



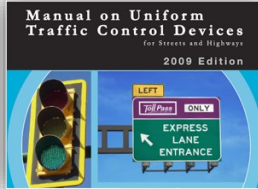
61st Edition

Collier-Lee-Charlotte County Traffic Incident Management

March 2015



The Importance of Advance Warning Devices



The Florida Department of Transportation, District One Road Rangers, are partnering with DBI Services to assist in the deployment of advanced warning devices when an incident or crash has occurred on our interstate highway system.

In this effort, all responders should be familiar with the process of advanced warning as outlined in chapter 6.I. of the Manual on Uniform Traffic Control Devices (MUTCD). For further information on the MUTCD, please visit the following website:

<http://mutcd.fhwa.dot.gov/html/2009/part6/part6i.htm>

When an incident occurs there is a significant probability of a secondary incident occurring, which often results in a more serious traffic incident than the initial event. During a traffic incident, vehicles approach the incident at high speeds and encounter the stopped queue of traffic long before the arrow panels and emergency lighting at the scene are even visible. This high-speed, approaching traffic, are not expecting the stopped traffic which need additional advance warning. Special incident management advance warning signs placed by first responders provides the needed warning to approaching motorists. These signs are a special fluorescent pink color with the legends "EMERGENCY SCENE AHEAD" and "BE PREPARED TO STOP."

Advance warning signs are generally deployed for Level II (Intermediate) and Level III (Major) incidents. Most minor incidents are cleared from the travel lanes before advance warning signs can be deployed. While the first responding units are not expected to stop and set up warning signs before securing the scene and protecting the victims of a crash, subsequent units should take steps to advise highway users of the incident ahead. The Manual on Uniform Traffic Control Devices (MUTCD) specifies: "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."

Safety Patrol operators can play a significant role in reducing secondary incidents. The prompt and proper placement of the safety patrol truck with the arrow board and setting up a cone closure at the scene will help move drivers safely past the scene and in a more controlled atmosphere. However, a crash can quickly cause traffic to back up due to the reduction in the roadway capacity. This backup, or traffic "queue", grows quickly as more high speed traffic vehicles approach.

The placement of incident advance warning signs is an important function. Generally, a second or follow-up responder takes this responsibility. As an example, this could be handled by the second safety patrol responding to the incident. If a backup unit is not available, the initial responding unit can double back and place the signs once the immediate scene is secure. It is important that the signs be placed far enough back and / or moved as needed to remain well in advance of the queue.



As you can see, Communication, Cooperation and Coordination is key to any successful emergency response. It is vital that the scene be re-assessed for safety every 15 minutes as the event moves from response into recovery, cleanup, and a return to normal condition.



The safety of the motoring public is a primary objective of the Traffic Incident Management (TIM) program. safety patrols are a key component of motorist safety and are also the "street level" representative of the TIM program. Additionally, advance warning can also help prevent secondary incidents which the longer incident responders remain at the scene, the greater the risk they, and the traveling public face.

For more information or if you have any questions, please contact Bill Fuller, District-One TIM Coordinator at (239) 225-1915 and/or william.fuller@dot.state.fl.us.

Article submitted by William Fuller, District One Traffic Incident Management Project Manager.

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Upcoming Events:

2015 TIM Team Meetings:

SWIFT SunGuide Center
10041 Daniels Parkway
Fort Myers, FL 33913
9:30 AM

- April 8, 2015
- June 10, 2015
- August 12, 2015
- October 14, 2015
- December 9, 2015



Wrong Way Driving Epidemic—Part 1

“Epidemic”

Wrong-way driving (WWD) incidents nationwide have been on the rise at a shocking rate over the past couple of years. WWD is one of the most dangerous driver errors/behaviors that can occur on any roadway. While WWD is not among the majority of causes for collisions, it is among the top for causes of fatal crashes. These types of crashes typically result in head-on collisions causing severe injuries or fatalities. The leading factors for this driver error can vary from driving under the influence to driver confusion.



Research

WWD incidents have been researched extensively among state agencies. Some of the statistics are quite scary. A study in North Carolina of statewide freeway WWD crashes found that WWD accounted for only 0.2% of freeway crashes, but had 5.6% of freeway fatalities. About 60% of WWD freeway crashes resulted in a fatality or serious injury, which is much higher than the 2.5% of total freeway crashes resulting in fatality or serious injury.¹ According to the Fatality Analysis Reporting System (FARS), a total of 1753 people died and thousands more were injured in wrong way crashes in the United States from 1996-2000. The number of fatalities caused by wrong way driving ranges between 300-400 per year².

With WWD contributing to some of the most severe crashes, knowing and understanding characteristics of drivers who participate in wrong way driving is pivotal in helping research countermeasures to minimize these events. WWD characteristics such as driver sobriety, age, and gender have been discussed in many studies. Upwards of 60% of wrong way driving crashes involve a driver under the influence of alcohol or drugs. Most studies concluded that young drivers and older drivers (65+) are overrepresented in wrong-way crashes³. Both of these demographics are represented but for different reasons. Typically, the younger drivers were driving the wrong way due to alcohol while older drivers were driving the wrong way due to confusion or for medical reasons, like dementia.

Crash Data Analysis



Understanding and analyzing wrong way driving incidents has proven to be a difficult task. Understanding the human factors involved, the roadway environment of where the driver entered the facility, and the fact that few wrong way driving incidents actually end in a crash, all prove to be limitations in analyzing wrong way driving incidents. First, the majority of crashes end in fatality or serious injury, so understanding the drivers state of mind and reasons for error (alcohol, medical, confusion, etc.) are challenging. This leaves researchers having to investigate and speculate the driver’s mindset. Secondly, knowing where the driver entered the facility is difficult unless a witness physically sees the driver enter the facility. This key information would aid in determining appropriate countermeasures that would deter the next driver from entering the facility incorrectly at the same location. Knowing if the geometric conditions, signage, or pavement markings played a role in the driver’s confusion would be essential. Lastly, only a small percentage of wrong way driving incidents actually end in a crash. Other wrong way driving incidents are self-corrected or stopped by law enforcement. The drivers who self-correct are the piece researchers know the least about, but the most vital for responding to implemented countermeasures.

Stay tuned next month for an overview of what the different Districts throughout Florida are doing to protect against wrong way driving incidents. We will look at the different technology being used around the state to help deter drivers from entering limited access facilities the wrong way.

⁽¹⁾ Braam, A.C. *Wrong Way Crashes: Statewide Study of Wrong Way Crashes on 40 Freeways in North Carolina*. Traffic Engineering and Safety Systems Branch, North Carolina 41 Department of Transportation, 2006.
⁽²⁾ Fatality Analysis Reporting System (FARS). (n.d.). from <http://www.nhtsa.gov/FARS>
⁽³⁾ Investigation of Contributing Factors Regarding Wrong-Way Driving on Freeways: <http://cetrans.isg.siu.edu/wwd/FHWA-ICT-12-010.pdf>

Article Submitted by Metric Engineering, Inc.. – Jessica Renfrow E.I.

T I M TEAM WEBSITE!

www.swftim.org

The Collier-Lee-Charlotte County TIM Team is committed to implementing the Quick Clearance principles of Florida’s Open Roads Policy through the “3 Cs” of TIM: Communication, Cooperation and Coordination, and providing the public with the best real-time Motorist Information available. Team membership draws from state, regional, and local transportation agencies, public safety providers, and other organizations and companies that service the traveling public. The Teams, sponsored by the FDOT, meet bi-monthly.

Mission

The TIM Team Program brings together all agencies involved in clearing the roadway crashes with the objective of improving detection, verification, response, and clearance times to expeditiously remove a motor vehicle crash or incident from the roadway while providing the best real-time information to motorists, resulting in a safer highway environment for both incident responders and motorists.

