

October 26, 2021

Department of Transportation
National Highway Traffic Safety Administration

via regulations.gov

**Re: Corporate Average Fuel Economy Standards for Model Years 2024-2026
Passenger Cars and Light Trucks, Docket No. NHTSA-2021-0053**

The Southern Environmental Law Center (SELC) offers the following comments on the Corporate Average Fuel Economy Standards for Model Years 2024-2026 Passenger Cars and Light Trucks (the CAFE standards) proposed by the National Highway Traffic Safety Administration (NHTSA). SELC is a non-profit, non-partisan organization working in six states—Virginia, North Carolina, South Carolina, Georgia, Alabama, and Tennessee—and at the federal level to promote clean water and healthy air, protect natural areas, and advance cleaner and more equitable transportation alternatives, smarter growth, and community revitalization while addressing our current climate crisis.

The transportation sector consumes over one quarter of the U.S.'s energy each year, and over 90 percent of the energy used for transportation comes from burning fossil fuels.¹ The transportation sector is also the largest source of carbon dioxide (CO₂) emissions nationally—as well as in the South—and emissions from passenger vehicles and light-duty trucks account for most of that pollution. The decrease in stringency of the CAFE standards during the Trump administration was therefore a significant step back for the United States in its attempts to increase energy efficiency and decrease greenhouse gas (GHG) emissions. We applaud the Biden administration for announcing its intention to review the weakened standards on its first day in office,² as well as for starting to put forward plans to promote cleaner vehicles.³

We similarly welcome NHTSA's proposed revision to the CAFE standards set in 2020. However, the current proposal to increase the standards at a rate of 8 percent year over year for model years 2024 through 2026 as reflected in Alternative 2 does not go far enough. NHTSA should at least adopt Alternative 3, which would increase the stringency of the CAFE standards by 10 percent each model year and result in total lifetime fuel savings similar to what would have occurred if the levels announced in the 2012 CAFE standards had been implemented and continued for an extra model year.⁴ The increasing importance of energy conservation, signals from vehicle manufacturers and consumers that improved fuel efficiency is feasible and desirable, and the possibility that the U.S. Environmental Protection Agency (EPA) will promulgate more stringent GHG tailpipe emissions standards than it initially proposed in its related rulemaking also weigh in favor of NHTSA finding that Alternative 3 is the maximum feasible standard. Furthermore, NHTSA must ensure that any compliance flexibilities included in

¹ U.S. ENERGY INFO. ADMIN., *Use of Energy Explained: Energy Use for Transportation* (May 17, 2021), <https://www.eia.gov/energyexplained/use-of-energy/transportation.php>.

² Exec. Order No. 13990 (Jan. 20, 2021).

³ Exec. Order No. 14037 (Aug. 5, 2021).

⁴ Corporate Average Fuel Economy Standards for Model Years 2024-2026 Passenger Cars and Light Trucks, 86 Fed. Reg. 49602, 49754 (proposed Sept. 3, 2021).

the regulations do not unnecessarily dilute the stringency of the standards and would result in real-world, verifiable fuel efficiency improvements.

Stronger Standards Are Needed to Conserve Energy, Meet the Climate Crisis, Improve Public Health, and Advance Equity

NHTSA is required to establish the “maximum feasible average fuel economy level”⁵ for each model year after “weighing and balancing”⁶ four statutory factors: (i) technological feasibility, (ii) economic practicability, (iii) the effect of other motor vehicle standards of the Government on fuel economy, and (iv) the need of the United States to conserve energy.⁷ In this rulemaking, NHTSA significantly reconsidered the balance of the statutory considerations in light of “important facts [that] have changed” since the 2020 CAFE standards were finalized.⁸ The first factor—the technological feasibility of the standards—is not in dispute for any of the alternatives evaluated. NHTSA itself notes that “sufficient technology exists to meet the standards—even for the most stringent regulatory alternative.”⁹ “[G]iven that the technology exists, [NHTSA considered] how much of it should be required to be added to new cars and trucks in order to conserve more energy, and how to balance that objective against the additional cost of adding that technology” in this rulemaking.¹⁰

NHTSA has always interpreted the need to conserve energy to include consideration of environmental implications.¹¹ The significant environmental impacts of improved fuel economy deserve substantial weight in this rulemaking since GHG emissions from the combustion of fossil fuels continue to drive climate change. The transportation sector “is the single leading source of U.S. emissions from fossil fuels, causing over one-third of total CO₂ emissions from fossil fuels,”¹² and CO₂ is the primary GHG emitted in the U.S.¹³ This is also true for the South overall. The transportation sector is the largest source of CO₂ in every state in SELC’s region

⁵ 49 U.S.C. § 32902(a).

⁶ Corporate Average Fuel Economy Standards for Model Years 2024-2026 Passenger Cars and Light Trucks, 86 Fed. Reg. at 49788.

⁷ 49 U.S.C. § 32902(f).

⁸ Corporate Average Fuel Economy Standards for Model Years 2024-2026 Passenger Cars and Light Trucks, 86 Fed. Reg. at 49604.

⁹ *Id.* at 49792.

¹⁰ *Id.*

¹¹ *Id.* at 49793-95. The current rulemaking makes clear that it also requires “serious consideration of the energy security risks of continuing to consume oil,” including climate change impacts that can affect national security. *Id.* at 49604. “NHTSA agrees both that oil conservation improves U.S. oil security, and that the environmental costs of oil use are intertwined with the security costs of oil use in some ways as climate change destabilizes traditional geopolitical power structures over time. The effect of climate change on natural resources inevitably has security implications—population changes and shifts have already been forced in some countries, which can create social and security effects at all geopolitical levels—local, national, regional, and global.” *Id.* at 49796.

¹² NAT’L HIGHWAY TRAFFIC SAFETY ADMIN., DOCKET NO. NHTSA-2021-0054, DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR MODEL YEAR 2024-2026 CORPORATE AVERAGE FUEL ECONOMY STANDARDS 5-8 to 5-9 (Aug. 2021). Passenger cars and light-duty trucks account for 58 percent of these emissions. *Id.*

¹³ *Id.* at 5-8.

except for Alabama, where it is the second largest source.¹⁴ In total, emissions from passenger cars and light duty trucks driven in the U.S. account for approximately 21 percent of nationwide CO₂ emissions.¹⁵

The U.S. is already experiencing climate change impacts. Sea level rise is affecting coastal communities around the country, and the South is particularly vulnerable. For example, Virginia's Hampton Roads region has one of the highest rates of sea level rise on the East Coast, with scientists predicting a rise of 1.5 to 2 feet by 2050.¹⁶ The frequency of extreme weather events, including heavy precipitation, high tides, storm surges, and heat waves, also continue to increase.¹⁷ These weather events can lead to public emergencies and infrastructure disruptions, stressing health services and communities. Many major metropolitan areas in the U.S., including many in the South like Washington, D.C., Atlanta, and Birmingham, already suffer from elevated concentrations of ozone, nitrogen oxides (NO_x), particulate matter (PM), and volatile organic compounds (VOCs)¹⁸ and hotter temperatures can make air quality even worse. Poor air quality can lead to or exacerbate asthma and other serious health conditions and has been shown to disproportionately impact low-income communities and communities of color.¹⁹ There is also an economic cost to climate change. Studies have found that climate change could cost the U.S. approximately 1.2 percent of the gross domestic product for every additional degree of warming, with the South expected to experience greater impacts than other parts of the country.²⁰

While all the alternatives NHTSA analyzed as part of this rulemaking would decrease fuel consumption compared to the 2020 CAFE standards, and in turn would decrease the growth in GHG emissions and reduce the impacts of climate change,²¹ the adoption of Alternative 3

¹⁴ Based on 2018 CO₂ emissions. U.S. ENERGY INFO. ADMIN., *State Carbon Dioxide Emission Data Tables*, tbl. 4 (Mar. 2, 2021), <https://www.eia.gov/environment/emissions/state/>. For example, the transportation sector produces 48.6 percent of Virginia's CO₂ emissions, *id.*, and about 70 percent of those emissions are from light-duty vehicles. U.S. ENV'T PROT. AGENCY, *2017 National Emissions Inventory (NEI) Data* (Jan. 2021), <https://www.epa.gov/air-emissions-inventories/2017-national-emissions-inventory-nei-data#datas>.

¹⁵ NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., *supra* note 12 at S-13.

¹⁶ NAT'L OCEANIC AND ATMOSPHERIC ADMIN., U.S. DEP'T OF COMMERCE, *Global and Regional Sea Level Rise Scenarios for the United States* (2017), <https://bit.ly/2EUv033>.

¹⁷ Tom Steinfeld & Chris Coil, GEORGETOWN CLIMATE CTR., and Hans-Peter Plag, OLD DOMINION UNIV., *Understanding Virginia's Vulnerability to Climate Change*, <https://www.georgetownclimate.org/files/report/understanding-virginias-vulnerability-to-climate-change.pdf> (last visited Oct. 21, 2021).

¹⁸ See ENV'T AM., U.S. PIRG, & FRONTIER GRP., *Trouble in the Air: Millions of Americans Breathed Polluted Air in 2018* (Winter 2020), https://uspirg.org/sites/pirg/files/reports/EnvironmentAmerica_TroubleintheAir_scrn.pdf; AM. LUNG ASS'N, *State of the Air* (2021), <https://www.lung.org/getmedia/17c6cb6c-8a38-42a7-a3b0-6744011da370/sota-2021.pdf>. For example, an estimated 750 premature deaths related to on-road vehicle emissions occurred in Virginia in 2016. *Transp., Equity, Climate & Health Project, Preliminary Results Slides*, <https://cdn1.sph.harvard.edu/wp-content/uploads/sites/2343/2020/10/TRECHPrelimResultsSlides.pdf> (last visited Oct. 21, 2021).

¹⁹ AM. LUNG ASS'N, *Disparities in the Impact of Air Pollution* (Apr. 20, 2020), <https://www.lung.org/clean-air/outdoors/who-is-at-risk/disparities>.

²⁰ Robinson Meyer, *The American South Will Bear the Worst of Climate Change's Costs*, THE ATLANTIC (June 29, 2017), <https://www.theatlantic.com/science/archive/2017/06/global-warming-american-south/532200/>.

²¹ Corporate Average Fuel Economy Standards for Model Years 2024-2026 Passenger Cars and Light Trucks, 86 Fed. Reg. 49602, 49801 (proposed Sept. 3, 2021). "The action alternatives would reduce the impacts of climate change that would otherwise occur under the No-Action Alternative. Although the projected reductions in CO₂ and climate effects are small compared with total projected future climate change, they are quantifiable and directionally consistent and would represent an important contribution to reducing the risks associated with climate change." *Id.*

would lead to the largest reduction in CO₂ emissions. Alternative 3 would result in approximately 2,200 million metric tons (MMT) fewer CO₂ emissions through 2100 than the current proposal (and 8,600 MMT fewer CO₂ emissions through 2100 than the 2020 CAFE standards).²² This difference in CO₂ emissions reduction is equivalent to almost 620,000 fewer vehicles on the road in 2025 (and almost 2,248,000 fewer vehicles when compared to the 2020 CAFE standards).²³ However, even Alternative 3—the most stringent standards analyzed—will only decrease GHG emissions by 8.7 percent below 2005 levels.²⁴ Given the urgency of the climate crisis and the need to ensure the U.S. is on track to meet its target to reduce economy-wide net GHG emissions by 50 percent from 2005 levels by 2030 under the Paris Agreement of the United Nations Framework Convention on Climate Change,²⁵ it is imperative that NHTSA adopt fuel economy standards at least as stringent as those reflected in Alternative 3.

Since low-income communities and communities of color are disproportionately affected by climate events,²⁶ improved fuel economy and the associated reduction in climate impacts will also have important environmental justice benefits. Oil refining operations are often sited in low-income communities and communities of color, and any decreases in these industrial activities could benefit the health and environment in these communities.²⁷ In addition, stronger standards that hasten the transition to cleaner vehicles will help reduce health impacts and costs associated with transportation pollution like NO_x and PM emissions, which often disproportionately impact low-income communities and communities of color.²⁸ In Virginia, for example, it has been estimated that the widespread adoption of zero-emission vehicles by 2050 would yield more than \$1.3 billion in avoided annual health costs—including costs of 115 premature deaths, more than 1,780 asthma attacks, and nearly 8,190 lost work days.²⁹ Similar—or even greater—avoided annual health costs have been estimated for other states in the South with widespread adoption of cleaner vehicles.³⁰ Improved fuel economy will also result in fuel savings for drivers, which can

²² NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., *supra* note 12 at 5-35.

²³ *Id.* at 5-40.

²⁴ *Id.* at 5-38 to 5-39.

²⁵ *Id.*

²⁶ Corporate Average Fuel Economy Standards for Model Years 2024-2026 Passenger Cars and Light Trucks, 86 Fed. Reg. at 49795.

²⁷ *Id.*

²⁸ *See e.g.*, CTRS. FOR DISEASE CONTROL & PREVENTION, *CDC Health Disparities and Inequality Report – United States, 2013*, 62 Morbidity and Mortality Weekly Report 3 (Nov. 22, 2013), <https://www.cdc.gov/mmwr/pdf/other/su6203.pdf>.

²⁹ AM. LUNG ASS'N, *The Road to Clean Air* 10 (Sept. 2020), <https://www.lung.org/getmedia/99cc945c-47f2-4ba9-ba59-14c311ca332a/electric-vehicle-report.pdf>.

³⁰ For example, Georgia could see almost \$1.7 billion in avoided annual health costs by 2050, including costs of 147 premature deaths, 2,665 asthma attacks, and over 12,200 lost work days. *Id.* North Carolina could see over \$1.6 billion in avoided annual health costs by 2050, including costs of 141 premature deaths, 2,384 asthma attacks, and over 10,000 lost work days. *Id.*

make a meaningful difference for low-income households and households of color that generally spend a greater proportion of their income on transportation costs.³¹

Alternative 3 May Be Economically Practicable and Provides Much Greater Benefits

There is growing evidence that more stringent CAFE standards are also economically practicable. As NHTSA repeatedly notes in its discussion of the proposed rule in the Federal Register, vehicle manufacturers have taken numerous steps that indicate increased fuel economy is both possible and profitable. Of particular significance, many vehicle manufacturers entered into a voluntary agreement with California regulators to increase fuel economy beyond the federal requirements for model years 2021 through 2026. As NHTSA concludes, this indicates that “the participating companies believe that applying [additional technology to achieve increased fuel economy] is practicable, because for-profit companies can likely be relied upon to make decisions that maximize their profit.”³²

Furthermore, almost every major vehicle manufacturer in the U.S. has launched, or is in the process of launching, an electric vehicle (EV) line and many have publicly stated ambitious EV and plug-in hybrid electric vehicle (PHEV) manufacturing and sales goals.³³ By the end of 2024, almost 100 EV and PHEV models are expected to be available to consumers,³⁴ and the popularity of these vehicles will likely continue to grow as they reach parity in upfront costs with internal combustion vehicles in a few years.³⁵ “[T]he fact that industry increasingly appears to believe that there is a market for these vehicles is broader evidence of market (and consumer) interest in fuel economy.”³⁶ Polling of consumer preferences also supports this conclusion. One survey found that fuel economy is an important factor for 94 percent of Americans planning to buy or lease a vehicle in the next two years, and that 7 in 10 Americans “agree” or “strongly agree” that vehicle manufacturers should continue, and in fact have a responsibility, to improve fuel economy.³⁷ Importantly, the Department of Energy also urged NHTSA to propose

³¹ The national average gasoline cost burden is 7 percent of total income. Shruti Vaidyanathan, Peter Huether, & Ben Jennings, *Understanding Transportation Energy Burdens*, AM. COUNCIL FOR AN ENERGY-EFFICIENT ECON., iii (May 2021), https://www.aceee.org/sites/default/files/pdfs/transportation_energy_burdens_final_5-13-21.pdf. When accounting for race and ethnicity, the gasoline burden is 6.3 percent for white households, 9.1 percent for Black households, 9.2 percent for Hispanic households, 10.9 percent for American Indian households, and 5.3 percent for Asian households. *Id.* at 14. The gasoline burdens for low-income households are even greater: 13.8 to 14.1 percent on average nationwide. *Id.* at 8.

³² Corporate Average Fuel Economy Standards for Model Years 2024-2026 Passenger Cars and Light Trucks, 86 Fed. Reg. at 49804. While not all vehicle manufacturers have joined this agreement and different manufacturers may be on different timelines for adopting cleaner vehicle technology, NHTSA has rejected the “least capable manufacturer approach” to assessing economic practicability. *Id.* at 49792.

³³ Ben Preston & Jeff. S. Bartlett, *Automakers Are Adding Electric Vehicles to Their Lineups. Here’s What’s Coming*, CONSUMER REPS. (Mar. 11, 2021), <https://www.consumerreports.org/hybrids-evs/why-electric-cars-may-soon-flood-the-us-market-a9006292675/>.

³⁴ *Id.*

³⁵ Jack Ewing, *The Ages of Electric Cars Is Dawning Ahead of Schedule*, N.Y. TIMES (Sept. 20, 2020), <https://www.nytimes.com/2020/09/20/business/electric-cars-batteries-tesla-elon-musk.html>.

³⁶ Corporate Average Fuel Economy Standards for Model Years 2024-2026 Passenger Cars and Light Trucks, 86 Fed. Reg. at 49604.

³⁷ CONSUMER REPS., *Consumer Attitudes Towards Fuel Economy: 2020 Survey Results 3* (Feb. 2021), <https://advocacy.consumerreports.org/wp-content/uploads/2021/02/National-Fuel-Economy-Survey-Report-Feb-2021-FINAL.pdf>.

Alternative 3 given the on-going transition to EVs and declining costs of clean vehicle technology.³⁸

The benefits of stronger fuel economy standards add up—from individual benefits, like reduced fuel costs, to societal benefits, like reduced health and climate damages—and Alternative 3 is projected to have substantially higher social benefits than any other alternative considered.³⁹ Under the “model year” perspective, which emphasizes impacts on model years nearest to those affected by proposed standards (model years 2024 through 2026),⁴⁰ the social benefits accruing under Alternative 3 range from \$108 billion to \$173 billion—\$32 billion to \$52 billion more than the proposed Alternative 2 standards.⁴¹ Under the “calendar year” perspective, the difference is even greater: Alternative 3 could result in \$96 billion to \$173 billion more in social benefits than the proposed standards.⁴² It is also important to note that the benefits of more stringent fuel economy standards may be even greater than what was modeled due to uncertainties surrounding the calculation of the social cost of CO₂.

The “calendar year” perspective may provide a better view of the cost and benefits of the CAFE standards since it emphasizes longer-term impacts of the proposed standards, including impacts that could accrue if the standards adopted through this rulemaking continue for model year 2027 and beyond.⁴³ In the case of the CAFE standards, technology costs, which account for a large portion of the estimated costs of the standards, “tend to be ‘front loaded’—occurring early in a vehicle’s life and tending to be higher in earlier model years,” and the benefits of the standards tend to be “back loaded” since the “social benefits of the standards occur as the vehicles are being driven, and because both fuel prices and the social cost of CO₂ emissions are projected to increase in the future.”⁴⁴ Furthermore, it seems unlikely that there will be a backslide in fuel economy after the current round of proposed standards expire. These standards do not operate in a vacuum, and manufacturers and consumers will consider the fuel efficiency achieved under the regulations as the status quo after model year 2026.

When assessing other motor vehicle standards as part of this rulemaking, it is important to consider the fact that EPA may adopt more stringent tailpipe GHG emissions standards for passenger cars and light-duty trucks than it initially proposed as it finalizes its current rulemaking. SELC and a large number of other groups and citizens have urged EPA to adopt, at a minimum, GHG emissions standards that utilize the standards promulgated in 2012 (through a joint rulemaking with NHTSA) as the basis for establishing targets for model years 2023 through 2026.⁴⁵ Stronger tailpipe GHG emissions standards will maximize the benefits and cumulative GHG emissions reductions from the regulations and help to protect the environment and public health and safety. For similar reasons, we urge NHTSA to adopt Alternative 3 to bring the CAFE

³⁸ Corporate Average Fuel Economy Standards for Model Years 2024-2026 Passenger Cars and Light Trucks, 86 Fed. Reg. at 49803.

³⁹ See *id.* at tbl. III-37; *id.* at tbl. III-38.

⁴⁰ See *id.* at 49620.

⁴¹ *Id.* at tbl. I-3.

⁴² *Id.* The calendar perspective also results in positive net benefits for Alternative 3 of between \$46 billion and \$132 billion. *Id.*

⁴³ See *id.* at 49620.

⁴⁴ *Id.* at 49621.

⁴⁵ Letter from Trip Pollard & Carroll Courtenay, SELC, to U.S. Env’t Prot. Agency, Off. of Transp. and Air (Sept. 27, 2021).

standards closer to the trajectory established in the 2012 rule. In addition, having both agencies use the 2012 rules as the basis for strengthening their respective standards could help to harmonize these programs moving forward.

Compliance Flexibilities Must Not Result in Dilution of the Standards

Finally, as in our comments on EPA's proposed tailpipe GHG emissions standards, we urge NHTSA to ensure that any non-statutorily required compliance flexibilities do not unnecessarily dilute the stringency of the fuel economy standards. It is vital that flexibilities only be provided for technology or modifications that provide real-world, verifiable fuel efficiency improvements. This will help to ensure that the compliance flexibilities do not simply serve as compliance loopholes for manufacturers, but instead go towards furthering the goals of the regulatory program.

Thank you for your consideration of these comments.

Sincerely,

Handwritten signature of Trip Pollard in black ink.

Trip Pollard
Senior Attorney

Handwritten signature of Carroll Courtenay in black ink.

Carroll Courtenay
Staff Attorney