Comments on the 'Safer Affordable Fuel-Efficient Vehicle Proposed Rule' by Former Employees of the U.S. Environmental Protection Agency National Vehicle and Fuel Emissions Laboratory, Save EPA Ann Arbor and the Environmental Protection Network
October 26, 2018

We, the undersigned, are engineers, scientists, policy analysts, attorneys and managers who previously worked at the U.S. Environmental Protection Agency (EPA) National Vehicle and Fuel Emissions Laboratory (NVFEL) or in other EPA offices directly involved with Office of Transportation and Air Quality mobile source regulations and programs. Some of us have retired, others of us have moved on to other careers. Several of us worked directly with industry and the State of California to forge the existing GHG standards- "Model Year 2017 and Later Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards." All of us have extensive knowledge about the issues involved in controlling vehicle greenhouse gas (GHG) emissions. The existing GHG standards would be severely weakened under the *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026*, jointly proposed by the U.S. Department of Transportation (DOT) and by political appointees at EPA. There is no technical or environmental or economic rationale for such a massive rollback of standards that have been working so well for the last 7 years and are required by law. Knowing the issues as well as we do, we state unequivocally that EPA and DOT must withdraw the SAFE proposal to weaken existing vehicle GHG and fuel efficiency standards and instead retain the existing GHG and fuel economy standards for 2021-2025.

These comments are also submitted on behalf of Save EPA Ann Arbor and the Environmental Protection Network (EPN). EPN is an organization comprised of over 300 EPA alumni volunteering their time to protect the integrity of US EPA, human health and the environment. We harness the expertise of former US EPA career staff and confirmation-level appointees to provide an informed and rigorous defense against current efforts to undermine the protection of public health and the environment.

Our concerns about the SAFE proposal start with the utter lack of transparency and expertise that characterizes its development. EPA and DOT political leadership should not advance a regulatory proposal that not only ignores, but indeed rejects the input of the world's recognized experts on vehicle emissions..

EPA's NVFEL has world-class automotive powertrain engineers. Many have industry experience and PhDs or other advanced degrees. NVFEL is the world's leading vehicle pollution and fuel economy test laboratory; its technical staff has published dozens of Society of Automotive Engineers papers on fuel economy and emissions. The lab has performed over 10,000 fuel economy tests, and NVFEL technical analysts have benchmarked the world's cleanest and most efficient vehicles. Yet DOT and the White House entirely cut these experts out of the process that generated the SAFE proposal. The fact that EPA's career staff recommendations and comments were ignored is well documented (Docket ID No. NHTSA-2018-0067 or EPA-HQ-OAR-2018-0283)

DOT does not have a fuel economy laboratory and has never conducted a Corporate Average Fuel Economy test - not even one test. Yet in drafting the SAFE proposal, DOT refused to have a single technical working meeting with EPA staff and ignored test data from NVFEL. After working closely with

EPA for seven years to promulgate the existing standards, this time DOT completely locked EPA experts out as evidenced by memos to the docket during inter-agency review. EPA experts could have helped DOT do a better analysis for the American people, but they were not allowed to do so.

In contrast, the existing GHG and fuel economy standards published in 2012 were borne out of an unprecedented commitment to transparency and consensus. From 2009 through 2012, EPA and DOT held hundreds of meetings with automakers, suppliers, California and other states, labor, environmental and consumer groups. The standards were negotiated, with no stakeholder getting everything it wanted, but every stakeholder getting some of what it sought. Most automaker CEOs and the UAW supported the standards. Not a single major lawsuit was filed after the new regulations were promulgated. Compare this to the recent process—minimal stakeholder meetings and a DOT analysis without any new data based only on contrived modeling assumptions. California and thirteen other states attorneys general have already indicated that they will sue should this reckless SAFE proposal be finalized.

Further, our concerns about the SAFE proposal extend to the total lack of data or evidence to support DOT's analysis. This lack has resulted in a technical analysis that is being widely ridiculed and a proposed eight-year rollback to the existing standards that even most automakers do not support. How can EPA and DOT stand behind a regulatory proposal with no basis in science or engineering or economics?

In multiple past analyses, including one DOT conducted just two years ago, DOT said the existing standards would have net societal *benefits* of nearly $100 billion. Now, DOT claims that the current standards would have net societal *costs* of $200 billion, a $300 billion reversal! To try to justify this remarkable flip-flop, DOT has contrived modeling assumptions that distort costs and benefits to achieve a preordained modeling result to make the existing standards look worse than they did previously. (France, Oral Testimony on Behalf of Environmental Defense Fund, SAFE Public Hearing, Dearborn, MI, September 25, 2018)

As an example, DOT's model assumes incorrectly that cars meeting the existing GHG standards would cost less to drive, so people would drive them more. It goes on to assume that Americans who own older vehicles, unaffected by more rigorous standards, will voluntarily choose to "stay home" leading to the false conclusion that Americans will drive almost a trillion miles less under the rollback than they would under the existing standards. (Environmental Defense Fund Comments on SAFE Proposal Docket EPA-HQ-OAR-2018-0283). There are no data to support this drastic reduction in miles traveled. Yet by making this assumption, DOT can model "reduced fatalities" since fatalities are correlated in the model with the number of miles driven. DOT then assigns $100 billion of unsupported benefits to the supposed reduction in fatalities under the rollback. This assumption alone has been universally condemned and undermines the credibility of the entire analysis (Alson, J October 10, 2018).

Unfortunately, DOT's analysis also relies on many other questionable assumptions to justify weakening the standards. These erroneous assumptions include exaggerating the cost of technology to meet the existing standards by 50-80%; applying artificially low gasoline prices that don't reach $3 per gallon for ten years; and modeling national travel rates in the near term that are 20-25% lower than those documented by official federal data. (Environmental Defense Fund Comments on SAFE Proposal Docket EPA-HQ-OAR-2018-0283). These assumptions allow DOT to calculate lower consumer fuel savings under the existing standards, and therefore lower costs under the rollback, contradicting DOT's analysis of just two years ago.

DOT claims that the rollback in GHG standards would prevent 12,700 fatalities. However, even DOT's own biased analysis refutes these claims. The Environmental Defense Fund replicated DOT's own modeling runs and found that 97-99% of the "reduced fatalities" have nothing to do with vehicle safety or fleet turnover, but are simply due to DOT assuming that Americans will reduce their personal mobility by trillions of miles under the rollback. While the fatality rate per mile, the safety metric that DOT has long used, is essentially unchanged (Environmental Defense Fund Comments to on SAFE Proposal Docket EPA-HQ-OAR-2018-0283).

We believe that the technical analysis DOT has put forward to justify the SAFE proposal is flawed to the point that the proposal must be withdrawn.

We must express our deep concerns about the devastating environmental and economic impacts that will result if the SAFE proposal is finalized. EPA and DOT should not finalize a regulatory proposal that will reverse progress toward reducing the GHG emissions that cause climate change, is required by law to reduce these dangers, threaten the technological leadership U.S auto manufacturers have built up over decades, cost U.S. consumers a lot of money out of pocket, and eliminate thousands of good, U.S. manufacturing jobs.

Extensive data support keeping the existing 2021-2025 standards which are technologically feasible (even on vehicles as large as a Ford F-150 pickup, since the standards automatically adjust based on vehicle size) and which were reaffirmed by EPA in January of 2017. The existing standards reduce climate change and have many economic and public health benefits which both NHTSA and EPA have repeatedly shown in the past will far exceed the technology costs. Weakening the standards will reduce or eliminate these benefits.

By 2025, the existing vehicle efficiency and clean car standards are expected to (all numbers are total benefits from 2012-2025):

- Nearly double vehicle efficiency;
- Save 6 billion metric tons of dangerous GHG pollution that causes climate change;
- Save America 12 billion barrels of oil;
- Provide net benefits to society of hundreds of billions of dollars over the lifetime of vehicles when the standards are fully implemented.

Weakening the standards will cost jobs. U.S. automakers are meeting the existing standards even faster than anticipated, creating thousands of jobs for Americans along the way. As the market shifts towards efficiency, a rollback now could put our automakers at a disadvantage in the global marketplace and jeopardize hard-fought industry jobs. By DOT's own SAFE analysis, rolling back the standards will eliminate as many as 60,000 auto industry manufacturing jobs by 2030. In contrast the existing standards are expected to create an estimated 650,000 jobs (full-time equivalent) throughout the U.S. economy, including 50,000 in light-duty vehicle manufacturing (parts and vehicle assembly).

The existing standards save consumers money. Weakening the vehicle efficiency and GHG standards will mean a hidden tax on families. The vast majority of Americans support making cars and trucks run on less gas because it saves them money. Weakening the standards would hurt low- and middle-income Americans because gas is a growing share of their household expenses. Under the existing standards,

consumers would save between $3,200 and $5,700 over the life of a new car in 2025. The original standards ensure that Americans who need bigger vehicles for family or work have fuel-efficient choices. New truck buyers will save, on average, about $4,800 to $8,200 over the lifetime of a new 2025 truck under the existing standards.

Under the Clean Air Act and the endangerment finding, the US EPA has a legal obligation to reduce greenhouse gas emissions (such as carbon dioxide (CO_2) from vehicles) and to take actions requisite to protect public health from the threats of climate change. US EPA has a mandatory duty to issue and enforce standards (per Clean Air Act section 202(a)(1) US EPA shall issue standards if US EPA finds that greenhouse gas air pollution endangers public health and welfare and vehicular greenhouse gas emissions contribute to that endangerment).

As stated previously, US EPA comments in the interagency review process show that US EPA had little to no part in developing the NHTSA proposal. Key US EPA technical models and data on which the current standards are based were consequently not adequately reviewed or refuted. By failing to exercise its independent judgment and expertise in this flawed SAFE rollback proposal US EPA has abdicated its legal responsibility. US EPA may not shirk its responsibility under the law or delegate to US Department of Transportation, NHTSA or an outside entity (leading case: *U.S. Telecomm v. FCC,* 359 F. 3d 554, 567-68 (D.C. Cir. 2004*).* EPA can look to expertise of outside entities and rely on outside entities for fact finding and policy advice, but it cannot lawfully merely rubber stamp conclusions of these other bodies (see the illustrative discussion in *Coalition for Responsible Regulation v. EPA* regarding EPA's use of the Intergovernmental Panel on Climate Change (IPCC) reports in crafting the endangerment finding at 684 f 3d at 120).

Americans deserve clean air and clean water, and weakening vehicle efficiency and GHG standards is a direct threat to public health and the planet. Rolling back these standards will only increase pollution and the devastating impacts of climate change. On October 6, 2018, the Intergovernmental Panel on Climate Change (IPPC) released a summary of its latest report showing we must do everything possible to reduce our use of fossil fuels to avoid calamitous impacts of climate change. (IPPC 2018) Our climate system is our life support; thus, climate change threatens every being on our planet. The scientific community shares a rare consensus that we are at a critical juncture. We must take action now to reduce emissions if we are to avert the worst outcomes of climate change. As documented in the IPCC 2018 report, if we don't reduce greenhouse gas emissions from all sectors (including vehicles), people's health will suffer from excessive heat, worse air pollution, more frequent storms, droughts, fires, changes in vector-borne illnesses, and less nutritious grains. Importantly, vehicular emissions in the U.S. contribute to those negative health impacts and public endangerment.

The analysis for this proposed rulemaking did not adequately consider the health impact to vulnerable groups. We are already seeing the climate impacts of extreme weather events put vulnerable populations, such as communities of color, the elderly, young children, the poor and those with chronic illnesses, at serious risk. We have already seen record wildfires as a result of climate change. Increased wildfire activity associated with just a 1.5 degree F increase is projected to increase respiratory illness like asthma by 25%. (IPPC 2018). There is a direct connection between air pollution, climate change and asthma. Weakening vehicle GHG standards that cut tailpipe carbon pollution will worsen air pollution and thus asthma and respiratory symptoms for the 24 million Americans – including 6.3 million children

– who suffer from asthma. CO_2 emissions will increase by nearly 1 billion metric tons over the lifetime of vehicles sold between 2021-2025.

Increased temperatures and heat waves can have significant effects on health that can lead to a number of adverse health outcomes, resulting in illness, hospitalization of even death. A 2017 NRDC study estimated an increase in the number of heat-related deaths due to climate change in 45 U.S. cities. An estimated 150 Americans will die every summer day due to extreme heat by 2040, with almost 30,000 heat-related deaths annually. Individuals with pre-existing conditions including diabetes, chronic obstructive pulmonary disease (COPD), congestive heart failure, or heart disease are at increased risk of mortality during extreme heat events. Increased hospitalization rates for respiratory and cardiovascular diseases can also occur as a consequence of extreme heat exposure. Heat-related illness is expected to increase with climate change. Without significant greenhouse gas reductions, average temperatures for North America are expected to rise resulting in a significant increase in extreme heat events and therefore an increase in heat-related illnesses and deaths.

Because manmade CO_2 concentrations are persistent in the atmosphere, vehicle emissions today affect future generations. Thus, it is imperative that emissions from mobile sources are reduced as quickly as possible to avert the worst predicted outcomes for climate change and human health. Unlike other types of air pollution with shorter atmospheric concentration residence times, CO_2 reductions contribute towards the global solution. Delays in reductions from this misguided and flawed proposal have major implications for generations. This proposal did not adequately factor in the full impact of the physical properties of CO_2 concentrations on population health or equity.

For all these reasons, we urge you in the strongest possible terms to retain and strongly enforce the existing 2021-2025 vehicle fuel efficiency and GHG standards and withdraw the SAFE proposal.

Sincerely,

Jeff Alson - Senior Engineer and Policy Advisor, 40 years

Jane Armstrong - Senior Policy Advisor, 29 years

Patricia D. Koman, Ph.D., M.P.P. - Senior Environmental Scientist, 22 years

Gay MacGregor - Director, Regional & State Programs Division Senior Policy Advisor, 35 years

Joe Somers - Science Advisor, 43 years

Kenneth J. Adler - Senior Policy Analyst in OTAQ, 30 years

Lucie Audette - Senior Policy Advisor, 25 years

Thomas M. Ball - Program Manager for In-Use Vehicle Emission Compliance, 37 years

Tracey Bradish - Chief of Staff, 35 years

Rod Branham - Technician, 29 years

Susan Bullard - Project Manager, 20 years

David Calkins - Chief of Air Planning Programs, EPA Region 9, 25 years

James Carpenter - Quality Assurance Manager, 26 years

Thaddeus J. Cieslak Jr. - Quality Control Specialist, 32 years

Donald Danyko - Facilities Engineering, 29 years

Maureen Delaney - Policy Advisor, Office of Air and Radiation, 23 years

Benjamin Ellies - Technology Advisor, 13 years

John M. German - Senior Technical Advisor, U.S. EPA Office Of Mobile Sources, 14 years

Katherine J. Gold - Environmental Protection Specialist, 10 years

Michael Gold - Project Manager, 5 years

Charles Lee Gray Jr - Division Director, 42 years

Gregory Green - Division Director, 18 years

John F. Guy - Senior Policy Advisor, Acting Deputy Director, Transportation and Regional Programs Division, 32 years

John Hannon - Assistant General Counsel, Air and Radiation Law Office, Office of General Counsel, 30 years

Daniel L. Harrison - Group Manager, Vehicle Programs Group, 33 years

Craig A. Harvey - Engineer, 32 years

Linda Hormes - Environmental Protection Specialist, 30 years

Rebecca Kanner - Mechanical Engineer, 4.5 years

Robert Larson - Engineer, policy analyst, 42 years

Richard Lawrence - Director, Engineering Operations Division, 28 years

Jim Lindner - Chemical Engineer, 18 years

James A. McCargar - Senior Policy Advisor (OAR/OTAQ), 19 years

Jacqueline W. McManus - Administrator Assistance, 20 years

M T Middlebrook - Sr. Info. Tech Specialist, 23 years

Lottie Parker - Engineering Technician, 33 years

Martin Reineman - Mechanical Engineer, Certification and Compliance Division, 38 years

Michelle Roos - Environmental Specialist, 5 years

Constance H Ruth - Environmental Protection Specialist, 25 years

Richard Rykowski - Sr. Technical Advisor, 32 years

Carl Scarbro - Program Analyst, 34 years

Sara Schneeberg - Assistant General Counsel, Air and Radiation Law Office, Office of General Counsel, 35 years

David Schulz - Power Industry National Oracle- Region 5, 42 years

Steven Silverman - Office of General Counsel, 37 years

Lori Stewart - Chief of Staff, Office of Air and Radiation, 34 years

Richard P. Thomas - Compliance Officer, 33 years (21 Federal, 12 contractor)

Gary Timm - OMSAPC staff in Washington, 38 years

Bonnie Weinbach - Environmental Scientist Regions 2 and 5, 10 years

John T. White - Engineer, 32 years

Richard Wilcox - Environmental Scientist, 34 years

For more information, contact EPN by email at info@environmentalprotectionnetwork.org or call 202-656-6229.

Media inquiries can be directed to caren_kaganevans@ecicommunications.com.