



U.S. Department of Transportation
Federal Highway Administration

Introduction to Traffic Incident Management (TIM) Programs

July 26, 2017

Agenda

- **Introduction and Opening Remarks**
 - Paul Jodoin, Federal Highway Administration
- **Introduction to Traffic Incident Management and Overview of Arizona Traffic Incident Management Program**
 - Jeff King, Federal Highway Administration and Retired Arizona State Trooper Captain
- **Overview of Oregon Statewide Traffic Incident Management Program**
 - Darin Weaver, Oregon Department of Transportation



TIM BUSINESS CASE

National TIM Program Vision

Through continuous and enhanced planning and training of all TIM personnel:

- Reduce or eliminate responder and motorist injuries and fatalities.
- Promote rapid incident clearance thereby reducing traffic congestion and vulnerability.
- Develop or enhance local TIM Programs that ultimately benefit corridors, regions and States.
- Measure performance that demonstrates improved TIM responses and programs over time.
- Emphasize TIM as a system operations “core mission” for all responders.

The Evolving Business Case: Why TIM?

The business case for training incident responders:

1. The safety of incident responders.
2. The safety of all road users.
3. Congestion mitigation and commerce.



Responder Struck-By Fatalities

In a typical year, the following number of responders are struck and killed:

- 10 Law Enforcement Officers.
- 4 Fire and Rescue Personnel.
- An estimated 40-60 Towing and Recovery Professionals.
- Several transportation professionals from DOTs, Public Works, and Safety Service Patrol Programs.

Responder Struck-By Crashes – Unknown Number of Injuries and Property Damage



Source: Ron Moore



Source: Joseph Rose



Source: North Naples Fire Department



Source: Tennessee Department of Transportation

Secondary Crashes

Secondary Crashes are crashes that occur within the incident scene or within the queue or backup, including the opposite direction, resulting from an original incident.

FHWA Focus States Initiative

Impacts of Incident-Related Congestion

- Lost time and productivity.
- Increased cost of goods and services.
- Impacts on air quality and the environment.
- Increased fuel consumption.
- Reduced quality of life.
- Negative public image for response agencies.

AAA Crashes vs Congestion November 2011	Cost of Crashes		Cost of Congestion	
	Total	Per Person	Total	Per Person
2005 U.S. National	\$164.2 billion	\$1,051	\$57 billion	\$430
2009 U.S. National	\$299.5 billion	\$1,522	\$97.7 billion	\$590

TIM Defined

- TIM consists of a planned and coordinated multidisciplinary process to detect, respond to, and clear traffic incidents so that traffic flow may be restored as safely and quickly as possible.
- Effective TIM:
 - Improves the safety of emergency responders, crash victims, and motorists.
 - Reduces the duration and impacts of traffic incidents.



TIM PROGRAMS

Arizona TIM Program Overview



Source: Arizona State Troopers

Arizona TIM Program Overview

- What triggered AZ DPS to implement TIM and TIM PMs?
 - History of officer involved struck by crashes.
 - On going work with International Association of Chief's of Police (IACP) to mitigate the outcomes of struck by crashes.
 - 2000-2001 Blue Ribbon Panel ref. Crown Victoria Police Interceptor (CVPI) crashes.
 - 2004 IACP Law Enforcement Safety Stops Sub Committee (LESSS).
 - Civilian secondary crash awareness and civil suit litigation.

Most Importantly was the Focus on Officer Safety!

In Arizona, 29 DPS officers had been lost in the line of duty, 17 of these were involved in motor vehicle crashes, 11 of these were involved in secondary crashes.



Secondary Items Driving Change

- Secondary Issues:
 - Expected recovery from great recession.
 - Predictions on freight movement.
 - Human resources:
 - Cuts and vacancies of FTEs.
 - New training and administrative mandates.
 - Inability to hire qualified candidates.
 - Increasing calls for service.

What did we find looking back at our TIM program prior to 2010?

- Az Troopers placed the most focus on the causes, DUI, Reckless Driving, Distracted Drivers, Speeding etc.
- Az Troopers were focusing on the big crashes not the everyday little crashes.
- Az Troopers had been implementing TIM on those traffic incidents that were longer in length not the everyday little ones.
- Little everyday traffic incidents in many cases led to or were connected to the big incidents.

“Take away practice: Apply TIM at every traffic incident and learn from the small ones before they get big,” Captain Jeff King, Az State Trooper (retired)

TIM Performance Measures DATA Collection

- The TIM PMs are being collected by AZDPS using Traffic and Criminal Software (TRACS).
- Was added to the Statewide crash form used in 2014.

ARIZONA CRASH REPORT			REPORT ID							
Total Units	Total Injuries	Total Fatalities	Estimated Total Damage Compared To \$1,000 Limit		Private Property	Fatal	Person Transported	Tow Away At Least	District or Grid No.	
0	0	0	<input type="checkbox"/> OVER	<input type="checkbox"/> UNDER	Crash <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> for Medical Care	<input type="checkbox"/> One Vehicle?		
On Highway / Road / Street			M.P. or R.P.		Offset Direction	Distance	<input type="checkbox"/> Measured <input type="checkbox"/> Approximate		<input type="checkbox"/> Miles <input type="checkbox"/> Feet	
<input type="checkbox"/> Inside <input type="checkbox"/> Outside			City		County					
Is this a Secondary Collision? <input type="checkbox"/> YES <input type="checkbox"/> NO			Roadway Clearance			Incident Clearance				
			Date		Time		Date		Time	

IACP & Public Roads Magazine Articles

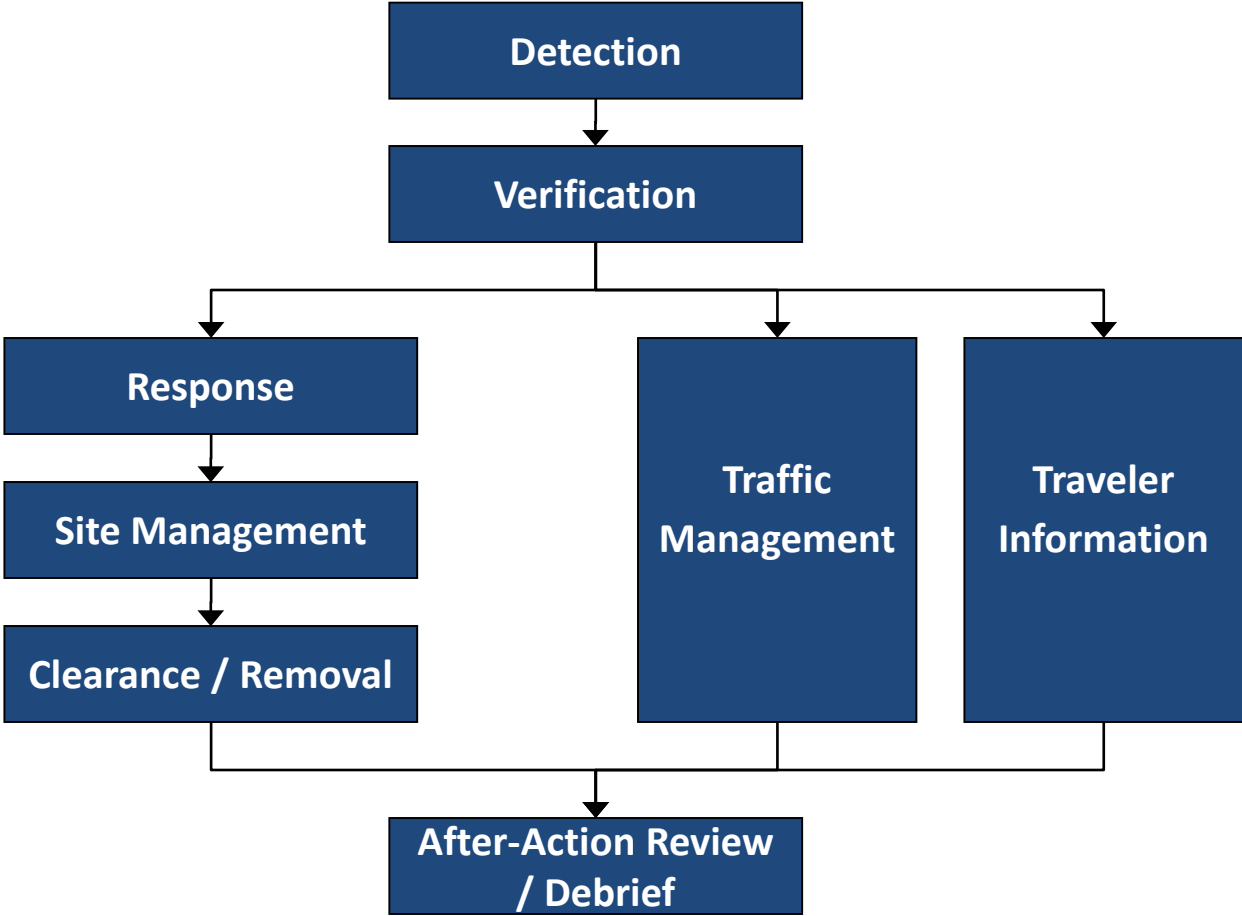
For additional background refer to:

James E. McGuffin Jr. and Jeffrey A. King, "Traffic Incident Management: The Next Evolution in Officer Safety," *The Police Chief* 82 (July 2015): 22–27.

And

Jeffrey A. King, "A Pivotal Job for Police," *Public Roads* Vol 78 No. 6, May/June 2015.

TIM Process



TIM Components

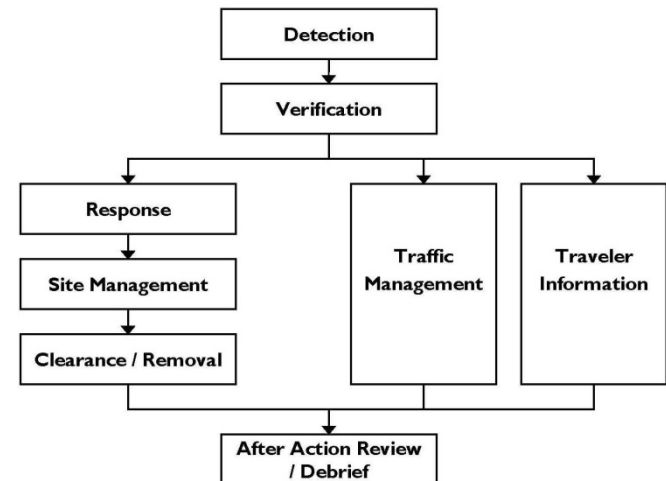
TIM Components

Program (Committee/Task Force)

- Relationships.
- Needs Assessment.
- Training.
- Performance Evaluation.
- Asset Management.
- Contracting.
- Administration & Staffing.
- Finance/Budget.

Response

- TIM Process.



What is a TIM Program?

- The goal of a TIM program is to allow for a more effective, efficient response for all responding agencies.
- On-going effort from all TIM responders to continuously identify needs and opportunities for improvement.
- TIM programs and associated committees and/or task forces are sustained and on-going.

TIM Program - Where do you Start?

1. Identify, involve, encourage participation from all responding agencies and stakeholders - “get folks to the table.”
2. Identify a “champion” to lead program development and on-going program administration.
3. Establish and maintain relationships.
4. Collectively assess the “climate” - Where are we now?
 - Tool: Federal Highway Administration (FHWA) Capability Maturity TIM Self-Assessment (CMSA).
5. Collectively establish goals for performance and progress - Where do we want/need to go?
 - Tool: Charter/Vision/Mission

TIM Who? - Identifying Program Participants

- Law Enforcement.
- Fire Departments.
- State Environmental Agency.
- Public Safety Dispatchers.
- Emergency Management.
- Medical Examiners/Coroners.
- Federal, State, and Local Departments of Transportation.
- Service Patrols (contracted and/or agency-staffed).
- Planning Organizations.
- Towing, Recovery, and Specialized Clean-Up Services.
- Media.

TIM Program Committee Meetings

- Meet regularly (e.g., monthly or quarterly) to:
 - Establish, confirm, reinforce goals/objectives.
 - Consider a vision or mission development activity and subsequent memorandum of understanding (MOU) signed by all participants.
 - Identify, discuss problem areas, needs (e.g., TIM CMSA).
 - Collaborate in developing solutions and strategies.
 - Conduct after-action reviews or debriefs.
 - Promote awareness of on-going TIM-related activities and initiatives.
 - Monitor training requirements.
 - Establish, reinforce and renew relationships.



OREGON'S TIM PROGRAM

ELEMENTS FOR SUCCESS

DARIN WEAVER

ODOT STATEWIDE TIM PROGRAM COORDINATOR

Coordination, Communication & Collaboration



Coordination

- Statewide (or Agency) TIM Plan
- Regional TIM Teams

Communication

- TIM Newsletter
- TIM Social Media
- TIM Internet Page

Collaboration

- Statewide TIM Training Committee
- Cross-Disciplined TIM Training

Coordination – Have A Plan and Share It!

2011
Agency Plan

Build
Support,
Understanding
and Buy-In

2015
Statewide Plan



OREGON TRAFFIC INCIDENT MANAGEMENT STRATEGIC PLAN

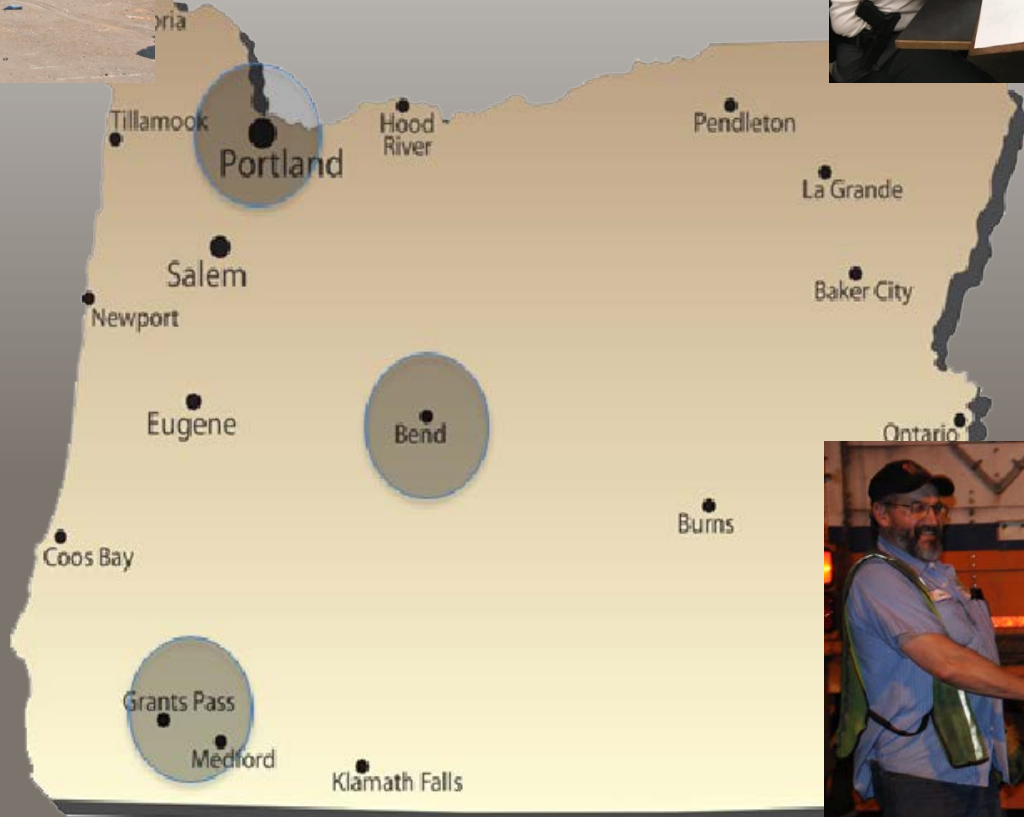


Prepared by:
DKS Associates
in partnership with
Oregon Department of
Transportation
and
Oregon State Police

December 23, 2015



Coordination – Regional TIM Teams





TIM Program Communications

Oregon TIM Program
Communications

TIM Social
Media

TIM
Internet
Site

TIM Trend
Newsletter

**Diversify, optimize
and streamline
channels to broaden
reach and accelerate
engagement**



Communication – Appeal to All TIM Responders

THE TIM TREND

June 2017

There goes the Sun!

The first total solar eclipse touching the United States since 1979 begins just after 9 a.m. August 21 near Newport. The eclipse path in Oregon offers the best weather prospects anywhere in the country. It will take about 2.5 hours to cross the state. The eclipse's path of totality will be about 60 miles wide.



State officials predict Oregon will host up to one million visitors for the event. Our guests will start arriving mid-August and depart up to a week after the eclipse. This will have a major impact on state highways.

We are concerned about traffic safety, traffic management and movement, emergency vehicle response ingress and egress, traffic bottlenecks, choke points, wildfires...
Our list goes on and on!

We're working with other state agencies, cities, counties and law enforcement to prepare for this event so residents

and visitors will be able to travel safely and have an enjoyable eclipse experience.

In this Edition

- What activities are taking place...
- What results they are meeting with...
- How and Where responders can get involved with your program...

Communication – Maintain & Build Engagement

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TRAFFIC INCIDENT MANAGEMENT
COMMITTED TO SAFETY & EFFICIENCY
EMBRACING COOPERATION, COMMUNICATION & COLLABORATION

Oregon TIM Responders
@OregonTIMResponders

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Photos

Government Organization in Salem, Oregon
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Oregon TIM Responders provides the latest traffic incident management news, best practices and training for Oregon's first responder community.

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ODOT Maintenance and Operations Branch

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- Advertise Events
- Celebrate Successes
- Educate & Inform
- Build a TIM Community

National TIM Responder Training



NATIONAL TRAFFIC INCIDENT MANAGEMENT (TIM) RESPONDER TRAINING PROGRAM

LAW ENFORCEMENT | FIRE | EMS | TRANSPORTATION
TOWING & RECOVERY | COMMUNICATIONS



OREGON 4-HOUR COURSE

Statewide Implementation Committee





TIM Training - Keep It Cross-Discipline



- Hand select trainers from each discipline to be a part of your state (or agency) training team
- Ensure Training events have multi-disciplined trainers
- Encourage Multi-disciplined / multi-agency attendance at each training event

TIM Training & Communication – Tools Linked & Complimentary

Oregon TIM Responder Training

<http://www.oregon.gov/ODOT/HWY/ITS/Pages/Traffic-Incident-Management.aspx>



The Oregon Department of Transportation, Oregon State Police and the Federal Highway Administration, in association with Oregon's Fire, EMS, Law Enforcement and Towing professionals present the National Traffic Incident Management (TIM) Responder Training



Eventbrite

LIVE EVENTS 5 PAST EVENTS 48



WED, FEB 15 10:00 AM
TIM Responder Training Request

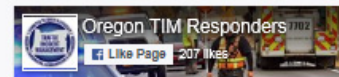
Choose YOUR Location, YOUR Date and YOUR Time - Click the Register...

FREE

#Class



WED, MAR 15 7:00 PM
Siletz Valley Fire District TIM Responder Training



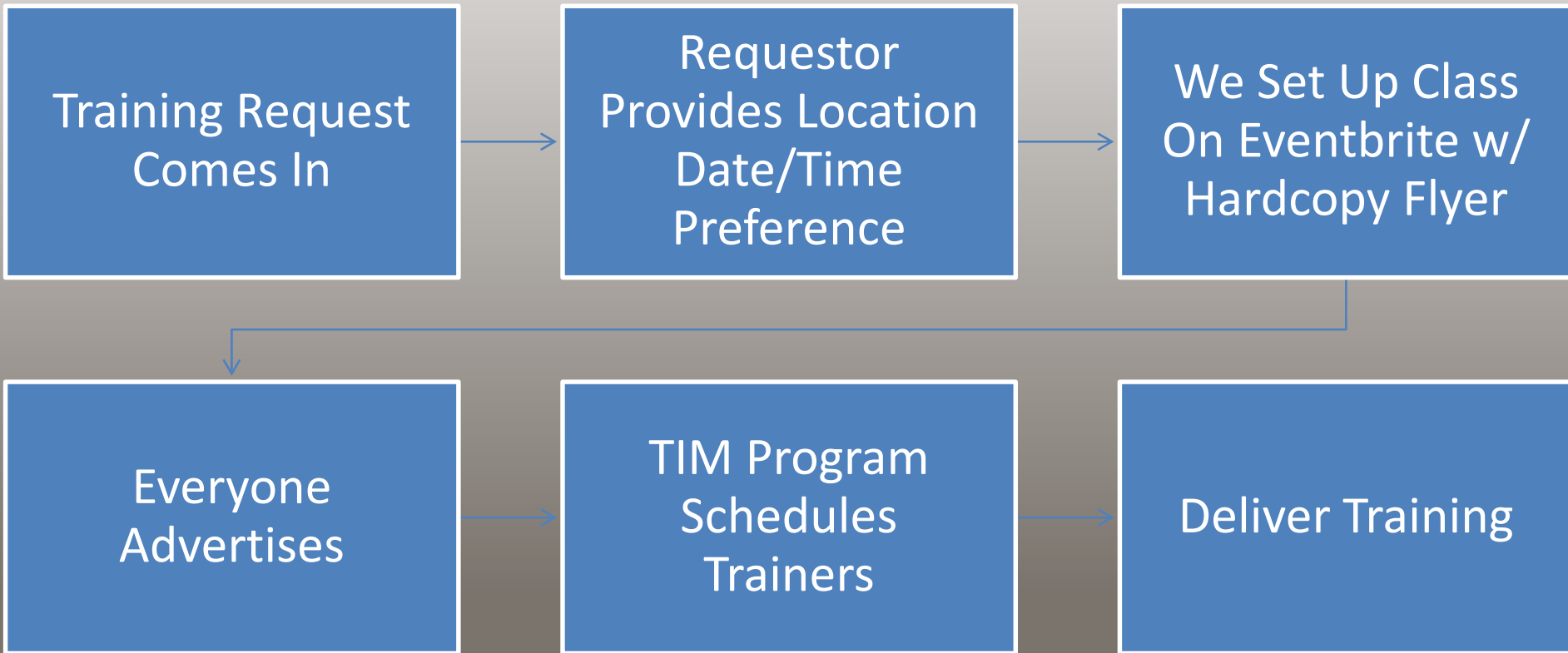
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Oregon TIM Responders
Yesterday at 8:37am

ODOT Job Opportunity for TIM Responders! Closes Tuesday, March 7, 2017

Centralized Training Coordination



Explore New Outreach & Promotional Ideas

Oregon Traffic Incident Management (TIM)

TIM training is designed by responders, for responders to enhance the safety and efficiency of how we work together to manage traffic incidents.



Visit our TIM Responder Training site to register or request a training event in your area.

www.eventbrite.com/o/oregon-tim-responder-training-8950531191

Scan the QR code with your smart phone or type the link into your browser.



From Gossip Column to TIM Program -



“Begin somewhere; you cannot build a reputation on what you intend to do.”

---Liz Smith



Realizing the Benefits



Coordination

- TIM Plan = Program Touchstone
- TIM Teams embed local champions, help institutionalize TIM

Communication

- Ongoing "TIM Meal"
- Select Peer Pressure
- Identifies how & where to get involved

Collaboration

- Share the knowledge
- Share the Game plan
- Succeed as a Cross-disciplined, inter-agency TIM Team

Shape or Be Shaped

“Far and away the best prize that life has to offer is the chance to work hard at work worth doing.”

---Theodore Roosevelt





Contact

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Thank you.



RESPONDER AND MOTORIST SAFETY

High-Visibility Safety Apparel Use

Manual on Uniform Traffic Control (MUTCD) Section 6D.03 states:

- All workers, including emergency responders, within the right-of-way of a roadway who are exposed either to traffic (vehicles using the highway for purposes of travel) or to work vehicles and construction equipment shall wear high-visibility safety apparel.
- Exceptions:
 - When uniformed law enforcement personnel are used to direct traffic, to investigate crashes, or to handle lane closures, obstructed roadways, and disasters, high-visibility safety apparel as described in this Section shall be worn by the law enforcement personnel.
 - Firefighters or other responders engaged in emergency operations that directly expose them to flame, fire, heat and/or hazardous materials.

High-Visibility Safety Apparel Use



Source: SHRP2 National TIM Training Program

Vehicle Markings



Source: Oak Creek Fire/Rescue, Wisconsin

On-Scene Lighting Procedures



Source: SHRP2 National TIM Training Program



TIM AFTER-ACTION REVIEWS

After-Action Reviews (AAR)

- **Purpose:** To evaluate the decisions made and actions taken during an incident and to identify both best practices and opportunities for improvement.
- Effective AAR/Debriefings provide a constructive forum to identify conflicts and inefficiencies and to then take steps to resolve or eliminate them.
- AAR/Debriefings can help open lines of communication and foster relationships between responders.
- Incident AAR/Debriefings should be multi-agency and multi-discipline.

AAR Typical Format

1. Review basic details of incident.
 - Utilize pictures and/or video to illustrate incident scene.
 - Utilize maps to illustrate incident location and emergency alternate routes.
2. Roundtable discussion – agency perspectives.
 - Discuss issues and/or areas of concern.
 - Identify solutions/enhancements.
3. No finger pointing!
4. Identify at least one action item per AAR/Debrief.

TIM Program meetings provide a regular opportunity to conduct AAR/Debriefs and follow up on resulting action items.



U.S. Department of Transportation
Federal Highway Administration

TIM TRAINING

High-Level TIM Training Framework and Tiered TIM Focus Areas

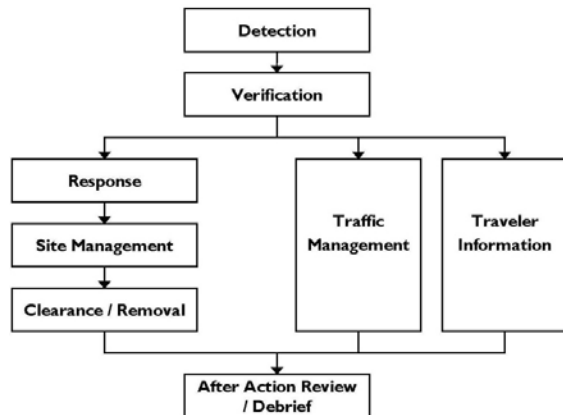
Tier 1: National
TIM Responder
Training
(SHRP2 L12)

Tier 2: Advanced
TIM Workshop
(for Mid-Level
Managers)

Tier 3: Executive
Level Briefings
(for Decision
Makers)

Response Focus

- TIM Process.



Program Focus (Committee/Task Force)

- Relationships.
- Needs Assessment.
- Training.
- Performance Evaluation.
- Asset Management.
- Contracting.
- Administration & Staffing.
- Finance/Budget.

National TIM Responder Training Program Implementation Progress – July 10, 2017



Train-the-Trainer Sessions

- **320** sessions with **9,799** participants



In-Person Responder Training

- **10,344** sessions with **237,453** participants



Web-Based Training (WBT)

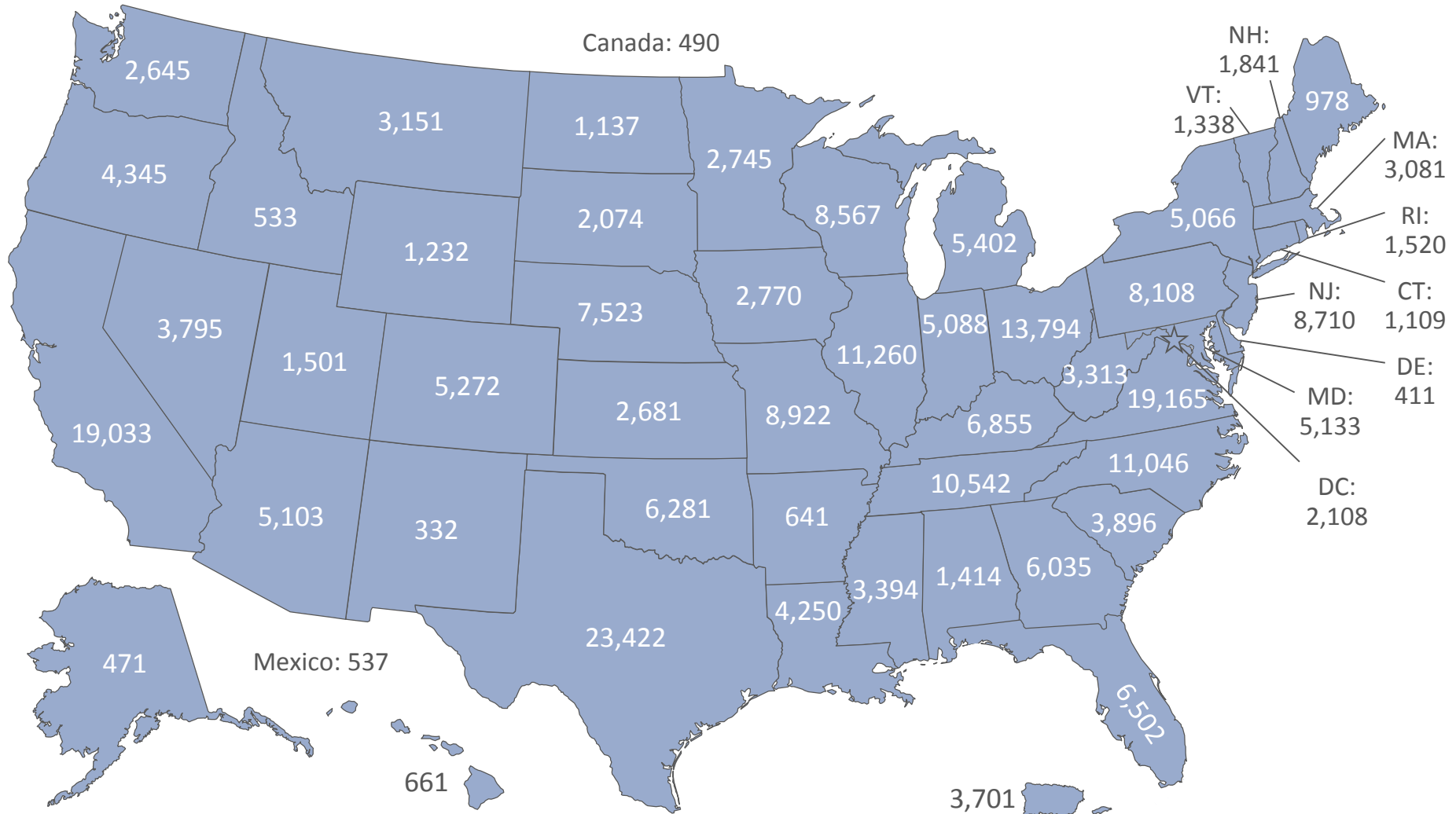
23,672 total | **18,340** NHI | **1,610** Other
3,722 ERSI Responder Safety Learning Network



Total Trained: 270,924

National TIM Responder Training Program

Total Trained – July 10, 2017



270,924 Total Trained



National Training for Traffic Incident Responders (Tier I)

Training Course Design:

- Course has been developed for responders by responders.
- Webinar focused solely on the Training September 20, 2017.

QUESTIONS?



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