COMMENTS OF JAY LOGEL
NHTSA DOCKET 2023-0038
EA16-003 Initial Decision
December 18, 2023

My name is Jay Logel. I am currently a legal consultant offering advice related to the National Highway Traffic and Motor Vehicle Safety Act of 1966, as amended and recodified at 49 U.S.C. Chapter 301, sections 30101-30183 [Safety Act] and litigation matters.[1] I retired from Ford Motor Company after more than 32 years in its Office of the General Counsel. I had responsibility for advising Ford on Safety Act matters continuously since the mid-1990's and represented Ford with the National Highway Traffic Safety Administration's Office of Chief Counsel throughout my career. I recognize that the people at NHTSA have been dedicated to safety and committed to exercising their legal duties given to the agency under the Safety Act.

For years, I was deeply involved in the industry's investigation and response to the Takata air bag inflator ruptures. My experience includes helping establish the Independent Testing Consortium, working closely with a third-party expert to help investigate the failure mechanism and developing new methods for understanding air bag inflator performance. During this time, I met regularly with NHTSA and the Takata Recall Monitor to help meet the incredible challenge of replacing millions of air bag inflators in older model vehicles.

The purpose of my submission is to discuss important legal principles as now applied to the ARC inflator investigation that are long established under the National Highway Traffic and Motor Vehicle Safety Act and court opinions that have considered specifically the recall requirements under section 30118 of the Safety Act.

Trial *De Novo* Standard of Review

If a court is called upon to review the evidence regarding whether a defect that relates to motor vehicle safety exists in ARC inflators requiring a safety recall, the standard of review is *de novo* and not a review of the administrative record of an agency decision. This standard of review was applied by the first District Court interpreting section 30118 of the Safety Act. *United States v. General Motors Corp.*, 377 F. Supp 242 (D.D.C. 1974) *rev'd* 518 F.2d. 420 (D.C. Cir. 1975) (*Wheels*) In his opinion, Judge Gasch noted that "all parties are agreed that defendant has the right to *de novo* review of the agency decision – this is not a case of review of an administrative record." *Wheels*, 377 F. Supp. at 250. The Court of Appeals confirmed that "[t]he District Court enforcement

[1] I prepared these comments with the support of a grant from certain auto industry members and manufacturers who are participating in this regulatory proceeding. However, I am not speaking on behalf of any of them. The views expressed in these comments are my own.

proceeding affords the manufacturer a trial *de novo* with the burden of proof on the Government to establish the existence of a safety-related defect." *Wheels*, 518 F.2d at 426. And it restated the principle again, "An enforcement proceeding under the Act is a trial *de novo* with the burden on the Government to prove a violation by a preponderance of the evidence." *Wheels* at 438. Further, the *Wheels* opinion specifically rejected a view that a defect theory advanced by the Government in an enforcement proceeding should be given deference like an administrative interpretation. *Wheels* at 437. The court noted that NHTSA had not adopted any rules defining a safety defect, and the Government's position was the determination of a safety defect should be a case-specific analysis. *Id*.[2]

In 1974, Congress amended the Vehicle Safety Act to add numerous provisions related to defect decisions, notifications and recalls. Among other things, the 1974 amendments added statutory language allowing a court to impose civil penalties on a manufacturer that disobeys a NHTSA Order, including an Order to recall vehicles to remedy a safety defect. During the legislative debate, due process concerns were raised about the fairness of allowing penalty exposure to accrue against a manufacturer that elected to challenge a NHTSA Order to recall. Congress responded to those concerns and specifically found that "due process would be satisfied **since there would be a trial *de novo*** with the burden of proof on the Government to prove, by a preponderance of the evidence, that a safety-related defect or failure to comply exists" before the manufacturer could be held liable. *Ford Motor Co. v. Coleman*, 402 F. Supp. 475, 480 n.12 (D.D.C. 1975) ("*Seat Brackets I*") (quoting from the legislative history of the 1974 amendments to the Vehicle Safety Act, H. Rep. No 93-1191, 93d Cong., 2d Sess. 17 (1974))(emphasis added).

I understand NHTSA continues to maintain its discretion to assess potential safety defects on a case-by-case basis. NHTSA has not published any rule or published any final agency action to define the term "safety-related defect." In recent years representing Ford during NHTSA's Office of Defect Investigations (ODI) investigations into field reports of potential safety defects, I became familiar with a risk matrix analytical tool ODI uses to help it assess whether data demonstrated a safety issue warranting further investigation.[3] The analytical tool assessed the frequency of field reports, the severity of the reports, and any special factors or variables that would

[2] Also, in discussing the comparative assessment required for the safety defect determination, the *X-Cars* court opined that case precedent did not establish a "rigid rule turning entirely upon a diminution of control in the abstract." *United States v. General Motors Corp. (X-Cars),* 656 F.Supp. 1555, 1578 (D.D.C.1987) It is another indication of the courts' case-specific specific approach when evaluating a potential safety defect.

[3] The risk matrices tool is described in National Highway Traffic Safety Administration. (2020, November). *Risk-based processes for safety defect analysis and management of recalls* (Report No. DOT HS 812 984).

influence a safety defect determination at the end of an investigation. The outcome was a red, yellow, or green categorization of whether the data indicated a safety issue warranting investigation (red), the issue might not warrant investigation, or the investigation might be closed (green), or the data was ambiguous (yellow). ODI used it as a tool to help guide its assessments and might share the framework with manufacturers during its investigative process. In those interactions between Ford and ODI, the agency did not use the tool to determine its ultimate position regarding the outcome of any investigation and was not bound by its categorizations. In my experience, the tool is as close as NHTSA has come to expressing NHTSA's interpretation of a safety defect under the Safety Act. The agency has not published the tool as a rule or interpretation, and the agency has not represented the outcome of the tool as a final agency action.

Similarly, actions to enforce a safety defect determination are not predicated on a formal agency action or limited to a review of an administrative record. In *United States v. General Motors Corp.*, 574 F. Supp. 1047 (D.D.C. 1983) (*X-Cars*) District Court Judge Jackson answered the question whether cases brought to enforce the safety defect determination required in section 30118 are limited to a review of the administrative record. GM's motion argued that the court did not have jurisdiction until NHTSA completed its administrative procedure and published an order for the court to enforce. Per the opinion, "the government contends that the Act is designed to admit of enforcement *dehors* the administrative process." *X-Cars*, 574 F. Supp. at 1048-1049. The court concluded that "issues to be tried will have to be determined *de novo* here, whether or not there has been formal agency action, thus making an administrative record superfluous." *Id.* At 1049 The court in *Wheels* reflected that manufacturers have the right to present evidence at trial generated during the discovery phase to support a defense regarding the cause of failures. *Wheels*, 518 F.2d at 442 fn. 113. That right could only be exercised if the trial is *de novo* and not limited to any administrative record.

The opinion in *Snyder Computer Systems v. United States Department of Transportation,* 13 F. Supp. 3d 848 (S.D. Ohio 2014), which related to the government's enforcement of a Recall Remedy Order under section 30120 of the Safety Act, should not confuse the issue. In that case, the court was asked to address NHTSA's ability to enforce a Recall Remedy Order after the manufacturer had already made the safety recall determination. This was not a review of a Final Determination of Defect and Order to recall under section 30118 of the Safety Act. The trial court postured the case as a review of the Recall Remedy Order as a final agency action subject to the arbitrary, capricious or abuse of discretion standard of review under the Administrative Procedures Act. Not surprisingly then, the court limited its review to the administrative record. There is a complete absence of any discussion of the long-established case law supporting the trial *de novo* standard of review related to safety defect determinations since the *Wheels* case. No such arguments related to the historical case law were briefed by counsel for either party, and the court was not asked to evaluate the

historical precedents. Any assertion that the Snyder decision reflects a new standard of review for cases brought to determine whether a safety defect exists under section 30118 is an unsupported extrapolation from the opinion.

In every case where the government has sought to enforce the requirement that manufacturers should have made a safety defect determination, courts have applied *de novo* review with the burden of proof on the Government to meet a preponderance of the evidence standard based on the evidence at trial regardless of the administrative record and without deference to Government's position as an administrative interpretation.

A "Commonsense" Approach and Comparative Analysis is Required

Considering whether ARC air bag inflators contain a safety defect requires a "commonsense" evaluation intended by Congress. This "commonsense" approach is relevant to both the "defect" prong as well as the "motor vehicle safety" prong of the two-part safety defect analysis. *Wheels*, 518 F.2d at 435. The *Wheels* court made a thorough review of the legislative history of the original Safety Act and its 1974 amendments related to the safety recall process. It found that Congress sought a "commonsense" approach to safety and that the Secretary of Transportation should be "practical and sensible." *Id.* at 435-436 (quoting the statement of Senator Magnuson in S.Rep. No. 1301 89th Cong., 2d Sess. 8 (1966))

In rejecting General Motors' position that only failures that occur when the vehicle is operated according to manufacturers' specifications be considered when making a defect determination, the *Wheels* court reflected the commonsense position that manufacturers are required to anticipate a reasonable level of misuse in their designs. *Id.* at 432-433 (quoting Senator Ribicoff in Hearings on Traffic Safety before the Senate Commerce Comm., 89th Cong., 2d Sess. 1 (1966)) And the court specifically identified economic factors as part of the commonsense approach. *Id.* at 436.

Congress has continued to apply this commonsense balancing approach to remedying safety defects over several amendments to the Safety Act. The time limit to the remedy without charge requirement recognizes that, at some point, the cost of conducting a safety recall is not warranted. The requirement that manufacturers offer a remedy without charge has always had a time limit that has migrated from eight years to 15 years as vehicle quality has improved. As a point of reference, in 2003 the average age of vehicles in operation was 9.7 years and by 2023 it is 12.5 years.[4] The current free remedy time limit is 15 years from the date of first purchase for vehicles.[5] This limit reflects the practical and economic realities of remedying older model vehicles. Regardless of the severity of the risk of any defect, Congress has never deemed a remedy without charge to be warranted for vehicles beyond a certain age.

[4] S&P Global Mobility, U.S. average age of light vehicles as of January 1 for each year.
[5] 49 U.S.C. §30120(g)

The population of ARC inflators subject to NHTSA's investigation goes back more than 23 years in service.

The court in *X-Cars* explained that determination of "defect" under the Safety Act requires a comparative assessment. It identified three elements to be considered in evaluating the unreasonableness of a safety risk: (1) severity of harm; (2) frequency of the harm in the threatened population relative to the incidence in the general population; and (3) the economic, social, and safety consequences of reducing the harm to a reasonable level. *United States v. General Motors Corp. (X-Cars)*., 656 F. Supp. 1555, 1578 (D.D.C. 1987). The *X-Cars* court stated the safety recall duty exists when there is "a significant risk that can be remedied at a proportionate cost, and without a corresponding sacrifice of public safety in other respects." *Id.* at 1579. "Conversely, if the only remedies are ineffective, prohibitively expensive, or affirmatively detrimental to public safety, even a significant risk may nevertheless be reasonable as a matter of law." *Id.* (internal quotes removed).

This comparative assessment has been expressed in many contexts. In *X-Cars*, the court relied on comparative test data and comparative field data to determine whether the frequency of rear-wheel lock up in the GM vehicles was higher than their peers. Id. at 1573, 1579. Also, Congress, NHTSA and courts have consistently recognized that automotive equipment items subject to replacement due to wear such as tires or wiper blades are not defective because they have failed at the end of their useful life. As noted above, Congress has always limited the requirement to offer a remedy free of charge, even for a recognized safety defect, based on vehicle time in service. The essence of the *Wheels* opinion is that the Safety Act does not require vehicles or components that never fail regardless of time-in-service or unforeseen operating conditions.

A Comparative Evaluation of the Frequency of the Harm is Missing

Regarding the frequency, the *Wheels* opinion holds "a component is defective if it is subject to a significant number of failures in performance occurring on vehicles operated under conditions of specified use or reasonably foreseeable abuse or failure to maintain (ordinary abuse)." *Wheels*, 518 F.2d at 447. The number of failures must justify requiring a manufacturer to bear the costs of conducting a safety recall. No party disputed that wheel failures posed an unreasonable risk to safety. That prong of the test was admitted by everyone involved. Yet, no party nor the court promoted or considered the position that more than one failure or even a very small number of safety-related failures justified a safety recall. Everyone understood the Safety Act did not justify the cost of a safety recall due to a very small number of safety-related failures. That was the essence of General Motors' argument. Failures caused by overloading should not count in the frequency calculation, and if the number of failures

within the load capacity of the trucks was very small, there were not enough failures to warrant the costs of a recall.[6]

When evaluating a potential safety defect, courts consider the time-in-service to failure, the nature of the component, reasonably foreseeable use or misuse, the frequency and severity of the risk, and the effectiveness and cost to remedy the condition. And the Government bears the burden to prove by a preponderance of the evidence in a trial *de novo* that these factors show a defect that poses an unreasonable safety risk.

When I review NHTSA's Initial Decision of September 5, 2023, it does not appear that NHTSA has made a comparative assessment of the failure rate of air bag inflators in a similar population over a similar time-in-service. ARC argues that the events are isolated and randomly distributed and of different causes. The Initial Decision letter quotes ARC's position as being the failure rate is not significant considering the volume and time-in-service of the inflator population. On page 17 of NHTSA's Initial Decision, the agency characterizes these arguments as ARC "minimiz[ing] the severity of risk from its rupturing inflators." And NHTSA "rejects" the argument that seven ruptures do not constitute a defect. This position appears to be based on the severity of the risk rather than a rate assessment. While NHTSA discusses how to most accurately characterize the rate of failure compared with exposure to deployment events, NHTSA's response does not address ARC's argument about rate.[7] I am not aware of any judicial decision finding that seven safety-related failures in a similarly large population over this many years in service was sufficient to support a safety defect finding. There is no doubt that the consequence of an inflator rupture can be very severe. However, the comparative rate of failure information to support NHTSA's position that seven ruptures is not *de minimis* is not contained in the Initial Decision.

<u>NHTSA Relies on the Rate, not a Common Cause, to Define the Population</u>

Identifying why an air bag inflator ruptures is a technical challenge. While not making a commitment to the mechanism of failure leading to inflator ruptures, NHTSA's letter indicates the mechanism of failure may be particles of weld slag becoming dislodged and blocking the inflator exit orifice causing over pressurization of the air bag inflator. Evidence that weld slag has become dislodged and blocked the exit orifice at a comparatively significant rate could potentially support a defect finding. The agency's

[6] Some may read the opinion in *United States v. General Motors Corp.* (*Carburetors*), 565 F.2d. 754 (D.C.Cir. 1977) as articulating a rule that a very small number of failures in the future is sufficient to evidence a defect and warrant the cost of a safety recall. The *Carburetors* court did not find a defect on basis of the future risk. In that case, General Motors admitted that there was a defect under the Safety Act and the proof of the defect was substantiated by "*at least* 665 reported incidents of engine compartment fires." *Carburetors* 565 f.2d at 756. General Motors' position was that a small number of future failures and fires did not pose an unreasonable safety risk under the related to motor vehicle safety prong of the safety defect test. *Id.* at 757.

[7] NHTSA argues that the correct rate analysis is seven ruptures in 2.6 million estimated deployments rather evaluating seven ruptures in more than 52 million inflators.

letter does not mention data related to those findings. If such data existed, it might help establish a the necessary "frequency" required under court opinions applying the Safety Act.

In the Initial Decision, and at the Public Hearing on October 5, 2023, NHTSA's analyses appear to take the position that the risk of a potential inflator rupture is relatively equal across all 52 million inflators. Dr. Glassbrenner of NHTSA's Mathematical Analysis Division presented at the Public Meeting. Both Dr. Glassbrenner and the Initial Decision identify the failure rate at seven failures in 2.6 million air bag deployments. Expressed as a future risk, Dr. Glassbrenner's methodology predicts one rupture per 370,000 future deployments.[8] Then, Dr. Glassbrenner predicts that "ruptures will continue to occur."[9] This appears to be the basis for NHTSA's rate-based decision that all 52 million ARC inflators contain a safety defect. No comparative assessment is offered.

The Takata air bag inflator recalls have limited comparative value. The failure mechanism between the two inflator designs appears to be very different. The Takata inflator rupture risk increased with the propellant's exposure to moisture over time-in-service creating excessive pressure during deployment. The failure mode mentioned in NHTSA's Initial Determination relates to blockages that prevent pressure from escaping the inflator when deploying.[10] And while the inflator numbers are similar, 67 million Takata inflators, compared with 52 million ARC inflators, the time-in-service and the number of inflator ruptures is very different. Overall, Takata inflator ruptures have resulted in 27 reported deaths and more than 400 reported injuries in the U.S.[11] And the Takata rupture risk increases with time. Within the Takata inflator populations, there were unique manufacturing problems that created substantially increased risks and high inflator rupture rates in relatively small vehicle populations. These factors make direct rate comparisons difficult.

NHTSA Did Not Assess the Economic, Social and Safety Consequences of a Recall

Manufacturers and the Agency have in many situations agreed that assessing whether a safety recall is warranted does not need to involve in-depth considerations of the economic, social, safety consequences of remedying the defect. Assessing the frequency of the failures and the severity of the failures has in many instances been sufficient to make a recall determination within a smaller vehicle population. The ARC

[8] National Highway Traffic Safety Administration. Statement of Dr. Donna Glassbrenner at Public Meeting on Initial Decision that Certain Frontal Driver and Passenger Air Bag Inflators Manufactured by ARC Automotive Inc. and Delphi Automotive Systems L.L.C. Contain a Safety Defect, Docket No. NHTSA-2023-0038, October 5, 2023 at 58-59.
[9] Id at 59.
[10] In its May 11, 2023 letter responding to NHTSA's Recall Request Letter, ARC states that its investigation as determined that for two ruptures where the cause can be determined, weld slag blockage was not the cause. I can only assume NHTSA does not agree with ARC's assessment.
[11] National Highway Traffic Safety Administration. Statement of Bruce York at Public Meeting on Initial Decision that Certain Frontal Driver and Passenger Air Bag Inflators Manufactured by ARC Automotive Inc. and Delphi Automotive Systems L.L.C. Contain a Safety Defect, Docket No. NHTSA-2023-0038, October 5, 2023 at 17.

inflator facts as contained in NHTSA's Initial Determination are unique. The agency's Initial Determination documents seven ruptures in a population of 52 million inflators in vehicles with up to 23 years in service. The affected vehicle population is second only to the Takata recalls. Seven failures in this size population with this time in service would not typically justify a defect finding. As described above, the agency appears to base its assessment primarily on the severity of harm element. But severity does not eliminate the frequency factor as described in *X-Cars*. No mention is made of how many future ruptures are anticipated or the potential costs and subsequent risks of a safety recall to prevent that risk. NHTSA's position appears to be that given the severity of harm that results from an air bag inflator rupture, a recall is warranted to prevent even one more such failure, regardless of the economic, social, or safety consequences of conducting such a massive recall.[12]

While the severity and frequency of the harm are distinguishable from Takata, there are lessons we can take away from the Takata recall implementation experience that are comparable. We have learned from the Takata experience that recall completion rates will be very low in vehicles of this age without extraordinary outreach efforts.[13] While a defect that has been involved in more than 400 injuries might warrant such efforts, the safety risk associated with the ARC inflators is not comparable to the Takata case.

Engineering, Manufacturing, and Supply Consequences

The Takata experience shows that it will take many years before replacement inflators will be available to complete any recall. There simply is not the manufacturing capacity in the world to provide the incremental 52 million inflators needed to complete the recall. New factories will need to be built and entire new supply chains developed to supply this number of replacement parts. I was honored to work with the tremendously committed team at Ford Motor Company who implemented the replacement part development and the innovative outreach campaigns. It was a massive effort involving hundreds of people over several years. The ARC recall would present even more difficult logistic and supply chain challenges, as the agency's rationale that the entire 52 million inflator population poses an indistinguishable safety risk provides no basis to support staggering the timeline for a rollout of a potential recall.

[12] It is certainly understandable for members of NHTSA to react to the Takata experience as cautionary and seek to avoid a similar situation related to ARC inflators. As I have described, these facts are distinguishable from the Takata defect in several respects including the failure rate, the time-in-service, and the increasing failure risk over time that the Takata inflator failure mechanism posed. It also involved deception and the misrepresentation of test data that misled Honda, and then the entire industry, about the manufacturing quality and safety of ammonium nitrate-based inflators. *See* Plea Agreement, *United States v. Takata Corporation*, case no. 16-cr-20810 (E.D. Mich), ECF No. 23.

[13] Fourth Report of Takata Independent Monitor, December 22, 2020.

Not only will the resource commitments in terms of costs, human resources, and years of effort be extraordinary to recall 52 million ARC inflators, the process of manufacturing and replacing air bag inflators is not without risks.

Manufacturing 52 million replacement inflators will require a series of trade-offs as we learned from Takata recalls and the recent supplier chain disruptions. The first trade-off is finding and employing the engineering talent to design and verify the performance of replacement inflators. Engineering resources assigned to replacement inflator development are not available to design and verify other current and future products. New products with improved safety performance may be delayed due these trade-offs. Each OEM will make staffing choices about how to support the additional workload. For example, no one has current familiarity with the design choices that were made for vehicles and inflators built 23+ years ago. Engineering and manufacturing teams will need time to re-discover these designs.

Engineering resources are finite and based on the Takata experience, there will be competition to acquire the resources and pressure applied by each OEM on suppliers to prioritize each of their demands over those of the other OEMs. Similar trade-offs will be made throughout the supply chain in terms of engineering, verification, and manufacturing resources. While achieving safe performance targets will not be compromised, there will be economic and social costs throughout the industry. In a world of finite resources, trade-offs related to costs, timing, and prioritization must be made when a recall of this size and scope is considered.

All the engineering and manufacturing costs, and the opportunity costs of these resources not deployed to make other products are recognizable economic and societal costs of a recall of ARC inflators that will be borne throughout the economy.

Safety Consequences

There are safety consequences inherent in the processes of manufacturing and replacing 52 million air bag inflators that NHTSA did not evaluate in its Initial Decision.

Manufacturing Reliability Introduces New Failures

It is important to recognize that there is a failure rate in any manufactured product. The reliability of a population of 52 million replacement inflators will not be perfect. Hopefully, none of the replacement inflators will rupture, but that risk is not zero. The rate of other types of failures in the replacement inflator population will not be zero. The recall may introduce some number of defectively manufactured replacement inflators for currently non-defective inflators.

Servicing Millions of Vehicles Creates New Safety Risks

The service repair process introduces even a larger potential for safety risks related to recalling 52 million inflators. Manufacturing processes occur in tightly controlled environments to help reduce the risks of variability and defects. Service repairs are conducted at thousands of facilities employing tens of thousands of technicians. Dealership service departments are staffed by dedicated, safety conscious professionals who take their responsibilities seriously. Even with proper training, sound processes, and good intentions, there will be variability that introduces new risks of malfunctioning air bag inflators when millions of inflators are replaced. It is not a criticism; it is an inevitable fact of being human. There is a direct, increased safety risk to vehicle occupants when millions of air bag inflators are serviced.

Delays for Other Safety Repairs

There is also an indirect increased risk to motor vehicle safety when there is a new increase in service demand to replace millions of air bag inflators. The demand for those inflator replacements will displace millions of other service repairs. Some of those displaced repairs will be for conditions that pose an immediate safety risk for people in those vehicles or, in the case of a brake or steering problem, those sharing the road. There will be some number of accidents, injuries, and potentially fatalities, that result from these displaced, high-risk service repairs. We cannot expect owners to always diagnose those conditions that pose an immediate safety risk, and we cannot expect dealer service departments to always prioritize repair scheduling for the highest risk conditions.

NHTSA's recall policies would exacerbate this risk of ARC inflator replacements displacing service for immediate safety risks. First, recall letters will alert owners to the risk of death due to an inflator rupture without any information to the owner about the relative frequency of the risk of an inflator rupture. Second, OEMs may be expected to prioritize efforts to increase completion rates without consideration for the consequences for other displaced repairs. This pressure on OEMs, in turn, will cause OEMs to pressure dealerships to prioritize ARC inflator replacements over all other repairs. Dealers will respond when they are being measured against dashboards with performance targets and other incentives.

Due to the timeline for generating service parts for this population of vehicles, and the age of the vehicle population, this increased demand will continue at some elevated level for years. This increase in service demand should be understood in the context of recent safety recall service demand and the severe shortage in qualified technicians.[14] Between 2018 to 2022 calendar years, the affected vehicle population for safety recalls

[14] Auto dealers are facing a shortage of technicians to fix cars. Here's why. CNBC , July 9, 2022. https://www.cnbc.com/2022/07/09/auto-dealerships-are-facing-a-shortage-of-technicians-to-fix-cars-heres-why.html

totaled over 211,000,000.[15] The National Automobile Dealers Association estimates there about 56,000 unfilled technician positions at franchised dealerships.[16]

NHTSA's Initial Decision did not evaluate the risks related to improperly performed ARC inflator repairs or the safety consequences of delaying critical safety repairs due to prioritizing the replacement of millions of ARC inflators. These events will happen at some non-trivial occurrence level that requires comparison with the rate of failure in the population covered by the Initial Decision.

More Vehicle Miles Traveled Increases Safety Risks

Another increased safety risk is the potential for crashes, injuries, and fatalities that may occur when owners travel to and from dealerships for their recall remedy service. NHTSA most recently estimated that in 2022 there were 1.35 traffic fatalities per 100 million vehicle miles traveled.[17] In a study evaluating the economic and societal impacts of motor vehicle crashes, NHTSA estimates the economic cost of each fatality is $1.6 million.[18] In formulating the cost-benefit analysis of new regulations, the Department of Transportation estimates the value of a statistical life at $12.5 million.[19] NHTSA's most recent Traffic Safety Fact Sheet reported a rate of 80 injury crashes per 100 million vehicle miles traveled.[20] For each critically injured person, NHTSA estimates the economic cost is $979,000.[21] NHTSA also has estimates for the societal costs of motor vehicle crashes, injuries, and fatalities that should be included in its evaluation of whether a safety recall is warranted here.[22]

Hypothetically, let us assume that 20 million vehicles are driven to dealerships for ARC recall service. And let us assume that the average miles traveled to and from the dealership is 20 miles in total. That would result in 400 million vehicle miles traveled in seeking ARC inflator recall service. NHTSA could then estimate that there will be 5-6 fatalities (5.50) and 320 injury crashes resulting just from the travel associated with

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[15] NHTSA 2022 Annual Report Safety Recalls, January 2023.
[16] NADA 2023 Mid-Year Report.
[17] National Center for Statistics and Analysis. (2023, April). Early estimate of motor vehicle traffic fatalities in 2022 (Crash•Stats Brief Statistical Summary. Report No. DOT HS 813 428). National Highway Traffic Safety Administration.
[18] Blincoe, L., Miller, T., Wang, J.-S., Swedler, D., Coughlin, T., Lawrence, B., Guo, F., Klauer, S., & Dingus, T. (2023, February). The economic and societal impact of motor vehicle crashes, 2019 (Revised) (Report No. DOT HS 813 403). National Highway Traffic Safety Administration.

[19] Office of Transportation Policy, Department of Transportation **(**2021, October) Departmental Guidance on Valuation of a Statistical Life in Economic Analysis

[20] National Center for Statistics and Analysis. (2023, October). Summary of motor vehicle traffic crashes: 2021 data (Traffic Safety Facts. Report No. DOT HS 813 515). National Highway Traffic Safety Administration.
[21] Blincoe, L., Miller, T., Wang, J.-S., Swedler, D., Coughlin, T., Lawrence, B., Guo, F., Klauer, S., & Dingus, T. (2023, February). The economic and societal impact of motor vehicle crashes, 2019 (Revised) (Report No. DOT HS 813 403). National Highway Traffic Safety Administration.
[22] *Id.*

seeking service. Additionally, there will be millions of miles traveled by common carriers delivering millions of replacement inflators and returning relaced inflator for disposal. I recognize that fatal accidents are greatly influenced by many behavioral factors including alcohol, speeding, and seat belt use that may be less likely to occur in these trips to dealerships. While I am not able to offer a detailed statistical analysis of these risks, NHTSA is capable of such analyses, and should perform them, according to the court cases instructing the agency's responsibility under the Safety Act to evaluate the economic, societal, and safety consequences of a recall.

NHTSA's Initial Decision Did Not Make a Comparative Evaluation of the Frequency of Harm, Severity of Harm, and Economic, Social, and Safety Consequences of a Recall

As outlined above, NHTSA has the burden to prove that a significant number of safety-related failures have occurred during foreseeable use before it can establish a safety-related defect in a population of vehicles. A safety recall of 52 million ARC air bag inflators will have important economic, social, and safety consequences. Economic and societal trade-offs will be necessary and new safety risks will result from the recall. In many investigations, those consequences are not in question because the failure rate in the vehicle population is clearly high enough to justify a recall action. Here, the vehicle population is so remarkably high and the failure rate so remarkably low that those factors are not in alignment, and the mismatch should be addressed by NHTSA. NHTSA's Initial Decision appears to make the argument that the severity of harm alone meets its burden of proof that the affected population of vehicles contains a safety-related defect and that a recall is warranted. In its Initial Decision, the agency "rejects" rate-based analyses as diminishing the severity of the harm. I can find no support in the Safety Act or its caselaw for the proposition that a small number of high severity events regardless of other factors is sufficient for the agency to meet its burden to prove a safety defect. The Safety Act caselaw requires NHTSA to prove the accumulated risks of conducting a safety recall of 52 million ARC inflators are justified compared with both the failure rate and the severity of the harm. NHTSA's Initial Decision did not make these required assessments.