

Pennsylvania Automated Vehicle Incident Response Plan

Penn State TESC
December 13, 2019

Automated Vehicle Incident Response Plan

- Formed in November 2016 based on direct recommendations from the 2014 Transportation Advisory Committee (TAC) Study on Traffic Incident Management with the motto of *One Vision, One Voice, All Together*.
- Represents a partnership of Federal, State, County, and Municipal stakeholders focusing on the three core concepts which form the foundation of the National Unified Goal (NUG) of Traffic Incident Management:

Responder Safety • Safe, Quick Clearance • Prompt, Interoperable Communications

- Quarterly Meetings
- **Inter-Agency Agreement Signed August 28, 2018**
- Closed Facebook Group
- Website in development (www.penntime.org/www.penntime.com)



Automated Vehicle Incident Response Plan



Training

Committee Goals: To promote and coordinate the delivery of TIM training to both highway agencies and emergency responders from all disciplines including Fire, EMS, Law Enforcement, and Towing.



Technology:

Committee Goals: To establish and implement efficient use of technology to enhance TIM in Pennsylvania.



Public Education & Outreach

Committee Goals: To develop and implement strategies aimed at promoting TIM awareness and educational information to the public.



Legislative Affairs

Committee Goals: To review transportation legislation related to TIM and develop consensus within the statewide TIM community for recommendations that can be presented to elected officials for consideration.



TIM Task Force Development

Committee Goals: To foster the growth of existing TIM Task Force groups in Pennsylvania, and assist with the development of new Task Force groups in regions in need of formalized TIM programs.



Towing & Recovery

Committee Goals: To review and improve statewide towing regulations, practices, and procedures while promoting safe, quick clearance of incident scenes.

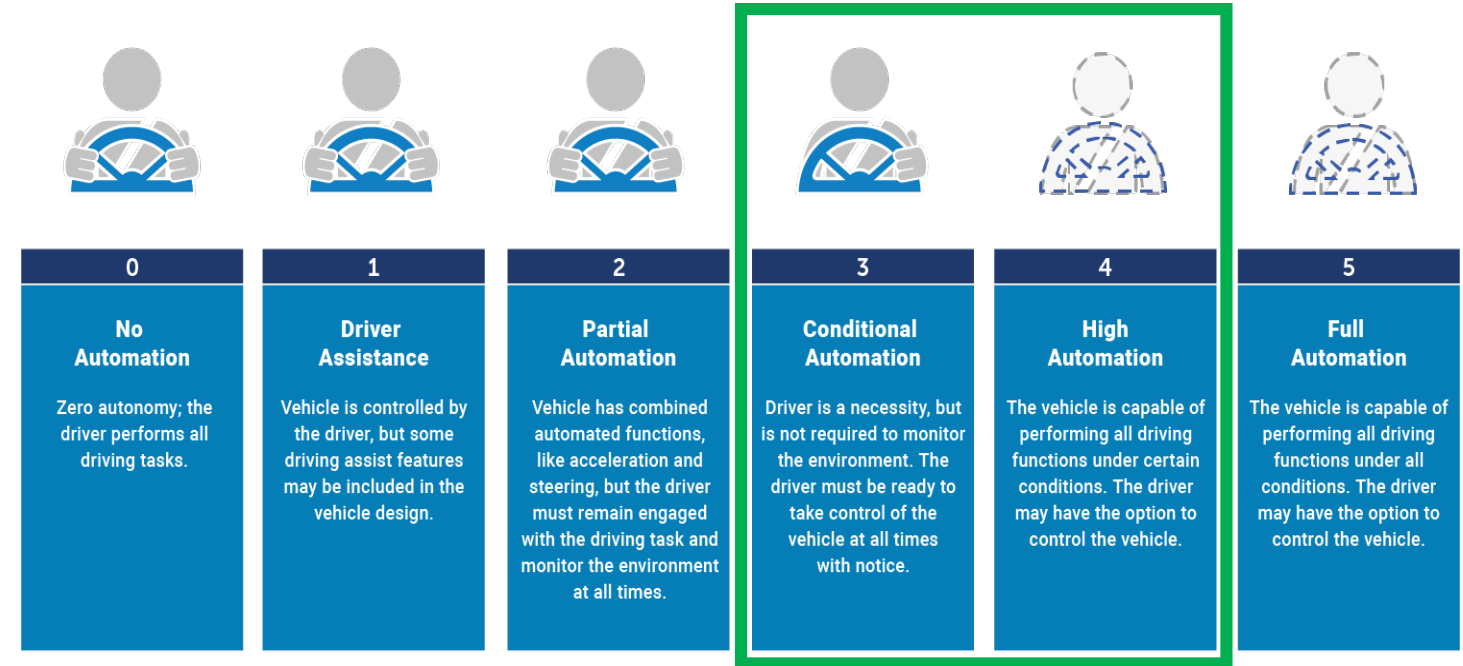


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Background

- March 2018 – 1st recorded pedestrian fatality involving an automated vehicle
- July 2018 - PennDOT's Automated Vehicle Testing Guidance
- November 2018 – PennTIME established an AV Leadership Working Group
- February 2019 – PennTIME AV Leadership Working Group and PennDOT's Office of Transformational Technology identified a need for an automated vehicle incident response plan
- July 2019 – AV IRP Framework Draft submitted

SOCIETY OF AUTOMOTIVE ENGINEERS (SAE) AUTOMATION LEVELS



Overview

- What is an Automated Vehicle Incident Response Plan?
- Why is an Automated Vehicle Incident Response Plan needed?
 - Safety
 - Communication
 - Incident Response
 - Training
 - Data Preservation
 - Emerging Technologies

Automated Vehicle Incident Response Plan

Vision, Mission and Goals

- **Vision:** *“Establish a uniform incident management approach for reportable traffic incidents involving automated and platooning vehicles authorized to utilize Pennsylvania roadways.”*
- **Mission:** *“Proactively engage industry, public sector, and responders to provide safe and efficient response and incident management methods to AV incidents throughout Pennsylvania while maintaining efforts to preserve critical data collected from the AV.”*
- **Goals:**
 - 1) *Improve Safety*
 - 2) *Prepare Workforce*
 - 3) *Preserve Critical Data*
 - 4) *Enhance Mobility*

Industry	Public Sector	Responders
<ul style="list-style-type: none"> • Increases public perception of transparency and cooperation • Improves systems based on end user experience and feedback • Strengthens relationships with public entities • Provides protection efforts of critical systems • Provides statewide consistency without having to meet with every individual municipality 	<ul style="list-style-type: none"> • Allows for data-driven decision-making • Provides guidance for policy development • Enhances mobility through improved incident management, traffic operations, and congestion mitigation • Improves communication amongst stakeholders 	<ul style="list-style-type: none"> • Enhances safety • Provides guidance for operational efficiency • Prepares the workforce by providing operational techniques • Promotes multi-disciplinary coordination and training among all responders

Automated Vehicle Incident Response Plan

Methodology

- AV Research – Best Practices
- PennTIME AV Leadership Working Group
- Stakeholder Meetings
- Coordination with testers via PennDOT's Office of Transformational Technology



AV IRP Components

- Administrative Guidance
- Policy Reference
- Crisis Communication Plan
- Law Enforcement/Emergency Protocol
- Data Share
- Training

Crisis Communication Plan

- Currently under development
- PennDOT's Crisis Communication Plan creates a structure for communicating with all vested stakeholders in the even of an AV-related reportable crash.
- Communication Procedures and Response Elements
 - Communication Hierarchy
 - Communication Methods
 - Notification Process

Upcoming in 2020

- Automated Vehicle Testing Guidance Version 2 – Early 2020
- Increase direct dialogue with approved testers
- Facilitate additional stakeholder outreach and communications
- AV IRP Version 1 – Summer 2020

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Thank you!!!

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