

The Atlantic

‘We Knew They Had Cooked the Books’

The Trump administration’s attempt to kill one of America’s strongest climate policies has been a complete debacle.



Story by Robinson Meyer

FEBRUARY 12, 2020 | SCIENCE

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ANN ARBOR, Mich.—On a drizzly day in January 2018, Jeff Alson, an engineer at the Environmental Protection Agency’s motor-vehicles office, gathered with his colleagues to make a video call to Washington, D.C.

They had made the same call dozens of times before. For nearly a decade, the EPA team had worked closely with another group of engineers in the National Highway Traffic Safety Administration (NHTSA, pronounced *nits-uh*) to write the federal tailpipe-pollution standards, one of the most consequential climate protections in American history. The two teams had done virtually all the technical research—testing engines in a lab, interviewing scientists and automakers, and overseeing complex economic simulations—underpinning the rules, which have applied to every new car and light truck, including SUVs and vans, sold in the United States since 2012.

Their collaboration was historic. Even as SUVs, crossovers, and pickups have gobbled up the new-car market, the rules have pushed the average fuel economy—the distance a vehicle can travel per gallon of gas—to record highs. They have saved Americans \$500 billion at the pump, according to the nonpartisan Consumer Federation of America, and kept hundreds of millions of tons of carbon pollution out of the air. So as the call connected, Alson and the other EPA engineers thought it was time to get back to work. Donald Trump had recently ordered a review of the rules.

Speaking from Washington, James Tamm, the NHTSA fuel-economy chief, greeted the EPA team, then put a spreadsheet on-screen. It showed an analysis of the tailpipe rules’ estimated costs and benefits. Alson had worked on this kind of study so many times that he could recall some of the key numbers “by heart,” he later told me.

Yet as Alson looked closer, he realized that this study was like none he had seen before. For years, both NHTSA and the EPA had found that the tailpipe rules saved lives during car accidents because they reduced the weight—and, with it, the lethality—of the heaviest SUVs. In 2015, an outside panel of experts concurred with them.

But this new study asserted the opposite: The Obama-era rules, it claimed, killed almost 1,000 people a year.

“Oh my God,” Alson said upon seeing the numbers. The other EPA engineers in the room gasped and started to point out other shocking claims on Tamm’s slide. (Their line was muted.) It seemed as if every estimated cost had ballooned, while every estimated benefit had shrunk. Something in the study had gone deeply wrong.

It was the beginning of a fiasco that could soon have global consequences. The Trump administration has since proposed to roll back the tailpipe rules nationwide, a move that, according to one estimate, could add nearly 1 billion tons of carbon pollution to the atmosphere. Officials have justified this sweeping change by claiming that the new rules will save hundreds of lives a year. They are so sure of those benefits that they have decided to call the policy the Safer Affordable Fuel-Efficient Vehicles Rule—or SAFE, for short.

SNAFU may be a better moniker. To change a federal rule, the executive branch must do its homework and publish an economic study arguing why the update is necessary. But Trump’s official justification for SAFE is honeycombed with errors. The most dramatic is that NHTSA’s model mixed up supply and demand: The agency calculated that as cars got more expensive, millions more people would drive them, and the number of traffic accidents would increase, my reporting shows. This error—later dubbed the “phantom vehicles” problem—accounted for the majority of incorrect costs in the SAFE study that the Trump administration released in 2018. It is what made SAFE look safe.

[Read: The Trump administration flunked its math homework]

Once this and other major mistakes are fixed, all of SAFE's safety benefits vanish, according to a recent peer-reviewed analysis in *Science*. If SAFE is adopted into law, American traffic deaths could actually increase, carbon pollution would soar, and global warming would speed up.

In other words, SAFE isn't actually safe—and the Trump administration based its rollback on flawed math.

Extensive interviews with key participants and a review of emails and documents reveal how this happened: The Trump administration kept the government's top tailpipe-pollution experts from working on the tailpipe-pollution rule. For two years, rival bureaucrats at NHTSA and overworked Trump political appointees stonewalled the EPA team, blocked it from learning of the rollback, and prevented it from seeing analysis of the new rule. When the EPA engineers finally saw the flawed study and identified some of its worst errors, the same Trump officials ignored them.

This may have been a series of legally fatal blunders. The EPA team identified the phantom-vehicles problem early in the process. Within weeks of SAFE's publication in August 2018, analyses from outside economists and the Honda Motor Company vindicated the EPA team's assessment. Those groups found that the SAFE study was a turducken of falsehoods: it cited incorrect data and made calculation errors, on top of bungling the basics of supply and demand. Not since 1999—when NASA engineers accidentally confused metric and imperial units when building and navigating the Mars Climate Orbiter, leading to the spacecraft's eventual destruction—have federal employees messed up a calculation so publicly, and at such expense and scale. And the EPA team saw it coming.

My reporting directly contradicts what EPA Administrator Andrew Wheeler told members of Congress last year. In a June letter to House Republicans, Wheeler said it was “false” that “EPA professional staff were cut out” of the rollback’s development.

In a statement, an EPA spokesman did not directly deny my reporting. “As we’ve stated multiple times before, career and professional staff within EPA’s Office of Air and Radiation were involved in the development of this proposal and continue to be involved in the final stages as we work with NHTSA to finalize this rule,” said Michael Abboud, the agency spokesman. He added that the old rule was “unworkable” and rushed into law at the end of the Obama administration.

A NHTSA spokesman declined to comment because the proposed regulation is under agency review. He referred me to older statements that said the EPA and NHTSA had reviewed “hundreds of thousands of public comments” and undertaken “extensive scientific and economic analyses” in the course of reworking the SAFE rule. A final version of the rule is expected in the next several weeks. But that new version of the SAFE study recognizes that the benefits of the rollback do not exceed its costs, according to a letter from Senator Tom Carper of Delaware, the ranking Democrat on the Environment and Public Works Committee, obtained by *The Washington Post*.

If Carper’s allegation is true, that could doom the proposal in court. In fact, several legal issues could hinder SAFE. In 2007, the Supreme Court ruled that the Clean Air Act “requires” the EPA to regulate carbon pollution “from new motor vehicles.” But my reporting has found that NHTSA employees—and not EPA staff—actually wrote the first version of the rollback, raising questions about whether the rule is legally valid.

Either way, the SAFE rollback has already caused chaos. Major automakers—some of which once begged Trump to weaken the rules—now despise SAFE, according to reporting in *The Wall Street Journal*. When Ford, Volkswagen, BMW, and Honda began negotiating a compromise version of the standard with California last year, the Trump administration smacked them with an antitrust investigation. (It dropped the probe last week.) A fifth automaker, Mercedes-Benz, also considered joining the truce with California, *The New York Times* reported over the summer. (Mercedes did not respond to a request for comment.)

That chaos might have comforted Alson, who retired in 2018, and the other EPA engineers two years ago, as they sat slack-jawed in their conference room in Ann Arbor. Soon after unveiling the analysis, Tamm asked if anyone had questions. No one spoke. The meeting, originally scheduled to last an hour, adjourned after 30 minutes.

“We couldn’t even bring ourselves to try to engage,” Alson told me. “We knew they had cooked the books so bad that there wasn’t any reason to talk about it.”

REPUBLICANS WILL OFTEN claim that one federal rule or another meddles with an essential part of the economy. The tailpipe-pollution rules live up to the hype. They govern the place where the auto industry and the oil industry—two massive, planet-spanning businesses that together make up about 11 percent of American GDP—most often meet: the humble car engine.

There’s no way around this. In recent years, nearly one-fifth of the country’s climate-warming carbon pollution has come from cars and light-duty trucks, according to the EPA. It’s inevitable: If you burn gasoline in an internal-combustion engine, you release carbon dioxide; if you want to release less carbon, you must burn less gasoline. Some car regulations—such as those addressing traffic-safety issues—require only

that some new technology, such as an airbag or backup camera, simply be affixed to a car's frame. But any carbon-pollution rule must go to the heart of a motor vehicle: the engine, power train, and air conditioner.

Yet for decades, NHTSA—the traffic-safety arm of the Department of Transportation—set the nation's fuel-economy rules. It was given that power for “purely political” reasons, says Lee Vinsel, a professor at Virginia Tech who studies American car regulation. “It had nothing to do with expertise.”

Congress first established the fuel-economy standards during the 1970s oil embargo as a “panic mode” policy that would reduce cars' use of fuel and, by extension, American dependence on foreign oil, Vinsel told me. But lawmakers split on which agency should set the rules.

[Read: [Climate change can be stopped by turning air into gasoline](#)]

The EPA, then a young office, had already started measuring fuel efficiency as part of a broader campaign to defend the new Clean Air Act. Yet neither the EPA nor the other agencies in contention, the Federal Trade Commission and the Department of Commerce, won the support of Representative John Dingell, a powerful New Deal Democrat from Detroit. Although Dingell was an environmental champion who helped write the Endangered Species Act, his Michigan ties meant that he was “rabidly anti-regulation of the automobile,” Vinsel said. If fuel-economy rules had to pass, Dingell wanted to keep an eye on them. And he could do that through the Department of Transportation, whose purse strings he held via his seat on the House Committee on Interstate and Foreign Commerce (which he later renamed the Energy and Commerce Committee).

Dingell, second from left, at a 1977 breakfast hosted by then-President Jimmy Carter, center, in the Family Dining Room of the White House (AP Photo / Charles Harrity, File).

So Congress split the difference. In 1975, it put NHTSA in charge of *setting* fuel-economy standards, but the EPA in charge of *measuring* them. From the very beginning, NHTSA needed the EPA's data to do its job. It was the beginning of a corrosive rivalry between the two agencies.

The messy setup worked at first. Over the next decade, the fuel economy of new cars doubled in the United States. But as global oil production increased and prices fell, the standards began to fester, and fuel economy stopped improving. By 2003, General Motors had even found a loophole in the law: It could sell SUVs so enormous, they fell outside the legal definition of a "light-duty vehicle," such as the Hummer H2.

Then oil prices soared again, and soon after, Congress moved to close the Hummer-size loophole in the law. But the real change came from

the Supreme Court, which ruled in 2007 that the EPA must treat greenhouse gases from cars as it would any other air pollutant. If carbon dioxide is dangerous, then “the Clean Air Act requires the agency to regulate” it, Justice John Paul Stevens wrote for the majority.

It was a landmark shift. For the first time, the EPA had the legal power to fight climate change and regulate carbon pollution. The state of California, which retains special powers under the Clean Air Act, could regulate carbon dioxide too.

Soon after Barack Obama took office in 2009, he ordered all three to work together. NHTSA’s fuel-economy standards should mirror, as closely as possible, the carbon-pollution rules passed by the EPA and the California Air Resources Board, he said.

His order still holds. Today, three different entities—the EPA, NHTSA, and the California board—all have some power to regulate the carbon pollution of cars and light trucks in the United States.

What resulted was one of the most effective climate protections in American history. The tailpipe rules, published by the three entities in 2012, required carbon pollution from new cars and light trucks to decrease every year until 2025. In exchange for several concessions, automakers even agreed to accept the rules without a lawsuit. This was virtually unheard of—seemingly every company fights new EPA regulations in court—but it was crucial for the White House. With the tailpipe rules on firm legal footing, the EPA could move to regulate carbon pollution in other parts of the economy.

Most important, the rules worked. Over the past decade, the average fuel efficiency of new passenger cars has improved from about 31 to 39 miles per gallon, a record high. The biggest savings have come from bulky trucks such as the Ford F-150, the best-selling vehicle in the

United States. Today, an entry-level F-150 uses two-thirds as much gas as the 2006 model did.

[Read: Why California is environmentalists' trump card]

And then automakers began to fight the rule. Though the EPA had published rules out to 2025, the Obama administration told automakers that it would do a “midterm review” before the second phase (applying to cars in model years 2020 to 2025) kicked in. In July 2016, the EPA, NHTSA, and the California Air Resources Board completed the first step of that process, publishing a 1,200-page study that found the rules were still doable. But now car lobbyists began to fuss. The market had changed, and the rules needed to change too, they said.

Trump’s victory that November seemed to seal their success. Two days after the election, automaker lobbyists wrote a jubilant letter to the president-elect, asking him to revise the 2020 to 2025 standards. Then, Obama-appointed officials and EPA staff panicked and rushed ahead with the midterm-review process. The EPA published a final version of the rules a week before Trump’s inauguration. But NHTSA did not follow suit.

The rules’ publication infuriated car companies. And then Trump took office.

ON MARCH 15, 2017, Donald Trump made his first visit to Michigan as president. Months earlier, he had won the state by a little more than 10,700 votes. Now, flanked by Scott Pruitt, the new EPA administrator, he announced to about 1,000 autoworkers that the White House would review and roll back the EPA tailpipe rules. “The standards were set far into the future—way, way into the future,” Trump said. “If the standards threatened auto jobs, then commonsense changes could have and should have been made.”

In fact, the EPA and NHTSA had concluded a year earlier that the rules were likely to have only a small effect on jobs. (They may have boosted them.) As Trump made his claim at a former GM plant in Ypsilanti, many of the experts on the issue watched his announcement from their desk, 20 minutes down the road in Ann Arbor. No one from the EPA vehicles team was invited to attend the event, Alson said.

It was a sign of things to come.

Trump and Transportation Secretary Elaine Chao, third from left, talk with auto industry leaders in Ypsilanti Township, Michigan, in 2017 (REUTERS / Jonathan Ernst).

A few weeks later, Bill Charmley, the longtime chief of the EPA vehicles team, called Jim Tamm, his NHTSA counterpart, according to documents obtained from a public-records request. The two men talked often. For years, their teams had held video or conference calls “almost every month and sometimes every week,” according to Alson. When deadlines approached, the teams talked “every single day.” And documents show that even in the waning days of the Obama

administration, as the EPA moved to finalize the rules through 2025, Charmley and Tamm stayed in regular contact.

But now Tamm seemed uninterested in the two teams ever talking or meeting at all. When a senior EPA engineer emailed Tamm to “follow up” on the call a week later, he struck an almost pleading tone. “I wanted to reach out to you [to] begin thinking about regular EPA and NHTSA coordination meetings,” the engineer wrote. “It is my understanding that we may not be in a position to start meeting, but hopefully the situation does not preclude us from thinking about what the meetings could look like if and when they begin.”

There is no evidence Tamm ever replied to that message. A month later, a different EPA engineer asked again by email if the two teams could meet to discuss the rules, only to be rebuffed again by a NHTSA employee. “We need further discussion on our end,” the NHTSA employee explained.

After years of close contact, the NHTSA team seemed to go dark to the EPA team. For nearly a year, the two teams “did not have a single technical phone call or meeting or email or anything” about the tailpipe rules, Alson said. “I’m an engineer and an introvert ... but it felt like *The Twilight Zone*. Like, what is going *on* here?”

At the same time, the EPA team received little guidance from its political leaders. President Trump appointed only one person—Mandy Gunasekara, a lawyer and longtime Senate Republican staffer—to oversee the massive EPA Office of Air and Radiation, which includes the Ann Arbor team. President Obama had appointed three people to manage the same office.

“From March until October [2017], it was really just me figuring out the agenda” for the 1,000-person office, which also regulates coal-fired power plants and nuclear waste, Gunasekara told me. (She left the

administration in 2019 and now runs Energy45, a pro-Trump advocacy organization.)

The office's leadership was so understaffed that Gunasekara spent her first months in the agency "just trying to figure out what all was going on," especially regarding court deadlines, she said.

With no clear path forward, the EPA team continued its work studying vehicle pollution. The lab measured new engines from Ford and Toyota, a time-consuming process that generated benchmarks showing an engine's power, efficiency, and emissions.

By the summer, the team began holding calls with carmakers and lobbyists to discuss the rules. Documents show that NHTSA was often invited to sit in on those meetings, but Gunasekara told me that its staff was not very involved. "They didn't have political leadership at all," she said.

Yet public documents suggest that NHTSA was already doing its own work on the rollback. By July 20, 2017, crucial Excel files later used in the NHTSA cost-benefit study had already been created, according to the names and metadata of the files themselves.

AS THE FALL arrived, President Trump had finally chosen a political leader for NHTSA, and on October 25, the agency held a video call with the EPA. The meeting started warmly, with Heidi King, NHTSA's new Trump-appointed chief, making little jokes, Alson remembers.

Then Charmley, the EPA vehicles-team chief, began to present the work that his team had done in the previous year. The Ann Arbor lab had benchmarked engines, improved its model, and studied the costs of several new fuel-saving technologies. This presentation would turn out to be the EPA's only chance to show "in no uncertain terms" that it had done new work that NHTSA had not considered, Alson said.

As Charmley spoke, King started to look frustrated and became almost silent, Alson remembers.

When it was NHTSA's turn to speak, King and Tamm spent an awkward minute encouraging each other to start. Finally, Tamm began to talk. He broke the news that NHTSA had paid Argonne National Laboratory to study a Toyota Prius and Ford F-150, Alson said. But the EPA had already benchmarked those vehicles and several others. NHTSA had gone out of its way to avoid using the EPA data, seemingly as part of a larger campaign to avoid sharing any information with the EPA at all.

The teams had only a few more meetings that year. Another video call between the teams, in December, ended as fruitlessly as the first had—its most memorable feature was the appearance of Bill Wehrum, a former oil-industry lawyer who Trump had just appointed to lead the EPA's Office of Air and Radiation.

So as 2018 arrived, the EPA team still knew virtually nothing about a rollback that had been announced 10 months earlier. But it still had hope. One more video call was scheduled for January 11, and—promisingly—no political appointees were scheduled to attend it. It would be just the old friends on the EPA and NHTSA career staff. “I remember one of my colleagues saying, ‘I think we’re going to get some numbers,’” Alson said.

[Read: [Trump's fuel-efficiency rollback breaks with 50 years of precedent](#)]

They got more numbers than they bargained for. On that video call, the one Alson remembers so vividly, Tamm argued that the rules through 2025 could cost the United States hundreds of billions of dollars.

The engineers were gobsmacked. It takes time and effort to put together a cost-benefit analysis, which uses complex economic models to estimate vehicle prices, public-health outcomes, and the ebb and flow of the

entire American private-vehicle fleet. For years, the EPA and NHTSA teams had collaborated when conducting such research.

Not only had the NHTSA team secretly done its own analysis, but it now claimed that the rules—the same exact regulation it had judged in 2016 to bring \$88 billion in benefits—imposed \$230 billion of costs. Somehow, its calculations had shifted more than \$300 billion in value.

Alson felt repulsed by the distorted math. “It was almost like you don’t want to get close to it, don’t want to touch it,” he told me. And when Tamm said that the cost-benefit analysis was nearly finished, and that NHTSA hoped to publish the proposed rollback that spring, he confirmed Alson’s worst fear. The EPA team would have almost no ability to work on the rollback. It had been boxed out.

UNTIL RECENTLY, the EPA and NHTSA’s collaboration was seen as one of the most successful in the federal government.

Two nonpartisan watchdogs—the National Academies of Sciences, Engineering, and Medicine and the U.S. Government Accountability Office—both published reports praising their work. In 2014, Tamm and Charmley shared a finalist spot for the highest award given to members of the federal civil service. “Charmley, Tamm, and their team of about 40 employees at two agencies,” bragged the citation for that award, together “surmounted complex technical issues.”

But outside the public eye, resentments lurked. More people work at the EPA than at NHTSA, and EPA employees are generally thought to have more expertise. The EPA has better facilities: It can test engines in its lab in Ann Arbor, while NHTSA does not have an emissions lab at all. In that light, the public praise for the tailpipe rules may have seemed double-edged: The Government Accountability Office report lauded the EPA’s “original research” but lamented NHTSA’s “resource

constraints,” and endorsed the new NHTSA computer model that was programmed “with EPA’s input.”

Soon after Gunasekara started, several NHTSA career employees told her that the EPA had “rolled them in the 2012 rule,” she said. (When she asked EPA employees, “they had a totally different response,” telling her that NHTSA was still annoyed about several technical decisions, she added.)

“It’s a small program at NHTSA, but they are ferociously bitter toward EPA for driving the train on the 2012 Obama standards, and they are determined to get back at them,” Mary Nichols, the chief air regulator for the state of California, told me.

So the new situation was—at the very least—a reversal of sorts for the EPA team.

Immediately after that pivotal January meeting, the EPA team asked NHTSA for a copy of the raw computer code used to generate its cost-benefit study. More than a month later, an engineer sent an email so oddly written and un-descriptive that it was auto-sorted into Gunasekara’s spam folder. When she found it, the email didn’t even contain what the EPA had asked for: Instead of sending over raw code, the NHTSA team had sent a compiled program. This meant that EPA staff could not examine the model’s underlying calculations in full.

The model also contained a built-in expiration date: It abruptly stopped working at the end of March 2018. When the EPA emailed NHTSA to ask for a new version of the program, the team received no reply.

In spite of those limitations, the EPA team was able to find several problems in NHTSA’s math. In an April 2018 meeting with White House officials, Charmley explained several of them. NHTSA’s model, he said, appeared to add to American roads millions of vehicles that did not exist. This made it “unusable in current form for policy analysis and

for assessing the appropriate level of the [NHTSA] or [EPA] standards,” his presentation said.

Dick Swanson / DOCUMERICA / National Archives

It was the EPA’s first warning to the Trump administration that something had gone seriously awry. The next day—four months after the EPA had first asked for the modeling code—NHTSA finally sent the raw code for the analysis.

The EPA team now acted quickly. In June, Charmley told the White House that the EPA had fixed key errors in NHTSA’s math—and that it had significantly changed the results of the NHTSA study. The rollback would actually increase fatalities, killing 17 Americans a year, he said.

But White House and senior EPA officials declined to stop the rollback. Officials knew at the time that two of NHTSA’s models didn’t link up correctly, Gunasekara said, but they did not think it was worth pausing

the process. “It’s like, okay, do we delay this for a week, which then becomes a couple of months at the tail end of the regulatory process? Or do we just know it’s not 100 percent and that’s okay?” she said. The Trump team thought the agency’s other concerns were mere “disagreements over assumptions,” she added.

But the next month, the EPA team informed the White House of even more errors in NHTSA’s math. Again, officials declined to stop the rollback. So Charmley asked Andrew Wheeler, the new EPA administrator, for the Ann Arbor office’s name and logo to be removed from the rule-making—an extraordinary request that had never been made before. Wheeler accepted. “It was one of those things like ... *If that’s what you really want, we’re not going to argue over something like that,*” Gunasekara said.

The SAFE rollback was published on August 2, 2018.

IN FACT, the flaws in the proposal far exceeded the normal scope of technical disagreements. In December 2018, 11 economists—including some whose research was cited by NHTSA in its flawed study—published a scathing assessment of the NHTSA-led analysis in *Science*. “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,” they wrote.

The errors they and other independent analysts found are staggering in their scale. At one point, the NHTSA team forgot to divide by four. Elsewhere, it used bad data, claiming that, in the future, there will be fewer of certain types of fuel-saving engines than there are on the road already. But these errors pale in comparison to NHTSA’s insertion of millions of “phantom vehicles” onto American roads.

Yet even after these errors came to light, Trump EPA appointees continued to let NHTSA officials dominate the process, my interviews revealed.

In late 2018, officials gathered at the Eisenhower Executive Office Building to discuss the rollback and possible compromises. “In terms of the dynamics of the meeting, Heidi King spoke about three times longer than Bill Wehrum ever did,” Nichols, the California regulator, told me. It was “very obvious” that NHTSA officials would lead the process and that “whatever the EPA had to say was of no interest to them,” she added. And while some EPA career staff attended that meeting, they were not asked by the hosts to speak, she said.

Surveying the rollback process as a whole, Nichols said: “The errors [administration officials] have fallen into are that they don’t know [anything] about how cars work.”

The errors could now cause legal trouble for the SAFE rollback. Under federal law, an agency must publish a detailed and genuine explanation of any proposed rule-making. If it fails to meet that standard, then a court can toss out the new rule, pronouncing it “arbitrary and capricious.” The explanation for SAFE—at least in the proposal—does not appear to be genuine, since it contains fundamental errors that were identified before it was published.

“You didn’t have the A team doing the analysis here... If you shut out the people who know what they’re doing, this is what you get,” Jack Lienke, a law professor at NYU and the regulatory-policy director at the Institute for Policy Integrity, told me.

“If the experts—who are actually within the agency issuing this proposal—thought that the assumptions being made were unreasonable, that makes a judge a lot more comfortable saying it is arbitrary and capricious.”

In addition, the Supreme Court's landmark 2007 ruling gives the EPA—and not NHTSA—the exclusive power to regulate carbon pollution.

The Trump administration has struggled to publish a final version of the SAFE rollback, pushing the deadline back several times. The extra time has only revealed new problems. Last month, Carper, the Democratic senator from Delaware, alleged that a new version of the NHTSA study admits that SAFE will impose \$34 billion of costs on the American economy. (NHTSA had once promised \$230 billion in net *benefits*.) The new study also admits that SAFE will cost consumers an extra \$1,400 at the pump on average—and that SAFE will not save hundreds of lives a year, as it once claimed, Carper said.

“This would seem to fly in the face of rational rulemaking, which requires the benefits to exceed the costs, not the other way around,” Carper wrote to a White House official, in the letter obtained by *The Washington Post*.

In a statement, a NHTSA spokesman said SAFE would “ultimately” save lives because it would make new vehicles more affordable, and “new vehicles are safer than ever.”

The Trump administration expects to publish its final version of the tailpipe rule in the coming weeks. No matter what form it takes, it will reverberate worldwide. Other countries both import used cars from the United States and adopt the American tailpipe standards wholesale. Canada implemented the 2012 version of the tailpipe rules nearly verbatim, and has no plans to change them.

After the final version of SAFE is published, it will go to the courts. Its odds of survival are unclear. Historically, regulatory agencies win about 70 percent of their court challenges, Lienke said. Yet under the Trump

administration, agencies have lost more than 90 percent of their cases, according to an ongoing tally from the Institute for Policy Integrity.

Many of those losses came in cases like this one, in which agencies published false, misleading, or fundamentally erroneous explanations of their own rules. In June, the Supreme Court held that the Trump administration could not add a citizenship question to the 2020 census, because the Department of Commerce's internal motivations did not match its publicly stated reasoning.

Agencies must “offer genuine justifications for important decisions, reasons that can be scrutinized by courts and the interested public,” Chief Justice John Roberts wrote in his majority opinion. “The explanation provided here was more of a distraction.”