

Detailed NEPA Comments by the States of California, Connecticut, Delaware, Hawaii, Iowa, Illinois, Maine, Maryland, Minnesota, North Carolina, New Jersey, New Mexico, New York, Oregon, Rhode Island, Vermont, Washington, the Commonwealths of Massachusetts, Pennsylvania, and Virginia, the District of Columbia, and the Cities of Los Angeles, New York, Oakland, San Francisco, and San Jose

October 26, 2018

The Attorneys General of California, Connecticut, Delaware, Hawaii, Iowa, Illinois, Maine, Maryland, Massachusetts, Minnesota, North Carolina, New Jersey, New Mexico, New York, Oregon, Pennsylvania, Rhode Island, Vermont, Virginia, Washington, the District of Columbia, the California Air Resources Board (CARB), and City Attorneys of Los Angeles, Oakland, San Francisco, San Jose, and New York (collectively the States and Cities), submit this Analysis in support of their comments on the Draft Environmental Impact Statement (DEIS) prepared by the National Highway Traffic Safety Administration (NHTSA) for the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Year 2021-2026 Passenger Cars and Light Trucks, 83 Fed. Reg. 42,986 (Aug. 24, 2018) (the “Proposed Rollback”), Docket No. NHTSA-2017-0069.¹ The DEIS expressly relies upon, and incorporates by reference, analyses contained solely within the notice of proposed rulemaking and preliminary regulatory impact analysis for the Proposed Rollback; therefore, the States and Cities hereby incorporate by reference the Detailed Comments submitted by the States and Cities on Docket Nos. NHTSA-2018-0067 and EPA-HQ-OAR-2018-0283 (hereinafter referred to as “States and Cities Proposed Rollback Comments”). The States and Cities further incorporate by reference CARB’s Analysis In Support of Comments on the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks submitted on Docket Nos. NHTSA-2018-0067 and EPA-HQ-OAR-2018-0283 (hereinafter referred to as “CARB’s Comments”).

The DEIS is inadequate and must be withdrawn for several reasons. First, NHTSA has defined the purpose of the proposed action in a manner that contravenes its statutory mandate. Further, NHTSA’s reliance on fundamentally flawed modeling and assumptions undermines NHTSA’s assertions in the DEIS and elsewhere regarding fuel consumption, emissions of criteria and toxic air pollutants and greenhouse gases (GHGs), and resulting economic costs and benefits of the Proposed Rollback. It further casts doubt on the DEIS analysis of alternatives and environmental impacts by relying on data that lack professional and scientific integrity. Just as fundamentally, the DEIS fails to include and analyze a reasonable range of alternatives, including alternatives that are more stringent than the augural standards, which obscures the degree of environmental harm of the Proposed Rollback. The DEIS also misstates the environmental consequences of the Proposed Rollback on environmental justice communities,

¹ In addition to this document, the States and Cities are submitting three Appendices with our comments: (i) an Appendix of Climate Impacts (States’ Appx. A); (ii) an Appendix of ZEV Penetration and Infrastructure Beyond California (States’ Appx. B); and (iii) an Appendix of Reference Materials (States’ Appx. C). Appendices A and B are being submitted via www.regulations.gov, and Appendix C was sent yesterday on a DVD via overnight mail.

and fails to address the impacts on endangered species and historic resources. Finally, the DEIS fails to discuss reasonable mitigation measures and instead, NHTSA claims its “hands are tied.”

For these reasons and the numerous deficiencies identified below, NHTSA should withdraw its inadequate DEIS, and if the entire Proposed Rollback is not withdrawn, draft a new DEIS responsive to the comments submitted, and allow additional time to comment on the new DEIS that is consistent with applicable laws.

I. NHTSA PREJUDICED STAKEHOLDERS BY DENYING REQUESTS TO EXTEND THE COMMENT PERIOD ON THE PROPOSED ROLLBACK AND BY FAILING TO PROVIDE THE REQUESTED INFORMATION

On August 27, 2018, eighteen States sent a letter to NHTSA explaining that, given the breadth, complexity and novelty of the issues raised in the Proposed Rollback, the voluminous but nonetheless incomplete materials accompanying it, and the profound effects the rule would have on the public health and the environment, the States were requesting that NHTSA extend the comment period on the DEIS to align with the requested 120-day comment period for the Proposed Rollback.² Such an extension would be consistent with NHTSA’s past practice when dealing with comparative rulemakings.

NHTSA received seventeen other requests for an extension of the public comment period from a variety of agencies, municipalities (including the City of Los Angeles), government organizations, environmental groups, industry groups (including the Alliance of Automobile Manufacturers) and 32 United States Senators. On September 21, 2018, NHTSA issued a notice extending the public comment period for the DEIS by 33 days and for the Proposed Rollback by 3 days.³ The Agencies justified their refusal to grant a longer extension on their assertion that the vehicle manufacturers “will need maximum lead time to respond to the final rule.”⁴ However, this claim is firmly rebutted by the fact that automakers themselves—through the Alliance of Automobile Manufacturers—requested a 60-day extension of the public comment period for many of the same reasons listed in the States’ August 27, 2018 letter. Thus, NHTSA’s refusal to allow a meaningful extension of the public comment period was unjustified and erroneous.

Additional time is further warranted because, as outlined in the CARB letter dated September 11, 2018 (CARB letter),⁵ significant technical studies and data of central relevance to the analyses in both the DEIS and the Proposed Rollback are not available as of the date of this submission. NHTSA’s last-minute forwarding of some data to CARB does not remedy this defect. NHTSA’s failure to provide adequately detailed information necessary for the public to fully comment on the DEIS runs afoul of NEPA and the Administrative Procedure Act, 5 U.S.C. §§ 551-559. *See Connecticut Light & Power Co. v. Nuclear Regulatory Comm’n*, 673 F.2d 525, 530-31 (D.C. Cir. 1982) (“An agency commits serious procedural error when it fails to reveal portions of the technical basis for a proposed rule in time to allow for meaningful

² See Letter from Eighteen States to Andrew K. Wheeler and Heidi King, dated August 27, 2018 (Docket ID EPA-HQ-OAR-2018-0283-0792).

³ 83 Fed. Reg. 48, 578-48,581 (Sept. 26, 2018).

⁴ *Id.* at 48,581.

⁵ See Letter from Ellen M. Peter to Andrew K. Wheeler and Heidi King, dated September 11, 2018 (Docket ID: EPA-HQ-OAR-2018-0283).

commentary.”); *see also Trout Unlimited v. Morton*, 509 F.2d 1276, 1282 (9th Cir. 1974) (finding that an EIS should “provide the public with information on the environmental impact of a proposed project as well as encourage public participation in the development of that information.”).

For these reasons, the States and Cities respectfully reiterate their request that: (1) NHTSA and EPA make all requested information available immediately; and (2) NHTSA extend the comment period of the DEIS and the Proposed Rollback for an additional 60 days after such disclosure to afford the States and Cities and the public a reasonable opportunity to review and comment on the DEIS.

II. NHTSA’S DRAFT ENVIRONMENTAL IMPACT STATEMENT IS LEGALLY INADEQUATE AND MUST BE WITHDRAWN

As required by the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 *et seq.*, NHTSA has prepared the DEIS to “analyze and disclose the potential environmental impacts of the Proposed Rollback.”⁶ NEPA is the “basic national charter for protection of the environment.” 40 C.F.R. § 1500.1(a); *Center for Biological Diversity v. U.S. Forest Service*, 349 F.3d 1157, 1166 (9th Cir. 2001). The statute’s “primary function is information-forcing, . . . compelling federal agencies to take a hard and honest look at the environmental consequences of their decisions.” *Am. Rivers v. Fed. Energy Regulatory Comm’n*, No. 16-1195, 2018 WL 4610726, at *1 (D.C. Cir. Sept. 7, 2018) (citations and internal quotation marks omitted). NEPA requires federal agencies to prepare a “detailed statement” on the impacts of certain actions prior to making decisions. 42 U.S.C. § 4332(2)(C). NEPA is not meant to simply document a predetermined action. The environmental impact statement must rigorously analyze the direct, cumulative, and reasonably foreseeable indirect impacts of the proposed action, as well as all reasonable alternatives to the action. 42 U.S.C. § 4332(2)(C)(i); 40 C.F.R. §§ 1502.14, 1502.16.

The DEIS is inadequate because NHTSA has defined the purpose of the proposed action in a manner that contravenes its statutory mandate. Further, NHTSA’s reliance on fundamentally flawed modeling and assumptions lacks scientific integrity and undermines the DEIS’s analysis of the impacts on air quality and climate change from the Proposed Rollback. The DEIS also fails to analyze a reasonable range of alternatives, which obscures the degree of environmental harm of the Proposed Rollback. The DEIS also misstates the environmental consequences of the Proposed Rollback on environmental justice communities, and erroneously concludes that a consultation with the relevant federal authorities regarding endangered species and historic resources is not required. Finally, the DEIS fails to include a thorough discussion of all reasonable mitigation measures and the appropriate agencies that could implement such measures.

A. NHTSA Has Improperly Defined the Purpose and Need of its Proposed Action to Evade Its Statutory Mandate Under EPCA

Under NEPA, a federal agency must include a statement explaining the underlying purpose and need to which the agency is responding to in proposing an action and its alternatives. *See* 40 C.F.R. § 1502.13. Generally, the purpose and need statement is dictated by “the views of Congress,” based on “the agency’s statutory authorization to act, as well as other congressional

⁶ DEIS at S-1.

directives.” *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 196 (D.C. Cir. 1991). A federal agency “must look hard at the factors relevant to the definition of purpose,” *ibid*, and define its objectives broadly enough to avoid unreasonably narrowing the scope of the action and alternatives for consideration. *See, e.g., League of Wilderness Defs.-Blue Mountains Biodiversity Project v. U.S. Forest Serv.*, 689 F.3d 1060, 1069 (9th Cir. 2012). Here, in proposing to rollback fuel standards for model years (MY) 2021 to 2026 light-duty vehicles, NHTSA has abdicated its statutory duty to promote energy efficiency and conservation.

The Energy Policy and Conservation Act (“EPCA”) was enacted in 1975 to establish a comprehensive and systematic national energy policy to increase domestic energy production and supply, reduce energy demand, foster the more efficient use of energy, and, most importantly, promote energy conservation. *See e.g.*, Pub. L. No. 94-163, §2, 89 Stat. 871 (1975) (stating that the purpose of EPCA is to conserve energy supplies through energy conservation programs, and where necessary, to regulate certain energy uses, and provide for improved energy efficiency of motor vehicles.). EISA, which amended EPCA to provide additional requirements for NHTSA, confirmed that the statute’s purpose is “[t]o move the United States toward greater independence and security, to increase the production of clean renewable fuels, to protect consumers, to increase the efficiency of products, buildings, and vehicles...” Pub. L. No. 110-140, 121 Stat. 1492 (2007). To further the goal of energy conservation, EPCA requires NHTSA to establish standards for automobiles reflecting the “maximum feasible” average fuel economy level for each vehicle model year considering “technological feasibility, economic practicability, the effect of other motor vehicle standards of the Government on fuel economy, and the need of the United States to conserve energy.” 49 U.S.C. § 32902(a),(f).⁷ EPCA does not mandate a specific balancing test; rather, it provides a list of relevant considerations to help inform NHTSA in setting the “maximum feasible” level. In determining what weight to give each factor, NHTSA’s discretion is limited by EPCA’s fundamental statutory purpose: energy conservation. *See Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1195 (9th Cir. 2008) (“*CBD v. NHTSA*”).

In 2012, NHTSA issued binding CAFE standards for MY 2017 through 2021 vehicles under EPCA.⁸ The agency also published “augural” standards for MY2022-2025, which “represent[ed] the agency’s current judgment, based on the information available to the agency today, of what levels of stringency would be maximum feasible in those model years.”⁹ Now, NHTSA states that in accordance with EPCA and EISA, “the purpose of the rulemaking” is to establish CAFE standards for MY 2021 to 2026 for passenger cars and light trucks at the “maximum feasible average fuel economy level that the Secretary of Transportation decides the manufacturers can achieve in that model year.”¹⁰ Further, the Agency states that, “based on different ways the agency could weigh EPCA’s four statutory factors, the maximum feasible level of CAFE stringency falls within the range of alternatives under consideration.”¹¹ The DEIS

⁷ As discussed in the States and Cities Proposed Rollback Comments and CARB’s Proposed Rollback Comments, the rigor of the CAFE standards must also reflect harmonization with EPA’s stringent goals in the Clean Air Act context. *See Massachusetts v. EPA*, 549 U.S. 497, 531-532 (2007) (“*Mass v. EPA*”).

⁸ 77 Fed. Reg. at 62,639.

⁹ *Id.*

¹⁰ DEIS at 1-4 citing 49 U.S.C. § 32902(a).

¹¹ DEIS at 2-4.

then references the notice of proposed rulemaking for the Proposed Rollback for a “full discussion of the agency’s balancing of the statutory factors related to the maximum feasible standards.”¹²

As detailed below, NHTSA’s balance of the EPCA factors overrides the statute’s fundamental purpose through new and erroneous interpretations of those factors in a way that narrowly defines or even redefines its objectives, ignoring crucial aspects of the problem the agency is required by statute to address, reaching conclusions that run counter to the evidence before the agency, and offering explanations that are simply implausible. The States and Cities incorporate by reference Section III. D. of the States and Cities’ Proposed Rollback Comments, but emphasize the following:

The Need of the United States to Conserve Energy: Traditionally, NHTSA has evaluated “the need of the Nation to conserve energy” by considering “the consumer cost, national balance of payments, environmental, and foreign policy implications of our need for large quantities of petroleum, especially imported petroleum.”¹³ In the DEIS, NHTSA arrives at arbitrary conclusions by disregarding environmental impacts (see *infra* Section II.D.) mischaracterizing the United States’ exposure to global oil market volatility, failing to accurately consider consumer costs, and ignoring the fundamental fact that the Proposed Rollback will result in greater use of petroleum, thus increasing our nation’s dependence on oil.

Technological feasibility: NHTSA concedes that the augural standards are technologically feasible.¹⁴ Nevertheless, NHTSA has unreasonably reinterpreted this statutory factor in a manner contrary to EPCA’s purpose of encouraging technological development. Indeed, fuel economy standards under EPCA are “intended to be technology forcing, with the recognition that ‘market forces...may not be strong enough to bring about the necessary fuel conservation which a national energy policy demands.’” *Center for Auto Safety*, 793 F.2d at 1339, citing S. Rep. No. 179, 94th Cong., 1st Sess. 2 (1975), U.S.C.C.A.N. 1975 at 9. However, the Proposed Rollback’s preferred alternative requires no year-over-year improvement in fuel economy standards for at least six years, resulting in no technology forcing whatsoever. Alternatives 2 through 8, require severely pared back and slightly increased fuel economy over time, also resulting in no technology-forcing given NHTSA’s concession that the technology already exists that could meet the augural standards. NHTSA is impermissibly and unreasonably interpreting this factor in a manner contrary to the plain meaning of “feasibility,” and ignoring EPCA’s technology-forcing purpose.

Economic Practicability: NHTSA has utterly failed to analyze the economic practicability of the Proposed Rollback by failing to consider significant job losses and other economic harms that would result from the proposal, erroneously reinterpreting the factor to put an unreasonable amount of weight on consumer choice, considering unrelated concerns about safety, and relying on fundamentally flawed economic inputs and assumptions.

The Effect of Other Motor Vehicle Standards on Fuel Economy: In the Proposed Rollback, NHTSA has posited an unsupportable interpretation of EPCA that “State tailpipe standards

¹² DEIS at 2-4, fn.12.

¹³ 83 Fed. Reg. at 43,210.

¹⁴ 83 Fed. Reg. at 43,216 (“We continue to believe that technological feasibility, *per se*, is not limiting during this rulemaking time frame.”).

(whether for GHGs or for other pollutants) do not qualify as ‘other motor vehicle standards of the Government’” under the statute.¹⁵ This proposed interpretation contravenes the statute, case law, and the agency’s past practice.

Safety: NHTSA has historically considered safety impacts when setting maximum feasible standards. *CBD v. NHTSA*, 538 F.3d at 1204. But in the Proposed Rollback, NHTSA departs from its past practice by relying on novel and unsupported theories regarding the linkages between fuel economy and safety that do not reflect reality. In the past, NHTSA has considered the safety of the technologies that improve fuel economy. *See* 77 Fed. Reg. at 62,670; 75 Fed. Reg. at 25,556-57; 68 Fed. Reg. at 16,870. In the Proposed Rollback, however, NHTSA has linked safety concerns with rebound and scrappage effects of increased fuel standards. 83 Fed. Reg. at 43,209, 43,212. As discussed in Section II.B., these theories are unsupported, implausible, and contradicted by numerous experts—rendering them arbitrary and capricious. The agency has also failed to acknowledge or adequately justify its break with past analyses of safety.

Further, NHTSA’s emphasis on safety is inconsistent with the agency’s failure to take more direct and effective steps toward improving vehicle safety. According to the Consumers Union, “DOT and NHTSA have failed to finalize numerous safety efforts begun under their own initiative prior to 2017, as well as at least 11 overdue vehicle safety rules required by Congress.”¹⁶ In addition, NHTSA’s position regarding safety is inconsistent with the agency’s apparent lack of concern that automakers might “globalize a vehicle platform” in response to more stringent fuel standards in other countries, which would in theory lead to the same safety risks NHTSA has identified. 83 Fed. Reg. at 43,211. NHTSA does not explain these inconsistencies, which render its analysis arbitrary and capricious.

The Proposed Rollback, and NHTSA’s proposed reinterpretation of the “maximum feasible” statutory language that underlies it, flies in the face of the unambiguous text, structure, and purpose of EPCA. And even assuming *arguendo* that some ambiguity exists, NHTSA’s interpretation of “maximum feasible” in the Proposed Rollback is “manifestly contrary” to EPCA’s primary purpose of energy conservation, and is, therefore, an unreasonable and improper interpretation of the statute. Hence, the DEIS’s definition of the purpose and need for the Proposed Rollback is fatally flawed.

B. NHTSA Relies on a Technical Analysis that Lacks Scientific Integrity and Distorts the Environmental Impacts of the Proposed Rollback

When preparing an EIS, federal agencies are required to use high-quality information and accurate scientific analysis, and to ensure the professional and scientific integrity of the discussions and analyses therein. 40 C.F.R. §§ 1500.1(b), 1502.24; *see also Custer Cty. Action Ass’n v. Garvey*, 256 F.3d 1024, 1034 (10th Cir. 2001) (NEPA requires agencies to use “the best available scientific information.”). Here, NHTSA’s modeling decisions lie at the core of the DEIS:

Using NHTSA-selected inputs, the agency projects a set of technologies each manufacturer could apply to each of its vehicle

¹⁵ 83 Fed. Reg. at 43,210.

¹⁶ States’ Appx. C-108, Consumer Reports, Auto Fuel Economy and Safety: Improving Together at 4.

models to comply with various levels of CAFE standards to be examined for each fleet, for each model year. The model then estimates the costs associated with this additional technology utilization and accompanying changes in travel demand, fuel consumption, fuel outlays, emissions, an economic externalities related to petroleum consumption and other factors.¹⁷

The economic assumptions embedded in the CAFE model “play a significant role in determining the impacts on fuel consumption, changes in emissions of criteria and toxic air pollutants and GHGs, and resulting economic costs and benefits of alternative standards.”¹⁸ However, NHTSA’s dramatically revised CAFE model is a radical departure from past analyses and modeling of the light-duty vehicle sector. Further, the assumptions and other model inputs on which NHTSA relies, introduce profound errors into the analyses and conclusions regarding safety, vehicle sales and costs, and profoundly distort the environmental impacts of the Proposed Rollback.

Described below are several major flaws in NHTSA’s modeling (including assumptions and other inputs). In addition, the States and Cities hereby incorporate by reference Section III. E. of the States and Cities’ Proposed Rollback Comments and CARB’s Comments (including the expert reports submitted with CARB’s comments):

Scrappage model. The “scrappage model” only examines one thing—the effect of new vehicle prices on the scrappage of existing vehicles, based on the theory that when new vehicle prices increase, existing vehicle prices also increase. NHTSA then asserts that this leads individuals with vehicles near the end of their useful lives to decide to delay the scrappage of those vehicles. The scrappage model outputs create results that do not make sense and are unexplained. For example, NHTSA claims that under the augural standards, the vehicle fleet in the United States would be 9 million vehicles larger in 2035 than under the Proposed Rollback because for every new vehicle not sold under the augural standards, there will be two to four old vehicles not scrapped. 83 Fed. Reg. at 43,098-43,099. The conclusion is dubious. In interagency discussions, EPA complained the model inaccurately and unrealistically showed that there would be 60 vehicles not scrapped for every new vehicle not sold.¹⁹ After predicting a larger fleet due to reduced scrappage, NHTSA then predicts Americans will drive an additional 893 billion miles from 2017 through 2050.²⁰ This inflated projection of vehicle miles travelled is based, unreasonably and illogically, on fleet size rather than on the need to drive. Further, because the scrappage model is not linked to the sales model²¹, these two components produce

¹⁷ DEIS at 2-12.

¹⁸ DEIS at 2-15.

¹⁹ See EPA-HQ-OAR-2018-0283-0453, Attachment 5, p.5.

²⁰ See Expert Report of Mike Van Auken attached to CARB Comments, (“Comments on the Preliminary Regulatory Impact Analysis of the Proposed Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Year 2021-2026 Passenger Cars and Light Trucks”) (Oct. 2018).

²¹ NHTSA’s calculation of the vehicle sales impact of the Proposed Rollback comes from a new and un-peer reviewed “sales model” that has numerous flaws including, but not limited to, erroneous assumptions about the impact of the augural standards on manufacturers’ and consumers’ technology costs, omissions of important data regarding how consumers respond to fuel cost savings, and reliance on aggregate and

internally inconsistent estimates of the decline in sales of new vehicles. This leads to a serious disconnect that EPA identified in its review of NHTSA's model.²² Such inconsistencies are another indication of the arbitrariness of NHTSA's approach. See *Air Transport Ass'n of America v. Dept. of Transportation*, 119 F.3d 38, 43 (D.C. Cir. 1997). This dubious forecasting of growth in vehicles on the road and vehicle miles traveled under the augural standards skews NHTSA's overall analysis and fails to meet the minimum standard of reliability that NEPA demands. Indeed, the inexplicable results that NHTSA's model produces indicate that the model is fundamentally and fatally flawed and should not be the basis of any evaluation of environmental effects or agency decisionmaking.

Rebound effect. The "rebound effect" is premised on the idea that people will adjust the amount of their driving in response to increases or decreases in the cost of driving. It is typically measured in percentages. A rebound effect of 5 percent generally means that for every one percent increase in the cost of driving, there will be a 0.05 decrease in vehicle miles traveled (VMT). Conversely, for every one percent decrease in the cost of driving, there will be a 0.05 percent increase in the amount of driving. The cost of driving may be affected by swings in fuel prices or, as here, an increase in fuel economy that effectively makes it cheaper for a person to drive.²³

In 2012 and 2016, EPA and NHTSA concluded that the rebound effect from the existing standards is 10 percent.²⁴ Now, however, NHTSA has doubled its estimate of the rebound effect, placing it at 20 percent.²⁵ NHTSA claims that it changed the estimated rebound effect in the Proposed Rollback because the "central tendency" of all rebound studies is around 22-23 percent.²⁶ But, NHTSA fails to give appropriate weight to studies: (1) that examine the impact of fuel economy standards, as opposed to the impact of fuel price changes²⁷, (2) that are based on studies conducted in the United States (European drivers and driving conditions are different than American drivers and conditions in important and relevant ways), or (3) that rely on superior data sets and data that was based on time periods other than the Great Recession of

macro-level data that lack the detail sufficient to capture the consumer behavioral response it purports to model. See Section III, E., 1 of the States and Cities Proposed Rollback Comments.

²² EPA raised this as a concern with NHTSA in June 2018 when it reviewed the model. As EPA described it, "there is no mechanism within the CAFE model to reconcile the combined effects of the sales and scrappage models in order to produce a realistic total fleet of registered vehicles." See States' Appx. C-50, EPA-HQ-OAR-2018-0283-0453, EPA Staff Memo re EPA Further Review of CAFE Model and Inputs, dated June 18, 2018, attached to email from W. Charmley to C. Achanta, re Material for today's Light-duty GHG NPRM discussion, at 4 (hereafter "EPA June 18 Memo").

²³ See, Expert Report of Kenneth Gillingham, attached to CARB's Comments ("The Rebound Effect of Fuel Economy Standards: Comment on the Safer Affordable Fuel-Efficient (SAFE) Vehicles Proposed Rule for Model Years 2021-2026 Passenger Cars and Light Trucks") (Oct., 2018) ("Gillingham Rebound Report"); see also 83 Fed. Reg. at 43,107. Because the rebound effect influences vehicle miles traveled, the proper estimate of it affects not only fatalities but also fuel consumption and emissions of criteria pollutants as well as GHG.

²⁴ 77 Fed. Reg. at 62,716; see also States Appx. C-40, TAR at 10-20.

²⁵ 83 Fed. Reg. at 43,104.

²⁶ 83 Fed. Reg. at 43,100.

²⁷ Gillingham Rebound Report at 8.

2008-2009, which had wildly fluctuating fuel prices among other confounding economic variables.

“Domestic” social cost of carbon. NHTSA grossly underestimates the social cost of carbon by relying on a number that is dramatically lower than any that was used in hundreds of regulatory proceedings at the federal level through January 2017. NHTSA admits that the reduction in its social cost of carbon calculation is primarily due to its decision to calculate on a domestic rather than a global basis. Not only does NHTSA’s new social cost of carbon calculation depart from agency practice, it also violates Executive Order 13783 and the Office of Management and Budget’s (OMB) Circular A-4—both of which NHTSA concedes guide its analysis here—by failing to use the best available science and appropriate discount rate.

It was arbitrary and capricious for NHTSA to completely ignore the global costs of increased GHG emissions, and the DEIS fails to give the public and decision-makers the necessary context to assess the significance of the climate consequences associated with the action alternatives, as NEPA requires.²⁸ See 42 U.S.C. § 4332 (F) (requiring federal agencies to “recognize the worldwide and long-range character of environmental problems...”). In addition to NHTSA’s dramatic shift in position without reasoned explanation, the social cost of carbon analysis contains the following seven fatal flaws:²⁹

(1) By calculating the social cost of carbon on a domestic rather than a global basis, NHTSA fails to account for the global effects of carbon pollution that impact the U.S. and its citizens. Carbon pollution’s effects do not stop at the U.S. border; emissions in India and China, for example, can cause damage to U.S. companies and citizens (and vice versa). NHTSA’s use of a domestic number to justify greater U.S. emissions creates a dangerous precedent that other countries may also follow to relax their own emissions. Such increased global emissions will, in turn, harm the U.S. and its citizens.³⁰

(2) By omitting any analysis of the global social cost of carbon, NHTSA failed to adhere to OMB’s Circular A-4, which instructs that impacts beyond the U.S. borders should be reported separately. NHTSA’s failure to calculate a global social cost of carbon was not due to a lack of information; EPA provided the data for NHTSA to do so, which NHTSA ignored. Indeed, had NHTSA used the global number, its social cost of carbon calculation would increase seven-fold.³¹

(3) NHTSA’s domestic social cost of carbon omits important spillover effects on U.S. corporations. The negative effects of global climate change—such as increased armed conflicts

²⁸ See States’ Appx. C-83 at 32-33, fn.86 (monetization may be “appropriate and relevant” and, in particular, “the Federal social cost of carbon . . . provides a harmonized, interagency metric that can give decision makers and the public useful information for their NEPA review.”).

²⁹ See Expert Report by Maximilian Auffhammer et al., attached to CARB’s Comments (The Use of the Social Cost of Carbon in the Federal Proposal “Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks”) (October 19, 2018) (hereinafter “Auffhammer Report”), which is incorporated herein by reference.

³⁰ Auffhammer Report at 7-8.

³¹ Auffhammer Report at 8-9.

and extreme weather events—impact U.S. corporations both directly (through assets they own) and indirectly (through disruptions of supply chains).³²

(4) By using a domestic social cost of carbon, NHTSA fails to consider the welfare of 9 million U.S. citizens living abroad and 450,000 men and women serving in the U.S. armed forces abroad. These individuals are affected by extreme weather events outside U.S. borders. Moreover, despite sound science demonstrating that climate change will lead to an increase in the frequency of conflict domestically and globally, NHTSA fails to account for the likelihood that the number of American troops who will be deployed abroad will increase.³³

(5) NHTSA's analysis uses a discount rate of 3% and 7%, whereas the best available science and majority of experts agree that the discount rate should be closer to 2%. As reflected in a forthcoming, peer-reviewed analysis in a top economics journal,³⁴ fewer than 3 in 100 experts believes a discount rate of 7% is appropriate. And 67% of experts preferred a discount rate lower than 3%.³⁵

(6) NHTSA failed to use the best available science when it relied on outdated models that did not implement any of the updates suggested by the National Academies of Sciences panel which studied social cost of carbon at the request of a federal interagency working group. NHTSA's decision to ignore these updates, such as damage functions concerning the agricultural impacts of climate change,³⁶ is inexplicable because many of the panel's suggestions have already been implemented in the peer-reviewed literature and so are readily available. Moreover, whereas the vast majority of the literature analyzing social cost of carbon is from after 2010, NHTSA's analysis here did not incorporate any literature from the past decade. This failure had a significant impact on the social cost of carbon calculation; for example, as one analysis found, simply updating the damage function for one sector of the economy leads to a doubling of the social cost of carbon.³⁷

(7) Even if a domestic social cost of carbon number were appropriate (which it is not), the most recent, peer-reviewed, scientific analysis published in a top journal³⁸ indicates that such a domestic number is at least \$48 per ton of CO₂—far higher than the \$1 to \$7 range used to justify the Proposed Rollback.³⁹

For all of the reasons discussed above, NHTSA's reliance on fundamentally flawed modeling and assumptions undermines NHTSA's assertions in the DEIS and elsewhere regarding fuel consumption, emissions of criteria and toxic air pollutants and GHGs, and resulting economic costs and benefits. It further deprives the DEIS's analysis of alternatives and

³² *Id.*, at 9-10.

³³ *Id.* at 10-11.

³⁴ Drupp, M.A., Freeman, M., Groom, B. and Nesje, F., forthcoming. Discounting disentangled. *American Economic Journal*.

³⁵ Auffhammer Report at 11-12.

³⁶ Moore, F., Baldos, U., Hertel, T., & Diaz, D. New science of climate change impacts on agriculture implies higher social cost of carbon. *Nature Communications*. Accessed on October 24, 2018.

<https://www.nature.com/articles/s41467-017-01792-x>.

³⁷ Auffhammer Report at 12-13.

³⁸ Ricke, K., Drouet, L., Caldeira, K. and Tavoni, M., 2018. Country-level social cost of carbon. *Nature Climate Change*, p.1

³⁹ Auffhammer Report at 13.

environmental impacts of any legitimacy by introducing data that lack professional and scientific integrity. Thus, NHTSA should withdraw the DEIS, conduct a new analysis with the best scientifically available information, and recirculate a revised DEIS for review and comment.

C. NHTSA Has Failed to Analyze a Reasonable Range of Alternatives

As NHTSA recognizes, “[t]he purpose of an EIS is to ‘provide full and fair discussion of significant environmental impacts and [to] inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.’” 83 Fed. Reg. at 43,213 (citing 40 C.F.R. § 1502.1). Indeed, the alternatives section “is the heart of the environmental impact statement.” 40 C.F.R. § 1502.14. In order to fulfill its intended role of “sharply defining the issue and providing a clear basis for choice among options by the decisionmaker and the public,” the environmental impact statement must “[r]igorously explore and objectively evaluate all reasonable alternatives.” *Id.* § 1502.14(a). “The agency must look at every reasonable alternative within the range dictated by the nature and scope of the proposal. The existence of reasonable but unexamined alternatives renders an EIS inadequate.” *Ilio’Ulaokalani Coalition v. Rumsfeld*, 464 F.3d 1083, 1095 (9th Cir. 2006); *see also Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 812-13 (9th Cir. 1999).

As further detailed below, the alternatives presented by the DEIS are wholly insufficient, thereby rendering the DEIS inadequate. NHTSA has chosen to analyze a narrow range of action alternatives “with fuel economy stringencies that increase annually, on average, 0.0 to 3.0 percent from the model year 2020 or model year 2021 standards for passenger cars and for light trucks (depending on alternative).”⁴⁰ A threshold question when evaluating the adequacy of an environmental impact statement is “whether the selection and discussion of alternatives fosters informed decision-making and informed public participation.” *California v. Block*, 690 F.2d 753 (9th Cir. 1982.) By failing to analyze alternatives that exceed the stringency of the augural standards and an alternative that retains the California program, the answer to the threshold question posed above is, quite clearly, “no.”

1. NHTSA should, at a minimum, select the No Action Alternative because it is the only environmentally beneficial alternative

NEPA regulations require agencies to include a “no-action” alternative in their environmental impact statements, and to compare the environmental impacts of not taking action with a reasonable range of action alternatives so that each alternative’s environmental impacts becomes clear. 40 C.F.R. § 1502.14(d). Although NHTSA vaguely mentions that it “may still select the no action alternative” (which is the only alternative that would not increase environmental harm), NHTSA has selected the most environmentally damaging alternative (Alternative 1) as its preferred course of action. NHTSA never discusses actually adopting the no action alternative and the Proposed Rollback does not contemplate the no action alternative as a regulatory option. The failure to analyze and consider the adoption of the “no action” alternative is unreasonable and capricious.

⁴⁰ DEIS at S-2.

2. Alternatives that exceed the stringency of the augural standards for Model Year 2022 through 2025 are consistent with EPCA’s purpose, are technologically feasible, are economically practicable, and would reduce the significant impacts of NHTSA’s proposal

NHTSA has taken the position that it needs to analyze only a range of alternatives with fuel economy stringencies that are less than the augural standards. That is, NHTSA appears to believe that the augural standards represent the upper bound of the analysis, with the preferred alternative of rolling back the standards to model year 2020 levels as the lower bound of the analysis. These alternatives (combined for passenger cars and trucks) are presented in tabular form below. All alternatives under consideration would decrease fuel economy requirements when compared to the augural standards.⁴¹

Model Year	Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Projected required mpg									
MY 2021	39.0	36.9	37.1	37.1	37.5	39.0	37.9	37.9	39.0
MY 2022	40.8	36.9	37.3	37.3	38.1	39.6	38.9	38.9	40.0
MY 2023	42.7	36.9	37.5	37.5	38.7	40.2	39.9	39.9	41.0
MY 2024	44.7	37.0	37.7	37.7	39.3	40.8	40.9	40.9	42.1
MY 2025	46.8	37.0	37.9	37.9	39.9	41.5	42.0	42.0	43.2
MY 2026	46.8	37.0	38.1	38.1	40.6	42.1	43.1	43.1	44.3

mpg = miles per gallon; MY = model year

*Projected Average Required Fleet-Wide Fuel Economy (mpg) for Combined U.S. Passenger Cars and Light Trucks by Model Year and Alternative.*⁴²

NHTSA concedes that more stringent alternatives are possible,⁴³ but ascribes its failure to analyze more stringent CAFE standards to its balancing of EPCA’s four statutory factors. The DEIS does not elaborate on how that balancing precludes the selection and analysis of alternatives that are more stringent than the augural standards. NHTSA merely states “that such an alternative would, after careful balancing of EPCA’s four statutory factors, fall well outside the range of the maximum feasible level.”⁴⁴

As stated, NHTSA’s interpretation of “maximum feasible” contravenes EPCA (*supra*, Section II.A.) NHTSA has narrowly defined the project such that only one set of alternatives – the less stringent alternatives – would achieve the goals. An agency preparing an environmental impact statement may not define objectives of its action such that only one alternative would accomplish the goals of the agency action. *See Idaho ex rel. Kempthorne v. U.S. Forest Service*, 142 F. Supp. 2d 1248 (D. Idaho 2001). “If the purpose is defined too narrowly, only one

⁴¹ DEIS at 1-7.

⁴² DEIS at S-4.

⁴³ *See* 83 Fed. Reg. at 43,226 (“[M]ore stringent standards may be possible, insofar as production-ready technology exists that the industry could physically employ to reach higher standards”).

⁴⁴ DEIS at 2-11.

alternative from among the environmentally benign ones in the agency's power would accomplish the goals of the agency's action, and the environmental impact statement (EIS) would become a foreordained formality.” *North Carolina Alliance for Transp. Reform, Inc. v. U.S. Dept. of Transp.*, 151 F. Supp. 2d 661, 686 (M.D.N.C. 2001). By advancing a preferred alternative that freezes CAFE standards for at least six years and increases the nation's consumption of petroleum by approximately 500,000 barrels per day, NHTSA has effectively decided that the nation no longer needs to conserve energy and has defined “maximum feasible” in a manner that contravenes its congressional mandate under EPCA. Indeed, in 2012, NHTSA rejected less stringent alternatives because they would not have represented “the appropriate balancing of the relevant factors, because they would have left technology, fuel savings, and emissions reductions on the table unnecessarily, and not contributed as much as possible to reducing our nation's energy security and climate change concerns.”⁴⁵ With the Proposed Rollback, NHTSA has radically changed positions—assuming energy conservation provides little, if any, benefits, for example—without explaining or even acknowledging this complete reversal of course. *See Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117, 2126 (2016) (“explanation fell short of the agency's duty to explain why it deemed it necessary to overrule its previous position”).

Further, “[s]ince EPCA's overarching goal is energy conservation, consideration of more stringent fuel economy standards that would *conserve more energy* is clearly reasonably related to the purpose of the CAFE standards.” *CBD v. NHTSA*, 538 F.3d at 1219 (emphasis in original). As NHTSA recognizes in the DEIS, the transportation sector is, and will continue to be, the largest consumer of U.S. petroleum and second-largest consumer of total U.S. energy.⁴⁶ As a result, by increasing fuel economy of passenger cars and light trucks, the United States has the potential to achieve significant reductions in fuel consumption. In the July 2016 Draft Technical Assessment Report jointly conducted by NHTSA, EPA, and CARB, the agencies found that:

on balance, each gallon of fuel saved as a consequence of the [Light-Duty Vehicle] GHG/fuel economy standards is anticipated to reduce total U.S. imports of petroleum by 0.9 gallons.⁴⁷

Given the extensive record evidencing that NHTSA's MY 2021 standards and MY 2022-2025 augural standards are both technologically and economically feasible—including, but not limited to, the 2016 Draft TAR, EPA's Technical Support Document and Proposed Determination (Nov. 2016) and Final Determination (January 2017), and CARB's Advanced Clean Cars Midterm Review⁴⁸—NHTSA cannot justify its selection of action alternatives that exclusively are less stringent than the augural standards. Informed analyses post-dating NHTSA's 2012 final EIS for the augural standards have concluded that the augural standards will be even less costly to achieve and that both the augural standards and more stringent standards are technologically and economically feasible. NHTSA concedes as much, at least as to the technology; as discussed above, its assumptions about costs and other factors are unsupported and, in some cases, demonstrably false. Thus, inclusion of more stringent

⁴⁵ 77 Fed. Reg. at 63,055.

⁴⁶ DEIS at S-5.

⁴⁷ States' Appx. C-40, TAR at 10-23.

⁴⁸ *See* States' Appx. C-39, C-40, C-41, C-42, C-46.

alternatives in the DEIS is reasonable and NHTSA must analyze multiple alternatives that exceed the stringency of the augural standards. For instance, in the final EIS accompanying its 2012 fuel efficiency standards, NHTSA analyzed an alternative with a 7-percent annual increase in fuel economy. At a minimum, NHTSA should analyze an upper bound alternative at least as stringent here.

3. NHTSA improperly narrowed the range of alternatives by weighting the CAFE model to rationalize a preordained result: fuel economy standards that are less stringent than the augural standards.

In addition, the DEIS fails to satisfy NEPA because NHTSA has designed its CAFE model to rationalize a preconceived result: the selection of action alternatives that are less stringent than the augural standards. NHTSA’s refusal to consider more stringent alternatives stems not from any actual inconsistency with EPCA, but from the decision to rollback the existing standards before performing any analysis, which necessitated misconstruing the statute and the technical analysis (*supra*, Section II.A. and B.).

In March 2017, the President announced he was “cancelling” U.S. EPA’s Final Determination that the current light-duty vehicle greenhouse gas emissions standards are appropriate, that his administration would “work on the CAFE standards” and eliminate “industry-killing regulations.”⁴⁹ Shortly thereafter, EPA announced that it intended to reconsider the Final Determination, and NHTSA announced it would initiate a rulemaking to set CAFE standards for model years 2022 to 2025.⁵⁰ Specifically, in following this direction to relax the CAFE standards, NHTSA has embedded the CAFE model with assumptions that result in an inaccurate estimate of safety impacts of the augural standards, an overestimation of the vehicle miles driven and thus tailpipe emissions (criteria pollutants and GHGs) as a result of the augural standards, and an underestimation of the impacts of climate change by using a domestic social cost of carbon. See *supra*, Section II.D.

The results from this complex, confusing, and weighted modeling process are an extremely narrow universe of potential regulatory options that are all less stringent than the augural standards. While NHTSA leans on various baseless reasons to justify its narrow range of alternatives, it has also—via unsound modeling—built the emissions conclusions in a way that forecloses consideration of more stringent and environmentally beneficial alternatives. By creating a narrative that mischaracterizes the environmental impacts of the proposed action and alternatives, NHTSA has deliberately deprived the public of information “essential to a reasoned decision between the alternatives.” 40 C.F.R. § 1502.22(a).

NHTSA should have begun the NEPA analysis with a range of reasonable alternatives (including more stringent standards), and then evaluated the environmental, economic, and social costs and benefits of each alternative using a model with scientifically and technically sound inputs that produce rational results. See 40 C.F.R. § 1500.1. Instead, NHTSA ran the NEPA process in reverse by preordaining a narrow range of action alternatives and weighting the CAFE model to justify the less stringent standards. In effect, the DEIS is nothing more than a *post hoc* paper exercise to justify a choice that NHTSA had already made. “Environmental impact

⁴⁹ See States’ Appx. C-65.

⁵⁰ 82 Fed. Reg. 14,671 (Mar. 22, 2017.)

statements shall serve as the means of assessing the environmental impact of proposed agency actions, rather than justifying decisions already made.” *Id.* § 1502.2. NEPA review must be conducted “not as an exercise in form over substance, and not as a subterfuge designed to rationalize a decision already made [or] to file detailed impact studies which will fill governmental archives.” *Metcalfe v. Daley*, 214 F.3d 1135, 1142 (9th Cir. 2000) (internal citation and quotation marks omitted). Accordingly, NHTSA must consider a full range of alternatives that are feasible and that are not artificially limited by a predetermined end-result.

4. The DEIS is also inadequate because it fails to analyze the action alternatives under a scenario in which EPA and California’s programs remain in place.

In determining what constitutes a reasonable range of alternatives, NEPA requires that agencies “take into proper account all possible approaches to a particular project.” *Alaska Wilderness Recreation & Tourism Ass’n v. Morrison*, 67 F.3d 723, 729 (9th Cir. 1995). “An EIS aids the agency’s own decisionmaking process by ensuring that the agency has before it all possible approaches to a particular project ... which would alter the environmental impact and the cost-benefit balance.” *Northwest Coalition for Alternatives to Pesticides (NCAP) v. Lyng*, 844 F.2d 588, 591-92 (9th Cir. 1988) (internal quotations and citations omitted). Moreover, “when the proposed action ... is an integral part of a coordinated plan to deal with a broad problem, the range of alternatives that must be evaluated is broadened.” *Ilio’Ulaokalani Coalition*, 464 F.3d at 1098.

Here, the DEIS analyzes action alternatives premised on the legally baseless assumption that EPA and California’s vehicle emission standards do not exist. The DEIS leaves the public guessing as to NHTSA’s reason for this assumption.⁵¹ EPCA expressly requires NHTSA to consider “the effect of other motor vehicle standards of the Government on fuel economy.” 49 U.S.C. § 32902(f). Although NHTSA contends otherwise, NHTSA must consider both EPA vehicle emission standards under the Clean Air Act (including GHG standards currently in effect) and California’s vehicle emissions standards, “which are currently enforceable there and in other states that have adopted those standards.”⁵² Although EPA has proposed to relax its motor vehicle GHG emissions standards, those emissions standards are currently in effect. Likewise, EPA’s final action granting California’s waiver currently remains in effect.

Therefore, in order for the public to make a reasoned decision, NHTSA must analyze “all possible approaches” to the proposed action, which includes an analysis of all action alternatives under two scenarios: (1) a scenario in which EPA and California’s vehicle emission standards are not in effect; and (2) a scenario in which EPA and California’s vehicle emissions standards remain in effect. The DEIS appears to present only the first scenario, but NHTSA must analyze the impact of EPA and California’s standards as they currently exist, and the environmental

⁵¹ DEIS at 1-15. The States vigorously disagree with NHTSA’s preemption assertions and its claimed authority to declare California GHG and ZEV standards void (DEIS at 8-22, fn. 10) and incorporate by reference the States and Cities’ Proposed Rollback Comments and CARB Proposed Rollback Comments on this issue.

⁵² See also, NHTSA, Final Rule: Average Fuel Economy Standards for Light Trucks Model Years 2008-2011, 71 Fed. Reg. 17,566, 17,643 (Apr. 6, 2006) (CARB emission standards discussed in section X.D. entitled “Federal Motor Vehicle Emission Standards”).

benefits they are expected to provide.⁵³ Failing to do so obscures the degree of environmental harm of the Proposed Rollback by not informing the public of the emission reductions that would otherwise occur if EPA and California’s vehicle emission standards remain in effect.

D. NHTSA Has Failed to Take a “Hard Look” at the Environmental Impacts of the Action Alternatives

Under NEPA, an agency’s analysis must be detailed and provide a comprehensive “hard look” at the potential environmental impacts. *See, e.g., League of Wilderness Defenders-Blue Mountains Biodiversity Project v. U.S. Forest Serv.*, 689 F.3d 1060, 1075 (9th Cir. 2012) (“Taking a ‘hard look’ includes ‘considering all foreseeable direct and indirect impacts.’” (internal citation and quotation omitted)). Furthermore, “‘a hard look’ should involve a discussion of adverse impacts that does not improperly minimize negative side effects.” *Id.* (internal citation and quotation omitted). The NEPA regulations define “significant” environmental impacts to require a consideration of both the context and intensity of the impact. Significance must be analyzed within the context of society as a whole. 40 C.F.R. § 1508.27(a). Intensity looks at the severity of the impacts, including the degree to which the action affects public health or safety, the degree to which the effects on the human environment are unique, and the degree to which the action may establish a precedent for future actions. *Id.* § 1508.27(b).

The DEIS fails to take a “hard look” at the environmental impacts of the Proposed Rollback and measures to mitigate those impacts. Relying on NHTSA’s flawed modeling, the DEIS erroneously concludes that the Proposed Rollback will result in negligible air quality and GHG impacts. Indeed, CARB’s modeling shows that, contrary to the DEIS’s findings, the Proposed Rollback will significantly increase emissions of criteria air pollutants and GHGs. Nor does the DEIS adequately disclose the impact of the Proposed Rollback on environmental justice communities. The DEIS also erroneously concludes that a consultation with the relevant federal authorities regarding the impact of the Proposed Rollback on endangered species and historic resources is not required.

1. The Proposed Rollback will increase emissions of criteria pollutants and will undermine state implementation plans

Under the Clean Air Act, EPA is required to establish National Ambient Air Quality Standards (NAAQS) for six common air pollutants known as “criteria air pollutants:” carbon monoxide (CO); nitrogen dioxide (NO₂); ozone,⁵⁴ sulfur dioxide (SO₂), lead, and particulate matter (PM).⁵⁵ The NAAQS provide states with achievable goals to protect the health of its residents from emissions of criteria air pollutants. NHTSA concedes that the Proposed Rollback will generally increase emissions of criteria air pollutants, but claims that it would not “noticeably impact net emissions of smog-forming or other criteria or toxic air pollutants.” 83

⁵³ *See Mass v. EPA*, 549 U.S. 497, 531-532 (2007) (“EPA has been charged with protecting the public’s ‘health’ and ‘welfare,’ 42 U.S.C. § 7521(a)(1), a statutory obligation wholly independent of DOT’s mandate to promote energy efficiency. *See* Energy Policy and Conservation Act, § 2(5), 89 Stat. 874, 42 U.S.C. § 6201(5). The two obligations may overlap, but there is no reason to think the two agencies cannot both administer their obligations and yet avoid inconsistency.”.)

⁵⁴ Although vehicles do not directly emit ozone, it is created by a chemical reaction in the presence of sunlight between nitrogen oxides (NO_x) and volatile organic compounds (VOCs).

⁵⁵ DEIS at 4-1.

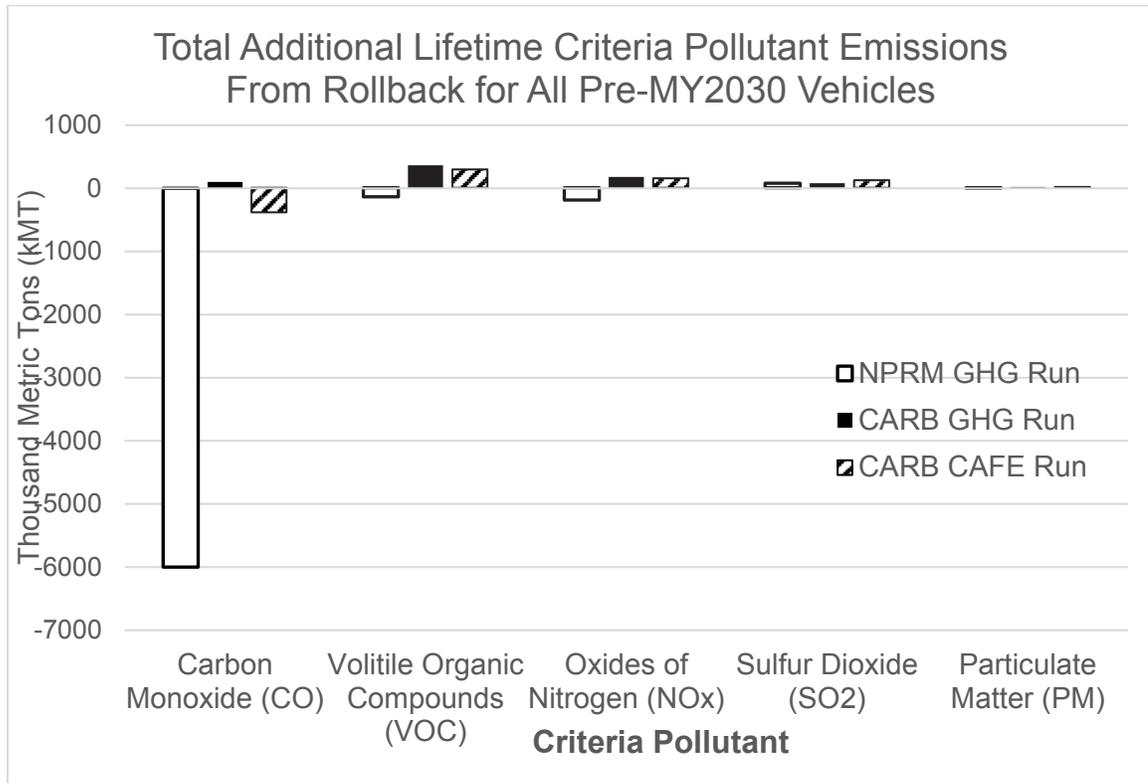
Fed. Reg. at 42,996-42,998. Relying primarily on the CAFE model, NHTSA bases this conclusion on its air quality analysis of the Proposed Rollback, which accounts for downstream emissions (i.e., emissions from vehicle tailpipes), upstream emissions (i.e., emissions associated with extracting, refining, and delivering fuel), and emissions associated with increased VMT from the rebound effect and from the scrappage model. As detailed below and in CARB's Comments, (which is incorporated by reference), NHTSA grossly underestimates the impact of the Proposed Rollback on criteria air pollutants and its corresponding impact on state implementation plans.

a. NHTSA's flawed modeling on criteria pollutants deprives decisionmakers and the public of essential information

As described above, the modeling used to arrive at the calculations in the DEIS suffers from many deficiencies and as a result, the DEIS overstates the emissions benefits from the Proposed Rollback. In order to evaluate how these flaws may impact the analysis, CARB ran the CAFE model with a few corrected assumptions.⁵⁶ Figure 1 below demonstrates the significant difference in emission estimates by only partially correcting the inputs and assumptions in the CAFE model. Notably, the slight CO decrease shown in Figure 1 in the "CARB CAFE Run" bar graph is not accurate, as it reflects the fact that NHTSA's flawed inputs and assumptions have only been partially corrected in the modeling shown below. In reality, the Proposed Rollback would not result in any decreases of any criteria pollutant. Nevertheless, this figure demonstrates the profound effect on emissions quantification that results from correcting even some of the inputs and assumptions in NHTSA's CAFE modeling.

⁵⁶ See CARB Comments, Section IX.

Figure 1: Total Additional Lifetime Criteria Pollutant Emissions Under Proposed Rollback



Note: As described in the CARB Comments, CARB partially corrected the CAFE model and ran it in two ways: (1) using the CAFE standards as the compliance program, and (2) using EPA’s GHG vehicle emissions standards as the compliance program. The bar graph reflects the results of CARB’s two modeling runs compared to the existing standards (CARB GHG Run and CARB CAFE Run) and the agencies cumulative emission estimates of the Proposed Rollback compared to existing standards (see PRIA, p. 1282).

As detailed in CARB’s Comments, by partially correcting assumptions and turning the dynamic scrappage model off, the CAFE model demonstrates that the Proposed Rollback will substantially increase cumulative emissions of the pollutants CO, VOC, NOx, and PM when compared to existing standards. This difference in emission estimates is mostly a result of the agencies assertion that the Proposed Rollback will significantly decrease VMT and thus decrease downstream emissions from vehicle tailpipes. But, in actuality, the Proposed Rollback will not decrease VMT and instead, the Proposed Rollback will increase fuel consumption and thus increase “upstream” emissions associated with extracting, refining, and delivering fuel. Thus, contrary to the agencies assertions, the Proposed Rollback will – quite “noticeably” – increase net emissions of criteria pollutants.

b. The DEIS fails to consider that the Proposed Rollback undermines state implementation plans

Further, these increases in emissions will undermine state implementation plans (SIPs). A SIP is a federally enforceable plan that identifies how a state will attain and maintain NAAQS.

SIPs must identify both the magnitude of reductions needed and the actions necessary to achieve those reductions in order to meet NAAQS. SIPs also include a demonstration that: the area will make reasonable further progress toward attainment, is implementing reasonably available control technology on all major sources, has a program in place to address emissions from new stationary sources, and meets transportation conformity requirements. An increase in upstream emissions from fuel consumption will have dire implications for states that need to comply with SIPs. For example, in areas such as the South Coast air basin in California, CARB has estimated that the Proposed Rollback would create an additional 1.24 tons per day of NO_x emissions.⁵⁷ Because of SIP commitments for federal ozone standards, that increase would have to be offset by reducing emissions from mobile sources, which would require working into the region's fleet 1.3 million more fuel-efficient vehicles, or 1 million more zero emission vehicles.⁵⁸ And yet, via the Proposed Rollback, the agencies seek to yank away tools that states, including California, need to get those additional fuel-efficient and zero-emission vehicles on the road.

The DEIS arrives at numerous inexplicable results, including projected criteria pollutant decreases from the preferred alternative for certain years in areas where refinery operations would likely experience increased operations due to increased fuel demand. As an example, for the San Francisco Bay Area in California, the DEIS concludes that this nonattainment area would experience certain criteria emissions benefits under NHTSA's preferred alternative, including reductions of NO_x in 2025 and VOCs and CO in 2025 and 2035.⁵⁹ This is despite the facts that the Proposed Rollback would increase consumption of refined fuels and that the Bay Area is one of two primary fuels-refining regions in California, with five refineries in that air basin.⁶⁰ As stated, with increased fuel consumption comes increased fuel production-related emissions.

NHTSA also calculates, at a nonattainment or maintenance area level, anticipated emissions changes for the years 2025, 2030, and 2050.⁶¹ Because all nine areas that NHTSA identifies as suffering from "serious" or "extreme" non-attainment conditions for ozone and PM_{2.5} are located in California, these comments focus on the air quality impacts in California from the Proposed Rollback. However, our analysis suggests that the same fundamental flaws in the DEIS as it pertains to California also apply to the DEIS's analysis for the rest of the country. By necessity, CARB's analysis is very preliminary, because not enough time has been provided to confirm many of NHTSA's calculations. This deprives both the decisionmakers and the public of essential information. See 40 C.F.R. § 1502.22(a). Figure 2, below, shows CARB's preliminary assessment of the differences between NHTSA/EPA's analysis and CARB's analysis using proper assumptions:

⁵⁷ CARB Comments Section VII.

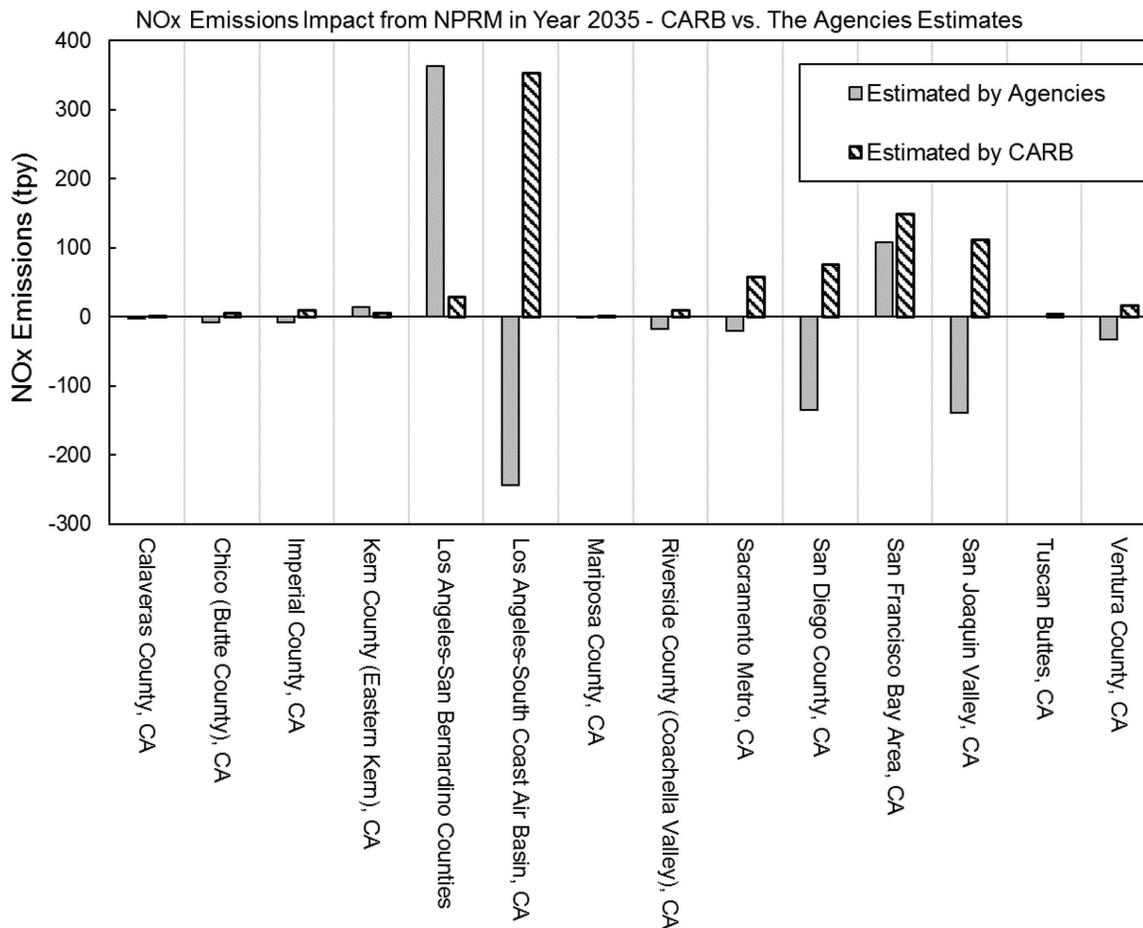
⁵⁸ *Id.*

⁵⁹ DEIS at A-125 (NO_x, 2025), A-179 (VOCs, 2025), A-196 (VOCs, 2035), A-230 (CO, 2025), A-247 (CO, 2035), and A-264 (CO, 2050).

⁶⁰ See <https://www.arb.ca.gov/fuels/carefinery/carefinery.htm>.

⁶¹ Confusingly, the emissions reductions in these tables are shown as positive values, and the increases are shown as negative values.

Figure 2: NOx Emissions Changes from the NPRM Preferred Alternative in 2035 as Compared to the Augural Standards⁶²



Given California’s extraordinary challenges in attaining both federally and state prescribed ambient air quality standards (AAQS), its SIP is designed with very tight margins for error. The South Coast and San Joaquin Valley air basins, in particular, are faced with extremely challenging ozone attainment deadlines (75 ppb 8-hour standard) in 2031.⁶³ Even marginal increases in NOx emissions in those areas can impede attainment of the AAQS. By CARB’s current estimates, NHTSA’s action alternatives would only magnify the difficulty of meeting ozone attainment deadlines in multiple California air basins. Furthermore, increased temperatures due to climate change have been shown to exacerbate ozone conditions by

⁶² Note: to generate Figure 2, CARB’s statewide estimates were disaggregated to different regions using tailpipe emissions as surrogates. The supporting documentation for this figure is titled “Attachment – Emissions Impact Alternative1.xlsx”, included in the DVD submitted in conjunction with the CARB Comments.

⁶³ See States’ Appx. C-87 at 11, 21.

increasing ozone-forming reactions in the atmosphere.⁶⁴ Because NHTSA's Proposed Rollback would further exacerbate climate change, it would also exacerbate ozone levels.

Finally, the DEIS does not analyze impacts at a geographic scale that is any smaller than nonattainment and maintenance areas. To the degree the Proposed Rollback may present any more geographically-specific challenges,⁶⁵ NHTSA should consider this in its analysis. Given the magnitude of the changes the Proposed Rollback would cause, and the sensitivity of many freeway-adjacent communities to vehicle emissions, the DEIS should consider impacts to specific areas such as major freeway corridors that would foreseeably be impacted by the proposal. It is also unclear what threshold NHTSA is using for analyzing the significance of air emissions increases.⁶⁶ But, NEPA requires agencies to determine whether their actions would significantly affect the quality of the environment. 42 U.S.C. § 4332(C). To do so, agencies must consider both the context and the intensity of the impacts. 40 C.F.R. § 1508.27. NEPA also requires consideration of “[w]hether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment,” among many other factors. 40 C.F.R. § 1508.27(b). Yet the DEIS does not clearly indicate what significance metric it is using to evaluate the air quality impacts, so the degree of significance remains undisclosed. NHTSA must correct this by providing appropriate context for the air emissions from the Proposed Rollback.⁶⁷

c. NHTSA's reasons for failing to conduct a general conformity analysis are flawed

Under the Clean Air Act's General Conformity Rule, “a conformity determination is required where a federal action would result in total direct and indirect emissions of a criteria pollutant or precursor originating in nonattainment or maintenance areas equaling or exceeding the rates specified in 40 C.F.R. § 93.153(b)(1) and (2).”⁶⁸ Essentially, federal actions must not interfere with a state's ability to implement its SIP or meet the NAAQS. 42 U.S.C. § 7506(c)(1)-(2); *see also* 40 C.F.R. Part 51, Subpart W, and Part 93, Subpart B. To the extent that a federal action will increase emissions of a criteria pollutant and precursors, the attainment and maintenance of the NAAQS standards becomes more difficult. The added pollution is especially problematic in states such as California, that have significant areas now in nonattainment, or in areas that are newly-designated as attainment and are at risk of backsliding into nonattainment due to such added pollution.

The DEIS states that the General Conformity Rule does not apply because the Proposed Rollback will not directly or indirectly affect air quality. There are three fundamental issues with

⁶⁴ *See* States' Appx. C-88.

⁶⁵ *See* States' Appx. C-91.

⁶⁶ NHTSA includes general conformity thresholds, but it states those thresholds are “provided for information only; a determination under the General Conformity Rule is not required for the Proposed Action.” DEIS at Appendix A at A-19.

⁶⁷ *See CBD v. NHTSA*, 538 F.3d at 1217 (“NHTSA must provide the necessary contextual information about the cumulative and incremental environmental impacts of the Final Rule in light of other CAFE rulemakings and other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions.”).

⁶⁸ DEIS at 4-14.

NHTSA’s conclusion. First, NHTSA uses inappropriate modeling to determine that the General Conformity Rule does not apply. Second, NHTSA argues that any emissions flowing from its actions are neither “direct” nor “indirect” under the meaning of general conformity because NHTSA cannot control the technologies that automobile manufacturers would use, or consumer behavior (including purchasing).⁶⁹ Yet this contradicts NHTSA’s assertion that the costs of the augural standards purportedly are causing new vehicles to become too expensive, and are thereby negatively impacting consumer purchasing behavior. NHTSA then attempts to justify this course of action by predicting, using new, unsupported modelling inputs of its own design, the emissions levels that would flow from its action. In other words, the rulemaking is premised on understanding consumer purchasing and the emissions implications of such purchasing, while NHTSA claims on the other hand that it cannot make assumptions about these very things when it comes to satisfying its obligations under the General Conformity Rule. NHTSA cannot have it both ways. Indeed, the Ninth Circuit Court of Appeals has previously recognized that “[b]y allowing particular fuel economy levels, which NHTSA argues translate directly into particular tailpipe emissions, NHTSA’s regulations are the proximate cause of those emissions just as EPA Clean Air Act rules permitting particular smokestack emissions are the proximate cause of those air pollutants....” *CBD v. NHTSA*, 538 F.3d at 1217. Finally, in the context of this joint rulemaking between NHTSA and EPA, it is inappropriate that NHTSA’s determination regarding its own conformity obligations, regardless of its independent merit or lack thereof, does not address any conformity-related obligations EPA may have that flow from the joint rulemaking.

2. The DEIS’s conclusion that toxic air emissions would decline is unsupported and counter-intuitive

NHTSA also calculates, at a nonattainment and maintenance area scale, anticipated toxic air emissions changes for the years 2025, 2030, and 2050. This analysis concludes that, compared to the augural standards, the Proposed Rollback would result in nearly across-the-board reductions in toxic air emissions other than diesel particulate.⁷⁰ NHTSA does not explain how it arrived at this conclusion, nor does it provide sufficient information in the DEIS to analyze NHTSA’s results. The DEIS states cryptically that under the Proposed Rollback “[e]missions decline from 2025 to 2050 due to increasingly stringent EPA regulations...and from reductions in upstream emissions from fuel production, despite a growth in total [vehicle miles traveled] from 2025 to 2050.” *Id.* This fails to explain why toxic emissions under the Proposed Rollback would be lower than under the augural standards, as that same rationale would presumably apply under the augural standards. Moreover, the Proposed Rollback assumes that it will lead to a greater use of gasoline, and in turn a greater volume of oil refining, which, all else being equal, would increase upstream emissions of toxic pollutants as compared to the augural standards.

In short, the DEIS fails both to provide the public with sufficient information to evaluate NHTSA’s assertions about impacts on toxics emissions and to take the requisite “hard look” at the Proposed Rollback’s impacts on toxics emissions. It lacks the evidence, data, analysis, and

⁶⁹ DEIS at 4-14 and 4-15.

⁷⁰ DEIS at 4-38.

explanation sufficient to inform the decisionmakers or the public of the bases for its counterintuitive claim that the preferred alternative would reduce toxic air emissions.

3. The DEIS fails to take a “hard look” at GHG emissions impacts of the Proposed Rollback

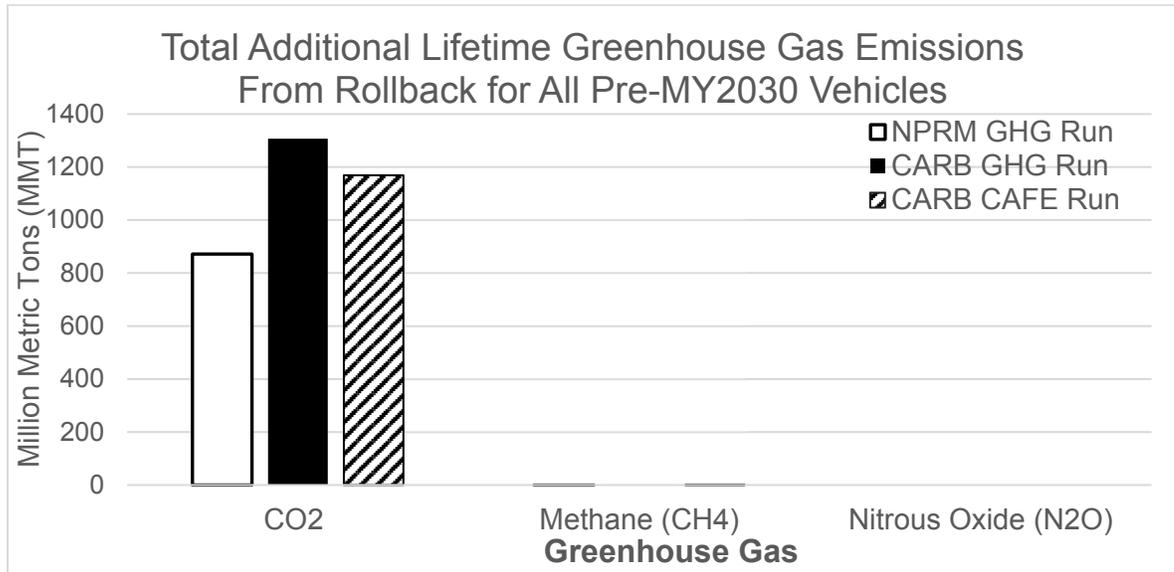
Under NEPA, agencies must analyze the direct, indirect and cumulative impacts of an agency action on GHG emissions. *See, e.g., CBD v. NHTSA*, 538 F.3d at 1216 (“The impact of GHG emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct.”); *Sierra Club v. FERC*, 867 F.3d 1357, 1371 (D.C. Cir. 2017) (NEPA review must consider the direct and indirect effects of greenhouse gas emissions of the alternatives). In 2016, the Department of Transportation published for comment DOT Order 5610.1D, setting forth procedures to address climate change when conducting a NEPA analysis of its proposed actions. DOT Order 5610.1D(2)(a) and (c)(6).

Although the data provided by NHTSA, which is a division of the Department of Transportation, is both limited and skewed by the fundamentally flawed models discussed in Section II., B above, the DEIS admits that the Proposed Rollback will increase GHG emissions. NHTSA estimates that the preferred alternative would increase U.S. fuel consumption by a half million barrels per day, or 2-3% of total daily consumption⁷¹ and increase CO₂ emissions by 7,400 million metric tons (MMT) by 2100 when compared to augural standards⁷². Given the flaws in how NHTSA conducted its technical analysis, NHTSA’s discussion of the effect of the Proposed Rollback on GHG emissions substantially understates the outcome. The figure below demonstrates the significant difference in emission estimates by partially correcting the inputs and assumptions in the CAFE model.

⁷¹ 83 Fed. Reg. at 42,986.

⁷² DEIS at S-18 and Appendix D-18.

Figure 3: Total Additional Lifetime GHG Emissions From Proposed Rollback



Note: As described in the CARB Comments, CARB partially corrected the CAFE model and ran it in two ways: (1) using the CAFE standards as the compliance program, and (2) using EPA’s GHG vehicle emissions standards as the compliance program. The bar graph reflects the results of CARB’s two modeling runs compared to the existing standards (CARB GHG Run and CARB CAFE Run) and the agencies cumulative emission estimates of the Proposed Rollback compared to existing standards (see PRIA, Table 3-4, p. 127).

Nevertheless, the DEIS concludes that the action alternatives would, “to a small degree, increase the impacts and risks of climate change” (S-14), that the effects would be “small, occur on a global scale, and would not disproportionately affect the United States” (S-14), and that global warming “could be further exacerbated to a very small degree under the Proposed Action...compared to the No Action Alternative” (9-2). The transportation sector, however, represents over a third of the nation’s GHG emissions, the largest of any single sector. And light duty vehicles account for approximately 60% of total U.S. CO₂ emissions from transportation.⁷³ That means U.S. light-duty vehicles account for approximately 3 percent of total global emissions. Simply put, light-duty vehicles in the United States are among the largest single opportunities for GHG emission reductions anywhere in the world. Leaving these emissions on the table, as the Proposed Rollback’s preferred alternative would do, will set global efforts to address climate change back significantly, contrary to the conclusions of the DEIS. The Proposed Rollback is particularly egregious because the nation’s vehicle fleet is the single largest source of GHGs in the U.S. If, in NHTSA’s view, a rulemaking that adds 7,400 MMTCO₂ to the climate crisis has nothing but *de minimis* results, the inevitable conclusion is that no action on any front is warranted. If this is NHTSA’s view, NHTSA must disclose it.

In order to assess the importance of vehicle emissions reductions, it helps to have a measuring stick. One of the ways in which scientists calculate and express what it will take to hold the increase in temperatures to a certain level is using a “carbon budget.” The carbon budget is used to identify an amount of cumulative GHG emissions from human activity (starting in late 1800s) that provides a two-thirds chance of going over a particular increase in global

⁷³ *Id.*

mean temperatures. The budget is measured in billions or “gigatons” of carbon (“GtC”), which can be converted into billions of tons of CO₂. In 2018, the Intergovernmental Panel on Climate Change (IPCC) calculated that the world could emit no more than 420 GtCO₂ to retain a two-thirds chance of limiting the global average temperature increase to 1.5°C.⁷⁴ The IPCC further estimated that the budget is being depleted by approximately 42 GtCO₂ per year. Thus, if global emissions continue at the current pace, the carbon budget will be exhausted in 10 years. Despite the drastic reductions needed to achieve climate stabilization, the Agencies have instead proposed an action that, by their own admission, would increase CO₂ emissions by almost 7.5 billion tons by 2100.⁷⁵ Even assuming these emission estimates are accurate, the Proposed Rollback constitutes a significant depletion of the remaining carbon budget.

Taking a “hard look” requires a recognition – absent in this DEIS -- that climate change presents an extremely challenging cumulative emissions problem. This is because a large percentage of the GHGs already in the atmosphere will remain there for decades, and the CO₂ emissions from vehicles sold during the 2021 to 2026 model years will remain in the atmosphere for centuries. The emissions resulting from the Proposed Rollback will continue long past 2021 through 2026, as vehicles remain in service for many years, sometimes many decades. Further compounding these more direct harms, the Proposed Rollback would also create a “technology cliff.” That is, removing one of the major federal technology drivers would jeopardize other federal and state programs for reducing vehicular GHG emissions,⁷⁶ as those programs will no longer benefit from one of the primary complementary GHG-reducing programs.

Further, NHTSA may not bury the GHG increases the Proposed Rollback would cause simply by noting the vastness of the problem. Citing myriad expert reports, including from the IPCC, US National Research Council, NOAA, the US Global Change Research Program, and EPA’s Endangerment Finding, NHTSA acknowledges that climate change is real, temperatures are increasing, and that human influence is the dominant cause. NHTSA then cannot attempt to disguise the true impact of its proposed action in a vast quantity of ever-rising cumulative GHG emissions.⁷⁷ In fact, rather than demonstrating that the GHG emissions from the Proposed Rollback are *de minimis*, this approach shows they are quite significant. The courts have already rejected the contention that agencies need not take incremental steps to address climate change because their contribution to that problem is relatively small.⁷⁸ This principle is especially powerful here, where NHTSA proposes not just to do nothing to address a developing global crisis, but rather proposes to flatline existing standards that are already in place to help address it. NHTSA must evaluate the “incremental impact” that the Proposed Rollback will have on climate change,⁷⁹ and the NEPA analyses must carefully consider the Proposed Rollback’s incremental

⁷⁴ See States’ Appx. C-1 to C-15.

⁷⁵ DEIS at S-18.

⁷⁶ Such programs include, for example, California’s ZEV and vehicular GHG programs.

⁷⁷ See *Mass v. EPA*, 549 U.S. 497, 524 (2007) (“Agencies, like legislatures, do not generally resolve massive problems in one fell regulatory swoop.... They instead whittle away at them over time, refining their preferred approach as circumstances change and as they develop a more nuanced understanding of how best to proceed.... And reducing domestic automobile emissions is hardly a tentative step.”)

⁷⁸ *Id.*

⁷⁹ *CBD v. NHTSA*, 538 F.3d at 1216.

impact in light of past, present, and reasonably foreseeable future actions. *See Am. Rivers v. Fed. Energy Regulatory Comm'n*, No. 16-1195, 2018 WL 4610726 (D.C. Cir. Sept. 7, 2018).

This is precisely what NHTSA fails to do in its DEIS: NHTSA begins the DEIS by concluding that CO₂ emissions resulting under the augural standards would result in a pessimistic world in which the global mean surface temperature rises by a colossal 6.27 degrees Fahrenheit by 2100, and global sea level rises by 30.03 inches with attendant impacts to extreme and regional temperature and precipitation trends.⁸⁰ It then uses those high figures to minimize the GHG changes from the Proposed Rollback, only looking at global average trends in air temperature, sea level rise and ocean pH. For example, it concludes that global mean surface temperature would increase by only 0.005 degrees Fahrenheit, and sea levels would rise only 0.02 inch, compared to the No Action Alternative.⁸¹ No analysis is performed on the effect of any alternatives on the many other impacts from climate change NHTSA acknowledges, for example, such as extreme and regional temperatures, extreme weather including heat waves, droughts, regional sea level rise, coastal flooding and erosion, snow cover, human health, ecosystems, and Arctic impacts including melting of permafrost.⁸² While NHTSA's 2012 draft and final EIS also used comparisons on a global scale, that was in the context of conservatively framing essential emissions reductions from the proposed 2012 standards against a massive global environmental issue; it was not in the context of attempting to minimize GHG emissions *increases* as part of an action contrary to remedial statutes directing protection of the environment and conservation of resources.

NHTSA compounds this minimization of the impacts by failing to show the real-world consequences of the expected dramatic increases in global mean surface temperatures and sea level rise in ways the public can understand. Absent from the DEIS are any maps showing the loss of property and infrastructure due to increased sea levels and commensurate storm surges that would affect tens of millions of Americans. Rather, beyond discussion regarding the sea level rise risk posed by climate change generally, the DEIS provides only three paragraphs of text specifically describing the potential impacts of the Proposed Rollback on this critical point.⁸³ The change in ocean acidity likewise receives only two paragraphs and a few brief scattered statements generally noting that ocean acidity is a climate-induced change,⁸⁴ with no mention of the bleaching of coral reefs or imperilment of shellfish-dependent industries. The sole quantifications regarding changes to ocean acidity are very brief and unexplained in terms of their actual physical effects on the environment.⁸⁵ Furthermore, the quantifications for sea level rise and ocean acidification due to the Proposed Rollback also suffer from the same problem plaguing NHTSA's GHG impacts analysis (described above), in that NHTSA minimizes the ocean PH and sea level rise impacts by showing them in the context of a world that has utterly failed to take appropriate action to address catastrophic climate change.⁸⁶ Nor does there appear to be any discussion of the impact of warming ocean temperatures on ocean ecosystems, which is

⁸⁰ DEIS at S-15.

⁸¹ *Id.*

⁸² DEIS at 5.2.2.

⁸³ DEIS at 5-23 to 5-24, 5-40.

⁸⁴ DEIS at 5-24, 5-10, 5-16, and 8-44.

⁸⁵ DEIS at 5-31.

⁸⁶ *Id.*

already resulting in the dramatic northward migration of economically and culturally important species, such as New England’s American lobster.⁸⁷ Enormous changes in temperature are mentioned matter-of-factly⁸⁸ without acknowledgment of their impact on wild fires, safety of agricultural workers, or even suspension of airport operations—all of which have already begun to manifest themselves in the Southwest. The DEIS spends three pages on a table of “Regional Changes to Warming and Seasonal Temperatures” that provides skeletal, bareboned one-sentence descriptions that use vague terms such as “increase in frequency and duration of heat waves” and “more frequent droughts.”⁸⁹ NHTSA cannot claim that better and more descriptive information is not available—multiple recent reports by the federal government are replete with informative, graphic and digestible presentations of information on the impacts of climate change.

In summary, the Proposed Rollback would have tremendous GHG consequences, as it would essentially eviscerate one of the significant federal climate measures, without adequately disclosing the magnitude of that change to the public, and without providing any mitigation for the increased GHG emissions it would cause. The overwhelming scientific consensus finds that immediate and continual progress toward a near-zero GHG emission economy by mid-century is necessary to avoid truly catastrophic climate change impacts.⁹⁰ In the face of these stark scientific facts, NHTSA recklessly proposes to gut the primary emission reduction program for the United States’ single-largest sector for GHGs. Slamming the brakes on reductions in GHG emissions from U.S. light-duty vehicles for over half a decade would deal the fight against climate change a substantial blow. As it stands, the federal government’s own scientists believe that the commitments made by the U.S. and other nations through the Paris Agreement process⁹¹ provide less than a 10 percent chance of holding to a 3.6°F (2°C) temperature rise, and “there would be virtually no chance if emissions climbed to levels above those implied by the country announcements.”⁹² Yet, that is precisely the direction EPA’s Proposed Rollback points us, increasing the U.S.’ emissions above its commitment levels and hurling the nation and the world toward a point of calamity. NHTSA should revise the DEIS to inform the public of the magnitude of the GHG impacts of the Proposed Rollback.

4. The DEIS fails to adequately disclose the environmental impacts of the Proposed Rollback on minority and low-income communities

NHTSA’s environmental justice analysis is incomplete and inadequate. Executive Order 12,898 directs agencies to identify and address “disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations

⁸⁷ See States’ Appx. C-92.

⁸⁸ DEIS at 5-34.

⁸⁹ DEIS at 5-37 to 5-39.

⁹⁰ States’ Appx. C-1 to C-15.; *see also* States’ Appx. C-20 to C-37, Climate Science Special Report: Fourth National Climate Assessment, Vol. I. U.S. Global Change Research Program, Washington, D.C., USA (USGCRP), doi: 10.7930/JIM32SZG (hereafter “Fourth Nat’l Climate Assessment”) (“Stabilizing global mean temperatures to less than 3.6°F (2°C) above preindustrial levels requires substantial reductions in the net global CO₂ emissions prior to 2040 relative to present-day values and likely requires net emissions to become zero or possibly negative later in the century.”).

⁹¹ See <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>.

⁹² States’ Appx. C-20 at 398.

and low-income populations.”⁹³ In response to this Executive Order, the Council for Environmental Quality published guidance on how federal agencies should consider environmental justice under NEPA.⁹⁴ The EJ Guidance provides principles for considering environmental justice in NEPA analyses, including: ensuring sufficient opportunities for public input by minority, low income, and Native American populations; considering relevant public health data concerning potential health and environmental hazards of an action; and recognizing the “interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of the proposed action.”⁹⁵

In the DEIS, NHTSA concludes that the proposed action and alternatives will not have adverse human or environmental effects on people of color and low-income communities.⁹⁶ NHTSA itself undermines its conclusion when it acknowledges that low-income people and people of color are more exposed to environmental hazards from refinery and roadway pollution⁹⁷ and are more vulnerable to the effects of climate change.⁹⁸ Nevertheless, NHTSA claims that downstream emissions would decrease under all action alternatives.⁹⁹ Relying on studies that demonstrate “a disproportionate prevalence of minority and low-income populations living near mobile sources of pollutants,” the DEIS concludes that the action alternatives will result in “a net benefit to minority and low-income populations proximate to roadways in terms of reduced exposure to tailpipe emissions” compared to the augural standards.¹⁰⁰ This conclusion is premised entirely on the assumption that the action alternatives will reduce downstream emissions of criteria and toxic air pollutants. But, as stated above, the DEIS’s air quality impacts analysis is erroneous due to NHTSA’s reliance on baseless economic assumptions and flawed modeling. In fact, the Proposed Rollback will result in an increase in tailpipe emissions. These increased emissions *will* adversely affect people living within 200-500 meters of high-volume roadways, including disproportionate impacts to low-income communities and communities of color, as discussed in detail in CARB’s Comments.¹⁰¹ NHTSA must therefore reconsider its conclusion that the Proposed Rollback will result in a “net benefit” to environmental justice communities located near mobile sources.

Likewise, NHTSA claims that the magnitude of the increase in upstream emissions from oil production and distribution from the proposed action, compared to the augural standards, is “very minor” and cannot be characterized as disproportionate.¹⁰² Again, because of the inaccuracy of the DEIS air quality impacts analysis, NHTSA’s claim is incorrect. NHTSA also claims that the potential increase in fuel production and consumption as a result of the Proposed Rollback will result in higher emissions of criteria and toxic air pollutants, but concludes that disproportionate impacts on environmental justice communities are not foreseeable because “a

⁹³ Exec. Order No. 12,898, 59 Fed. Reg. 7,629 (Feb. 11, 1994).

⁹⁴ CEQ, Environmental Justice: Guidance Under the National Environmental Policy Act (Dec. 1997) (“EJ Guidance”), available at <https://ceq/doe.gov/docs/ceq-regulations-and-guidance/regs/ej/justice.pdf>.

⁹⁵ EJ Guidance, at 8-10.

⁹⁶ DEIS at 7-11 - 7-12.

⁹⁷ PRIA at 1317-1318, *see also* DEIS at 7-10.

⁹⁸ DEIS at 7-11.

⁹⁹ *Id.*

¹⁰⁰ DEIS at 7-10.

¹⁰¹ *See* CARB’s Comments at 294-309.

¹⁰² DEIS at 7-11.

correlation between proximity to oil refineries and the prevalence of low-income and minority populations has not been established in the scientific literature.”¹⁰³ Contrary to NHTSA’s assertions, the correlation is well established in the scientific literature. Indeed, the Office of Environmental Health Hazard Assessment recently issued a report finding that 15 of 20 refineries in California are located in or within ½ mile of a disadvantaged community.¹⁰⁴ For these reasons, NHTSA must revise the DEIS to adequately disclose the environmental impacts of the Proposed Rollback on minority and low-income communities.

5. The DEIS erroneously concludes that the Proposed Rollback will not affect endangered species

The DEIS fails to take a “hard look” at the effect the Proposed Rule’s action alternatives will have on species listed under the federal Endangered Species Act (ESA), and NHTSA wrongly concludes that it need not consult with the United States Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NOAA Fisheries) about these impacts. Section 7(a)(2) of the ESA requires that federal agencies consult with the FWS or NOAA Fisheries to ensure the actions they fund, authorize, or implement are “not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat of such species.” 16 U.S.C. § 1536(a)(2). The consultation procedures clarify that this requirement is intended for actions that “may affect” listed species or critical habitat, 50 C.F.R. § 402.14, and it is generally the agency’s responsibility to determine whether consultation is required. *See* 51 Fed. Reg. 19,926, 19,949 (June 3, 1986). In making this determination, agencies must consider whether there is a causal connection between the proposed action and direct or indirect effects on species or critical habitats. 50 C.F.R. § 402.02.

NHTSA admits that all action alternatives will increase GHG emissions compared to the augural standards.¹⁰⁵ NHTSA claims, however, that consultation under ESA section 7(a)(2) is not required because “any potential for a specific impact on particular listed species and their habitats associated with emissions changes” are “too uncertain and remote to trigger the threshold of such a consultation.”¹⁰⁶ NHTSA’s claims are baseless. FWS recognizes there is a large body of evidence that GHG emissions accelerate climate change and drastically affect

¹⁰³ *Id.* at 7-10.

¹⁰⁴ States’ Appx C-80.

¹⁰⁵ DEIS at 5-31.

¹⁰⁶ DEIS at 7-1. NHTSA appears to rely on the determination by FWS that GHG emissions from individual stationary sources are “too remote” to warrant consultation. *See* Memorandum from H. Dale Hall, Director, U.S. Fish and Wildlife Service re: “Expectations for Consultation on Actions that Would Emit Greenhouse Gases” (May 14, 2008), *available at* <https://www.fws.gov/policy/m0331.pdf>. That determination is not applicable here. That determination concerned only whether the emissions resulting from the oil extracted at an individual oil field were too remote to warrant consultation. (*Id.* at 2.) By contrast, NHTSA’s CAFE standards regulate all light-duty vehicles, which account for 60% of U.S. emissions in the transportation sector and are the largest contributor of GHG emissions in the nation.

listed species.¹⁰⁷ Additionally, policies that increase GHG emissions lead to compounding effects that make mitigation increasingly difficult by accelerating climate change.¹⁰⁸

Thus, NHTSA's proposed action resulting in a significant increase in GHG emissions "may affect" many federally-listed threatened and endangered species that are at the risk of extinction because of climate change. Indeed, peer-reviewed scientific demonstrates that increased climate change fueled by GHG emissions is already and increasingly will become a significant driver of species decline, extinction, and biodiversity loss.¹⁰⁹ NHTSA must consult with FWS and NOAA Fisheries under Section 7(a)(2) of the ESA to ensure that NHTSA's proposed actions will not jeopardize listed species or destroy or adversely modify their critical habitat.

6. The DEIS fails to adequately address the environmental consequences of the action on historic resources

The National Historic Preservation Act requires that the "head of any Federal agency" embarking on a project, "prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, shall take into account the effect of the undertaking on any historic property."¹¹⁰ Climate change and air pollution imperil historic properties throughout the country via direct degradation, sea level rise, fire, flood, and other forms of harm. As former National Park Service Director Jon Jarvis explained: "[c]limate change poses an especially acute problem for managing cultural resources because they are unique and irreplaceable — once lost, they are lost forever. If moved or altered, they lose aspects of their significance and meaning."¹¹¹ If NHTSA completes an undertaking that may further imperil these resources, it must properly consult with the relevant federal and state authorities and fully disclose any impacts. The DEIS concludes the Proposed Rollback would not significantly impact historical and cultural resources. NHTSA claims it would reduce NOx emissions, and because "it is not possible to distinguish between acid deposition deterioration impacts and natural weathering (rain, wind, temperature, and humidity) impacts on historical buildings and structures and the varying impact of a specific geographic location on any particular historical resource." (DEIS at 7-7.) As explained above, the Proposed Rollback would not reduce NOx emissions. NHTSA must consult with relevant federal and state authorities, and must properly support its determination that it is not possible to identify impacts on historical buildings and structures.

¹⁰⁷ See FWS website, *Consequences for Wildlife*, <https://www.fws.gov/home/climatechange/impacts.html>. See also Testimony of Dan Ashe, Dir., FWS, Dep't of the Interior, Before the U.S. House of Reps., Comm. on Oversight and Gov. Reform, Subcomm. on Interior, Regarding Barriers to Recovery and Delisting of Listed Species Under the Endangered Species Act of 1973 (Apr. 21, 2016), available at <https://www.doi.gov/ocl/esa-delisting>; see also, e.g., National Park Serv., "Climate Change Endangers Wildlife" (June 3, 2018) (noting "estimate[s] that 35% of animals and plants could become extinct in the wild by 2050 due to global climate change"), available at https://www.nps.gov/pore/learn/nature/climatechange_wildlife.htm.

¹⁰⁸ States' Appx. C-1 to C-15.

¹⁰⁹ See States' Appx. C-97.

¹¹⁰ 54 U.S.C. § 306108.

¹¹¹ See States' Appx. C-94.

E. NHTSA must identify mitigation measures that address the adverse environmental impacts of the proposed action alternatives

NHTSA dedicates only four sentences in the DEIS to mitigation measures, claiming it does not need to include mitigation measures to minimize adverse environmental impacts in the DEIS since “NHTSA does not have the jurisdiction to regulate the specified pollutants that are projected to increase as a result of the Proposed Action and alternatives.”¹¹² NHTSA has not met its statutory duty under NEPA to provide a detailed statement on the environmental impacts and reasonable alternatives to a proposed project, including alternatives and mitigation measures outside the scope of the agency’s authority. *See* 40 C.F.R. § 1502.14(c) (stating agencies shall “[i]nclude reasonable alternatives not within the jurisdiction of the lead agency”). A “hard look” review of mitigation measures under NEPA must account for “all foreseeable direct and indirect impacts,” discuss adverse impacts without “improperly minimiz[ing] negative side effects,” and not rely on “[g]eneral statements about possible effects.” *League of Wilderness Defenders-Blue Mountains Biodiversity Project v. U.S. Forest Serv.*, 689 F.3d 1060, 1075 (9th Cir. 2012). Thus, NHTSA must do more than merely list examples of mitigation concepts, but rather discuss measures it may implement “in detail and explain the effectiveness of the measures.” *Nw. Indian Cemetery Protective Ass’n v. Peterson*, 795 F.2d 688, 697 (9th Cir. 1986), *rev’d on other grounds*, 108 S.Ct. 1319 (1988).

At a minimum, NHTSA must include a thorough discussion of all reasonable mitigation measures and detail the appropriate agencies that could implement such measures. NHTSA admits that mitigation measures to the proposed action include “further EPA emissions standards for passenger cars and light trucks.” At the same time, EPA—a cooperating agency for the DEIS—is jointly proposing to weaken its GHG emission standards for vehicles. NHTSA’s claim that its “hands are tied” is thus contrary to NEPA and inherently inconsistent with the proposed rulemaking. NHTSA further states that “mechanisms to encourage the reduction of VMT” may mitigate the adverse environmental impacts of the proposed action and alternatives.¹¹³ NHTSA must include a detailed discussion of these “mechanisms” in the DEIS, which may include such federal actions as creating tax breaks for transit and biking, expanding transportation demand management programs for federal employees, implementing a social marketing campaign regarding VMT reduction, increasing dedicated funding for transit and active modes, requiring VMT as a performance measure for federal funding, and providing NEPA guidance on evaluating VMT impacts of federal projects.¹¹⁴

III. CONCLUSION

Given the deficiencies identified above, NEPA requires that NHTSA withdraw its inadequate DEIS, and if the entire Proposed Rollback is not withdrawn, draft a new DEIS responsive to the comments submitted, and allow additional time to comment on the new DEIS that is consistent with applicable laws.

¹¹² DEIS at 9-2.

¹¹³ *Id.*

¹¹⁴ *See* expert report of Susan Handy attached to CARB Comments, “Potential Federal Actions to Reduce Vehicle Travel” (Oct. 16, 2018).