



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



May 23, 2024

VIA EMAIL

Matthew Schwall
Director, Safety & Incident Management
Waymo, LLC
1600 Amphitheatre Parkway
Mountain View, CA 94043

Subject: Information Request ID PE24016-1

Dear Mr. Schwall:

This letter is to inform you that the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) has opened a Preliminary Evaluation (PE24016) to investigate incidents of unexpected driving behaviors involving vehicles equipped with the Waymo 5th Generation automated driving system (ADS) manufactured by Waymo LLC (Waymo), and to request certain information.

This is an initial request and further requests will be made at a later date.

This office opened PE24016 following 22 reports of unexpected driving behaviors leading to crashes and potential traffic safety law violations in certain vehicles equipped with the Waymo 5th Generation ADS. ODI has identified an additional nine (9) similar reports since the investigation was opened. Waymo reported certain incidents under Standing General Order 2021-01, while other incidents were identified through publicly available information. Reports include collisions with stationary and semi-stationary objects such as gates and chains, collisions with parked vehicles, and instances in which the ADS appeared to disobey traffic safety control devices or rules (e.g., ADS-equipped vehicles driving in opposing lanes with nearby oncoming traffic and driving into construction zones).

A list including the nine (9) additional reports, as well as the original 22 reports, is provided for your review and information below (“Subject incidents”).

ODI is concerned that ADS-equipped vehicles exhibiting such unexpected driving behaviors may increase the risk of crash, property damage, and injury. Although this office is unaware of injury allegations, several of the incidents involved collisions with clearly visible objects that a competent driver would be expected to avoid. A number of these incidents also occurred in the proximity of other road users, including pedestrians.

Unless otherwise stated in the text, the following definitions apply to these information requests:

- **Subject incidents:** Each incident identified in the list below:

SGO reports:

1. 30270-7729 (added since initial resume)
2. 30270-7534
3. 30270-7312
4. 30270-7308
5. 30270-7054
6. 30270-7058
7. 30270-7048
8. 30270-6981
9. 30270-6838
10. 30270-6661 (added since initial resume)
11. 30270-6561
12. 30270-6548
13. 30270-6150 (added since initial resume)
14. 30270-6133
15. 30270-5758
16. 30270-5318
17. 30270-5081
18. 30270-4363
19. 30270-1494
20. 30270-1220-1 and 30270-1160-1 (same incident)

Other reports:

21. Observed driving in opposing lane in San Francisco while overtaking vulnerable road users
https://old.reddit.com/r/sanfrancisco/comments/1c9lbcx/waymo_going_down_the_street_the_wrong_way/
22. Observed driving in opposing lane when attempting to enter traffic
<https://twitter.com/budrcn88/status/1782920628951220244>
23. Observed behavior after attempt to turn left
<https://twitter.com/greggertruck/status/1788054903988138043>
24. Observed driving in unpaved area during road work
<https://x.com/entartika/status/1778157845248344348>
25. Observed behavior in postal service parking lot
<https://www.youtube.com/watch?v=TbEplrZ-uSA>
26. Observed driving in Muni lane in San Francisco
<https://www.youtube.com/watch?v=Mz9IEJOYKuU>
27. Observed behavior near Potrero Ave 101 on-ramp detour, blocking roadway or stopping within coned area

https://old.reddit.com/r/sanfrancisco/comments/1c61lww/line_of_driverless_waymos_glitch_out_and_block/

28. Observed repeated lane departures while following towed tree in Phoenix on May 13

<https://www.instagram.com/somedaypilot/reel/C67BuGmyANs/>

29. Alleged problematic behavior at intersection of Ashbury St. and Fulton St. in San Francisco on “Wed 5/15 around 5:44”

https://old.reddit.com/r/SelfDrivingCars/comments/1cv37kk/potential_accident_waiting_to_happen_with_waymo/

30. Observed behavior at stop sign near bus in Phoenix

<https://www.youtube.com/watch?v=UVK-hswkfoE>

31. Observed crash with utility pole in Phoenix on May 21 (SGO report number not available) <https://www.youtube.com/watch?v=HAZP-RNSr0s>

- **Waymo:** Waymo LLC, all of its past and present officers and employees, whether assigned to its principal offices or any of its field or other locations, including all of its divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of Waymo (including all business units and persons previously referred to), who are or were involved in any way as of January 1, 2014, with any of the following related to the Waymo 5th Generation ADS:
 - a. Design, engineering, analysis, modification or production (e.g., quality control);
 - b. Testing, assessment or evaluation;
 - c. Consideration, or recognition of potential or actual defects, reporting, record-keeping and information management, (e.g., complaints, field reports, warranty information, part sales), analysis, claims, lawsuits or arbitrations; or
 - d. Communication to, from or intended for zone representatives, fleets, dealers, or other field locations, including but not limited to people who have the capacity to obtain information from dealers.

For my staff to evaluate the subject incidents, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following information requests. Insofar as Waymo has previously provided a document (including video) to ODI, Waymo may produce it again or identify the document, the document submission to ODI in which it was included and the precise location in that submission where the document is located. When documents are produced, the documents shall be produced in an identified, organized manner that corresponds with the organization of this information request letter (including all individual requests and subparts). When documents are produced and the documents would not, standing alone, be self-explanatory, the production of documents shall be supplemented and accompanied by explanation.

Please repeat the applicable request verbatim above each response. After Waymo's response to each request, identify the source of the information and indicate the last date the information was gathered.

1. For each subject incident provide the following information:
 - a. State the VIN of each Waymo vehicle involved.
 - b. State the complete system configuration of each ADS, including hardware and software versions at the time of the incident.
 - c. Furnish a brief explanation of each Waymo ADS's decision-making that led to a collision or a potential traffic safety law violation.
2. For each subject incident and Waymo vehicle involved, provide the following video information:
 - a. For subject incidents reported or reportable under the SGO, provide all video recorded by or of each Waymo vehicle involved in the incident of the 30 seconds leading up to contact with any crash partner and through the conclusion of the crash event. A crash event includes any safety-relevant activity that occurs after a collision, such as the vehicle achieving a stable stopped condition or reaching a final point of rest. If the vehicle did not achieve a stable stopped condition, provide video ending no less than 30 seconds following the contact event.
 - b. For subject incidents that were not reportable under the SGO, provide all video recorded by or of each Waymo vehicle involved in the incident, including at least 30 seconds preceding the potential traffic safety law violation until at least 30 seconds after the potential violation ends.
 - c. If remote assistance was involved in any way in a subject incident (e.g., monitoring, assisting, etc.), provide all video of remote assistance involvement in the subject incident. At a minimum, this should include any remote assistance provided for the subject vehicle during the applicable timeframes in requests 2a or 2b of this request.
 - d. Provide a composite rendering for the same timeframe specified in requests 2a or 2b (as applicable) showing video of each crash partner and each involved traffic control device alongside synchronized renderings of the ADS planned paths, the predicted trajectories of relevant road users, the velocity of the Waymo vehicle and other relevant road users, and the acceleration of the Waymo vehicle.
 - e. To the extent that the driving behavior as explained in 1c is not fully interpretable by the video specified in 2a-d, supplement the video submission with additional composite views showing additional perception, planning, or other elements that influenced the ADS decision-making.

Legal Authority for This Request

This letter is being sent to Waymo pursuant to 49 U.S.C. § 30166, which authorizes NHTSA to conduct any investigation that may be necessary to enforce Chapter 301 of Title 49 and to request reports. It constitutes a new request for information.

Civil Penalties

Waymo's failure to respond promptly and fully to this letter could subject Waymo to civil penalties pursuant to 49 U.S.C. § 30165 or lead to an action for injunctive relief pursuant to 49 U.S.C. § 30163. (Other remedies and sanctions are available as well.) The Vehicle Safety Act, 49 U.S.C. § 30165(a)(3), provides for civil penalties of up to \$27,168 per violation per day, with a maximum of \$135,828,178 for a related series of daily violations, for failing or refusing to perform an act required under 49 U.S.C. § 30166. *See* 49 C.F.R. § 578.6(a)(3). This includes failing to respond completely, accurately, or in a timely manner to ODI information requests.

If Waymo cannot respond to any specific request or subpart(s) thereof, please state the reason why it is unable to do so. If on the basis of attorney-client, attorney work product, or other privilege, Waymo does not submit one or more requested documents or items of information in response to this information request, Waymo must provide a privilege log identifying each document or item withheld, and stating the date, subject or title, the name and position of the person(s) from, and the person(s) to whom it was sent, and the name and position of any other recipient (to include all carbon copies or blind carbon copies), the nature of that information or material, and the basis for the claim of privilege and why that privilege applies.

Submission Instructions

If Waymo's response contains any information that you claim is confidential business information, Waymo must submit a request for confidential treatment directly to NHTSA's Office of the Chief Counsel by following the instructions in Enclosure 1, Information for Requests for Confidential Treatment. Please see Enclosure 1 for additional instructions on submitting a request for confidential treatment that is compliant with 49 C.F.R. Part 512 (specifically, a request for confidential treatment must include the four required parts that are discussed in enclosure 1).

In addition, you must request two secure electronic file transfer links from Neil Dold at neil.dold@dot.gov. One secure electronic file transfer link is for submitting a duplicate copy of your request for confidential treatment to ODI. The second secure electronic file transfer link is for your non-confidential response to this letter. Do not submit any confidential business information along with your non-confidential submission. Please refer to PE24016 in Waymo's response to this letter and in a request for confidential treatment that Waymo may submit.

Due Date

Waymo's response to this letter must be submitted to this office by **June 11, 2024**. If Waymo finds that it is unable to provide all of the information requested within the time allotted, Waymo must request an extension from me at (202) 366-5864 no later than five business days before the response due date. If Waymo is unable to provide all of the information requested by the original deadline, it must submit a partial response by the original deadline with whatever information Waymo then has available, even if an extension has been granted.

If you have any technical questions concerning this matter, please call Neil Dold of my staff at (202) 366-7352.

Sincerely,

Scott Simmons

Scott Simmons, Chief
Advanced and Emerging Technology Division
Office of Defects Investigation

Enclosure 1, Information for Requests for Confidential Treatment.

ENCLOSURE 1 – INFORMATION FOR REQUESTS FOR CONFIDENTIAL TREATMENT

If you believe that your response contains any material that you claim is confidential business information, submit these materials to NHTSA’s Office of the Chief Counsel in accordance with 49 C.F.R. Part 512. **All requests for confidential treatment must be submitted directly to the Office of the Chief Counsel.**

As a CBI Portal Pilot participant, you may submit your request and files containing CBI to NHTSA’s Office of the Chief Counsel via the Confidential Business Information Portal. If you are not currently registered for the CBI Portal, please send a registration request to cbi-helpdesk@dot.gov. Alternatively, if you do not want to use the CBI Portal for this specific IR response, upon request, ODI will provide you with a secure file transfer link for your submission to the Office of the Chief Counsel.

Requests for confidential treatment are governed by Part 512. A current version of this regulation is available on the internet at <http://www.ecfr.gov> by selecting Title 49 “Transportation,” selecting “Parts 500 – 599” and then selecting Part 512 “Confidential Business Information.”

How to request confidential treatment:

NHTSA is currently treating electronic submission as an acceptable method for submitting confidential business information to the agency under Part 512. If you claim that any of the information or documents provided in your response constitutes confidential business information within the meaning of 5 U.S.C. § 552(b)(4), or is protected from disclosure pursuant to 18 U.S.C. § 1905, you must request a secure file transfer link from the ODI contact listed in your Information Request. ODI will copy a representative from the Office of the Chief Counsel on the secure file transfer link for your request for confidential treatment. You must submit supporting information together with the materials that are the subject of the confidentiality request, in accordance with Part 512, to the Office of the Chief Counsel. Do not send a hardcopy of a request for confidential treatment to NHTSA’s headquarters.

Your request must include a request letter that contains supporting information, pursuant to Part 512.8. Your request must also include a certificate, pursuant to Part 512.4(b) and Part 512, Appendix A.

You are required to submit one unredacted “confidential version” of the information for which you are seeking confidential treatment. Pursuant to Part 512.6, the words “ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION” or “CONFIDENTIAL BUSINESS INFORMATION CONTAINED WITHIN BRACKETS” (as applicable) must appear at the top of each page containing information claimed to be confidential. In the latter situation, where not all information on the page is claimed to be confidential, identify each item of information for which confidentiality is requested within brackets: “[].”

You are also required to submit one redacted “public version” of the information for which you are seeking confidential treatment. Pursuant to Part 512.5(a)(2), the redacted “public version” should include redactions of any information for which you are seeking confidential treatment

(i.e., the only information that should be unredacted is information for which you are **not** seeking confidential treatment).

For questions about a request for confidential treatment, please contact Dan Rabinovitz in the Office of the Chief Counsel at Daniel.Rabinovitz@dot.gov or (202)366-8534.