



U.S. Department of Transportation
National Highway Traffic Safety Administration

ODI RESUME

Investigation: PE24015
Prompted By: SGO Review
Date Opened: 05/10/2024
Investigator: Paul Parker **Reviewer:** Scott Simmons
Approver: Tanya Topka
Subject: Rear-end Collisions Involving Zoox Vehicles

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Zoox, Inc.
Products: Zoox automated vehicle (AV) and Zoox Automated Driving System
Population: 500 (Estimated)
Problem Description: Subject vehicle unexpected sudden braking leads to rear-end collisions.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	EWR D&I	Other	Total	EWR Field Reports
All Incidents:	0	0	0	2	2	0
Crashes/Fires:	0	0	0	2	2	0
Injury Incidents:	0	0	0	2	2	0
Number of Injuries:	0	0	0	2	2	0
Fatality Incidents:	0	0	0	0	0	0

Description of Other:
 Reports of collisions involving the subject vehicles submitted under SGO 2021-01

ACTION/SUMMARY INFORMATION

Action: Open this Preliminary Evaluation (PE)

Summary:
 The Office of Defects Investigation (ODI) has received notice of two (2) incidents involving Zoox vehicles equipped with the Zoox Automated Driving System (ADS) wherein the vehicles unexpectedly braked suddenly, leading to rear-end collisions. Each incident involved a Toyota Highlander equipped with Zoox ADS. Each incident resulted in a motorcyclist that was following a

Zoox vehicle colliding into the Zoox vehicle. Each incident resulted in minor injuries. Both collisions occurred during daytime lighting conditions and within the Operational Design Domain of the Zoox ADS. The incident reports received by NHTSA were submitted under Standing General Order 2021-01 (SGO). Through its initial investigation of both incidents, ODI has confirmed that each of the Zoox vehicles was operating in autonomous mode leading up to the collision.

ODI has opened a Preliminary Evaluation to investigate the Zoox Automated Driving System equipped on the subject vehicles. This investigation will evaluate the Zoox Automated Driving System performance, particularly relating to the collisions listed in this resume, the behavior in crosswalks around vulnerable road users, and in other similar rear-end collision scenarios.

The SGO reports cited in the Opening Resume will be available in the investigation file at NHTSA.gov. under the following titles:

SGO 2021-01 report ID: 30610-7578

SGO 2021-01 report ID: 30610-7589