May 23, 2016

Honorable Mark R. Rosekind, Administrator
National Highway Traffic Safety Administration
U.S. Department of Transportation
1200 New Jersey Avenue, S.E.
West Building Ground Floor, Room 12-140
Washington, D.C. 20590-0001

Re: January 12, 2016 Petition Requesting AEB Rulemaking

Dear Administrator Rosekind:

On January 13, 2016, Consumer Watchdog, the Center for Auto Safety and Joan Claybrook petitioned NHTSA to promulgate a safety regulation requiring all light vehicle manufacturers to incorporate three established and proven technologies as standard equipment that will prevent or reduce deaths and injuries from automobile crashes: Forward Collision Warning, Crash Imminent Braking, and Dynamic Brake Support, collectively known as Automatic Emergency Braking (AEB).[1]

In the Petition, we pointed out that NHTSA (1) had announced, on October 16, 2016, a rulemaking to establish AEB as a mandatory safety technology for trucks and other heavy vehicles; (2) had issued a decision on November 2, 2015, to include two of the AEB technologies, Crash Imminent Braking (CIB), and Dynamic Brake Support (DBS), as Recommended Advanced Technology Features in NHTSA's highly-regarded "5-Star Safety Rating System"; and (3) had proposed to update the "5-Star Safety Rating System" to include *crash avoidance* technologies that prevent or mitigate the impact of a crash, including AEB. In light of those actions, a mandatory AEB requirement for light vehicles seemed the logical and inevitable next step.

However, apart from acknowledging receipt of our Petition on February 23, 2016, NHTSA has made no formal response. We now know that behind closed doors, NHTSA was deeply engaged in negotiations with the auto industry to *avert* the proposed rulemaking. This process culminated in NHTSA's announcement on March 17, 2016, that it had secured a voluntary "commitment" in the form of a Memorandum of Understanding (MOU) from twenty automakers representing more than 99 percent of the U.S. auto market to make a limited version of automatic emergency braking a standard feature on "substantially all light duty vehicles and trucks" not later than the 2023 model year for vehicles up to 8,500 pounds, and not later than the 2026 model year for passenger vehicles between 8,501 pounds and 10,000 pounds.[2] "Substantially all" is defined as 95%, so one out of every 20 vehicles manufactured by each signatory to the MOU is not covered by the MOU. Light

[1] Forward Collision Warning alerts the driver to a front collision that will occur if the driver does not apply the brakes but does nothing else. Dynamic Brake Support applies additional braking if the system determines the driver is not applying enough braking to avoid a front collision. Crash Imminent Braking applies the brakes to avoid or reduce the speed of a front collision that will occur when the driving is not applying any brakes.
[2] The MOU is at https://www.regulations.gov/#!documentDetail;D=NHTSA-2015-0101-0005.

duty vehicles with manual transmissions are given two additional years, to the 2025 model year. Models that are phased out or redesigned with 12 months of the 2023, 2024 or 2025 model year also do not have to comply with the 2023, 2024 or 2025 model year dates in the MOU. Nowhere has NHTSA said how many vehicles these waivers and extensions cover, and perhaps the agency does not even know. If the MOU were a rulemaking, as the law requires, NHTSA would have to provide such information to the public.

What does the MOU offer in terms of safety on the road? Not much, as is seen by comparing the MOU to NHTSA's NCAP Program and the agency's research.[3]

Absent from the MOU is any commitment by automakers to (1) meet the 45 mph to 0 mph test that NHTSA's 5-Star Safety Rating Program establishes for Forward Collision Warning, (2) include Dynamic Brake Support in the AEB system, and (3) meet the minimum 10 mph speed reduction from 25 mph test established under both NHTSA's Research Programs and the Insurance Institute for Highway Safety's (IIHS) rating system for Crash Imminent Braking. Inexplicably, and without any explanation anywhere, the MOU reduces the starting test speed to 24 mph. Moreover, the auto companies in the MOU agreed only to reduce the speed by 10 mph – from 12 mph to 2 mph. If the MOU were a rulemaking, NHTSA would have to explain how and why the AEB voluntary measures became so weak in the face of higher ratings every where else.

The MOU gives each auto company unfettered discretion to decide whether to market a protective AEB system that will bring a car to a complete stop at 40 mph without a collision into a stopped vehicle, or a compromised and dangerous AEB system that can't even bring the car to a complete stop from a speed of 12 mph. Regardless of whether the system used is good or bad, automakers are also free to continue their current practice of making these safety options so expensive that many buyers will be priced out of the protection they would receive under a mandatory safety standard. Of course, the new car salesperson at the dealer can tell the consumer with a straight face that this car meets the NHTSA agreement and the MOU even if that particular vehicle has the compromised AEB system. It speaks volumes that neither the MOU nor NHTSA requires a window sticker detailing the speed at which the AEB system will stop the car from before hitting a parked vehicle. If that rating is not on the window sticker at the point of sale, the MOU is worthless in telling the consumer how good or bad the AEB system on that car is.

In June 2012, NHTSA completed a thorough study of the benefits of Crash Imminent Braking, Dynamic Brake Support and Forward Collision Warning. NHTSA's conclusion was that a Crash Imminent Braking system that reduced the vehicle's speed to 10 mph from 25 mph before hitting a stationary vehicle would only save 38-63 lives annually.[4] In a later study in August 2014, NHTSA estimated lives saved by Crash Imminent Braking at 40 annually.[5] For Dynamic Brake Support, NHTSA estimated 3-19 lives saved annually in the June 2012 study and 25 lives saved annually in the August 2014 study. Neither study did a separate analysis of FCW but came up with an estimated

[3] The MOU completely pales in comparison to the European NCAP rating for AEB, which requires that the vehicle be able to come to a complete stop from 70 km/h (43.5 mph) without hitting a stopped vehicle. "Implementation of Autonomous Emergency Braking (AEB), The Next Step in EURO NCAP's Safety Assessment," Paper No. 13-0269, The 23rd International Technical Conference on the Enhanced Safety of Vehicles (ESV) Seoul, Republic of Korea, May 27-30, 2013 (http://www-esv.nhtsa.dot.gov/Proceedings/23/isv7/main.htm).

[4] "Forward-Looking Advanced Braking Technologies Research Report," NHTSA, June 2012, at 26.

[5] "Automatic Emergency Braking System (AEB) Research Report," NHTSA, August 2014, at 16.

100 lives saved for the three systems combined, without any explanation of how it got to a 100. If the MOU were a rulemaking, NHTSA would have to explain how these estimates were calculated.

In a rulemaking, NHTSA would have had to do a Regulatory Impact Analysis that detailed not only the lives saved and injuries prevented by the technology, but also the practicability of the technology, the present market penetration of AEB technologies, and the lead time necessary to implement the AEB technology. The five-page MOU, however, raises more questions than it answers. At the top of the list of unanswered questions is how many lives will be saved annually, given the omission and compromises mentioned above. One thing is certain: the number of lives saved annually, if any, is going to be significantly less than the estimate in NHTSA's August 2014 study.[6]

NHTSA's active participation in, and deference to, an industry-sponsored set of unenforceable pledges in lieu of safety standards set by regulation represents an abdication of its regulatory responsibilities that is *unprecedented* in the history of the agency. After all, NHTSA was established by Congress in 1966, after extensive hearings and evaluation, based on which lawmakers concluded that, "The promotion of motor vehicle safety through voluntary standards has largely failed. The unconditional imposition of mandatory standards at the earliest practicable date is the only course commensurate with seriously reducing the highway death and injury toll."[7]

Not surprisingly, the five-page MOU between NHTSA, IIHS and various automobile manufacturers is deafeningly silent on the critical procedural and substantive protections that would be essential elements of a duly promulgated regulation. The most glaring example is that, likely because the terms of the MOU are not enforceable, the MOU does not even address compliance testing, as would be required by a regulation. If a manufacturer's AEB fails to meet the voluntary requirements of the MOU, the manufacturer has no obligation to do a recall or take any other action. By contrast, if NHTSA required AEB as a safety standard adopted by regulation, NHTSA would engage in compliance testing and any failure would result in a mandatory recall.[8]

Comparison of the MOU with NHTSA's own research and recommendations on AEB show that, predictably, the voluntary terms do not contemplate deployment of state of the art AEB technologies, but rather appear to maximize auto company profits and marketing concerns at the expense of robust consumer protection, establishing a lowest common denominator of industry practice.

The MOU contains no procedure by which NHTSA or anyone else can hold the auto manufacturers to their promises. Indeed, the "commitments" are not binding on any company or particular vehicle or model at any given time and can be unilaterally abandoned at will, with no public notice.

Moreover, the auto industry's "commitments" cannot be enforced by any member of the public, or by NHTSA or any other government agency. Relegating itself to the status of an interested observer, NHTSA claims it "will track the progress industry is making towards its commitment," apparently

[6] Ibid.
[7] Committee Report on S. 3005, The Traffic Safety Act of 1966, June 23, 1966, at 274. (Emphasis added.)
[8] 42 U.S.C. 30118-42 U.S.C. 30120.

with the assistance of IIHS and Consumer Reports magazine.[9] But the MOU says nothing about what if any reporting auto manufacturers will undertake, nor how NHTSA, IIHS and Consumer Reports will "monitor" the conduct of the automakers.

Asked to explain this radical departure from the regulatory process enacted by Congress fifty years ago, Secretary Foxx said he "wants to ease some of the regulatory restraints to make it easier for the technology to develop."[10] And you said in an interview on the sidelines of the Detroit Auto Show that, "the agency cannot make vehicles safe simply by imposing new regulations and handing down fines.…We're going to have to find new tools – that means new collaborations, new partnerships."[11] You also said, "You can't use old tools for new problems. We'll keep using those, but if we do not look for new ways to handle these problems, we are stuck."[12] You have also asserted that the rulemaking procedure required by the statute would take too long. "…bypassing the regulatory process would save three years in making automatic braking systems standard equipment, according to NHTSA."[13] "The unprecedented commitment means that this important safety technology will be available to more consumers more quickly than would be possible through the regulatory process."[14]

Contrary to your suggestion, the reason for the agency's repudiation of the rulemaking process surely isn't speed. The "voluntary" AEB "agreement" that you negotiated doesn't take effect until sometime between September 1, 2022, and August 31, 2023 – more than six years from now at a minimum. Vehicles with manual transmissions get until the 2025 model year, which begins on September 1, 2024. Large pickups and SUVs get 3 more years: until September 1, 2025, the 2026 model year. *That's ten years away*. By contrast, Secretary Foxx himself recently estimated that notice-and-comment rulemaking, a transparent process with opportunity for public participation, takes "three to four years."[15]

NHTSA's rulemaking process has withstood the test of time and been used in over 4,000 thousand decision-making proceedings published in the Federal Register, including many involving highly technical issues.[16] Under The National Traffic and Motor Vehicle Safety Act, rules issued must be objective and framed in terms of performance, not vehicle design. And the safety rules *must* set *minimums*, allowing manufacturers ample flexibility to develop and propose greater safety innovations. Further, in reviewing this law, a 1972 decision by the Sixth Circuit Court of Appeals made it clear that federal vehicle safety standards may be used to force innovation.[17]

By contrast, the automakers' pledges and the MOU contain such weak performance targets and

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[9] The announcement stated that the non-profit publisher of "Consumer Reports will assist in monitoring automaker progress toward meeting the AEB commitment." It is unclear precisely what role Consumer Reports, or its parent company Consumers Union, will have in monitoring the agreement, or precisely to whom it will report.
[10] POLITICO, Pro Transportation Report, Friday January 15, 2016.
[11] Exclusive: U.S., Major Automakers to Announce Safety Accord Friday, David Shepardson, Detroit News, January 11, 2016).
[12] POLITICO, Pro Transportation Whiteboard, January 21, 2016.
[13] James F. Peltz, "Automakers agree to make automatic braking a standard feature by 2022," Los Angeles Times March 17, 2016, Business/Autos section.
[14] Ibid.
[15] Lauren Gardner, "Foxx: Congress 'Frosty' on $4 Billion Self-Driving Car Ask," Bloomberg News, March 29, 2016.
[16] 1 Auto. Design Liability § 3:8, NHTSA FMVSS and CFR actions and citations (3d ed. 2015).
[17] *Chrysler Corp. v. Department of Transp*., 472 F.2d 659, 671 (1972).

envision such an excessively long lead time that they will "freeze" safety technologies at a very low level and eliminate incentives for manufactures and innovative suppliers to develop improvements over the next decade.

Indeed, since your announcement of NHTSA's MOU with various auto companies, it has become clear that a number of manufacturers are preparing to market cars capable of exceeding the MOU's targets much sooner. For example, Honda is already offering a form of AEB in many of its 2016 models that, when travelling at 40 mph, can bring the car to a complete stop *before* hitting a stationary vehicle--whereas the MOU contemplates only that the vehicle traveling at 12 mph will slow to 2 mph, not stop, before colliding.[18] Volvo will have AEB on all its models by 2018.[19] Subaru has one of the best AEB systems tested by IIHS on most of its 2016 models.[20] Toyota will have AEB on 25 of its 30 models by 2017.[21] Thus the marketplace confirms that the MOU's requirements are far too weak and will permit some laggard manufacturers to rely on marginal AEB systems until at least the 2023 model year.

That is not to suggest that speed to market is the only concern. Vehicle defect reports available on NHTSA's own website indicate that there are potentially life-threatening errors and failures in some AEB technologies that manufacturers have already deployed and in the software programs on which the new systems will so heavily rely.[22] These data emphasize the importance of a thorough rulemaking proceeding to establish federal safety standards applicable to all vehicles.

In 2013, 11,303 people were killed in cars and light trucks where the initial point of impact was the front of the vehicle.[23] This is the very type of crash where AEB is the most effective. While AEB will not prevent all of these deaths, a rigorous AEB system that can stop a vehicle traveling at 45 mph before it crashes will save far more than the 40 lives reflected in NHTSA's estimates of the likely deaths and injuries that can be prevented under the MOU.

The rigorous, open decision-making process required by the Safety Act and the Administrative Procedure Act explores all the alternatives, gives all interested parties the opportunity to provide information and views, and requires a scientific basis for a final decision, to find the most effective safety standard. Moreover, the Act gives NHTSA discretion to act rapidly if circumstances warrant. Rules can also be amended, deleted, or effective dates changed. These features of the statutory rulemaking process protect not only consumers, but automakers – which is why several large auto manufacturers testified at your public meeting on automated vehicles on April 8, 2016, that they prefer federal regulation to the informal approach you have chosen.

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[18] "Honda Sensing," http://automobiles.honda.com/sensing/
[19] Press Release, "Volvo Joins Automakers, NHTSA & IIHS on Automatic Emergency Braking Agreement," Volvo, March 17, 2016 (https://www.media.volvocars.com/us/en-us/media/pressreleases/188549/volvo-joins-automakers-nhtsa-and-iihs-on-automatic-emergency-braking-agreement).
[20] "Eyesight Driver Assist Technology," http://www.subaru.com/engineering/eyesight.html.
[21] "Lexus and Toyota Will Make Automated Braking Standard on Nearly Every Model and Trim Level by End of 2017," http://corporatenews.pressroom.toyota.com/releases/lexus+toyota+automated+braking+standard+2017.htm.
[22] "Crash Avoidance Recalls," http://www.autosafety.org/wp-content/uploads/2016/05/Crash-Avoidance-Recalls.pdf; Software Safety Recalls in 2014-2015, http://www.autosafety.org/wp-content/uploads/2016/04/2014-15-Software-Recalls.pdf
[23] "2013 Traffic Safety Facts," DOT HS 812 139, Table 72.

Americans will pay a heavy toll in deaths and injuries for the agency's abdication of its responsibilities. NHTSA's own calculations show that over 600,000 lives have been saved by vehicle safety technologies installed to comply with NHTSA mandatory safety standards, adopted through notice-and-comment rulemaking, from 1960 to 2012.[24] This conservative number does not include the millions of injuries mitigated by NHTSA mandatory standards.

Recent years have seen a record number of vehicle recalls, serious safety scandals, including defective GM ignition switches, Takata airbags and unintended acceleration by Toyotas; and the Volkswagen and Hyundai fuel economy scandals. We had hoped NHTSA would recognize that complying with the requirements of the rulemaking process, with its guarantees of science-based decision-making, due process and disclosure, is the only way to assure public confidence in the agency's actions.

Like its previous actions in support of AEB for heavy vehicles and the "5-Star Safety Rating" program, NHTSA's March 17 announcement confirms that the agency believes AEB technologies are essential and should be installed in all vehicles. The only issue is whether NHTSA is going to follow the course prescribed by statute to require those safety features as standard equipment, or abdicate its authority to the industry that NHTSA is charged by Congress with regulating.

NHTSA was required to grant or deny our January 13, 2016 Petition within 120 days. (49 U.S. 30162(d).) That deadline has passed. We ask that NHTSA act *immediately* to grant or deny our Petition.

Sincerely yours,

Harvey Rosenfield	Clarence Ditlow	Joan Claybrook
Of Counsel	Executive Director	President Emeritus
Consumer Watchdog	Center for Auto Safety	Public Citizen
Santa Monica, California	Washington, D.C.	Washington, D.C.

[24] Traffic Safety Facts 2013: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System, NHTSA, 2015, DOT HS 812 139; "Lives Saved by Vehicle Safety Technologies and Associated Federal Motor Vehicle Safety Standards, 1960 to 2012 Passenger Cars and LTVs," NHTSA, 2015, DOT HS 812 069.