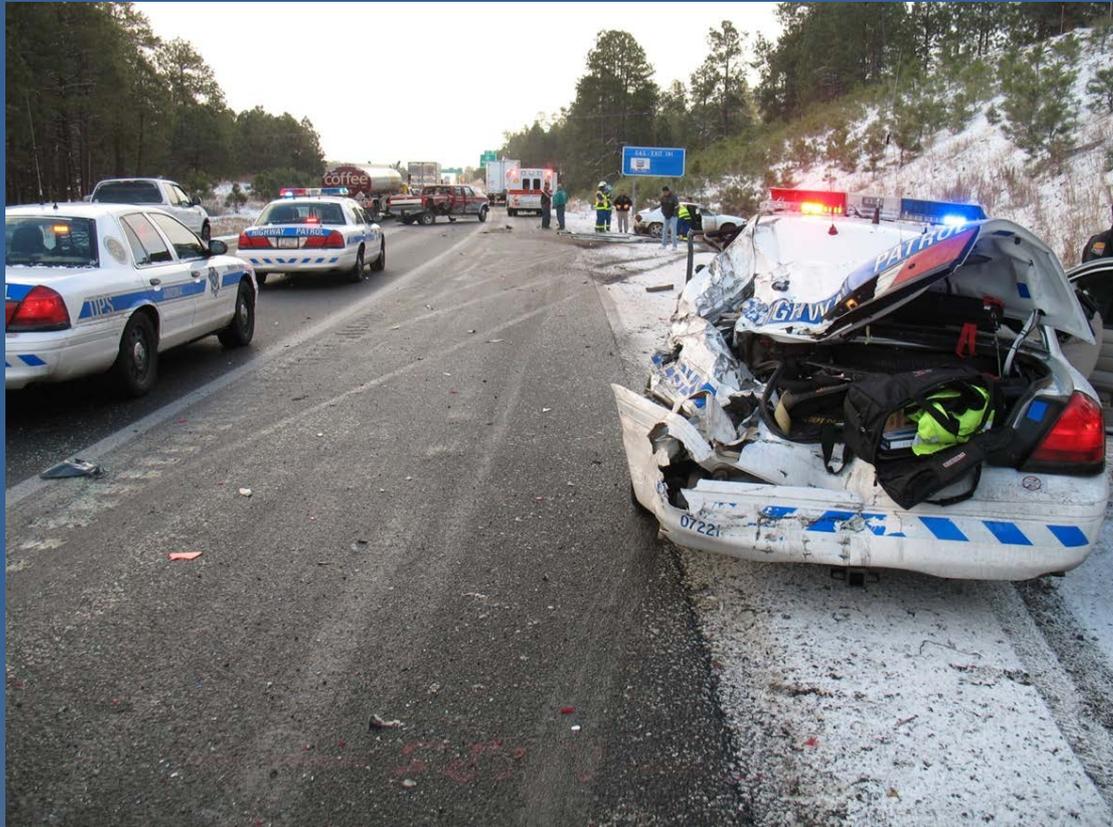


Arizona Department of Public Safety TIM Performance Measurements



What did we know? What did we do? What did we learn?

First Responder Safety – Officer Safety

“To date, the Arizona DPS has lost 29 officers, 17 died in traffic crashes and 11 of those were involved in secondary crashes.”



Additional Reasons for Adopting the TIM Program:

- Realization that TIM strategies did not require additional manpower and would ultimately result in additional non-obligated time through reduced crashes.
- Increased transportation system mobility
- Improved collaboration with other disciplines
 - This collaboration would also serve to better prepare the agency and region for planned events as well as any natural or man-made disasters.
- All of which result in a savings or loss of life, limb, property, money, time, pollution, angry drivers, etc.

Initial Impact of the Rollout

Oct - Dec 2010: 4,793

- Non-Injury
 - Roadway Clearance: 45 min
 - Incident Clearance: 84 min
- Injury
 - Roadway Clearance: 54 min
 - Incident Clearance: 94 min
- Fatal
 - Roadway Clearance: 212 min
 - Incident Clearance: 214 min

April - June 2011: 4,366

- Non-Injury
 - Roadway Clearance: 32 min (-28%)
 - Incident Clearance: 40 min (-51%)
- Injury
 - Roadway Clearance: 46 min (-14%)
 - Incident Clearance: 58min (-37%)
- Fatal
 - Roadway Clearance: 198 min (-6.78%)
 - Incident Clearance: 211 min (-1.68%)

Roll Call Training & New Policy

TIM Performance Measurements On Crash Report

“Blockage Removed” Roadway Clearance Time

The time all lanes are available for traffic flow (time stamp rather than duration).

“Incident” Clearance Time

The time the last responder has left the scene (time stamp rather than duration) and are no longer a distraction to mainline traffic.

Secondary Crash?

Was “this” crash a secondary crash, Yes or No?

Was the primary incident a Crash?

Yes or No?

Did it involve a first responder?

Was a first responder an involved traffic unit, Yes or No?

“Time Blockage Reopened” Roadway Clearance Time

- Help file: "Time Blockage Reopened" is when collision debris and/or vehicles have been removed from the lanes of traffic.
(actual time not duration)

“Incident” Clearance Time

- Help file: When all patrol, collision vehicles or major debris are removed from the view of traffic, includes tow trucks and fire. When the collision is no longer causing a visual distraction to traffic, usually vehicles parked on an on or off ramp would not be considered a distraction. Does not include follow-up off highway at the hospital or other locations. (actual time not duration)

Secondary Crash?

- Help file: A secondary collision is defined as a crash within an incident scene or within a traffic queue resulting from an original incident. The original incident does not have to be a collision, could be a disabled motorist, vehicles on the side of the road, or any other unusual circumstance related to traffic backup or change in traffic flow. If the queue is a normal, every day occurrence “without an original incident” and a crash occurs then it is not considered to be secondary.

- We did not find, “Was it secondary to a primary crash?” needed additional help once they learned to identify the secondary crash.
- The next question, “did it involve a first responder,” did create some difficulty.
 - They would answer “yes” because they were involved in the investigation.
 - They would default the answer to no because it was relatively infrequent.

Duration vs. Time of Occurrence

- All the times collected and associated with the crash report and/or investigations were time of occurrence i.e. time accident occurred, time you arrival, time investigation completed etc.
- Therefore Az DPS choose to remain consistent and ask for the actual time of roadway and incident clearance rather than duration.

Data Issues

- Initially all first responder involved crashes had to be reviewed to verify. After it was taught that they must be a traffic unit the issue began to clear up.
- In many cases they wanted to show no roadway blockage put 00:00 which would be midnight, so if the crash happened at 18:00 it would show 6 hours of blockage in the calculation.
- Similarly, although less frequently, If the crash occurred and the drivers moved it off line, the same issue would occur.

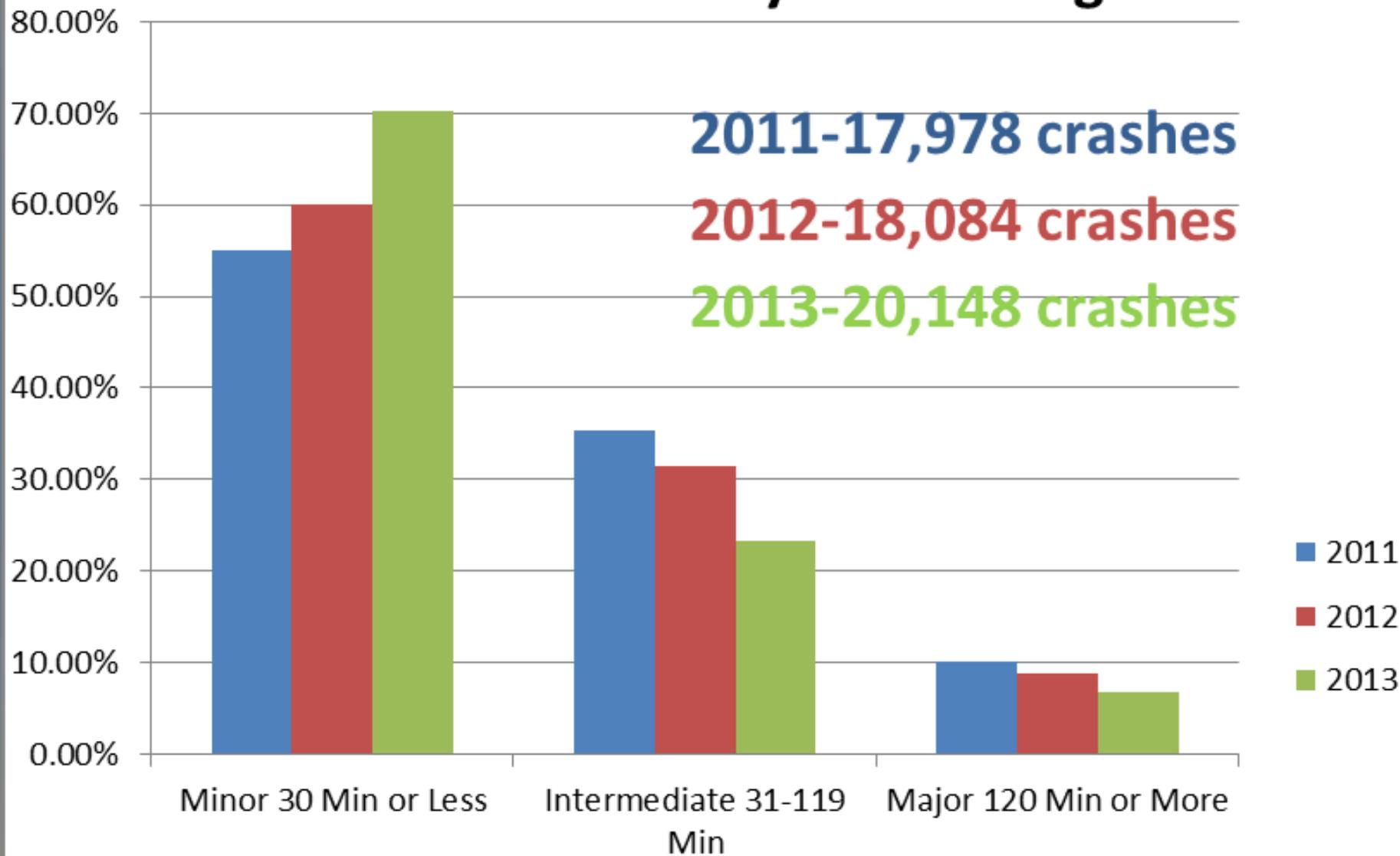
Data adjustments

- For the purpose of this preliminary assessment of the data, 00:00 in roadway and incident clearance was changed to the time of the collision where appropriate to indicate no blockage for calculation purposes.
- Looking at 3 years of data for the metropolitan Phoenix region.
- 56,210 total crashes, approximately 65% of the total crashes on state and Federal highways in Arizona.

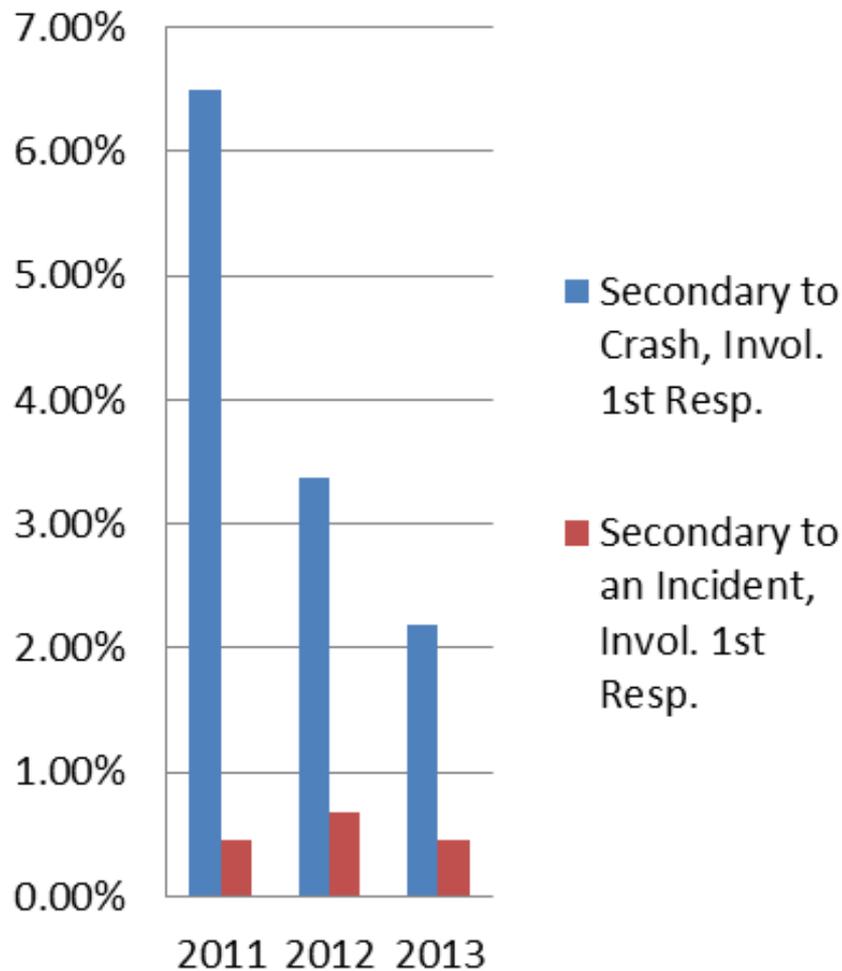
AzDPS TIM Program 2010-2013

- TIM workshops
- TIM Coalition
- TIM Policies
- TIM Training
- PM in Az DPS Strategic Plan
- TIM added to 2014 SHSP
- TIM PMs statewide collection July 2014

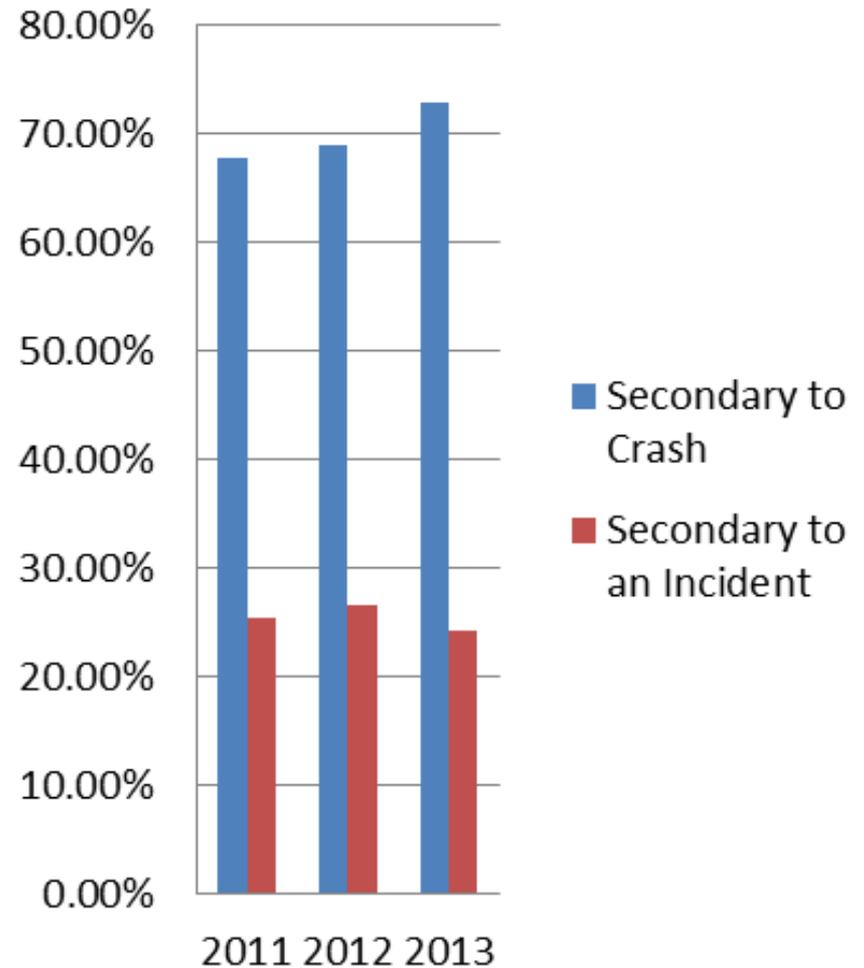
AzDPS Metro Crash Incident Clearance Times by Time Categories



Secondary Crashes to Crashes vs Incidents, Involving a 1st Responder



Secondary Crashes to Crashes vs Incidents Involving non-responders



Collecting the Data

- Prior to 2008 would have been by hand and re-entered or keyed into a Database for analysis.
- In 2008, DPS adopted the TraCS software as its mobile reporting platform, no cost to agency.
- Additions and changes to fields on their forms and databases are done at the agency level with no fees.

For additional information

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