

# Developing Traffic Control Assistant Training Programs



Emergency Responder Safety Institute  
Cumberland Valley Volunteer Firemen's Association

The Cumberland Valley Volunteer Firemen's Association's Emergency Responder Safety Institute (ERSI) conducted the work detailed in this manual with grant funding provided by the United States Fire Administration (USFA). The objective of the project was to study of the feasibility of using Fire Corps volunteers as non-emergency Traffic Control Assistants. This project was intended to review the transferability of best practice information developed by the ERSI to the Fire Corps volunteers serving with local emergency organizations. This manual provides an overview of the demonstration project sponsored by ERSI and establishes guidelines for the training and use of volunteers as Traffic Control Assistants.

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## Introduction

Traffic congestion on the roadways of our cities and towns is steadily increasing. With the increase in congestion comes an increase in traffic delays and incidents involving vehicles including breakdowns, fires, and accidents. As a result emergency responders – including firefighters, law enforcement, EMS and tow operators – find themselves working on or near roadways on a regular basis leading to an increase in the risk to these responders. U.S. Department of Labor (DOL) statistics indicate an upward trend in struck-by fatalities involving responders over the last decade.<sup>1</sup> Incidents in Midwest City, OK; Lionsville, PA; Ocala, FL; and Beavercreek, OH are just a few of the many examples of fatal or serious struck-by events involving fire and EMS personnel. Struck-by incidents involving law enforcement personnel are reported almost daily in the national media. Organizations representing personnel who regularly operate on the roadway including DOT workers and tow operators have also reported numerous accounts of incidents where workers they represent have been killed or injured as a result of a struck-by incident.

In response to the rising number of incidents involving death and injury of emergency responders on our nation's roadways the Cumberland Valley Volunteer Firemen's Association (CVVFA) established the Emergency Responder Safety Institute (ERSI). The Institute is committed to reducing deaths and injuries to America's Emergency Responders. The experts who make up the Institute have identified a number of best practices for operations at roadway incidents and have been active in the development of standards for personal protective equipment for emergency responders operating on the roadway. The ERSI web site [www.ResponderSafety.com](http://www.ResponderSafety.com) has become the premier source of information for emergency responders regarding safety at roadway incidents. One of the major functions of the CVVFA/ERSI is the development and delivery of training programs for emergency responders and personnel who provide temporary traffic control (TTC) at emergency incidents as well as non-recurring special events that result in congestion and reduced traffic flow.

Temporary traffic control at emergency incidents and planned special events, using trained personnel, has been identified as a key strategy in minimizing the impact on traffic and increasing the safety of both the public using the roads and personnel who must operate on or near roadways. While temporary traffic control measures are not always implemented at emergency incidents, they serve a critical function and significantly improve the safety of personnel operating at the incident or event. CVVFA/ERSI has found that methods of providing temporary traffic control differ widely from jurisdiction to jurisdiction. Some areas of the country utilize fire police units for this function. Some jurisdictions rely on law enforcement, while others rely on fire/EMS responders at an incident to implement TTC measures. At many incidents, no traffic control or safety measures are implemented, leaving responders exposed to the hazards of roadway operations. In the case of planned special events, many venues use volunteers to perform traffic control functions during the event (See the Resources section of this manual for information on use of volunteers at planned special events).

The ERSI in conjunction with the United States Fire Administration has conducted a review of traffic control programs in a number of locations, identified key training requirements for personnel, and sponsored a demonstration program to explore the establishment of a traffic control assistant training program targeted at Fire Corps volunteers.

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<sup>1</sup> “[Unifying Incident Response](#)”, Public Roads, September/October 2007, Vol. 71. No. 2.

## Temporary Traffic Control Training

The need to provide trained personnel to perform temporary traffic control at roadway incidents and planned special events that impact the traveling public is well documented. While there is a need to train personnel at all levels from incident command to the individual responder, this manual will focus on the development of programs designed to train individuals assigned to perform basic traffic control functions at roadway incidents and planned special events. This manual will use the title Traffic Control Assistant to describe these individuals.

The Traffic Control Assistant is an individual who's primary job assignment at a roadway incident or planned special event is the control of traffic at an assigned location, deployment of temporary traffic control devices and providing early warning to other emergency responders in the event of a hazardous condition involving traffic. The Traffic Control Assistant will meet or exceed the flagger qualifications established in 6E.01 of the *Manual on Uniform Traffic Control Devices*, 2003 Edition (MUTCD) issued by the Federal Highway Administration.

This manual is designed to assist public safety agencies interested in developing traffic control programs. The manual provides information and resources designed to assist in the implementation of traffic control training based on proven practices and experience. While the manual was developed to address volunteer programs using the Fire Corps model, the materials and process could easily be adapted to develop programs for departments, career or volunteer, interested in implementing procedures and training to enhance the safety of emergency personnel during roadway operations.

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### Key considerations in the development of a Traffic Control Assistant training program

- ◆ Identify who is responsible for temporary traffic control at incidents and planned special events
  - ◆ Establish policies and operating procedures for the jurisdiction or organization
  - ◆ Identify personnel who will perform Traffic Control Assistant functions
  - ◆ Provide initial training for assigned personnel
    - Classroom
    - Hands on drills and table top exercises
  - ◆ Require annual refresher training
-

## Responsibility

Roadway incidents and planned special events will typically involve multiple agencies or organizations. The keys to successful traffic management at the incident or event are communication, cooperation and coordination before and during an incident or event. It is important to understand that every agency has a specific role to play and that good planning and coordination prior the deployment of personnel is critical. Roles and responsibilities should be determined well before personnel are trained and ready for deployment.

As part of this project, a number of traffic control systems were examined. Models that were examined as part of this project included well established Fire Police units with specific authority and jurisdiction, auxiliary fire units deployed in support of emergency responders and departments where the function was performed by emergency responders assigned to an incident. Departments or organizations interested in developing a traffic control program will have to determine the model that is the best fit for them.

## Policies and Procedures

Once the responsibility for traffic control is determined, the organization should develop policies and procedures related to the response and management of roadway incidents or planned special events. Most fire service organizations have a standard format for the development, implementation and review of operating procedures. Where these guidelines are in place they should be followed.

Policies should identify the roles and responsibilities of the various agencies involved and the specific role of the department or organization. Operating Procedures should include the following:

- ♦ Terminology specific to TTC
- ♦ Incident command functions and positions
- ♦ Incident/event safety
  - Minimum requirements for PPE
  - Safety benchmarks for all incidents and events
  - Required equipment for TTC operations
- ♦ Standard placement for responding apparatus and emergency units
- ♦ Roadway operations
  - Rural/low volume roads
  - High volume roadways
  - Limited access highways

As with all policies and procedures, those developed to address roadway incidents and planned special events should be periodically reviewed based on input from incident debriefings and their effectiveness and ease of implementation.

## Qualifications of the Traffic Control Assistant

As part of the planning process for the implementation of a formal traffic control program, the organization should establish a set of minimum requirements for individuals who will be performing traffic control functions. Where existing public safety personnel will perform the functions there should be no additional requirements beyond training. Where the traffic control assistant function will be performed by other individuals – including volunteers – the organization should establish a set of minimum qualifications for all assigned personnel. These qualifications may include background checks and an assessment of the physical ability of individuals to perform the functions on the job. Physical abilities for a traffic control assistant include the ability to stand for long periods of time, take prompt evasive actions to prevent injury, carry items such as traffic cones, and deploy portable TTC signs. Personnel performing as a traffic control assistant should also be able to communicate effectively with others, including supervisors, other traffic control personnel and the public.

## Volunteer Recruitment

If the Traffic Control Assistant program is being established as a new program, the organization will need to consider the number of personnel needed for the program and how they will be recruited. It is recommended that the organization develop a brief job description that describes the position and details the minimum qualifications discussed in the previous section.

For the demonstration project conducted with the Goshen Fire Company in West Chester, Pennsylvania contact was made with the local chapter of the American Red Cross, the local provider of Community Emergency Response Team (CERT) training in the region. The assumption was that CERT trained volunteers would provide a pool of individuals who had expressed an interest in volunteering in the emergency services and who had completed the basic CERT training program. These individuals were contacted regarding the Fire Corps program and several attended an informational meeting on the program. As a result of the information session, a group of CERT trained volunteers chose to attend the Traffic Control Assistant training. Other sources of volunteers for a Traffic Control Assistant program could include local service groups or students attending local colleges who are looking for community service opportunities.

The [Community Emergency Response Team \(CERT\) Program](#) educates people about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. [The Fire Corps](#) is a partner program of the Citizen Corps that was established in 2002. The mission of Fire Corps is to increase the capacity of volunteer, career, and combination fire and EMS departments through the use of citizen advocates. Fire Corps provides resources for departments to utilize citizen advocates in non-operational roles so they can develop, implement, and sustain programs and services that will help their department meet the needs of their community.

One of the roles identified as a potential activity for Fire Corps volunteers is the provision of back up support during major events when response agencies may be overwhelmed. The Traffic Control Assistant program is intended to address the training required to develop volunteers to serve in this support role. The demonstration project at the Goshen Fire Company was developed as a Fire Corps program.

## **Training Traffic Control Assistants**

As previously discussed, the Traffic Control Assistant will be assigned tasks that include the control of traffic at an assigned location, deployment of temporary traffic control devices and providing early warning to other emergency responders in the event of a hazardous condition involving traffic. Training to perform these tasks efficiently and safely is a critical component of any traffic control program. Based on the best practices identified by ERSI staff, it is recommended that the Traffic Control Assistant training include both lecture/discussion and practical hands-on sessions.

Table 1 lists the minimum recommended performance objectives for the job of Traffic Control Assistant. These objectives were developed from the job performance requirements found in NFPA 1001, *Standard for Professional Qualifications for Fire fighter*, Sections 6E.01, Qualifications for Flaggers, *Manual on Uniform Traffic Control Devices* and Chapter 8 of the Federal Highway Administration publication, *Managing Travel for Planned Special Events*.

In addition to the objectives listed in Table 1, organizations developing programs should consider adding objectives that are specific to the jurisdiction or organization and the duties that the Traffic Control Assistant will be expected to perform. The development of additional performance objectives should be accomplished by conducting a job task analysis. A simple task analysis would involve a review of the performance objectives in Table 1 and then identifying tasks that the organization's Traffic Control Assistants would be expected to perform that are not addressed. A review of state and local requirements for personnel involved in traffic control should also be conducted. Additional performance objectives may need to be developed to address these requirements. This analysis should be conducted by supervisors, trainers and experienced personnel within the organization.

Once the list of performance objectives is finalized, a training outline can be developed. A sample program outline using the minimum performance objectives for the job is provided in Table 2. If additional tasks are added during the job task analysis that the organization conducts, the topics should be added to the program. As shown, the total time for the basic program is estimated at 24 hours. This should be broken into sections or training modules that fit into the organization's training schedule. Consideration should be given to conducting some of the practical drill sessions on a weekend day rather than in the evening to cut down on the number of sessions required to complete the training. There should, however, be at least one drill session scheduled for an evening where night and low visibility operations can be conducted. A sample plan for a TTC drill is provided in Appendix 1 .

The development of content for the training program should be guided by the performance objectives developed by the organization. Sources for this information include the ERSI website [www.ResponderSafety.com](http://www.ResponderSafety.com), the Federal Highway Administration, the National Safety Council Flagger program and materials developed by state departments of transportation. A list of additional sources for materials is provided in the Resources section of this manual.

The final component of the Traffic Control Assistant training should be assigning the trainees to work with members of the organization with experience in traffic control. The field training under supervision provides the trainee with the opportunity to use the skills they have learned under the supervision of an experienced member. This is also an opportunity to evaluate the ability of the trainee to perform assigned traffic control tasks prior to allowing them to operate independently. The amount of time that is allocated for field training should be determined by the organization and the performance of the trainee.

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**Table 1: Performance Objectives for the Traffic Control Assistant**

The Traffic Control Assistant will:

- ♦ Describe potential hazards involved in operating at emergency incidents and planned special events including vehicle traffic, utilities, and environmental conditions.
  - ♦ Demonstrate the proper procedures for dismounting a vehicle in traffic.
  - ♦ Describe proper procedures for safe operation at emergency scenes.
  - ♦ Describe the protective equipment available for members' safety when operating near traffic.
  - ♦ Implement basic temporary traffic control measures for an assigned location at an emergency incident or planned special event.
  - ♦ Select the appropriate personal protective clothing for a traffic control assignment.
  - ♦ Don and doff personal protective clothing used for roadway operations.
  - ♦ Deploy traffic and scene control devices.
  - ♦ Operate in an assigned protected work area at an incident or planned special event.
  - ♦ Comprehend traffic control assignments and orders from supervisors.
  - ♦ Communicate specific instructions clearly, firmly, and courteously.
  - ♦ Move and/or maneuver quickly in order to avoid danger from errant vehicles.
  - ♦ Utilize hand signals and devices (such as paddles and flags) to provide clear and positive guidance to drivers, personnel and pedestrians in a TTC zone.
  - ♦ Recognize dangerous traffic situations and provide warning to emergency responders operating in the work area in sufficient time to avoid injury.
-

**Table 2: Traffic Control Assistant Training Outline**

<b>Time</b>	<b>Topic</b>	<b>Format</b>
.5 Hours	<b>Introduction</b> What the program is all about	Lecture
1.5 hours	<b>The Department/organization</b> History Structure – Leadership SOPs	Lecture
2 hours	<b>Safety</b> Hazard of working near traffic PPE Safe Operations	Lecture Practical
8 Hours	<b>Basic Traffic Control Techniques</b> Directing traffic Deployment of TTC devices (cones, signs flares etc. Tools of the trade – Using flags, paddles and flashlights Night/Low visibility operations Response to threatening situations <i>(Basic DOT Flagger Class + organization specific topics and skills)</i>	Lecture Practical
2 hours	<b>Communications</b> With the public At the incident/event	Lecture
2 hours	<b>Working with other agencies</b>	Lecture
8 hours	<b>Operations at incidents and planned special events</b> Field exercises(drills) that allow the trainees to practice and demonstrate TTC skills and knowledge	Lecture Practical
Determined by Agency	<b>Supervised field training</b>	Practical

Implementing a Traffic Control Assistant training program will require assigning a lead instructor who optimally has both traffic control and training experience. The lead instructor will have the responsibility of coordinating the program as it progress and providing support instructors with the equipment and information they need to instruct assigned modules of the program.

A key component to a well developed program is the location that is selected for both the classroom and practical sessions. The classroom should be large enough to accommodate all of the students and instructional staff. As much of the program will be conducted using multi-media materials, the classroom should be properly equipped for this purpose including a screen suitable for use with an LCD projector. Students should have ample room to sit and take notes or review teaching materials.

The practical sessions should be conducted in an area that simulates road conditions so that students may practice skills in an environment that is safe but as close to real life as possible.

Support instructors should be selected based on their knowledge and experience in the assigned topic. These individuals should also have experience as instructors to make sure that the information



is properly communicated to the trainees. Support instructors could include senior department officers to teach the history and organization of the department, the department safety officer, representatives of the state DOT who work in the department's region, DOT flagger instructors and law enforcement officers with traffic control experience, to give just a few examples. Additional experienced personnel may also be required to assist during drill sessions.

Attendance at all training sessions should be documented using a sign-in sheet that includes the date and time of the program, the topic discussed, instructors and the names of all participants. These records should be maintained by the organization to document the training and who attended.

At the completion of the program the organization should provide participants with certificates of attendance as well as individual certificates for specialized training such as a DOT Flagger Class if it was included in the program. If not already assigned, the newly trained Traffic Control Assistants should also be provided with the personal protective equipment that they will be expected to use at incidents or planned special events.

## **Fire Corps Traffic Assistant Program Demonstration Project**

The grant funding provide by the USFA included funds for a demonstration project to evaluate the feasibility of implementing a volunteer Traffic Control Assistant program by an organization. The Goshen Fire Company in West Chester, Pennsylvania was selected as the site for this phase of the project. The selection was made based on the willingness of the department leadership to work with ERSI and the well established Fire Police unit it operated. Additionally, the Goshen Fire Company hosts an annual country fair that runs for a week and attracts thousands of attendees while it is in operation. This event provided a planned special event that could be used as part of training program.

The Goshen Fire Company is a very well managed organization with an elected board and company president. The three operational divisions of the department operate under the direction of a Fire Chief, an EMS Chief and a Fire Police Chief. The department is a combination department with career firefighter/EMTs staffing stations during weekdays and one station during the evening shift and on weekends. The Goshen Fire Company has a strong and well trained complement of volunteers.

ERSI staff met with the fire company leadership early in the project and a Staff Battalion Chief was assigned as project coordinator. The Fire Police Chief was assigned to serve as the lead instructor for the program with support from other members of the fire company and fire police unit. Specialty instructors were the responsibility of ERSI. It was agreed that the goal of the program was to identify and train a core group of volunteers who could serve as Traffic Control Assistants in support of the already established fire police unit. The primary role of these volunteers would be to provide additional trained personnel during major emergencies or natural disasters and special events such as the Goshen Country Fair. Once trained, the volunteer Traffic Control Assistants would work under the supervision of a member of the fire police unit.

ERSI and the Goshen Fire Company also agreed that since the training would be unique to the area that members of the Goshen Fire Police as well as neighboring Fire Police units would be invited to attend the sessions.

### **Recruitment**

The initial phase of the project was the recruitment of a group of volunteers who were interested in attending the program. Working with the local chapter of the American Red Cross, the provider of CERT training for the region, the project coordinator obtained a list of people who had completed CERT training. These individuals were contacted and an announcement regarding the program placed in the local newspaper.

An informational meeting at the Goshen Fire Company headquarters was attended by several potential volunteers. This meeting was also covered by the local media local the newspapers printed articles on the program that provided additional information to potential candidates for the program. The project coordinator was also interviewed by a local radio station. Based on this meeting and responses from the media coverage, a core group of volunteers and interested members of the Goshen Fire Police were selected for the training.

## Planning

With a core group of trainees identified, a planning session was held at the fire company headquarters. The company president, members of the senior staff as well as the project coordinator, Fire Police Chief and ERSI staff attended. The objective of the meeting was to identify the key topic areas to be addressed in the program, identify instructors, and set a firm schedule for the training. The program outline with brief descriptions of the session, time allocation and instructors is shown in Table 3.

The Goshen Fire Company Project Coordinator was assigned the responsibility for program logistics including securing locations for the training sessions and the planned graduation ceremony, and providing food for the two all day sessions.

The Lead Instructor/Fire Police Chief was assigned the task of identifying local instructors and developing a field training program that would be implemented during the week of the Goshen Country Fair.

ERSI staff were assigned the task of coordinating the delivery of a PennDot approved certified Flagger class and the eight hour ERSI "Protecting Emergency Responders on the Roadway" programs. ERSI also was tasked with documenting the program as it progressed.

Insurance and liability issues for the participants during the training were considered and the Fire Company President took the responsibility of contacting the company's insurance provider. It was determined that the insurance in place for volunteers and the Goshen Country Fair would provide sufficient protection for both the company and the trainees during the program.

The process of incorporating the new personnel into the fire company was also addressed. Individuals who lived or worked in the Goshen Fire Company service area could potentially be incorporated into the fire police unit as auxiliary members for use in major emergencies or at special events. These individuals would also be encouraged to formally join the fire company as full members of the fire police unit should they be interested. Individuals in the program who did not live in the Goshen Fire Company service area would be provided with documentation of the training so that they could apply for membership on their local department.

**Table 3: Goshen Fire Company Training Outline**

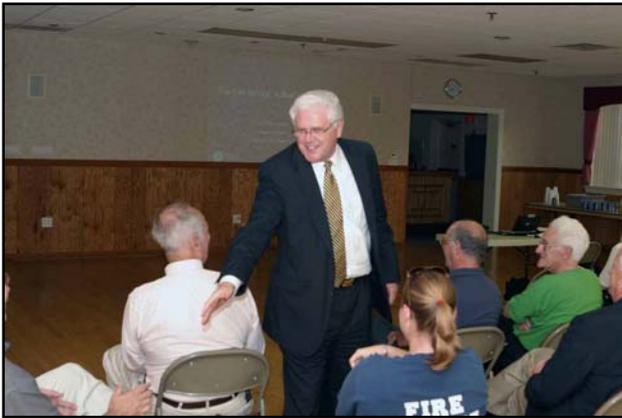
<b>Time</b>	<b>Topic</b>	<b>Instructor</b>
2 Hours	<p><b>Introduction to the Program</b></p> <p>What the Traffic Control Assistant program is all about and Schedule.                      History – Fire Service &amp; Law Enforcement                      Working with other agencies</p>	GFC and ERSI Instructors
2 hours	<p><b>The Department/organization</b></p> <p>Fire Company Structure – Leadership                      Department SOPs                      Safety</p>	Fire Chief EMS Chief Fire Police Chief Safety Officer Training Officer
2 hours	<p><b>Planned Special Events and Field Training</b></p> <p>Fair history and operations                      Hazard of working near traffic                      PPE                      Safe Operations                      Reacting to emergencies during the event</p>	Fire Police Chief Safety Officer Training Officer GFC Country Fair Officer
	<p><b>Field Training at Goshen Country Fair</b></p> <p>Trainees sign up for blocks of time to work under supervision of Fire Police personnel</p>	Supervised by Fire Police FTOs
8 Hours	<p><b>Certified Traffic Flagger Course</b></p> <p>Directing traffic                      Deployment of TTC devices (cones, signs flares etc.                      Tools of the trade – Using flags, paddles and flashlights                      Night/Low visibility operations                      Response to threatening situations                      Written Test for PennDot certification</p>	PennDot Certified Instructor
2 hours	<p><b>GFC Fire Police Operations</b></p> <p>Practical drill covering normal operations of the Fire Police at emergency incidents                      Safety during operations</p>	Fire Police Chief
8 hours	<p><b>Protecting Emergency Responders on the Highways</b></p> <p>Awareness level safety on the roadway program for emergency responders. Classroom training and table top exercises using best practices identified by ERSI</p>	ERSI Instructors
2 Hours	<p><b>Graduation Ceremony</b></p>	GFC and ERSI

## Implementation

The Goshen Fire Company Traffic Control Assistant program was well implemented using resources available to the fire company and the ERSI. All of the classes provided were well attended by both the Fire Corps volunteers and members of the Goshen and area fire police units. Each of the training sessions are summarized in this section to provide the user with ideas regarding the implementation of a similar program.

### *Introduction*

The initial session served as an introduction to the program Traffic Control Assistant Program. Goshen Fire Company leadership welcomed the group and along with ERSI staff provided an overview of the upcoming program. In order to motivate the participants a fire service leader and a well known law enforcement official were invited to speak on the history, roles and responsibilities of the emergency services. There was also a general discussion on working with other agencies that might be expected to respond to, or have a stake in, traffic control and roadway safety.



### *Goshen Fire Company Operations*

This session focused on the Goshen Fire Company. Topics presented by senior staff included department structure and leadership, policies and procedures, operational safety and the conduct and personal appearance of members.

### *Planned Special Events*

The planned special events segment of the program was presented to coincide with the set-up and planning for the Goshen Country Fair held annually on the grounds of the headquarters station of the fire company. A officer of the Goshen Country Fair provided the history and an overview of the event. After a tour of the venue the Fire Police Chief discussed the roles of the fire police during the event. These included traffic control at the entrances and exits to the public roads, traffic control in the fair parking area, providing security for vehicles in the parking area during the event and the plan for responding to emergencies on the fair grounds. The participants were introduced to the PPE that they would be expected to use while taking part in field training during the event. Operating in and near traffic and safety precautions were discussed. Each participant had an opportunity to direct traffic and park vehicles during both daylight and low light conditions.



### *Field Training*

The annual Goshen Country Fair was held while the demonstration program was being conducted. This event was an opportunity to provide a field training experience to the trainees during an actual event that the fire police unit participates in annually. Trainees were encouraged to sign up in advance for shifts during the six day event.

Trainees were provided with PPE and assigned a post under the supervision of an experienced member of the Goshen Fire Police. While the ideal field training experience would be conducted later in a program, the timing of the event did not permit more in-depth training earlier. The event was a success and the trainees who participated were provided with an invaluable experience that they could draw upon as the program continued.



### *PennDot Flagger*

Pennsylvania law requires that individuals providing traffic control on the roadway be certified as a *flagger* by taking a six hour program that is approved by PennDot. A member of the ERSI staff who is a certified state instructor conducted this program. The program was expanded to include tactics and operations that are more applicable to the Traffic Control Assistant operating at a roadway incident or planned special event. The program consisted of both classroom and practical sessions conducted on the road system that is part of the fairground. The session was attended by a number of personnel assigned to fire police duties from neighboring departments. The larger group added to the learning experience as they brought different perspectives to the class and discussion. Each participant was awarded a wallet card certifying their participation in the program as specified in the state regulations for flagger training.



### *Fire Police Operations*

This session expanded on Goshen Fire Police operations. Normal fire police operations, traffic control techniques and operational safety were discussed and drilled.

### *Protecting Emergency Responders on the Roadway*

This seven hour program was presented by ERSI instructors as an optional training opportunity for the group. The program introduces the students to safe roadway operations, the selection and use of state of the art traffic safety vests and decision making while operating at emergency roadway operations. The students then practice their skills in a series of table top exercises in small teams. The program was opened to area departments and was well attended.

A CD with the program and support materials is available from the ERSI website [www.ResponderSafety.com](http://www.ResponderSafety.com).



## *Graduation*

Volunteers who attended all of the training sessions were invited to attend a graduation ceremony and dinner sponsored by the Goshen Fire Company at the Montgomery County Public Safety Training Campus. The group was welcomed by administrative and operational officers of the Goshen Fire Company and ERSI staff. A PowerPoint program that reviewed the training was presented to the group by ERSI staff. The volunteers were then presented with certificates of attendance and personal traffic safety vests for use when on assignment.



## Lessons Learned

The purpose of a demonstration project is to learn from the effort by identifying both the strengths and weaknesses. The lessons learned during the Goshen Fire Company program should assist users in planning and implementing their programs.

The timing of the training for this program was a function of the Goshen Country Fair and the availability of project staff. The recruitment meeting was held late in June, 2007. There were three evening training sessions in July prior to the event that took place from July 30 to August 4, 2007. The remaining classes were held in September, 2007. Holding training for volunteers during the peak vacation period was a significant limitation and may have reduced the number of people who were able to take part in the program. Consideration should be given to the timing of programs, when possible, so that the maximum number of participants can attend.

Timing also resulted in offering the field training experience out of the normal sequence. It is recommended that field training take place after the personnel have attended the recommended Flagger training session. This provided the trainees with the basic skills and knowledge required to operate safely in traffic control situations. For the Goshen program additional training time was required to provide the knowledge and skills prior to the PennDot Flagger class.

The need for a skilled project management team to implement the program was evident during the entire Goshen program. The assigned Staff Battalion Chief and Fire Police Chief took complete ownership of the project from start to finish and made the program a success. They coordinated the logistics for each of the training sessions including providing food for the two all-day programs and the graduation ceremony at the completion of the program. The project managers also coordinated the many instructors who taught the various modules of the program and the outside practical sessions.

The Goshen Fire Police response unit was made available during each of the practical sessions to provide equipment for the class. This provided a realistic experience for the trainees. Experienced fire police personnel were also available to assist during the practical exercises. Having necessary equipment and trained personnel available during practical exercises is essential for success.

A basic tenet of successful volunteer programs is *don't waste the volunteers time!* Adhering to this principle was a key to the success of the Goshen program. Each of the sessions was very well planned and implemented. Classroom instructors were well prepared with excellent materials and the sessions began and ended on time. Each of the practical exercises were designed to allow participation by all of the trainees.

The Graduation dinner provided for the participants who completed the program was an opportunity to recognize their commitment of time. Each trainee was awarded a certificate of completion, a PennDot Flagger wallet card and a public safety class traffic vest. The trainees were encouraged to bring guests to the dinner. Recognition of achievement is a significant motivational factor in any program such as this one.

## **Examples of Traffic Control Programs**

**GDOT HEROs**

**Goshen Fire Police**

**Delaware State Fire Police**

**Volusia County**

**Spring Hill Fire Rescue**

**Loveland Symmes Fire Department**

## GDOT HEROs

The Highway Emergency Response Operators (HEROs) are the key component of the Georgia Department of Transportation's Incident Management program. The program began in Atlanta prior to the 1996 Summer Olympic Games and has since been expanded in association with GDOT's Georgia Navigator Intelligent Transportation System program. As the GDOT strives to reduce congestion on the highways, HEROs will respond quickly to incidents and clear the roads so that the normal traffic flow can be restored.



Funding for the HERO program has been provided by Congestion Mitigation/Air Quality (CM/AQ) Fund under the guidance of the Atlanta Regional Commission's (ARC) Incident Management Taskforce. The Taskforce members include the Federal Highway Administration (FHWA), Georgia DOT, traffic reporters, emergency and first-response agencies and the private sector.

HERO operators are GDOT employees. The program operates 24 hours a day, seven days a week. Typically, HEROs work between 55,000 and 60,000 incidents per year.

The HERO program is an example of a well organized traffic management and control program with highly trained and motivated operators. It is discussed in this manual as an example of a “Best Practice” for a full time traffic control organization.

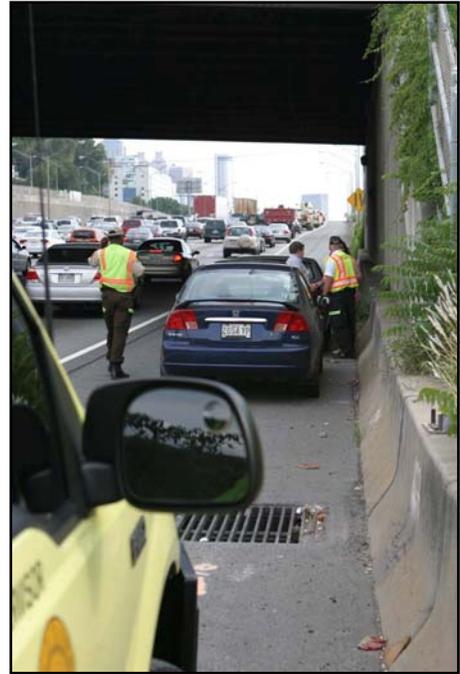
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### Goals of the HERO Program

- ♦ To minimize major disruption of freeway traffic flow at incident locations.
  - ♦ To focus on the factors that cause disruption in the flow of traffic and remove those factors.
  - ♦ To relieve congestion and maintain the consistent flow of traffic at incident locations
  - ♦ To reduce response time to traffic-related incidents
-

## HERO Duties

- ♦ Patrol the Atlanta-area freeways, Monday through Friday, from 5:30 a.m. to 9:30 p.m
- ♦ Patrol same freeways on Saturday and Sunday from 9:30 am to 9:30 pm
- ♦ Be on call to respond to incidents outside of the above hours
- ♦ Initiate measures to reduce traffic congestion and delays
- ♦ Provide support to law enforcement, first-response and other emergency agencies
- ♦ Assist in clearing stalled vehicles from the travel lanes
- ♦ Help stranded motorists with minor mechanical problems including:
  - Change flat tires
  - Jump start weak batteries
  - Provide fuel, coolant, etc.
  - Provide road and travel information
  - Provide transportation to safer areas
  - Provide courtesy use of a telephone



## HERO Response Units

The HERO units are very well equipped for their mission. All vehicles have emergency warning lights, sirens and rear facing arrow/sign boards. The vehicles have heavy front bumpers that allow the operators to push disabled vehicles from the traveled way. The units are also equipped with 120VAC inverters, an air compressor, and a diesel fuel transfer system. An equipment list for the typical unit is provided in Table 4.



**Table 4: GDOT HERO Equipment List**

<b><i>GDOT HERO UNIT</i></b>			
<b>Supervisor Vehicle Inspection/Inventory Report, HERO I, II</b>			
<i>Please include a count of each item, not just checked!</i>			
<b>Vehicle Information</b>		Vehicle # _____	Inspection Date ___/___/___
Current Mileage _____	Inspection by: _____		
Red Light Sticker: _____	Assigned to: _____		
<b>When was the last logged:</b>			
Safety Inspection: _____	Last Oil Change: _____ miles		
Brake Inspection: _____	C-Service: _____		
<b>Truck Cab</b>	____ Citation Box (1)	____ ERG Book (1)	____ Flashlight – Mag (1)
	____ Route Book (1)	____ Spotlight (1)	____ Orange Cone (1)
		____ Yellow Jacket (1)	_____
<b>Left Front Compartment</b>			
____ Gas Can (1)	____ Water Can (1)	____ Hand Wipes (1)	____ Funnel (1)
____ Brake Fluid (1)	____ De-Icer (1)	____ Marker Paint (1)	_____
____ Oil 15-W40 (1)	____ Power Steer. (1)	____ Starter Fluid (1)	_____
____ Tank Patch (1)	____ Trans. Fluid (1)	____ WD40 (1)	_____
<b>Left Mid Compartment</b>			
____ Flare-Red Container (1)	____ Body Bag (1)	____ Flare-case (1)	_____
____ Tarp (1)	____ Haz-mat pool (1)	____ Sledge Hammer (1)	_____
	____ White Suit (1)	_____	_____
<b>Left Rear Compartment</b>			
____ Haz-Mat Can (1)	____ Blanket (1)	____ C-Collar Bag (1)	____ Gloves, box (1)
	____ Jump Bag, stocked (1)	____ O.B Kit (1)	_____
<b>Inside Body</b>			
____ Peat Moss, bag (2)	____ Absorbent, Buck. (3)	____ Absorbent Pads (20)	____ Absorbent Booms (4)
____ Floor Jack (1)	____ Chain, J-hook (1)	____ Chain, Doubles J (1)	____ Chain, Log, 20' (1)
____ Water Cooler (1)	____ Lug Wrench (1)	____ Traffic Cones (30)	____ Fire Extinguisher (2)
____ Push Broom (1)	____ Air Compressor (1)	____ Air Hose, 20' (1)	____ Jumper cables (1)
____ Plastic Shovel (1)	____ Flat Shovel (1)	____ Round Shovel (1)	_____
	____ Pry Bar (1)	____ Fuel Pole Adpt. (1)	_____
<b>Right Rear Compartment</b>			
_____	____ Air Hose Reel	____ Recovery Hose Reel	_____
<b>Right Mid Compartment</b>			
____ Ball Peen Hammer (1)	____ Adj. Wrench Set (3)	____ Air Chuck (1)	____ Air Gauge (1)
____ Electrical Tape, roll (1)	____ Center Punch (1)	____ Channel Locks (1)	____ Duct Tape, roll (1)
____ Impact Sockets, metric (7)	____ Fuses, box, Asst. (1)	____ Hand cleaner (1)	_____
____ Mechanics' Wire (1)	____ Impact Wrench (1)	____ Impact Sockets, SAE (7)	_____
____ Socket Set, SAE (1)	____ Rubber Mallet (1)	____ Socket Set, Metric (1)	_____
____ Socket Extension, 10" (1)	____ Screwdriver, Flat (5)	____ Screwdriver, Phillips (5)	_____
____ Vice Grips (3)	____ Test Light (1)	____ Towels, box (1)	_____
<b>Right Frt Compartment</b>			
_____	____ Oil Dry, bag (5)	____ Inverter/Generator (1)	_____
<b>Outside Truck</b>			
_____	____ Emergency lights	____ Flood Lights (2)	_____
_____	____ Chock Blocks (2)	____ Numbers, Radio (2)	_____
<b>Notes:</b> Any item or tool may be placed in another compartment with supervisors' approval.			
<b>Inspector Signature:</b> _____		<b>Rank:</b> _____	<b>Operator Signature:</b> _____
<small>Revised 08/04 HDH</small>			

## HERO Operator Training



HERO operators are highly trained for their jobs. When hired the operators attend a training academy conducted by experienced trainers. The topics covered in this initial training include deployment of traffic control devices, traffic control management, emergency medical first responder, hazardous materials, and safety on the roadway. HERO operators must also have a CDL license. Once an operator successfully completes the initial training they are assigned to work with a Field Training Operator for a set period of time prior to being assigned a vehicle and working alone.

The quality of the training and operation of the HERO program is demonstrated by a very low accident rate involving both the vehicle and the operators even though they work under extremely dangerous conditions when on duty.



## Goshen Fire Police

The Goshen Fire Company is organized with three emergency response components: Fire, EMS and Fire Police. The Fire Police Unit is under the supervision of a Fire Police Chief who reports to the Board of Directors. The unit responds to emergency incidents to provide traffic control and when required scene lighting using the roof mounted scene light. Fire Police attend regular training sessions that are coordinated by the Fire Police Chief. Members of the fire police are issued reflective vests and other PPE appropriate to the job.

The Fire Police Unit serves a major role in providing traffic control at non emergency events such as the Goshen Country Fair sponsored by the Goshen Fire Company.

In addition to the scene light, the fire police vehicle also has a roof mounted arrow board for traffic control. The vehicle carries a large supply of traffic control equipment including:

- ♦ 28" Traffic cones
- ♦ 360° LED Flares for traffic cones
- ♦ Flashlights with traffic wands
- ♦ Hand lights
- ♦ Electric generator
- ♦ Portable scene light with generator
- ♦ Portable radios
- ♦ Traffic control signs
- ♦ Signs for use on traffic cones
- ♦ PPE – vests, coats, helmets, etc.

With the vehicle mounted and self-contained portable lighting equipment, the Fire Police unit is frequently tasked with providing scene lighting during traffic accident investigation and scene clean-up so that other emergency response units can return to service.



## Delaware State Fire Police



In the State of Delaware, volunteer fire departments are allowed to appoint up to six fire police members per station. By state statute fire police hold the status of constable. Appointed by the chief of department or elected by the fire company, fire police personnel are sworn in by the county sheriff. In most departments, the fire police report to a fire police captain who is appointed by the fire chief.

Fire police personnel respond to emergency incidents to provide traffic control during operations. They also support departments during special events and fire fighter funerals.

In most cases fire police personnel in Delaware respond in their personal vehicles. Their vehicles are typically equipped with emergency warning lights and carry a basic complement of traffic control equipment.



Typical equipment includes traffic cones, road flares, traffic control devices such as signs, flags and flashlights with cones, first aid equipment and personal protective equipment including high visibility vests, gloves and head protection.

## Volusia County

Volusia County, Florida established a fire police unit in 1961. Made up of 18 members under the direction of a Unit Commander. The unit has five fire police vehicles equipped with traffic cones, road flares and signs.

The units responds to 25 to 30 calls per month. Special events in the area, such as the Daytona 500 and other racing events and spring break increase the unit's activity.

## Spring Hill Fire Rescue

The Spring Hill Fire Rescue Fire Police unit was incorporated in 1968. The 10 members provide traffic control at fire and EMS incidents for the 40 square mile district. The unit has two Fire Police vehicles assigned. They respond to an average of 35 calls per month

with the majority being motor vehicle accidents.

The unit works closely with the county sheriff and the Florida Highway Patrol. Fire Police members regularly are requested to remain on the scene to control traffic while law enforcement officers conduct their investigation of incidents, allowing fire/rescue and EMS units clear.

Traffic control training is provided to members by the Sheriff's office. CPR and first aid training is provided by the fire department.



### Fire Police vehicle equipment list:

- 30 – 28" Traffic cones
- 1 – 4'x4' Accident Ahead sign
- 1 – 4'x4' All Traffic sign (with arrows)
- 1 – Ramp Closed sign
- 2 – Detour signs
- 2 – Cases of road flares
- 1 – LED STOP/SLOW sign
- 2 – High Visibility vests – Fire Police ID
- 5 – Flare holders for use with cones
- 2 – 360° LED Flares

## Loveland Symmes Fire Department Emergency Service Unit

Established in 2005, the "LSFD Volunteer Emergency Services Unit" (E.S.U.) provides supplemental operational and administrative assistance specifically in the area of fire, disaster and related emergency services.

Based upon the Federal "[Community Emergency Response Team](#)" (C.E.R.T.) and "[Federal Fire Corps](#)" concept, LSFDD took the program a step further. The LSFDD ESU members may choose to be assigned to a mutually agreed upon duty crew at a firehouse



and participate directly in emergency response activities along with the on-duty regular firefighters. ESU members are also subject to "call out" to assist at specific situations as needed. Volunteer ESU member duties include assisting at emergency calls, traffic control, fire and disaster support services, community events, or long term emergency situations. Additional duties for some ESU members also include administrative support services for the fire department. LSFDD ESU volunteers attend bi-monthly ESU meetings and training sessions.

While LSFDD ESU members are required to maintain a commitment of time, ESU also provides a unique opportunity for them to learn and apply a wide range of emergency service skills while contributing directly to the Loveland and Symmes Community. LSFDD ESU members also have opportunities for on-duty time, riding and working alongside of the on-duty personnel.

The ESU vehicle traffic control equipment includes:

- 3 – Truck mounted halogen traffic control arrows
- 26 – 28" Traffic cones
- 2 – Traffic control signs
- 2 – Cases of road flares
- 2 – Area search/scene lights
- Multiple reflective vests
- Multiple flashlights

All members of the ESU are issued reflective vests and fire PPE.

## Resources

[ResponderSafety.com](http://ResponderSafety.com)

US Fire Administration (USFA) Roadway Operations Safety Programs:

<http://www.usfa.dhs.gov/fireservice/research/safety/roadway.shtm>

Fire Corps

U.S. DOT Federal Highway Administration – MUTCD Part 6 Temporary Traffic Control

National Traffic Incident Management Coalition

I-95 Corridor Coalition Quick Clearance Toolkit

DOT Federal Highway Administration Traffic Incident Management Program

<http://ops.fhwa.dot.gov/incidentmgmt/index.htm>

FHA Planned Special Events Traffic Management web site

[http://ops.fhwa.dot.gov/program\\_areas/sp-evnts-mgmt.htm](http://ops.fhwa.dot.gov/program_areas/sp-evnts-mgmt.htm)

*Managing Travel for Planned Special Events*, Report Number FHWA-OP-04-010,  
September 2003, Federal Highway Administration.

[http://ops.fhwa.dot.gov/program\\_areas/sp-events-mgmt/handbook/handbook.pdf](http://ops.fhwa.dot.gov/program_areas/sp-events-mgmt/handbook/handbook.pdf)

GDOT HEROs Website

<http://www.dot.state.ga.us/dot/operations/trafficops/HERO/index.shtml>

Atlanta area TIME Taskforce web site

<http://www.dot.state.ga.us/specialsubjects/time/index.shtml>

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Delaware State Fire Police Association

Fire Corps

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Springhill Fire Department, Springhill, Florida

US Department of Homeland Security

United States Fire Administration

Volusia County Fire and Rescue Department, Volusia County, Florida

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Superintendent Denis Onieal, National Fire Academy

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## **Appendix Materials**

**Appendix 1: Emergency Operations on the Roadway Drill**

**Appendix 2 MUTCD, Chapter 6I Control of Traffic Through Traffic Incident Management Areas**

**Appendix 3: Traffic Incident Management Definitions**

**Appendix 4: Training and Implementation Checklist for Planned Special Events**

## Appendix 1: Emergency Operations on the Roadway Drill

**Objectives:** The Traffic Control Assistant shall establish and operate in safe work areas at emergency incidents on or near the roadway. To accomplish this, they should be able to:

- ◆ Properly position apparatus and other vehicles to protect the scene and allow for safe operation.
- ◆ Select and use personal protective equipment for the hazard.
- ◆ Avoid traffic when dismounting apparatus at a roadway emergency.
- ◆ Deploy traffic and scene control devices.
- ◆ Conduct operations at roadway incidents within the safe zone.

NOTE: Consider asking local police and highway departments to participate in the drill to improve understanding of the needs of all responders and agencies.

**Setup/Location:** The ideal location for this drill is a private road with little traffic such as a school access road and parking lot after hours.

**Equipment:** PPE including Public Safety Traffic Vests and other assigned PPE; Tools for personnel assigned to direct traffic – flashlights with wands, flags etc.; traffic control devices including cones and signs.

### Scenarios:

- A. A two car MVA that impacts one lane of traffic on a two lane road.
- B. A single vehicle into a utility pole with wires down.
- C. A multi-car MVA in an intersection.

Have personnel respond into each of the scenarios and:

- ◆ Complete an initial size-up of the incident
- ◆ Establish proper short term blocking using first arriving apparatus
- ◆ Establish Command and Safety Officer functions
- ◆ Properly additional apparatus, EMS and support units
- ◆ Establish a temporary traffic control zone with sufficient advanced warning for the incident
- ◆ Demobilize units as the event is controlled

### Debriefing:

Conduct a debriefing with all participants after each scenario. Identify what went right, what went wrong and improvements that should be made in future operations.

## Appendix 2: MUTCD Chapter 6I. Control of Traffic Through Traffic Incident Management Areas

### Section 6I.01 General

Support:

Whenever the acronym “TTC” is used in this Chapter, it refers to “temporary traffic control”.

**Standard:**

**The needs and control of all road users (motorists, bicyclists, and pedestrians within the highway, including persons with disabilities in accordance with the Americans with Disabilities Act of 1990 (ADA), Title II, Paragraph 35.130) through a TTC zone shall be an essential part of highway construction, utility work, maintenance operations, and the management of traffic incidents.**

Support:

A traffic incident is an emergency road user occurrence, a natural disaster, or other unplanned event that affects or impedes the normal flow of traffic.

A traffic incident management area is an area of a highway where temporary traffic controls are imposed by authorized officials in response to a road user incident, natural disaster, hazardous material spill, or other unplanned incident. It is a type of TTC zone and extends from the first warning device (such as a sign, light, or cone) to the last TTC device or to a point where vehicles return to the original lane alignment and are clear of the incident.

Traffic incidents can be divided into three general classes of duration, each of which has unique traffic control characteristics and needs. These classes are:

- A. Major—expected duration of more than 2 hours;
- B. Intermediate—expected duration of 30 minutes to 2 hours; and
- C. Minor—expected duration under 30 minutes.

The primary functions of TTC at a traffic incident management area are to move road users reasonably safely and expeditiously past or around the traffic incident, to reduce the likelihood of secondary traffic crashes, and to preclude unnecessary use of the surrounding local road system. Examples include a stalled vehicle blocking a lane, a traffic crash blocking the traveled way, a hazardous material spill along a highway, and natural disasters such as floods and severe storm damage.

Guidance:

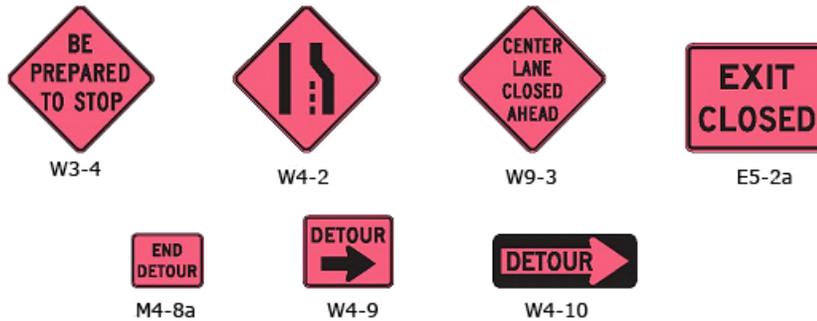
In order to reduce response time for traffic incidents, highway agencies, appropriate public safety agencies (law enforcement, fire and rescue, emergency communications, emergency medical, and other emergency management), and private sector responders (towing and recovery and hazardous materials contractors) should mutually plan for occurrences of traffic incidents along the major and heavily traveled highway and street system.

On-scene responders should be trained in safe practices for accomplishing their tasks in and near traffic. Responders should always be aware of their visibility to oncoming traffic and take measures to move the traffic incident as far off the traveled roadway as possible or to provide for appropriate warning.

Responders arriving at a traffic incident should, within 15 minutes of arrival on-scene, estimate the magnitude of the traffic incident, the expected time duration of the traffic incident, and the expected vehicle queue length, and then should set up the appropriate temporary traffic controls for these estimates.

## CHAPTER 6I. Continued

Figure 6I-1. Examples of Traffic Incident Management Area Signs



### Option:

Warning and guide signs used for TTC traffic incident management situations may have a black legend and border on a fluorescent pink background (see Figure 6I-1).

### Support:

While some traffic incidents might be anticipated and planned for, emergencies and disasters might pose more severe and unpredictable problems. The ability to quickly install proper temporary traffic controls might greatly reduce the effects of an incident, such as secondary crashes or excessive traffic delays. An essential part of fire, rescue, spill clean-up, highway agency, and enforcement activities is the proper control of road users through the traffic incident management area in order to protect responders, victims, and other personnel at the site while providing reasonably safe traffic flow. These operations might need corroborating legislative authority for the implementation and enforcement of appropriate road user regulations, parking controls, and speed zoning. It is desirable for these statutes to provide sufficient flexibility in the authority for, and implementation of, TTC to respond to the needs of changing conditions found in traffic incident management areas.

### Option:

For traffic incidents, particularly those of an emergency nature, TTC devices on hand may be used for the initial response as long as they do not themselves create unnecessary additional hazards.

## Section 6I.02 Major Traffic Incidents

### Support:

Major traffic incidents are typically traffic incidents involving hazardous materials, fatal traffic crashes involving numerous vehicles, and other natural or man-made disasters. These traffic incidents typically involve closing all or part of a roadway facility for a period exceeding 2 hours.

### Guidance:

If the traffic incident is anticipated to last more than 24 hours, applicable procedures and devices set forth in other Chapters of Part 6 should be used.

### Support:

A road closure can be caused by a traffic incident such as a road user crash that blocks the traveled way. Road users are usually diverted through lane shifts or detoured around the traffic incident and back to the original roadway. A combination of traffic engineering and enforcement preparations is needed to determine the detour route, and to install, maintain or operate, and then to remove the necessary traffic control devices when the detour is terminated. Large trucks are a significant concern in such a detour, especially when detouring them from a controlled-access roadway onto local or arterial streets.

## **CHAPTER 61. Continued**

During traffic incidents, large trucks might need to follow a route separate from that of automobiles because of bridge, weight, clearance, or geometric restrictions. Also, vehicles carrying hazardous material might need to follow a different route from other vehicles.

Some traffic incidents such as hazardous material spills might require closure of an entire highway. Through road users must have adequate guidance around the traffic incident. Maintaining good public relations is desirable. The cooperation of the news media in publicizing the existence of, and reasons for, traffic incident management areas and their TTC can be of great assistance in keeping road users and the general public well informed.

The establishment, maintenance, and prompt removal of lane diversions can be effectively managed by interagency planning that includes representatives of highway and public safety agencies.

### **Guidance:**

All traffic control devices needed to set up the TTC at a traffic incident should be available so that they can be readily deployed for all major traffic incidents. The TTC should include the proper traffic diversions, tapered lane closures, and upstream warning devices to alert approaching traffic of the end of a queue. Attention should be paid to the end of the traffic queue such that warning is given to road users approaching the end of the queue.

If manual traffic control is needed, it should be provided by qualified flaggers or uniformed law enforcement officers.

### **Option:**

If flaggers are used to provide traffic control for an incident management situation, the flaggers may use appropriate traffic control devices that are readily available or that can be brought to the traffic incident scene on short notice.

### **Guidance:**

When flares are used to initiate TTC at traffic incidents, more permanent traffic control devices should replace them as soon as practical. Both the flare and its supporting device should then be removed from the roadway.

On-scene responders should be trained in safe practices for accomplishing their tasks in and near traffic. Responders should always be aware of their visibility to oncoming traffic and take measures to move the traffic incident as far off the traveled roadway as possible or to provide for appropriate warning.

## **Section 61.03 Intermediate Traffic Incidents**

### **Support:**

Intermediate traffic incidents typically affect travel lanes for a time period of 30 minutes to 2 hours, and usually require traffic control on the scene to divert road users past the blockage. Full roadway closures might be needed for short periods during traffic incident clearance to allow traffic incident responders to accomplish their tasks.

The establishment, maintenance, and prompt removal of lane diversions can be effectively managed by interagency planning that includes representatives of highway and public safety agencies.

### **Guidance:**

All traffic control devices needed to set up the TTC at a traffic incident should be available so that they can be readily deployed for intermediate traffic incidents. The TTC should include the proper traffic diversions, tapered lane closures, and upstream warning devices to alert approaching traffic of the end of a queue.

Attention should be paid to the end of the traffic queue such that warning is given to road users approaching the end of the queue.

If manual traffic control is needed, it should be provided by qualified flaggers or uniformed law enforcement officers.

## CHAPTER 6I . Continued

### Option:

If flaggers are used to provide traffic control for an incident management situation, the flaggers may use appropriate traffic control devices that are readily available or that can be brought to the traffic incident scene on short notice.

### Guidance:

When flares are used to initiate TTC at traffic incidents, more permanent traffic devices should replace them as soon as practical. Both the flare and its supporting device should then be removed from the roadway.

On-scene responders should be trained in safe practices for accomplishing their tasks in and near traffic. Responders should always be aware of their visibility to oncoming traffic and take measures to move the traffic incident as far off the traveled roadway as possible or to provide for appropriate warning.

### Section 6I.04 Minor Traffic Incidents

#### Support:

Minor traffic incidents are typically disabled vehicles and minor crashes that result in lane closures of less than 30 minutes. On-scene responders are typically law enforcement and towing companies, and occasionally highway agency service patrol vehicles.

Diversion of traffic into other lanes is often not needed or is needed only briefly. It is not generally possible or practical to set up a lane closure with traffic control devices for a minor traffic incident. Traffic control is the responsibility of on-scene responders.

#### Guidance:

When a minor traffic incident blocks a travel lane, it should be removed from that lane to the shoulder as quickly as possible.

### Section 6I.05 Use of Emergency-Vehicle Lighting

#### Support:

The use of emergency-vehicle lighting (such as high-intensity rotating, flashing, oscillating, or strobe lights) is essential, especially in the initial stages of a traffic incident, for the safety of emergency responders and persons involved in the traffic incident, as well as road users approaching the traffic incident. Emergency-vehicle lighting, however, provides warning only and provides no effective traffic control. It is often confusing to road users, especially at night. Road users approaching the traffic incident from the opposite direction on a divided facility are often distracted by emergency-vehicle lighting and slow their vehicles to look at the traffic incident posing a hazard to themselves and others traveling in their direction.

The use of emergency-vehicle lighting can be reduced if good traffic control has been established at a traffic incident scene. This is especially true for major traffic incidents that might involve a number of emergency vehicles. If good traffic control is established through placement of advanced warning signs and traffic control devices to divert or detour traffic, then public safety agencies can perform their tasks on scene with minimal emergency-vehicle lighting.

#### Guidance:

Public safety agencies should examine their policies on the use of emergency-vehicle lighting, especially after a traffic incident scene is secured, with the intent of reducing the use of this lighting as much as possible while not endangering those at the scene. Special consideration should be given to reducing or extinguishing forward facing emergency-vehicle lighting, especially on divided roadways, to reduce distractions to on-coming road users.

Vehicle headlights not needed for illumination, or to provide notice to other road users of the incident response vehicle being in an unexpected location, should be turned off at night.

## Appendix 3: Traffic Incident Management Definitions

**Advanced Warning** – Notification procedures that advise approaching motorists to transition from normal driving status to that required by the temporary emergency traffic control measures ahead of them (Defined by MUTCD)

**Block** – Positioning of emergency vehicles on an angle to the lanes of traffic creating a physical barrier between upstream traffic and the work area. Includes: upstream, downstream, block to the left, and block to the right.

**Downstream** – Downstream blocking protects the work area from traffic approaching from the same direction.

**Upstream** – Upstream blocking protects the work area from traffic approaching from the opposite direction.

**Block Right** – Block to the right places the vehicle angled to the right with the rear of the vehicle closest to the roadway.

**Block Left** – Block to the left places the vehicle angled to the left with the rear of the vehicle farthest from the roadway.

**Highway** – A limited access, divided roadway with high speed traffic.

**Minor Incident** – Any incident that will be cleared any incident that will be cleared in 30 minutes or less. (Defined by MUTCD)

**Intermediate Incident** – Any incident that will be cleared in between 30 minutes up to 2 hours. (Defined by MUTCD)

**Major Incident** – Any incident that will be cleared any incident that will be cleared in 2 hours or more. (Defined by MUTCD)

**Roadway** – Any place on which a vehicle-related incident could occur. Including but not limited to highways, secondary roads, dirt roads, driveways, and parking lots.

**Shadow** – The protected work area at a vehicle-related roadway incident that is shielded by the block from emergency vehicles. Also known as Safe Zone or Work Zone.

**Taper** – The action of merging several lanes of moving traffic into fewer moving lanes.

**Temporary Traffic Control (TTC)** – Equipment and apparatus placed on the roadway to temporarily alter the flow of traffic to make a scene safe. This may include but is not limited to: signs, cones, flares, and attenuator vehicles.

**Traffic Incident Management (TIM)** – Equipment and apparatus placed on the roadway to temporarily alter the flow of traffic to make a scene safe. This may include but is not limited to: signs, cones, flares, and attenuator vehicles.

## Appendix 4: Training and Implementation Checklist for Planned Special Events

### Recruit and Train Volunteers

IMPLEMENTATION ACTIVITIES CHECKLIST				
APPLIES?	ASSESSMENT	IF CHECKED	TIPS / EXAMPLES	USER NOTES
<b>Step 5. Recruit and Train Volunteers</b>				
<input type="checkbox"/>	▪ Event transportation services	<ul style="list-style-type: none"> <li>Evaluate the number of volunteers needed by task</li> <li>Determine criteria for recruiting and organizing volunteers</li> <li>Establish rewards for volunteer service</li> <li>Develop method of training volunteers</li> </ul>	<ul style="list-style-type: none"> <li>Maintain good span of control (3 to 7 persons reporting to one supervisor) in supervising a group of volunteers</li> <li>Various perks can improve and speed-up the volunteer recruiting process</li> <li>Recruit additional volunteers for certain low-interest assignments</li> <li>Training should ensure volunteers understand assignments, disseminate accurate information, and understand team operations protocol</li> </ul>	
<input type="checkbox"/>	▪ Traffic / pedestrian control			
<input type="checkbox"/>	▪ Parking operations			
<input type="checkbox"/>	▪ Operations monitoring			
<input type="checkbox"/>	▪ Crowd control			
<input type="checkbox"/>	▪ Event patron assistance			

Assessment: Event transportation services

If Assessments apply:

- Evaluate the number of volunteers needed by task
- Determine criteria for recruiting and organizing volunteers
- Establish rewards for volunteer service
- Develop method of training volunteers

Tips/Examples:

- Maintain good span of control (3 to 7 persons reporting to one supervisor) in supervising a group of volunteers
- Various perks can improve and speed-up the volunteer recruiting process
- Recruit additional volunteers for certain low-interest assignments
- Training should ensure volunteers understand assignments, disseminate accurate information, and understand team operations protocol

Assessment: Traffic / pedestrian control

If Assessments apply:

- Evaluate the number of volunteers needed by task
- Determine criteria for recruiting and organizing volunteers
- Establish rewards for volunteer service
- Develop method of training volunteers

Tips/Examples:

- Maintain good span of control (3 to 7 persons reporting to one supervisor) in supervising a group of volunteers
- Various perks can improve and speed-up the volunteer recruiting process
- Recruit additional volunteers for certain low-interest assignments
- Training should ensure volunteers understand assignments, disseminate accurate information, and understand team operations protocol

## **Training and Implementation Checklist for Planned Special Events**

Assessment: Parking operations

If Assessments apply:

- Evaluate the number of volunteers needed by task
- Determine criteria for recruiting and organizing volunteers
- Establish rewards for volunteer service
- Develop method of training volunteers

Tips/Examples:

- Maintain good span of control (3 to 7 persons reporting to one supervisor) in supervising a group of volunteers
- Various perks can improve and speed-up the volunteer recruiting process
- Recruit additional volunteers for certain low-interest assignments
- Training should ensure volunteers understand assignments, disseminate accurate information, and understand team operations protocol

Assessment: Operations monitoring

If Assessments apply:

- Evaluate the number of volunteers needed by task
- Determine criteria for recruiting and organizing volunteers
- Establish rewards for volunteer service
- Develop method of training volunteers

Tips/Examples:

- Maintain good span of control (3 to 7 persons reporting to one supervisor) in supervising a group of volunteers
- Various perks can improve and speed-up the volunteer recruiting process
- Recruit additional volunteers for certain low-interest assignments
- Training should ensure volunteers understand assignments, disseminate accurate information, and understand team operations protocol

Assessment: Crowd control

If Assessments apply:

- Evaluate the number of volunteers needed by task
- Determine criteria for recruiting and organizing volunteers
- Establish rewards for volunteer service
- Develop method of training volunteers

Tips/Examples:

- Maintain good span of control (3 to 7 persons reporting to one supervisor) in supervising a group of volunteers
- Various perks can improve and speed-up the volunteer recruiting process
- Recruit additional volunteers for certain low-interest assignments
- Training should ensure volunteers understand assignments, disseminate accurate information, and understand team operations protocol

## **Training and Implementation Checklist for Planned Special Events**

Assessment: Event patron assistance

If Assessments apply:

- Evaluate the number of volunteers needed by task
- Determine criteria for recruiting and organizing volunteers
- Establish rewards for volunteer service
- Develop method of training volunteers

Tips/Examples:

- Maintain good span of control (3 to 7 persons reporting to one supervisor) in supervising a group of volunteers
- Various perks can improve and speed-up the volunteer recruiting process
- Recruit additional volunteers for certain low-interest assignments
- Training should ensure volunteers understand assignments, disseminate accurate information, and understand team operations protocol

Source: [FHA Planned Special Events Traffic Management website](#)