



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

**Investigation:** PE 21-020  
**Date Opened:** 08/13/2021  
**Investigator:** Steven Posada                      **Reviewer:** Gregory Magno  
**Approver:** Stephen Ridella  
**Subject:** Autopilot & First Responder Scenes

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** Tesla, Inc.  
**Products:** 2014-2021 Tesla Model Y, Model X, Model S, Model 3  
**Population:** 765,000 (Estimated)  
**Problem Description:** Subject vehicle crashes with in-road or roadside first responders.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
<b>Complaints:</b>	0	TBD	0
<b>Crashes/Fires:</b>	11	TBD	11
<b>Injury Incidents:</b>	7	TBD	7
<b>Number of Injuries:</b>	17	TBD	17
<b>Fatality Incidents:</b>	1	TBD	1
<b>Number of Fatalities:</b>	1	TBD	1

## ACTION / SUMMARY INFORMATION

**Action:** ODI has opened a Preliminary Evaluation

### Summary:

Since January 2018, the Office of Defects Investigation (ODI) has identified eleven crashes in which Tesla models of various configurations have encountered first responder scenes and subsequently struck one or more vehicles involved with those scenes. The incidents are listed at the end of this summary by date, city, and state.

Most incidents took place after dark and the crash scenes encountered included scene control measures such as first responder vehicle lights, flares, an illuminated arrow board, and road cones. The involved subject vehicles were all confirmed to have been engaged in either Autopilot or Traffic Aware Cruise Control during the approach to the crashes.

Autopilot is an Advanced Driver Assistance System (ADAS) in which the vehicle maintains its speed and lane centering when engaged within its Operational Design Domain (ODD). With the ADAS active, the driver still holds primary responsibility for Object and Event Detection and Response (OEDR), e.g., identification of obstacles in the roadway or adverse maneuvers by neighboring vehicles during the Dynamic Driving Task (DDT).

ODI has opened a Preliminary Evaluation of the SAE Level 2 ADAS system (Autopilot) in the Model Year 2014-2021 Models Y, X, S, and 3. The investigation will assess the technologies and methods used to monitor, assist, and enforce the driver's engagement with the dynamic driving task during Autopilot operation. The investigation will additionally assess the OEDR by vehicles when engaged in Autopilot mode, and ODD in which the Autopilot mode is functional. The investigation will also include examination of the contributing circumstances for the confirmed crashes listed below and other similar crashes.

Incident List

Date	City/County	State
07/10/2021	San Diego	CA
05/19/2021	Miami	FL
03/17/2021	Lansing	MI
02/27/2021	Montgomery County	TX
08/26/2020	Charlotte	NC
07/30/2020	Cochise County	AZ
01/22/2020	West Bridgewater	MA
12/29/2019	Cloverdale	IN
12/10/2019	Norwalk	CT
05/29/2018	Laguna Beach	CA
01/22/2018	Culver City	CA