness of incidents

A48.2 Present this system to local incident management teams and incorporate it into all forms of incident management training

##### Potential Obstacles to Implementation

Multi-agency effort

##### Objectives Met Through the Implementation of this Strategy

O8, O13

**A49. Sponsor an Annual Statewide Conference to Encourage Interaction among Responders and Promote New Initiatives in Highway Incident Management**

A statewide conference is a good way to draw attention to the highway incident management program. By hosting the conference annually, new initiatives in incident management can be presented to responders. Local responders can also share their own best practices with other responders. Vendors could be invited to show the latest incident management technologies.

Specific Steps to Implementation

A49.1 Sponsor an annual statewide conference to encourage interaction among responders and promote new initiatives in highway incident management

Potential Obstacles to Implementation

Logistical issues

Objectives Met Through the Implementation of this Strategy

O4, O8, O12

## **Priority of Action Strategies**

Because there are so many action strategies, it is important to identify which strategies are most important. Which strategies should be given the highest priority for implementation? The following three tables organize the strategies by priority, classifying each strategy as high, medium, or low priority. The assignment of “low priority” should not be misunderstood. All the strategies identified in the Plan are important and potentially beneficial, but, on a comparative basis, some of the strategies are considered to be less important than others.

In the following tables, each strategy is also assigned a time frame for implementation. Some strategies are considered to be high-priority, but may require time for implementation. At the same time, some strategies may be low-priority items, but they can be implemented very quickly. The items listed as high-priority and designated for immediate implementation can be considered “early winners”.

The priorities assigned to the action strategies are based primarily on the input of the Study Advisory Committee. However, the priorities were also influenced by stakeholder input, the best practices (identified in Section 4.0), and the amount of time available in the schedule.

## High Priority Action Strategies

Action Strategy	Specific Steps to Implementation		
	Immediate (1 year)	Mid-term (2 to 3 years)	Long-term (3 to 5 years)
<b>A6. Public Information Campaign</b>	A6.3 A6.5	A6.1 A6.2 A6.4	
<b>A7. Alternate Route Plans</b>	A7.1 A7.2	A7.3 A7.6 A7.7	
		A7.4 A7.5	
<b>A8. Vehicle Parking Plans</b>	A8.1	A8.2	
<b>A10. Cleanup of Small Fuel Spills</b>	A10.1	A10.3	
	A10.2	A10.4	
<b>A11. HAZMAT Ordinances</b>	A11.1	A11.3	
	A11.2	A11.4	
<b>A12. Quick Clearance and Vehicle Removal</b>	A12.1	A12.2 A12.3	
<b>A22. Incident Reporting Hotline</b>		A22.1 A22.2 A22.3	
<b>A24. Reference and Ramp Markers</b>	A24.1	A24.2	
<b>A27. Communications Interoperability</b>		A27.1 A27.2	
		A27.3	
<b>A33. ITS at Critical Locations</b>	A33.1	A33.3	
	A33.2		
<b>A35. 511 System Enhancements</b>	A35.2	A35.1 A35.3 A35.4	
<b>A38. Interagency Training</b>	A38.1 A38.2	A38.3	
<b>A39. Traffic Control for Emergency Responders</b>	A39.1	A39.2	A39.3
<b>A42. I.M. Task Force</b>	A42.1		
	A42.2		
	A42.3		
<b>A43. Local I.M. Teams</b>	A43.1	A43.3	
	A43.4	A43.2	
	A43.6	A43.5	
<b>A45. Post-Incident Debriefings</b>	A45.1 A45.2	A45.3	
<b>A47. Share Strategic Plan</b>	A47.1 A47.2 A47.3	A47.4	

### Medium Priority Action Strategies

Action Strategy	Specific Steps to Implementation		
	Immediate (1 year)	Mid-term (2 to 3 years)	Long-term (3 to 5 years)
A1. Emergency Vehicle Lighting	A1.1		
		A1.2 A1.3	
A4. End of Queue Warning	A4.1	A4.2	
A5. Incident Management Planning in Work Zones	A5.1	A5.2 A5.3	A5.4
A14. Push Bumpers	A14.1 A14.2	A14.3	
A16. Crash Reconstruction Equipment Comparison		A16.1 A16.2	A16.3
A17. Incident Response Team	A17.1	A17.2 A17.3	A17.4
A18. Freeway Service Patrols	A18.1	A18.2	
A19. On-Scene Traffic Manager	A19.1 A19.2	A19.3 A19.4 A19.5	
A20. Towing Incentive Program	A20.1 A20.2	A20.3 A20.4	A20.5
A21. Medical Examiner Policy	A21.1 A21.2	A21.3	
A25. Barrier Opens or Crossovers	A25.1 A25.2	A25.3	
A30. TMC Enhancement	A30.1	A30.2	
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Action Strategy	Specific Steps to Implementation		
	Immediate (1 year)	Mid-term (2 to 3 years)	Long-term (3 to 5 years)
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<b>A3. Secondary Crash Investigation</b>	A3.1	A3.2	
		A3.3	
<b>A9. Open Roads Policy</b>	A9.1	A9.2	
<b>A13. Update CRASH Form</b>	A13.1	A13.2	
<b>A15. Crash Investigation Sites</b>	A15.1		
	A15.2		
<b>A23. Automatic Cargo Identification</b>	A23.1	A23.2	A23.3
			A23.4
<b>A26. AVL and CAD</b>	A26.1	A26.2	A26.3
<b>A28. Equipment Storage Sites</b>	A28.1	A28.3	
	A28.2		
<b>A29. 24-Hour Incident Response</b>	A29.1	A29.3	
	A29.2		
<b>A31. Sharing Info Among Agencies and TMC</b>	A31.1	A31.2	
		A31.3	
<b>A37. NHI Course</b>	A37.1		
	A37.2		
<b>A46. Mock Disaster Exercise</b>	A46.1	A46.2	
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