



September 25, 2018

The Honorable Andrew Wheeler
Acting Administrator
Environmental Protection Agency
EPA Docket Center
Air and Radiation Docket
Mailcode 28221T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Docket ID No. EPA-HQ-OAR-2018-0283

The Honorable Heidi King
Administrator
National Highway Traffic Safety Administration
Docket Management Facility, M-30
U.S. Department of Transportation
West Building, Ground Floor, Rm. W12-140
1200 New Jersey Ave, SE
Washington, DC 20590

Docket ID No. NHTSA-2018-0067

EPA and NHTSA Public Hearing in Dearborn, Michigan

Oral Comments on the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks, A Proposed Rule by the National Highway Traffic Safety Administration and the Environmental Protection Agency [Docket Nos. EPA-HQ-OAR-2018-0283 and NHTSA-2018-0067]

My name is Gina Oliver. I am the Senior Director of the Automotive Team for the American Chemistry Council's Plastics Division, which represents U.S. companies that manufacture the plastics used in lightweight plastic and polymer composite auto parts. The automotive industry is a growing end-use customer market for chemistry. In 2017, automobiles manufactured in North America included approximately \$7.0 billion worth of lightweight plastic and composite parts, or \$416 per vehicle manufactured. This growth is due to the unique characteristics of plastic and polymer composites to improve safety, reduce mass, enhance aerodynamics, optimize design flexibility, and enable electric and autonomous vehicles.



ACC applauds the Agencies for their efforts to create a harmonized, sustainable, and safe passenger vehicle platform in the United States. However, conclusory statements in the NPRM that “the relatively cost-effective technology option of vehicle lightweighting...will increase on-road fatalities”¹ contradict NHTSA’s own research. In two NHTSA studies from 2012² and 2017³, researchers concluded that plastics and composites offer considerable weight savings in the vehicle *and* satisfy safety performance requirements. At the 2013 NHTSA Workshop on Mass-Size-Safety, the Insurance Institute for Highway Safety, or IIHS, concluded that advanced structural engineering and technology innovations have improved occupant protection across *all* vehicles.⁴

Further, the NPRM claims that heavier and larger vehicles are safer while lighter and smaller vehicles are less safe according to historical data. However, more recent studies have shown that improved vehicle design has allowed lightweighting to both enhance safety and reduce vehicle mass because readily available safety equipment acts in synergy with vehicle mass reduction to maintain and improve safety.

If the final rule maintains conclusions that vehicle lightweighting will increase on-road fatalities, that would run counter to the Department of Transportation’s efforts to encourage the development of driver assistance and fully autonomous vehicles. The innovative capabilities of lightweight plastic and polymer composites enable autonomy through their high strength-to-weight ratio, design flexibility, and optimized component integration.

¹ NPRM, 83 Fed. Reg. 42986, 42991 (Aug. 24, 2018).

² Chung-Kyu Park, Cing-Dao (Steve) Kan, William Thomas Hollowell, and Susan I. Hill, “Investigation of Opportunities for Lightweight Vehicles Using Advanced Plastics and Composites,” National Crash Analysis Center, George Washington University, Report No. DOT HS 811 692 (December 2012), available at <https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/PB2013103220.xhtml>.

³ National Center for Manufacturing Sciences, *High-Performance Computing Studies*, Report No. DOT HS 812 404, Washington, DC National Highway Traffic Safety Administration (April 2017), available at https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/812404_computingstudiesreport_v2_0.pdf.

⁴ Joe Nolan, “The Relative Safety of Large and Small Passenger Vehicles,” Insurance Institute for Highway Safety, Presentation to the 2013 NHTSA Workshop on Mass-Size-Safety, Washington, DC, May 2013.



ACC supports the Agencies' recognition of lightweight plastic and polymer composite technologies, as a compliance tool for auto manufacturers to make vehicles more fuel efficient. We respectfully request that the Final Rule reflect the latest science by NHTSA and the private sector on the safety of vehicle lightweighting. Please contact ACC with any questions.

Thank you.

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