## VIA ELECTRONIC SUBMISSION

Heidi King Deputy Administrator National Highway Traffic Safety Administration 1200 New Jersey Avenue, SE Washington, DC 20590

Andrew R. Wheeler Acting Administrator Environmental Protection Agency 1200 Pennsylvania Ave., NW Washington, DC 20460

## Attn: Docket No. NHTSA-2018-0067

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

Re: Comments of Environmental Defense Fund 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. 42986 (Aug. 24, 2018)

On behalf of our members across the country, Environmental Defense Fund ("EDF") respectfully submits these comments—including the attached supporting documents<sup>1</sup>—on the National Highway Traffic Safety Administration's ("NHTSA") and the Environmental Protection Agency's ("EPA") Proposed Rule: The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks, 83 Fed. Reg. 42986 (Aug. 24, 2018) ("Proposed Rule" or "Proposed Rollback").

<sup>&</sup>lt;sup>1</sup> Attached are Appendix A, which is our more detailed technical appendix, and Appendix B, a report by EDF consultant, Richard Rykowski, *Review of the Agencies' Technical Analysis Supporting the SAFE Vehicle NPRM*. A Department of Transportation regulation issued in 1977 established a 15-page limit for public comments and petitions submitted to the agency. 49 C.F.R. § 553.21; *see also* 42 Fed. Reg. 58,949 (Nov. 14, 1977). The validity of that regulation has never been adjudicated, and EDF believes it to be unlawful on its face and as applied to this case. *See* 5 U.S.C. 553(c); *Perez v. Mortgage Bankers Ass'n*, 135 S. Ct. 1199, 1203 (2015) ("An agency must consider and respond to significant comments received during the period for public comment."). In an abundance of caution, EDF is including these appendices to our public comment with the remainder of our discussion. *See, e.g.*, EPA & NHTSA, *Proposed Rulemaking To Establish Light Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards*, 74 Fed. Reg. 49,454, 49,455 (Sept. 28, 2009) ("[Y]ou may attach necessary additional documents to your comments. There is no limit on the length of the attachments.").

EDF is a non-partisan, non-governmental environmental organization representing over two million members nationwide. Since 1967, EDF has linked law, policy, science, and economics to create innovative, equitable, and cost-effective solutions to today's most pressing environmental problems. EDF pursues initiatives at the state and national levels to protect human health and the environment. Among these initiatives, EDF has worked to reduce climate-destabilizing and health-harming emissions from the transportation sector and improve vehicle fuel economy.

EDF strongly opposes the agencies' Proposed Rollback, which will expose Americans to substantial amounts of additional climate-destabilizing and health harming pollution from cars and light trucks and will force consumers to spend more hard-earned money at the gas pump. Today, EDF is submitting a set of detailed comments documenting the serious and pervasive flaws with the Proposed Rollback—features of the proposal that exceed the agencies' statutory authorities and otherwise render the proposal arbitrary, capricious and unlawful. EDF has also joined other public health and environmental organizations in submission to this rulemaking docket of a detailed legal comment.

In these comments, we address the widespread technical flaws that infect the Proposed Rollback, which cause the agencies to systematically (and dramatically) overstate the benefits of the proposal and understate its harmful costs. We focus on three key analytical deficiencies—the agencies' assessment of safety impacts, emissions impacts, and compliance costs—and describe how the agencies' conclusions diverge from their prior findings and are otherwise inconsistent with the substantial body of evidence supporting the original model year ("MY") 2021-2025 standards.<sup>2</sup> We briefly discuss our key findings in each of these areas, below.

<u>Safety Impacts</u>. NHTSA asserts that the proposed rollback will have safety benefits—reducing fatalities by between 12,700 (for the CAFE standards) and 15,700 (for the GHG standards) under NHTSA's "model year" analysis. NHTSA's conclusions are patently false and represent a dramatic departure from EPA's and NHTSA's prior and consistent finding, which showed that protective greenhouse gas and fuel economy standards would have negligible (and likely modestly beneficial) safety impacts. In particular, our analysis shows:

• 97-99 percent of NHTSA's projected fatality reductions are simply due to flawed assumptions about how people will change their driving habits under the proposed roll back—driving new cars less based on an exaggerated rebound effect and driving used cars less as well due to a new and deeply flawed scrappage model. None of the changes in VMT have anything to do with vehicle design or safety and should therefore be disregarded. NHTSA has long used fatality rate as its safety metric, and even NHTSA's own deeply-flawed analysis demonstrates that the fatality rate is essentially unchanged under the Proposed Rollback.

<sup>&</sup>lt;sup>2</sup> The original Mid-Term Evaluation was intended only to cover model years 2022-2025. The administration's proposal, which likewise dramatically weakens standards for 2021 and extends those weakened standards through 2026, is just further example of the extreme bias and unjustifiable overreach that runs throughout the proposal.

- The remaining 1-3 percent of NHTSA's projected fatality reductions are due to vehicle design and/or "fleet turnover," though NHTSA's analysis with respect to these areas is likewise wrong. Notably, the agencies concede that their own analysis shows that mass reduction (the only potential impact related to vehicle design) has a statistically insignificant impact on fatalities. Furthermore, NHTSA makes a new modeling assumption that vehicle manufacturers will apply mass reduction without consideration of its safety implications. This new assumption is contrary to NHTSA's assumption in past rulemakings that mass reduction will be applied safely and more cost effectively (more mass reduction from heavier vehicles), and contrary to vehicle manufacturers' current practice.
- But even taking NHTSA's biased modeling assumptions at face value, the remaining 1-3 percent of fatalities accounts for about 5-30 fatalities per year or 0.01-0.08 percent of all highway fatalities (about 37,000 per year)—meaning that the resulting reduction in fatalities estimated in the proposed rule are so minimal as to have zero statistical significance.

EDF's modeling, which corrects several of the key errors in NHTSA's analysis, shows that the current standards will actually reduce fatalities by 5-10 per year. But more importantly, these possible changes in fatalities due to vehicle safety, whether positive or negative, are dwarfed by the increase in fatalities due to the emissions increases that would result from the Proposed Rollback, which were not properly accounted for by the agencies.

**Emissions Impacts**. While the agencies elevate the purported (and entirely fabricated) safety impacts attributable to the Proposed Rollback, they completely ignore the very real, adverse emissions and health impacts that will result from the proposal. Indeed, the agencies remarkably claim that rolling back protective greenhouse gas and fuel economy standards for the nation's largest source of climate pollution will nonetheless have negligible emissions impacts.

This conclusion is based on a series of new, deeply flawed, and unsupported assumptions, which center on four key areas: 1) NHTSA's assumption that the proposed rollback will cause Americans to drive *used vehicles* nearly a trillion miles less (an assumption without any scientific, economic, or logical basis); 2) NHTSA's assumption that 95% of the additional gasoline needed to power the Proposed Rollback's less efficient vehicles will be produced from imported crude and 50% refined outside the United States (and so will dramatically reduce pollution impacts domestically)<sup>3</sup>; 3) NHTSA's unprecedented assumption that automakers will voluntarily over-comply with "maximum feasible" standards under the Proposed Rollback; and 4) NHTSA's inflated estimate of the "rebound effect."

When we correct these errors, we find that, when compared to the original MY 2021-25 standards, the Proposed Rollback will have dramatic and harmful emissions and health impacts, including:

<sup>&</sup>lt;sup>3</sup> NHTSA makes these analytical assumptions despite attempting to justify its Proposed Rollback on the flawed assertion that fuel economy improvements are no longer needed because of increased domestic energy production.

- Approximately 200 million tons of additional, annual CO<sub>2</sub> emissions in 2050 (nearly double what NHTSA's analysis estimates) and approximately 4.5 billion tons of additional cumulative CO<sub>2</sub> emissions between 2017-2050.
- Substantial NOx, VOC, PM, and SO<sub>2</sub> emissions, which NHTSA's analysis underestimates by orders of magnitude. Compared to the recent light-duty Tier 3 rule, the emission increases attributable to the rollback in the 2030 calendar year will offset 24% of the VOC reductions expected from Tier 3, offset 13% of the NOx reductions that are expected from Tier 3, and offset 38% of the PM<sub>2.5</sub> reductions that are expected from Tier 3.
- In addition to analyzing the health impacts for calendar year 2030, EDF also calculated • the cumulative PM-related health impacts from 2017 to 2050. Table 1, below, shows the Proposed Rollback will result in 14,501-32,362 premature mortality incidences, translating into dollar damages of \$89 to \$197 billion. The agencies entirely ignore these substantial impacts, which far outweigh NHTSA's flawed, safety-related benefits.

Table 1: Cumulative Effect of the Proposal on PM2.5-RelatedHealth Impacts from 2017-2050 (Derived using EPA RegulatoryAnalysis Tool)	
Premature Mortality	14,501-32,362
Respiratory emergency room visits	40,089
Acute bronchitis	126,057
Lower respiratory symptoms	1,623,910
Upper respiratory symptoms	2,299,464
Minor Restricted Activity Days	61,424,459
Work loss days	10,395,427
Asthma exacerbation	2,358,166
Cardiovascular hospital admissions	30,418
Respiratory hospital admissions	24,887
Non-fatal heart attacks (Peters)	94,492
Non-fatal heart attacks (All others)	10,222

Technology Costs and Benefits. Finally, NHTSA projects that the net costs of complying with the current MY 2021 - 2025 standards (and accordingly the net benefits due to the agencies' Proposed Rollback) is nearly \$300 billion greater than prior analyses by NHTSA and EPA over the past seven years. Our comments identify the key flaws in NHTSA's analysis, including:

• NHTSA raised its vehicle technology costs by 50-100% based on a wide variety of model design flaws and biased assumptions.

- NHTSA reduced the fuel savings to consumers by a third by assuming that automakers would voluntarily increase fuel economy in the absence of the standards, for which there is no historical precedent.
- NHTSA's arbitrary and unjustified assumptions regarding scrappage and rebound that project that Americans will voluntarily reduce their driving of both new and used vehicles under the Proposed Rollback.

When we corrected these flaws, EDF found that the Proposed Rollback would have a net cost of between \$100 billion to \$300 billion, consistent with projections by NHTSA and EPA in multiple analyses between 2010 and 2016.

## \*\*\*

Our comments provide more detailed critiques and supporting modeling in each of these areas, discuss other aspects of the proposal that are similarly flawed, and include an extensive report more fully addressing the range of biased assumptions and modeling errors found throughout the proposal. In each of these areas, NHTSA's analyses and the conclusions that flow from them almost always fail to recognize and reconcile the agency's prior inconsistent findings and are likewise arbitrarily disconnected from underlying, extensive factual record.

Taken together, it appears NHTSA has constructed a new analytical modeling tool expressly designed to frustrate its ability to adopt standards that achieve fuel economy improvements and impede EPA's mandate to secure greenhouse gas reductions. Indeed, for all of the internal inconsistencies and unexplained inaccuracies, each change NHTSA has made has one thing in common—it helps the agency to justify its preferred outcome of completely rolling back the standards.

Finally, and most alarmingly, NHTSA seeks to shield many aspects of its technical analysis from public scrutiny—burying key assumptions deep within the model's code and completely obscuring how other features operate. In addition, the agencies have withheld important information that would help to enable meaningful public comment, seemingly intentionally delaying release of public hearing transcripts and certain modeling files until the day before the close of the public comment period and never releasing certain other information requested by numerous stakeholders. These actions violate EPA's duties under section 307 of the Clean Air Act and both agencies' duties under the Administrative Procedure Act to ensure the public (who will be seriously harmed by the proposed rollback) has a meaningful opportunity to comment on its many, inherent flaws.

In light of these procedural and substantive flaws, the agencies should swiftly and immediately withdraw this proposal and retain the current MY 2021-2025 standards unchanged. We appreciate the opportunity to submit these comments, and encourage the agencies to contact us with any questions.

Respectfully submitted,

Alice Henderson Erin Murphy Vickie Patton Martha Roberts Laura Shields Rama Zakaria Peter Zalzal

Jeff Alson, consultant to EDF Tom Cackette, consultant to EDF Chet France, consultant to EDF Rick Rykowski, consultant to EDF

Sean Donahue, Donahue, Goldberg & Weaver, LLP, Counsel to EDF Matthew Littleton, Donahue, Goldberg & Weaver, LLP, Counsel to EDF Steve Silverman, Consultant to EDF