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Via electronic submission

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Attn: Docket No. NHTSA-2017-0069 Docket No. NHTSA-2018-0067

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

Re: Supplemental Comments of Public Health and Environmental Organizations on National Highway Traffic Safety Administration's and Environmental Protection Agency's Proposed Rule: The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks, 83 Fed. Reg. 42,986 (Aug. 24, 2018)

The undersigned organizations hereby submit this supplemental comment in the above dockets. Because the information herein is "of central relevance to the rulemaking," we are submitting this letter and the referenced documents in EPA's rulemaking docket. We are also submitting them in NHTSA's dockets for the Proposal and the Draft Environmental Impact Statement. The documents, which became available only after the close of the comment period, provide compelling evidence of the urgent need to reduce ongoing harm and grave danger to public health and welfare caused by greenhouse gas emissions. The agencies have a duty to consider this new evidence demonstrating that the climate crisis caused by anthropogenic emissions of carbon dioxide and other greenhouse gases is already upon us and will lead to catastrophic consequences unless emissions are steeply reduced within the next decade.

Since the close of the comment period, greenhouse gas concentrations have continued to increase.² Events during the last few months graphically illustrate that climate change is causing extreme weather, including heatwaves, to become both more frequent and more severe. June

¹ 42 U.S.C. § 7607(d)(4)(B)(i). *See also id.* § 7607(d)(7)(A) (providing that such material forms part of the administrative record for judicial review).

² In July 2019, average atmospheric CO₂ concentrations atop Mauna Loa were 411.77 ppm, an increase of nearly 3 ppm over July 2018. See NOAA, Earth Systems Research Laboratory, Monthly Average Mauna Loa CO₂ (Aug. 5, 2019), https://www.esrl.noaa.gov/gmd/ccgg/trends/mlo.html (Exhibit A).

2019 was the warmest June on record, with extreme heat waves experienced throughout Northern latitudes.³ Early July 2019 brought an extreme heat wave to Alaska, which "re-wrote the record books for multiple cities and communities across the state." Later in July, another extreme heatwave in Europe shattered temperature records – breaking the all-time record for Paris by nearly four degrees Fahrenheit, with a temperature of 108.68 degrees (42.6°C).⁵

July 2019 appears to have been the Earth's hottest month on record.⁶ Extreme heat has blanketed much of the continental United States and caused significant harm, including to the crops of farmers already suffering from this year's extensive and disruptive flooding.⁷ The heatwaves caused serious health hazards,⁸ disrupted economies, and exacerbated other adverse impacts associated with climate change. In late July, the extreme heatwave that struck Europe moved northwest, causing massive melting of Greenland's ice-sheet, adding an estimated nearly two hundred billion tons of water into the Atlantic and causing a projected half-millimeter rise of the global sea level in a single month.⁹ Exceptionally warm temperatures in Siberia and Alaska are

https://www.noaa.gov/news/june-2019-was-hottest-on-record-for-globe (Exhibit B); World Weather Attribution, Human contribution to record-breaking June 2019 heatwave in France (July 2, 2019),

³ See U.S. Department of Commerce, National Oceanic and Atmospheric Administration, June 2019 Was Hottest on Record for the Globe (July 18, 2019) ("Scorching temperatures made June 2019 the hottest June on record for the globe. And for the second month in a row, warmth brought Antarctic sea-ice coverage to a new low for June."),

https://www.worldweatherattribution.org/human-contribution-to-record-breaking-june-2019-heatwave-in-france/.

Tom Liberto, *High Temperatures Smash All-time Records in Alaska in Early July 2019*, NOAA Climate.gov (July 16, 2019), https://www.climate.gov/news-features/event-tracker/high-temperatures-smash-all-time-records-alaska-early-july-2019 (Exhibit C).

⁵ See World Meteorological Organization, July matched, and maybe broke, the record for the hottest month since analysis began (Aug. 1, 2019), https://public.wmo.int/en/media/news/july-matched-and-maybe-broke-record-hottest-month-analysis-began (Exhibit D).

⁶ Andrew Freedman, *July was Earth's hottest month on record, beating or tying July 2016*, Washington Post (Aug. 12, 2019), https://www.washingtonpost.com/weather/2019/08/02/july-was-earths-hottest-month-record-beating-ortying-july/?utm_term=.1ef66b327ba2 (Exhibit E); *see also* Chelsea Harvey, *July was the hottest month in history*, E&E News (Aug. 6, 2019), https://www.eenews.net/climatewire/stories/1060859237 (Exhibit F); Copernicus Climate Change Service, Surface Air Temperature for July 2019, https://climate.copernicus.eu/surface-airtemperature-july-2019 (Exhibit G).

⁷ Andrew Freedman, Stifling Heat to Rule the Weekend for Two-Thirds of the Lower 48, with Records in Jeopardy, Washington Post (July 20, 2019), https://www.washingtonpost.com/weather/2019/07/20/stifling-heat-rule-weekend-two-thirds-lower-states-with-records-jeopardy/?utm_term=.1f4f560c117a (Exhibit H); Emma Newberger, 'It Never Stops': US Farmers Now Face Extreme Heat Wave After Floods and Trade War, CNBC (July 19, 2019), https://www.cnbc.com/2019/07/19/extreme-heat-wave-hits-us-farmers-already-suffering-from-flooding.html (Exhibit I); Michael Coren, As the Climate Crisis Heats Up, Flooded Farms in the Midwest Can't Plant Corn, Quartz (May 30, 2019), https://qz.com/1631469/midwest-floods-linked-to-climate-change-are-devastating-us-farms/ (Exhibit J).

⁸ Justin Carissimo, *Massive heat wave blamed for at least 6 deaths*, CBS (July 21, 2019), https://www.cbsnews.com/live-news/heat-wave-2019-extreme-heat-advisory-warning-deaths-latest-weather-forecast-us-nyc-2019-07-20/.

⁹ See Andrew Freedman and Jason Samenow, *The Greenland Ice Sheet Poured 197 Billion Tons of Water into the North Atlantic in July Alone*, Washington Post (Aug. 2, 2019) ("An extraordinary melt event that began earlier this week continued through August 1 on the Greenland ice sheet, and there are signs that about 60 percent of the expansive ice cover saw detectable surface melting, including at higher elevations that only rarely see temperatures climb above freezing. . . . July 31 was the biggest surface melt day since at least 2012 According to Ruth Mottram, a climate researcher with the Danish Meteorological Institute, the ice sheet sent 197 billion tons of water pouring into the Atlantic Ocean during July. This is enough to raise sea levels by 0.5 millimeter, or 0.02 inches, in a one-month time frame, said Martin Stendel, a researcher with the institute."), https://www.washingtonpost.com/weather/2019/08/01/greenland-ice-sheet-poured-billion-tons-water-into-north-

causing dramatic, destabilizing and climate change-accelerating melting of permafrost. ¹⁰ These are only some of the facets of a global environmental and social disaster currently unfolding as greenhouse gas concentrations continue to climb. Countless others are documented in the record.

We are also submitting the following centrally relevant information which became available after the deadline for public comment. First, we draw the agencies' attention to a study recently reported in the journal NATURE finding that:

the warmest period of the past two millennia occurred during the twentieth century for more than 98 per cent of the globe. This provides strong evidence that anthropogenic global warming is not only unparalleled in terms of absolute temperatures, but also unprecedented in spatial consistency within the context of the past 2,000 years. The study of past climate provides an essential baseline from which to understand and contextualize changes in the contemporary climate.¹¹

Additionally, we submit the Government Accountability Office's June 2019 written testimony submitted to the House Budget Committee, which concludes that "the effects of climate change have already and will continue to cause fiscal exposure across the federal government and that exposure will continue to increase." Climate Change: Opportunities to Reduce Federal Fiscal Exposure at 15 (June 11, 2019) (GAO-19-625T) (Exhibit O).

Also attached is a research brief prepared by Climate Central which documents the connection between a warming climate and increased numbers of "stagnation events" in urban areas, creating conditions for high levels of harmful ground-level ozone pollution.¹²

In August 2019, the Intergovernmental Panel on Climate Change released in summary form a Special Report on the impact of climate change on land, agriculture, and food supplies. Reflecting the work of more than 100 experts, the Special Report concludes that climate change is causing and exacerbating a wide variety of harms to land – including desertification of very

¹⁰ See Yumashev et al., Climate Policy Implications of Nonlinear Decline of Arctic Land Permafrost and Other Cryosphere Elements, 10 NATURE COMMUNICATIONS 1900 (Apr. 23, 2019), https://www.nature.com/articles/s41467-019-09863-x.pdf (Exhibit M); Niel McFarquhar, Russian Land of Permafrost and Mammoths is Melting, New York Times (Aug. 4, 2019), https://www.nytimes.com/2019/08/04/world/europe/russia-siberia-yakutia-permafrost-global-warming.html (Exhibit M)

atlantic-july-alone/ (Exhibit K); Henry Fountain, *Europe's Heat Wave, Fueled by Climate Change, Moves to Greenland*, New York Times (Aug. 2, 2019), https://www.nytimes.com/2019/08/02/climate/european-heatwave-climate-change.html (Exhibit L); Alan Taylor, *A Heatwave in Greenland*, The Atlantic (Aug. 6, 2019), https://www.theatlantic.com/photo/2019/08/heatwave-greenland-photos/595591/.

¹¹ Raphael Neukom, Nathan Steiger, Juan José Gómez-Navarro, Jianghao Wang and Johannes P. Werner, *No evidence for globally coherent warm and cold periods over the preindustrial Common Era*, 571 NATURE 550, 550 (July 25, 2019) (footnote omitted), https://www.nature.com/articles/s41586-019-1401-2. This publication is being submitted in full in hard copy by mail.

¹² Climate Central, *Climate Change is Threatening Air Quality Across the Country* (July 30, 2019), https://www.climatecentral.org/news/climate-change-is-threatening-air-quality-across-the-country-2019 (Exhibit P). ¹³ Climate Change and Land: An IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems, Summary for Policymakers (2019), https://www.ipcc.ch/report/srccl/ ("Special Report, Summary for Policymakers") (Exhibit Q).

large areas, water scarcity, and widespread loss of soils – thereby threatening the world's food supply. Among the Report's findings are that:

"Climate change, including increases in frequency and intensity of extremes, has adversely impacted food security and terrestrial ecosystems as well as contributed to desertification and land degradation in many regions (high confidence)." Special Report, Summary for Policymakers (Approved Draft) at 5.

"Climate change creates additional stresses on land, exacerbating existing risks to livelihoods, biodiversity, human and ecosystem health, infrastructure, and food systems (high confidence)." *Id.* at 15.

"Deferral of GHG emissions reductions from all sectors implies tradeoffs including irreversible loss in land ecosystem functions and services required for food, health, habitable settlements and production, leading to increasingly significant economic impacts on many countries in many regions of the world (high confidence)." *Id.* at 41.

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¹⁴ See generally id.; see also Christopher Flavelle, Climate Change Threatens the World's Food Supply, United Nations Warns, New York Times (Aug. 8, 2019) ("Barring action on a sweeping scale, the report said, climate change will accelerate the danger of severe food shortages. As a warming atmosphere intensifies the world's droughts, flooding, heat waves, wildfires and other weather patterns, it is speeding up the rate of soil loss and land degradation, the report concludes."), https://www.nytimes.com/2019/08/08/climate/climate-change-food-supply.html (Exhibit R).

The unfolding climate crisis is undeniable. The agencies cannot continue to ignore these events and must abandon their indefensible proposal to freeze or weaken the current light-duty vehicle standards. Finalizing this proposal would ignore the facts before us and would exacerbate the ongoing disaster, experienced most severely by those least able to protect themselves. That would be a historic blunder and an unconscionable betrayal of the public.

Please contact Alice Henderson, <u>ahenderson@edf.org</u>, (303) 447-7205, if you have any questions regarding this comment.

Respectfully submitted,

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CONSERVATION LAW FOUNDATION
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