September 6th 2022

Steven Cliff and Pete Buttigieg
National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT)
1200 New Jersey Avenue SE
Washington, DC

RE: Model Years 2027 and Beyond Corporate Average Fuel Economy Standards and Model Years 2029 and Beyond Heavy-Duty Pickup Trucks and Vans Vehicle Fuel Efficiency Improvement Program Standards

DOCKET NO. NHTSA-2022-0075

Dear Dr. Cliff and Secretary Buttigieg,

Thank you for the opportunity to comment on the *Notice of Intent To Prepare an Environmental Impact Statement for Model Years 2027 and Beyond Corporate Average Fuel Economy Standards and Model Years 2029 and Beyond Heavy-Duty Pickup Trucks and Vans Vehicle Fuel Efficiency Improvement Program Standards*. The impacts of these standards will be large and have the potential to encourage the production of higher efficiency vehicles, including electric vehicles. The stated goal of the NHTSA, when it comes to fleet fuel economy standards, is to reach “the maximum feasible average fuel economy level that . . . the manufacturers can achieve in that model year” (49 U.S.C. 32902(a).). This average fleet fuel economy of a manufacturer is calculated, in short, by dividing the total number of vehicles produced, in the specified classification (passenger or heavy-duty), by the sum of the divisions of models by their targeted fuel efficiency.

As a U.S citizen, I will be directly affected by these standards set by NHTSA if I chose to purchase these cars with the model years specified, and by the environmental impacts of less fuel consumption. Being environmentally conscious, I would prefer that the vehicles on the road and available to purchase, are (on average) as fuel efficient as they can be. I understand that the feasibility aspect of the average fuel economy means that the standard shall be “appropriate, cost-effective, and technologically feasible”(49 U.S.C. 32902(a).). To clear up a few terms, CAFE means Corporate Average Fuel Economy and FE means fuel efficiency.

The first aspect I would like you to consider is the rising adoption of electric vehicles and its upward pressure on fleet average fuel economy. I understand and imagine that this has been planned to be included in the draft EIS, but I believe that the strength of EV adoption should not be underestimated.

Just this past July, the U.S passed an important threshold in the EV space with 5% of new vehicle sales being EVs. This is a very important threshold, as after that threshold has been passed adoption tends to surge. (Randall) This adoption can be seen in other countries such as Norway. In addition, it is estimated that 50% of new vehicle sales could be EVs by the year

2035.(DeGraff) Given the incredible efficiency of these vehicles, around 100MPGe and rising, combined with rising adoption rates the maximum feasibility should continue to be raised.

The second aspect for consideration is the environmental effects of setting a high standard. The setting of this high standard will almost certainly cause more investment in the production of electric vehicles, and the environmental degradation caused by such investment, i.e. mining, must be considered. This would count as a reasonably foreseeable indirect effect.(CEQ) This environmental degradation, in the long run, could create problems that impact the economic feasibility of the standards.

For example, there is currently a debate ongoing whether to allow Perpetua Resources, formerly known as Midas Gold, to reopen a mining operation at Stibnite Mine. Some of the resources they are attempting to extract are gold and antimony. These metals are incredibly vital in the production of lithium-ion batteries as well as semiconductors, both of which are fundamental ingredients in EVs and PHEVs, plug-in hybrids. An EIS has already been conducted on this mining operation, which has been attached below, and I have also linked a relevant local news article to explain the context. I know it is impossible, and do not expect this draft EIS to include detailed analysis on the environmental effects of mining at potentially specific locations. Rather, I would like this draft EIS to include the estimated aggregate effects of more mining locations across the U.S. Some of those environmental effects could be: loss of habitat, contamination of water supplies from run off, and emissions related to run off.

Some of the minerals that would be mined, due to the increased need for EVs in compliance with the CAFE standards, are gold, lithium, and antimony. Looking at these specific minerals are carbon emissions related to extracting each of these. In addition, antimony is poisonous and carcinogenic to humans. There are many more minerals and elements essential to EV production that would require increased extraction to comply with federal CAFE regulations. The environmental health and human health impacts caused by emissions, land use change, contamination and others must be considered from increased mining of resources related to EVs. Over-extraction, and pollution degrade the environment and human health, which had the potential to disrupt, and impact the economic feasibility of the CAFE and FE standards.

The final aspect I am proposing for consideration is the price effect on both new and used passenger vehicles and heavy duty trucks from new standards. It is reasonable to assume that the higher the standards, the more investment needed by companies to produce them. These standards are not the only driver of company investments, but they do factor in. The more investments that are required the higher the price of a vehicle can be expected. (Leard) The EIS should consider the environmental justice and economic effects of these potentially higher prices, especially on lower-income communities. Again, I believe this is a reasonably foreseeable indirect effect. In addition, environmental justice falls under what must be reviewed as part of this draft EIS and if prices are too high for consumers, then it would affect the “economic practicability” (49 U.S.C. 32902(a).) of these standards.

In this case, with the assumption that higher standards would put upward pressure on car prices, these standards would have a disproportionate impact on the poorest Americans. Given the spread out nature of essential infrastructure in the United States and lack of public transportation in most areas, owning a car is for many, essential for one's livelihood. Despite being a basic necessity, a vehicle is already not affordable for many. As of 2019, more than 7 million Americans are already 90 or more days behind on their car loans. (Carey) While an increase in CAFE standards would only directly impact the cost on new vehicles, it has been seen that new vehicle prices are correlated to used car prices. (Purohit) Thinking economically; if people are priced out of the new vehicle market, then some of those people will move to the used vehicle market, driving up demand and price. These price increases will have a disproportionate negative effect on the poorest Americans, so by increasing CAFE/FE there is a major economic effect to consider. It is then a matter of environmental justice and economic feasibility, that the NHTSA must look into and analyze the impacts of.

When looking at possible policy options, a no action alternative would simply be continuation of the most recent CAFE standards. and the possible range of future CAFE standards are all standards that achieve the goal of “maximum feasible“. I understand that these are the only alternatives that exist due to laws requiring the NHTSA to set standards.(49 U.S.C. 32902(a).) Working within these options, a standard should be developed that is as high as feasibly possible in order to slow global temperature rise by combating the use of oil, however there are potentially negative environmental & health effects as well as environmental justice concerns. Both of these concerns do have indirect effects on the economic feasibility of the standards. There is not one standard that fits this “maximum feasible” (49 U.S.C. 32902(a).) definition, but rather a range of possibilities. Therefore, if there is seen to be significant and avoidable environmental and health effects as well as environmental justice effects that have impacts on the long term economic feasibility of these standards, then I would encourage the NHTSA to take the lower alternative. While the only mandate for the NHTSA is to find the maximum feasibility, there is some wiggle room on this front. I encourage the NHTSA and DOT to take into consideration the environmental and environmental justice concerns I have discussed.

I fully support the NHTSA and its pursuit of CAFE/FE standards that achieve maximum feasibility, and hope that when it comes to maximum feasibility, the full impact of EVs are imputed into decision making. I also advise that the environmental/health degradation impacts and environmental justice impacts are given adequate attention in the draft EIS statement so that the public and administrators are aware of their scope and effect on economic feasibility of the standards.

Sincerely,
Tyler Daniel Beauchesne

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