August 18, 2008

Mr. Stephen Kratzke
Associate Administrator
National Highway Traffic Safety Administration (NHTSA)
1200 New Jersey Ave., SE
Department of Transportation, West Building
Washington, DC 20590

Comments on Draft Environmental Impact Statement (EIS) for New Corporate Average Fuel Economy Standards, 73 FR 37922, July 2, 2008, Docket No. NHTSA-2008-0060

Dear Associate Administrator Kratzke:

Public Citizen respectfully submits these comments on the draft Environmental Impact Statement (EIS) prepared by the National Highway Traffic Safety Administration (NHTSA) to accompany the new Corporate Average Fuel Economy (CAFE) standards proposed May 2, 2008.[1] These CAFE standards have been proposed pursuant to the Energy Independence and Security Act, and the EIS has been prepared consistent with the findings of the Ninth Circuit Court of Appeals in *Center for Biological Diversity v. National Highway Traffic Safety Administration*.[2]

NHTSA has not completed this draft EIS in accordance with the requirements under the National Environmental Policy Act (NEPA).[3] This document does not put the potential impacts of fuel economy standards in a context that allows for a meaningful comparison of alternatives, which unfairly biases judgment in favor of NHTSA's preferred action. The purpose of the EIS process is to provide an analysis of the environmental impacts that allows decision makers to consider whether the preferred action is also the action that produces the greatest environmental benefits.

The implications of this draft EIS extend beyond its impact on the CAFE rulemaking. The agency has a responsibility to develop this document thoughtfully and with appropriate attention to the unique challenges of tackling an EIS that treats a global problem. Putting the impacts of each alternative into the proper context is absolutely vital to comparing regulatory alternatives. Because the scope of global warming is great, and action will be required by multiple actors and policies, it is impossible for this single action to resolve the problem. However, it is wrong to take the perspective that because this action alone is inadequate that it is unnecessary to compare regulatory alternatives and take the action that puts us on the correct path to reducing greenhouse gas emissions from light duty vehicles.

The need for appropriate and decisive action in reducing greenhouse gas emissions across the entire economy requires that each sector identify its role in achieving these reductions, which is why it is particularly troubling that NHTSA has not effectively contextualized the role that fuel economy standards play in reducing global warming pollution.

Public Citizen has the following concerns with the draft EIS:

- NHTSA has not considered a full range of alternatives to the agency's proposed action.
- NHTSA has not placed the impacts into a meaningful or useful context to aid decision makers and the public in selecting the proper course of action.
- NHTSA has constrained the evaluation of the various impacts of different alternative scenarios in its use of the CAFE Compliance and Effects Model (commonly, the Volpe model).

Range of Alternatives

The range of alternatives is the "heart" of the EIS, with comparisons of the impacts of various alternatives "sharply defining the issues and providing a *clear basis* for choice among options by the decisionmaker and the public."[4] To this aim, NHTSA has neither sharply defined the issues, nor has it provided a clear basis for choice among the options. Furthermore, NHTSA has not fulfilled the obligation to "rigorously explore and objectively evaluate all reasonable alternatives," "[i]nclude reasonable alternatives not within the jurisdiction of the lead agency," or "[i]nclude appropriate mitigation measures not already included in the proposed action or alternatives."[5] NHTSA's range of alternatives is unreasonably constrained by the Volpe model's assumptions regarding the inputs, and NHTSA does not consider other reasonable alternatives out of its jurisdiction.

The National Environmental Policy Act (NEPA) requires that the EIS "serve as an *action-forcing* device to insure that the policies and goals defined in the [National Environmental Policy] Act are infused into the ongoing programs and actions of the Federal Government."[6] NHTSA provides a range of alternatives for this draft EIS which amount to merely tweaking the economic assumptions that are used in the Volpe model. NHTSA has obfuscated the relative benefits of the alternatives it considered by not putting the impacts in context.

NHTSA has unreasonably constrained its range of alternatives, omitting a number of reasonable options. For example, NHTSA considered but did not analyze in detail more aggressive or accelerated standards. Instead, the agency asserts that it requires standards be raised by 4.5 percent per year, a rate fast enough that extended to 2020 would exceed the 35 by 2020 mandate of Congress. The agency explains, "other alternatives that would establish higher CAFE standards would result in larger fuel savings and emission reductions than those resulting from the preferred alternative. However, they would also result in lower net benefits than the preferred alternative due to higher costs to society. As such, NHTSA is already considering accelerated fuel economy standards."[8]

NHTSA does not consider impacts of extending fuel economy standards beyond the mandated 35 mpg by 2020, although there is clear need and a Congressional mandate to continue to improve efficiency to make the reductions that are needed, which serves to minimize the value of action when NHTSA extrapolates the benefits to 2100. However, EISA requires that NHTSA set fuel economy standards that are the maximum feasible for each model year from 2021-2030. Standards that exceed the 2020 level should be considered to increase at least until 2030, when the statutory mandate ends. It is also reasonably foreseeable that fuel economy standards or some combination of policies will be employed to continue to reduce oil consumption beyond 2020.[9]

The agency also does not include a technology-forcing alternative as required by Energy Policy and Conservation Act (EPCA).[10] While EPCA does not provide explicit guidance, NHTSA has been chided in its interpretation of the balance of the four factors in the statute. In *Center for Biological Diversity v. NHTSA*, the Ninth Circuit Court of Appeals found that NHTSA's weighing the value of consumer choice over the "need of the nation to conserve energy" was arbitrary and capricious. The courts have affirmed the idea that technology-forcing statutes can impose standards that are at the technology horizon – levels which only the most advanced facilities in an industry may only achieve some of the time.[11]

Consideration of alternatives not within the jurisdiction of the lead agency and mitigation measures not included in the proposed action or alternatives are particularly important in addressing the implications of fuel economy standards on reducing greenhouse gas emissions. NHTSA must therefore consider actions that fall outside the scope of the proposed action, and outside of the agency's jurisdiction – something it specifically failed to do when it stated in the draft EIS: "NHTSA emphasizes to the reader of this DEIS that the proposed action does not directly regulate the emissions from passenger cars and light trucks. NHTSA does not have that authority."[12]

In *Center for Biological Diversity v. NHTSA* the Ninth Circuit cites *Center for Auto Safety v. NHTSA*: "Congress intended energy conservation to be a long term effort that would continue through temporary improvements in energy availability. Thus, it would clearly be impermissible for NHTSA to rely on consumer demand to such an extent that it ignored the overarching goal of fuel conservation."[13] Climate policy will also be a long term effort that will require consistent policy to achieve goals with a long horizon and whose benefits are even further in the future. For any action we take to meet greenhouse gas emission reduction targets to be meaningful, the policy must be consistent through periods of variability.

Context

An EIS is meant to aid decision makers and the public in assessing the relative value of a proposed action or alternative. For this draft EIS to be useful as a decision-making tool, it must compare the impacts of various alternatives in the proper context. Light duty vehicles built for sale in the United States are part of the whole set of greenhouse gas-emitting sources, regulation of which, as NHTSA has stated, cannot alone stop global warming from happening.[14] However, the agency has not established a meaningful context, instead choosing to extrapolate the benefits of each alternative over the entire globe 90 years into the future. NHTSA must discuss the

benefit of any action in terms of its impact on climate change and it must be placed into a context that includes other strategies to reduce greenhouse gas emissions. This perspective allows for decision makers and the public to judge whether the agency's proposed action results in emissions reductions that are consistent with the contribution to emissions from light duty transportation in light of the technological feasibility of making those emissions reductions.

The draft EIS states that none of the proposed alternatives actually result in absolute reductions in greenhouse gas emissions, but instead result in a reduced rate of greenhouse gas emissions from light duty passenger vehicles.[15] NHTSA must therefore consider fuel economy standards as part of a comprehensive strategy to reduce greenhouse gas emissions from light duty transportation that may include policies that are not within its jurisdiction. NEPA requires "considerations of both context and intensity. . . . [Context] means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant."[16] In this case, significance requires that NHTSA consider impacts in the context of multiple strategies for reducing greenhouse gas emissions from light duty transportation as part of a comprehensive strategy to achieve atmospheric concentrations of greenhouse gases that will prevent the most harmful effects of global warming.

For the context to be meaningful, NHTSA needs to establish a target for greenhouse gas reductions. It can then show how the various proposed alternatives fit into the reductions that are necessary from the U.S. light duty transportation sector to meet that target. Public Citizen supports reduction of atmospheric concentrations of CO_2 to 350 parts per million (ppm) to prevent the most catastrophic effects of climate change.[17] The policy debate surrounding global warming has considered other targets for atmospheric concentrations, such as 450 ppm or 550 ppm. Public Citizen does not seek to resolve the question of a target for atmospheric concentrations of greenhouse gases at this time, nor does it expect that NHTSA resolve this question in the draft EIS. However, NHTSA must present the regulatory alternatives for fuel economy standards required under EISA such a way as to present a clear choice to decision makers and the public. The agency must therefore select a target or range of atmospheric concentrations of greenhouse gases to provide a framework within which it can discuss the relative benefit of different regulatory options.

NHTSA cannot dictate national and international climate policy through this draft EIS, nor would it be desirable that it do so. When the Environmental Protection Agency (EPA) completed an analysis of pathways to reduce greenhouse gas emissions from the transportation sector it modeled scenarios for 450, 550, 650 and 750 ppm.[18] In its analysis, EPA also looked at three approaches to reducing greenhouse gases from the transportation sector: improvements in vehicle technology, reducing greenhouse gas emissions from transportation fuels, and employing tactics to achieve reductions in travel demand.

NHTSA has also influenced the context by choosing a baseline that is too low. The agency's baseline is the no action alternative; however, the agency assumes fuel economy levels of 27.5 mpg for passenger cars and 23.5 mpg for light trucks.[19] NHTSA's most recent report on

the level of fuel economy performance of vehicles estimates that passenger cars are getting 31.2 mpg and light trucks are getting 23.4 mpg.[20] However, even this level of fuel economy is unlikely to capture a real baseline, considering the intense shift in consumer demand for fuel efficient vehicles and the auto industry's scrambling to produce and market more efficient vehicles.[21]

Volpe Model

Public Citizen opposes the use of marginal cost-benefit analysis in estimating the maximum feasible level of fuel economy, as this type of economic analysis structurally fails to set the maximum feasible level. We acknowlege that the Ninth Circuit Court of Appeals reserved judgment: "[EPCA] is silent on the precise question of whether a marginal cost-benefit analysis may be used;" however, the Court also admonished the agency for not putting enough emphasis on the need of the nation to conserve energy.[22] The structure of the Volpe model is such that the standards it prescribes are heavily influenced by the economic assumptions and product plans provided by the auto industry.

The Volpe model for fuel economy is structured in such a way that it undercuts the maximum feasible level of fuel economy statutorily mandated by EPCA. This is because the model is designed to minimize the estimate of what is technologically feasible and economically practicable. The fuel economy targets set by the Volpe model are a direct product of the economic assumptions made in the inputs to the model. The model also constrains the level of fuel economy by excluding technologies judged not to be cost efficient, and applying phase-in caps on certain technologies, which skews the impacts across the entire range of alternatives.

Since the economic assumptions NHTSA makes in the Volpe model are the single biggest factor in determining the level of fuel economy standards, it is vitally important that its estimates be as accurate as possible. NHTSA's sensitivity analysis of the model shows that the model is most sensitive to changes in the price of gasoline; however, the assumptions the agency makes about the future price of fuel have been the source of significant controversy. Public Citizen commented more extensively about the economic assumptions made in the Volpe model for NHTSA's Notice of Proposed Rulemaking (NPRM) for the CAFE standards, but we would like to make the following comments on the economic assumptions:[23]

- The future fuel price assumptions are unjustifiably low, assuming at 2030 price of gasoline at $2.51. The administrator of the Energy Information Administration has publicly stated that NHTSA should use the high-end estimate in setting fuel economy standards.[24]
- NHTSA has set the price of CO_2 arbitrarily and too low. The agency chose a value of $7/ton CO_2 based on a 2005 meta-analysis of estimates of the price per ton of carbon by Richard S. J. Tol, from which NHTSA estimated prices per ton of carbon, and NHTSA converted the range to $0-14 per ton CO_2. In comments to NHTSA's NPRM, Tol commented that NHTSA has improperly indexed the values in the Tol paper, as they were in 1995 dollars instead of 2005 dollars, and also that a 2007 paper he authored found larger estimates than the 2005 paper.[25]

- NHTSA has assumed a very high rebound effect, which also influences its assumptions both in the appropriate level of standards and the potential environmental benefits of each of the range of alternatives.

The Volpe model inappropriately constrains NHTSA from considering a reasonable range of alternatives. As we have described above, and in our comments to the NPRM, the economic assumptions NHTSA makes in the Volpe model inaccurately underestimate the maximum feasible level of fuel economy. Each of the alternatives proposed by the agency are based on the preferred action proposed by NHTSA, and the benefits of each alternative are estimated using the assumptions contained in the Volpe model.

The Volpe model also uses incomplete and inaccurate inputs from the auto industry to make projections about the future fleet mix and market preference. NHTSA solicited the automakers to provide product plans with which it could complete the modeling to set the fuel economy standards. However, many of the automakers solicited provided incomplete data, or no data at all. In these cases, NHTSA assumed that automakers would make no change from model year to model year, which skews the model to prefer no change in vehicle characteristics or fleet mix. In recent months, several major automakers have announced plans to substantially change their product plans.[26]

The Volpe model does not estimate market shifts, and therefore cannot predict the experience of recent months, where sales of light trucks have plummeted and sales of small cars have skyrocketed in response to high oil prices.[27] The vehicles automakers are offering do not achieve a level of fuel economy consumers want, and vehicles that comply with the 2011-2015 standards will not achieve a level of fuel economy that consumers want.[28] NHTSA's failure to effectively regulate the industry has resulted in a market that offers too few choices to consumers, and the Volpe model will exacerbate this problem rather than correct it, by relying on outdated information from the automakers.

The assumptions made as part of the Volpe model serve to resist aggressive fuel economy improvements, and even the most aggressive alternative considered falls short of what American consumers want, and what other countries are requiring. The minimizing effect of the economic assumptions used Volpe model serves to obscure the relative benefits of its proposed alternatives.

Conclusion

Public Citizen would like to express disappointment that the agency is furthering the Bush administration's policy of inaction on global warming. The agency has crafted its draft EIS in such a way to obscure the relative benefit of a limited range of regulatory options, which is contrary to legal requirements in developing the document. Rather than present options in a context that allows for clear comparison between regulatory alternatives, it has obfuscated the relative benefits by extrapolating them to global impacts until 2100. NHTSA's promotion of inaction is consistent with the Bush administration's inaction on all global warming action.

EPCA was passed at a time of national anxiety about oil prices, energy security, and environmental consequences of petroleum. Congress intended that this new policy would encourage not just a reduction in petroleum consumption, but it would encourage energy policy to include principles of conservation into the future. The implementation of EPCA in the years between 1985 and the enactment of EISA have not been consistent with these goals. NHTSA incorrectly based the need of the nation to conserve energy on the price of oil. The agency's failure to appropriately intervene and raise fuel economy standards during the period of relatively low oil prices during the 1980s and 1990s has made consumers and the auto industry vulnerable to exactly the kind of market shift that has happened in the past year.

In the face of spiking oil prices, Congress acted in 2007 to mandate that NHTSA raise fuel economy standards again. However, as the House Select Committee on Global Warming and Energy Independence explained in a July 2008 report, had Congress acted in 1994 to raise fuel economy standards again, the fleet of passenger cars and light trucks would have already been getting 35 miles per gallon in 2006.[29]

History has shown that energy policy requires a long view, and consistency of policy that extends far into the future. NHTSA's role as a regulatory agency is to require incremental increases in conservation and efficiency to give consumers and the auto industry more flexibility to respond to a volatile and competitive energy market, and also to play its appropriate role in protecting against the most harmful effects of global warming. This draft EIS fails to promote consistent, effective policy both in terms of energy and the environment.

[1] *See* 73 FR 24352, 24487. (May 2, 2008).
[2] Energy Independence and Security Act (EISA). P.L. 110-140 (Dec. 19, 2007). & *Center for Biological Diversity et al., v. NHTSA.* 508 F. 3d 508. (Nov. 15, 2007).
[3] 42 U.S.C. §4321 et seq., Pub. L. 91-190 (Jan. 1, 1970).
[4] 40 CFR 1502.14. emphasis added.
[5] *Id.*
[6] 40 CFR 1502.1. emphasis added.
[8] *See Draft Environmental Impact Statement, Corporate Average Fuel Economy Standards, Passenger Cars and Light Trucks, Model Years 2011-2015*. National Highway Traffic Safety Administration. (June 2008). at 2-11.
[9] *See* Comments of Natural Resources Defense Council to NHTSA-2008-0060 at 0557. (Aug. 14, 2008).
[10] Energy Policy and Conservation Act. Pub. L. 94-163 (Dec. 22, 1975).
[11] *See Kennecott Greens Creek Mining Co. v. Mine Safety and Health Administration*. 476 F.3d 946, 957 (D.C. Cir. 2007). & *United Steelworkers of America, AFL-CIO-CLC v. Marshall* 647 F.2d 1189, 1246 (D.C. Cir. 1980).
[12] Draft EIS at S-4. *Supra* note 6
[13] *Center for Auto Safety v. NHTSA*. 793 F.2d 1322, 1338. (Jun. 20, 1986).
[14] DEIS at S-4. *Supra* note 6.
[15] *Id.*
[16] 40 CFR 1508.27
[17] *See* James Hansen et al. "Target Atmospheric CO_2: Where Should Humanity Aim?" (April 2008). Available at < http://www.columbia.edu/~jeh1/2008/TargetCO2_20080407.pdf>
[18] "A Wedge Analysis of the U.S. Transportation Sector." Environmental Protection Agency. EPA420-R-07-007. (April 2007).
[19] Draft EIS at 2-7. *Supra* note 6.
[20] "Summary of Fuel Economy Performance." National Highway Traffic Safety Administration. (Mar. 2008).
[21] *See* Leslie Allen. "GM Expands Fuel Efficient XFE Lineup for 2009." *Automotive News.* (Aug. 12, 2008). & Bill Vlasic. "As Gas Costs Soar, Buyers Flock to Small Cars." *New York Times.* (May 2, 2008).
[22] *Center for Biological Diversity v. NHTSA*. *Supra* note 2.
[23] *See* Comments of Public Citizen to NHTSA-2008-0089 at 0187. (Jul. 2, 2008).
[24] *See* letter from Rep. Rahm Emmanuel and Rep. Edward Markey to President Bush. (Jun. 18, 2008) & David Shephardson. "House committee chair urges NHTSA to set tougher fuel economy requirements." *The Detroit News.* (Jun. 26, 2008).
[25] S*ee* Comments of Richard S.J. Tol to NHTSA-2008-0089 at 0152 (Jun. 30, 2008)
[26] *See* Tom Krishener. "GM to close 4 plants, focus on small cars." Associated Press. (Jun. 3, 2008). & Christine Tierney. "Even Toyota must retool in the U.S." *The Detroit News*. (Aug. 11, 2008).
[27] 73 FR 24394.
[28] *See* Consumer Federation of America. "Consumers Want Fuel Economy They Can't Find." (Apr. 21, 2008).
[29] *See* House of Representatives, Select Committee on Energy Independence and Global Warming. "Republican Regret: What if a Republican Congress had passed, not blocked, higher fuel economy standards?" (Jul. 29, 2008). Available at < http://globalwarming.house.gov/tools/2q08materials/files/0123.pdf>