



May 18, 2021

The Honorable Robert L. Sumwalt, III  
Chairman  
National Transportation Safety Board  
490 L'Enfant Plaza East, SW  
Washington, DC 20594

Dear Chairman Sumwalt:

This letter responds to the safety recommendation issued by the National Transportation Safety Board (NTSB) to the National Highway Traffic Safety Administration (NHTSA) in the NTSB's December 1, 2020, report, *Collision Between Pickup Truck with Trailer and Group of Motorcycles, Randolph, New Hampshire, June 21, 2019*, NTSB/HAR-20/04. Our response to the safety recommendation is discussed below.

**NTSB Recommendation and Requested Designation:**

**H-18-32 (reiterated recommendation)**

Require all new motorcycles manufactured for on-road use in the United States be equipped with antilock braking system (ABS) technology.

**NHTSA Action:**

NHTSA's safety mission is to reduce fatalities and injuries involving motor vehicles of all types, including motorcycles. As an update to our last response, NHTSA shares the concern of the NTSB that the percentage of all motor vehicle fatalities attributable to motorcycles (14 percent in the latest agency data<sup>1</sup>) continues to be much greater than their proportion of total vehicle registrations (3 percent) and total vehicle miles traveled (0.6 percent).

NHTSA's last response to NTSB on this topic noted that ABS was available on the majority of motorcycle models for sale in the United States based upon model counts for model-year 2018.<sup>2</sup> Updating that information for model-year 2020, ABS is now standard or optional on at least 70 percent of new models, and the proportion with standard ABS has grown to over 60 percent.<sup>3</sup>

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<sup>1</sup> Federal Highway Administration, 2019 registrations and VMT by vehicle type; available at <https://www.fhwa.dot.gov/policyinformation/statistics/2019/pdf/vm1.pdf>

<sup>2</sup> Although sales-weighted market penetration would be a more accurate measure of the proportion of new motorcycles equipped with ABS, NHTSA does not have that information. Lists of new models with standard or optional ABS are readily accessible and are a useful indicator of ABS availability.

<sup>3</sup> See <https://www.iihs.org/topics/motorcycles/motorcycle-abs>

This proliferation of ABS in the marketplace is significant. To assess its impact, NHTSA will continue to evaluate safety data and information from the agency's crash databases and other sources and will continue to work with stakeholders to identify research opportunities on ABS and other advanced safety technologies for motorcycles.

NHTSA is studying motorcycle crash causation and the potential benefits of advanced crash avoidance technologies in motorcycle crashes. Our previous letter cited a NHTSA research project that analyzed motorcycle pre-crash scenarios that might be addressed by crash avoidance technologies. NHTSA published a final report in April 2020.<sup>4</sup> By using harm measures derived from NHTSA crash databases to evaluate a wide range of pre-crash factors, the report provides insight on the safety improvement that might be realized from motorcycle crash avoidance features, which could include automatic emergency braking and other advanced safety technology.

Recently, NHTSA conducted a naturalistic driving study to gain insight into motorcycle crash causation using 160 privately owned and operated motorcycles instrumented with cameras and sensors. A report on that effort is forthcoming. Additionally, in ongoing NHTSA research on advanced crash avoidance features, such as automatic emergency braking and blind-spot detection/intervention, the agency considers detection of motorcycles when evaluating those features to ensure they benefit motorcyclists along with other road users.

NHTSA requests this recommendation be classified as **Open, Acceptable Response**.

If you have any questions, or require additional information, please contact me or Darren Hall, Governmental Affairs, Policy and Strategic Planning, at 202-366-7463.

Sincerely,



Steven S. Cliff, Ph.D.  
Acting Administrator

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<sup>4</sup> Swanson, E., Azeredo, P., Yanagisawa, M., & Najm, W. (2020, April). *Pre-crash scenario characteristics of motorcycle crashes for crash avoidance research*. (Report No. DOT HS 812 902)