

Section 16: Traffic Incident Management



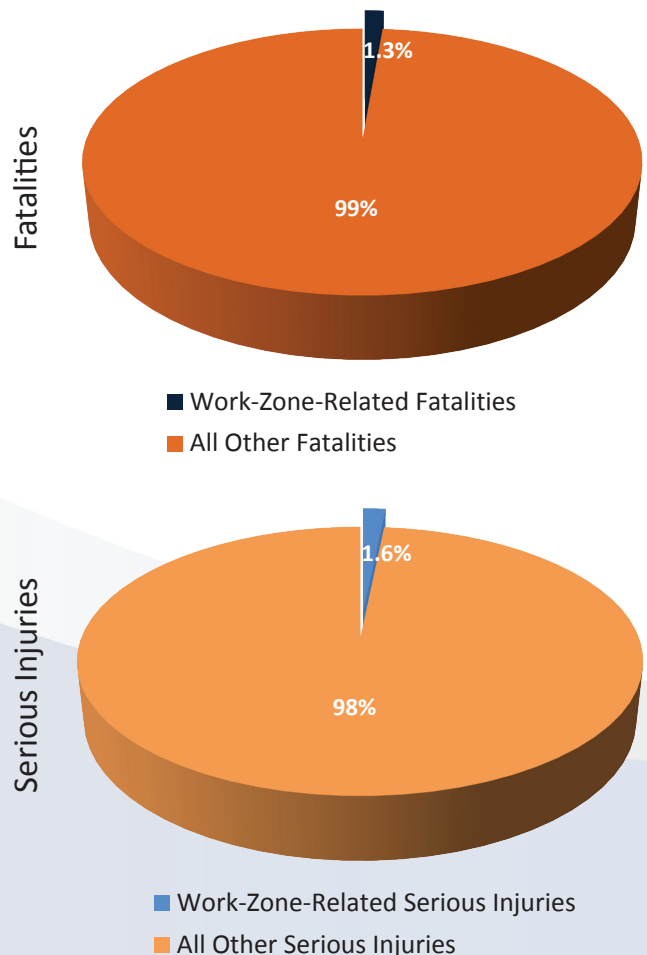
Traffic Incident Management (TIM) is the coordinated process to identify, respond to and clear traffic incidents to prevent secondary collisions and reduce the duration of incident-related congestion. The TIM Emphasis Area includes work-zone safety, where many of the same safety risks exist.

The safety challenge with this Emphasis Area can be measured by the number of secondary collisions and the number of collisions in work zones. The statewide crash report form is being modified to collect data on secondary collisions and other information that have not been collected in the past. While strategies in this section address key areas of TIM, the data graphics rely wholly on information for work zone crashes.

What

Figure 16.1: Work-Zone-Related Portion of All Fatalities and Serious Injuries

Work-zone fatalities and serious injuries are counted from all crashes within, entering or leaving a work zone or any area where workers are present. Of all fatalities, 1.3 percent occurred from work-zone-related crashes. Of all serious injuries, 1.6 percent resulted from a work-zone-related crash.

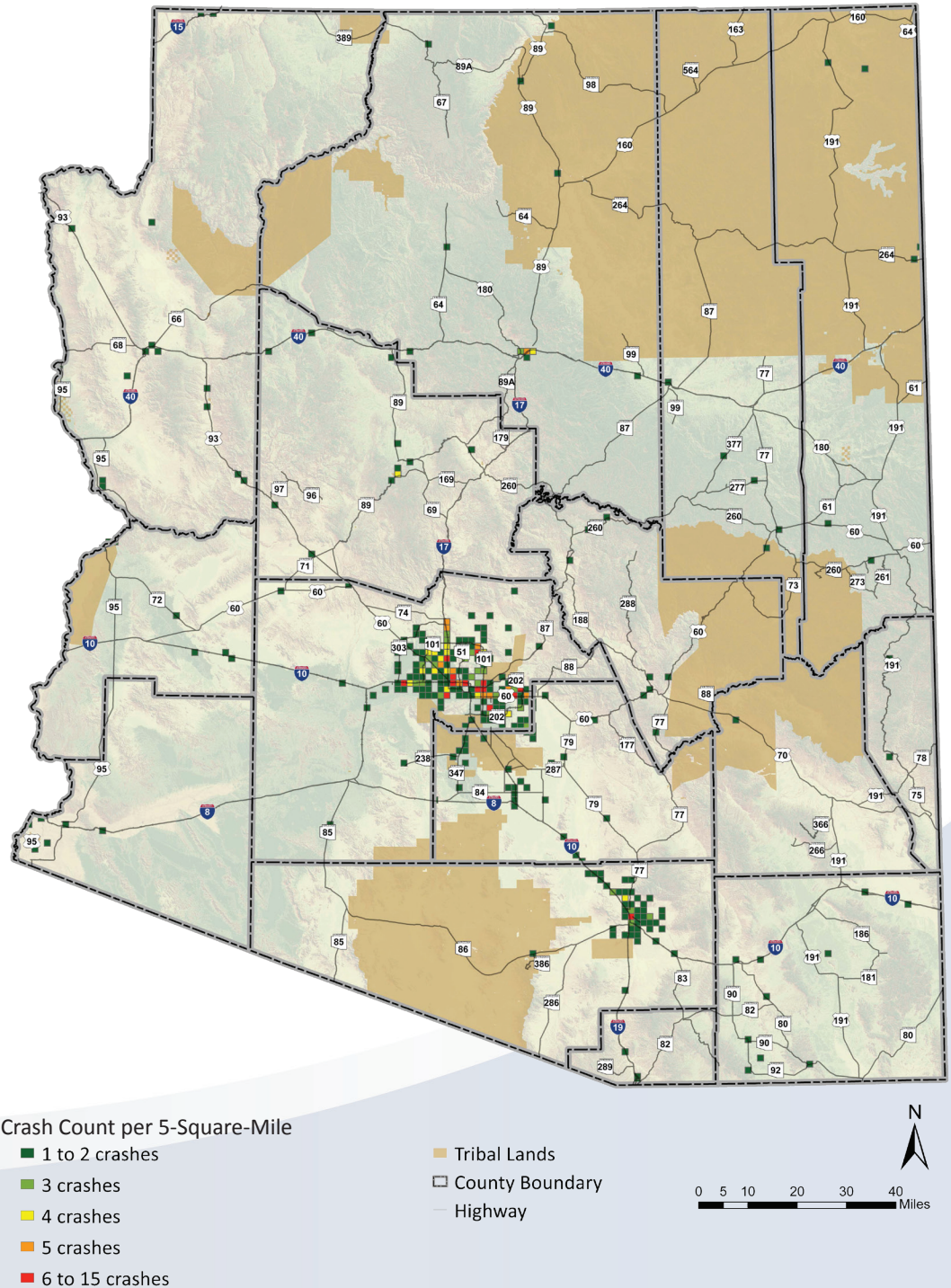


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Where

Figure 16.2: Work-Zone-Related Fatal and Serious-Injury Crash Density Map

At a statewide level, high-severity work-zone crashes have taken place over the eight-year period most often in the highest-traffic-volume locations in major urban centers. The locations of work zones change as roadway and other projects are started and completed, and many high-density crash locations shown here are not likely to see work-zone related crashes in the near future.



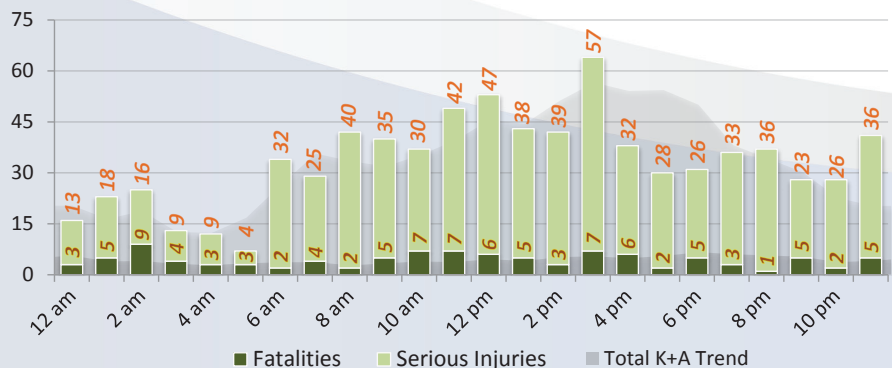
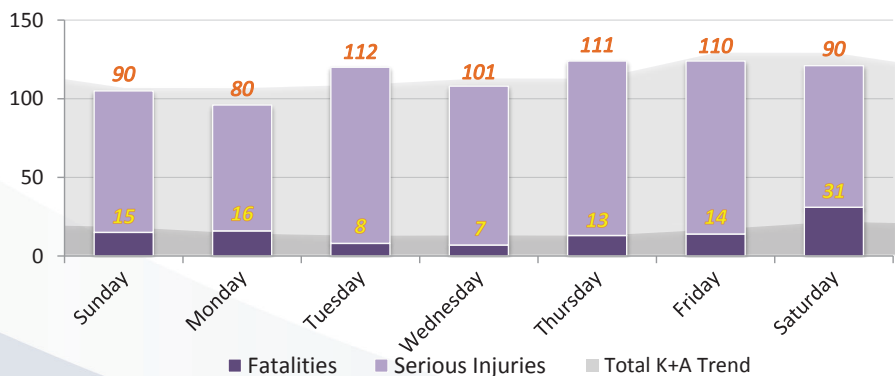
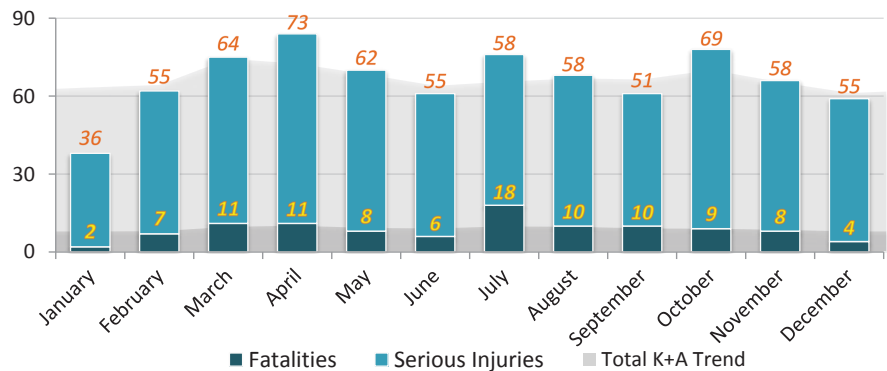
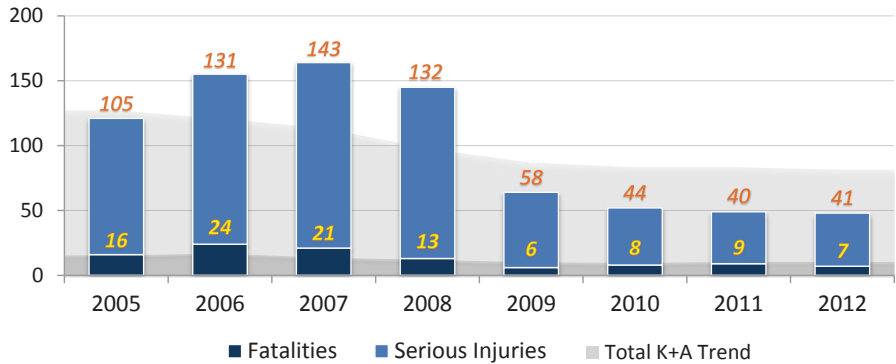
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When

Figure 16.3: Temporal Trends in Work-Zone-Related Fatalities and Serious Injuries

Work-zone-related crashes resulted in 24 and 21 fatalities in 2006 and 2007, respectively. Serious injuries were highest in 2007 with 143. Since 2008, fatalities and serious injuries associated with work-zone crashes have significantly decreased.

The trend in these high-severity crashes during the eight-year period shows the lowest numbers in the month of January. The highest numbers of fatalities have taken place during the month of July and on Saturdays. Some overnight hours, and hours approaching noon, have seen a higher proportion of work-zone crashes than the average for all crashes.

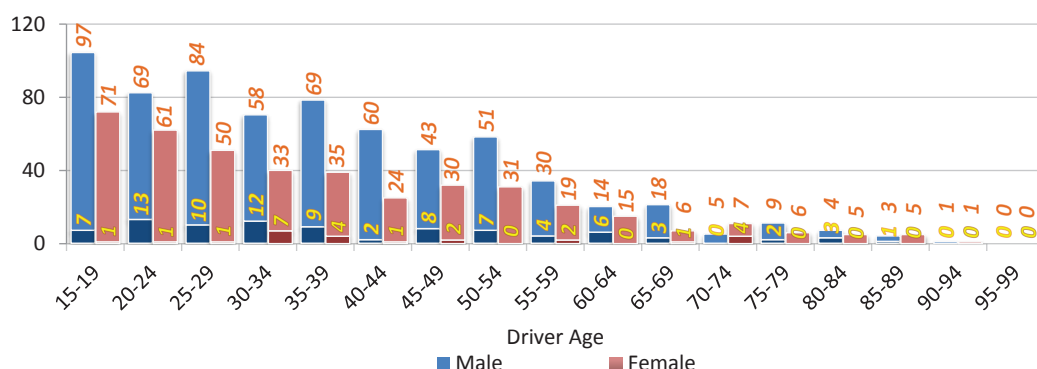


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Who

Figure 16.4: Work-Zone-Related Fatalities and Serious Injuries by Driver Age and Gender

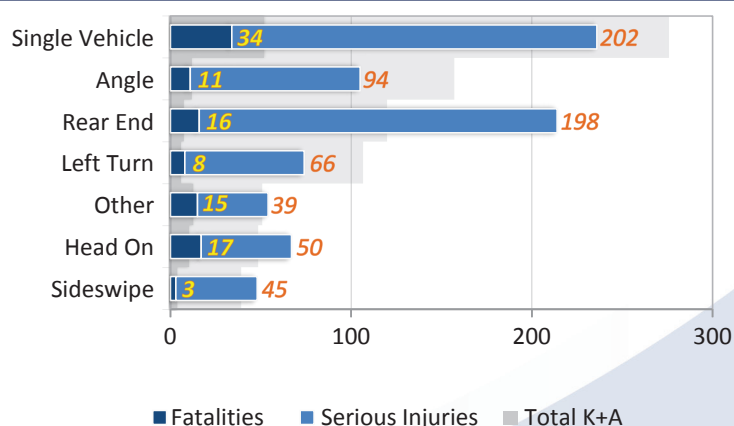
Younger drivers have been involved in a higher number of fatal and serious-injury work-zone crashes. Male drivers have been involved more than female drivers in nearly every age group.



How

Figure 16.5: Work-Zone-Related Fatalities and Serious Injuries by Crash Type

Work-zone-related fatalities have resulted from a higher proportion of rear-end and head-on collisions than the average for all Emphasis Area crash categories. The highest numbers of both fatalities and serious injuries have resulted from single-vehicle crashes, but the numbers are lower than the average for all crashes.



Emphasis Area Goal

Reduce fatalities and the occurrence and severity of serious injuries resulting from crashes in work zones and secondary crashes involving Traffic Incident Management (TIM) activities on all public roadways in Arizona.

Performance Measures and Objectives

To be determined by the Emphasis Area team during the first year of SHSP implementation.

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Strategies and Proposed Action Steps: Traffic Incident Management

A. Develop cross-cutting TIM programs that include training, public education, research, evaluation and application of technology.

Strategy Leader:

Supporting Key Partners:

Action Steps	Leader(s) and Partners	Potential Resources	Status
A.1 Establish TIM partnerships and programs.			
A.2. Provide continuing multidisciplinary training.			
A.3. Set goals for performance and progress,			
A.4. Utilize TIM technology, and evaluate performance measures.			
A.5 Utilize telemedicine between first responders and emergency rooms.			
A.6 Develop effective TIM policies.			
A.7 Establish awareness and education partnerships.			

B. Develop and implement practices, policies and public education efforts to increase TIM responder safety.

Strategy Leader:

Supporting Key Partners:

Action Steps	Leader(s) and Partners	Potential Resources	Status
B.1. Encourage recommended practices for responder safety.			
B.2. Strengthen education on and enforcement of Arizona's Move Over law.			
B.3. Improve driver training and awareness.			

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Strategies and Proposed Action Steps: Traffic Incident Management

C. Develop and implement procedures that achieve safe and quick incident clearance.

Strategy Leader:

Supporting Key Partners:

Action Steps	Leader(s) and Partners	Potential Resources	Status
C.1. Adopt multidisciplinary TIM procedures.			
C.2. Set response and clearance time goals.			
C.3. Provide 24/7 availability of resources for TIM.			

D. Develop and implement prompt and reliable communications systems that support TIM.

Strategy Leader:

Supporting Key Partners:

Action Steps	Leader(s) and Partners	Potential Resources	Status
D.1. Establish multidisciplinary communications practices and procedures.			
D.2. Provide prompt, reliable responder notification.			
D.3. Utilize interoperable voice and data networks to support TIM procedures.			
D.4. Utilize broadband emergency communications systems to support TIM procedures.			
D.5. Provide prompt, reliable traveler information systems.			
D.6. Develop partnerships with news media and information providers.			

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Strategies and Proposed Action Steps: Work Zones

A. Develop and improve work-zone design and management practices.

Strategy Leader:

Supporting Key Partners:

Action Steps	Leader(s) and Partners	Potential Resources	Status
A.1 Develop a work-zone manual for use by ADOT and local agencies to produce consistent work-zone traffic control practices statewide, which includes consideration of pedestrian and bicyclist safety needs.			
A.2 Create and maintain a statewide and/or regional database that allows for improved coordination of construction scheduling to minimize work zones on a route or area.			
A.3 Create regional committees comprised of engineering, enforcement, EMS and other stakeholders who assist agencies with work-zone traffic-management planning.			
A.4 Implement policies requiring contractors to update/maintain work-zone signing daily.			
A.5 Improve work-zone safety for pedestrians and bicyclists.			

B. Improve driver compliance with work-zone traffic controls.

Strategy Leader:

Supporting Key Partners:

Action Steps	Leader(s) and Partners	Potential Resources	Status
B.1 Increase fines for speeding through work zones.			
B.2 Use speed monitoring / feedback systems in work zones.			
B.3 Increase work-zone enforcement.			
B.4 Consider use of temporary rumble strips to gain driver attention and reduce speeds.			

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Strategies and Proposed Action Steps: Work Zones

C. Increase knowledge and awareness of work zones and work-zone safety.

Strategy Leader:

Supporting Key Partners:

Action Steps	Leader(s) and Partners	Potential Resources	Status
C.1 Conduct work-zone awareness campaigns.			