



Fatal Multi-Vehicle Crash
January 5, 2020
T86.1 Westbound

After Action Review

Report

Prepared For: Pennsylvania Turnpike Commission
May 21, 2020



Pennsylvania Turnpike Commission
 After Action Review – Fatal Multi-Vehicle Crash
 Date of Incident: January 5, 2020
 Location: T86.1 Westbound

Facilitator

Todd A. Leiss

**Traffic Incident Management Coordinator
 Pennsylvania Turnpike Commission**

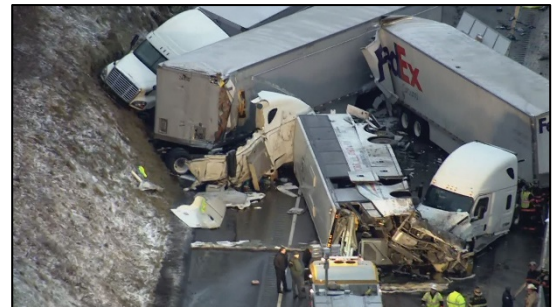
Attendees

Stephen Adamczyk, Pennsylvania State Police
 Michael Davidson, Pennsylvania Turnpike Commission
 John DelRicci, Pennsylvania Turnpike Commission
 Cpl. James DePaolo, Pennsylvania State Police
 Brian Feist, McCutcheon Enterprises
 Gene Good, Westmoreland County DPS
 Scott Graham, Mutual Aid EMS
 Cory Greene, Michael Baker Intl.
 Cpl. Jason Hamill, Pennsylvania State Police
 Seth Helman, Youngwood Fire Company
 William Howard, Pennsylvania Turnpike Commission
 Nathan Keel, Pennsylvania Turnpike Commission
 Ron Kolar, Pennsylvania Turnpike Commission
 Todd Leiss, Pennsylvania Turnpike Commission
 Jerry Lucia, Mt. Pleasant Fire Company
 Calvin McCutcheon, McCutcheon Enterprises
 Bud Mertz, Westmoreland County DPS

Kenneth North, Pennsylvania Turnpike Commission
 Michael Pack, Pennsylvania Turnpike Commission
 Christopher Parker, Pennsylvania Turnpike Commission
 John Patrick, Pennsylvania Turnpike Commission
 Lt. David Pope, Pennsylvania State Police
 Lt. Hardeep Rai, Pennsylvania State Police
 Cpl. David Roland, Pennsylvania State Police
 Dave Roland, Pennsylvania State Police
 Timothy Scanlon, Pennsylvania Turnpike Commission
 Craig Shuey, Pennsylvania Turnpike Commission
 Todd Smith, Pennsylvania Turnpike Commission
 Eric Sponsler, Jacobs
 John M. Storey Jr., Youngwood Fire Company
 Todd Tilson, Pennsylvania Turnpike Commission
 Brian Toseki, Pennsylvania Turnpike Commission
 Dave Wolfe, Drive Engineering

Introduction

On April 13, 2020, representatives from multiple agencies met to participate in a post-incident After Action Review for a Mass Casualty Incident (MCI) which occurred at mile post T86.1 on the westbound lanes of the Pennsylvania Turnpike on January 5, 2020. A MCI is generally defined as an event in which the number of casualties overwhelms the resources normally available to local responders. Due to the ongoing COVID-19 pandemic, all participants met in a virtual environment via Cisco WebEx. This report will summarize the successes and challenges experienced during the incident, and outline the suggestions and recommendations resulting from the AAR to help all responders continually improve Traffic Incident Management practices.



Incident Summary

Initial calls for a serious crash at mile post T86.1 Westbound began coming into the PA Turnpike Traffic Operations Center at 3:33am on January 5, 2020. Preliminary reports indicated a multi-vehicle crash with injuries blocking lanes. However, within the first ten minutes the scale of the crash became clear, with reports indicating multiple commercial vehicles,

passenger vehicles, and a tour bus were involved which escalated the event to a MCI. The crash also resulted in the spill of significant quantities of diesel fuel onto the roadway with impacts to nearby drainage openings which required a response from the Pennsylvania Department of Environmental Protection. The impact of the crash on the westbound embankment opened an underground spring, causing water to spill onto the roadway around the crash scene. Temperatures at the time of the crash were near the freezing mark¹ with occasional light precipitation. A copy of the Accu-Weather forecast map has been attached to this report as **Appendix A**. A language barrier with many of the occupants of the tour bus made information gathering difficult during the initial response phase of the incident. Ongoing situation reports early in the incident indicated that there were multiple fatalities, and one person unaccounted for from the tour bus. Ultimately, 5 people perished in the crash and over 30 individuals required medical evaluations for a range of injuries. The eastbound lanes of the Turnpike were also impacted by the crash. Vehicle and barrier debris came to rest in the eastbound lanes, in addition to the body of one crash victim from the tour bus.

The crash occurred during off-peak hours on a Sunday morning, which kept traffic volumes and backlog fairly minimal. Still, several mitigation strategies were employed to move both passenger and commercial vehicle westbound traffic impacted by the crash. Trapped passenger vehicles were turned around and traveled east in the westbound lanes where they were permitted to exit the Turnpike at the Donegal Maintenance Facility (mile post 88.8). Once the trapped passenger vehicles were cleared, sections of median barrier were removed to allow commercial vehicles to turn around and exit the roadway. Trapped passenger vehicles were cleared in about 2 ½ hours after the start of the incident, and all trapped commercial vehicles were successfully cleared in approximately 4 hours. A Plan X total closure of the Turnpike was implemented between Interchange 161 (Breezewood) and Interchange 75 (New Stanton).

The scale and severity of the incident served to compound complex logistical considerations. New operators and vehicles had to be acquired from both the bus company as well as the parcel carriers (UPS and FedEx), while Public Information Officers from multiple agencies conducted press conferences and provided updates to the media at a centralized location established at the Pennsylvania Turnpike's Donegal Maintenance facility. Additionally, special phone numbers were set up for family members of victims to acquire information with language interpretation services also provided. The Pennsylvania State Police conducted accident reconstruction activities using both conventional methods as well as an Unmanned Aircraft System (UAS). The scene was cleared and the entire roadway was reopened in just over fifteen hours.

The National Transportation Safety Board continues to investigate this crash, and as of the date of this report a formal NTSB report is still pending. **Figure 1** and **Figure 2** on pages 3 and 4 illustrate the overall incident timeline and highlights key milestone events.

Key Incident Data

PTC Event Name: ACC - FAT - ACCIDENT – FATAL T86.1W: @T86.1W

PTC CAD Event No.: 2001000814

MUTCD Incident Type/Classification: Major Incident Information:

Date: January 5, 2020

Incident Detection Time: 0333

Incident Termination Time: 1851

Total Duration: 15 hours, 18 minutes

Location: T86.1

County: Westmoreland County

Municipality: Mt. Pleasant

Township

Incident Commander: PA State

Police

Weather Conditions:

Temperature: 30°

Dewpoint: 25°

Humidity: 80%

Wind: West at 13 MPH

Precipitation: 0.0 Inches

Roadway Conditions: Normal

¹ Source: Weather Underground – Arnold Palmer Regional Airport Weather Station
<https://www.wunderground.com/history/daily/KLBE/date/2020-1-5>



T86.1 Westbound Fatal Crash Timeline

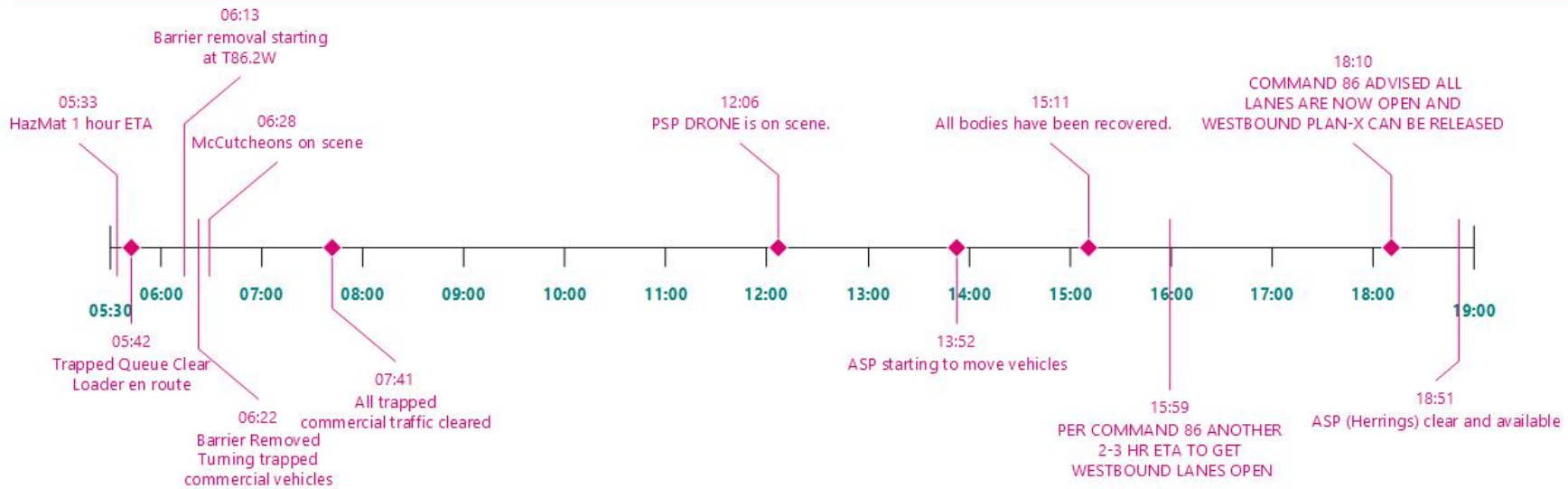
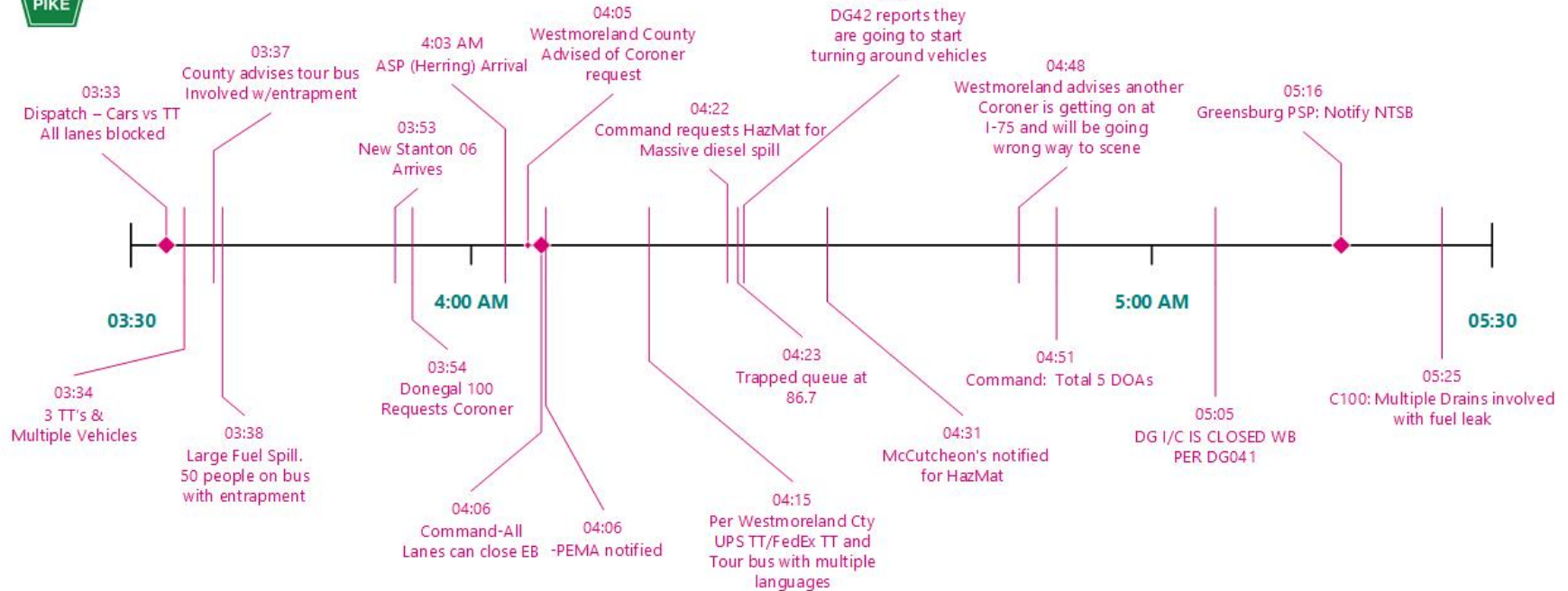


Figure 1 - Incident Timeline with Key Milestones (Westbound)





T86.1 Westbound Fatal Crash Timeline (Eastbound Activities)

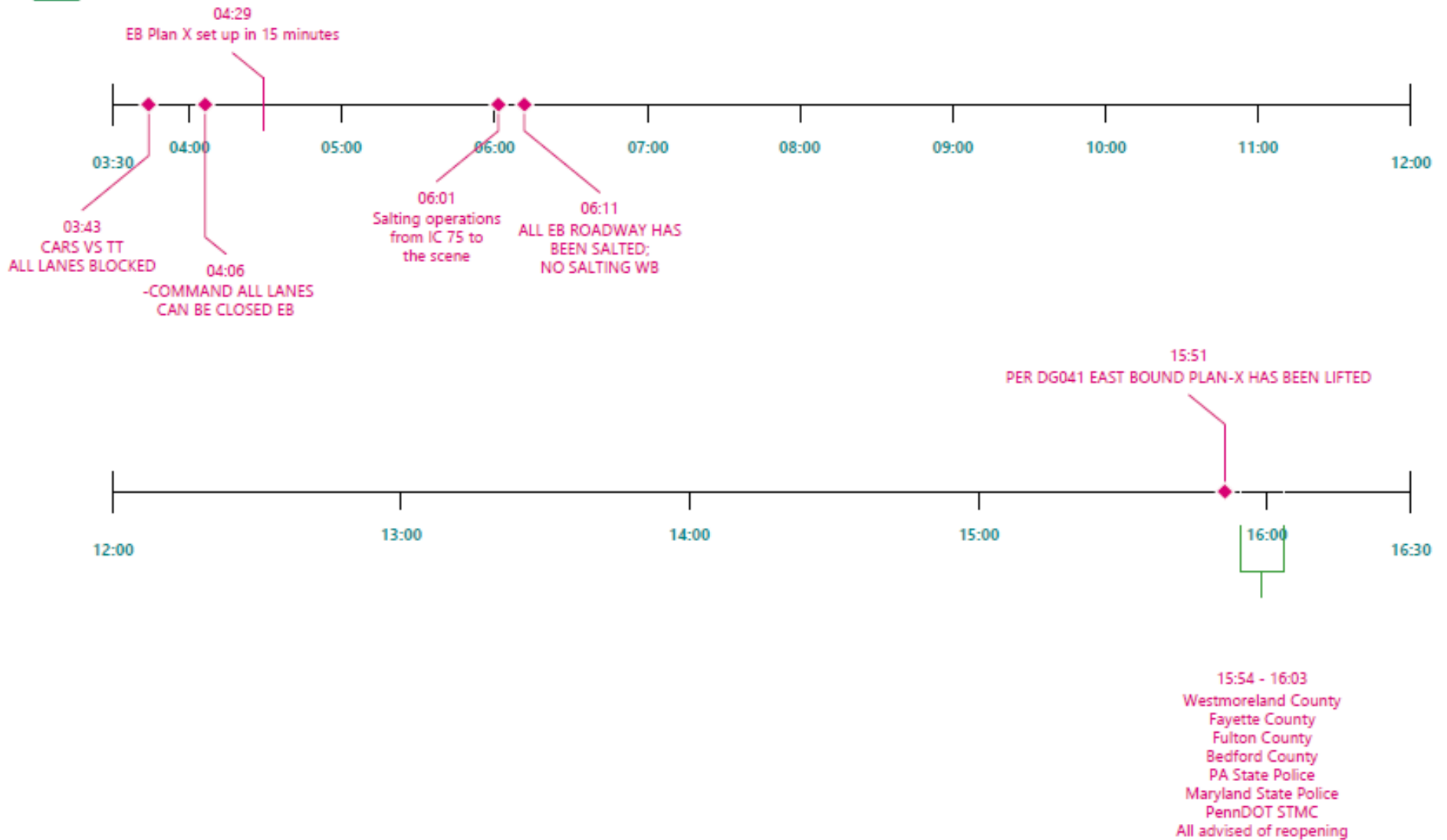


Figure 2 - Incident Timeline with Key Milestones (Eastbound)



Responding Agencies

The following agencies responded to assist with the incident.

| Pennsylvania Turnpike Commission | Westmoreland County EMS Agencies | Allegheny County EMS Agencies |
|--|----------------------------------|--|
| Maintenance | Mutual Aid | Sharpsburg (Allegheny Health Networks) |
| Fare Collection | Norvelt EMS | Units on Stand-by |
| Traffic Operations Center | Mt. Pleasant Medic 10 | White Oak EMS |
| Pennsylvania State Police | Kecksburg EMS | Towing & Recovery |
| PA State Police Troop T | Murrysville EMS | Herring Motors (PA Turnpike Authorized Service Provider) |
| PA State Police Troop A CARS & Investigation Teams | Fayette County Fire Departments | HazMat Spill Team |
| Westmoreland County Fire Depts. | Saltlick Twp. | McCutcheon Enterprises |
| Mt. Pleasant VFD Station 38 | Everson VFD (Stand-by) | Hospitals |
| Chestnut Ridge VFD Station 110 | Fayette County EMS Agencies | Frick Hospital |
| Youngwood VFD Station 26 | Fayette EMS | Forbes Hospital |
| Norvelt VFD Station 37 | Somerset County EMS Agencies | Somerset Hospital |
| Kecksburg VFD Station 76 | Somerset EMS | 911 Centers |
| Stand-by Units | Boswell EMS | Westmoreland County 911 |
| South Greensburg VFD Station 32 | Northern EMS | Somerset County 911 |
| Ligonier VFC Station 43 | Cambria County EMS Agency | Fayette County 911 |
| City of Greensburg Engine 79-8 | Medstar | Cambria County 911 |
| East Huntingdon Twp VFD Station 74 | | |

Traffic Operations Center Activities

Upon initial dispatch for the crash, staff at the PA Turnpike Traffic Operations Center (TOC) took immediate action to notify motorists utilizing various ITS devices including Dynamic Message Signs (DMS) and Highway Advisory Radio (HAR). Use of these devices expanded significantly commensurate with increased situational awareness regarding the scale and severity of the incident. **Figure 3** below shows the progression and expansion of ITS device usage from the time of incident detection to roadway clearance.

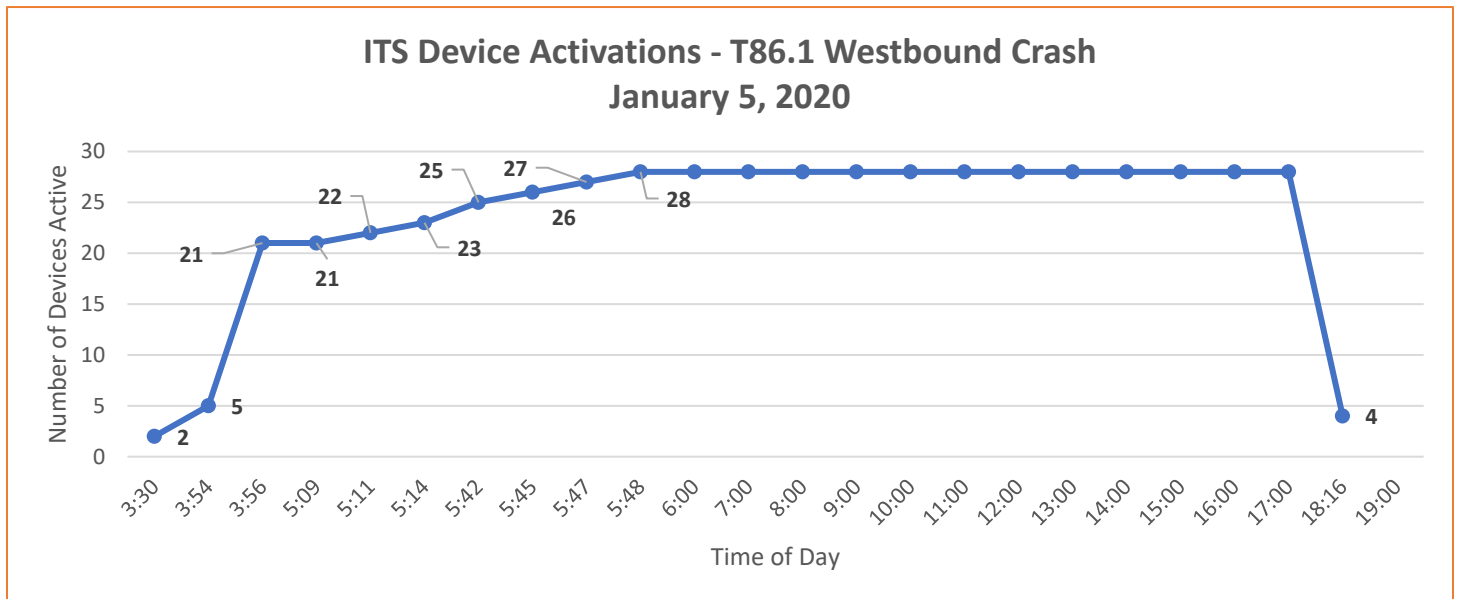


Figure 3 - ITS Device Activations

In addition, TOC personnel coordinated with PennDOT and PEMA to provide situational awareness and traveler information on state routes and interstates adjacent to the Turnpike.



After Action Review Report

Following brief opening comments and rules of engagement from Pennsylvania Turnpike TIM Coordinator Todd Leiss, the group was polled for feedback in certain key areas of the incident response.

Overall, the participants viewed the incident response positively from virtually all aspects including communications, command, logistics, rescue tactics, triage, and scene clearance.

Particular attention was given to the initial stages of the incident response during which 9-1-1 dispatchers communicated extensively with an 11 year old boy who was a passenger on the bus. The boy is credited with staying calm and providing detailed information (including exact mile post) to dispatchers which resulted in good pre-arrival scene size-up information for responders. Additionally, the boy reportedly moved other crash victims away from the potential dangers that were associated with the large diesel fuel spill from multiple commercial vehicles.



Jerry Lucia (Mt. Pleasant Borough) characterized on-scene communications as “close to flawless”, while Scott Graham (Mutual Aid EMS) noted that the use of a common Talk-Around Channel (TAC) was the key to success. Other successes included the rapid dispatch of a PTC Maintenance Loader, the use of articulating ladders to traverse the median barrier, use of the Unified Incident Command structure, and the availability of large buses from the towing and recover provider (Herring Motors) to safely shelter victims. This particular resource was deemed so critical that Herring Motors has now been added to the county’s disaster planning playbooks. Specific to the Unified Command structure, it was noted that keeping the towing and recovery operator in the Unified Incident Command (UIC) structure was extremely beneficial. Herring Motors vetted all actions through the UIC post which led to efficient removal of damaged vehicles as the various parts of the investigation were completed. Attendees also reported that medical triage was handled efficiently and was set up just downstream of the incident. Transportation was also positioned in the same location to increase efficiency of moving victims from the scene once they had cleared the triage area.

Reconstruction of the incident was conducted by the Pennsylvania State Police using both conventional and UAS methods. However, deployment of the UAS to this incident was delayed due to a crash on Interstate 70 which resulted in the death of a first responder. Pennsylvania State Police are in the early stages of acquiring additional UAS hardware and training more reconstructionists to avoid similar potential conflicts in the future.

The meeting also identified some areas where improvement is needed. Specific to traffic control, it was noted that vehicles located in Turnpike Service Plazas or Emergency Pull Off areas were not accounted for. This led to potentially dangerous situations in which a passenger or commercial vehicle traveling in the correct direction could have encountered responder vehicles that were traveling in the wrong direction to access the crash scene. This condition also highlighted the need to fully utilize the Turnpike Traffic Operations Center to provide the most accurate information for responders using contraflow tactics, as 9-1-1 dispatch personnel are likely not as well-versed in providing this type of information which may lead to confusion.

The importance of evidence preservation and overall scene management was also stressed, with a specific focus on the need to cover fatally injured victims in a more timely fashion, and to not move items that could be considered evidence during a criminal investigation. Additional considerations for improvement include developing improved plans for mass casualty incidents on limited access highways, and possibly closing the airspace over large scale incidents to prevent media from capturing potentially disturbing images at the scene. The following pages contain a more concise, bulleted list of identified strengths, areas of improvement, training needs, and other general needs, wants, and suggestions.

Strengths

- 9-1-1 dispatchers strong work with interviewing child victim for initial scene size-up.
- Use of a common TAC channel resulted in excellent communications.
- Use of articulated “Little Giant” ladders to safely traverse median barriers.
- Timely dispatch of needed resources (Turnpike Maintenance Loader).
- Use of UAS for crash reconstruction.
- Towing & Recovery participation in the Unified Incident Command structure.
- Use of Language Line services to overcome language barrier with victims.
- Proximity of patient triage and transport.
- Large bus resources made available for sheltering victims.

Areas for Improvement

- Accountability for vehicles in Turnpike Service Plazas, emergency pull-offs, and shoulders during contraflow response operations. Vehicles located “in between” the parameters of a Plan X must be addressed so they do not inadvertently encounter responder vehicles traveling contraflow to normal traffic flow.
- Need to always confirm contraflow response information with PA Turnpike Traffic Operations Center to avoid potential confusion from 9-1-1 dispatchers who may not be familiar with how to handle this information.
- Balance HazMat response activities with investigative activities to allow improved access for mitigation of spills.
- Strengthen UIC structure to minimize repetitive questions (e.g. “how long until the road is opened?”)
- Tighter scene management and personnel control to minimize instances where evidence could be compromised.
- Improve efficiency with covering bodies of fatally injured victims.
- Keep critical resource contact lists (e.g. transit agencies) up to date.
- Strategies for overcoming language barriers.
- Consider increased communication with the Federal Highway Administration (FHWA) for MCI events on the Pennsylvania Turnpike.

Training

- No specific training issues were identified. However, the importance of constantly vetting responder training requirements was reinforced.

Needs/Wants/Suggestions

- Initial response was swift due to PA Turnpike 24 hour winter operations. What would be different if this occurred outside of winter shift?
- Add Herring Motors to county resource list for buses. (This has been completed as of this report)
- Additional UAS resources to avoid conflicts in the event two major incidents occur simultaneously.
- Consider standardizing the practice of removing barrier sections during large scale events to facilitate easier movement for responders across the entire roadway.
- Consider using Language Line more frequently and develop flip charts to help with language barriers.
- Consider air space restrictions for media helicopters when bodies are exposed.
- Develop a comprehensive MCI plan for incidents on limited access highways.
- Be mindful of the potential difference in manpower response for similar incidents that may occur on weekdays.

APPENDIX A

Accu-Weather Forecast Map

SNOW SHOWERS WILL CONTINUE INTERMITTENTLY ACROSS PORTIONS OF WESTERN AND CENTRAL PENNSYLVANIA SUNDAY MORNING. AS PAVEMENT TEMPERATURES CONTINUE TO DROP, ANY WET SURFACES WILL FREEZE UP. THIS THREAT WILL BE MOST PREVALENT ON BRIDGES AND OVERPASSES.

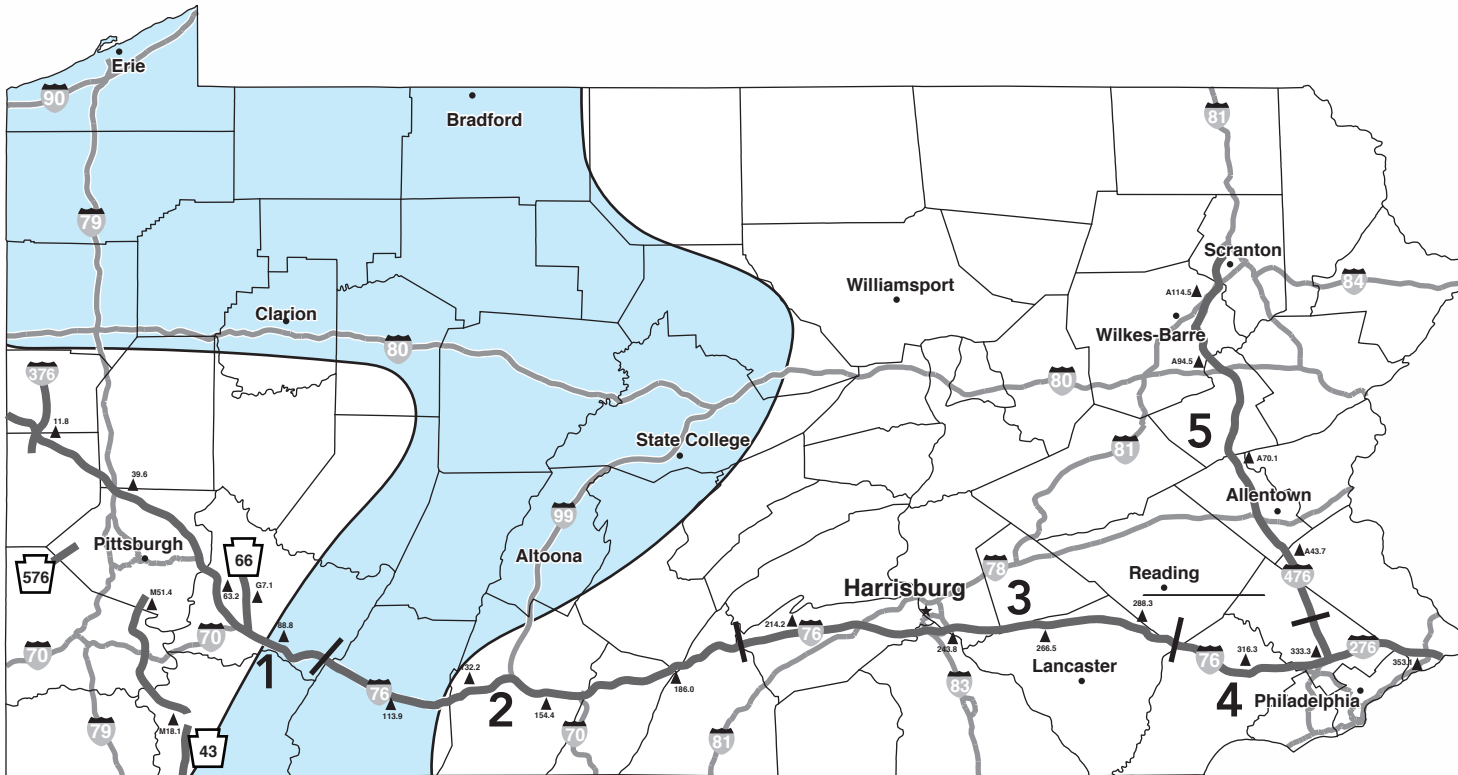
**PENNSYLVANIA
TURNPIKE
COMMISSION**

Forecaster: BE/MG/ML

Forecast Prepared:

Date: 1/5/20 Time: 4:00 AM

This map is for accumulation on paved surfaces



 Coating to 1 inch.