The Trump Administration has many energy and environmental initiatives, none of them good. But in terms of shoddy analysis and tenuous evidence, the worst is the Administration's attempt to freeze fuel efficiency standards. For sheer lack of professionalism, the Administration's cost-benefit analysis is hard to match. And you can't even say that the Administration is captive to industry, because this isn't something industry asked for. It's a case of untethered ideology trumping evidence and economics.

By way of background, §202 of the Clean Air Act requires EPA to impose standards for emissions from new motor vehicles once it has found that a pollutant endangers human health or welfare. During the Obama Administration, EPA issued such standards for greenhouse gases, in tandem with the National Highway Traffic Safety Administration (NHTSA, pronounced 'nitsa'), which regulates fuel efficiency standards for vehicles. The car industry was already under pressure because of regulations adopted in California, so the agencies were not writing on a blank slate. Those standards were scheduled to become increasingly strict for the next several years. The Trump Administration proposed freezing the standards at their current levels (dubbing their proposal the SAFE rule). Such a regulatory action could cause problems for car manufacturers, because California has its own standards for vehicle carbon emissions. Consequently, the manufacturers opposed freezing the standard and urged the Trump Administration to negotiate a compromise with California.

But Trump's EPA and NHTSA eschewed compromise and took a different approach in the proposed SAFE rule. It not only proposed freezing the national standards but also proposed to preempt California's standards. The agencies estimated that regulatory costs would decrease by $502 billion at a 3% discount rate ($335 billion at a 7% discount rate), while benefits would decrease by $326 billion, as compared with implementing the Obama-era rule. In other words, benefits would decrease, but costs would decrease more. (Without going into details, a high discount rate decreases the weight given to regulatory benefits that are farther in the future.)

The car remained unenthusiastic., though there was some covert lobbying from some oil companies.. The head of one major car company announced that "Ford is leading in this regard. … We're in favor of keeping the standard, not a rollback. We have plans to meet it." Honda has taken the same position.

The *Washington Post* reported that "[s]taffers at the Environmental Protection Agency strongly criticized the logic behind a recent move to loosen future gas mileage rules for cars, at one point requesting that the EPA's name and logo be removed from a key regulatory report." According to the *Post*, while NHTSA claimed that freezing the standards would save lives, “EPA’s internal analysis suggested the opposite — that *freezing* the Obama-era rules would lead to slightly more fatalities (seven for every trillion miles driven), cost jobs, and in economic terms, have a net negative impact of $83 billion.” EPA staff notified the White House office overseeing regulations of its technical disagreement and said the draft Regulatory Impact Statement should not be attributed to EPA; as far as we can tell from the public record, they were ignored. It is possible, however, that the White House regulatory office raised these concerns but was overruled by White House political staff.

Be that as it may, the proposal’s cost-benefit analysis (CBA) has also come under fire from economists outside the agency. The CBA relies on NHTSA models to project effects on fuel use, vehicle miles traveled, and accident rates for new and used vehicles. The direct benefits of fuel efficiency, in this analysis, are countered by the higher cost of cars (which leaves more older, less efficient cars on the road), by higher accident rates (due to smaller, lighter cars), and by an increase in the number of miles driven. But the Trump cost-benefit analysis appears to be internally inconsistent in its treatment of these issues, according to independent economists. Moreover, it appears, traffic safety experts sharply dispute the large reductions in deaths projected from the SAFE rule.

Economists at Resources for the Future (RFF), a respected think tank, faulted the cost-benefit analysis for assuming that the overall number of vehicles falls despite lower prices for new vehicles. They say that “[o]n its face, this is inconsistent with economics.” Moreover, the cost-benefit analysis assumes that at the same time that there are fewer vehicles, there will be more miles driven, which again seems inconsistent and “inconsistent with economics.” These assumptions are the basis for the Trump Administration’s assertion that relaxing the standards will reduce the number of cars on the road and thus improve safety. Or as the RFF economists point out, these dubious assumptions are the basis of the equally dubious conclusion that the new rule will “result in significant reductions in external costs (such as congestion) and increases in safety from the change in vehicle ages and decreased driving under the proposed new rule.” Finally, the RFF analysts concludes that the assumptions about vehicle use and fuel consumption played a major role in the proposed rule and were based on premises about consumer behavior that were not supported by the economics literature.

Similarly, Berkeley economist James Sallee critiques the economic analysis for “trying to have its cake and eat it too by claiming tighter standards will force consumers to buy less desirable cars, but they will still want to drive them more.” He also criticizes the report for ignoring the effect of the more expensive cars required by the Obama rule on depreciation costs, which should actually decrease number of miles driven, as more miles driven lowers the cars' resale value. He concludes that EPA's aggressive estimates for the rebound effect do not pair well with its assumption about driving.

Even the economists whose work the government relied on have denounced the cost-benefit analysis. In a December article in the journal *Science*, they didn't mince words:

> "The 2018 analysis has fundamental flaws and inconsistencies, is at odds with basic economic theory and empirical studies, is misleading, and does not improve estimates of costs and benefits of fuel economy standards beyond those in the 2016 analysis."

Like other outside economists, they suggest that part of the Administration's analysis flunks Econ 101:

> "The 2018 proposal argues that the rollback in standards will shrink the overall fleet by 6 million vehicles in the year 2029, compared with the current standards. This is inconsistent with basic economic principles. If prices of vehicles decrease (relative to other general-purpose goods), we expect more individuals to purchase vehicles and drive them rather than use other modes of travel."

Perhaps I was too kind: you don't have to have taken Econ 101 to realize that cutting the price of a good increases sales.

These massive analytic flaws in the proposal make it unlikely that it could pass judicial muster. No doubt the agency will try to patch up the analysis when it issues the final proposal. But the flaws are so numerous and run so deep that it is hard to see how a patch-job could succeed. Assuming the Administration isn't willing to just give up on the whole idea, they may have to back away from the idea of a complete freeze in the standards, just so they've got something that comes close to being legally defensible. Of course, that assumes that someone competent is calling the shots, which may be a dubious assumption in the current White House.