

**UPDATE ON THE RECALLS OF DEFECTIVE
TAKATA AIR BAGS AND NHTSA'S
VEHICLE SAFETY EFFORTS**

HEARING

BEFORE THE

**COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE**

ONE HUNDRED FOURTEENTH CONGRESS

FIRST SESSION

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JUNE 23, 2015
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Printed for the use of the Committee on Commerce, Science, and Transportation



U.S. GOVERNMENT PUBLISHING OFFICE

99-955 PDF

WASHINGTON : 2016

For sale by the Superintendent of Documents, U.S. Government Publishing Office
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ONE HUNDRED FOURTEENTH CONGRESS

FIRST SESSION

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**UPDATE ON THE RECALLS OF DEFECTIVE
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TUESDAY, JUNE 23, 2015

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Committee met, pursuant to notice, at 10:06 a.m., in room SR-253, Russell Senate Office Building, Hon. John Thune, Chairman of the Committee, presiding.

Present: Senators Thune [presiding], Blunt, Ayotte, Heller, Fischer, Moran, Gardner, Daines, Nelson, McCaskill, Klobuchar, Blumenthal, Markey, Booker, Manchin, and Peters.

**OPENING STATEMENT OF HON. JOHN THUNE,
U.S. SENATOR FROM SOUTH DAKOTA**

The CHAIRMAN. Good morning. Welcome, everyone. This hearing will come to order.

We have called this hearing for a very somber reason. Some defective airbags are hurting, rather than helping, people. We still haven't figured out exactly why, and we need to figure out how to prevent these issues from occurring in the future.

This is a pivotal time in vehicle safety. It is welcome news that cars are generally safer than they have ever been. Advances in vehicle technologies and safety innovations, as well as robust safety initiatives, have reduced the number of deaths on the road. Still, tragically, more than 30,000 people die every year due to motor vehicle accidents.

Airbags are one of the most important vehicle safety innovations, and that is why it is so alarming that tens of millions of cars have potentially defective airbags. Today, we will be asking witnesses for an update on recall and remedy efforts for Takata airbag inflators, which have been allegedly linked to 8 deaths and over 100 injuries.

The large number of vehicles recalled covers 11 auto manufacturers. The complexity of the different types of inflators, the lack of an identified root cause to date, and the age of the vehicles affected have made remedying this problem exceedingly difficult. But these challenges do not excuse the responsibilities of auto manufacturers, suppliers, and the National Highway Traffic Safety Administration, NHTSA, from their shared obligation to ensure vehicles are safe.

The first priority should be fixing the recalled vehicles as soon as possible. NHTSA has also taken an unprecedented role, inserting itself in overseeing this process. Takata and other alternative

suppliers have ramped up production of replacement parts to increase supply, and the autos are seeking to contact affected vehicle owners and working with dealerships on swift repairs.

Nevertheless, questions exist about whether the currently available replacements are truly safe. Takata is phasing out certain types of inflators, and testing is ongoing to determine the root cause or causes of the inflator defects. This testing will help to assess the scope of the recalls and safety of the replacement parts.

These alarming recalls underscore the importance of clear and accurate information for consumers. NHTSA's dedicated Takata recall website is an important step, but recall fatigue and confusion are growing. The large number of vehicles involved has resulted in delays for some consumer notice, and the number of times the same vehicle may be subject to recall may further perplex consumers.

As we all know, completing a recall is not easy. With an all-time record last year of nearly 64 million automobiles subject to recall, I appreciate that NHTSA and the auto industry are looking for ways to improve the process.

Identifying safety problems early is another key issue for both the industry and NHTSA. I look forward to hearing more about the Inspector General's audit report, which raises serious questions about the agency's abilities in this area. The audit identifies many instances in which the agency repeatedly dropped the ball in handling issues related to General Motors' ignition switch defect.

Weaknesses in NHTSA's ability to conduct accurate data analysis and provide necessary training and supervision call into question whether the agency can effectively identify and investigate potential safety problems and carry out its safety mission. These findings are especially disconcerting given the scale and complexity of the Takata defects.

I am pleased to know that Administrator Rosekind has concurred with all 17 of the Inspector General's recommendations and has committed to implement them.

There have been far too many troubling recalls throughout the agency's existence. That is why I have worked with Senator Nelson to pass our Motor Vehicle Safety Whistleblower Act. This legislation seeks to encourage employees to report safety concerns before they become larger problems and to prevent loss of life and serious injuries resulting from safety defects.

Despite a long vacancy with a Senate-confirmed leader, under Administrator Rosekind's leadership, NHTSA has also been looking for ways to improve. There have been assessments of NHTSA and a plan for a path forward, but now is the time for accountability. The agency, automakers, their suppliers and dealers, and Congress must work together to reduce deaths and injuries on our Nation's roadways.

This committee will continue to conduct oversight of the Takata recalls and NHTSA's vehicle safety efforts. I appreciate Takata's general cooperation with the Committee's requests to date. In fact, we just received another large production of documents from the company a few days ago. Some automakers are also producing documents to the Committee. And I am sure we will have more questions for NHTSA.

It is also important for consumers to check to see if their vehicle is subject to this or any recall. NHTSA has a vehicle identification number, or VIN, lookup tool online at *safercar.gov*. If you determine your vehicle is subject to a recall, please schedule an appointment to get it fixed with your closest dealership as soon as possible.

Now I am pleased to welcome Administrator Rosekind to his first appearance before the Committee since his confirmation as the NHTSA Administrator last December.

I also want to welcome Inspector General Scovel back to the Committee and our auto witnesses for this, our second full committee hearing on this important issue.

So I want to thank all of our witnesses for being here today. I look forward to your testimony.

And we will start with this first panel with Mr. Rosekind, followed by Mr. Scovel.

Mr. Rosekind, please proceed.

Oh, I am sorry. Excuse me. I apologize. My mistake.

The Senator from Florida, our distinguished Ranking Member, please make your opening statement before we proceed to the panel.

**STATEMENT OF HON. BILL NELSON,
U.S. SENATOR FROM FLORIDA**

Senator NELSON. Thank you, Mr. Chairman.

And, if I may, we have had an investigation done, “Danger Behind the Wheel: The Takata Airbag Crisis and How to Fix Our Broken Auto Recall Process,” done by our minority committee staff. If I may have that entered into—

The CHAIRMAN. Without objection.

Senator NELSON.—the record.

[The report follows:]



COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION

OFFICE OF OVERSIGHT AND INVESTIGATIONS
MINORITY STAFF

**Danger Behind the Wheel: The
Takata Airbag Crisis and How to
Fix Our Broken Auto Recall
Process**

STAFF REPORT FOR RANKING MEMBER NELSON
JUNE 22, 2015

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Exhibit C: March 31, 2011 E-mail with Subject: "Reworking station 100 parts to 120"

Executive Summary

Following reports of serious injury and death from airbags manufactured by TK Holdings Inc. (Takata) in numerous makes and models of vehicles—and claims of a delayed response from Takata, the automakers, and regulators—the Senate Commerce Committee held a hearing in November 2014 to determine the scope, potential cause, and appropriate Congressional response to this serious safety issue. After the hearing, then Commerce Committee Chairman Jay Rockefeller and Senator Bill Nelson requested briefings and documents from Takata, automakers, and the National Highway Traffic Safety Administration (NHTSA). Among other things, the documents provided to the Committee by Takata detailed the airbag inflator production process, the types of propellant used in these inflators, inflator failure modes analyses, and the alleged deaths and injuries caused by defective Takata airbags. Earlier this year, Chairman John Thune and Ranking Member Nelson made two additional requests for documents, mainly pertaining to airbag inflator testing programs and internal Takata safety inspections. To date, Committee minority staff has reviewed more than 13,000 documents provided by Takata that total more than 90,000 pages.

As further detailed in this report, it appears that Takata was aware, or should have been aware, of serious safety and quality control lapses in its manufacturing plants as early as 2001. Documents reviewed by Committee minority staff also indicate that Takata was informed of three serious incidents involving faulty inflators in the first half of 2007. Nonetheless, the first recall was not issued until November 2008—more than a year later.

In addition, internal e-mails obtained by the Committee suggest that Takata may have prioritized profit over safety by halting global safety audits for financial reasons. The report also sheds light on Takata's effort to address the impact of moisture and humidity on its inflators, which has now been reported to play a role in causing inflator ruptures. Further, it appears that NHTSA, by not opening an inves-

tigation until June 11, 2014, failed to promptly investigate Takata's defective airbags. NHTSA conducted an investigation related to Takata airbag inflators in November 2009, but the investigation only dealt with the scope and timeliness of two previous recalls, and it was closed in May 2010.

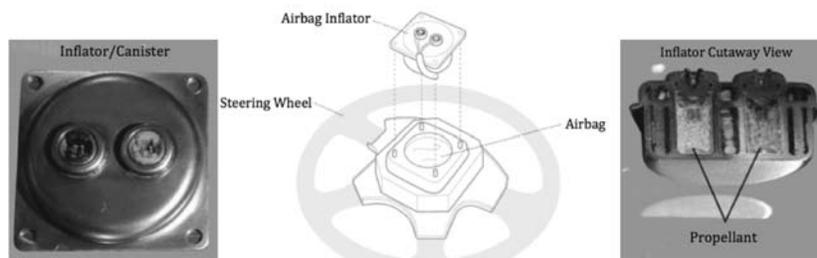
After more than 100 injuries and eight deaths allegedly caused by shrapnel from its rupturing airbags—over a period of more than 10 years—Takata cannot identify a root cause of these ruptures. Yet, Takata is currently producing hundreds of thousands of replacement inflators each month that may not completely eliminate the risk of airbag rupture. Overall, the Committee minority staff's ongoing investigation reveals a pattern of failures and missteps that did not quickly or effectively respond to a serious safety defect.

The recall process must be strengthened to address future defects that could cause serious injury or death. The Moving Ahead for Progress in the 21st Century Act (MAP-21), which was enacted in July 2012, took some important steps forward in this area by incentivizing employees to voluntarily share important safety information and protecting them from retaliation when they do so. Proposals that could strengthen NHTSA's ability to prevent and respond to future safety recalls include increasing the agency's civil penalty authority and expanding its ability to conduct independent testing. Steps must also be taken to improve recall completion rates and the automakers' ability to appropriately respond when recalls are necessary.

I. Background

An airbag is a vehicle occupant restraint system that consists of a fabric cushion or envelope that opens rapidly in the event of a collision. When a crash is detected, a signal is sent to the inflator, which is composed of a steel canister that houses a propellant,¹ and initiates a chemical reaction that causes the propellant to burn.² The burning propellant emits a gas that rapidly inflates and deploys the fabric cushion.³ In some cases, the propellant in airbags manufactured by Takata burns too quickly.⁴ This can cause the inflator to rupture, shooting metal fragments of the inflator canister at the car's occupants.⁵

Figure I: Airbag Inflator and Parts⁶



In July 1984, NHTSA amended Federal Motor Vehicle Safety Standard 208 to phase in a requirement that cars offer automatic occupant protection, such as airbags or automatic seatbelts.⁷ In 1991, Congress passed the Intermodal Surface Transportation Efficiency Act, which required cars built after September 1, 1997, to have airbags for the driver and right front passenger.⁸

Since 1987, Takata has supplied automakers with airbags and has become one of the three largest airbag manufacturers worldwide.⁹ In 1991, Takata began manufacturing airbag inflators in the U.S., and media reports suggest that in 2001 the company started using ammonium nitrate as the main ingredient in its propellant.¹⁰

¹Takata *Saw and Hid Risk in Airbags in 2004, Former Workers Say*, New York Times (Nov. 6, 2014).

²National Highway Traffic Safety Administration, *Air Bag Deployment* (online at www.safercar.gov/Vehicle%20Shoppers/Air%20Bags/Air%20Bag%20Deployment).

³Takata, *All About Airbags* (online at www.takata.com/en/around/airbag01.html).

⁴*Car Industry Struggles to Solve Air Bag Explosions Despite Mass Recalls*, Reuters (June 22, 2014).

⁵*Id.*

⁶Takata *Saw and Hid Risk in Airbags in 2004, Former Workers Say*, *supra* n. 1.

⁷49 Fed. Reg. 28962 (July 17, 1984).

⁸Pub. L. No. 102-240 (1991).

⁹Takata, *Airbags* (online at www.takata.com/en/products/airbag.html); *Special Report: Deadly Airbags Backfire on Firm that Crossed 'Dangerous Bridge'*, Reuters (Jan. 13, 2014). Autoliv and TRW are the other top three airbag manufacturers. *Airbag Inflator Shortage Plagues Industry*, Automotive News (Nov. 24, 2014).

pany started using ammonium nitrate as the main ingredient in its propellant.¹⁰ Compared to its predecessor, tetrazole, ammonium nitrate allowed Takata to create smaller and cheaper airbag inflators that emit less toxic fumes, which, in turn, could reduce the risk of chemical burns or breathing problems when an airbag deploys.¹¹ More than 14 years after the introduction of ammonium nitrate, however, this compound remains at the center of a safety crisis that has plagued Takata for more than a decade.

II. Timeline of the Takata Airbag Crisis

In 2003, the first known incident of a rupturing Takata airbag inflator occurred in a BMW vehicle in Switzerland.¹² Takata's investigation of the incident determined that the inflator, which was 17 months old at the time of the incident, ruptured as a result of an "overloading of propellant in the assembly of the inflator."¹³ Takata stated that this was an isolated event and unrelated to subsequent incidents.¹⁴

In 2004, the airbag in a 2002 Honda Accord ruptured in Alabama.¹⁵ Honda filed an early warning report with NHTSA, which was one of 245 reports filed that year about incidents that resulted in injury or death.¹⁶ Takata tentatively concluded that a compromised seal on the inflator or an overloading of propellant into the inflator might have caused the rupture.¹⁷ Honda said it was assured by Takata in 2004 that this incident was an anomaly.¹⁸ According to two former Takata employees interviewed by the *New York Times*, in the aftermath of this incident, Takata secretly conducted tests on 50 airbag inflators that were collected from vehicles sent to scrapyards.¹⁹ After two of these inflators cracked during testing, engineers began designing possible fixes in anticipation of a recall. The testing was suddenly shut down, however, and Takata executives ordered technicians to delete the testing data.²⁰ In Takata's response to the Committee's request for more information about this testing, Takata stated that it never tested airbags recovered from scrapyards in 2004.²¹

The next known incidents of rupturing inflators did not occur until three years later.²² According to a 2010 letter from Takata to NHTSA, in 2007, Honda reported three additional episodes to Takata that occurred during the first half of 2007²³—all involved 2001 Honda Civics.²⁴ According to media reports, Honda settled with the victims for undisclosed sums of money.²⁵

Takata determined that all three rupture incidents involved inflators that were assembled between October 31 and November 15, 2000, and all contained propellant tablets manufactured in the same months.²⁶ Focusing on the short time-frame in which these inflators and propellant were produced, Takata theorized that two manufacturing processes, which overlapped during this period, led to elevated moisture levels in the propellant.²⁷ It appears Takata believed these elevated propellant moisture levels during the manufacturing process, when combined with the thermal cycling in vehicles, "could cause the propellant density to decline over time, and

¹⁰ *Takata's Switch to Cheaper Airbag Propellant Is at Center of Crisis*, *New York Times* (Nov. 19, 2014).

¹¹ *Id.*

¹² TK Holdings Inc., Defect Information Report, PSDI, PSDI-4, and PSDI-4K Driver Air Bag Inflators (May 18, 2015), at 3.

¹³ *Id.*

¹⁴ *Takata Investigated Defective Air Bag Inflator as Early as 2003*, Reuters (Dec. 3, 2014).

¹⁵ *Takata Saw and Hid Risk in Airbags in 2004, Former Workers Say*, *supra* n. 1; TK Holdings Inc., Defect Information Report, PSDI, PSDI-4, and PSDI-4K Driver Air Bag Inflators, *supra* n. 12, at 3.

¹⁶ *Air Bag Flaw, Long Known to Honda and Takata, Led to Recalls*, *New York Times* (Sept. 11, 2014).

¹⁷ TK Holdings Inc., Defect Information Report, PSDI, PSDI-4, and PSDI-4K Driver Air Bag Inflators, *supra* n. 12, at 3.

¹⁸ *Takata Saw and Hid Risk in Airbags in 2004, Former Workers Say*, *supra* n. 1.

¹⁹ *Id.*

²⁰ *Id.*

²¹ Takata Narrative Response to Senate Commerce Committee (Dec. 12, 2014) at 5.

²² *Air Bag Flaw, Long Known to Honda and Takata, Led to Recalls*, *supra* n. 16.

²³ Letter from Kazuo Higuchi, Senior Vice President, Takata, to George Person, Chief, Recall Management Division, Office of Defect Investigation, National Highway Traffic Safety Administration, at 5 (Feb. 19, 2010) (online at www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/ACM13395661/INRL-RQ09004-39140P.pdf).

²⁴ Takata Response to Senate Commerce Committee, Exhibit A (Dec. 12, 2014); Takata Response to Senate Commerce Committee, Exhibit B (Mar. 27, 2015).

²⁵ *Air Bag Flaw, Long Known to Honda and Takata, Led to Recalls*, *supra* n. 16.

²⁶ Letter from Higuchi to Person, *supra* n. 23, at 5–6.

²⁷ *Id.* at 6.

such a decline in density could lead to overly energetic combustion during deployment of the air bag.”²⁸ This analysis was shared with Honda in September 2007, but a recall was not issued until more than a year later.²⁹

To test this hypothesis, Takata conducted additional testing on inflators recovered from salvage yards and inflators provided by Honda, but the analysis was inconclusive.³⁰ After the conclusion of Takata’s testing, the company learned of a fourth rupture incident.³¹ In October 2008, Takata recommended that Honda recall all vehicles equipped with propellant from the four suspect lots of inflators.³² The following month, in November 2008, Honda issued its first recall of vehicles with Takata airbags, which covered driver-side airbags in 3,940 cars in the U.S.³³

Based on its testing of additional inflators, Takata shifted its focus from the assembly of the inflator to the production of the propellant.³⁴ In 2009, Takata realized that its methodology for calculating propellant density in 2000 and 2001 could have led to invalid results.³⁵ The density of the propellant in inflators recovered from Honda’s November recall that were produced on Takata’s Stokes press, a specific compression press used to form the propellant into tablets, was found to be low, which could leave the propellant “more susceptible to overly aggressive combustion.”³⁶ Takata also learned of additional malfunctions of inflators produced outside the range of the November 2008 recall.³⁷

Takata presented this information to Honda in June 2009 and recommended expanding the recall to include all vehicles containing propellant manufactured on the Stokes press through February 2001.³⁸ The following month, Honda announced its decision to recall approximately 440,000 vehicles in the U.S. due to a potential defect in driver-side airbags.³⁹ Takata explained to NHTSA that it did not provide any inflators that were the same or substantially similar to those covered by the two recalls to any auto manufacturer other than Honda.⁴⁰ Among the nine alleged incidents of rupturing inflators that occurred in 2009, all involving Honda vehicles, were two incidents in which the shrapnel from the airbag inflator appears to have killed the driver of the car.⁴¹

In November 2009, NHTSA opened an investigation related to Takata’s rupturing airbags.⁴² The agency explained that it needed “additional information from Honda and Takata to more fully evaluate the scope and timeliness” of the previous recalls.⁴³

The second Honda recall covered approximately 10,000 vehicles outside the range that Takata had identified as containing the potentially defective inflators—primarily inflators with propellant produced after February 28, 2001—to allow Takata to assess whether the second recall addressed all potentially dangerous inflators.⁴⁴ Testing of these inflators determined that the density of some of the propellant that was manufactured outside the period covered by the existing recalls was also low.⁴⁵ In February 2010, Honda issued another recall, which expanded its second recall to

²⁸ *Id.* at 6.

²⁹ *Id.* at 6.

³⁰ *Id.* at 6–7 (TKH–SCS&T00002077–2078).

³¹ *Id.* at 7 (TKH–SCS&T00002078).

³² *Id.* at 7.

³³ This recall covered certain 2001 Honda Civics and Accords. Letter from William R. Willen, Managing Counsel, Product Regulatory Office, American Honda Motor Co., to Daniel C. Smith, Associate Administrator for Enforcement, National Highway Traffic Safety Administration (Nov. 11, 2008) (online at www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/ACM10641506/RCDNN-08V593-1511.pdf).

³⁴ Letter from Higuchi to Person, *supra* n. 23, at 8.

³⁵ *Id.* at 8–9 (TKH–SCS&T00002079–2080).

³⁶ National Highway Traffic Safety Administration, ODI Resume, Recall Query, Close Resume, RQ09–004 (Nov. 2, 2009–May 6, 2010) (online at www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/ACM13978206/INCLA-RQ09004-5021.pdf).

³⁷ Letter from Higuchi to Person, *supra* n. 23, at 11 (TKH–SCS&T00002082).

³⁸ *Id.* at 11–12.

³⁹ This recall involved certain 2001 Honda Civics and Accords, certain 2002 Honda Accords, and certain 2002 Acura 3.2TLs. Letter from William R. Willen, Managing Counsel, Product Regulatory Office, American Honda Motor Co., to Daniel C. Smith, Associate Administrator for Enforcement, National Highway Traffic Safety Administration (July 29, 2009) (online at www.autosafety.org/sites/default/files/09V259%20Part%20573.pdf).

⁴⁰ Letter from Higuchi to Person, *supra* n. 23, at 2.

⁴¹ Takata Response to Senate Commerce Committee, Exhibit A (Dec. 12, 2014); Takata Response to Senate Commerce Committee, Exhibit B (Mar. 27, 2015).

⁴² National Highway Traffic Safety Administration, ODI Resume, Recall Query, Opening Resume, RQ09–004 (Nov. 2, 2009).

⁴³ *Id.*

⁴⁴ Letter from Higuchi to Person, *supra* n. 23, at 12.

⁴⁵ Letter from Higuchi to Person, *supra* n. 23, at 12 (TKH–SCS&T00002083).

include all vehicles with driver-side inflators containing propellant manufactured on the Stokes press.⁴⁶ In May 2010, NHTSA closed its investigation into rupturing Takata airbags after determining that Honda did not fail to make timely defect decisions and that the scope of the previous recalls was appropriate.⁴⁷

In April 2011, Honda expanded its three previous recalls because it was unable to account for approximately 2,400 replacement inflators that may have been installed in vehicles covered by previous recalls.⁴⁸ To capture the entire population of vehicles in which these replacements could have been installed, Honda recalled 833,277 vehicles.⁴⁹ In December 2011, this recall was expanded to include an additional 272,779 vehicles.⁵⁰ Between 2011 and 2012, 16 additional alleged incidents occurred, although Takata may not have been aware of some of the incidents until years later.⁵¹

Between February and March 2013, Takata learned of two manufacturing problems affecting the propellant tablets within certain passenger-side airbag inflators.⁵² Takata explained that one manufacturing issue occurred at its Moses Lake, Washington plant between April 13, 2000, and September 11, 2002, where some propellant tablets may not have been adequately compressed because the auto-reject function on the machine that pressed the propellant into tablets had been turned off by the machine operator.⁵³ The other issue occurred at Takata's Monclova, Mexico plant between October 4, 2001, and October 31, 2002, where some propellant tablets may have been exposed to moisture.⁵⁴ Due to these manufacturing problems, Takata found that the propellant could potentially deteriorate, leading to over-aggressive combustion, which could cause the inflator to rupture.⁵⁵ At the time, Takata was aware of six ruptures—four in the U.S. and two in Japan.⁵⁶ Takata informed NHTSA in April 2013 that, based on these two manufacturing problems, a defect may exist in certain passenger-side airbag inflators in certain Honda, Toyota, Nissan, Mazda, GM, and BMW vehicles.⁵⁷ In light of Takata's defect report, most of these automakers issued recalls, but NHTSA did not reopen its investigation into rupturing Takata airbags.⁵⁸ In 2013, 18 additional alleged incidents occurred.⁵⁹

By May 2014, Takata was aware of six rupture incidents that occurred in vehicles in Florida and Puerto Rico that were not covered by previous recalls.⁶⁰ In June 2014, Takata notified automakers that some of its traceability records were incomplete, meaning Takata “could not identify with absolute certainty the propellant lots from which the propellant wafers in a specific inflator were taken.”⁶¹ As a result, it was possible that propellant wafers had been stored at the Monclova plant for up to three months before being used in inflators.⁶² Based on these conclusions,

⁴⁶ Letter from Higuchi to Person, *supra* n. 23, at 13.

⁴⁷ NHTSA, Close Resume, RQ09-004, *supra* n. 36.

⁴⁸ Letter from Jay Joseph, Senior Manager, Product Regulatory Office, American Honda Motor Co., Inc., to Claude Harris, Acting Administrator for Enforcement, National Highway Traffic Safety Administration (Apr. 27, 2011) (online at www.autosafety.org/sites/default/files/imce_staff_uploads/Honda%20Airbag%2011V-260.pdf).

⁴⁹ *Id.*

⁵⁰ Letter from Jay Joseph, Senior Manager, Product Regulatory Office, American Honda Motor Co., Inc., to Nancy Lewis, Acting Administrator for Enforcement, National Highway Traffic Safety Administration (Dec. 1, 2011) (online at www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/ACM19786131/RCDNN-11V260-5849.pdf).

⁵¹ Takata Response to Senate Commerce Committee, Exhibit A (Dec. 12, 2014); Takata Response to Senate Commerce Committee, Exhibit B (Mar. 27, 2015).

⁵² Letter from Kazuo Higuchi, Senior Vice President, TK Holdings, Inc., to Nancy Lewis, Associate Administrator of Enforcement, National Highway Traffic Safety Administration (Apr. 11, 2013) (online at www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM436445/RCDNN-13E017-5589.pdf).

⁵³ *Id.* An “auto-reject” function can “detect and reject propellant wafers with inadequate compression by monitoring the compression load that had been applied.” *Id.*

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ Honda, Toyota, Nissan, Mazda, and BMW issued recalls. See *Timeline—Takata Air Bag Recalls*, Reuters (Nov. 25, 2014).

⁵⁹ Takata Response to Senate Commerce Committee, Exhibit A (Dec. 12, 2014); Takata Response to Senate Commerce Committee, Exhibit B (Mar. 27, 2015).

⁶⁰ Letter from Mike Rains, Government Affairs Specialist, TK Holdings, Inc., to Frank Borris, Director, Office of Defects Investigation, National Highway Traffic Safety Administration (June 11, 2014) (online at www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM457251/INLE-PE14016-59600.pdf).

⁶¹ TK Holdings Inc., Defect Information Report, SPI Passenger Air Bag Inflators (May 18, 2015) at 4.

⁶² *Id.*

Takata recommended expanding the recall of vehicles with certain passenger-side airbag inflators, which led five automakers to expand their 2013 recalls and one automaker to issue a new recall.⁶³

Also in June 2014, officials from NHTSA's Office of Defects Investigation (ODI) requested that Takata support field actions—essentially regional recalls—of suspect inflators in vehicles registered in humid areas.⁶⁴ Even though, according to Takata, there was no evidence identifying a particular safety defect in inflators not recalled at the time, Takata agreed to support the requested regional recalls of driver-side and passenger-side airbag inflators in vehicles in Florida, Puerto Rico, Hawaii, and the Virgin Islands.⁶⁵ Takata identified that certain Honda, Toyota, Nissan, Mazda, Ford, Chrysler, and BMW vehicles contained the inflators.⁶⁶ Later that month, Takata determined that certain Subaru and Mitsubishi vehicles also contained the suspect inflators, increasing the number of automakers impacted by the potential defect to nine.⁶⁷

On June 11, 2014, after receiving complaints of three Takata airbag ruptures⁶⁸—and then learning from Takata of three additional ruptures⁶⁹—NHTSA's ODI opened an investigation “in order to collect all known facts from the supplier and the vehicle manufacturers that it believes may have manufactured vehicles equipped with inflators produced during the same period as those that have demonstrated rupture events.”⁷⁰ Because all six incidents occurred in the high absolute humidity climates of Florida and Puerto Rico, Takata theorized that humidity, in conjunction with potential manufacturing issues, might influence the stability of the propellant as it ages and thus contribute to the possibility of a rupture.⁷¹

On October 22, 2014, NHTSA released a consumer advisory urging owners of certain vehicle models made by the now ten affected automakers to respond to recall notices, some sent out 18 months prior, and act immediately to replace defective Takata airbags.⁷² The advisory noted that, from 2013 to 2014, approximately 7.8 million vehicles were recalled as a result of faulty Takata airbags.⁷³ David Friedman, NHTSA Deputy Administrator, stated, “Responding to these recalls, whether old or new, is essential to personal safety and it will help aid our ongoing investigation into Takata airbags and what appears to be a problem related to extended exposure to consistently high humidity and temperatures.”⁷⁴

On October 29, 2014, Deputy Administrator Friedman sent letters to the ten affected automakers urging them to “take aggressive and proactive action to expedite [their] remedy of the recalled vehicles and to supplement Takata's testing with [their] own.”⁷⁵ He also asked for information on the steps the automakers were tak-

⁶³*Id.* The automakers who expanded existing recalls include Toyota, Honda, Nissan, Mazda, and BMW; Subaru issued a new recall.

⁶⁴ Letter from Rains to Borris, *supra* n. 60.

⁶⁵*Id.* Takata agreed to support regional recalls replacing driver-side airbags manufactured between January 1, 2004, and June 30, 2007, and passenger-side airbags manufactured between June 2000 and July 31, 2004.

⁶⁶*Id.*

⁶⁷ Letter from Mike Rains, Government Affairs Specialist, TK Holdings, Inc., to Frank Borris, Director, Office of Defects Investigation, National Highway Traffic Safety Administration (June 25, 2014) (online at www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM457659/INLE-PE14016-59647.pdf).

⁶⁸The three ruptures include a driver-side airbag rupture in a 2005 Honda Civic (report received Aug. 2013), a passenger-side airbag rupture in a 2003 Toyota Corolla (report received Mar. 2014), and a driver-side airbag rupture in a 2005 Mazda 6 (report received Apr. 2014). National Highway Traffic Safety Administration, ODI Resume Investigation: PE 14-016 (June 11, 2014) (online at www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM456824/INOA-PE14016-9724.PDF).

⁶⁹*Id.* The three rupture incidents occurred in the following: a passenger-side airbag in a 2004 Nissan Sentra; a driver-side airbag in a 2006 Dodge Charger; and a passenger-side airbag in a 2002 Toyota Corolla.

⁷⁰*Id.*

⁷¹ Letter from Rains to Borris, *supra* n. 60.

⁷² NHTSA originally issued an alert on October 20, 2014, but this alert included erroneous entries of vehicle models. NHTSA released an updated consumer advisory on October 22, 2014. National Highway Traffic Safety Administration, *Consumer Advisory: Vehicle Owners with Defective Airbags Urged to Take Immediate Action* (Oct. 22, 2014) (online at www.nhtsa.gov/About+NHTSA/Press+Releases/Vehicle-owners-with-defective-airbags-urged-to-take-immediate-action). See also *NHTSA Releases Updated Takata Airbag Recalled Cars List, But It Still Has Errors*, AutoBlog (Oct. 22, 2014).

⁷³ *Consumer Advisory: Vehicle Owners with Defective Airbags Urged to Take Immediate Action*, *supra* n. 72. Auto manufacturers covered under the recalls include Toyota, Honda, Mazda, BMW, Nissan, Mitsubishi, Subaru, Chrysler, Ford and General Motors.

⁷⁴*Id.*

⁷⁵ See e.g., Letter from David J. Friedman, Deputy Administrator, National Highway Traffic Safety Administration to Jay Joseph, Assistant Vice President, American Honda Motor Co. (Oct.

ing to expedite production of replacements, including by obtaining additional airbag suppliers, urging and incentivizing dealers to repair vehicles, and encouraging consumers to bring in vehicles for repair.⁷⁶

The next day, NHTSA issued a Special Order to Takata demanding information on the defective airbags.⁷⁷ The Special Order listed 36 requests, which covered documents that refer to manufacturing conditions and process changes, communications between Takata and its rivals as well as its customers, and a list of known deaths and injuries. The Special Order also requested documents cited in an October 17, 2014, *Reuters* article, including a March 2011 e-mail from Takata supervisor Guillermo Apud with the subject “Defectos y defectos y defectos!!!!”⁷⁸

On November 18, 2014, NHTSA called for a national recall of certain driver-side airbags after learning of a rupture incident in a vehicle outside the existing regional recalls.⁷⁹ NHTSA also issued a General Order to Takata and the ten affected automakers demanding a detailed report and production of documents related to the testing of Takata inflators outside the regional recall areas.⁸⁰ NHTSA also issued a second Special Order to Takata, which compelled the company to provide documents and information related to the propellant within its inflators.⁸¹ NHTSA’s press release acknowledged Takata’s public concession that it had changed the chemical mix of its propellant in newly-designed inflators.⁸² Honda agreed to expand its recalls and replace defective inflators nationwide.⁸³

On November 21, 2014, the Senate Commerce Committee held a hearing to examine the Takata airbag defects and the recall process.⁸⁴ Hiroshi Shimizu, Senior Vice President of Global Quality Assurance, testified on behalf of Takata and apologized for the injuries and deaths caused by rupturing Takata airbags. At the hearing, Mr. Shimizu was unable to provide answers to important questions, including questions regarding the chemical compounds used in Takata’s airbags and the current production and safety testing of replacement airbags.⁸⁵ Because Mr. Shimizu’s testimony left so many questions unanswered, then Chairman Rockefeller and Senator Nelson sent a letter to Takata requesting documents and information regarding the company’s defective airbags.⁸⁶

On November 26, 2014, NHTSA sent Takata a Recall Request Letter formally demanding that Takata acknowledge the existence of a defect and issue a national recall for certain driver-side airbag inflators.⁸⁷ Based on reports of ruptures outside the geographic areas covered under the regional recalls, NHTSA believed that an “unreasonable risk posed by subject driver’s side airbag inflators may exist outside of the areas with high absolute humidity and therefore would not be mitigated by the current regional recall.”⁸⁸ On December 2, 2014, Takata responded to NHTSA’s

29, 2014) (online at www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM465685/INIM-PE14016-14351.pdf).

⁷⁶*Id.*

⁷⁷National Highway Traffic Safety Administration, Special Order Directed to TK Holdings, Inc. (Oct. 30, 2014) (online at www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM465855/INLM-PE14016-60576.pdf). A Special Order is issued pursuant to 49 U.S.C. § 30166(g). It is equivalent to a subpoena and requires that the response be signed under oath by a responsible officer of the company.

⁷⁸*Id.* See also *U.S. Regulator to Takata: Give Us Faulty Air-Bag Documents*, *Reuters* (Oct. 30, 2014).

⁷⁹National Highway Traffic Safety Administration, *USDOT Calls for National Recall of Defective Takata Driver Side Air Bags* (Nov. 18, 2014) (online at www.nhtsa.gov/About+NHTSA/Press+Releases/DOT-calls-for-national-recall-of-takata-driver-air-bags).

⁸⁰National Highway Traffic Safety Administration, General Order Directed to Manufacturers, PE14-016 Air Bag Inflator Rupture (Nov. 18, 2014).

⁸¹National Highway Traffic Safety Administration, Second Special Order Directed to TK Holdings, Inc., PE14-016 (Nov. 18, 2014).

⁸²*USDOT Calls for National Recall of Defective Takata Driver Side Air Bags*, *supra* n. 79.

⁸³*Honda to Replace Airbags Throughout U.S.*, *New York Times* (Nov. 18, 2014).

⁸⁴Senate Committee on Commerce, Science, and Transportation, *Examining Takata Airbag Defects and the Vehicle Recall Process*, 113th Cong. (2014).

⁸⁵*Id.* See also *Frustrated Senators Blast Takata, Signal More Safety Legislation*, *Automotive News* (Nov. 23, 2014).

⁸⁶Letter from Chairman John D. Rockefeller, IV and Senator Bill Nelson to Shigehisa Takada, Chairman and Chief Executive Officer, Takata Corporation (Nov. 24, 2014).

⁸⁷Letter from Frank S. Borriss II, Director, Office of Defects Investigation, National Highway Traffic Safety Administration, to Kazuo Higuchi, Senior Vice President, TK Holdings, Inc. (Nov. 26, 2014) (online at www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM467335/INRM-PE14016-60978.pdf).

⁸⁸*Id.* at 3.

Recall Request Letter stating that it firmly believed that the data and currently available information did not support a nationwide recall.⁸⁹

By December 2014, more than 11 million vehicles in the U.S. had been recalled, and five deaths were linked to the defective Takata airbags.⁹⁰ In addition to Honda, four auto manufacturers responded to the pressure from NHTSA to expand their Takata airbag-related recalls nationwide.⁹¹

Also in the same month, the automakers affected by the Takata airbag recalls formed a consortium to conduct an independent investigation into the root cause of the airbag ruptures. The consortium's ten members include Honda, Toyota, Fiat-Chrysler, BMW, Mazda, Ford, Subaru, Mitsubishi, General Motors, and Nissan.⁹² In February 2015, the group of automakers appointed former NHTSA Acting Administrator David Kelly as the project manager and coordinator and selected aerospace and defense technology company Orbital ATK to lead the review and testing of Takata inflators.⁹³ The automakers hope that this industry-wide testing initiative will supplement Takata's own testing and provide answers to questions surrounding the defective airbags.⁹⁴

In February 2015, NHTSA announced a \$14,000 per day fine against Takata for failing to fully respond to NHTSA's Special Orders regarding Takata's defective airbags.⁹⁵ According to NHTSA, Takata was not "being forthcoming with the information that it is legally obligated to supply" as well as not being "cooperative in aiding NHTSA's ongoing investigation of a potentially serious safety defect."⁹⁶ NHTSA also warned Takata that an incomplete response to the Special Orders and civil penalties could be referred to the Department of Justice, which could take action in Federal court to compel Takata to fully respond.⁹⁷ Takata responded by stating that the company had provided the agency with almost 2.5 million pages of documents and that it strongly disagreed with NHTSA's characterization of the company's cooperation.⁹⁸

On February 25, 2015, NHTSA issued a Preservation Order requiring Takata to preserve inflators recovered from recalled vehicles.⁹⁹ According to the Order, Takata is prohibited from destroying or damaging recovered inflators except for testing purposes and is required to implement a control plan for the "inspection, testing, or analysis of those inflators."¹⁰⁰ Takata is also required to set aside ten percent of the inflators for private plaintiffs and must submit a protocol for third-party testing.¹⁰¹ NHTSA will have access to all testing data from Takata, as well as all other independent testing data, while also reserving the right to collect inflators for its

⁸⁹ Letter from Mike Rains, Director of Product Safety, TK Holdings Inc., to Frank Borris, Director, Office of Defects Investigation, National Highway Traffic Safety Administration (Dec. 2, 2014) (online at www.autosafety.org/sites/default/files/imce_staff_uploads/Takata's%20Dec%20%202%20response%20to%20NHTSA's%20Nov%20%2026%20RRL.pdf).

⁹⁰ *Honda to Expand Airbag Recall Nationwide as Takata Resists*, New York Times (Dec. 3, 2014).

⁹¹ Honda, Mazda, BMW, Chrysler, and Ford expanded their recalls. See *Id.*; *Mazda Says U.S. Recalls Over Takata Air Bags to be Expanded Nationwide*, Reuters (Dec. 9, 2014); *BMW Joins in Expansion of Takata Airbag Recalls*, New York Times (Dec. 22, 2014); *Chrysler Recalls 2.9 Million U.S. Vehicles with Takata Airbags, Car and Driver* (Dec. 19, 2014); *Ford Recall of Takata Airbags to Extend Nationwide*, New York Times (Dec. 18, 2014).

⁹² *Automakers Choose Aerospace Firm to Run Takata Airbag Tests*, Automotive News (Feb. 26, 2015).

⁹³ *Automakers Select Orbital ATK to Lead Independent Review of Takata Airbag Inflators*, Reuters (Feb. 26, 2015).

⁹⁴ *Id.*

⁹⁵ Each Special Order is subject to a civil penalty of \$7,000 per day. Because, according to NHTSA, Takata was in violation of two Orders, it was fined \$14,000 per day. See 49 U.S.C. § 30165(a)(3); 49 C.F.R. § 578.6(a)(3). Letter from O. Kevin Vincent, Chief Counsel, National Highway Traffic Safety Administration, to Steven G. Bradbury, Counsel, Takata, Re: Failure to Fully Respond to Special Orders in NHTSA's Investigation in PE14-016, Takata Airbag Inflator Rupture (Feb. 20, 2015) (online at www.nhtsa.gov/staticfiles/communications/pdf/Takata-civil-penalty-demand-02202015.pdf); see also *NHTSA to Fine Takata \$14K a Day for Failing to 'Fully Cooperate' in Airbag Probe*, Automotive News (Feb. 20, 2015).

⁹⁶ Letter from Vincent to Bradbury, *supra* n. 95.

⁹⁷ *Id.*

⁹⁸ *Takata Responds to U.S. DOT and NHTSA Statements*, Business Wire (Feb. 20, 2015).

⁹⁹ National Highway Traffic Safety Administration, *U.S. Transportation Secretary Foxx Announces Order to Preserve Defective Takata Air Bag Inflators for Ongoing Federal Investigation* (Feb. 25, 2015) (online at www.nhtsa.gov/About+NHTSA/Press+Releases/2015/takata-ordered-to-preserve-defective-air-bag-inflators).

¹⁰⁰ National Highway Traffic Safety Administration, *Preservation Order and Testing Control Plan* (Feb. 25, 2010) (online at www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM477397/INOT-EA15001-1908.pdf).

¹⁰¹ *Id.*

own testing.¹⁰² In conjunction with announcing the Order, Secretary of Transportation Anthony Foxx revealed that NHTSA upgraded its investigation to an Engineering Analysis, a formal step in the defect investigation process which signals a belief in the existence of a safety defect.¹⁰³

On April 23, 2015, NHTSA published the Protocol submitted by Takata, as demanded by the Preservation Order, to “establish a framework under which the ten vehicle manufacturers[,] . . . private parties to civil litigation, or a consortium of the [automakers] or private parties may apply for and potentially receive Takata inflators for testing provided they satisfy certain legal and safety requirements.”¹⁰⁴ Under the Protocol, automakers or private plaintiffs must submit an application that identifies the number of requested inflators and, if the applicant desires a specific category of inflators, also identifies the inflators by type, automaker, state from which the inflators were obtained, and vehicle year and model. Takata will then determine whether it has a sufficient supply of inflators in the relevant classification to fulfill the request. If a request will cause Takata’s supply of inflators within a classification to fall below a specified minimum,¹⁰⁵ Takata will deny or modify the request, unless the party making the request has written approval from NHTSA to receive the inflators.¹⁰⁶

On May 13, 2015, Toyota announced the recall of approximately 637,000 vehicles in the U.S., and Nissan announced the recall of approximately 263,000 vehicles in the U.S.¹⁰⁷ According to Toyota’s Defect Information Report (DIR) filed with NHTSA, Toyota tested recovered recalled inflators and found that there was “insufficient air sealing at the initiator seal ring” in some of the inflators.¹⁰⁸ Because the inflators were not airtight, moisture could potentially intrude over time.¹⁰⁹

On May 18, 2015, Takata filed four DIRs with NHTSA and entered into a Consent Order.¹¹⁰ The DIRs estimated that more than 17 million driver-side inflators and more than 16 million passenger-side inflators have been installed in vehicles in the U.S. as both original and remedy parts.¹¹¹ In the DIRs, Takata explained “that a defect related to motor vehicle safety may arise in some of the subject inflators.”¹¹² Takata’s explanation of the defect in one type of passenger-side airbag inflator states as follows:

The propellant wafers in some of the subject inflators may experience an alteration over time, which could potentially lead to over-aggressive combustion in the event of an air bag deployment. Depending on the circumstances, this po-

¹⁰² *Id.*

¹⁰³ *U.S. Orders Takata to Preserve Evidence in Air-Bag Probes*, Bloomberg (Feb. 25, 2015).

¹⁰⁴ Takata, Protocol Under NHTSA Preservation Order (Apr. 23, 2015) (online at www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM477398/INOT-EA15001-1909.pdf).

¹⁰⁵ *Id.* The Protocol explains that Takata will not provide inflators for testing if fulfilling the request “would reduce the number of inflators that have been set aside in any classification below 70 percent of the number of inflators then remaining in the relevant set-aside at the time the request is fulfilled.”

¹⁰⁶ *Id.*

¹⁰⁷ See Toyota, Part 573 Safety Recall Report 15V-286 (May 13, 2015) (online at www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM478670/RCLRPT-15V286-6231.PDF); Toyota, Part 573 Safety Recall Report 15V-285 (May 13, 2015) (online at www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM478665/RCLRPT-15V285-2813.PDF); Toyota, Defect Information Report 15V-284 (May 13, 2015) (online at www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM478820/RCORRD-15V284-0712.pdf); Nissan, Defect Information Report 15V-287 (May 14, 2015) (online at www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM479142/RCORRD-15V287-3274.pdf).

¹⁰⁸ Toyota, Defect Information Report 15V-284, *supra* n. 107.

¹⁰⁹ *Toyota and Nissan Recall 6.5 Million More Vehicles Over Takata Airbags*, New York Times (May 14, 2015).

¹¹⁰ National Highway Traffic Safety Administration, Consent Order, EA15-001 Air Bag Inflator Rupture (May 18, 2015) (online at www.safercar.gov/staticfiles/safercar/recalls/consent-order-takata-05182015.pdf).

¹¹¹ National Highway Traffic Safety Administration, *Department of Transportation Announces Steps to Address Takata Airbag Defects* (May 19, 2015). The driver-side airbag inflator DIR notes that the defect potentially affects 17.6 million inflators. TK Holdings Inc., Defect Information Report PSDI, PSDI-4, and PSDI-4K, *supra* n. 12, at 2. The DIRs for passenger-side airbag inflators note that 16.2 million inflators may be affected by the defect. TK Holdings Inc., Defect Information Report SPI, *supra* n. 61, at 2 (7.7 million); TK Holdings Inc., Defect Information Report PSPI-L Passenger Air Bag Inflators (May 18, 2015) at 2 (5.2 million); TK Holdings Inc., Defect Information Report PSPI Passenger Air Bag Inflators, at 1 (3.3 million).

¹¹² TK Holdings Inc., Defect Information Report SPI, *supra* n. 61, at 3. Takata’s three other DIRs offer a similar explanation of the defect. See also TK Holdings Inc., Defect Information Report PSDI, PSDI-4, and PSDI-4K, *supra* n. 12, at 3; TK Holdings Inc., Defect Information Report PSPI-L, *supra* n. 111, at 2; TK Holdings Inc., Defect Information Report PSPI *supra* n. 111, at 2.

tential condition could create excessive internal pressure when the air bag is deployed, which could result in the body of the inflator rupturing upon deployment. Based upon Takata's investigation to date, the potential for such ruptures may occur in some of the subject inflators after several years of exposure to persistent conditions of high absolute humidity. In addition, Takata's test results and investigation indicate that this potential for rupturing may also depend on other factors, including vehicle design factors and manufacturing variability. . . . In the event of an inflator rupture, metal fragments could pass through the air bag cushion material, which may result in injury or death to vehicle occupants.¹¹³

In addition, in certain passenger-side airbag inflators, Takata is aware of an issue with the inflators' tape seals, which could allow leaks that increase the potential for moisture to seep into the inflators.¹¹⁴

The DIRs also reveal Takata's preliminary conclusions from testing and investigation conducted by Takata and an independent research firm, Fraunhofer ICT. Based on testing thus far, Takata has reached some preliminary conclusions:

It appears that the inflator ruptures have a multi-factor root cause that includes the slow-acting effects of a persistent and long term exposure to climates with high temperatures and high absolute humidity. Exposure over a period of several years to persistent levels of high absolute humidity outside the inflator, combined with the effects of thermal cycling, may lead to moisture intrusion in some inflators by means of diffusion or permeation. Fraunhofer ICT has identified the possibility in these climates for moisture intrusion into the inflator over time and a process by which the moisture may slowly increase the porosity of the propellant within the inflator. Fraunhofer ICT's analysis also indicates that the design of the inflator and the grain (shape) of the propellant can affect the likelihood that the porosity change will occur, as can manufacturing variability. The results of the Fraunhofer ICT research to date are consistent with the geographic location and age of the inflators that have ruptured in the field and in Takata's testing. Takata's testing also indicates that the design of the vehicle and the design of the air bag module are associated with differences in outcomes.¹¹⁵

Takata's DIRs describe prioritizing the replacement of defective inflators in four phases, generally based upon the risk that exists as a result of geographic location and age of the inflators.¹¹⁶ In addition, pursuant to the Consent Order, Takata plans to continue its testing of the defective inflators.¹¹⁷ Under the Consent Order, NHTSA's investigation will remain open and may involve meeting with Takata employees, conducting depositions of Takata employees, requesting information, and reviewing all test results and data.¹¹⁸ The Order also explains that NHTSA will not be seeking civil penalties beyond those that are applicable before May 18, 2015.¹¹⁹

On May 19, 2015, NHTSA announced the events of the previous day, including the expansion of the number of vehicles to be recalled due to defective Takata airbag inflators.¹²⁰ According to NHTSA, the recalls include nearly 34 million vehicles, potentially becoming the largest recall of any consumer product in U.S. history.¹²¹

¹¹³TK Holdings Inc., Defect Information Report SPI, *supra* n. 61, at 3. *See also* TK Holdings Inc., Defect Information Report PSDI, PSDI-4, and PSDI-4K, *supra* n. 12, at 3; TK Holdings Inc., Defect Information Report PSPI-L, *supra* n. 111, at 2; TK Holdings Inc., Defect Information Report PSPI, *supra* n. 111, at 2.

¹¹⁴TK Holdings Inc., Defect Information Report SPI, *supra* n. 61, at 3.

¹¹⁵TK Holdings Inc., Defect Information Report SPI, *supra* n. 61, at 6. *See also* TK Holdings Inc., Defect Information Report PSDI, PSDI-4, and PSDI-4K, *supra* n. 12, at 4-5; TK Holdings Inc., Defect Information Report PSPI-L, *supra* n. 111, at 5; TK Holdings Inc., Defect Information Report PSPI, *supra* n. 111, at 4-5.

¹¹⁶*See* TK Holdings Inc., Defect Information Report PSDI, PSDI-4, and PSDI-4K, *supra* n. 12, at 5; TK Holdings Inc., Defect Information Report SPI, *supra* n. 61, at 7; TK Holdings Inc., Defect Information Report PSPI-L, *supra* n. 111, at 5-6; TK Holdings Inc., Defect Information Report PSPI, *supra* n. 111, at 5-6.

¹¹⁷TK Holdings Inc., Defect Information Report PSPI-L, *supra* n. 111, at 5.

¹¹⁸National Highway Traffic Safety Administration, Consent Order, EA15-001 Air Bag Inflator Rupture (May 18, 2015) at 3-4.

¹¹⁹*Id.* at 3.

¹²⁰National Highway Traffic Safety Administration, *Department of Transportation Announces Steps to Address Takata Airbag Defects* (May 19, 2015) (online at www.nhtsa.gov/About+NHTSA/Press+Releases/DOI-action-on-takata-air-bag-defects).

¹²¹*Id.* *See also* *Flawed Takata Air Bags in 34 Million Vehicles Lead to Biggest Recall in History*, Washington Post (May 19, 2015).

However, according to news reports, the number of vehicles affected may be less than half the approximately 34 million initially estimated by NHTSA.¹²²

To prioritize and organize the various auto manufacturers' recalls, on May 22, 2015, NHTSA filed a notice of intent to open a coordinated remedy program for the replacement of defective Takata airbag inflators.¹²³ The goal of the notice is to consider whether—and, if so, how—NHTSA will exercise its authority to organize and prioritize the recall and remedy programs. Specifically, as part of this proceeding, NHTSA requests comments on how to order sourcing of the replacement inflators, whether NHTSA should order the manufacturers to prioritize certain regions or vehicles, and whether NHTSA should order re-replacements for replacement inflators if Takata cannot demonstrate that its replacements are safe.¹²⁴

On June 1, 2015, Honda announced a recall of driver-side airbag inflators in approximately 5.1 million vehicles, including 10 different Honda and Acura models.¹²⁵ The recall covered inflators that were installed at the time of manufacture as well as replacement inflators that had been installed as part of prior recalls of Takata inflators.¹²⁶

On June 5, 2015, NHTSA published a Notice of Coordinated Remedy Program Proceeding for the Replacement of Certain Takata Air Bag Inflators in the Federal Register.¹²⁷ NHTSA explained that the agency is “considering issuing one or more administrative orders that would coordinate remedy programs associated with defective Takata air bag inflators.”¹²⁸ Coordination of the remedy programs could include acceleration, prioritization, organization, and/or phasing of the remedy programs.¹²⁹

According to Takata's responses to the Committee, as of the end of January 2015, Takata's defective airbags had allegedly caused over 100 injuries and six deaths, with many of these alleged incidents occurring in Florida, followed by Puerto Rico, Texas, and California.¹³⁰ In addition, on June 12, 2015, Honda confirmed a seventh death resulting from a Takata airbag that ruptured in a 2005 Honda Civic on April 5, 2015, in Lafayette, Louisiana.¹³¹ Most recently, on June 19, 2015, Honda confirmed an eighth death, which occurred in September 2014 as a result of a rupturing airbag in a rented 2001 Honda Civic in Los Angeles.¹³² In Takata's recent filings with NHTSA, the company reported 84 known rupture incidents.¹³³

¹²² *Exclusive: Confusion Clouds Count of Cars Hit by Takata Air Bag Recall*, Reuters (June 10, 2015).

¹²³ National Highway Traffic Safety Administration, *Notice of Intent to Open a Coordinated Remedy Program Proceeding for the Replacement of Certain Takata Air Bag Inflators*, 80 Fed. Reg. 29791 (May 22, 2015) (Notice) (online at www.federalregister.gov/a/2015-12449).

¹²⁴ *Id.*

¹²⁵ Honda, Part 573 Safety Recall Report 15V-320 (June 1, 2015) (online at www.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM479494/RCLRPT-15V320-0154.PDF).

¹²⁶ *Id.*

¹²⁷ National Highway Traffic Safety Administration, *Notice of Coordinated Remedy Program Proceeding for the Replacement of Certain Takata Air Bag Inflators*, 80 Fed. Reg. 32197 (June 5, 2015) (online at www.federalregister.gov/a/2015-13756).

¹²⁸ *Id.*

¹²⁹ *Id.*

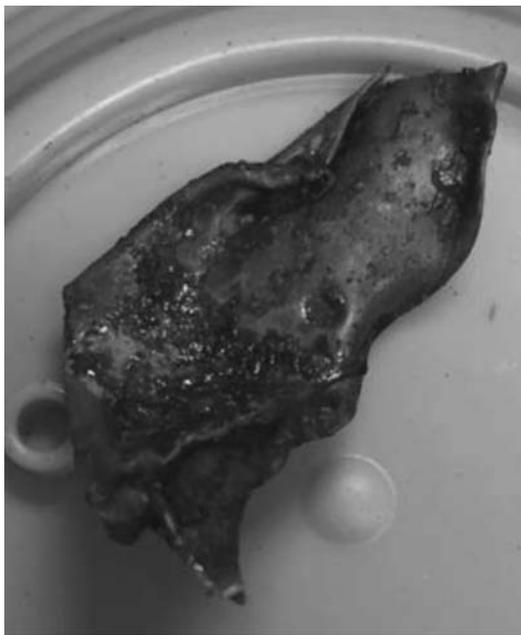
¹³⁰ Takata Response to Senate Commerce Committee, Exhibit A (Dec. 12, 2014); Takata Response to Senate Commerce Committee, Exhibit B (Mar. 27, 2015).

¹³¹ *Honda Confirms 7th Death from Takata Airbags*, Automotive News (June 12, 2015); Statement from American Honda Motor Co., Inc., *Confirmed Fatality Related to the Rupture of a Takata Airbag Inflator in Lafayette, Louisiana* (June 12, 2015).

¹³² *Honda Reports Eighth Death From Exploding Takata Air Bags*, Associated Press (June 19, 2015); Statement from American Honda Motor Co., Inc., *Re: Confirmed Fatality Related to the Rupture of a Takata Airbag Inflator in Los Angeles, CA on September 7, 2014* (June 19, 2015).

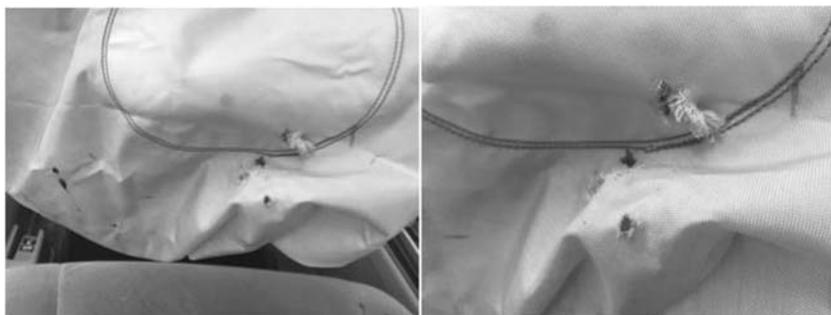
¹³³ TK Holdings Inc., Defect Information Report SPI, *supra* n. 61; TK Holdings Inc., Defect Information Report PSDI, PSDI-4, and PSDI-4K, *supra* n. 12; TK Holdings Inc., Defect Information Report PSPI-L, *supra* n. 111; and TK Holdings Inc., Defect Information Report PSPI, *supra* n. 111.

Figure II: Piece of Metal Shrapnel From A Takata Airbag¹³⁴



Piece of metal shrapnel recovered from the neck of a Florida resident after the airbag ruptured in his 2003 Honda Civic on March 20, 2015.

Figure III: Airbag Cushion With Holes Caused By Shrapnel¹³⁵



III. Media Reports and Takata's Internal Documents Raise Questions Regarding the Company's Knowledge of Serious Safety and Quality Control Issues as Early as 2001

Media reports and internal Takata documents reviewed by Committee minority staff, including audit and engineering reports, internal presentations, and e-mails, raise questions regarding Takata's commitment to ensuring the highest standards of quality controls. A *Reuters* investigation suggests that quality issues date back to 2001, when engineers in Takata's Monclova, Mexico facility identified a range of problems that included rust and faulty inflator welding, which they said could have caused inflators to fail.¹³⁶ In 2002, the plant tracked 60 to 80 defects per one million inflators shipped by Takata, which is six to eight times above the company's quality

¹³⁴ Law Office of Jason Turchin (online at www.floridapersonalinjuryattorneysblog.com/2015/04/2003-honda-civic-airbag-rupture-victim-retains-airbag-attorney-jason-turchin.html).

¹³⁵ Images provided to the Committee minority staff by Jason Turchin, Esq.

caused inflators to fail.¹³⁶ In 2002, the plant tracked 60 to 80 defects per one million inflators shipped by Takata, which is six to eight times above the company's quality control limit, according to an internal presentation.¹³⁷

A *New York Times* review of internal Takata documents, e-mails, photos, videos, and regulatory filings uncovered instances of employees raising concerns that transportation mishaps were resulting in the delivery of wet or damaged airbag units to car manufacturers.¹³⁸ One manager wrote an e-mail to colleagues in which he complained that quality checks that existed to ensure the inflators stayed dry, such as hosing down trucks to check for leaks, were being ignored.¹³⁹ "The whole situation makes me sick," he wrote.¹⁴⁰ In addition, footage from closed-circuit television showed forklifts dropping stacks of airbag inflators, which at times were not properly examined to ensure they were not damaged, according to former quality-control managers.¹⁴¹ In 2005, a U.S. consulting firm found a pattern of bad welding, and, according to engineering presentations, on at least three occasions between 2005 and 2006, Takata engineers identified leaks in inflators made in Monclova.¹⁴²

According to a *Reuters* report based on interviews with 21 current and former Takata employees and consultants, managers within Takata raised concerns that workers were breaking quality rules to increase the output of inflators.¹⁴³ Employees also expressed concerns over the pressures placed on them by managers.¹⁴⁴ For example, Alejandro Perez, a former Takata facility manager, told *Reuters* the pressure to restart and make up for lost production after a March 2006 explosion at the Monclova plant was unrelenting, particularly from managers based in the U.S. who had been flown to Mexico.¹⁴⁵

Takata workers also explained that employees were encouraged to meet certain quotas of inflators.¹⁴⁶ "If you didn't make it, you would be behind and they wouldn't pay you a productivity bonus," according to Jose Sanchez, a former Takata employee who made inflators from 2004 to 2010.¹⁴⁷

Workers at Takata's Moses Lake plant, which also manufactured inflators, told a similar story of managers who emphasized output quotas, especially as demand for cars and SUVs grew.¹⁴⁸ Two former quality control managers at Takata's main distribution center in Texas told the *New York Times* that a series of quality problems were encountered as Takata tried to fulfill the increasing demand for its airbags.¹⁴⁹

Production facilities would resist taking back potentially damaged or wet inflators as Takata struggled to meet this increased demand.¹⁵⁰ As automakers cut costs by implementing "just-in-time" production, meaning parts were only to arrive at assembly plants on an as-needed basis, pressure was placed on Takata to meet tight delivery schedules.¹⁵¹ Workers were told that if an automaker was forced to delay production due to a late shipment, the parts supplier would be fined tens of thousands of dollars for every minute of lost production.¹⁵² "That put a lot of pressure and incentive on us to never miss a shipment," one of the former managers told the *New York Times*.¹⁵³ "I'd argue, 'what if my daughter bought the car with the bad airbag?' But the plant would tell us, 'Just ship it.'"¹⁵⁴

In April 2009, engineers reportedly scrambled to fix a flaw in a machine in Monclova that pressed the propellant into tablets.¹⁵⁵ According to a June 2009 internal presentation reviewed by the *New York Times*, "inflators tested from multiple

¹³⁶ *Takata Engineers Struggled to Maintain Air Bag Quality, Documents Reveal*, Reuters (Oct. 17, 2014).

¹³⁷ *Id.*

¹³⁸ *Takata Saw and Hid Risk in Airbags in 2004, Former Workers Say*, *supra* n. 1.

¹³⁹ *Id.*

¹⁴⁰ *Id.*

¹⁴¹ *Id.*

¹⁴² *Takata Engineers Struggled to Maintain Air Bag Quality, Documents Reveal*, *supra* n. 136.

¹⁴³ *Special Report: Plant with Troubled Past at Center of Takata Air Bag Probe*, Reuters (Nov. 20, 2014).

¹⁴⁴ *Id.*

¹⁴⁵ *Id.*

¹⁴⁶ *Id.*

¹⁴⁷ *Id.*

¹⁴⁸ *Id.*

¹⁴⁹ *Takata Saw and Hid Risk in Airbags in 2004, Former Workers Say*, *supra* n. 1.

¹⁵⁰ *Id.*

¹⁵¹ *Id.*

¹⁵² *Id.*

¹⁵³ *Id.*

¹⁵⁴ *Id.*

¹⁵⁵ *Id.*

propellant lots showed aggressive ballistics.”¹⁵⁶ In March 2011—after three Takata airbag recalls had already been issued by one automaker¹⁵⁷—Guillermo Apud, a supervisor at the Monclova plant, sent an e-mail with the subject “Defectos y defectos y defectos!!!!”¹⁵⁸

In the full e-mail, which was reviewed by Committee minority staff, Mr. Apud explained that an automaker had reported receiving an improperly welded inflator and that 38 complete inflators had to be thrown out that day due to incorrect assembly.¹⁵⁹ He wrote, “We cannot be faced with findings/defects of this sort and NOT do ANYTHING”¹⁶⁰ and “A part that is not welded = one life less, which shows we are not fulfilling the mission.”¹⁶¹ A follow-up e-mail from a Takata quality engineer¹⁶² reiterated Apud’s concerns: “We are in a very critical situation because of the most recent problems that we have detected on the line. Situations like this can give rise to a Recall.”¹⁶³ According to *Reuters*, after this incident, inspections at the plant were tightened.¹⁶⁴

Nonetheless, according to media reports, serious lapses in quality control continued. In April 2011, Apud told fellow Takata supervisors that chewing gum had been found in an inflator, which he described as one of several “grave problems” in the Monclova plant’s inflator production.¹⁶⁵ The following month, Apud reprimanded employees for attempting to fix defective parts on the inflator assembly line—a practice Takata had prohibited in order to reduce the likelihood of faulty parts being shipped to automakers.¹⁶⁶ He wrote, “Rework on the line is PROHIBITED!!!!”¹⁶⁷ “We can’t have leaders/materials people/operators REWORKING material left and right without ANY control, this is why we have defect upon defect,” he continued.¹⁶⁸ “We need to change NOW!”¹⁶⁹

According to *Reuters*, in 2012, Takata workers in Monclova used the wrong parts when assembling inflators, according to documents Takata and automakers filed with NHTSA.¹⁷⁰ More than 1350,000 vehicles from three automakers were later recalled due to that defect.¹⁷¹ According to the explanation Takata provided to regulators in Japan, the mistake was possible because parts bins were kept too close together.¹⁷²

E-mails reviewed by Committee minority staff also indicate that—due to financial reasons—Takata’s global safety audits were halted from 2009 until 2011.¹⁷³ In a March 2011 e-mail, a Takata senior vice president in charge of inflators¹⁷⁴ asked the global director of inflator and propellant safety¹⁷⁵ when he planned to audit inflator operations at the Monclova and Moses Lake plants.¹⁷⁶ When the safety director replied that the plan was to audit North America in the fall, the vice president said, “Don’t wait till Fall” and advised him to complete the audits soon, adding, “Please help.”¹⁷⁷ The safety director replied, “I would like to perform a mini audit at Moses Lake (Propellant and Assembly), Monclova (Assembly and Propellant Handling/Storage not CAP), and Monterrey (Steering wheels)” and proposed dates in April and May 2011 to avoid conflicts with other scheduled audits.¹⁷⁸

¹⁵⁶ *Id.*

¹⁵⁷ National Highway Traffic Safety Administration, Recall 08V–593 (Nov. 14, 2008); National Highway Traffic Safety Administration, Recall 09V–259 (July 8, 2009); National Highway Traffic Safety Administration, Recall 10V–041 (Feb. 11, 2010).

¹⁵⁸ *Takata Engineers Struggled to Maintain Air Bag Quality, Documents Reveal, supra* n. 136.

¹⁵⁹ Takata Response to Senate Commerce Committee (Mar. 13, 2015) (TKH–SCS&T00045772_T0001).

¹⁶⁰ Takata Response to Senate Commerce Committee (Mar. 13, 2015) (TKH–SCS&T00045772_T0002).

¹⁶¹ *Takata Engineers Struggled to Maintain Air Bag Quality, Documents Reveal, supra* n. 136.

¹⁶² Takata Response to Senate Commerce Committee (Feb. 3, 2015) (TKH–SCS&T00011507).

¹⁶³ Takata Response to Senate Commerce Committee (Mar. 23, 2015) (TKH–SCS&T00060737_T0002).

¹⁶⁴ *Takata Engineers Struggled to Maintain Air Bag Quality, Documents Reveal, supra* n. 136.

¹⁶⁵ *Takata Engineers Struggled to Maintain Air Bag Quality, Documents Reveal, supra* n. 136.

¹⁶⁶ *Plant with Troubled Past at Center of Takata Air Bag Probe, supra* n. 143.

¹⁶⁷ *Id.*

¹⁶⁸ *Id.*

¹⁶⁹ *Id.*

¹⁷⁰ *Id.*

¹⁷¹ *Id.*

¹⁷² *Id.*

¹⁷³ Takata Response to Senate Commerce Committee (Mar. 23, 2015) (TKH–SCS&T00060922).

¹⁷⁴ Takata Response to Senate Commerce Committee (Mar. 13, 2015) (TKH–SCS&T00050595).

¹⁷⁵ Takata Response to Senate Commerce Committee (Mar. 13, 2015) (TKH–SCS&T00050617).

¹⁷⁶ Takata Response to Senate Commerce Committee (Mar. 23, 2015) (TKH–SCS&T00060924).

¹⁷⁷ Takata Response to Senate Commerce Committee (Mar. 23, 2015) (TKH–SCS&T00060923).

¹⁷⁸ Takata Response to Senate Commerce Committee (Mar. 23, 2015) (TKH–SCS&T00060922–TKH–SCS&T00060923).

The Takata global safety director was then dispatched from the U.S. to Monclova in May 2011.¹⁷⁹ A couple weeks before his visit, an e-mail was sent by the advanced product quality planning coordinator¹⁸⁰ instructing employees to close a series of items raised in prior audits: “All items in red must be closed this week without fail, as the time period for the same has already expired.”¹⁸¹ The day before the safety director from the U.S. arrived, the facility conducted its own audit, which detected several quality concerns, including scales with disconnected cables, energetic material on the floor, and dispensers for energetic material on unidentified lines.¹⁸² These items were highlighted in an e-mail to Monclova employees prior to the Takata global safety director’s audit.¹⁸³

Despite this preparation, an audit report dated May 16–18, 2011, from the Takata safety director faulted the plant for not properly closing bags of ammonium nitrate and for storing scrapped or contaminated propellant near good material, allowing for the possibility of a mix-up.¹⁸⁴ The audit report also explained that materials dating back to 2007 were found in the staging area, even though this area was intended for 24-hour storage of materials and not for long-term storage.¹⁸⁵ In addition, the audit found several instances of propellant on the assembly line floor.¹⁸⁶ Notwithstanding these findings, the safety director noted that the audit report would not be shared with Takata’s headquarters in Tokyo.¹⁸⁷

The same U.S. safety director conducted a follow-up audit of the Monclova plant in November 2011.¹⁸⁸ E-mails exchanged among employees of the plant in the lead-up to his visit discussed plant audit questions that needed to be addressed before the auditor arrived, including the question of whether a central safety committee exists.¹⁸⁹ A week before the director arrived, a superintendent of environmental health and safety¹⁹⁰ wrote that “NO safety committee, as such, has been formed.”¹⁹¹ He continued, “It can be made up by the Inflators managers, and we can mention the weekly staff meeting as evidence of meetings.”¹⁹² The inflator assembly quality manager¹⁹³ replied, “This is how we are going to answer and what we are going to have as support for a safety audit? GPS [Global Pyrotechnic Safety]? We need compelling responses and evidence so that there is no doubt and they don’t start asking for this and that . . .”¹⁹⁴ The follow-up audit report, dated November 10–11, 2011, identified 14 tasks intended to improve concerns identified in the audit. For example, the audit report noted that, in the assembly area, various metal parts were found in an area open to the elements and that improvement was needed to separate and protect the parts from weather.¹⁹⁵

Furthermore, a document from 2013 shows that Takata’s Monclova plant was not properly following the procedures that govern how changes are made to some aspects of the manufacturing process.¹⁹⁶ Changes in the inflator assembly lines were implemented without receiving the prior approval of directors of quality, engineering, and safety, despite policies that required their approval.¹⁹⁷ The document out-

¹⁷⁹ Takata Response to Senate Commerce Committee (Mar. 23, 2015) (TKH–SCS&T00060913); *Plant with Troubled Past at Center of Takata Air Bag Probe*, *supra* n. 143.

¹⁸⁰ Takata Response to Senate Commerce Committee (Feb. 3, 2015) (TKH–SCS&T00021010).

¹⁸¹ Takata Response to Senate Commerce Committee (Mar. 23, 2015) (TKH–SCS&T00060731_T0005).

¹⁸² Takata Response to Senate Commerce Committee (Mar. 23, 2015) (TKH–SCS&T00060731_T0003).

¹⁸³ *Id.*
¹⁸⁴ Takata Response to Senate Commerce Committee (Mar. 13, 2015) (TKH–SCS&T00045775); *Plant with Troubled Past at Center of Takata Air Bag Probe*, *supra* n. 143.

¹⁸⁵ Takata Response to Senate Commerce Committee (Mar. 13, 2015) (TKH–SCS&T00045775).

¹⁸⁶ Takata Response to Senate Commerce Committee (Mar. 13, 2015) (TKH–SCS&T00045776).

¹⁸⁷ Takata Response to Senate Commerce Committee (Mar. 23, 2015) (TKH–SCS&T00060725); *Plant with Troubled Past at Center of Takata Air Bag Probe*, *supra* n. 143.

¹⁸⁸ Takata Response to Senate Commerce Committee (Mar. 23, 2015) (TKH–SCS&T00060839).

¹⁸⁹ Takata Response to Senate Commerce Committee (Mar. 23, 2015) (TKH–SCS&T00064854_T0002).

¹⁹⁰ Takata Response to Senate Commerce Committee (Mar. 23, 2015) (TKH–SCS&T00065182_T0001).

¹⁹¹ Takata Response to Senate Commerce Committee (Mar. 23, 2015) (TKH–SCS&T00064854_T0001).

¹⁹² *Id.*

¹⁹³ Takata Response to Senate Commerce Committee (Mar. 13, 2015) (TKH–SCS&T00052964).

¹⁹⁴ Takata Response to Senate Commerce Committee (Mar. 23, 2015) (TKH–SCS&T00064854_T0001).

¹⁹⁵ Takata Response to Senate Commerce Committee (Mar. 23, 2015) (TKH–SCS&T00060839).

¹⁹⁶ Takata Response to Senate Commerce Committee (Feb. 3, 2015) (TKH–SCS&T00044269).

¹⁹⁷ Takata Response to Senate Commerce Committee (Feb. 3, 2015) (TKH–SCS&T00044271–44273).

lined updates to internal safety policies that were intended to end the practice.¹⁹⁸ Had Takata implemented more robust safety programs, including outside auditing and verification, it is possible that these serious production issues might have been addressed much earlier.

IV. Media Reports and Takata's Internal Documents Illustrate Takata's Efforts to Address the Impact of Moisture and Humidity on its Inflators

Takata has attempted to understand the precise roles of moisture and humidity in the stability of its ammonium nitrate-based propellant for more than a decade—and questions still remain today. As reported by the *New York Times*, Takata's patent applications demonstrate Takata's general knowledge of moisture's effect on the stability of ammonium nitrate. For example, in an October 2006 patent application, Takata explained that moisture could seep into the propellant during the manufacturing process as well as once the inflator was installed in a car.¹⁹⁹ Similar concerns were raised in another patent application in December 2013, with Takata engineers cautioning that temperature changes inside the airbag inflator might cause the propellant to “lose density especially in the presence of moisture or humidity.”²⁰⁰

Documents provided to the Committee by Takata show that the company frequently made adjustments in order to control moisture in the propellant during the manufacturing process. For example, Takata changed the moisture specification, which is the amount of allowable moisture present in the propellant,²⁰¹ for one version of its propellant tablets in 2010 and 2014. Based on an internal presentation outlining process changes for this propellant from 2000 through 2014, it appears that Takata did not change moisture specification from 2000 through 2009.²⁰² In 2010, however, Takata changed the moisture specification from a maximum of 0.20 percent to a maximum of 0.12 percent.²⁰³ In 2014, at Honda's request, Takata again changed the moisture specification—this time from 0.12 percent to 0.07 percent.²⁰⁴

Takata also made changes to control the humidity in the manufacturing environment. For example, according to an internal Takata presentation, the company changed the humidity specification at the propellant loading station for the driver-side inflator on at least three occasions between 2001 through 2010.²⁰⁵ Takata described that the reason for one of the changes was “to minimize the effects of moisture absorption on propellant.”²⁰⁶ In addition, in 2011, Takata began controlling the humidity in the entire plant by installing high capacity dehumidifiers, instead of controlling the humidity at each propellant loading station.²⁰⁷ These process changes illustrate Takata's efforts to regulate moisture and humidity during the manufacturing process of its airbag inflators.

Currently, Takata continues to attempt to understand the impact of exposure to moisture over the life of the inflator. Analysis by Fraunhofer ICT, a research institute with expertise in airbag and pyrotechnic technology that was hired by Takata to test various aspects of its inflators and propellants, suggests that long-term exposure to a climate of persistent high heat and humidity is a significant factor in explaining the airbag ruptures.²⁰⁸ Ongoing testing has identified an O-ring seal as the possible point at which water is entering the inflator.²⁰⁹

Significant questions still remain, however. For example, it is not known why the same inflator can perform differently depending on the make and model of the vehicle in which it was installed.²¹⁰ In addition, even when an inflator is subjected to

¹⁹⁸ Takata Response to Senate Commerce Committee (Feb. 3, 2015) (TKH-SCS&T00044269-44270).

¹⁹⁹ *Airbag Compound has Vexed Takata for Years*, *New York Times* (Dec. 9, 2014).

²⁰⁰ *Id.*

²⁰¹ See Takata Response to Senate Commerce Committee (Feb. 3, 2015) (TKH-SCS&T00045446).

²⁰² Takata Response to Senate Commerce Committee (Feb. 3, 2015) (TKH-SCS&T00045419-45443).

²⁰³ Takata Response to Senate Commerce Committee (Feb. 3, 2015) (TKH-SCS&T00045446).

²⁰⁴ Takata Response to Senate Commerce Committee (Feb. 3, 2015) (TKH-SCS&T00045456).

²⁰⁵ Takata Response to Senate Commerce Committee (Feb. 3, 2015) (TKH-SCS&T00008072-TKH-SCS&T00008095). In 2001, Takata changed the humidity specification from 30 percent to 42 percent. Takata Response to Senate Commerce Committee (Feb. 3, 2015) (TKH-SCS&T00008072). In 2004, Takata changed the humidity specification from 42 percent to 35 percent. Takata Response to Senate Commerce Committee (Feb. 3, 2015) (TKH-SCS&T00008082). In 2010, Takata changed the humidity specification from 35 percent to 30 percent. Takata Response to Senate Commerce Committee (Feb. 3, 2015) (TKH-SCS&T00008095).

²⁰⁶ Takata Response to Senate Commerce Committee (Feb. 3, 2015) (TKH-SCS&T00008082).

²⁰⁷ Takata Response to Senate Commerce Committee (Feb. 3, 2015) (TKH-SCS&T00008098).

²⁰⁸ TK Holdings Inc., Defect Information Report PSDI, PSDI-4, and PSDI-4K, *supra* n. 12.

²⁰⁹ *Takata Air-Bag Problems Linked to Several Factors*, *Wall Street Journal* (June 2, 2015).

²¹⁰ Takata Response to Senate Commerce Committee (Mar. 23, 2015) (TKH-SCS&T00064623).

all variables that, according to the testing, appear to play a role in causing a rupture event, some of these inflators nonetheless perform properly.²¹¹ These unanswered questions are particularly troubling in light of the fact that Takata continues to produce hundreds of thousands of replacement inflators each month, with plans to increase production to one million inflators per month by September 2015.²¹² Nonetheless, Takata and NHTSA agree that, due to the critical role of time in degrading the propellant, it is best to continue replacing the old, defective inflators as quickly as possible—even though there is a distinct possibility that some of these replacements will eventually also be recalled.²¹³

V. Proposed Policy Changes to Quickly Detect and Address Future Auto Safety Defects

Over the past 20 years, Congress has periodically scrutinized NHTSA's vehicle safety authority in the wake of high-profile vehicle defects that led to the needless deaths of American drivers. Twice Congress has responded with legislative reform efforts with the Senate Commerce Committee playing a leading role. In 2000, Congress passed the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act in response to the Firestone tire recall that caused at least 174 deaths and over 700 injuries.²¹⁴ Subsequently, in 2012, Congress again legislatively addressed NHTSA's regulatory authority with provisions in the comprehensive surface transportation reauthorization legislation—the Moving Ahead for Progress in the 21st Century Act (MAP-21)—with many of those provisions stemming from the lessons learned from sudden unintended acceleration defects in Toyota vehicles.²¹⁵

While these laws were significant and helpful, they stopped short of reforms that would have provided NHTSA with sufficient resources and authority to better detect and address dangerous vehicle safety defects. The holes in the current NHTSA regulatory and enforcement process, combined with the failure of certain manufacturers to maintain robust internal safety and quality control programs, have manifested in several large recalls—including those involving defective GM ignition switches and Takata airbags.

To that end, this report recommends numerous policy proposals to better enable NHTSA to protect the public from vehicle defects. Many of these proposals have been part of previously introduced bills—some in bills favorably reported by the Committee and some even in Senate-passed legislation. In addition, some of these proposals have been proffered by the Administration in its Fiscal Year (FY) 2015 budget, which provides a comprehensive transportation proposal known as the Generating Renewal, Opportunity, and Work with Accelerated Mobility, Efficiency, and Rebuilding of Infrastructure and Communities throughout America (GROW AMERICA) Act. Furthermore, NHTSA should adopt reforms on its own in order to address deficiencies within ODI.

A. NHTSA Improvements

1. Increase Civil Penalty Authority

The Takata airbag recalls confirm the urgent need for stronger enforcement mechanisms for NHTSA, including civil penalty authority that can sufficiently deter safety violations. In 2014, NHTSA issued over \$126 million in civil penalties, which surpassed the total amount collected by the agency in its 43-year history.²¹⁶ Despite the record year, NHTSA's civil penalty authority is currently capped at \$35 mil-

²¹¹ Takata Response to Senate Commerce Committee (Mar. 23, 2015) (TKH-SCS&T00064697).

²¹² House Committee on Energy and Commerce, Testimony of Kevin Kennedy, Executive Vice President of North America, TK Holdings Inc., *Hearing on An Update on the Takata Airbag Ruptures and Recalls* (June 2, 2015).

²¹³ Briefing by NHTSA to Bipartisan Commerce Committee Staff (June 17, 2015); Briefing by Takata to Bipartisan Commerce Committee Staff (June 18, 2015).

²¹⁴ Pub. L. No. 106-414 (2000); *Inside the Ford/Firestone Fight*, Time (May 29, 2001).

²¹⁵ Pub. L. No. 112-141 (2012); National Highway Traffic Safety Administration, RQ10003 Summary (Feb. 16, 2010-Mar. 1, 2011) (online at www-odi.nhtsa.dot.gov/cars/problems/defect/results.cfm?action_number=RQ10003&SearchType=QuickSearch&summary=true).

²¹⁶ See, e.g., NHTSA's fines of Honda (\$70 million for failing to both submit early warning reports and warranty claims); Hyundai Motor America (\$17.35 million for failing to issue a recall in a timely manner); and General Motors Company (\$35 million for failing to issue a recall in a timely manner). National Highway Traffic Safety Administration, *NHTSA Issues More Fines in 2014 Than in Agency's Entire History* (Jan. 8, 2015) (online at [www.nhtsa.gov/About+NHTSA/Press+Releases/2015/DOT-fines-Honda-\\$70-million](http://www.nhtsa.gov/About+NHTSA/Press+Releases/2015/DOT-fines-Honda-$70-million)).

lion,²¹⁷ severely limiting its ability to seek fines that are commensurate with, for instance, the seriousness of failing to report defects in a timely manner. The low cap has repeatedly demonstrated an inability to deter automakers from committing grave safety violations. This lack of deterrence is particularly apparent when companies fail to report important defect information to NHTSA as required under Section 30118 of the National Traffic and Motor Vehicle Safety Act (NTMVSA).²¹⁸ For example, NHTSA’s “record” \$35 million fine of GM represented a minuscule fraction of the company’s annual revenue of \$156 billion.²¹⁹ In contrast, it is worth noting—and it is telling—that when Toyota agreed to pay a record fine of \$1.2 billion for concealing information on sudden unintended acceleration, the auto giant did so in a settlement with the Department of Justice for violations of the Wire Act—not for violations of Section 30118 of NTMVSA.²²⁰

Over the past several years, lawmakers have proposed increasing or eliminating this cap. A Senate bill introduced in the 111th Congress would have increased the cap to \$300 million,²²¹ and legislation reported out of the Commerce Committee in the 112th Congress would have increased the cap to \$250 million.²²² The Senate-passed version of MAP-21 adopted the Committee-reported increase of \$250 million before it was reduced to the current \$35 million in Conference with the House.²²³ In the 113th Congress, a bill introduced in the Senate would have eliminated the cap,²²⁴ and a bill introduced in the House would have increased the cap to \$200 million.²²⁵ The GROW AMERICA Act also would increase the limit on NHTSA’s civil penalties to \$300 million.²²⁶ Substantially increasing or eliminating NHTSA’s civil penalty cap is critical to making NHTSA a stronger and more effective regulator.

2. Provide Enhanced and Independent Testing Capability

Improving NHTSA’s ability to conduct enhanced and independent testing would also greatly further motor vehicle safety. While Takata and the automakers have the responsibility to identify the root cause of the airbag ruptures, their regulator should have the ability to conduct its own independent tests to verify their findings. Furthermore, according to a new report issued by the Department of Transportation Inspector General’s office (DOTIG), NHTSA’s ability to aggressively and prophylactically identify and address defects before they cause greater harm is hampered by deficiencies in how ODI operates.²²⁷ Specifically, the DOTIG report found that ODI lacks (1) protocols and procedures to collect data that is accurate and useful, (2) the ability to statistically analyze data in order to discern trends that indicate the existence of safety defects, and (3) protocols that govern the conditions for conducting investigations. The report made 17 recommendations that ODI should adopt to address these deficiencies.²²⁸ Furthermore, NHTSA is plagued by a chronic lack of resources. Currently, the agency is underfunded and outmanned—only 51 employees are responsible for analyzing an overwhelming amount of data and conducting appropriate investigations therefrom.²²⁹ The President’s FY 2016 budget request proposes an overall NHTSA budget of \$908 million, a nine percent increase from the agency’s current budget of \$830 million.²³⁰ This includes increasing ODI’s budget to \$31.3 million, up from \$11 million in FY 2015, which would allow for the hiring

²¹⁷ 49 U.S.C. § 30165. The \$35 million maximum limit was increased from \$15 million by MAP-21. See Pub. L. No. 112–141, § 31203 (2012).

²¹⁸ 49 U.S.C. § 30118 (2000).

²¹⁹ See General Motors Company, 2014 Annual Report, at 22 (2014) (online at www.gm.com/content/dam/gmcom/COMPANY/Investors/Stockholder_Information/PDFs/2014_GM_Annual_Report.pdf).

²²⁰ See Department of Justice, *Justice Department Announces Criminal Charge Against Toyota Motor Corporation and Deferred Prosecution Agreement with \$1.2 Billion Financial Penalty* (Mar. 19, 2014) (online at www.justice.gov/opa/pr/justice-department-announces-criminal-charge-against-toyota-motor-corporation-and-deferred).

²²¹ S. 3302, 111th Cong. (2010).

²²² S. 1449, 112th Cong. (2011).

²²³ S. 1813, 112th Cong. (2012).

²²⁴ S. 2559, 113th Cong. (2014).

²²⁵ H.R. 4364, 113th Cong. (2014).

²²⁶ Department of Transportation, *Generating Renewal, Opportunity, and Work with Accelerated Mobility, Efficiency, and Rebuilding of Infrastructure and Communities throughout America Act* § 4110 (2014).

²²⁷ Department of Transportation, Office of Inspector General, *Inadequate Data and Analysis Undermine NHTSA’s Efforts to Identify and Investigate Vehicle Safety Concerns* (June 18, 2015).

²²⁸ *Id.*

²²⁹ *Auto Regulator Has 51 People Tracing 250 Million Cars*, Bloomberg (Mar. 26, 2015).

²³⁰ See Department of Transportation, *Budget Estimates Fiscal Year 2015*, National Highway Traffic Safety Administration (2015) (online at www.business.cch.com/plsd/FY2016-NHTSA-CBJ-Final.pdf).

of an additional 57 personnel.²³¹ Coupled with meaningful internal reforms, the increased budget for ODI would enhance NHTSA’s “ability to monitor data, find defects sooner, and strengthen [its] ability to conduct investigations of vehicles with suspected defects.”²³²

3. Improve Recall Completion Rates

Recall notifications are only effective when consumers act on the notices by actually bringing their vehicles to an authorized dealership to have them repaired. However, achieving high recall completion rates has proven to be a challenge. Secretary of Transportation Anthony Foxx has stated, “Recalls are only successful and can only save lives if they end up getting the cars fixed, but we know that 20 percent of vehicles that are recalled—and possibly more than that—go unrepaired.”²³³ A 2011 Government Accountability Office study found significant variation in recall completion rates: in any given year, some manufacturers have completion rates as low as 23 percent, while others have completion rates as high as 96 percent.²³⁴ By the end of 2014, of the 17 million vehicles that had been recalled for defective Takata airbags, reports suggested that only around 2 million vehicles—a mere 11 percent of those recalled—had been repaired.²³⁵ In April 2015, NHTSA hosted a workshop with industry, safety advocates, policy makers, and researchers on improving recall completion rates. At the workshop, NHTSA Administrator Mark Rosekind said, “Getting to 100 percent is going to be a real challenge, but it has to be our ambition. And until the day we hit that mark, we have to think of new ways to get there.”²³⁶

Lawmakers in recent years have attempted to bolster recall effectiveness by introducing legislation that would prohibit used car dealers and rental car companies from selling, leasing, or renting out vehicles subject to an open recall.²³⁷ Under current law, no such prohibition exists, constituting a major loophole in ensuring the safety of cars on the Nation’s roads and highways.²³⁸ The GROW AMERICA Act also proposes closing this loophole.²³⁹ Secretary Foxx stated, “Every vehicle under an open safety recall should be repaired as soon as possible. . . . Requiring rental car agencies and used car dealers to fix defective vehicles before renting is a commonsense solution that would make our roads safer.”²⁴⁰ In September 2014, the Senate Commerce Committee favorably reported S. 921, the Raechel and Jacqueline Houck Safe Rental Car Act, which would have closed this loophole for rental cars.²⁴¹

Numerous other ideas have been proposed to improve recall completion rates, including requiring consumers to fix open recalls before they are able to register their

²³¹*Id.* See also Department of Transportation, *U.S. Transportation Secretary Anthony Foxx Unveils President’s Bold \$94.7 Billion Investment in America’s Infrastructure Future* (Feb. 2, 2015) (online at www.dot.gov/briefing-room/us-transportation-secretary-anthony-foxx-unveils-president%E2%80%99s-bold-947-billion).

²³²*Id.*; National Highway Traffic Safety Administration, *U.S. Transportation Secretary Foxx Calls on Congress to Authorize New Enforcement Tools for NHTSA and Levis Fine on Takata* (Feb. 20, 2015) (online at www.nhtsa.gov/About+NHTSA/Press+Releases/2015/DOT-wants-new-enforcement-tools-for-nhtsa-and-fines-takata).

²³³National Highway Traffic Safety Administration, *U.S. DOT Hosts Workshop to Boost Recall Completion Rates* (Apr. 28, 2015) (online at www.nhtsa.gov/About+NHTSA/Press+Releases/2015/nhtsa-retooling-recalls-workshop-04282015).

²³⁴Government Accountability Office, *Auto Safety: NHTSA Has Option to Improve the Safety Defect Recall Process*, at 25 (June 2011).

²³⁵*The Unsolved Mystery of the Exploding Air Bags*, USA Today (Apr. 27, 2015).

²³⁶*DOT Aims to Follow Record Recall Fines with Record Repair Rate*, Politico Pro (Apr. 28, 2015).

²³⁷See, e.g., S. 3302, 111th Cong. (2010); S. 2559, 113th Cong. (2014); and S. 921, 113th Cong. (2012).

²³⁸*U.S. Transportation Secretary Foxx Calls on Congress to Authorize New Enforcement Tools for NHTSA and Levis Fine on Takata*, *supra* n. 233.

²³⁹Department of Transportation, *Generating Renewal, Opportunity, and Work with Accelerated Mobility, Efficiency, and Rebuilding of Infrastructure and Communities throughout America Act § 4109* (2014). Previous proposals have also required that used car dealers notify purchasers of any outstanding safety recalls. See S. 3302, 111th Cong. (2010) and S. 2559, 113th Cong. (2014).

²⁴⁰*U.S. Transportation Secretary Foxx Calls on Congress to Authorize New Enforcement Tools for NHTSA and Levis Fine on Takata*, *supra* n. 233.

²⁴¹S. 921, 113th Cong. (2014). On June 19, 2015, Honda confirmed that the 2001 Honda Civic involved in the eighth death caused by a rupturing Takata airbag inflator was a rental car. Statement from American Honda Motor Co., Inc., *Re: Confirmed Fatality Related to the Rupture of a Takata Airbag Inflator in Los Angeles, CA on September 7, 2014*, *supra* n. 132.

vehicles or renew their registrations.²⁴² Another idea is for auto manufacturers to provide direct in-vehicle notification to owners or lessees of open recalls.

4. Enact Whistleblower Legislation

As noted earlier, the Takata airbag recalls—as well as other high-profile safety recalls—highlight the need for stronger incentives for companies to report safety defects to NHTSA as soon as they become aware of them. In addition to increasing civil penalties for violations of Section 30118 of NTMVSA, bolstering incentives and protections for whistleblowers would also increase the likelihood that NHTSA receives critical safety information in a timely manner. Revealing information on the various issues surrounding the Takata airbag defects has often come from former Takata employees who have spoken to media sources in the aftermath of the crisis—often on the condition of anonymity.²⁴³ NHTSA has also urged potential whistleblowers to contact the Administration.²⁴⁴

Currently, MAP-21 provides whistleblower protections for employees of manufacturers, part suppliers, and dealerships by protecting them from discrimination or retaliation for engaging in certain protected activities, including providing information relating to any motor vehicle defect, noncompliance, or any violation to the Secretary of Transportation or an employer.²⁴⁵

In January 2015, Commerce Committee Chairman John Thune and Ranking Member Bill Nelson introduced the Motor Vehicle Safety Whistleblower Act (S. 304), which would enhance the protections in MAP-21 by incentivizing employees and contractors to voluntarily provide information to NHTSA.²⁴⁶ Under the bill, the Secretary of Transportation is authorized to share with the whistleblower up to 30 percent of any fines exceeding \$1 million that NHTSA recovers as a result of the information that is reported. To help improve automobile safety, S. 304 incentivizes whistleblowers to report violations and provides the necessary protections for such actions. On April 28, 2015, the Senate passed S. 304.

B. Safety Measures NHTSA, Takata, and Auto Manufacturers Should Undertake to Improve Recall Effectiveness

Short of additional legislation, NHTSA and private stakeholders can also do a better job of effectuating recalls. Specifically, NHTSA should consider using its existing authority to accelerate the availability of replacement parts to the public and should further modify its public database to make it more user friendly. Lastly, auto manufacturers should make loaner cars more readily available to consumers affected by lengthy recalls.

1. Increase Ability to Effectively Respond to Safety Defects/Recalls

The defective Takata airbag crisis highlights the need for improvements in the auto industry's ability to effectively respond to recalls. As of June 2015, Takata explained that production of replacement inflators had increased from approximately 350,000 to 700,000 per month.²⁴⁷ At this rate of production, it would take Takata more than three years to produce replacement inflators for all recalled vehicles. By September 2015, Takata plans to be manufacturing one million inflators per month,²⁴⁸ but the slow pace at which Takata initially produced replacements, which has led to reports of customers being told that parts are not available,²⁴⁹ underscores the need for better planning for recalls, especially large recalls.

Section 30120 of NTMVSA grants NHTSA the authority to improve the efficacy of recalls by expanding the sources of replacement parts and/or the number of authorized repair facilities.²⁵⁰ Granted under the TREAD Act, NHTSA can use this authority if it determines that the “manufacturer’s remedy program is not likely to be capable of completion within a reasonable time.”²⁵¹ Thus far, NHTSA has opted

²⁴² See S. 617 (2015).

²⁴³ See, e.g., Takata Saw and Hid Risk in Airbags in 2004, Former Workers Say, *supra* n. 1; *Exclusive: U.S. Federal Safety Regulators Seek Takata Whistleblowers*, Reuters (Jan. 29, 2015).

²⁴⁴ *Exclusive: U.S. Federal Safety Regulators Seek Takata Whistleblowers*, *supra* n. 244.

²⁴⁵ Pub. L. No. 112–141 § 30171; 49 U.S.C. § 30171.

²⁴⁶ S. 304. The Bill is cosponsored by Senators Heller, McCaskill, Klobuchar, Ayotte, Moran, and Blumenthal. On February 26, 2015 the Commerce Committee considered the bill and ordered to be reported favorably, modified by a substitute amendment.

²⁴⁷ Testimony of Kevin Kennedy, *Hearing on An Update on the Takata Airbag Ruptures and Recalls* (June 2, 2015), *supra* n. 213.

²⁴⁸ *Id.*

²⁴⁹ See, e.g., Takata Air Bag Recall Stalls in Wisconsin Over Lack of Parts, *Journal Sentinel* (Mar. 30, 2015).

²⁵⁰ 49 U.S.C. § 30120.

²⁵¹ 49 C.F.R. 573.14(b).

not to use its 30120 authority to accelerate the availability of replacements for defective Takata airbags, but it should not hesitate to do so if such an initiative would further public safety.

Furthermore, the lack of accurate information available to consumers raises serious concerns when it comes to industry and the government's readiness. To promote transparency and accountability, MAP-21 mandated that recall information be available on the Internet. Consumers are now able to search by vehicle make and model or enter their Vehicle Identification Number (VIN) into NHTSA's vehicle safety database at www.safercar.gov to see if their vehicle is subject to a recall.²⁵² The Takata airbag recalls have demonstrated that this search tool needs to be strengthened. NHTSA's VIN search tool wrongly informed some consumers that their vehicles had either already been repaired or were not subject to a recall.²⁵³ Moreover, in October 2014, the overwhelming demand for NHTSA's website caused it to crash.²⁵⁴ Bills introduced in Congress to improve NHTSA's vehicle safety database include measures aimed at: improving website organization and functionality; allowing for data to be searched, aggregated, and downloaded; and improving searchability of specific vehicles and issues through standardization of commonly used search terms.²⁵⁵ However, NHTSA is capable of taking these steps on its own accord. Even without a legislative directive, the agency should take the initiative to make its database more user friendly and effective for consumers.

2. Offer Loaner/Rental Cars When Recalls Involve Serious Safety Issues

At the November 2014 Commerce Committee hearing regarding the defective Takata airbags, Senator Nelson called on automakers to provide loaner vehicles or rental cars to consumers who could not get their vehicles immediately fixed due to the unavailability of replacement parts.²⁵⁶ In March 2015, Honda launched a multi-million-dollar ad campaign to urge owners of vehicles affected by the Takata airbag recalls to get their vehicles fixed.²⁵⁷ The advertisements, printed in English and Spanish, promised consumers a rental car or loaner vehicle free-of-charge. To keep drivers and passengers safe when vehicles are subject to a recall, automakers should provide rental or loaner vehicles, especially in cases in which the defect in question poses a serious safety hazard or in which replacement parts are unavailable.

VI. Conclusion

Thus far, the Committee minority staff's ongoing investigation reveals a series of failures by both Takata and NHTSA to timely address a defect that has now mushroomed into a recall crisis. Had Takata maintained a more robust culture of safety, it is likely that many of these defects could have been discovered much sooner. Similarly, had NHTSA promptly undertaken more aggressive steps to investigate the Takata airbag ruptures, it is possible that this defect could have been addressed years earlier.

To restore consumer confidence in the safety of vehicles, it is imperative that Congress take action to enhance NHTSA's regulatory and enforcement authorities. Similarly, automakers and part suppliers must redouble their internal safety efforts. As this report shows, it is not enough to merely conduct safety audits after problems are detected. Rather, safety must be built-in as a core component of a manufacturer's internal culture.

²⁵² Pub. L. No. 112-141 § 31301.

²⁵³ *NHTSA Updates Recall Website After Cars.com Probe*, Cars.com (Apr. 23, 2015).

²⁵⁴ National Highway Traffic Safety Administration, *U.S. Department of Transportation Unveils New, Free, Online Search Tools for Recalls Using Vehicle Identification Number* (Aug. 20, 2014) (online at www.nhtsa.gov/About+NHTSA/Press+Releases/2014/New-free-online-search-tool-for-recalls-using-VIN-released); see also *Demand Crashes Air Bag Recall Web Site Safercar.gov*, Washington Post (Oct. 21, 2014). In addition, Honda's VIN search tool, which allows consumers to determine whether a car is subject to recall, was providing false information in the months after millions of vehicles were recalled. Owners whose cars were subject to multiple recalls were only informed of the most recent recalls, and earlier recalls were shown as completed. See Senate Committee on Commerce, Science, and Transportation, *Examining Takata Airbag Defects and the Vehicle Recall Process*, 113th Cong. (Nov. 20, 2014).

²⁵⁵ See S. 2559, 113th Cong. (2014); H.R. 1181.

²⁵⁶ Senator Bill Nelson Statement, Senate Committee on Commerce, Science, and Transportation, *Examining Takata Airbag Defects and the Vehicle Recall Process*, 113th Cong. (Nov. 20, 2014).

²⁵⁷ *New Honda Ads: Fix Your Airbags*, AutoBlog (Mar. 14, 2015).

Appendix I

Chronology of Takata Airbag Events

2 0 0 7	<p>May</p> <ul style="list-style-type: none"> Driver-side airbag inflator in a 2002 Honda Accord ruptures in Alabama. Takata tentatively concludes that a compromised seal on the inflator or an overloading of propellant into the inflator might have caused the rupture.
2 0 0 8	<p>February and May</p> <ul style="list-style-type: none"> Honda reports three additional incidents of rupturing driver-side inflators to Takata. One of the incidents occurred in February and two occurred in May; all involved 2001 Honda Civics. Takata theorizes that two manufacturing processes may have resulted in the exposure of propellant to moisture and/or humidity.
2 0 0 8	<p>November 11</p> <ul style="list-style-type: none"> Honda issues the first recall (08V-593) of cars equipped with Takata airbags, covering 3,940 vehicles in the U.S.
2 0 0 9	<p>May 27</p> <ul style="list-style-type: none"> Shrapnel from a rupturing driver-side inflator in a 2001 Honda Accord in Oklahoma causes the death of the driver. <p>June</p> <ul style="list-style-type: none"> Takata presents to Honda a theory that its methodology for calculating propellant density in 2000 and 2001 could have led to invalid measurements and recommends expanding the previous recall. <p>June 30</p> <ul style="list-style-type: none"> Honda issues a recall (09V-259), which expands the November 2008 recall to cover 440,000 vehicles in the U.S.
2 0 0 9	<p>November 2</p> <ul style="list-style-type: none"> NHTSA opens an investigation (RQ09-004) intended to evaluate the scope and timeliness of Honda's two recalls.
2 0 0 9	<p>December 24</p> <ul style="list-style-type: none"> Shrapnel from a rupturing driver-side inflator in a 2001 Honda Accord in Virginia causes the death of the driver.
2 0 1 0	<p>February 9</p> <ul style="list-style-type: none"> Honda issues a recall (10V-041) of 379,000 vehicles in the U.S. with potentially defective driver-side inflators. <p>May 6</p> <ul style="list-style-type: none"> NHTSA closes its investigation into Honda's handling of the recalls, finding insufficient information to suggest that Honda failed to make timely recall decisions.

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2011	<p>April 27</p> <ul style="list-style-type: none"> Honda issues a recall (11V-260) of 833,277 U.S. vehicles to capture approximately 2,430 defective replacement driver-side inflators that could have been installed in vehicles. <p>December 1</p> <ul style="list-style-type: none"> After learning of a new incident, Honda expands recall 11V-260 to include an additional 277,779 U.S. vehicles due to uncertainty over which driver-side inflators contain the suspect propellant. In addition, Honda says it will contact 603,421 U.S. vehicle owners to account for 604 potentially defective driver-side inflators that may have been sold in the U.S.
2012	<p>March-October</p> <ul style="list-style-type: none"> Five alleged rupture incidents occur in 2012, all involving Honda vehicles.
2013	<p>February-March</p> <ul style="list-style-type: none"> Takata learns of two manufacturing problems with the propellant used in some passenger-side inflators: (1) some propellant tablets may not have been adequately compressed because a machine's auto-reject function was turned off and (2) some propellant tablets may have been exposed to moisture. Honda issues a recall (13V-132) of 561,422 U.S. vehicles with potentially defective passenger-side inflators. <p>April 10</p> <ul style="list-style-type: none"> Mazda issues a recall (13V-130) of 149 U.S. vehicles with potentially defective passenger-side inflators. <p>April 11</p> <ul style="list-style-type: none"> Takata submits a Defect Information Report to NHTSA informing the agency of a potential defect in passenger-side inflators. Toyota issues a recall (13V-133) of 844,277 U.S. vehicles with potentially defective passenger-side inflators. Toyota explains that it will not replace all inflators but rather will ask owners to bring their vehicles to dealers for inspection. Nissan issues a recall (13V-136) of 438,302 U.S. vehicles with potentially defective passenger-side inflators. <p>May 3</p> <ul style="list-style-type: none"> BMW issues a recall (13V-172) of 42,080 U.S. vehicles with potentially defective passenger-side inflators. <p>September 3</p> <ul style="list-style-type: none"> Shrapnel from a rupturing driver-side inflator in a 2002 Acura TL in California causes the death of the driver.
2014	<p>June</p> <ul style="list-style-type: none"> Takata notifies automakers that some of its records were incomplete, allowing for the possibility that some propellant was stored – and thus exposed to moisture – for up to three months before being used in inflators. Takata recommends expanding the recall of vehicles with certain passenger-side inflators. NHTSA requests Takata's support for a regional field action that would allow for the collection and testing of passenger-side and driver-side inflators from high humidity regions. In addition, Takata finds that its production records and methodology for determining the recall range of cars subject to some 2013 recalls may have been incomplete. <p>June 10</p> <ul style="list-style-type: none"> Toyota issues a recall (14V-312) modifying its April 11, 2013, recall so that all 844,277 previously identified vehicles will have their inflators replaced.

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2017	<p>June 11</p> <ul style="list-style-type: none"> NHTSA opens a formal Preliminary Evaluation into airbag inflator ruptures (PE14-016).
	<p>June 19</p> <ul style="list-style-type: none"> Nissan launches a recall (14V-340) covering 29,998 U.S. vehicles to collect passenger-side inflators from high humidity regions (FL, HI, PR, and VI). Ford launches a recall (14V-343) covering 58,669 U.S. vehicles to collect driver and passenger inflators from high humidity regions (FL, HI, PR, and VI). Mazda launches a recall (14V-344) to collect driver and passenger-side inflators from high humidity regions (FL, HI, PR, VI). Toyota issues a recall (14V-350) to collect passenger-side inflators from high humidity regions (FL, HI, PR, and VI).
	<p>June 20</p> <ul style="list-style-type: none"> BMW launches a recall (14V-348) covering 140,696 U.S. vehicles to collect driver-side inflators from high humidity regions (FL, HI, PR, and VI). Honda issues a recall (14V-349) of 988,440 U.S. vehicles with potentially defective passenger-side inflators. Honda issues a recall (14V-351) covering 2,803,214 U.S. vehicles to collect driver-side inflators from high humidity regions (FL, HI, PR, VI, AL, GA, LA, MS, SC, and TX). Honda issues a recall (14V-353) covering 698,288 U.S. vehicles to collect passenger-side inflators from high humidity regions (FL, HI, PR, VI, AL, GA, LA, MS, SC, and TX). Chrysler issues a recall (14V-354) covering 371,309 U.S. vehicles to collect passenger and driver-side inflators from high humidity regions (FL, HI, PR, and VI).
	<p>June 23</p> <ul style="list-style-type: none"> Mazda issues a recall (14V-362) covering 18,050 U.S. vehicles that may contain defective passenger-side inflators.
	<p>June 24</p> <ul style="list-style-type: none"> Nissan issues a recall (14V-361) of 226,326 U.S. vehicles with potentially defective passenger-side inflators.
	<p>July 7</p> <ul style="list-style-type: none"> Subaru issues a recall (14V-399) of 8,557 U.S. vehicles with potentially defective passenger-side inflators.
	<p>July 11</p> <ul style="list-style-type: none"> Mitsubishi launches a regional recall (14V-421) covering 11,985 vehicles to collect passenger-side inflators from high humidity regions (FL, HI, PR, and VI).
	<p>July 15</p> <ul style="list-style-type: none"> BMW issues a recall (14V-428) expanding a previous recall (13V-172) for passenger-side airbag inflators covering 573,935 vehicles.
	<p>August 1</p> <ul style="list-style-type: none"> Subaru launches a regional recall (14V-471) covering 8,959 vehicles to collect passenger-side inflators from high humidity regions (FL, HI, PR, and VI).
	<p>August 17</p> <ul style="list-style-type: none"> A driver-side airbag inflator in a 2007 Ford Mustang ruptures in North Carolina.
<p>September 29</p> <ul style="list-style-type: none"> Shrapnel from a rupturing inflator in a 2001 Honda Accord in Florida causes the death of the driver. 	

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2014	<p>October 19</p> <ul style="list-style-type: none"> Toyota issues a recall (14V-655) of 247,000 vehicles in high absolute humidity areas (FL, PR, HI, VI, and along the Gulf Coast).
	<p>October 29</p> <ul style="list-style-type: none"> NHTSA sends a letter to all 10 manufacturers (Toyota, Honda, Mazda, BMW, Nissan, Mitsubishi, Subaru, Chrysler, Ford and General Motors) to "take aggressive and proactive action to expedite [their] remedy of the recalled vehicles and to supplement Takata's testing with [their] own."
	<p>October 30</p> <ul style="list-style-type: none"> NHTSA issues a Special Order to Takata demanding information on its defective airbags. Nissan notifies NHTSA that it will expand Recall 14V-340 into a Recall 14V-701 covering 22,738 additional vehicles for a total of 52,738 potentially affected by defective Takata airbag inflators in high humidity areas (FL, GA, PR, HI, VI, AL, LA, MS, and TX).
	<p>November 3</p> <ul style="list-style-type: none"> Honda issues a recall (14V-700) of 807,599 vehicles with potentially defective passenger-side inflators in high humidity regions (AL, FL, GA, HI, LA, MS, SC, TX, PR, and VI).
	<p>November 13</p> <ul style="list-style-type: none"> A July 27, 2014, death from shrapnel from a rupturing inflator in a 2003 Honda City in Malaysia is linked to a Takata airbag. Honda subsequently recalls 170,000 vehicles in Asia and Europe.
	<p>November 18</p> <ul style="list-style-type: none"> NHTSA calls for an expansion of regional recalls to national recalls of driver-side airbag inflators affecting 5 automakers (BMW, Chrysler, Ford, Honda, and Mazda). NHTSA issues a General Order to the 10 affected automakers demanding a detailed report and production of documents related to the testing of Takata inflators outside the regional recall areas. NHTSA issues a second Special Order to Takata for information related to the propellant within the inflators.
	<p>November 21</p> <ul style="list-style-type: none"> The U.S. Senate Commerce Committee holds a hearing titled <i>Examining Takata Airbag Defects and the Vehicle Recall Process</i>. Witnesses include a Takata victim, NHTSA Deputy Administrator David Friedman, and Takata, Honda, and Chrysler executives.
	<p>November 24</p> <ul style="list-style-type: none"> Mitsubishi issues a recall (14V-752), which expands Recall 14V-421 to cover 22,259 vehicles in the U.S.
	<p>November 26</p> <ul style="list-style-type: none"> NHTSA sends a Recall Request Letter to Takata formally demanding that it acknowledge the existence of a defect and issue a national recall for driver-side airbag inflators.

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2014	<p>December 2</p> <ul style="list-style-type: none"> Takata responds to NHTSA's Recall Request Letter stating that the data and currently available information did not support a national recall. <p>December 3</p> <ul style="list-style-type: none"> Chrysler issues a regional recall (14V-770) superseding a regional recall (14V-354), covering 420,564 vehicles. The U.S. House Energy & Commerce Committee holds a hearing on Takata airbag ruptures and recalls. Witnesses include Takata, Toyota, Honda, and BMW executives and NHTSA Deputy Administrator David Friedman. <p>December 10</p> <ul style="list-style-type: none"> Ford launches a regional recall (14V-787), which expands regional Recall 14V-343, to cover 40,952 vehicles in high absolute humidity areas (FL, HI, PR, VI, AL, MS, LA, TX, and GA). <p>December 18</p> <ul style="list-style-type: none"> Ford launches a national recall (14V-802) partially superseding a regional recall (14V-343) to cover 462,911 vehicles. <p>December 23</p> <ul style="list-style-type: none"> Chrysler (FCA) issues a national recall (14V-817), which expands a regional recall (14V-354) to cover 2,908,790 vehicles. <p>December</p> <ul style="list-style-type: none"> A group of 10 auto manufactures affected by defective Takata airbags create the Independent Testing Coalition (ITC). In February 2015, the ITC contracts with Orbital ATK to conduct independent testing of the defective inflators to find the root cause of the ruptures and selects former NHTSA Acting Administrator David Kelly to lead the investigation.
	<p>January 18</p> <ul style="list-style-type: none"> Shrapnel from a rupturing driver-side inflator in a 2002 Honda Accord in Texas causes the death of the driver. <p>February 20</p> <ul style="list-style-type: none"> NHTSA imposes a civil penalty of \$14,000 per day against Takata for failing to fully respond to NHTSA's Special Orders issued on October 30, 2014 and November 18, 2014. <p>February 25</p> <ul style="list-style-type: none"> NHTSA announces that it will upgrade the Takata investigation to an engineering analysis, a formal step in the agency's defect investigation process. NHTSA issues a Preservation Order requiring Takata to preserve inflators recovered from recalled vehicles for inspection, testing, and analysis. Takata also agrees to submit a written protocol detailing how it would implement the requirements of the Preservation Order.
	<p>March 16</p> <ul style="list-style-type: none"> Honda issues a national recall (15V-153), which expands a regional recall (14V-351) to cover 88,549 vehicles.
	<p>April 16</p> <ul style="list-style-type: none"> Nissan issues a regional recall (15V-226), which expands a previous regional recall (14V-701) to cover 45,000 vehicles in high absolute humidity locations (PR, HI, VI, FL, GA, AL, LA, MS, and TX).

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T I M E	<p>April 23</p> <ul style="list-style-type: none"> NHTSA publishes Takata's written protocol detailing how it will implement and comply with the Preservation Order.
	<p>May 13</p> <ul style="list-style-type: none"> Toyota issues a recall (15V-286), which expands previous regional recall 14V-655 involving defective passenger-side inflators covering an additional 300,000, bringing the total number of affected vehicles to 644,000 vehicles. Toyota issues a national recall (14V-312), which expands a previous recall (13V-133) to cover an additional 176,000 vehicles, bringing the total number of recalled vehicles to 747,000. Toyota issues a new recall (15V-284) to cover 159,700 driver-side inflators in 2004-2005 RAV4 vehicles.
	<p>May 14</p> <ul style="list-style-type: none"> Nissan issues a national recall (15V-287), which expands two previous recalls (14V-701 and 15V-226) to cover 263,692 vehicles.
	<p>May 18</p> <ul style="list-style-type: none"> Takata files four Defect Information Reports acknowledging a defect exists in 17.6 million driver-side inflators and 16.2 million passenger-side airbag inflators for a total of approximately 33.8 million defective Takata inflators in the U.S. Based on independent research performed by Fraunhofer ICT, Takata's preliminary conclusion for inflator ruptures is a "multi-factor root cause that includes the slow-acting effects of a persistent and long-term exposure to climates with high temperatures and high absolute humidity" that may lead to moisture intrusion in some inflators.
	<p>May 19</p> <ul style="list-style-type: none"> NHTSA announces Takata's acknowledgement of a defect in certain airbag inflators and issues a Consent Order that requires Takata to cooperate with all future NHTSA actions. This Consent Order also ends the \$14,000 per day fine that NHTSA imposed on Takata in February 2015.
	<p>May 22</p> <ul style="list-style-type: none"> NHTSA publishes a notice of intent to open a coordinated remedy program proceeding for the replacement of certain Takata airbag inflators affecting 11 auto manufacturers – BMW, Chrysler, Daimler, Ford, General Motors, Honda, Mazda, Mitsubishi, Nissan, Subaru, and Toyota.
	<p>May 26</p> <ul style="list-style-type: none"> Chrysler issues a recall (15V-312), which expands a previous recall to cover 438,156 vehicles. Chrysler expands recall (15V-313) for driver-side inflators, superseding recall 14V-817, to cover 4,066,732 vehicles.
	<p>May 27</p> <ul style="list-style-type: none"> Mitsubishi issues a national recall (15V-321), which expands previous regional recall 14V-752 involving defective passenger-side inflators covering 82,784 vehicles. Ford issues a recall (15V-319), which expands a previous recall (14-V802) involving driver-side airbag inflators to cover 1,019,081 vehicles. Ford launches a recall (15V-322) of 361,523 vehicles with potentially defective passenger-side inflators. BMW expands a recall (14V-328) to Recall 15V-318, increasing the affected vehicle population from 140,696 to 420,661.

Appendix I

2016	<p>May 28</p> <ul style="list-style-type: none"> GM issues a recall (15V-324), which expands a previous recall of passenger-side airbag inflators to cover 330,198 vehicles. Subaru issues a recall (15V-323) for passenger-side airbags to cover 81,100 vehicles.
	<p>May 29</p> <ul style="list-style-type: none"> Nissan notifies NHTSA that none of its vehicles are affected by Takata's recent recall expansion and that its previous recalls cover the defective Takata airbags in its vehicles.
	<p>June 1</p> <ul style="list-style-type: none"> Honda issues a recall (15V-320) of driver-side airbag inflators in approximately 5.1 million vehicles. The recall covered inflators that were installed at the time of manufacture as well as replacement inflators that had been installed as part of prior recalls of Takata inflators.
	<p>June 2</p> <ul style="list-style-type: none"> The U.S. House Energy & Commerce Committee conducts a follow-up hearing on the Takata defective airbags and the recall process. Witnesses include NHTSA Administrator Mark Rosekind, ITC Project Director David Kelly, and Takata, Global Automakers, and Alliance of Automobile Manufacturers executives.
	<p>June 4</p> <ul style="list-style-type: none"> Mazda issues recalls (15V-345 and 15V-346) of approximately 445,000 driver-side airbag inflators and 27,000 passenger-side airbag inflators.
	<p>June 5</p> <ul style="list-style-type: none"> NHTSA publishes a Notice of Coordinated Remedy Program Proceeding for the Replacement of Certain Takata Air Bag Inflators in the Federal Register. The agency explains that coordination could include acceleration, prioritization, organization, and/or phasing of the remedy programs.
	<p>June 9</p> <ul style="list-style-type: none"> Daimler Trucks issues a recall (15V-361) of 2,564 driver-side airbag inflators, increasing the total number affected automakers to 11.
	<p>June 12</p> <ul style="list-style-type: none"> Honda confirms that a rupturing airbag killed the driver of a 2005 Honda Civic on April 5, 2015, in Lafayette, Louisiana. The vehicle involved in the crash was included in a June 2014 recall, and a recall notice was mailed to the victim on April 2, 2015; however, it did not arrive before the fatal accident. Daimler Vans issues a recall (15V-354) of passenger-side airbag inflators in approximately 40,061 vehicles.
	<p>June 15</p> <ul style="list-style-type: none"> Honda issues a recall (15V-370) of approximately 1.39 million cars to replace passenger airbag inflators.
	<p>June 16</p> <ul style="list-style-type: none"> Toyota expands a recall (15V-285) to include an additional 1.36 million cars with defective passenger-side airbags.
	<p>June 19</p> <ul style="list-style-type: none"> Honda confirms an eighth death caused by a rupturing Takata airbag in a 2001 Honda Civic in Los Angeles. Takata is aware of at least eight deaths and over 100 injuries allegedly caused by its defective airbags. Nearly 34 million vehicles may be subject to a recall, making this potentially the largest collection of recalls of any consumer product in U.S. history.

Appendix II

List of Vehicles Affected by Takata Air Bag Recalls (as of June 19, 2015)*

Acura:	2008 - 2010 Dodge Ram 4500	2004 - 2006 B-Series Truck
2002 - 2003 Acura TL	2008 - 2010 Dodge Ram 4500/5500 Cab Chassis	2004 - 2008 Mazda RX-8
2003 Acura CL	2008 - 2010 Dodge Ram 5500	2006 - 2007 MazdaSpeed6
2003 - 2006 Acura MDX		
2005 Acura RL	Ford:	Mitsubishi:
	2004 - 2006 Ford Ranger	2004 Mitsubishi Lancer Sportback
BMW:	2005 - 2006 Ford GT	2004 - 2006 Mitsubishi Lancer/Lancer Evolution
2000 BMW 328i	2005 - 2014 Ford Mustang	2006 - 2010 Mitsubishi Raider
2000 - 2006 BMW 325i		
2001 - 2005 BMW M3	GM:	Nissan:
2001 - 2006 BMW 325xi/330i/330xi	2007 - 2008 Chevrolet Silverado 2500/4500	2002 - 2003 Nissan Maxima
2002 - 2003 BMW M5/525i/530i/540i	2007 - 2008 GMC Sierra 2500/3500	2002 - 2004 Nissan Pathfinder
2002 - 2003 BMW 525iT/540iT		2002 - 2006 Nissan Sentra
2003 - 2004 BMW X5 3.0i/4.4i	Honda:	Pontiac:
2002 - 2005 BMW 325Xi/T/325iT	2001 - 2005 Honda Civic	2003 - 2007 Pontiac Vibe
2002 - 2006 BMW 325Ci/330Ci	2001 - 2007 Honda Accord	
2002 - 2006 BMW 325Ci/330Ci	2002 - 2004 Honda Odyssey	Saab:
	2002 - 2006 Honda CR-V	2005 Saab 92X
Chrysler:	2002 - 2006 Honda Ridgeline	
2005 - 2010 Chrysler 300/300C/SRT8	2003 - 2005 Honda Civic Hybrid	Subaru:
2007 - 2008 Chrysler Aspen	2003 - 2008 Honda Pilot	2003 - 2005 Subaru Baja
	2003 - 2011 Honda Element	2003 - 2005 Subaru Legacy
Daimler:	Infiniti:	2003 - 2005 Subaru Outback
2006 - 2008 Dodge Sprinter 2500/3500	2001 Infiniti I30	2004 - 2005 Subaru Impreza
2006 - 2008 Freightliner Sprinter 2500/3500	2002 - 2003 Infiniti QX4	
2008 - 2009 Sterling Bullet 4500/5500	2002 - 2004 Infiniti I35	Toyota:
	2003 - 2005 Infiniti FX35,45	2002 - 2007 Toyota Sequoia
Dodge:	2006 Infiniti M35,45	2003 - 2006 Toyota Tundra
2003 - 2008 Dodge Ram 1500	Lexus:	2003 - 2007 Toyota Corolla
2003 - 2009 Dodge Ram 2500	2002 - 2007 Lexus SC	2003 - 2007 Toyota Matrix
2003 - 2009 Dodge Ram 3500		2004 - 2005 Toyota Rav4
2004 - 2008 Dodge Durango	Mazda:	
2005 - 2010 Dodge Charger/Magnum	2003 - 2008 Mazda6	*Please visit www.safercar.gov
2005 - 2011 Dodge Dakota	2004 - 2005 MPV	
2007 - 2009 Dodge Ram 3500 Cab Chassis		
2008 - 2009 Sterling 4500/5500 Cab Chassis		

Exhibit A

From: [REDACTED]
To: [REDACTED]
Sent: 4/5/2011 10:56:47 AM
Subject: RE: GPS audit

Thank you so much for your support.

Global safety audits had stopped for financial reasons for last 2 years. Good to start at least locally.

From: [REDACTED]
Sent: Tuesday, April 05, 2011 10:52 AM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: GPS audit

[REDACTED] this is a good opportunity, please support [REDACTED] plan as below

From: [REDACTED]
Sent: Tuesday, April 05, 2011 9:12 AM
To: [REDACTED]
Cc: [REDACTED]
Subject: FW: GPS audit

Dear [REDACTED],

For information, help and support. We need your help.

[REDACTED] is a coordinator for Global Pyro Safety. He has over 30 years of experience in safety and processing. He has audited all Takata plants worldwide for safety. Last week, he was in [REDACTED] for a global audit.

I would like [REDACTED] to carry of safety audit of MTY1 [REDACTED] (new and scrap) handling and storage and also; for [REDACTED] handling and storage.

[REDACTED] plans to visit MTY1 on the 19th May afternoon and 20th May morning, after his safety audit of MIO plant. Please provide name of the MTY1 safety person that [REDACTED] can contact for coordinating this visit.

I sincerely appreciate all your help.

Regards;

From: [REDACTED]
Sent: Tuesday, April 05, 2011 9:52 AM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: GPS audit

I would like to perform a mini audit at Moses Lake (Propellant and Assembly) , Monclova (Assembly and Propellant Handling/Storage not CAP) and Monterrey (Steering wheels).

Exhibit A

Here is what I propose:

1. Moses Lake April 18th (PM) to April 20th (AM if needed)
2. Monclova May 16th to May 18th
Pick in Monterrey 16th at noon, travel to Monclova
Return to Monterrey morning 19th
Monterrey Steering wheel (Magnesium areas) May 19th and morning May 20th
Travel to Detroit

Thank you

██████████

From: ██████████
Sent: Wednesday, March 23, 2011 2:06 PM
To: ██████████
Cc: ██████████
Subject: RE: GPS audit

Please let me know what dates your guys will be proposing, need to schedule properly at Monclova too many audits and activities going on right now, we need to make sure we give the proper support during this audit.
Thank you

From: ██████████
Sent: Wednesday, March 23, 2011 11:47 AM
To: ██████████
Cc: ██████████
Subject: RE: GPS audit

██████████

Don't wait till Fall. You and ██████████ should do MLIO and MIO soon.

When is it good for you two? Don't worry about everybody, just two of you.

Please help.

Regards;

██████████

From: ██████████
Sent: Wednesday, March 23, 2011 8:36 AM
To: ██████████
Subject: RE: GPS audit

██████████

January 2009

The plan will be to Audit North America Fall 2011

From: ██████████
Sent: Tuesday, March 22, 2011 5:08 PM
To: ██████████

Exhibit A

Subject: GPS audit

█

When is the last time you did GPS audit for MLIO and MIO?

If you have reports for their audits can you send them to me?

When is the next time you will go there for GPS audit?

Regards;

█

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Exhibit B

From : [REDACTED]
Sent : 3/30/2011 6:32:08 PM
To : [REDACTED]

Subject: Defects and defects and defects!!!!

[REDACTED]

Yesterday our customer reported an UNWELDED part, from YOUR shift.
TODAY they have reported a part with the label rotated 180 degrees from YOUR shift.

[REDACTED]

Today 38 complete inflators were thrown away because of incorrect CAP

EVERYBODY

I'm giving your colleagues as an example but the MESSAGE is general

Exhibit B

We need to strengthen inspection on line, and our associates must follow the internal control procedures to the letter

We cannot be faced with findings / defects of this sort and NOT do ANYTHING

One unwelded part = one less life, which means that we are NOT accomplishing the mission

Remember that here WE SAVE LIVES with our products. Therefore I need ALL your support in the DISCIPLINE and verification activities that take place before, during, and after each operation

You must always be on line to guarantee this and to answer any questions from your PERSONNEL

Let me know if you have any questions



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Exhibit C

From : [REDACTED]
Sent : 3/31/2011 10:34:36 PM
To : [REDACTED]

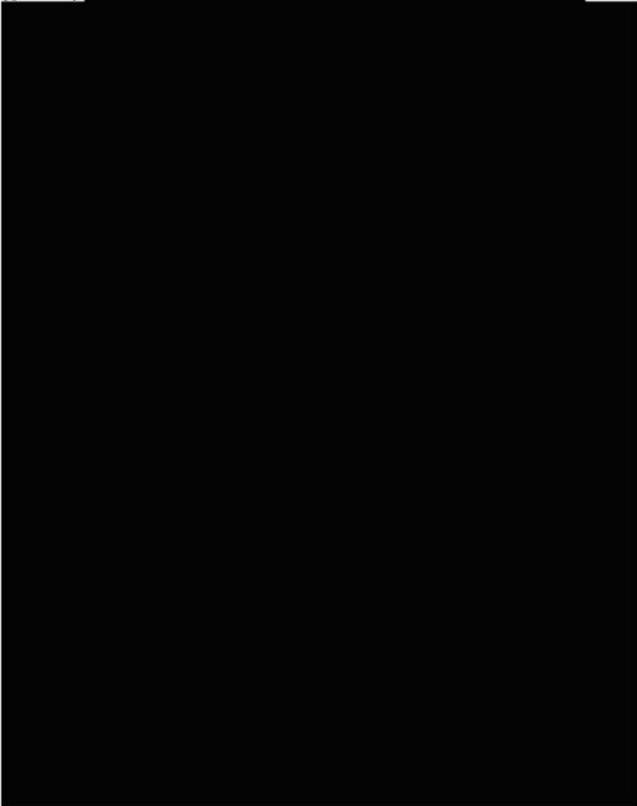


Exhibit C

[REDACTED]

Subject: RE: Reworking station 100 parts to 120
Attachments: RE: Defects and defects and defects!!!!

Supervisors, ME and QEs

As [REDACTED] says in his email, we are in a very critical situation because of the most recent problems that we have detected on the line.

Situations like this can give rise to a Recall.

We need the support of every one of you to make the operatives aware of good practices:

- Abnormal situations Response Plan (critical defects such as missing welds, reversed parts, incorrect weights, incorrect components, etc.)
- Accumulation of parts (this leads to operators having two parts in their hands at the same time and makes it easier for them to mix parts)
- Inspection of parts before, during, and after processing.
- Attention to the operation

The eyes of all the top management will be on us

Let's pause and reconsider everything I have described above and correct what has to be corrected.

Discuss your plan of action at the daily meeting.

Regards

[REDACTED]

Senator NELSON. And thank you for your cooperation on this.

And you will recall, Mr. Chairman, last year we actually the started the hearings on these airbag defects. And the news was not good. At that point, last November, we had five deaths and dozens of injuries that were ties to the defective Takata airbags.

And we had testimony from an Air Force lieutenant, Lieutenant Stephanie Erdman. She suffered severe facial injuries and almost lost one of her eyes when her airbag exploded after a relatively minor accident in the Florida panhandle near Eglin Air Force Base.

But since then, the recalls have ramped up, appropriately, but unfortunately the tragedies have continued. January, this year, Houston, a man killed by a Takata airbag that exploded in his vehicle after a minor accident. And then April, a 22-year-old was involved in an accident, Lafayette, Louisiana. The wreck was serious, but, as you can see—look at this airbag.

And do we have the pictures of the lady?

That is the one from Florida, isn't it? OK. Hold that back. Hold that one back.

You can see—now, this is a normal airbag deployed. This is the front of what would be facing the driver in the steering wheel. And, of course, it deploys. And if it deploys normally, it is supposed to look like that. OK?

This is what happened in this case that I just referenced in Louisiana. That is blood. But look at the tear in the airbag. You can see that it obviously has been punctured. And instead of it being like that, the shrapnel in the inflator—which is this device which is in the steering wheel, underneath the steering wheel, and this explodes, sending hot gas out and inflating the airbag. Well, when it is defective, it explodes with such force that it actually breaks open the metal, and the metal goes out. And then, of course, instead of the airbag saving lives, it is killing people.

Let me show you. That is a piece of metal that actually came out on this lady, and this lady is in Miami last July. Look how big that is. Now, that hit her, and thank goodness it hit her there in a relatively superficial wound that is a permanent scar. But what if it had hit her there? Or what if it had hit her there? That is the piece that hit her.

This is deadly serious business. Just last Friday, we learned of the eighth death, southern California, conclusively tied to a defective Takata airbag. And some of these victims' families got recall notices—got recall notices after their loved ones were killed. And in addition to the eight deaths, this committee has learned of allegations of well over 100 serious injuries.

Now, I got into this thing because there was a woman killed in Orlando. This was a year ago. That is how I got into it. When the police got to the car, they thought it was a homicide. They thought somebody had slashed her throat. And only afterwards did they find out that, in fact, this is what it was.

And then I got into it because of a firefighter that lives in the Orlando area. He won't be a firefighter again because he lost his eye now.

And so I could go on and on about these incidents just in Florida alone, but the bottom line is we need to get these cars fixed. And we have been talking about this since last year.

Dr. Rosekind has been a breath of fresh air, and you have taken numerous actions to speed up the Takata recall process, but NHTSA still faces deep challenges.

For one thing, as no doubt you will point out, it is underfunded. It lacks the necessary funding to make sure that automakers—and the sticks, as well as the carrots, it lacks to get the automakers to be forthcoming about the recalls.

And, by the way, this isn't the only thing. We are not just picking on Takata. Look how many deaths occurred from the GM defective steering ignition switches. GM hid a defect for over a decade, and at least 114 people died. This is awful. And for that, NHTSA could only fine GM a measly \$35 million, and that is less than one-hundredth of a percent of what GM makes in a quarter.

And NHTSA also appears to have serious internal and managerial issues. These challenges were detailed in this Department of Transportation Office of Inspector General report released yesterday that revealed serious problems in NHTSA's Office of Defects Investigation, especially related to the handling of the GM crisis last year.

And so I can tell you, this Senator is going to fight for additional funding for NHTSA, but there also has to be accountability. And the IG report found severe deficiencies in NHTSA's ability to effectively collect and analyze safety data as well as conduct investigations. The agency lacks proper protocols and procedures. And staff, apparently, are inadequately trained to do their job. We need accountability.

And I look forward, Doctor, to hearing how you intend to respond to this report that has now been put in the record and how you continue to modernize the agency.

And, finally, I look forward to hearing from the representatives of Takata.

Yesterday, the staff issued a report detailing its initial findings in a months-long investigation of Takata. And for years, it is obvious that Takata did not put safety first. It appears that Takata knew, or should have known, as early as 2001—that is 14 years ago—that there were serious safety and quality lapses in its airbag production process.

And you would think that they would have stepped up their safety efforts at these plants after discovering these issues. No. And, by the way, there are eight people dead. Instead, internal e-mails suggest they actually suspended global safety audits from 2009 to 2011 for cost-cutting reasons.

And now the same company responsible for this disaster is the one making nearly all of the replacement airbags for most of the recalled vehicles. That doesn't sit well with a lot of Americans. And I think Takata has some serious explaining to do.

So for everyone involved—NHTSA, to automakers, to the suppliers—we need to improve as fast as possible. And we need to get the recall completed but also make sure that the safety issues are spotted sooner so that dangerous vehicles are identified and fixed faster in order to do what we are supposed to do, which is help keep consumers safe.

Mr. Chairman, if I sound that I am invested in this issue—when I saw the pictures of that woman in Orlando with her neck lac-

erated, I am invested. When I talked to that firefighter, with his little boy with him, that will never be a firefighter again because he doesn't have an eye, I am invested.

So thank you for calling this hearing.

The CHAIRMAN. Thank you, Senator Nelson.

We will now proceed to our panel and start with Administrator Rosekind.

Please proceed. Thanks.

**STATEMENT OF HON. MARK R. ROSEKIND, Ph.D.,
ADMINISTRATOR, NATIONAL HIGHWAY TRAFFIC SAFETY
ADMINISTRATION, U.S. DEPARTMENT OF TRANSPORTATION**

Mr. ROSEKIND. Chairman Thune, Ranking Member Nelson, and members of the Committee, thank you for the opportunity to provide an update on NHTSA's efforts to address vehicle safety defects, including defective Takata airbags.

The recall of defective Takata airbags may represent the largest national consumer safety recall in history, and it is certainly one of the most complicated.

All of NHTSA's actions are targeted at achieving one goal, the only acceptable goal: a safe airbag in every American vehicle.

On May 19, Secretary Foxx and NHTSA took a significant step toward this goal and announced that Takata, at the agency's insistence, had filed four defect reports, launching national recalls of an estimated 33.8 million defective airbag inflators.

The 11 affected auto manufacturers have now made available individual Vehicle Identification Numbers so that vehicle owners can go to *safercar.gov* and use NHTSA's VIN lookup tool to determine if their vehicle is under recall.

Affected consumers should contact their dealers to arrange a replacement airbag as soon as possible. Consumers may also request a free loaner or rental vehicle from the dealer while they wait for a replacement airbag.

After reviewing automaker filings, our current estimate is that there are about 34 million defective airbags in 32 million affected vehicles.

NHTSA has issued a consent order to Takata that, among other things, gives NHTSA the ability to ensure the adequacy of the remedy. For the first time ever, NHTSA is using authority provided by the TREAD Act and other authorities for a coordinated remedy program to prioritize and organize recall and remedy efforts.

Late last week, NHTSA sent information requests to all of the affected automakers, Takata, and other potential suppliers of replacement parts, seeking information as part of our coordinated remedy program.

In addition, we have had initial discussions with the affected companies on a protective order that would allow these companies to share confidential business information with NHTSA and one another so that confidentiality concerns do not interfere with our safety efforts.

In a separate action, NHTSA is in the process of determining whether Fiat Chrysler Automobiles is in violation of the Safety Act's requirements to remedy safety defects adequately and within

a reasonable time. NHTSA has scheduled a July 2nd hearing to examine 22 recalls that affect more than 11 million vehicles.

At NHTSA, we are determined to use every tool available to protect the traveling public, and one critical tool is self-evaluation. At the urging of Secretary Foxx, with the full support of NHTSA's staff and leadership, and before I arrived, NHTSA was involved in tough self-examination after one of the most challenging years in the agency's history.

On June 5, NHTSA released two reports that are essential in our efforts to improve our own effectiveness. The first report, "NHTSA's Path Forward," provides the results of a year-long due diligence review of our defect investigation process. Our review found weaknesses in processes for identifying and addressing defects. We are addressing those weaknesses with improvements already underway and within existing resources.

The second report is a workforce assessment that details how the President's Fiscal Year 2016 budget request specifically requests NHTSA's mission needs. In addition, the report examines NHTSA's workforce, given the 265 million vehicles we monitor, compared to the safety investigation workforces in other modes of transportation. It provides one possible path toward matching NHTSA's workforce to those challenges.

At Secretary Foxx's request, the Department of Transportation's Inspector General performed an audit of NHTSA's investigation of the GM ignition switch defect. NHTSA thanks Inspector General Scovel and his staff for their diligence. Their report is a helpful contribution to our efforts, and we have concurred with all 17 of the report's recommendations.

To give you a sense of NHTSA's commitment to improving efforts to identify and address safety defects, to date we have implemented or initiated 44 separate changes to improve our effectiveness. That includes efforts to address 10 of the 17 recommendations from the IG's audit that were underway before the audit's release.

Two factors outside the scope of the IG's audit are essential to NHTSA achieving its mission. The first is GM's concealment of critical safety information from NHTSA. If I could sum up our process improvements in a single phrase, it would be, "Question assumptions." Question the information NHTSA gets from industry, and question our own assumptions.

The second factor also outside the scope of the Inspector General's audit is available resources. The same 51 people managing the Takata recall include 8 that analyze 80,000 consumer complaints; 8 others oversee more than 1,200 recall campaigns now underway; and 16 others continue to investigate scores of potential defects.

The agency must accomplish this task with a defects investigation budget that, when adjusted for inflation, is 23 percent lower than 10 years ago. The President's Fiscal Year 2016 budget request would provide the people and technology needed to keep Americans safe.

Secretary Foxx has proposed the GROW AMERICA Act, which would provide stable increased funding and important safety authorities to help NHTSA in our mission. It is clear that gaps in available personnel and authority represent known safety risks.

The members of this committee and your colleagues in Congress can help NHTSA address those risks and keep the traveling public safe.

Thank you for this opportunity to testify, and I look forward to your questions.

[The prepared statement of Mr. Rosekind follows:]

PREPARED STATEMENT OF MARK R. ROSEKIND, PH.D., ADMINISTRATOR, NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, U.S. DEPARTMENT OF TRANSPORTATION

Chairman Thune, Ranking Member Nelson, and members of the Committee, thank you for the opportunity to provide an update on NHTSA's efforts to address vehicle safety defects, including defective Takata air bags.

Let me first address Takata. The recall of defective Takata air bags may represent the largest national consumer recall in history. It is certainly one of the most complicated.

You and the American people should know: Air bags save lives. Frontal air bags saved 2,388 lives in 2013 alone and 39, 886 lives since 1987. We need to make sure that people trust their air bags. All of our actions are targeted at achieving our goal, the only acceptable goal: a safe air bag in every American vehicle.

On May 19, Secretary Foxx and NHTSA took a significant step toward ensuring that air bags in all vehicles are safe. As part of NHTSA's ongoing investigation, NHTSA announced that Takata, at the agency's insistence, had filed four Defect Information Reports (DIR) covering an estimated 33.8 million defective air bag inflators. This action launched national recalls for all of the named air bag inflators and significantly expanded the universe of vehicles with Takata air bag inflators that were subject to recall.

The 11 affected auto manufacturers have scoured their records and state registrations to determine exactly which vehicles are affected, and have provided NHTSA with specific make and model information. As they have provided that information, NHTSA has posted updates on a special website within safercar.gov, informing consumers about make and model information. We strongly encourage vehicle owners to check their VIN numbers on Safercar.gov to see if their vehicle is included in the expansion. In fact, this is a good practice for all vehicle owners to engage in regularly, at least weekly.

Automakers are legally responsible for informing consumers, via a mailed notice, that their vehicle is subject to a recall. In addition, under the Consent Order announced on May 19 Takata must, within 60 days, provide NHTSA with plans for how it, alone and in concert with automakers, will use traditional media, new media and individual contacts to inform consumers and boost completion rates.

On May 19 and 20, after the Department of Transportation/NHTSA announcement, more than 1.5 million people conducted VIN lookup searches on Safercar.gov, including nearly 1 million on May 20 alone. At one point, Safercar.gov was the most visited website in the Federal Government.

Understandably, consumers will want to know what this expanded recall means for them and what actions they should take. If a vehicle has an open recall, consumers should call their dealer to arrange for a replacement air bag as soon as one is available. Because of the size and scope of the recall, a replacement may not be immediately available. In order to mitigate and control the risk, and to organize and prioritize the availability of replacement air bags, NHTSA is taking steps to coordinate the remedy process among Takata, the auto manufacturers, and other air bag suppliers—something NHTSA has never done before in its history.

In the meantime, consumers whose air bags are under recall may continue to drive their vehicles and should stay in contact with their dealers in order to replace their air bag as soon as replacements are available. Consumers may also check with the dealer for a free loaner or rental vehicle, as offered by some auto manufacturers, while they wait for a replacement air bag.

The four defective air bag inflator models and affected automakers included in these recalls are as follows:

Expanded Recalls

The first DIR Takata filed declares a defect in all PSDI, PSDI-4, and PSDI-4K model driver inflators. Five automakers are affected (Honda, BMW, Chrysler, Ford, and Mazda). Takata estimates that this recall covers 17.6 million inflators, 9.7 million of which are already subject to prior recalls and safety campaigns.

The second DIR declares a defect in all SPI model passenger inflators made between 2000 and 2008. Eight automakers are affected (Chrysler, Ford, GM, Daimler Trucks, Mitsubishi, Nissan, Subaru, and Toyota). Takata estimates the recall covers 7.7 million inflators, 2.8 million of which are already under recall.

The third DIR covers PSPI-L model passenger inflators in cars manufactured by Honda and Toyota. Model years vary by automaker. GM is also affected because it sold the Toyota-made Pontiac Vibe. Takata estimates 5.2 million inflators are covered, 1.1 million of which are already under recall.

The fourth DIR covers PSPI model passenger inflators in certain Honda models. Takata estimates this covers 3.3 million inflators, 2.1 million of which are already subject to prior recall.

As you know, it is the responsibility of individual automakers to remedy defective components. Takata's filing of Defect Information Reports has led to subsequent DIR filings by each of the affected automakers. After receiving those filings, reviewing them and asking for clarifications from the automakers, our current estimate is that there are about 32 million defective inflators on American roads that must be replaced.

It is important to note that this number is an estimate, and will be refined as automakers gather additional information. We know that there are almost certainly vehicles that are counted twice, because they are equipped with two inflators—driver and passenger-side—that must be replaced. In addition, we know that some inflators will have to be replaced more than once. We do not yet know how many vehicles are in that category because Takata and automakers have not yet provided us in all cases with information to establish that they have identified a remedy that is safe for the lifetime of the vehicle—information NHTSA is seeking as part of our coordinated remedy process. We have asked all the affected automakers to provide us with a comprehensive list of makes, models and model years affected by the Takata recalls, and have provided that list to the public through the Takata microsite on safercar.gov.

Coordinated Remedy

To deal with the extraordinary complexity of the Takata recall, NHTSA is using all of the tools at its disposal to prioritize and organize these national recalls, and to ensure the adequacy of the remedy. In addition to the defect notifications, NHTSA has issued a Consent Order to Takata. This Consent Order, among other things, gives NHTSA oversight into the company's testing, requires the company's full cooperation with NHTSA's investigation, and, importantly, gives NHTSA the ability to ensure the adequacy of the remedy so that there will be a safe air bag in every vehicle.

Additionally, NHTSA has begun its own testing for oversight and to verify if the remedy is effective.

Fifteen years ago, Congress provided authority in the TREAD Act that gives NHTSA the ability to address the challenges and circumstances now faced in this recall. For the first time ever, NHTSA is using this authority, in conjunction with other authority under the Safety Act, to open a coordinated remedy proceeding to prioritize and organize vehicle manufacturers' recall and remedy programs related to the defective Takata air bag inflators.

On Friday, May 22, 2015, the Federal Register published NHTSA's notice of intent to open this proceeding. A supplementary notice published on June 5 opened a docket for public comment on a variety of issues related to the replacement of the air bag inflators. NHTSA will obtain relevant information from any and all sources regarding the availability and implementation of remedy parts and programs in a process that will be public and transparent. NHTSA also plans to hold a series of meetings to collect additional information from Takata, auto manufacturers, and air bag suppliers.

It is NHTSA's expectation that this process will provide the necessary data on which to develop a plan to prioritize and organize replacement inflators.

Root Cause

By now, everyone had hoped to have a more clear understanding of the root cause of these air bag inflator failures. There are several factors that, based on incidents in the field and from lab test data, are known to lead to an increased risk of an inflator rupture.

Prolonged exposure to persistent levels of high absolute humidity outside the inflator, combined with the effects of thermal cycling, may lead to moisture intrusion in some inflators over time. As a result of moisture intrusion, the propellant wafers in some of the subject inflators may experience an alteration over time, which could lead to over-aggressive combustion in the event of an air bag deployment.

Takata is also aware of a potential issue with internal tape seal leaks in some inflators that could also be a source of moisture intrusion. Takata's test results and investigation indicate that the potential for rupturing may also depend on other factors, including vehicle design factors and manufacturing variability.

So while NHTSA's analysis of the data shows that prolonged exposure to hot, humid climates is associated with greater risk, the full story is not yet known and a definitive root cause has not been identified. In my recent experience as a Member of the National Transportation Safety Board, I know there may not be a single root cause, and we may in fact never know the root cause. But Boeing did not wait to find a remedy for the lithium battery in its 787 Dreamliner despite not knowing the root cause of the fire and smoke incidents that grounded the fleet. NHTSA must act to protect the driving public and ensure their air bags are safe. That is why NHTSA is taking aggressive action to keep people safe on the road now, rather than waiting, perhaps indefinitely, to determine the root cause.

Fiat Chrysler recall issues

In addition to our efforts regarding Takata, NHTSA is in the process of determining whether Fiat Chrysler Automobiles is in violation of the Safety Act's requirements to remedy safety defects adequately and within a reasonable time. NHTSA has scheduled a July 2 hearing as part of that process. That hearing will examine 22 recalls that affect more than 10 million vehicles, and will evaluate the timeliness and effectiveness of remedies and the adequacy of the company's consumer notifications.

In each of those 22 recalls, NHTSA has significant concerns about Fiat Chrysler's performance. On June 18, NHTSA published a notice in the Federal Register that outlines those concerns. They include slow repairs on vehicles responsible for loss of control and fatal fires; remedy repairs that failed to prevent dangerous roof liner fires; and failure in at least eight cases to notify owners of recalls in a timely fashion, including recalls of Takata air bags for which Fiat Chrysler to date still has not provided notification to owners. The company also has on several occasions provided NHTSA with inaccurate or incomplete information on defects and communications with owners and dealers.

Based on information gathered from the public and from Fiat Chrysler, NHTSA will make a final determination as to whether Fiat Chrysler has failed to meet its obligations under the Safety Act, and take any actions that are appropriate based on that determination.

Internal reviews and the Inspector General's audit

At NHTSA, as I have said repeatedly, we are determined to use every tool available to protect the traveling public. And one critical tool is self-evaluation. While we are focused on holding the entities we regulate accountable, we have also looked for every way we can find to improve our own performance.

That is not something new. Before I arrived, at the urging of Secretary Foxx and with the full support of NHTSA's staff and leadership, NHTSA was involved in tough self-examination after one of the most challenging years in the agency's history. NHTSA's approach to Takata, Fiat Chrysler and the scores of other defect-related issues we deal with every day has been informed by the lessons learned in that process.

On June 5, NHTSA released two reports that are essential elements in our efforts to improve our performance. In addition, we announced two initiatives—one involving some of the top safety experts in the country, the other tapping NHTSA's internal strengths—to help us turn the lessons of our self-scrutiny into concrete safety gains.

The first internal report, "NHTSA's Path Forward," provides the results of a year-long due diligence review of our defect investigation process in the wake of the GM ignition switch investigation. Our review found weaknesses in our process for identifying and addressing defects, and we are making changes to address those weaknesses. The report addresses six major process improvements to do a better job of holding the industry and ourselves accountable. With small exceptions, all of these improvements are under way and we intend to make them within existing resources. Whatever resources are provided to our agency, we are committed to doing better with what we have.

The second report is a workforce assessment that stems from a 2011 recommendation by the Department of Transportation's Inspector General in the wake of the Toyota unintended acceleration case. At the heart of that recommendation was the question of whether NHTSA had enough staff with sufficient expertise to assess defects in an increasingly complex U.S. vehicle fleet. As we have said since its release, the President's 2016 budget request for NHTSA reflects the lessons of the GM inves-

tigation, and this workforce assessment provides significant detail on how the FY16 budget request would help us complete our mission. But in addition, the report examines NHTSA's defects investigation workforce in light of the size of the fleet we monitor, the scope of the safety risk to the American public, and in light of safety investigation workforces in other modes of transportation, and provides one possible path, in what would be a several-year process, toward matching NHTSA's workforce to those challenges.

When we released our internal reports, we made two additional announcements on initiatives that will help us improve our performance.

The first is the creation of an outside Systems Safety Team to help us implement our enhanced systems safety approach. In Drs. Joe Kolly, Vic Lebacqz and Jim Bagian, we have three of the most respected safety professionals in the world to help us implement our improvements.

Complementing this external team is an internal effort designed to tackle our toughest safety challenges. That effort will use multi-disciplinary teams from across NHTSA to address safety risks or problems that cut across our various lines of work.

In addition to our own efforts, the Department of Transportation's Inspector General has, at Secretary Foxx's request, performed an audit of NHTSA's investigation of the GM ignition switch defect. Let me take this opportunity to thank Inspector General Scovel and his staff for their diligence. We believe the report is a helpful contribution to our efforts to better identify and address safety defects, and we have concurred with all 17 of the report's recommendations. In fact, many of the Inspector General's findings reinforce the findings of our internal examinations. We will aggressively implement the Inspector General's recommendations, and anticipate implementation of all 17 recommendations within one year, with the understanding that at least two recommendations may require rulemaking, which could extend that timeline.

Two factors outside the scope of the Inspector General's audit are essential to achieving NHTSA's mission. The first is a hard lesson from the GM experience, in which, as GM has acknowledged, the company concealed critical safety information from NHTSA that would have radically changed the agency's understanding of its ignition switch affected air bag deployment. While GM's deception was not within the scope of the Inspector General's audit, NHTSA cannot ignore the fact that manufacturers may seek to intentionally deceive us. If I could sum up our process improvements in a single phrase, it would be: question assumptions. Question the information we get from industry, and question our own assumptions.

The second factor, also outside the scope of the Inspector General's audit, is available resources. Fixing problems such as the Takata recalls and Fiat Chrysler's recall performance is a monumental task. Yet the agency must manage this enormous and necessary task with its existing people, technology, and authorities. NHTSA must accomplish this task with a defects investigation budget of \$10.6 million, a figure that, when adjusted for inflation, is actually 23 percent lower than its budget 10 years ago.

We need your support to help us protect the safety of the American traveling public. The President has submitted a budget request that would fund significant improvements in NHTSA's defect investigation efforts, providing the people and technology needed to keep Americans safe. Secretary Foxx has proposed the GROW AMERICA Act, which would provide stable, increased funding for our agency and important safety authorities to help us in our mission, such as raising the maximum civil penalty to \$300 million.

At NHTSA, we address safety risks every day. In my judgment as a safety professional, gaps in our available personnel, technology and authority are a known risk. I urge the members of the Committee and your colleagues in Congress to help us address that risk and keep the traveling public safe on America's roadways. Thank you for this opportunity to testify and I look forward to your questions.

The CHAIRMAN. Thank you, Administrator Rosekind.
Mr. Scovel?

**STATEMENT OF HON. CALVIN L. SCOVEL III, INSPECTOR
GENERAL, U.S. DEPARTMENT OF TRANSPORTATION**

Mr. SCOVEL. Chairman Thune, Ranking Member Nelson, members of the Committee, thank you for inviting me to discuss NHTSA's vehicle safety oversight.

As you know, strong oversight is critical for taking timely action against vehicle defects, such as GM's faulty ignition switch. As of this month, this defect has been linked to more than 110 fatalities and 220 injuries.

Airbag nondeployments prompted NHTSA's Office of Defects Investigation to look at certain GM vehicles as early as 2007, but ODI ultimately determined an investigation was not warranted. We now know that the faulty ignition switch can unexpectedly disable the vehicle's power steering, power brakes, and airbags.

Today, I will discuss the weaknesses we identified relating to ODI's procedures for collecting and analyzing vehicle safety data and for determining which issues warrant further investigation. I will also show how the weaknesses we identified affected ODI's handling of the GM ignition switch defect.

We identified three areas of weakness in NHTSA's vehicle safety procedures that undermine its efforts to identify and investigate vehicle safety concerns.

First, ODI lacks the procedures needed to collect complete and accurate vehicle safety data. The use of ODI's early warning aggregate data is limited due to the inconsistencies in how manufacturers categorize safety incidents. ODI guidance specifies 24 categories for reporting potential defects related to an average of over 15,000 vehicle components, leaving manufacturers to use broad discretion when reporting these data.

Consumer complaints, ODI's primary source for identifying safety concerns, similarly lack information to correctly identify the vehicle systems involved, due in large part to the lack of guidance to consumers. Further, ODI does not adequately verify manufacturers' data or take timely action to enforce manufacturers' compliance with reporting requirements.

Second, ODI does not follow standard statistical practices in analyzing early warning reporting data. Consequently, it cannot identify statistically significant trends or outliers that may indicate a safety issue should be pursued.

In addition, despite the volume of consumer complaints, which averaged roughly 330 a day in 2014, ODI relies on one initial screener in the first phase of its two-tiered screening process. This process leaves the office vulnerable to a single point of failure, and it runs the risk that complaints with potential safety significance may not be selected for further review. Inadequate training and supervision of screeners further increase this risk.

Third, ODI emphasizes investigating issues that are most likely to result in recalls, which has blurred the line between pre-investigative and investigative duties. Investigative duties, such as research and engineering analysis work, are being performed during the pre-investigative phase, often by screeners who are not trained to carry out these responsibilities.

In addition, stakeholders within ODI have not reached consensus on the amount and type of information needed to open investigations. And ODI does not always document the justifications for its decisions not to investigate potential safety issues. This lack of transparency and accountability in ODI's investigation decisions further undermines NHTSA's efforts to identify needed recalls and other corrective actions.

These three procedural weaknesses impeded ODI's handling of the GM ignition switch defect. From 2003 through 2013, GM submitted over 15,000 non-dealer field reports and about 2,000 death and injury reports on vehicles that would ultimately be subject to the ignition switch recall.

However, inconsistently miscategorized reports may have masked potential safety defect trends. For example, GM did not assign a component code to a death and injury report—not airbags, not electrical, not ignition—even though a state trooper's report indicated that the ignition switch was involved in the accident and a possible cause of airbag nondeployment.

In addition, at least 12 GM non-dealer field reports categorized by GM under “airbags” and that may have been related to the ignition switch defect were not reviewed before the recall because NHTSA's analytical tools could not read the report format used by GM, a fact ODI staff did not note until after the recall.

ODI staff also missed opportunities to connect the GM ignition switch defect to airbag nondeployments. For example, ODI employees overlooked documentation on a fatal accident involving a 2005 Cobalt that linked the ignition switch defect to the vehicle's airbag nondeployment, including a state trooper's accident investigation report and a NHTSA special crash investigation report.

Calls for investigation were similarly overlooked. For example, in 2007, NHTSA's Associate Administrator for Enforcement noted that an investigation proposal, quote, “looks like one we want to jump on and learn as much as we can quickly.” While a screener was assigned to monitor the issue, the Defects Assessment Division Chief did not reassign responsibility after the screener left NHTSA in 2008.

In 2010, an ODI screener suggested revisiting the 2007 investigation proposal on airbag nondeployments because of new consumer complaints. However, the airbag investigator identified a downward rate of consumer complaints for the vehicles, so the screener decided that the issue did not present enough of a safety trend to warrant proposing another investigation.

According to ODI staff, there were no discussions of the ignition switch defect that, in fact, caused airbag nondeployment prior to GM's February 2014 recall. In hindsight, ODI officials told us that they did not understand the safety consequences of the ignition switch defect and had a flawed understanding of airbag technology.

NHTSA has committed to taking aggressive action to implement the 17 recommendations we made to strengthen vehicle safety oversight. According to the Administrator, extensive changes to the agency's processes have been implemented, and more are underway.

OIG's audits and investigations support NHTSA's vehicle safety oversight mandate. Our agents played a critical role in the multi-agency criminal probe of Toyota and continue to actively pursue allegations of criminal conduct related to vehicle safety. Our auditors are currently assessing NHTSA's actions to implement recommendations we made in 2011 and plan to report our findings later this year.

Mr. Chairman, with your permission, I would like briefly to address those who have been injured and the families of those who

have been lost in crashes involving GM's defective ignition switches.

When testifying before this committee last year, I promised you that my staff and I would work relentlessly to determine what NHTSA knew of the defect, when it knew it, and what actions NHTSA took to address it. Our audit report issued last week and my testimony today fulfill that promise. I offer you again my deepest sympathy.

This concludes my prepared statement. I would be happy to answer any questions that you, Mr. Chairman, and other committee members may have.

[The prepared statement of Mr. Scovel follows:]

PREPARED STATEMENT OF HON. CALVIN L. SCOVEL III, INSPECTOR GENERAL,
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, U.S. DEPARTMENT OF
TRANSPORTATION

NHTSA's Efforts to Identify Safety-Related Vehicle Defects

Chairman Thune, Ranking Member Nelson, and Members of the Committee:

Thank you for inviting me to this important hearing on your ongoing efforts to examine the National Highway Traffic Safety Administration's (NHTSA) vehicle safety oversight program. In April 2014, I testified at this Committee's hearing¹ on the General Motors Corporation's (GM) delay in recalling 8.7 million vehicles² for a faulty ignition switch—a defect, which as of this month, has been linked to more than 110 fatalities and 220 injuries—and committed to determining what NHTSA knew of this safety defect, when the Agency knew it, and what actions were taken to address it. In addition, the Secretary of Transportation requested that we examine NHTSA's current safety defect investigation processes and make recommendations for improvement.

My testimony today highlights our findings, which we recently reported³—specifically, our assessment of the procedures NHTSA's Office of Defects Investigation (ODI) uses to (1) collect vehicle safety data, (2) analyze the data and identify potential safety issues, and (3) determine which issues warrant further investigation.

Summary

ODI lacks the procedures needed to collect complete and accurate vehicle safety data. Notably, ODI guidance specifies 24 categories for reporting potential vehicle defects related to an average of over 15,000 vehicle components, leaving manufacturers to use broad discretion in reporting early warning data. Further, ODI does not adequately verify the data manufacturers submit. Consumer complaints—ODI's primary source for identifying safety concerns—similarly lack information to correctly identify the vehicle systems involved.

When analyzing early warning reporting data, ODI does not follow standard statistical practices. Consequently, it cannot differentiate outliers and trends that represent random variation from those that are statistically significant. In addition, ODI does not thoroughly screen consumer complaints or adequately train or supervise its staff in screening complaints. Collectively, these weaknesses have resulted in significant safety concerns being overlooked.

ODI's process for determining when to investigate potential safety defects further undermines efforts to identify needed recalls and other corrective actions. ODI emphasizes investigating issues that are most likely to result in recalls, which has led to considerable investigative duties being performed during the pre-investigative phase, often by screeners who are not trained to carry out these responsibilities. In addition, ODI does not always document the justifications for its decisions not to investigate potential safety issues and does not always make timely decisions on opening investigations.

¹*Identifying and Investigating Vehicle Safety Defects* (OIG Testimony CC-2014-015), Apr. 2, 2014. OIG testimonies and reports are available on our Website: www.oig.dot.gov.

²Recalled vehicles include Chevrolet Cobalts and HHRs, Saturn Ions and Skys, and Pontiac G5s and Solstices that were manufactured between 2003 and 2011.

³*Inadequate Data and Analysis Undermine NHTSA's Efforts To Identify and Investigate Vehicle Safety Concerns* (OIG Report No. ST-2015-063), June 18, 2015.

Background

ODI is responsible for reviewing vehicle safety data, identifying and investigating potential vehicle safety issues, and requiring and overseeing manufacturers' vehicle and equipment recalls (see table 1). NHTSA reports that it has influenced, on average, the recall of nearly 9 million vehicles every year since 2000.

Table 1.—ODI's Vehicle Safety Oversight Process

Phase	Number of Staff	Description
Pre-Investigation	13	ODI collects and analyzes vehicle safety data to identify and select potential safety issues for further investigation.
Investigation	20	ODI investigates the potential safety issue to determine whether a recall is warranted.
Recall management	8	ODI ensures that manufacturer recalls comply with statutory requirements.

Source: OIG analysis

ODI's pre-investigative phase includes four key elements:

- *Collect and analyze early warning reporting data.* The Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act⁴ of 2000 authorized NHTSA to require manufacturers to report on a variety of early warning data. This data includes property damage claims, consumer complaints, warranty claims, and field reports from incidents involving certain vehicle components and conditions defined in NHTSA regulations.⁵ In addition, manufacturers are required to report all death and injury claims and notices. ODI's Early Warning Division staff⁶ are responsible for verifying that manufacturers submit these data, prioritizing the data using statistical tests, and identifying and referring potential safety trends to the Defects Assessment Division for further analysis.
- *Collect and analyze consumer complaints.* ODI receives consumer complaints through a variety of sources including letters, vehicle safety hotline calls, and submissions through NHTSA's safecar.gov Website. ODI's Defects Assessment Division screens all complaints and forwards ones with potential safety significance for additional review.⁷
- *Identify potential safety issues.* If a potential safety issue is identified, the Defects Assessment Division researches and analyzes available safety data and prepares an investigation proposal for ODI's investigative division chiefs to review.⁸
- *Select potential safety issues to investigate.* ODI's investigative division chiefs review investigation proposals and recommend to the Director of ODI whether to open an investigation, decline an investigation, or refer the proposal to the Defects Assessment Panel for further review.

In October 2011, we reported on NHTSA's vehicle safety oversight and made 10 recommendations for improving ODI's processes for identifying and addressing safety defects.⁹ As of May 29, 2013, ODI had taken action to address nine recommendations; at the end of April 2015, NHTSA completed a workforce assessment, our remaining recommendation. We are conducting a separate audit to assess these actions and plan to report our findings later this year.

ODI Lacks Effective Procedures for Collecting Complete and Accurate Vehicle Safety Data

ODI lacks effective guidance and verification procedures to obtain complete and accurate early warning reporting data and take timely action to correct identified

⁴Pub. L. 106–414.

⁵Title 49, Code of Federal Regulations (CFR), Part 579.

⁶The Early Warning Division currently has four staff including two safety defects analysts, one statistician, and one safety defects engineer.

⁷The Defect Assessment Division currently has nine staff including eight screeners and a Division Chief.

⁸ODI has three investigative divisions: the Vehicle Control Division, Vehicle Integrity Division, and the Medium and Heavy Duty Vehicle Division.

⁹*Process Improvements Are Needed for Identifying and Addressing Vehicle Safety Defects*, (OIG Report Number MH–2012–001), Oct. 6, 2011. OIG reports are available on our Website at www.oig.dot.gov.

inaccuracies and omissions. ODI received some early warning reporting data and consumer complaints related to the GM ignition switch defect more than a decade before GM notified ODI of the recall.

ODI Lacks Detailed Guidance and Verification Processes to Obtain Complete and Accurate Early Warning Reporting Data

The TREAD Act and related regulations require vehicle and equipment manufacturers to report quarterly to NHTSA on a variety of early warning reporting data that could indicate a potential safety defect. Such data include warranty and property damage claims, consumer advisories, and foreign recalls of vehicles substantially similar to ones sold in the United States.

Regulations specify 24 broad vehicle codes that manufacturers assign to reported early warning safety data. However, ODI notes that an average vehicle may have over 15,000 components, and categorizing them can be open to interpretation. For example, ODI staff told us that a manufacturer could assign one of three vehicle codes to a malfunction of an air bag component located in a seat: air bags, seats, or electrical system. Additionally, the regulations allow manufacturers to decide if an incident not included in the 24 defined codes should be reported, with the exception of incidents related to death and injury claims, which must be reported.

Despite this complexity, ODI does not provide detailed guidance to help ensure manufacturers appropriately interpret and apply the codes.¹⁰ ODI investigative chiefs and vehicle safety advocates told us that ODI's early warning aggregate data are ultimately of little use due to the inconsistencies in manufacturers' categorizations of safety incidents.

According to ODI staff and a January 2008 report issued by the Volpe National Transportation Systems Center,¹¹ non-dealer field reports¹² are the most important source of early warning reporting data because they can provide a specific, technical basis for launching investigations. However, lacking guidance on what information should be reported, manufacturers submit reports of varying usefulness. For example, one manufacturer's non-dealer field reports include detailed information—such as the technician's analysis of the condition, root cause analysis, corrective actions taken, and whether the action resolved the condition—while another manufacturer's reports contain brief descriptions of consumers complaints.

ODI staff check that manufacturers submit early warning reporting data on time and may request underlying documentation for aggregate data—particularly if they identify an anomaly in the data—and for death and injury data. However, ODI staff noted that their requests for such documentation have declined, from an average of 23 annually between 2006 and 2009 to an average of 4 annually between 2010 and 2014, as a result of their increased workload.

Moreover, ODI does not verify that manufacturers' early warning reporting data are complete and accurate. Although ODI has the authority to inspect manufacturers' records for compliance with early warning reporting requirements,¹³ NHTSA officials told us the Agency has never used this authority. In addition, the ODI has no processes in place for systematically assessing the quality of early warning reporting data or internal guidance on using oversight tools to enforce data reporting requirements. The Agency also has not established best practices for providing early warning reporting data and does not periodically review manufacturers' early warning reporting procedures. Instead, the Director of ODI told us ODI relies on the "honor system." However, according to ODI staff, manufacturers routinely miscategorize safety incidents. For example, staff told us that some manufacturers avoid using the word "fire" in non-dealer field reports and instead use phrases such as "strange odor" to avoid categorizing an incident as fire-related. Miscategorizations such as these compromise ODI's efforts to quickly identify potential safety defect trends.

Yet even in cases where ODI suspects noncompliance, it has not taken prompt enforcement action. For example:

- ODI officials told us they were aware that a vehicle manufacturer was "conservative" in reporting early warning reporting data. According to a November 2014

¹⁰According to ODI staff, such guidance would require additional rulemaking.

¹¹In 2006, ODI initiated an evaluation of its early warning reporting system, with support from Volpe.

¹²Non-dealer field reports are communications between consumers, authorized service facilities, and manufacturers regarding the failure, malfunction, lack of durability, or other performance problem related to a vehicle or vehicle part.

¹³Title 49 United States Code (U.S.C.) Section 30166 establishes NHTSA's subpoena power and its authority to inspect manufacturers' records and require recordkeeping to assess compliance with early warning reporting requirements.

audit prepared for the manufacturer, two ODI employees called the manufacturer's officials in late 2011 or early 2012 to ask about inconsistencies between previously reported early warning reporting data and reported death and injury incidents pertaining to an air bag recall.¹⁴ However, ODI took no enforcement action to address this issue until the manufacturer self-reported the omission of about 1,700 death and injury claims in October 2014. NHTSA subsequently required the manufacturer to describe its procedures for complying with early warning reporting requirements and provide the Agency with supporting documentation for all third-party audits of its reporting.

- In November 2004, ODI discovered that a major recreational vehicle manufacturer did not report required death and injury data and other early warning reporting data. However, ODI did not take action until nearly a decade later, when the office opened an investigation into the manufacturer's reporting following a suspected recall noncompliance issue. During the investigation, the manufacturer stated that it failed to report the early warning reporting data because of internal miscommunications and a software failure.

ODI Does Not Provide Sufficient Guidance to Consumers on the Type of Information To Include When Submitting Complaints

ODI relies primarily on consumer complaints—most of which are submitted through NHTSA's safercar.gov Website—to identify potential safety defects. The online complaint form requires consumers to select up to 3 affected parts from a drop-down list of 18 options, such as air bags and electronic stability control. Additionally, the Website provides a text field for consumers to describe the incidents underlying their complaints.

ODI's initial screener estimates that 50 to 75 percent of complaints incorrectly identify the affected parts, and roughly 25 percent do not provide adequate information to determine the existence of safety concerns. These data quality issues occur in part because ODI does not provide consumers with detailed guidance on submitting complaints. For example, safercar.gov does not define the 18 affected parts categories—some of which may be unfamiliar to consumers, such as “adaptive equipment.” Furthermore, safercar.gov does not allow consumers to submit, or encourage them to retain, supporting documentation (such as photographs or police reports), which ODI's screeners and management have indicated are valuable in identifying potential safety concerns. In contrast, the U.S. Consumer Product Safety Commission's complaint Website (saferproducts.gov) allows consumers to upload as many as 25 documents or photos related to their complaints.

ODI Received Early Warning and Consumer Complaint Data Related to GM's Ignition Switch Defect

From 2003 through 2013, GM submitted about 15,600 non-dealer field reports and about 2,000 death and injury reports on vehicles subject to the ignition switch recall. A 2011 ODI analysis of early warning reports for 22 vehicles with potential air bag issues ranked the 2005 to 2010 Chevrolet Cobalt models fourth for fatal incidents and second for injury incidents involving air bags.¹⁵

However, GM's categorization of early warning reporting data related to the faulty ignition switch may have masked potential trends. Specifically, GM assigned different codes to non-dealer field reports describing ignition switch problems. For example, GM assigned the “Engine and Engine Cooling” code to a non-dealer field report on a 2005 Chevrolet Cobalt that concluded a minor impact to the ignition key could easily cause the engine to shut off. In another case, GM assigned the “Electrical” code to a non-dealer field report on a 2006 Pontiac Solstice that described the vehicle ignition system turning off several times while driving when his knee hit the key ring.

Moreover, underlying documentation did not support GM's categorization of the early warning reporting data. NHTSA regulations require manufacturers to identify each vehicle system or component that allegedly contributed to incidents related to death and injury claims and notices.¹⁶ Documentation underlying a death and injury report related to a fatal accident involving a 2005 Chevrolet Cobalt included a Wisconsin State trooper's report indicating that the ignition switch and air bags were both involved in the accident. However, GM categorized the death and injury

¹⁴The manufacturer officials did not follow up with ODI to provide a full explanation of the inconsistencies.

¹⁵In addition to the Cobalt, ODI analyzed consumer complaints and death and injury data categorized as air bag-related for 21 other passenger vehicles from GM and other manufacturers.

¹⁶49 CFR §§ 579.21(b)(1)-(2).

report as not involving any of the systems, components, or conditions defined in regulations.

Some consumer complaints were also miscategorized or lacked sufficient detail to link them to the ignition switch defect.¹⁷ For example:

- ODI contractors used the codes “Unknown or Other” and “Exterior Lighting: Headlights: Switch” when entering a September 2003 complaint into Artemis—ODI’s primary database for storing data used to identify and address potential safety defects. However, the complaint described engine shutoffs in a 2003 Saturn Ion when the driver’s knee accidentally hit the car keys, so the incident that should have been coded as “Electrical Systems: Ignition: Switch”
- A June 2005 complaint related to an accident involving a 2005 Chevrolet Cobalt did not specify whether the accident occurred on or off the road, or whether the impact was to the front, side, or back of the vehicle—essential details to ODI’s analysis of air bag non-deployment in these vehicles. Instead, the complaint only stated that an accident had destroyed the vehicle and injured one person and that the air bags did not deploy.

Weak Data Analyses and Reviews Undermine ODI’S Efforts to Identify Vehicle Defects

ODI does not follow standard statistical practices when analyzing early warning reporting data, conduct thorough reviews of consumer complaints, or provide adequate supervision or training for staff responsible for reviewing these data and complaints. As a result, it cannot reliably identify the most statistically significant safety issues to pursue. In the case of GM, ODI missed multiple opportunities to link the ignition switch defect to air bag non-deployments because ODI staff lacked technical expertise and did not consider all available information.

ODI Does Not Follow Standard Statistical Practice When Analyzing Early Warning Reporting Data

ODI uses four statistical tests to analyze aggregate early warning reporting data (such as consumer complaints, warranty claims, and property damage claims)—as well as a fifth test to analyze non-dealer field reports (see table 2).

Table 2.—ODI’s Statistical Tests for Analyzing Early Warning Reporting Data

Statistical test	Description
Crow-AMSA	Trend analysis used to analyze aggregate data
Mahalanobis distance	Test used to analyze aggregate data
Probability measure	Test used to analyze aggregate data
Logistic regression	Regression test used to analyze death and injury aggregate data
CRM-114	Filter used to analyze non-dealer field reports

Source: OIG analysis

While the statistical experts we consulted¹⁸ note that conducting multiple tests provides a sound basis for analysis, ODI does not follow standard statistical practices when implementing tests of aggregate data. Specifically, ODI does not consistently identify a model (a set of assumptions) for the aggregate data to establish a base case—that is, what the test results would be in the absence of safety defects. Without a base case, ODI cannot differentiate outliers that represent random variation from trends that are statistically significant and indicate a safety issue should be pursued.

ODI has missed opportunities to update and improve its statistical methods for analyzing early warning reporting data. For example:

- ODI does not regularly assess the performance of its aggregate data tests. According to the statistical experts, out-of-sample testing—a standard statistical assessment practice—would allow ODI to determine whether potential safety issues identified in one portion of its aggregate data turn up in the remaining portion. However, ODI performed out-of-sample testing on only one aggregate

¹⁷ From January 1, 2003, through February 7, 2014, ODI received 9,266 complaints involving the vehicles subject to the GM ignition switch recall—including 72 complaints indicating at least 1 injury and 3 complaints indicating at least 1 fatality. The majority of these complaints involved the 2005 to 2010 Chevrolet Cobalt and the 2003 to 2007 Saturn Ion.

¹⁸ The statistical experts we consulted with are from academia and research institutes.

data test and only when the test was first implemented. ODI also conducted out-of-sample tests on non-dealer field reports, but it has not done so since 2009.

- Despite recent developments in data analytics, ODI has not updated its statistical tests from initial implementation in 2006 through 2009, so it has not taken advantage of recent methodological advances. Although ODI has periodically recalibrated some of its tests using current data, it has not updated the analytical methodologies it uses.
- Volpe conducted the only external review of ODI's aggregate data tests since their implementation. According to its January 2008 report, Volpe reported that the review's scope was limited because of concerns about the informational burden on ODI and manufacturers. As a result, Volpe was unable to reach any conclusions about the tests' effectiveness. ODI has not requested any other external reviews of its statistical tests.

ODI similarly lacks procedures to promote timely screening of early warning reporting data. For example, ODI's Early Warning Division staff review non-dealer field reports based on the results they receive from a statistical test; however, there is no process for ensuring that all non-dealer field reports are included in the universe from which the sample is drawn. ODI has overlooked non-dealer field reports for months or even years if, for example, manufacturers submit the reports in formats that ODI's statistical test cannot process.

In addition, advanced screeners, who are responsible for proposing safety defect investigations, told us that they are less likely to rely on early warning reporting data because of the data's lack of timeliness. The information in early warning reporting data can be delayed by months because manufacturers submit the reports quarterly.

ODI Does Not Thoroughly Screen Consumer Complaints

In 2014, ODI received nearly 78,000 consumer complaints—or roughly 330 complaints each day. Despite the volume of complaints, ODI's two-tiered screening process leaves the office vulnerable to a single point of failure and the risk that complaints with potential safety significance may not be selected for further review.

Currently, one employee reviews all submitted consumer complaints, determines which complaints have potential safety implications, and forwards those complaints to eight advanced screeners who perform more in-depth reviews. Determinations of whether complaints warrant further review are made within a matter of seconds—in part because the initial screener spends roughly half of the day carrying out other work responsibilities. According to the initial screener and our independent verification, about 10 percent of complaints are forwarded to advanced screeners for in-depth reviews,¹⁹ leaving no assurance that the remaining 90 percent of complaints receive additional review. ODI recently completed a workforce assessment to determine the number of staff required to meet ODI's objectives and determine the most effective mix of skill sets, a recommendation we made in 2011.

ODI also lacks formal guidance for screening complaints. The initial screener relies on professional experience and judgment, as well as informal guidance and precedent to determine which complaints to forward to the advanced screeners. He noted that some complaint categories automatically warrant further analysis—including most air bag non-deployments and seatbelt issues—and that he prioritizes incidents that occur suddenly, with little warning for the consumer. He also noted that he assigns lower priority to engine, transmission, and vehicle body issues and generally does not forward certain incidents that most likely do not lead to investigations, such as sharp door edges. The initial screener does not forward complaints he believes are covered by existing recalls.

Like the initial screener, ODI's eight advanced screeners have access to a variety of data sources—such as technical service bulletins and special crash investigation reports—and have the authority to reach out to consumers and perform field inspections to augment their research. However, three advanced screeners said they rely mainly on consumer complaints to identify safety concerns, and four advanced screeners said they only occasionally use other sources of data. While screeners are encouraged to query all complaints for issues in their areas of concentration, four screeners told us they do not consistently do this—in some cases because it takes too much time. Advanced screeners also have access to early warning reporting data; however, four advanced screeners told us that they are less likely to rely on these data because they are untimely. Two screeners were also concerned about the

¹⁹We independently verified that, in 1 week of review, the initial screener forwarded about 10 percent of complaints to advanced screeners.

early warning reporting data's lack of usefulness because they felt the data provided no significant additional detail.

In 2013, ODI began requiring advanced screeners to annotate the complaints they review by documenting the condition that led to the incident and their reasons for deciding not to pursue potential issues. According to the Defects Assessment Division Chief, the annotations are intended to identify and correct inconsistencies and inaccuracies in complaints—and thereby enable ODI to properly link them to relevant safety concerns—and provide a record of review. However, an ODI internal audit found that roughly half the complaints were incorrectly annotated or lacked critical information. Additionally, we analyzed annotations for complaints received in the fourth quarter of 2013 and found that about 57 percent of the complaints that screeners determined did not warrant further review lacked justifications. Advanced screeners told us that annotating complaints is time consuming.

ODI's Pre-Investigation Staff Lack the Training and Supervision to Effectively Analyze Vehicle Safety Data

NHTSA has not adequately prepared ODI staff who review early warning reporting data and consumer complaints to carry out their responsibilities. For example:

- ODI staff charged with interpreting statistical test results for early warning reporting data told us they have no training or background in statistics.
- Three screeners assigned to analyze air bag incidents lacked training in air bags. One screener who was originally hired to review child seat restraint issues was assigned in 2008 to review air bag issues—without any air bag training and without an engineering or automotive background.
- Screeners told us that training to maintain professional certifications—such as the Automotive Service Excellence certification for automotive mechanics—must be completed on their own time and generally at their own expense.
- Screeners also noted that ODI lacked the funding to allow them to attend training to stay abreast of the latest developments in vehicle technology.

In addition, ODI has not established an adequate supervisory review process to evaluate the quality of screeners' work in identifying potential safety issues. For example, the Defects Assessment Division Chief characterized his oversight of the initial complaint screener's work as "minimal" and acknowledged that he does not provide much guidance to the initial screener. Advanced screeners agreed that supervisory review is often informal and that the Defects Assessment Division Chief does not regularly review their complaint annotations. In addition, ODI staff told us that their data analysis and screening efforts were generally not reviewed and that they received little feedback on the quality of their work.

Inadequate training and supervisory review have led to deficient analyses of early warning reporting and complaint data. For example, the developer of one statistical test that ODI uses to analyze early warning reporting data stated that the test should produce the same results every time for the same data input in the same order. However, ODI staff told us that different test runs produce different results, and management has not considered this to be a problem.

ODI Staff Overlooked Documentation Pointing to the GM Ignition Switch Defect

In their reviews of non-dealer field reports and death and injury and special crash investigation reports, ODI staff missed opportunities to connect the GM ignition switch defect to air bag non-deployments. For example, ODI employees overlooked documentation on a fatal accident involving a 2005 Chevrolet Cobalt that linked the ignition switch defect to the vehicle's air bag non-deployment:

- A Wisconsin State Trooper's report that identified the ignition switch defect as a possible cause of air bag non-deployment during the accident.
- Event data recorder data²⁰ that showed the vehicle's power mode status had been in the "accessory" position during the accident—a key indicator of the ignition switch defect.
- A NHTSA special crash investigation report that concluded the vehicle's air bags failed to deploy possibly due to "power loss due to movement of the ignition switch just prior to the impact."

Between the second quarter of 2012 and the fourth quarter of 2013, ODI received 13 non-dealer field reports on the 2005 to 2010 Chevrolet Cobalts that GM cat-

²⁰An event data recorder is a device installed in a vehicle to record technical vehicle and occupant information for a brief period of time (seconds, not minutes) before, during, and after a crash.

egorized as air bag-related and that we determined may be related to the ignition switch defect.²¹ However, ODI staff reviewed only one of these non-dealer field reports before the February 2014 recall. According to ODI staff, they did not review the majority of these reports because in the second quarter of 2012, GM began using a new file format for most of their document submissions, which could not be read by the statistical test ODI uses to analyze these reports. ODI staff acknowledged that they did not notice the reports were not analyzed until after the recall.

ODI also received 9,266 consumer complaints between January 1, 2003, and February 7, 2014, that involved GM vehicles subject to the ignition switch recall. Because ODI's screeners were not required to annotate their reviews of complaints until 2013, ODI cannot establish a full picture of why it did not investigate complaints related to the GM ignition switch and air bag non-deployment issues prior to 2013. From the time that the annotations were required to the date of the recall, ODI received 926 consumer complaints involving the recalled vehicles. ODI's initial screener advanced 27—or 3 percent—of these complaints for further review, compared to the average of 10 percent that are typically forwarded. ODI's advanced screeners noted in their annotations that 11 of the 27 complaints included allegations of front air bag non-deployment, but they did not advance these complaints for further consideration because they concluded there was either “no actionable trend indicated” or “minimal hazard.” ODI staff did not thoroughly understand when air bags were supposed to deploy in these vehicles, which prevented them from linking the ignition switch defect to the air bag non-deployment. This may be explained by ODI staff's acknowledged lack of training on air bags.

ODI prepared three proposals for investigating the loss of power steering and air bag non-deployment in the Chevrolet Cobalt and Saturn Ion. While each proposal was supported by early warning reporting referrals, ODI staff did not establish the ignition switch defect as a potential root cause for these issues. ODI officials told us that they did not understand the safety consequences of the ignition switch defect before the GM recall.

ODI Initiates Investigations Without Assurance That the Most Significant Safety Defects are Targeted

ODI's decisions on whether to open an investigation are not backed by guidance for applying the factors it established for opening an investigation. In addition, decisions lack transparency and accountability. This was the case with ODI's decision not to investigate the GM air bag non-deployment defect.

ODI Lacks Consensus and Detailed Guidance on the Amount and Type of Information Needed To Open Investigations

According to ODI's Defects Assessment Division Chief, ODI considers three factors when proposing a vehicle safety defect investigation: (1) rate of consumer complaints,²² (2) severity of the potential safety issue, and (3) identification of a potentially defective vehicle component or root cause. However, ODI has not developed specific guidance on how screeners should apply these factors, and there is a lack of consensus among ODI leadership on the factors necessary to open an investigation—leaving screeners uncertain about how much support is needed to propose an investigation.

Attorneys in NHTSA's Office of Chief Counsel state that while NHTSA must establish severity for all cases, it can establish either frequency or root cause to force a manufacturer to initiate a recall. The Director of ODI prefers screeners to focus on establishing the safety consequences of a potential defect rather than determining root cause, and ODI's two investigative chiefs agree that establishing a pattern of safety concerns is more important than identifying root cause. However, ODI's Defects Assessment Division Chief expects advanced screeners to find the root cause in order to build a compelling proposal for an investigation.

The Director of ODI can also unilaterally decide not to open an investigation after discussion with Defects Assessment Panel participants. For example, the Director of ODI decided not to pursue two investigative proposals after concluding that they presented minimal hazards. The first proposal, made in June 2014, related to 2007 to 2011 vehicles that suddenly lost steering power assist; the second, made in July 2014, related to 2012 model vehicles that experienced intermittent loss of electrical

²¹To determine which non-dealer field reports were related to the ignition switch recall, we limited this analysis to vehicle models, model years, facts, and circumstances that would make an incident eligible for compensation through the GM ignition switch compensation fund.

²²The rate of complaints is the number of relevant complaints received by NHTSA divided by the number of vehicles in production.

power. Both proposals established the rate of complaints, severity of the issue, and the defective components.

Without specific guidance on the amount and type of information needed to launch an investigation, screeners largely rely on precedent and professional judgment to determine which issues merit investigation. One screener told us he uses his “gut feeling” when reviewing complaints to gauge the “appetite” of the office for specific issues. Another screener told us he only proposes investigations that have the greatest chance of being selected to avoid the extra work of proposing investigations that are ultimately denied. Three screeners said they are hesitant to propose investigations if similar proposals have been rejected in the past.

In general, ODI officials prefer to open investigations that are most likely to result in a manufacturer recall—an assertion echoed by four of the eight screeners we spoke with. In 2011 and 2012—the most recent years for which ODI has actionable data—about 70 percent of the investigations eventually resulted in recalls. According to an ODI investigative division chief, repeatedly opening investigations that do not result in a recall could cause ODI to lose credibility with manufacturers. However, ODI’s focus on issues most likely to result in recalls creates the potential for missed opportunities to investigate issues that have serious safety implications.

Targeting potential safety defects that most likely lead to recalls also blurs the line between pre-investigative and investigative duties. Considerable investigative duties—such as research and engineering analysis work—are being performed in the pre-investigative phase, often by screeners who are not adequately trained to perform this work. In one case, a screener told us he could not detect any exhaust odor in a vehicle, but subsequent work by investigative staff found that the carbon monoxide level reached Consumer Product Safety Commission thresholds for noticeable headache, fatigue, and nausea, and exceeded Occupational Safety and Health Administration standards if exposure exceeded 8 hours.

In addition, screeners may not have access to the data needed to prompt an investigation, such as manufacturer data. While NHTSA’s Office of Chief Counsel stated that ODI may compel information from manufacturers during the pre-investigative stage, the Defects Assessment Division Chief told us they generally do not compel this information without first launching an investigation. Regardless, three screeners were unaware that their division has the authority to compel information from manufacturers without launching an investigation. These added duties not only take time away from the advanced screeners’ primary duty of screening safety data, which can result in backlogs of those data, but can cause potential safety defects to be overlooked.

ODI’s Investigation Decision Process Lacks Transparency and Accountability

ODI’s investigation decision process involves several steps. First, the Defects Assessment Chief provides a list of proposals to ODI’s investigative division chiefs—along with supporting documentation, such as consumer complaints and warranty claims. The division chiefs then review the proposals and decide whether to open an investigation, decline to investigate, or send the proposal to ODI’s Defects Assessment Panel for further review.²³ According to ODI’s written policy, division chiefs have 2 weeks to complete their review. However, the investigative division chiefs consider the 2-week requirement to be a suggested time-frame that should be balanced against other competing priorities.

If a proposal is sent to the Defects Assessment Panel, investigation decisions are frequently delayed. The panel often reschedules meetings, and according to some screeners, the meetings tend to be pro forma. For example, one screener stated the meetings focus on the reasons for not opening an investigation rather than reasons for opening one. The panel also repeatedly delays decisions on proposals to obtain additional information. For example:

- In August 2014, the panel reviewed a proposal to investigate a side air bag non-deployment that resulted in a fatality. At that meeting, the Director of ODI, who sits on the panel, requested additional information. By October, the manufacturer had responded to ODI’s questions, but an investigative division chief requested that an investigation not be opened until his team had completed an on-site inspection of the vehicle involved in the accident. As of the most recent panel meeting in February 2015—5 months after the panel first reviewed the potential defect—a decision to investigate this issue remains pending.
- In January 2014, the panel discussed a proposal on a vehicle’s steering failure. However, the panel has delayed the decision whether to investigate this issue

²³The Defects Assessment Panel is a body chaired by the Director of ODI that is intended to meet monthly to review investigation proposals and decide whether to open an investigation.

for over a year—despite a recommendation from the investigative division to open an investigation.

In addition to delays, ODI's decisions are not transparent. Of the 56 investigation proposals for light vehicle safety defects in 2013, 32 were not investigated—18 of which lacked documented justifications for not investigating. While the panel may provide a reason for declining an investigation, such as “minimal hazard,” it does not document the evidence that supports its decision. In addition, a proposal may be rejected by investigation divisions, which do not always document reasons for declining to investigate. Lack of transparency exacerbates the problems created by reliance on precedent because screeners do not learn what management deems worthy of investigation.

Transparency and accountability are especially critical since ODI generally does not revisit proposals once they are declined for investigation. Screeners told us that there is a need for ever increasing numbers of incidents to consider reopening previously rejected investigative proposals. While ODI lists declined proposals in Artemis as being “monitored,” it does not track who monitors these issues. Half of the advanced screeners consider monitored proposals to be essentially denied and rarely resubmit proposals unless there is a new angle or “smoking gun.” One screener said resubmitting a proposal is like “beating a dead horse.”

ODI Did Not Investigate or Adequately Monitor the GM Air Bag Non-Deployment or Ignition Switch Issues

At a November 2007 Defects Assessment Panel meeting, ODI management and staff discussed a proposal to investigate frontal air bag non-deployments related to the Chevrolet Cobalt and Saturn Ion. ODI ultimately declined the proposal but did not document its justification for doing so. According to ODI staff, the decision not to investigate was based on a flawed understanding of air bag technology. Specifically, the Defects Assessment Panel believed the air bags did not deploy because the drivers were not wearing their seatbelts and because the vehicles left the road during the accidents.²⁴ At the same panel meeting, an ODI air bag investigator advocated against opening an investigation because he had concluded, based on his analysis of complaints, that the rate of air bag non-deployment complaints for the Cobalt and Ion was similar to that of peer vehicles.

According to ODI staff who attended the 2007 panel meeting, the Defects Assessment Panel had requested that the potential safety defect be monitored to identify future air bag non-deployments occurring on the road, where air bag deployment would be expected. In addition, NHTSA's Associate Administrator for Enforcement, who did not attend the panel discussion, told the Director of ODI and the Defects Assessment Division Chief that “given the reports of fatal crashes, this

[investigation proposal] looks like one we want to jump on and learn as much as we can quickly.” The ODI screener who prepared the investigation proposal was initially assigned to monitor the issue. However, the Defects Assessment Division Chief did not reassign that responsibility after the screener responsible for monitoring the issue left NHTSA in 2008.

ODI missed other opportunities to investigate the air bag non-deployment issue. For example, in April 2009, the Defects Assessment Division Chief requested a special crash investigation of a collision involving air bag non-deployment in a 2005 Chevrolet Cobalt. However, ODI did not follow up on the investigation's results, and the Defects Assessment Division Chief had no explanation for why ODI did not pursue the issue. Two ODI staff members reviewed the findings of the special crash investigation in February 2010, but neither reported the results of their reviews. The first, an investigator, told us he did not report the results because he was not responsible for screening safety issues. The second, an advanced screener, told us that while he does not recall reviewing the report, he would only have noted issues in his area of concentration: engine, power train, and speed control.

According to ODI officials, in 2010, an ODI screener suggested revisiting the 2007 investigation proposal on air bag non-deployments in the Chevrolet Cobalt because of new consumer complaints. However, after the air bag investigator updated his analysis of consumer complaints and identified a downward rate of complaints for the vehicles, the screener decided that the issue did not present enough of a safety trend to warrant renewing the investigation proposal.

While ODI identified air bag non-deployments as a potential safety issue, it did not identify or propose an investigation of the GM ignition switch issue. According

²⁴According to GM, frontal air bag deployment takes into consideration factors such as speed of the vehicle, severity and location of the impact, and rate of deceleration. Air bags are programmed not to deploy in non-accident circumstances, such as driving over potholes or rough terrain.

to ODI staff, there were no discussions of the ignition switch defect prior to the February 2014 recall.

This concludes my prepared statement. I will be happy to answer any questions you and other Committee Members may have for me.

The CHAIRMAN. Thank you, Mr. Scovel.

Administrator Rosekind, I know you only took the helm here at NHTSA at the end of last year, and I know you have been working to improve NHTSA's handling of vehicle defects. And I would say you have your work cut out for you.

The Inspector General's report reaches some serious conclusions regarding NHTSA's ability to detect vehicle defects, highlighting things like failure to review information provided by both industry and consumers, botched data analysis, inadequate training and supervision as major problems for the agency. All of these have to concern you.

And while we have to ensure that automakers properly report safety violations, it doesn't help if NHTSA's staff are not even reviewing the information or if, when they do, they aren't employing proper statistical analyses to detect defects.

NHTSA isn't following basic best practices, and these are process issues that can't be solved just by throwing additional resources at the problem. So my question is, how do you propose to address these issues?

Mr. ROSEKIND. Thank you for acknowledging the challenges that exist in our head.

We have concurred with all 17 of the recommendations. They validate and are consistent with our two reports, as well.

So I would like to provide to the Committee a list of 44 actions that we already have underway. Ten of the 17 are addressed in those. And they get exactly to detailed action on each of these elements, from communication to case management to statistical tests, to make sure that every one of those—and I am just highlighting.

There were 17 in their report. Our total actions are already up at 44. We will continue to look for every place possible that we can make changes.

I will just add, I think we will look for all the internal changes we can, but what is also critical about the report, though it is outside their report to talk about the resources, so many people have heard me discuss: 80,000 complaints. We are literally looking at an individual screener having to have five reports analyzed every hour. Each of those reports actually takes an hour.

So when the IG report says it is inadequate, I agree. And we have to change those.

The CHAIRMAN. Inspector General Scovel, you identified three general areas of concern in your audit of the pre-investigation practices of NHTSA's Office of Defects Investigations. In your opinion, what does NHTSA need most? More information? More expertise? Better practices for reviewing and analyzing data they already receive?

Mr. SCOVEL. Thank you, Mr. Chairman.

Right now, I would say the onus is on NHTSA to press forward with the process changes that we have outlined in our audit report and in my testimony today.

We are very pleased to understand that the Administrator has concurred in all 17 of our recommendations and, in fact, in his response to our audit report last week, indicated a very aggressive schedule, signaling his intent to press forward as quickly as possible.

I understand the Administrator's request for resources. That ultimately represents a policy decision between the administration and the Congress. I am fully cognizant of that and respect my role. However, I would have to say that allocating more resources to an effort or to an agency whose processes are not in line in the first place does not seem like a good idea.

We would urge the Administrator to press forward with his aggressive timeline to address our recommendations, as well as his own process improvements that he has identified, in order to best position himself for success no matter what the policy decision may be regarding additional resources.

The CHAIRMAN. Mr. Rosekind, you have recently taken some unprecedented steps with regard to NHTSA's handling of the defective Takata inflators, including issuing a preservation order and a consent order and announcing efforts to facilitate a coordinated remedy program.

How does the agency plan to implement this program?

Mr. ROSEKIND. And thank you for acknowledging the effort there. It was this committee that really helped focus for the entire country and the needed actions ahead. That all changed on May 19. We went from denying a defect to having acknowledgment of not only a defect but national recalls, the consent order, which allows us to actually help evaluate the remedy, as well as the coordinate remedy program, which is not just acceleration but even more advanced prioritization.

So, right now, we have actually already been in touch with all 11 manufacturers, 7 potential supply folks, and have sent them a letter that outlines all the information we need to determine how this has to proceed. So the first meetings are already scheduled for July 1 with each of those individual groups. There will be both individual and group meetings through July, with our hope that August will be—we will take all that information, put it together. Planning for a public hearing in September that would allow us to lay out the program, which is very complicated.

The CHAIRMAN. Good.

And, very quickly, Mr. Scovel, could you just please discuss some of the difficulties that NHTSA has encountered or experienced in receiving consumer complaints? And how would clearer guidelines benefit the public?

Mr. SCOVEL. In receiving complaints, Mr. Chairman, we would highlight a couple of things for the Committee's attention.

First, in the way that NHTSA collects its data. Data quality has to be an ultimate concern for NHTSA in its effort to identify vehicle safety defects, because if that data is not of the highest quality, then essentially defects will be missed and resources may be squandered. So the accuracy and the completeness and the timeliness of those data submissions is essential.

And that data comes from a number of different sources. The early warning reporting data from the manufacturer, that process

needs to be improved. As we have shown and NHTSA has acknowledged, the broad discretion allowed to manufacturers in categorizing potential problems or defects means that the data quality is diluted, it is diffuse. And the best analysts at NHTSA or anywhere in the world will not be able to reach a proper conclusion based on data that is unsupportable.

We also would note that—and I commend the Administrator for his attention to that and his remarks this morning, too, that they intend to follow up with manufacturers more often.

In our interviews of every single employee in the Office of Defects Investigation and a representative of each of the contractors that works in that effort, we learned from the highest sources in that office that they generally employ what he called an honor system in order to determine whether manufacturers are meeting their requirements to submit this early warning reporting data. For a safety regulator to take that approach, sir, we think is not keeping the best safety interests of the public in mind.

Consumer complaints, Mr. Chairman, which historically has been the primary source for NHTSA to identify safety concerns, are also diffuse, have also been watered down, in effect, because of a lack of guidance from the agency to consumers who are seeking to report accidents and defects to the agency but who find themselves at a loss when confronting on the website 18 different category codes in a vehicle that has 15,000 components and they themselves are not automotive experts.

Certainly, some consumers are going to get it wrong. But, in many others, the most well-meaning and those who have themselves or their families have been impacted by vehicle safety defects will read the guidance and attempt to follow it as best they are able. The agency performance will improve as a result.

The CHAIRMAN. Thank you, Mr. Scovel.

Senator Nelson?

Senator NELSON. You know, there is a pattern here among these regulatory agencies that are supposed to be looking out for the consumer. We saw this about 10 years ago with the Consumer Product Safety Commission when we had all of that Chinese drywall problem, the defective Chinese toys, and so forth, and a card table was their research department. So, too, we are now hearing stuff about the agency that you are trying to straighten out, Mr. Rosekind.

Tell me, you all came up with 33.8 million vehicles to be recalled on this Takata matter. How did you come up with that number?

Mr. ROSEKIND. So our estimate is that there are about 34 million inflators that are defective, and they are in about 32 million vehicles. So that is acknowledgment that some vehicles have both driver and passenger airbags that need to be replaced. It also includes that some cars have interim remedies. They need to come back again.

Senator NELSON. Right.

Mr. ROSEKIND. So that is why 34 million inflators in 32 million vehicles.

Senator NELSON. Do you have the Vehicle Identification Number for all of those?

Mr. ROSEKIND. Yes. Those have been provided by all of the 11 auto manufacturers at this point.

Senator NELSON. All right.

Now, you have heard what the Inspector General said about this Office of Defect Investigations. What do you think you need to do to ensure that ODI does not miss the next GM ignition defect or the next Takata airbag crisis?

Mr. ROSEKIND. This is why we have fully concurred with all 17 recommendations. They all need to be addressed. That is why I am going to submit to you our list of 44 total actions that are going on that really get to all of these processes that we are discussing.

But it is also an ongoing evaluation. That is part of the issue here. We can't stop looking. So I am going to give you 44 different areas. I can give you plenty of examples if you want. I would rather just give you the list for the moment. But part of it also has to be not just that list but an ongoing evaluation to make sure that on a continual basis we are looking for ways that we can improve the processes and do it faster and better.

Senator NELSON. OK.

I want to suggest to you one area. In this ODI, as the Inspector General has just talked about, get about 80,000 complaints each year. Yet there is one person who conducts the first review of these complaints. And this particular person has other duties, so spending 50 percent of that person's time doing other things.

So, if you do the math, that person, who spends 4 hours a day on this, would have to review, process, and follow on and flag over 80 complaints an hour. That is less than one complaint a minute. So how in the world can you get it done?

Mr. ROSEKIND. You can't. And that is why I agree with the IG's report. It specifically called out the scanning of those reports as being inadequate. It is.

And you have just pointed out that that is a resource issue. You have too many complaints and not enough people.

That original person is a triage point to try and get it somewhere else, but it is just overwhelming.

Senator NELSON. All right.

I am going to yield the rest of our time because I want our members to go on and get a chance to get into this.

The CHAIRMAN. Thank you, Senator Nelson.

Senator McCaskill is up next.

**STATEMENT OF HON. CLAIRE McCASKILL,
U.S. SENATOR FROM MISSOURI**

Senator MCCASKILL. Thank you. Thank you, Mr. Chairman, and thank you, Senator Nelson, for your incredible focus on this issue.

As the Chairman and the Ranking know, we obviously did a lot of hearings around the GM recall and a lot of hearings around the failures of NHTSA.

I want to first begin with rental car safety. Honda confirmed on Friday that the eighth death linked to a faulty airbag occurred last September in California. This was a rental car from Sunset Car Rental in San Diego that never made the repairs after the recall.

I, along with Senator Schumer and others, have legislation pending that would prohibit a car from being rented at a rental car agency until open safety recalls are in fact remedied. We have the

support of the rental car industry, the consumer and safety advocates, the insurance companies, and General Motors.

But, unfortunately, many auto manufacturers are blocking this legislation right now. The Alliance of Automobile Manufacturers has opposed this legislation, and they are saying that they should only be grounded if there is a do-not-drive recall.

Let me ask you, Dr. Rosekind, have any of the 11 manufacturers issued a do-not-drive recall related to the faulty airbags?

Mr. ROSEKIND. Not that I am aware of. And, annually, that number is very small.

Senator MCCASKILL. And what about NHTSA? Do you support the efforts that we have ongoing to try to ground rental cars that have not been repaired?

Mr. ROSEKIND. Absolutely.

Senator MCCASKILL. OK.

I would like to put into the record the American Car Rental Association and Consumers for Auto Reliability and Safety, their written statements for the record, if I might, on that subject.

The CHAIRMAN. Without objection.

[The information referred to follows:]

WRITTEN STATEMENT OF THE AMERICAN CAR RENTAL ASSOCIATION AND CONSUMER
FOR AUTO RELIABILITY AND SAFETY

Introduction

Good morning, Chairman Thune, Ranking Member Nelson and Members of the Committee on Commerce, Science, and Transportation. The American Car Rental Association (ACRA) and Consumers for Auto Reliability and Safety (CARS) respectfully submit this joint written statement as part of the Committee's hearing entitled "Update on the Recalls of Defective Takata Air Bags and NHTSA's Vehicle Safety Efforts." ACRA and CARS ask that this statement be made a part of the official record of the hearing.

ACRA is the national representative for over 98 percent of our Nation's car rental industry. ACRA's membership is comprised of more than 300 car rental companies, including all of the brands you would recognize such as Alamo, Avis, Budget, Dollar, Enterprise, Hertz, National and Thrifty. ACRA also has as members many mid-size, regional car rental companies as well as smaller, "Mom & Pop" operators. ACRA members have over two million registered vehicles in service, with fleets ranging in size from one million cars to ten cars.

CARS, based in Sacramento, California, is a national award-winning non-profit auto safety and consumer advocacy organization dedicated to preventing motor vehicle-related injuries, fatalities and economic losses. CARS has spearheaded promulgation of several Federal motor vehicle safety standards, and successfully advocated for numerous landmark bills signed into law by Governors from both major parties. CARS has been working to enact safe rental car legislation in close collaboration with Cally Houck, whose two daughters were killed in a crash caused by a safety defect in an unrepaired rental vehicle that was under a safety recall.

ACRA and CARS applaud this Committee for its continued interest in the Takata air bag and other recent automobile recalls. We have come together in an unusual partnership of an industry trade group and a consumer safety organization to urge Congress to pass the "Raechel and Jacqueline Houck Safe Rental Car Act," which was recently introduced as bipartisan legislation in the House and Senate and has been referred to this Committee. We believe that passing this bipartisan bill is one important step that Congress can and should take immediately to help get unsafe recalled vehicles off the roads.

The Car Rental Industry and Consumer Safety

In 2004, Raechel and Jacqueline Houck were killed by a rental car that had been recalled due to a defective steering component that was prone to causing an underhood fire and a loss of steering. The car had been rented to them prior to being repaired. The legislation named in their memory, the "Raechel and Jacqueline Houck Safe Rental Car Act" (S. 1173/H.R. 2198), was introduced in the House and the Senate on May 1, 2015. The Senate bill is authored by Senators Charles Schumer (D-

NY) and Barbara Boxer (D-CA), and co-sponsored by Commerce Committee Ranking Member Nelson (D-FL) and by Committee members Senators Claire McCaskill (D-MO) and Richard Blumenthal (D-CT). The House bill is sponsored by Representatives. Lois Capps (D-CA), Walter Jones (R-NC), G.K. Butterfield (D-NC) and Jan Schakowsky (D-IL).

The Safe Rental Car Act would prohibit rental companies from renting or selling cars subject to a Federal safety recall unless they have been repaired. The only exception to this rule would be if the manufacturer identified an interim measure that could be taken while the permanent repair was being developed that would eliminate the risk. Once the permanent repair becomes available, however, the car must be grounded until the repair is made.

ACRA and CARS worked very hard to develop a legislative proposal that is supported by consumer safety organizations and the rental car industry. The bill fairly balances the public's interest in safety with the rental car industry's business model. It represents a reasoned, rational compromise that is effective, and also workable, given the realities of the auto rental marketplace.

From the industry's point of view, properly maintained vehicles in the rental industry are paramount. It's about trust—between customers and the individual businesses of ACRA members. Customers should have confidence that their rental is not the subject of a safety recall and the legislation provides that confidence.

From a consumer safety point of view, it is just common sense that rental cars subject to safety recalls should be repaired before they are put into the hands of consumers and their families. People who are renting vehicles need them right away, for a business trip, vacation or sometimes in an emergency. There is no time to take a rental car to get repaired. And consumers expect that the car they are renting is safe. Most people are shocked to learn that it isn't already illegal, under Federal law, to rent out an unrepaired recalled vehicle.

Important Safety Provisions of S. 1173/H.R. 2198

- *Timing of Notice and Grounding*

S. 1173/H.R. 2198 define the time-frame in which rental companies need to ground the vehicles after receiving the safety recall notice. There is a period of time the companies need in order to receive the notice and successfully lock down the appropriate vehicles. The bills call for the vehicles to be grounded as soon as practicable, or within 24 hours of receiving the safety recall notice. In the situation of a particularly large recall—one that affects more than 5,000 vehicles for one company, the lock down time-frame is 48 hours.

- *Interim Remedy*

The only exception under S. 1173/H.R. 2198 to the “do not rent” requirement is when the manufacturer has issued a safety recall and has not developed the permanent repair, but offers a temporary fix—or interim remedy—that eliminates the safety risk. If the rental car company performs the interim remedy, then the car may continue to be rented. Once the permanent repair is offered by the manufacturer, the vehicle must be pulled from service and permanently repaired before being re-rented.

- *Car Sales From Rental Fleets*

The American car rental industry is the largest single purchaser of cars from domestic and foreign car manufacturers every year. The industry, in turn, sells a large number of cars each year through retail and wholesale channels. S. 1173/H.R. 2198 require that rental car companies permanently repair any safety recall to any vehicle prior to selling that vehicle—either through retail or wholesale markets. The only exception to this requirement is when a vehicle has been so severely damaged that it will only be sold for parts, the rental company does not need to perform the recall work.

Federal versus State Role

This is a critical national issue and deserves a national solution. The motor vehicle safety recall process is overseen by the National Highway Traffic and Safety Administration (NHTSA) and has its origins in the Federal Motor Vehicle Safety Act, originally enacted in 1966. Therefore, ACRA and CARS believe strongly that major changes to rental vehicle safety recall procedures should be made by Congress, rather than individual states. Rental cars are an integral part of interstate commerce and car rental customers cross state borders in rental vehicles at will and with the blessing of the renting companies.

CARS agreed with the rental car companies to join together in support of this legislation in order to create a uniform Federal standard, rather than pursuing legisla-

tion on a state-by-state basis. California Senator Bill Monning, who represents the district where the tragic crash occurred that claimed the lives of Raechel and Jacqueline Houck, agreed to forestall pursuit of state legislation he authored beginning in 2010, in order to allow Congress time to address the problem nationally.

As attention to vehicle safety recalls remains squarely in the public spotlight, policy makers at the local, state and Federal level are understandably eager to address safety concerns. There have been several initiatives at various levels of government to particularly address safety recalls concerning the rental industry. No two proposals are the same. ACRA and CARS believe a patchwork of state and local laws would be disruptive to consumers and the car rental industry since rental cars regularly are rented in one state and driven and left in another. In addition, these state and local proposals create challenges because each attempts to address a regulatory process that is controlled and overseen by a Federal agency (NHTSA). ACRA and CARS are united in our conviction that rental car safety should be addressed on the Federal level.

Conclusion

As the supporters of S. 1173 and H.R. 2198 continue to talk to members of Congress and their staff in support of this legislation, ACRA members are often asked why the car rental industry is willing to accept new Federal regulation of the industry's practices. The response to that is easy. After listening to customers, ACRA engaged and became part of the process. The end result is a proposal that will provide car rental customers additional assurance that the vehicles they rent are safe and provides the car rental industry with a uniform Federal standard across the country.

ACRA and CARS urge Congress to enact this bill, named for Raechel and Jacqueline. It is beyond your power to bring them back to life, but the fate of others who rent vehicles to visit their parents, take a vacation, or go on a business trip—or share the roads with them—rests squarely in your hands.

As a first step toward enactment, we respectfully request that this Committee hold a hearing on the Raechel and Jacqueline Houck Safe Rental Car Act, to hear first-hand from the stakeholders why now is the time to pass this critical safety legislation.

Thank you for providing ACRA and CARS with the opportunity to submit this statement.

Senator McCASKILL. I now want to go to this audit. And my colleagues are patient with me because I am an audit weirdo. I used to be an auditor, so I read this stuff. And Mr. Scovel knows that I am somebody who consumes these things.

This audit report is one of the worst I have ever seen, in terms of a government agency. And the reason it is so bad—I agree, Mr. Scovel, this isn't about resources; this is about blatant, incompetent mismanagement, Mr. Rosekind.

I mean, let's just go through one of many shortcomings, and this is one that just jumped out at me: when to open an investigation. Now, if NHTSA isn't clear about when an investigation is to be opened, we might as well shut it down.

The Inspector General found there are three factors to be considered about an investigation: rate of consumer complaints, severity of potential safety issues, and identification of root cause.

Now, here is the scary part. Based on the interviews the Inspector General did, there is disagreement within your agency over when an investigation can even be opened. The General Counsel said severity must be established for all cases, along with frequency and root causes. The ODI Defects Assessment Division Chief says all three should be met. The ODI's Director does not think a root cause is necessary and prefers a focus on safety consequences. And the ODI's two investigative chiefs agree that a root cause is not necessary.

So you have key personnel within your agency that aren't even on the same page about when an investigation should occur. I assume that you are getting busy on this as a baby step before you get at all the other problems that are in this problem.

Mr. ROSEKIND. There are actually 44 distinct actions that we are taking. That is one of them. Those people are now in the same room determining what those threshold and criteria should be.

Senator MCCASKILL. Do you believe that everyone that works there knows what their authorities are? Do you believe that there is a clear understanding about what the investigative authorities are at NHTSA?

Mr. ROSEKIND. I think the people that have the specific authorities assigned to them are aware of those, but you have just highlighted where those lines have been blurred and clarifications are needed.

Senator MCCASKILL. Well, on average, only four times a year over the past 4 years has ODI even requested underlying documentation for death and injury reports. Four times a year. That, to me, is stunning.

And although you have the authority to inspect manufacturers' records for compliance with early warning requirements, NHTSA officials told the IG the agency has never used this authority. Never used the authority to inspect manufacturers' records for compliance with early warning requirements.

Listen, I think you are doing your best. I think you understand the severity of the situation before you. But I was shocked when I read this IG report how bad it was. I knew it was bad when the Acting Director before you didn't even know you had subpoena power. I mean, we discovered that in a previous hearing.

So we are going to be watching very carefully, Mr. Rosekind, the kind of work you do immediately.

And I disagree with my colleague; I am not about to give you more money until I see meaningful progress on reforming the internal processes in this organization. You can't start throwing money until you have a system in place that is going to make this agency function like it is supposed to.

Thank you, Mr. Scovel, for your work. I think it is very illuminating.

Thank you for working so hard since you have been there. It is not fair to blame you for all this. I think you are trying as hard as you can to get the place shaped up, but we have a long way to go.

And I would certainly hope, Mr. Chairman, that we would do a follow-up every 4 to 6 months to see how they are doing on the IG's list. Because I think the driving public deserves so much better from the cop on the beat.

Thank you, Mr. Chairman.

The CHAIRMAN. Yep. Thank you, Senator McCaskill. You bet. Senator Klobuchar?

**STATEMENT OF HON. AMY KLOBUCHAR,
U.S. SENATOR FROM MINNESOTA**

Senator KLOBUCHAR. Thank you, Mr. Chairman, for holding this hearing. I think it is incredibly important that we follow up and

have hearings like this after something major has happened, like we saw with Takata, with GM.

Last November, after evidence emerged that Takata were susceptible to ruptures in regions outside of high-humidity areas, I called on Takata to expand the recall nationally. Last month, they finally complied and expanded the recall nationwide for certain types of driver- and passenger-side airbags.

One of the individuals affected by a Takata airbag was Shashi Chopra from North Oaks, Minnesota. She is now permanently blind. She was simply a passenger in a car that wasn't even going very fast that was in what we would consider a minor fender bender and is now permanently blind.

Mr. Rosekind, what tools does NHTSA need to compel companies to act sooner?

Mr. ROSEKIND. Part of what we are looking at, besides resources related to personnel, are authorities.

So other safety agencies within DOT have imminent hazard. What does that mean? If a hazard was identified, we would have been able to take those Takata airbags off the streets much sooner than what happened in this situation.

So there are a variety of authorities—

Senator KLOBUCHAR. And would that be, then, established by law? Is that what you are saying you—

Mr. ROSEKIND. Yes. Those are authorities that you, Congress, have to provide to the agency.

Senator KLOBUCHAR. And were the daily civil penalties at NHTSA levied against Takata for failing to fully respond to NHTSA's special orders helpful in getting them to act?

Mr. ROSEKIND. Yes. And I think what you are pointing out is we were able to go to \$14,000 a day, which was the maximum, but on our list of authorities that we are looking for in GROW AMERICA, that is another one. Our maximum penalty is \$35 million. We are looking for \$300 million.

Senator KLOBUCHAR. OK. Very good.

Last month, NHTSA filed a Notice of Intent to open a coordinated remedy program for the replacement of defective Takata airbag inflators in order to consider whether and, if so, how NHTSA will exercise its authority to organize and prioritize the recall and remedy programs.

How is NHTSA approaching the replacement of these airbags to ensure that vehicles that are most at risk are replaced first?

Mr. ROSEKIND. That is why we have just sent out information letters to all of the 11 manufacturers, the 7 suppliers, and are collecting information so we can put a plan together to do just that.

People have talked about an accelerated remedy. This is more than just making it go faster. It means coordinating and prioritizing to make sure people in the areas that have been identified for risk, which have to do with age, certain geography, driver side—those people need to make sure they are replaced as soon as possible.

Senator KLOBUCHAR. OK.

Switching to the GM issue, which you are also aware of, we had a case of Natasha Weigel from Albert Lea, Minnesota, riding with her two friends in a 2005 Chevy Cobalt on a Wisconsin country

road. Without warning, the car's electrical power went out. The car barreled ahead at 71 miles per hour. Natasha and another passenger were killed when it ran into a tree.

The report found that Wisconsin State Trooper, Keith Young, conducted an investigation into the crash that clearly made that link—this is a state trooper in Wisconsin—between the defective ignition switch and the failure of the airbag to deploy. It cracked the code that evaded GM and NHTSA for years.

This is what he wrote: “The two front seat airbags did not deploy. It appears the ignition switch had somehow been turned from the ‘run’ position to ‘accessory’ prior to the collision with the trees.”

We know this is all troubling, and in December I asked you what concrete changes you would implement at NHTSA to improve the consumer complaint process. I would like to know what systems NHTSA has put in place to ensure that if the Office of Defect Investigation investigators are in possession of critical information, like Trooper Young's report, I would like some assurance that they are now acting.

Mr. ROSEKIND. And I am going to actually start, though, by acknowledging this committee, whether it is your opening statement mentioning *safercar.gov* or the fact that each of you talk about one of the tragedies, you put a face to the tragedies that are going on, it is so critical for people—

Senator KLOBUCHAR. Thank you.

Mr. ROSEKIND.—to know that these are real people that are being affected. So thank you all for doing that.

And I would say specifically, we did talk about this in my confirmation hearing, and we have new systems that are already in place, such as a case management system that allows our crash investigators, as well as the screeners and the panels, to look at this information from multiple sources all in one place. It is an attempt to basically connect those dots so the people who are working on this have all available information.

And I will just—

Senator KLOBUCHAR. Yes. Because I know, like, there were about 260 complaints over an 11-year period from consumers that the GM vehicle had turned off while they were driving. And somehow, over those 11 years, those dots weren't connected.

So, as you said, there has been a change. But how does that change really work in effect?

Mr. ROSEKIND. We are talking about panels and screeners that now have access to all the information. Previously, there could be an update to a piece of information and the person responsible for that case didn't even get an alert that there had been updated information.

So now you have more data and making sure, every time there is new data, that individual who is responsible gets all the information in one place.

Senator KLOBUCHAR. OK. Very good.

Well, thank you very much. I will probably have some more questions for the record.

But thank you, again, Senator Thune and Senator Nelson.

The CHAIRMAN. Thank you, Senator Klobuchar.

And next up is the Ranking Member on the Subcommittee on Consumer Protection, somebody who, like Senator Nelson, has been very involved on these issues. So I would like to recognize Senator Blumenthal.

**STATEMENT OF HON. RICHARD BLUMENTHAL,
U.S. SENATOR FROM CONNECTICUT**

Senator BLUMENTHAL. Thank you very much, Mr. Chairman. I want to express my appreciation to you for having this hearing today, which I know reflects your own interest and caring about this subject.

And to my distinguished colleague from Florida, thank you for your very eloquent and powerful statement.

I want to pursue some of the lines that have been raised already, lines of questioning, that reflect the real-life consequences, as you have just said, Mr. Rosekind.

Just to show you, first, one of the airbags that actually bears the marks of the, in effect, exploding shreds of metal that so injured eight people that they were killed and many others.

But the real fault is not with the airbag. There is no blood on the airbag. Some may say, legitimately, there is blood on the hands of Takata executives, who concealed and covered up the devastating, deadly effects of these explosions.

The fault is really with this device, the inflator, because it contained a substance that caused this explosion. Ammonium nitrate, when moistened, became explosive. And the question for Takata today is whether these devices are any safer than they were when they killed eight people. And the evidence may well show that these inflators are as dangerous today as they were when Takata first learned that they were potential killers some years ago, as early as 2004 and 2006, that they are as dangerous today and should be completely revamped and revised in their basic design and structure, which Takata has not yet done.

The number of deaths reported so far is eight. I feel that that number is a lot like the number 13 that was first acknowledged by GM as caused by its defective ignition switch. We now know that that number is at least 117 because of the findings of the compensation fund that GM established only after I and others on this committee called for them to do it. That number of eight may well grow. It may be only the tiny fractional tip of the iceberg of death that was caused by these exploding airbags.

And so I believe, as has been stated, that this report is a searing, devastating indictment of an agency that was responsible for protecting the public. But let's not forget the responsibility of corporate executives, who could have and should have fully disclosed and then protected their customers from these devastatingly deadly devices.

I think that that record of cover-up and concealment is one of the low points in corporate conduct, and it represents the need to strengthen not only the agency that you had, Mr. Rosekind—we need to strengthen that agency, not strangle it. We need to provide more resources and funds, not cut. But a cop is only as good as the legal tools that he has. A cop is only as good as the laws that are enforced.

And so I have proposed, along with my colleagues Senator Markey, Senator Nelson, a collection of new laws that will strengthen your legal tools. Because, ultimately, we can use all the rhetoric we want in this room, in press conferences, in public forums, but the rhetoric is no good without real action and institutional change and new laws that give you the tools you need.

So, for example, eliminating the caps on penalties—not just raising them, but eliminating the caps on penalties for nondisclosure; the Early Warning Reporting Act that will give you the mandate to establish a database that is useful to consumers so they can take action to protect themselves; the Automaker Accountability Act that I have proposed; as well as criminal penalties imposed not just on the companies but on the corporate executives when they cover up or conceal defects.

And, as my colleague Senator McCaskill has already said, rental car companies need to be held accountable, but also used car dealers. At least one of these Takata deaths occurred as a result of a used car. And very often the manufacturers and the dealers simply can't find the present owner of a car because he or she has bought it as a used car.

Automobile manufacturers and new car dealers are required to repair safety recalls before selling recalled vehicles under current law, but there is no requirement that used car dealers fix any outstanding safety defects before selling a used car. And this gap in consumer protection puts people at risk.

So I think there are a number of preventive acts that can be taken, and not the least of them is that any settlements, such as happened with the GM ignition defect, be disclosed fully. Secret settlements ought to be banned. That is why I have proposed the Sunshine in Litigation Act with my colleague Senator Graham, and I hope to revive it again this challenge.

I want to know from you whether you will join me, Mr. Rosekind, in seeking these basic, fundamental reforms——

Mr. ROSEKIND. I am going to start——

Senator BLUMENTHAL.—that will be important going forward. We can allot and blame as much as we wish for the failures of the past, and there have been deadly failures. But repairing this system and reforming it going forward ought to be our concern. And it is not just oversight; it is addressing these problems with new legislation, giving you new tools, and your successors, so that there is real institutional change.

Mr. ROSEKIND. And I just wanted to start by saying thank you, because, yes, what you have seen over the last months is NHTSA's willingness to use all authorities and tools available to us to get action. If we don't have those authorities or even the maximum is ineffective, we can't do our job. So we will support and provide any technical and other assistance to help with those new authorities.

Senator BLUMENTHAL. And you need more resources, do you not?

Mr. ROSEKIND. Absolutely.

Senator BLUMENTHAL. In fact, the FAA, I think, has something like 30 times your budget and 6,000 employees as compared to your 90. Is that not a glaring deficiency? Does that not reflect a lack of investment in your agency and in the safety of our roads and drivers?

Mr. ROSEKIND. And you are citing a chart that is in our workforce assessment that makes that comparison.

So, with under 500 deaths in major aviation accidents, they have over 6,000 safety professionals working at that number. In the rail industry, they have under 10, and they have close to 700 professionals working on that. And we have, in 2013, 32,719 lives lost on our roadways, and at NHTSA we have 90 people dealing with those.

Senator BLUMENTHAL. If our airplanes and airspace were as dangerous as our cars and our roads, corporate officials would be indicted and there would be sweeping changes in the airline industry. The lack of dramatic crashes is perhaps what enables the drip-by-drip, crash-by-crash tragedies that have been detailed here. And this Nation has to make the kind of investment in your agency that, laudably, it has made in the safety of our airspace.

Thank you.

The CHAIRMAN. I have Senator Markey, followed by Peters, followed by Heller, followed by Daines.

We have a vote going on, so if you want to proceed. And, if you can, I would like to wrap this first panel up as quickly as possible. I will go over and vote, and if we get to the end of the people who want to ask questions, gavel it out, recess it, and we will come back and pick up as soon as we get through with the vote.

Senator Markey?

**STATEMENT OF HON. EDWARD MARKEY,
U.S. SENATOR FROM MASSACHUSETTS**

Senator MARKEY. Thank you, Mr. Chairman, very much.

Dr. Rosekind, Senator Blumenthal and I have a bill, the Early Warning Reporting System Improvement Act, that requires automakers to automatically provide more documents about potentially defective cars to NHTSA and requires NHTSA to then make more of that information available to the public so that it can protect itself.

And we can't get back the 117 people whose lives were lost to the GM ignition switch defect; we can't get back the 8 people whose lives were taken by exploding Takata airbags.

But, Dr. Rosekind, you do have right now the authority to implement many of the changes that the Markey-Blumenthal early warning reporting bill requires. You can take permanent measures, even without a new law, to put information about fatal defects into the hands of the public in case NHTSA's analysts fail to spot the next ignition switch or exploding airbag defects. You can look at the families who lost their parents, children, spouses, or siblings because of these defects, and you can tell them that you did everything you could to make sure that their lives weren't lost in vain.

Dr. Rosekind, will you call for a NHTSA rulemaking to require automakers to provide the early warning documents that alert them to potentially fatal defects to NHTSA and to have NHTSA then make this information public?

Mr. ROSEKIND. The agency and I will do everything we can with the transparency of the agency to try and make that information available. Numerous examples already raised; if the information had been available, that could have helped to save lives.

And our interest will be to look at that and make sure that our current legal requirements related to privacy, confidentiality, wouldn't actually impede that objective.

Senator MARKEY. Will you do a rulemaking, Dr. Rosekind, in order to make sure that there is a formalized process to ensure that the information goes to your agency and then the agency discloses it to the public so that they can protect themselves?

Mr. ROSEKIND. And I will commit to looking at what shape that could look like, knowing what our current legal obligations are for confidentiality.

Just very simply, the manufacturers have that data. They don't have the Federal restrictions we do related to confidentiality and privacy, for example. They could post that now—

Senator MARKEY. Will you do a rulemaking? Will you do a rulemaking, Doctor, consistent with the Privacy Act and confidential proprietary information to ensure through the rulemaking that any information which you can make public will be made public and that the auto industry will be forced to give you that information? Will you conduct a rulemaking to achieve that goal?

Mr. ROSEKIND. I will determine whether—whatever we can do for transparency, I will determine whether or not a rulemaking is even needed.

Senator MARKEY. Well, so you are going to—so you will do everything, then, that is allowed by law to ensure that the auto industry will provide you with the information about defects and that NHTSA will then release that information? You will do everything that is allowed by existing law?

Mr. ROSEKIND. That is what we will look into and make sure that we can provide that transparency, yes.

Senator MARKEY. And you are saying that you do not need a rulemaking in order to accomplish that goal?

Mr. ROSEKIND. And that is what I have to look at, what those legal conflicts are. So if it is not—

Senator MARKEY. Will you do a rulemaking if one is required? After you determine the scope of your authority under the existing rules, will you do a rulemaking if it is necessary?

Mr. ROSEKIND. If the evaluation shows a rulemaking would be useful for transparency, yes.

Senator MARKEY. OK. Well, I think that is very important. I think that will really give the information to the public which they need. If people can go online to buy a car, they should be able to go online in order to determine if that car has a defect which could harm a family member.

So the sooner you put it online, the sooner you put that information up, the sooner you get that information out there is the more accountable the industry is going to be. They will know that, that the consumers will be king, the consumers will be protecting their family, the consumers will be able to ensure that any successor NHTSA is accountable and ensuring that that information is made public.

Now, Senator Blumenthal and I have another bill, and that bill is one that says that a used car that is now purchased by someone may have a recall that actually ensures that there is a free replacement part but that the person who purchased the used car really

doesn't know about it. So our bill would require that when that new owner registers their cars that they are made aware of the safety defects and that those repairs are made.

Would you support that kind of legislation, Dr. Rosekind?

Mr. ROSEKIND. DMV is a very important touch point to get those people informed. GROW AMERICA talks about this, because, at this point, there is no sense yet of the technology to do that, the cost, the procedures, et cetera, and making sure that the consumers basically don't have any negative effects from a defect created by a manufacturer.

So, absolutely, DMVs could be a touch point that could be used. And in GROW AMERICA, we are suggesting pilot programs to work that technology, the cost procedures out to figure out how it could go national.

Senator MARKEY. OK. Thank you. I appreciate that.

Senator HELLER [presiding]. Thank you.

I am doing the heavy lifting right now with the gavel.

Senator Peters?

**STATEMENT OF HON. GARY PETERS,
U.S. SENATOR FROM MICHIGAN**

Senator PETERS. Thank you.

And appreciate both the panelists here today and your testimony.

Administrator Rosekind, I hear you when you say that NHTSA needs help. And if the agency is going to be able to deliver effective oversight for vehicle safety, we in Congress here, need to consider increasing your funding, as well as having stable funding, so you can modernize your crash data collection systems, hire additional electronic and technical experts, and enhance the Office of Defects Investigation.

But before that happens, I am sure you know very well that you must prove that your agency can actually do this effectively and have in place the procedures that can ensure the work is done in a timely manner. And you know as well as anybody, time is of the essence. The more time that elapses oftentimes means more deaths as a result of problems.

Now, I personally see all the time in Michigan the incredible progress that the auto industry is making to develop new technologies focused on collision avoidance and mitigation. These new developments, without question, are going to make traveling on our Nation's roads much safer, smarter, more energy-efficient, and at the same time less congested.

And Congress, I believe, needs to do its part to promote these policies that will help us usher in this new age and this new era of safety and mobility. And the first step should be to ensure that NHTSA has the resources to not only address the major issues that it is facing today, and the one in particular with airbags, but also encourage the development of these new technologies that have the potential to save thousands of lives in the future.

But it will be difficult to secure this funding and the ability to move this incredible technology forward if folks like myself and fellow Members of Congress are not confident that the resources are going to be deployed in an effective manner. And, as the IG report has made clear, there is a considerable amount of work to do.

Administrator Rosekind, this recall you are involved in right now is of unprecedented scale. NHTSA is courting this recall, and you have introduced a number of programs and initiatives in order to do this. You have told our committee about the 17 recommendations of the IG, which reiterate many of the findings of your own internal report, and about how you anticipate the agency being able to implement these recommendations before the end of the year.

Sir, can you say that NHTSA can adequately coordinate this recall that you are in the middle of right now and implement these reforms without more funding from Congress?

Mr. ROSEKIND. We already have that plan in place, that we have to effect this recall with current resources. That is the plan.

Senator PETERS. And that will be an opportunity for us to see the effectiveness of your agency, to be able to use these resources, to be able to do this in an expedited way?

Mr. ROSEKIND. Correct.

Senator PETERS. To Mr. Scovel, you have identified certainly an alarming lack of transparency and accountability; a severely deficient workforce, both in volume and technical expertise; and, as I mentioned earlier and you have mentioned here, you have delivered 17 recommendations, and NHTSA has concurred.

You have provided detailed action steps taken to make changes, but based on, now, you have intimate knowledge of this agency as a result of your work, do you believe that this agency is capable of making these changes? And how long do you think it will take?

Mr. SCOVEL. Thank you, Senator Peters.

I would hold the Administrator to his word. When he responded to our audit report, he indicated not only concurrence but a very aggressive intent to make good on all of those in a relatively short timeframe, in our experience dealing with similar reports in other modes of the Department of Transportation.

Clearly, the burden is on the agency at this point to make good on its promises to reform its processes so that it may then come to Congress and back to the American people and say, we are prepared to handle what we have, and, by the way, we may be able to do even a better job should, as a policy matter, we be accorded more resources.

But right now, sir, the burden is on the administrator.

Senator PETERS. And you have set a very aggressive timeline of one year. Again, based on your intimate knowledge—and you have a lot of experience with a lot of different agencies—is that really a realistic timeline?

Mr. SCOVEL. It is. I would say that is the Administrator's own timeline, which we endorse. We are hopeful. We will birddog these recommendations and the implementation of them as carefully as we have anything else in our long history of providing oversight for the department's safety regulatory agencies.

Senator PETERS. Well, I will be with you, working closely. That has always been my frustration. When you sometimes get recommendations from the IG, there is lip service but never follow-through, and 1 year turns into 2 years and 3 years.

And, in the case of the work of this agency, these are people's lives at stake. And we need to have a robust regulator that is able

to also help us in the auto industry in this country to move to even more dramatic safety improvements with some of the V2V and the V2I technologies that are coming forward.

So I look forward to working with both of you gentlemen. Thank you so much.

**STATEMENT OF HON. DEAN HELLER,
U.S. SENATOR FROM NEVADA**

Senator HELLER. Senator Peters, thank you.

Mr. Rosekind, it looks like you and I are going to have a one-on-one conversation.

And, Mr. Scovel, it is not because I don't appreciate your work.

And I do appreciate both witnesses' being here. And I don't think I will complete the questioning. It is my understanding that we will have more members back after they get back from the floor. If not, we will go to recess until they do.

But I want to talk a little bit about this gap in consumer protection that others are talking about. Last Saturday, I dropped my daughter's car off at the dealership. I usually do most of the work myself. My father owned an automotive business. And, anyways, it was an independent auto repair service.

And so the question becomes, if you are the second owner, third owner, fourth owner of a particular vehicle. When I went into that dealership, does that dealership have an obligation to tell me if or not there is a recall on that particular make and model?

Mr. ROSEKIND. They do not. That is part of our GROW AMERICA authority request, is to get that kind of independent—if you go to a new car dealer, they should do that for you automatically—

Senator HELLER. OK. But are they obligated to do that? If—

Mr. ROSEKIND. No.

Senator HELLER.—you go to a new car dealership today, are they obligated on a service maintenance contract that you might have with them to tell you if there is a recall?

Mr. ROSEKIND. Yes, they should be doing that for you.

Senator HELLER. But are they obligated and—

Mr. ROSEKIND. Yes.

Senator HELLER.—are they required?

Mr. ROSEKIND. Yes.

Senator HELLER. Because I asked, I did ask, and they gave me the answer, and I have no reason to question it. But I don't know that I have ever been to a dealership that I have dropped a car off that they have told me. And maybe they don't have to unless you have a recall, so I am not putting that into question.

So you are saying, if I took that vehicle instead, say, to a Jiffy Lube, they wouldn't be obligated to tell me if there was a recall?

Mr. ROSEKIND. Correct.

Senator HELLER. Gas station? None of them are responsible; is that correct?

Mr. ROSEKIND. That is correct.

Senator HELLER. OK. OK. How is that going to change?

Mr. ROSEKIND. In GROW AMERICA, we have asked to change that so that everybody, not just the new car manufacturers but all those independents, would also be required to run that check—

Senator HELLER. OK.

Mr. ROSEKIND.—and inform you.

Senator HELLER. OK. So if your tendency is to bring your car into an independent station, what is your alternative, then, to know about a recall? What is the alternative?

Mr. ROSEKIND. What we are recommending is that everybody on a regular basis, even weekly, go to *safercar.gov* and look up your VIN number.

Senator HELLER. All right. So you are an 18-year-old girl; do you think weekly they will go to *safercar.gov*?

Mr. ROSEKIND. No way.

Senator HELLER. No way. I guarantee you my daughter wouldn't. So there is the gap.

How do you protect—and I am a parent, and I know you are a parent too. And I hope you had a good Father's Day. How do you protect that child? As a parent that represents everybody here in this room, how do you protect that child, knowing that they won't go to *safercar.gov*? I will, and I will check for her.

But I guess a better question is, what percentage of America even has ever heard of *safercar.gov*?

Mr. ROSEKIND. That is a good question. I am going to actually find that out, to know about *safercar.gov* and sort of what its visibility is.

But we are with you. I think, especially over the last year, there is so much discussion about recall fatigue and how much information is out there, do people know where to go; it is a huge problem.

So one of the things, actually, that we have on our list of actions already underway is creating a national campaign. NHTSA is the one who runs Click It or Ticket, Drive Sober or Get Pulled Over.

Senator HELLER. It works, by the way.

Mr. ROSEKIND. And we want to use that same effect in this to go after this issue. Because I am with you. It is great to come here and for us to announce *safercar.gov*, but there are too many people, like our kids, that aren't going to do that. We have to figure out how to fill those gaps.

Senator HELLER. Very good.

I am going to stop my questioning here, but thank you very much for your hard work, both of you. And I am going to go down to the floor, but I will turn it over to Senator Daines at this point. Thank you very much.

**STATEMENT OF HON. STEVE DAINES,
U.S. SENATOR FROM MONTANA**

Senator DAINES [presiding]. All right. Thank you, Senator Heller.

I truly am grateful this committee is highlighting the safety challenges of Takata's airbags that have killed eight people. However, there are other recalls that I believe need attention and further underscores NHTSA's lack of efficacy.

Last summer, there was a fire truck, a 2002 International Model 4800, that's front axle, actually the ball and socket, seized, and it caused the shaft to break, seizing up the left front wheel. It was coming down Highway 12, just outside of Helena, Montana. It is between my hometown of Bozeman, and I drive this all the time.

It was during daylight hours. Weather conditions were fine. And this fire truck veered into oncoming traffic, and the volunteer fire chief in the truck was killed in a very violent head-on collision. And there was a family of five, mom and dad and three small children, in a pickup that were also killed.

So when I drive back and forth—in fact, I went by that tragic site just days after it happened. You could see the marks coming in, the tire marks, in a straightaway where this horrible collision occurred. There are six white crosses now standing by the side of the highway where that occurred.

This particular Navistar front driveshaft has been recalled in approximately 500 vehicles, with notifications being mailed this month. Now, this accident occurred on June 19 of last year. So the notifications went out just in the last 10 days, a year after the accident.

And it turns out this exact component was a NHTSA-approved solution to a previous recall that occurred in 2003.

With that as background, Dr. Rosekind, the recent OIG report frequently makes references to the defects, the lack of process, the weak data analysis contained in these reports, which I have looked over. They have made 17 recommendations to ODI to improve early warning reporting data, improve data verification processes, to institute external reviews, and evaluate staff training needs, amongst other recommendations.

Unfortunately, this is not the first time many of these recommendations have been made. The OIG highlighted similar issues and made similar recommendations in 2002, in 2004, in 2011, in 2014, and now here we are in 2015.

So my question for Dr. Rosekind is: Navistar declared a safety recall 2 months after the accident. They moved quickly with an interim solution. But 12 months after the accident, the final recall was being sent and the solution is being executed.

You mentioned in your testimony it is the automakers' responsibility to remedy defective components. My question is, why is it taking a year? And what are the NHTSA scientists and engineers doing to expedite these solutions to mitigate these safety risks to all Americans?

Mr. ROSEKIND. I said this earlier; I don't think you can say it enough. This committee—that story about the tragedy of those lives lost can't be told enough. So we have personalized, added a human face to every one of these tragedies.

What you are highlighting is something we have emphasized. Identifying defects is fine. If they are not remedied, you still have the risk. And that is what is going on here. And part of the challenge that you were citing is basically making sure in a timely manner a correct long-term, permanent solution is in place.

So I have just learned about this, and you can count on me going back to figure out exactly the specifics, even more than what you are telling me now, of what happened here to see what is going on.

Senator DAINES. Yes, I would appreciate that. You know, it is also the face of innocence here, with a fire chief—he was returning back to Three Forks, Montana. It was a nice summer evening, good daylight, in a straightaway. And you see this young couple and their kids in a pickup. And it is a road I drive all the time. And

it was just the innocence of the lives lost, I think, that is so troubling.

But, importantly, could this have been prevented? That is really the question and looking at the process and procedures, the speed at which the remedies are put in place. I would greatly appreciate you taking a look at that.

And, you know, part of that is how many times has NHTSA had more than one recall on the same vehicle component. And I know you are new to the job. I appreciate your leadership. I know you have a long to-do list, but I would appreciate you looking into that and looking at—again, we have had repeat recalls here—so we can prevent these tragedies.

Since I am the only Senator here right now, I am going to keep going with some more questions until I am out of time.

Mr. Scovel, does the Office of Inspector General maintain stats on how often components are recalled more than once?

Mr. SCOVEL. We do not. We did not include that as part of our current audit. We don't maintain that kind of data base to begin with. Our current audit, sir, it, as you know, focused on the pre-investigative phase and not on the recall phase.

Senator DAINES. Yes. And I might suggest it is something to look at, because that is starting to look at the process and the systemic challenges that exist today, again, with the goal here being preventing these tragedies from ever happening again. The pain these families experience never goes away.

NHTSA's Office of Defects Investigation has had over a decade to implement numerous recommendations from your office. What do you see the challenge around why it is taking so long to implement?

Mr. SCOVEL. Senator, some of those recommendations were tailored for the circumstances and the unique programs that we were examining at the time. For instance, the 2002 and 2004 reports that you referenced were examining NHTSA's ability to implement requirements of the newly enacted TREAD Act. In 2011, we were looking at the investigative phase, primarily, of NHTSA's operations. In the current audit, we were looking at the pre-investigative phase.

So I don't want to sound like I am overly parsing this, because we are trying to dissect each and every phase of NHTSA's safety operation, with the idea of being able to commend what is going on right, find out what is going on wrong, and make effective recommendations to improve.

Our recommendations in this case, all concurred in by the agency. Very aggressive timeline for their implementation. We believe they can all be implemented, in fact, with current resources. And I think that is the agency's intent. Most commendable on their part.

What Dr. Rosekind is attempting to do, in our estimation, is to change the organizational culture of NHTSA, at least the defects investigation and resolution part of the operation.

Senator DAINES. Yes. I spent 28 years in business before I took this different day job here on Capitol Hill. And they always said it is what you inspect, not what you expect—

Mr. SCOVEL. Right.

Senator DAINES.—and the importance of clear metrics. And I think there should be one, it looks like, on just perhaps its speed, in terms of how quickly are we going from an accident to action in the field here that is going to correct the defect.

Mr. SCOVEL. Right.

Senator DAINES. It seemed like, when Navistar was in the field within 2 months, why did it take the Federal agency a year?

Mr. SCOVEL. Right.

Senator DAINES. You know, there is a 10-month gap there.

Mr. SCOVEL. Yes. And I think you are talking about safety steps that can be taken by way of corrective action or by way of recall.

Remember, again, if you will, our current audit focused on the pre-investigative phase. We did get to the timing element of that part of NHTSA's effort. Our audit report, not so much our statement for today's hearing, but our audit report released at the end of last week, did discuss at some length the length of time it took for an investigative proposal to be evaluated, assessed, and decided within the Office of Defects Investigation.

That is a key step, of course, because you are never going to get to a possible corrective action or a recall, at least in a position to be influenced by NHTSA, unless you get through this investigation proposal, evaluation, and decision stage.

We found one instance where an investigative proposal languished 5 months. This was very recently, within the last year. Another one had been on the books for more than a year without resolution. There is a circuitous pattern for evaluation and discussion within the Office of Defects Investigation of some of these investigative proposals.

But, again, to pick up on Dr. Rosekind's opening remarks at this point, question assumptions. One of the assumptions that desperately must be questioned is how can we speed up the decision loop so that we can get to the decision to investigate sooner and hopefully, upon investigation, get to a decision on corrective action sooner.

Senator DAINES. Right. And I appreciate, sir, on the balance of ensuring we are thorough and we have properly identified the problem and how to mitigate the risk.

Mr. SCOVEL. Right.

Senator DAINES. It just seems as though we are seeing a pretty big gap there. And I appreciate your efforts, as well, to change the culture, to look at ways we can move faster.

And the Senator and the Chairman have just returned here.

Mr. Chairman, I am going to turn it back to you.

But thank you for your thoughtful comments.

The CHAIRMAN [presiding]. Thank you to the Senator from Montana for presiding here while we get through the vote.

And I think that wraps up the first panel. So thank you, Mr. Rosekind and Mr. Scovel, for your time and for your testimony and for your responses to our questions.

I want to invite the second panel to come up, and we will get going with that.

We want to welcome our second panel of witnesses this morning. Thank you for being here, and for your testimony.

I am going to hand it off for opening statements. We have with us today Mr. Kevin Kennedy, who is Executive Vice President of North America for Takata; Mr. Scott Kunselman, who is the Senior Vice President, Vehicle Safety and Regulatory Compliance, with Chrysler, formerly known as Chrysler Group; and Mr. Rick Schostek, who is the Executive Vice President for Honda North America.

So I am going to ask, if we could, on my left and your right, Mr. Kennedy, if you will please proceed with your testimony, and then we will go from there. And, if you can, confine it as close to 5 minutes as possible, and we will take it from there.

Mr. Kennedy?

**STATEMENT OF KEVIN M. KENNEDY,
EXECUTIVE VICE PRESIDENT OF NORTH AMERICA,
TK HOLDINGS INC. ("TAKATA")**

Mr. KENNEDY. Chairman Thune, Ranking Member Nelson, and distinguished members of the Committee, I am honored to be here on behalf of Takata and our employees throughout the United States.

For Takata, safety is the core of what we do and who we are. We are proud that Takata airbags have saved thousands of lives and prevented serious injuries in hundreds of thousands of accidents.

It is unacceptable to us for even one of our products to fail to perform as intended. We deeply regret each instance in which someone has been injured or killed. We will do everything in our power to address the safety concerns raised by airbag ruptures. Our chairman met twice with Administrator Rosekind and made that commitment personally.

That is why, after months of testing and extensive analysis, we voluntarily agreed with NHTSA to take broad action, in conjunction with the automakers, to respond to your concerns and those of the public. Our agreement with NHTSA contemplates dramatically expanded recalls, including national recalls, going well beyond the scope of the risk suggested by the science and the testing.

Based on more than 57,000 tests of returned inflators in years of research by leading experts from around the world, our best current judgment is that the rupture issues are related to long-term exposure over many years to persistent conditions of high heat and high absolute humidity. And for some inflators, these issues may also involve potential manufacturing and vehicle-specific factors.

Most field ruptures have involved older inflators in the region of high heat and absolute humidity. And all analysis to date indicates that the potential for rupture is limited to an extremely small fraction of inflators.

That is why Takata's filings state that a safety-related defect may arise in some of the inflators. Not all of the inflators covered by the proposed recalls are defective. But even one rupture is too many, and so our remedy program is much broader.

Most of the injuries and all of the fatalities in the U.S. involve driver-side airbag inflators that feature the batwing-shaped propellant wafers. We have agreed to replace all of the batwing driver inflators from the start of production through the end of production in any vehicle registered anywhere in the United States.

These recalls will proceed in stages, and the final stage will include the replacement of batwing inflators previously installed as remedy parts.

We are ceasing production of the batwing inflators altogether.

There have been far fewer field ruptures involving passenger-side airbags. Nevertheless, our agreement with NHTSA also contemplates significantly expanded recalls for passenger airbag inflators.

To support these recalls, our total production of replacement kits for North America will soon reach 1 million per month. We have augmented our capacity to produce replacement kits by including inflators made by other suppliers.

We are investing in innovation and working with our automaker customers to develop a range of new inflator products. At the same time, Takata continues to serve its customers by producing airbag inflators that use phase-stabilized ammonium nitrate propellant, which has distinct safety and efficiency benefits over alternative propellants. We have full confidence in the safety of these products.

We are using various technologies in response to the recalls. The process of qualifying new products takes time, and for certain types of airbags and for certain vehicle models, the best solution today is to use existing technologies in place of the original unit. We agree with NHTSA that it is absolutely the right response to public safety concerns not to wait but to replace an older unit with a new inflator. Doing so provides an important safety benefit.

We have agreed with NHTSA to do ongoing testing to verify the safety and the service life of these remedy parts. If they need to be replaced in the future, we will act before a potential risk of rupture develops. We are also supporting the testing work of the automakers and NHTSA as well as the work of the independent quality assurance panel led by former Secretary of Transportation Sam Skinner. And we will work with the automakers to get the word out to consumers to help maximize recall completion rates.

We will continue to do all we can to ensure uncompromised safety, and we will keep you and the public updated on our progress.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Kennedy follows:]

PREPARED STATEMENT OF KEVIN M. KENNEDY, EXECUTIVE VICE PRESIDENT,
OF NORTH AMERICA, TK HOLDINGS INC. ("TAKATA")

Chairman Thune, Ranking Member Nelson, and distinguished Members of the Committee, I am honored to be here today on behalf of Takata and our employees across the United States and around the world who are dedicated to making products that save lives.

For Takata, safety is more than an obligation; it is the core of who we are and what we do. We are proud that millions of Takata airbags have inflated properly, preventing thousands of deaths and avoiding serious injuries in hundreds of thousands of accidents. We are also proud of our seatbelts that save lives, the spacesuit materials we make to protect our astronauts, and all the other high-quality products Takata manufactures.

It is unacceptable to us and incompatible with our safety mission for even one of our products to fail to perform as intended and to put people at risk. We deeply regret each instance in which a Takata airbag inflator has ruptured, especially in those cases where someone has been injured or killed.

We understand how important it is to the driving public, Congress, the National Highway Traffic Safety Administration ("NHTSA"), and our automaker partners to

address and resolve the safety concerns raised by the airbag ruptures, and we are committed to doing everything in our power to help achieve that goal.

I am therefore pleased to tell you today what Takata is doing to address these issues.

Takata's Agreement with NHTSA

After months of testing and analysis of tens of thousands of returned inflators and extensive discussions and collaboration, we voluntarily agreed with NHTSA to take broad actions, in conjunction with the automakers, to respond to the public safety concerns.

Our agreement with NHTSA contemplates dramatically expanded recalls—including in several instances *nationwide* recalls—encompassing various types of airbag inflators.

The proposed recalls and the related commitments we have made go well beyond the scope of the safety risk suggested by the current science and testing data.

Root Cause Assessment

Takata has engaged world-renowned experts in energetic systems from Germany's Fraunhofer Institute to conduct years of research into the root cause of the inflator ruptures, and we have consulted with various engineering experts in the United States. Takata has also tested and analyzed tens of thousands of returned inflators over the past several months. We have shared the results of that research with NHTSA and the automakers, as well as with this Committee.

Based on this research and our ongoing testing and analysis of returned inflators, Takata has gained a much better understanding of the long-term phenomenon behind the recent ruptures. Our best current judgment is that the potential for rupture is related to long-term exposure, over a period of several years, to persistent conditions of high heat and high absolute humidity. In certain circumstances, these conditions can result in an alteration in the propellant wafers in the inflators that could potentially lead to over-aggressive combustion.

The research of our experts suggests that the potential for this long-term phenomenon to occur was not within the scope of the testing specifications prescribed by automakers or comprehended within the industry's inflator validation practice when the inflators were originally made—an important fact that is not intended to put blame on the automakers or suggest an allocation of responsibility between the automakers and Takata.

The potential for rupturing may also be influenced by other factors, including the possibility of manufacturing issues, like those identified in earlier recalls, and factors specific to particular vehicle models.

Consistent with this research, most of the field ruptures have involved older inflators and most have occurred in regions of the country with high heat and high levels of absolute humidity. All research to date indicates that the potential for ruptures is limited to an extremely small fraction of older inflators.

But even one rupture is too many, and so Takata has agreed to take much broader action.

Driver Airbag Inflators

All of the fatalities—including most recently in Louisiana—and most of the injuries that have occurred in accidents with ruptured airbag inflators in the United States have involved older types of driver-side airbag inflators that feature “batwing-shaped” propellant wafers.

We propose to replace all of these “batwing” driver inflators, from start of production through end of production, in all vehicles registered anywhere in the United States.

To date, there have been a total of 70 reported instances in the U.S. of such “field ruptures” involving the “batwing” driver inflators. Fifty-eight (58) of those ruptures occurred in vehicles that were already subject to previous recalls involving identified issues with the pressing of the propellant wafers in some of these inflators.

To put these incidents in perspective, the 70 reported cases of field ruptures involving the older batwing driver inflators represent approximately 0.009 percent of estimated total deployments of these airbags, or around 9 failures out of every 100,000 deployments.

In the past several months, Takata has conducted ballistic tests of more than 19,000 of these driver inflators, and 16 of them have ruptured during testing, or approximately 0.084 percent of the tested inflators. The inflators selected for this ballistic testing include a disproportionate number of older inflators returned from areas of high absolute humidity, so the percentage of failures seen in the testing results is likely to overstate the overall potential for rupture.

These figures are not meant to minimize the issue. But they do put in perspective why Takata's Defect Information Reports ("DIRs") state that a safety-related defect "may arise" in "some" of these inflators. *It is not the case that all of the inflators covered by the DIRs are "defective."*

Notwithstanding the science and testing data suggesting that the problem is focused on a small number of older inflators that have spent years in regions of high heat and absolute humidity, Takata will support the replacement of *all* the batwing driver inflators through national recalls to be conducted by the affected automakers.

The recommended recalls will proceed in four stages. In order to prioritize the replacement of inflators where the safety need is greatest, the first stage will target older vehicles that have ever been registered in the Southern States, Hawaii, and territories where the levels of both heat and absolute humidity are higher than anywhere else in the country.

But the recalls will not stop there. Subsequent stages of the recalls will target the batwing driver inflators manufactured in later years and vehicles registered in other States outside the areas of high absolute humidity. The recalls will continue until we have replaced all of the batwing driver inflators, from start of production to end of production, and they will include vehicles manufactured by five different automakers—Honda, BMW, Chrysler, Ford, and Mazda. The final stage of the recalls will include the replacement of batwing driver inflators that were previously installed as remedy parts in prior recalls.

Takata has also committed to cease producing the batwing driver inflators.

Passenger Airbag Inflators

There have been far fewer field ruptures involving passenger airbags: 22 total reported instances in the U.S. to date (of which most occurred in vehicles subject to prior recalls), and none has involved a fatality. Nevertheless, our agreement with NHTSA also contemplates significantly expanded recalls covering several types of passenger airbag inflators.

One of these proposed recalls will be *nationwide* in scope. The other two will focus initially on high humidity States, but with the *potential to expand* to a nationwide recall if ordered by NHTSA after consideration of additional testing and consultations with Takata and the affected automakers. Specifically:

For one type of passenger inflator, we have recommended a nationwide recall that will proceed in four stages, according to the year the inflator was made. This recall will encompass all of the inflators of this type from start of production through vehicle model year 2008, and it will involve vehicles manufactured by eight different automakers.

The root cause assessment for the potential issue with these inflators includes the long-term exposure to high heat and absolute humidity discussed above, but it also includes the possibility of a specific manufacturing issue.

This type of passenger inflator has been involved in nine (9) reported field ruptures in the U.S., which represents approximately 0.0045 percent of estimated deployments. While it has ruptured at a higher rate in Takata's ballistic testing (approximately 0.68 percent out of nearly 10,300 tested), all but two of the test ruptures to date have involved inflators returned from high absolute humidity States. The two exceptions were inflators manufactured on the same day, which suggests the possibility of a discrete manufacturing issue.

Takata has committed to continue testing this type of inflator from later model years and to share this test data with NHTSA, in order to monitor whether additional action may be appropriate.

For two other types of passenger inflators, Takata has recommended recalls focused on particular models and model years of vehicles manufactured by certain automakers. The recalls will initially cover the relevant makes, models, and model years of these vehicles that were sold or ever registered in Florida, Georgia, Texas, and the other high absolute humidity States and territories. But there will be the potential for these recalls to expand later to other States and potentially nationwide if NHTSA finds that the results of further testing show the need for an expansion, after consultation with Takata and the affected automakers.

The scope of the recalls recommended for these last two types of passenger inflators tracks the results of Takata's testing and analysis. While there have been 13 reported field ruptures of these inflators, representing approximately 0.0055 percent of estimated deployments, *all have involved vehicles of the specific makes and models covered by our DIRs and all were in vehicles that had spent years in the areas of high absolute humidity.*

In addition, Takata's ballistic testing of these two inflator types has shown elevated rates of test ruptures for these inflators when returned from the areas of high absolute humidity and from the particular models covered in the DIRs, *and no test*

ruptures for the same types of inflators in other circumstances. These results show the clear importance of long-term exposure to an environment of high heat and absolute humidity. But they also indicate that something about the particular makes and models of these cars appears to be correlated with the potential for these inflators to rupture.

Takata has committed to NHTSA that we will continue to test these types of passenger inflators from other vehicles and from other States to help determine whether the scope of these recalls should be expanded.

Continued Use of Phase-Stabilized Ammonium Nitrate, Including in Remedy Parts

In serving the demands of its customers, Takata continues to use phase-stabilized ammonium nitrate ("PSAN") in the propellant formulations for many of its airbag inflators. PSAN is safe for use in airbag inflators, and Takata has full confidence in the safety of our current products that use PSAN propellant, including the replacement parts we are making in response to the recalls. The chemistry of phase stabilizing ammonium nitrate is well established and well understood, and our research into the root cause of the inflator ruptures has not shown that they are associated with any measurable loss of phase stabilization of the propellant, even after many years in the field.

PSAN has distinct advantages over other chemicals used in alternative inflator propellants. It is non-toxic; it is stable and safe to handle during the manufacturing process; it produces far less smoke and particulate matter when the airbag is deployed, so that it is much less irritating to vehicle occupants with respiratory sensitivities; and PSAN-based propellants are significantly more efficient than other propellants (converting a higher percentage of the solid propellant into gas), so that PSAN inflators can be smaller and lighter, which has helped automakers meet government mandates to produce more fuel-efficient vehicles.

At the present time, more than 50 percent of the airbag replacement kits Takata is providing in response to the recalls contain inflators made by other suppliers that do not use ammonium nitrate propellant. We expect that number to reach 70 percent by the end of this year. The use of other suppliers' inflators significantly augments Takata's capacity for production of replacement inflators and also responds to some automakers' desire to use alternative technologies in implementing their recalls.

Through investments in innovation, Takata has developed and continues to develop a range of new inflator products for use in both driver airbags and passenger airbags, including updated PSAN-based inflators with desiccant and inflators that do not use ammonium nitrate in the propellant. Takata is working intensively with vehicle manufacturers to validate new inflator products, including for use as remedy parts. Over time, all of our inflators will consist of new products.

The process of developing and qualifying inflators that are re-engineered, including re-engineering inflators to add desiccant, takes time. Among other things, this process involves testing to establish that the airbag modules equipped with re-engineered inflators will adequately protect vehicle occupants in a crash. The completion of that process requires several months.

For certain types of inflators in certain vehicle models, there is currently no available alternative to the use of a PSAN-based inflator as the remedy part. In these cases, we have agreed with NHTSA that the right solution for public safety is not to wait for the completion of a process of engineering changes and approvals, but is to take action now to replace the original inflators that are subject to the recalls with new PSAN inflators.

The replacement of the original inflator with a newly made PSAN-based inflator is absolutely the right response to the public safety concerns raised by the inflator ruptures, and doing so provides an important safety benefit. Because a clear factor in these ruptures is the age of the inflator and long-term exposure to particular environmental conditions over many years, the replacement of older inflators with newly manufactured units, even ones without desiccant, will provide an ample margin of safety over the older units being replaced, particularly those that have been exposed for many years to conditions of high heat and absolute humidity.

In replacing the batwing inflators on the driver side, Takata's remedy parts include, in addition to inflators from other suppliers, a newer type of PSAN driver inflator that has not shown a potential risk for rupture after exposure to high heat and absolute humidity. On the passenger side, Takata has made improvements to address specific manufacturing issues and other improvements in the production of new inflators, and these improvements also contribute to the added safety of the newly manufactured PSAN replacement inflators.

As we pledged in writing in the Consent Order and the DIRs we filed, Takata has agreed with NHTSA to conduct ongoing testing of PSAN-based inflators used

as remedy parts, in order to determine the appropriate service life of the parts and whether further action may be needed to replace the remedy parts in the future. You can be assured that if later replacement of these remedy parts is determined to be appropriate, Takata will take the necessary action, in conjunction with the affected automakers, to complete such replacements well before any potential risk of rupture develops.

In the meantime, we strongly believe, and NHTSA agrees, that the goal of safety is best served through the expanded recall actions we have recommended.

Implementing the Recalls

The Consent Order that we have agreed to with NHTSA makes clear that NHTSA will play a central role in overseeing the organization and implementation of these proposed recalls. NHTSA has now issued notices in the Federal Register to receive comments on how best to proceed in this regard. We anticipate that NHTSA will convene meetings involving Takata and all of the affected automakers to organize and coordinate the staging of the recalls, so as to ensure that the remedy is appropriately prioritized to those vehicles where the public safety need is most immediate.

The Consent Order also requires Takata, after consulting with the automakers, to prepare a plan for NHTSA's approval that outlines the steps Takata will take, both on its own and in conjunction with the affected automakers, to maximize recall completion rates and, as noted, to carry out further testing of inflators to help determine the safety and appropriate service life of the remedy inflators.

Because the recalls will only succeed if consumers bring their cars in for repair, we have committed to working with NHTSA and our customers to help inform consumers about the risks associated with some inflators, and to urge them to respond in a timely fashion to the recalls that are being implemented.

To this end, we are in the process of developing a proactive advertising campaign for NHTSA's approval that would be designed for implementation in conjunction with the automakers, in order to reach greater numbers of vehicle owners and help to ensure that the recall completion rates will be as high as possible.

Additional Measures

Let me say a bit more about Takata's extensive testing program and our ramped up production of replacement kits to address the needs of these recalls.

Since the last hearing before this Committee, we have continued to advance our investigation into the root cause factors associated with the inflator ruptures. We have performed ballistic tests on more than 50,000 inflators since September of last year, and that testing and analysis is ongoing. We also have performed live dissections, propellant analysis for moisture, chemical analysis, leak testing, and CT scanning.

We continue fully to support efforts by David Kelly's Independent Testing Consortium and the automakers to do additional testing and analysis. And we welcome NHTSA's decision to do its own testing, as well as to coordinate with us on our testing.

In addition to supporting these ongoing testing efforts, we are continuing to support the work of the independent Quality Assurance Panel, led by former Secretary of Transportation Samuel K. Skinner, to ensure that best practices are in place for the production of safe inflators. We are committed to adopting the recommendations his panel puts forth, and sharing the findings of the report with you and with the public.

We also have continued to ramp up substantially our production of replacement kits to fulfill automaker orders. In December, we were producing approximately 350,000 kits per month. In May, we produced approximately 700,000 units. By September, we expect to be producing 1 million per month. That is capacity primarily directed to production for the U.S. market. And, as mentioned, we continue to work with other inflator suppliers to increase further the production of replacement inflators to meet anticipated demand.

Conclusion

In closing, I want to emphasize that we have confidence in the inflators we are producing today. We have confidence in the integrity of our engineering and our current manufacturing processes. We believe that, properly manufactured and installed, these inflators will work as designed to save lives. Of course, we know that the proof is in the data, and that is why we have enlisted the assistance of the Quality Assurance Panel and why we have agreed to conduct ongoing testing, including of our remedy parts. We will continue to do everything we can to ensure uncompromised safety for our customers and the success of the recall efforts, and we will keep Congress, NHTSA, and the public updated on our progress.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Mr. Kennedy.
Mr. Kunselman?

**STATEMENT OF SCOTT KUNSELMAN,
SENIOR VICE PRESIDENT AND HEAD OF VEHICLE
SAFETY AND REGULATORY COMPLIANCE, FCA US LLC**

Mr. KUNSELMAN. Thank you.

Chairman Thune, Ranking Member Nelson, members of the Committee, thank you for the opportunity to appear today and provide an update on this important matter.

My name is Scott Kunselman, and I am the senior vice president and head of vehicle safety and regulatory compliance at FCA US, LLC, formerly Chrysler. I lead an organization with a mission of safeguarding our customers, a mission we embrace with passion.

As you know, FCA's involvement with Takata airbags is extensive, proactive, and ongoing.

Today's automobiles are among the most sophisticated and complex consumer goods on the market. Auto manufacturers are more committed than ever to developing advanced safety technologies to reduce fatalities and injuries resulting from motor vehicle crashes. On a daily basis, we work to design, engineer, and manufacture vehicles to withstand a myriad of operating conditions.

Promoting and ensuring vehicle safety is a responsibility shared by automakers, suppliers, government, and even consumers. FCA looks forward to continuing this collective engagement with Takata and NHTSA to help address this critical situation related to airbag inflators.

FCA has remained actively engaged with Takata and NHTSA since I spoke with this committee last November. Much has transpired since that time. Through multiple recall campaign expansions and based on information from both Takata and actions by NHTSA, FCA is now in the process of recalling 4.8 million inflators in approximately 4.5 million vehicles across the United States.

We are also aggressively taking actions on multiple fronts to assist in determining the root cause of inflator ruptures, which remains unknown at this time. FCA is an active participant in the Independent Testing Coalition, a group consisting of all 11 affected automakers formed in December 2014 and, again, trying to independently determine the root cause of inflator ruptures. In addition, FCA continues to return recalled inflators to Takata to further their research and understanding.

But despite the lack of root cause determination to date, FCA's mission to identify and implement solutions that will improve the safety of our customers has not been delayed. Today, I am pleased to share with the Committee that as of June 8, 2015, FCA is replacing all driver-side inflators involved in the recall with an alternate and permanent design provided through TRW. Customers who receive the TRW inflator replacement will require no further action on their vehicles.

The Takata inflators that are no longer needed due to the supply from TRW are being quarantined and returned from our dealers to Takata. All of the approximately 50,000 customers who previously

received a Takata inflator will be notified to return for the TRW update, as well.

In addition to these driver-side efforts, FCA has been working with Takata to develop improved versions of the passenger inflator designs. These new versions will contain an improved igniter material as well as a desiccant that will protect the propellant from moisture exposure. These designs will complete validation testing in August, and FCA expects to begin installing those in November of this year.

To date, FCA continues to be aware of just a single incident of a high-pressure deployment involving a driver-side airbag causing an injury in one of our vehicles. Our actions demonstrate the abundance of caution we are employing to protect our customers.

In closing, I would like to reiterate our belief that promoting and ensuring vehicle safety is a responsibility shared by automakers, suppliers, government, and consumers, and FCA will continue to collaborate with Takata, NHTSA, and others to aggressively address this matter.

I once again extend my thanks to the Committee for discussing this important issue, and I would be pleased to answer any questions.

[The prepared statement of Mr. Kunselman follows:]

PREPARED STATEMENT OF SCOTT G. KUNSELMAN, SR. VICE PRESIDENT AND HEAD OF VEHICLE SAFETY AND REGULATORY COMPLIANCE, FCA US LLC

Chairman Thune, Ranking Member Nelson, Members of the Committee, thank you for the opportunity to appear today and provide an update on this important matter.

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Today's automobiles are among the most sophisticated and complex consumer goods on the market. Auto manufacturers are more committed than ever to developing advanced safety technologies to reduce fatalities and injuries resulting from motor vehicle crashes. On a daily basis, we work to design, engineer, and manufacture vehicles to withstand a myriad of operating conditions.

Promoting and ensuring vehicle safety is a responsibility shared by auto makers, suppliers, government and consumers. FCA looks forward to continuing this collective engagement with Takata and NHTSA to help address this critical situation relating to airbag inflators.

FCA has remained actively engaged with Takata and NHTSA since I spoke with this Committee last November. Much has transpired since that time. Through multiple recall campaign expansions, based on information from Takata and actions by NHTSA, FCA is now in the process of recalling 4.8 million inflators in 4.5 million vehicles in the United States.

We are also aggressively taking actions on multiple fronts to assist in determining the root cause of inflator ruptures, which remains unknown at this time. FCA is an active participant in the Independent Testing Coalition (ITC), a group consisting of the 11 affected automakers formed in December 2014 trying to independently determine the root cause of the inflator ruptures. In addition, FCA continues to return recalled inflators to Takata to further their research and understanding.

Despite the lack of a root cause determination to date, FCA's mission to identify and implement solutions that will improve the safety of our customers has not been delayed. Today, I am pleased to share with the Committee that as of June 8, 2015, FCA is replacing all driver side inflators involved in the recall with an alternate and permanent design provided by TRW. Customers who receive the TRW inflator replacement will require no further action on their vehicles. Takata inflators that are no longer needed due to the supply from TRW are being quarantined and returned from our dealers to Takata. All of the approximately 50,000 customers who

previously received a Takata inflator will be notified to return for the TRW update, as well.

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To date, FCA continues to be aware of a single incident of a high-pressure deployment involving a driver's-side air bag that caused a personal injury in one of our vehicles. Our actions demonstrate the abundance of caution we are employing to protect our customers.

In closing, I would like to reiterate our belief that promoting and ensuring vehicle safety is a responsibility shared by auto makers, suppliers, government, and consumers. FCA will continue to work collaboratively with Takata, NHTSA and others to aggressively address this matter.

I once again extend my thanks to the Committee for discussing this important issue and I would be pleased to answer any questions.

The CHAIRMAN. Thank you, Mr. Kunselman.
Mr. Schostek?

**STATEMENT OF RICK SCHOSTEK, EXECUTIVE VICE
PRESIDENT, HONDA NORTH AMERICA**

Mr. SCHOSTEK. Thank you, Mr. Chairman, Ranking Member Nelson, and members of the Committee. I appreciate the opportunity to update the Committee on our efforts since my last appearance before this committee.

Let me begin by acknowledging that in the past 2 weeks we have confirmed that two more customers lost their lives—one in September 2014 and the other in April of this year—as a result of Takata airbag inflator ruptures that have occurred in our older-model vehicles.

This is heartbreaking and a painful reminder to us of the reason we continue to urgently accelerate our actions to repair the affected vehicles. But, of course, the real pain is experienced by the families of the victims. We sincerely apologize to them and extend our deepest sympathies.

We are working very hard to solve this problem. Over and above the required mailed notification to affected customers, we have pursued new and creative ideas to encourage our customers to check their vehicle identification number in order to increase the rate of response to the recalls. We have enhanced our general recalls website and created a new micro site dedicated to this issue to keep our customers informed and to make it easy for them to check their vehicles for open recalls.

Honda also voluntarily initiated a bilingual regional advertising program in March to implore customers to repair their vehicles. This campaign of radio commercials and full-page newspaper ads, represented here to my left, was designed to grab the attention of customers in the nine high temperature and absolute humidity states and two U.S. territories. We also are using social media channels in a targeted way, including via Facebook, with good success.

And let me add, Mr. Chairman, that whenever we issue a press release or statement on this matter, we specifically request that the news media help us spread the word by directing customers to our recall websites so they can look up their VIN and get their ve-

hicle repaired. And we have appreciated the news media's assistance with this effort.

To accelerate the safety actions and increase the supply of airbag inflators, Honda proactively began searching for alternate supply solutions to more quickly facilitate the repairs of these older-model vehicles. And that effort led to agreements with Daicel, Autoliv, and TRW to provide us with replacement parts, in addition to Takata.

As a result of this proactive effort by Honda and the actions taken by our dealers, we are averaging more than 50,000 repairs per week. We have also asked our dealers to expand their service hours and never turn away a customer with an affected vehicle.

And we require dealers to check the VIN for every vehicle that comes into their dealership. To support this policy, in February we initiated a new system that alerts dealers whenever their staff fails to check a VIN of a car brought in for service to see if it has an open recall.

We have also reinforced with our dealers Honda's firm policy to provide affected customers with a loaner or rental car free of charge while their vehicle is being repaired or if they are waiting for a replacement part to be delivered. All dealers are authorized to make a vehicle available to a customer without prior approval from Honda.

We have also been searching salvage yards nationwide to find and secure recalled inflators. We have already identified many thousands of inflators from salvage yards that now never will be installed in another vehicle.

In some markets, we have enlisted a special investigative firm as part of our effort to contact hard-to-reach owners of older model vehicles affected by the Takata airbag inflator recalls.

Mr. Chairman, for many reasons, it is particularly difficult to locate the owners of older vehicles and get them repaired. When I testified last November, I suggested that we find a way to tie the annual state vehicle registration process to a requirement that safety defects be addressed before completion of vehicle registration.

Subsequently, Ms. Stephanie Erdman, who was injured by a Takata inflator rupture and who also appeared before this committee last fall, joined me in writing an op-ed in *Automotive News* in support of the idea of such a registration requirement.

We continue to believe there is substantial promise with this approach, and we want to thank Senators Markey and Blumenthal for introducing S. 617. I recognize there are some issues about the concept that require further discussion, but I am convinced that this is the single most significant step we can take.

Again, I very much appreciate the opportunity to appear before the Committee today, and I would be happy to address your questions. Thank you.

[The prepared statement of Mr. Schostek follows:]

PREPARED STATEMENT OF RICK SCHOSTEK, EXECUTIVE VICE PRESIDENT,
HONDA NORTH AMERICA

Thank you, Mr. Chairman, Ranking Member Nelson and members of the Committee. My name is Rick Schostek, Executive Vice President of Honda North America, based in Marysville, Ohio.

I appreciate the opportunity to update the Committee regarding the efforts made by Honda with respect to the recall of Takata airbag inflators since my last appearance before this committee over seven months ago.

Let me begin by acknowledging that in the past two weeks we have confirmed that two more customers lost their lives—one in September 2014 and the other in April of this year—as a result of Takata airbag inflator ruptures that have occurred in our older model vehicles. This is heartbreaking, and a painful reminder to us of the reason we continue to urgently accelerate our actions to repair the affected vehicles. But of course the real pain is experienced by the families of the victims. We sincerely apologize to them, and extend our deepest and heartfelt sympathies.

We are working very hard to solve this problem. During the past few months, we have been accelerating our efforts to repair vehicles at a level unprecedented in the history of our company.

This is a reflection of the deep commitment our company has undertaken to notify our customers and to increase the supply of replacement inflators available for repairs.

Over and above the required mailed notification to affected customers, we have pursued new and creative ideas and methods to encourage our customers to check their vehicle identification number and recall status in order to increase the rate of response to recall notifications.

We have enhanced our general recalls website and created a new microsite dedicated to this issue to keep our customers informed and to make it easy for them to check their vehicles for open recalls. And our Customer Relations department is set up to receive calls from customers seven days a week.

Honda also voluntarily initiated a bi-lingual regional advertising campaign in March to implore customers to repair their vehicles. This campaign of radio commercials and full-page newspaper ads, represented behind me, was designed to grab the attention of customers in the nine states and two U.S. territories that experience the most consistently high temperatures and absolute humidity and to encourage them to immediately check for open recalls and safety improvement campaigns.

We also are using social media channels in a targeted way—including via Facebook, with good success. Let me add, Mr. Chairman, that whenever we issue a news release or statement on this matter, we specifically request that the news media help us spread the word by directing customers to our recall websites, so they can look up their VIN and get their vehicle repaired. We have appreciated the news media's assistance with this effort.

To accelerate the safety actions and increase the supply of airbag inflators, Honda proactively began searching for alternative supply solutions to more quickly facilitate repairs of our older model vehicles. This effort led to agreements with Daicel, Autoliv and TRW Automotive to provide us with replacement parts in addition to Takata.

As a result of this proactive effort by Honda and the actions taken by our dealers, in recent weeks, we are averaging more than 50,000 repairs per week. We have asked our dealers to expand service hours and to never turn away a customer with an affected vehicle. And we require dealers to check the VIN for every vehicle that comes into their dealership. To support this policy, in February we initiated a new system that alerts dealers whenever their staff fails to check the VIN of a car brought in for service to see if it has an open recall.

We also have reinforced with our dealers Honda's firm policy to provide affected customers with a loaner or rental car free of charge while their vehicle is being repaired or if they are waiting for a replacement part to be delivered. All dealers are authorized to make a vehicle available to a customer without prior approval from Honda. We have been actively monitoring the availability of loaner and rental cars and engaging with our dealers to ensure that they offer such vehicles so we can meet our customers' needs.

Further, to prevent the possibility that any Takata airbag inflators under recall can be used as a replacement part, we've been searching salvage yards nationwide to find and secure recalled inflators. We have already identified many thousands of inflators from salvage yards that now never will be installed in another vehicle.

In some markets, we have enlisted a special investigative firm as part of our effort to contact hard-to-reach owners of older model vehicles affected by the Takata airbag inflator recalls.

Mr. Chairman, for many reasons, it is particularly difficult to locate the owners of older vehicles and get the vehicles repaired. When I testified last November, I suggested that we find a way to tie the annual state vehicle registration process to a requirement that safety defects be addressed before completion of vehicle registration. Subsequently, Ms. Stephanie Erdman, who was injured by a Takata inflator rupture and who also appeared before this committee last fall, joined me in writing an Op Ed in *Automotive News* in support of the idea of such a registration requirement.

We continue to believe that there is substantial promise with this approach. I want to thank Senators Markey and Blumenthal for introducing S.617, the Repairing Every Car to Avoid Lost Lives Act—the “RECALL” Act. I recognize that there are a number of issues about this concept that require further discussion. But I am convinced that this is the single most significant step we can take to achieve what we all want to accomplish, and that is a 100 percent repair rate. Our company stands ready to work with the Congress to help find a path forward.

Even as we look at new, long-term solutions to improve recall completions, we remain focused on the needs of our customers today. And we are fully mobilized on the effort to complete the recalls and safety improvement campaigns associated with Takata airbag inflators.

Again, I very much appreciate the opportunity to appear before the Committee today, and I will be happy to address your questions. Thank you.

The CHAIRMAN. Thank you, Mr. Schostek.

Mr. Kennedy, NHTSA has urged Takata to get replacement inflators into vehicles with potentially defective airbags as quickly as possible even if the root cause has not yet been identified and those replacements may have to be replaced again some years down the road.

We are all concerned this very serious safety issue has persisted for way too long. And eight people have died; numerous others have received serious injuries. Takata has been looking at this problem for several years. We need to know why this happened and make sure it doesn't happen again.

So tell me what Takata is doing to find the root cause.

Mr. KENNEDY. Well, Senator, we have been working with a number of avenues to get to root cause. As you have mentioned, we have been working on this for a number of years. We have been working with the Fraunhofer Institute from Germany, who is the leading expert in the world on propellants and pressure vessel designs.

We have learned much, especially in the last 6 to 8 months, as to what the root cause of this is. We understand the mechanism. We understand a number of the factors that cause the issues. But, as you said, we do not have a definitive root cause that we can turn on and off.

But, in spite of that, we have gone forward with NHTSA and the automakers to replace parts because this is in the best interests of the public safety.

The CHAIRMAN. Well, without a root cause, though, we don't know whether or not the new replacement inflators have the same defect. So why is it a good idea to put new inflators into cars that might have the same defect?

Mr. KENNEDY. Yes. Well, let me talk about that a little bit.

Many of the replacement parts are alternative designs; they are not the same design that was originally used. As I mentioned, particularly on the driver side, the batwing inflators were the ones that have caused all of the fatalities in the field as well as most of the serious injuries. And we are not replacing with batwings. We

will go out and get every batwing that was ever made, including all of the remedy parts.

And we are also, as Mr. Kunselman and Mr. Schostek have talked about, we are using alternative inflators from many of our competitors in order to speed replacement parts out into the field.

And then we are continuing to work to improve the current inflators, as Mr. Kunselman mentioned as well, in order to make them more robust. And part of the consent order requires us and NHTSA and the automakers to continue to get the parts back and evaluate the remedy parts to make sure that they are safe.

The CHAIRMAN. Will these replacement bags, though—are they going to be safer than the original equipment, than the original airbags?

Mr. KENNEDY. What we do know is that it takes a considerably long time for this condition to manifest itself. Previously, Administrator Rosekind had said 7 to 12 years. So we know that there is a large increase in public safety and in the margin of safety by just putting a brand-new inflator in.

And we do know that on some of the passenger-side ones, there were some manufacturing defects that we have been able to uncover with all the testing that we have done in the last 6 months. So we feel very confident in the inflators that we are making today.

The CHAIRMAN. Mr. Kunselman, Takata has stated, as you heard, that its replacement inflators are safe in the interim but require replacement at a later date. NHTSA also endorsed this approach.

You have stated that Fiat Chrysler will be replacing all recalled driver-side inflators with an alternative design by manufacturer TRW and described TRW's design as permanent, that customers who receive the TRW replacement will not need to come back in for another replacement.

Given that we still don't know the root cause for this defect, why are you so confident that the TRW inflators will not have to be replaced in the near future?

Mr. KUNSELMAN. In this case, the TRW inflator that we are replacing—with Takata's help, mind you—it has a track record, and we are not aware of any issues with its previous use in the field.

We were fortunate to have an available inflator with the right characteristics to utilize in our vehicle program that has a track record, and I am unaware of issues with it in the past. That explains the confidence.

The CHAIRMAN. Yes.

Mr. Kunselman, Mr. Schostek, for our automakers, I am sure you both recall because we had her in here, Lieutenant Stephanie Erdman, who was seriously injured by shrapnel from a defective Takata airbag, testified at our November hearing that she took her vehicle to a Honda dealership three times without the dealer informing her that her car was subject to an open recall. Now, that is pretty incredible. Three times.

And so the question is, you know, what steps have you all taken since then to work with your dealers? And I know you described some of this, Mr. Schostek, in your testimony. But how are you going to give us an insurance that these important safety recalls have been addressed and assure that recall information and vehicle

safety issues are going to be shared with customers when they get their cars in and have them serviced?

Mr. SCHOSTEK. Thank you, Mr. Chairman. It is an important question, and it is on our minds constantly, as well. We have more than 1,200 Honda and Acura dealers in the United States, and we are working hard with them.

We have done a number of things since we last were here in November. As I mentioned, we have initiated a new report that flags if a dealer neglected to check a VIN when a customer came in.

Moreover, we have had face-to-face meetings with our dealers. We have zone managers and district managers, and they have personally visited every dealer and talked to each dealer about the importance of checking for open recalls. We have periodic regional meetings of our dealer principals. We have in the last several months reinforced again that obligation.

Mr. Chairman, there is sometimes turnover at a dealership. We need to continue to make sure that education is well understood, make sure that the dealer principals understand, the owners of the dealerships understand that this is our expectation of them and that we are going to check every one of these VINs.

So we have taken multiple efforts already, and we will do more to continue to remind them of their obligation.

The CHAIRMAN. Mr. Kunselman, do you have anything to add to that?

Mr. KUNSELMAN. Yes, I would reiterate, many of the same points that Mr. Schostek highlighted we are doing, as well, with respect to informing the dealer of their responsibility.

I would add to it something that he also mentioned earlier. We have made sure that the technology is also there to make this automatic step in the process. When a vehicle rolls into the service bay at a dealer, in most cases in an automated fashion the vehicle uploads the information to the service provider's screen, and the service provider is immediately flagged of open recalls, and the service provider goes out of their way to schedule that activity on that visit or on an immediately subsequent visit.

So, in addition to the reminders of responsibility, the urgency, we are making sure that the technology exists to make this an automatic step in the process, so it is not left to human hands, but the machine can point this out to their service provider.

The CHAIRMAN. Yes. Thank you.

Senator Nelson?

Senator NELSON. Would you all hold up that photograph, please?

This is a picture of a massive explosion in 2006 in your Mexico plant. It was so massive that it blew out windows a kilometer away.

This plant used the ammonium nitrate propellants to make air-bag inflators; is that correct?

Mr. KENNEDY. Yes, sir, that is correct.

Senator NELSON. And, in your written response to our committee's November letter, the company said that the explosion was caused by, quote, "improper storage of propellant scrap." Is that right?

Mr. KENNEDY. Yes, sir. Yes, Senator, that is correct.

Senator NELSON. Is that the type of concern that your safety audits were intended to identify?

Mr. KENNEDY. One of them, yes, sir.

Senator NELSON. Then why would Takata decide to halt these audits for financial reasons?

Mr. KENNEDY. Yes, I believe you are referring to the report that was issued yesterday by the staff of the Committee. I think that misrepresents exactly what happened, sir, and, if you will allow me, I will explain that.

Senator NELSON. Certainly.

Mr. KENNEDY. What that was referring to—first of all, there are a number of safety and quality audits that are done on the products. The audits that were referred to in that e-mail were not the safety and the quality audits on the products, first of all. Because I think that was implied or inferred from the report.

Second, the only thing that was suspended was the participation of people from other regions of the world. We held the local safety audits. We held the local quality audits. They were all done on schedule, and they were completed. The only thing that e-mail was referring to was the participants from other parts of the world were not to be included in the audit.

Senator NELSON. All right. But I am trying to get at this. Hasn't Takata blamed the defective airbags on how your plants handled the ammonium nitrate propellants and how your plants assembled the inflators?

Mr. KENNEDY. There were some of the earlier recalls that I believe were announced in 2008–2009 where we identified manufacturing defects that included the pressing of propellant disc as well as exposure to humidity during the process.

Senator NELSON. So the answer is yes. So if you are saying that these pyrotechnic handling problems had to do with the safety of the inflators, wouldn't you have had a clue in 2006 when that happened?

Mr. KENNEDY. Absolutely. Absolutely, we did. We had issues at the plant where material, scrap material, was mixed, and that is what led to that particular incident.

Fortunately, no one was injured in that incident, other than I think someone sprained their wrist walking out the door. So we completely cleared the plant. No one was injured, no one was hurt in that particular thing.

And we revised a number of our safety and handling procedures following that. They were completely redone after that.

Senator NELSON. And yet, knowing that something is going on here, it is 9 years later—

Mr. KENNEDY. Yes, sir.

Senator NELSON.—and now we see.

Now, explain this batwing design and why you think that is the culprit.

Mr. KENNEDY. Well, the batwing design is just—it is a name the engineers came up with to describe the shape of the propellant wafer that is inside the driver airbag inflator. There is really nothing about it other than that.

Senator NELSON. The propellant that caused that explosion?

Mr. KENNEDY. It was one of the—it was the mixing of different types of propellant and energetic materials that led to that particular incident.

Senator NELSON. Did it occur to you back in 2006 with this that humidity might have had something to do with it?

Mr. KENNEDY. I haven't reviewed the report, and I don't remember it from that long ago, Senator. But I don't recall the humidity was an issue in that particular incident at the facility.

Senator NELSON. What about—

Mr. KENNEDY. I can double-check that to be sure and get back with you, but that is my recollection.

Senator NELSON. Well, what about all these deaths in the South? Do you think humidity is one of the contributing factors?

Mr. KENNEDY. Yes, Senator, we do. The report from the Fraunhofer Institute has concluded that they think it is a multi-factor combination of age, exposure to high absolute humidity, and high temperature.

Senator NELSON. Then how do you explain the southern California, where there is a mild temperature, death?

Mr. KENNEDY. Well, that is why we are continuing to look into the issue. We haven't dropped it. We have experts from Penn State. We have experts from Georgia Tech. We have the Fraunhofer Institute. We are working with a vast array of experts in this field, and we are continuing to investigate to try to run it to ground so we know exactly what happened.

But that is why we decided to act, with NHTSA and the auto-makers, to go get these parts now. It is the right thing to do for the public's safety.

Senator NELSON. Would you want your daughter to drive a vehicle with a Takata airbag that you had replaced the batwing ammonium nitrate?

Mr. KENNEDY. The car that my wife and children drive in every day uses one of these ammonium nitrate inflators.

Senator NELSON. Did you replace the batwing?

Mr. KENNEDY. It was not—it was on the passenger side.

Senator NELSON. Is that the only place that it is replaced, on the passenger side?

Mr. KENNEDY. Batwings are just a driver-side design. It is not used on the passenger side at all. It is purely a driver-side issue.

Senator NELSON. So you are attributing the batwing design to part of the defect.

Mr. KENNEDY. That is what the data and the testing has shown. All of the fatalities and most of the serious injuries have involved the batwing driver inflators. That is why we have agreed to go get 100 percent of those back from the field.

Senator NELSON. Then I didn't understand your answer, that you suddenly jumped to the passenger side.

Mr. KENNEDY. Well, you asked me if I would—maybe I misinterpreted your question, Senator. I am sorry.

Senator NELSON. If your daughter were driving the automobile that you had replaced the batwing design in the driver's seat—

Mr. KENNEDY. I would have no issue with that at all, Senator. None.

Senator NELSON. Well, I will tell you, there are a lot of consumers that would. How do you think that the consumers can feel that this thing is fixed?

Mr. KENNEDY. Well, that was why—again, sticking with the bathing on the driver side—that is why we have agreed to go replace every one of these, to go get the parts and get them out of the field. And a lot of people have talked today about the efforts to do that.

And that is really one area where we, as an industry and a government, need to concentrate, is to get the parts out of the field once there has been a defect analyzed and declared.

Senator NELSON. Mr. Kunselman, apparently you don't feel confident enough that it is fixed. You have gone to a new airbag manufacturer. Tell us about that.

Mr. KUNSELMAN. Yes, thank you.

Again, as I stated, we were fortuitous in the ability to identify an alternative that would perform appropriately in our vehicle, given the demands of the fill rate and size of the airbag. And so we did quickly move here to gain confidence that this would be a permanent solution, even in the absence of root cause, not understanding what ultimately might happen. This is why we took this path.

Senator NELSON. May I regurgitate your words, and you tell me if this is what you just said?

We wanted a clear path to greater confidence, so we went with another manufacturer.

Mr. KUNSELMAN. That is correct.

Senator NELSON [presiding]. OK.

Thank you, Mr. Chairman.

Senator Blumenthal?

Senator BLUMENTHAL. Thank you, Senator Nelson.

Thank you for being here today, all of you.

Mr. Kennedy, you have been with Takata for only about 3 years, correct?

Mr. KENNEDY. No, sir. I have been with Takata just over 10 years.

Senator BLUMENTHAL. Ten years.

Mr. KENNEDY. Yes, sir.

Senator BLUMENTHAL. Sorry. So you were with the company back in 2005.

Mr. KENNEDY. Yes. I started in December 2004. Correct.

Senator BLUMENTHAL. I would like you to commit, as Executive Vice President of this company, that Takata will establish a compensation fund, similar to the one that GM established.

Mr. KENNEDY. Yes, I haven't been involved in that, of the recall, at this point, sir, so I can't do that. I will certainly take that back to our Chairman and to our team and discuss that and get back with you on that. But I am not in a position today to commit to that, sir.

Senator BLUMENTHAL. Don't you run the company's North American operation?

Mr. KENNEDY. I have responsibility for certain aspects in North America. I am responsible for our customer activity, including sales and marketing; engineering, application engineering; program management; some of our core engineering, not related to inflators

but core engineering on other projects; as well as some of our IT and communications.

Senator BLUMENTHAL. Well, I am just a country lawyer from Connecticut, but it sounds like you run this company in North America.

Mr. KENNEDY. I report to an executive committee and a president of North America. So I do not run all aspects of the North American operation, sir.

Senator BLUMENTHAL. How soon can you come back with an answer about a compensation fund?

Mr. KENNEDY. I would think in the next—would 4 weeks be sufficient, sir?

Senator BLUMENTHAL. How about the next 2 weeks?

Mr. KENNEDY. Two weeks? Yes, sir.

Senator BLUMENTHAL. My view is that Takata is every bit as responsible for the 8 deaths found so far as GM is for the 117 deaths and counting.

And the number eight is still, as of today—the compensation fund that you should establish, in my opinion, is likely to disclose additional deaths that resulted from this defective product. Would you agree?

Mr. KENNEDY. I think it is—I would agree that it is probably likely, as many of these parts are still in the field.

Senator BLUMENTHAL. In fact, let me show you one of those parts. This is a Takata inflator that caused the explosion in this airbag that caused these holes. It didn't shred the airbag, but the shards that came through the airbag, caused by the explosion—and you can see the results of that explosion—piercing this metal, and you can see where the shards, emanated, could well have caused the kinds of deaths that we have seen eight times so far, demonstrated eight times so far. Correct?

Mr. KENNEDY. Yes, sir. And, again, I just want to repeat how deeply sorry we are for all of the pain and suffering we have caused.

Senator BLUMENTHAL. And I am not challenging whether you are sorry. I believe sincerely that you are. My question is, in replacing these batwing propellants, have you also replaced the chemical, ammonium nitrate, that was used in these batwing propellants?

Mr. KENNEDY. Some of the replacement parts that we are using for those batwings still include a phase-stabilized ammonium nitrate. But it is a completely different design that we have not experienced issues with.

Senator BLUMENTHAL. You haven't experienced issues with it because you haven't finished testing.

Mr. KENNEDY. Well, they have been in the field for a number of years, they have been used in a number of different vehicles, and these alternative designs have not seen issues.

Senator BLUMENTHAL. Why are you continuing to use ammonium nitrate, when it was very likely a contributing factor, if not the factor, in causing these exploding inflators?

Mr. KENNEDY. Well, first, I respectfully would disagree that it is the issue with causing the inflator ruptures. It could be one of the potential factors in it.

But phase-stabilized ammonium nitrate has many, many advantages, especially over the materials that we were using prior. The industry was using azide prior, and azide is highly, highly toxic. And some of the other materials that we had used had issues with handling and manufacturing because they were very, very energetic in a normal state. Phase-stabilized ammonium nitrate, if you put it on the table and put a torch on it, you can't even light it.

It is very safe, and it is very clean. It burns very, very efficiently, which, again, addressed some of the concerns that were in the field with previous propellants that were causing respiratory issues with many, many drivers.

Senator BLUMENTHAL. But the problem is that it becomes unstable when it becomes moist or accumulates moisture, correct?

Mr. KENNEDY. Well, it is not a phase-stabilization issue. This is what everyone was concentrating on at the beginning, that it is an issue with the phase stabilization of ammonium nitrate. The conclusions that the Fraunhofer Institute have come to is this is not a phase-stabilization issue. We cannot even measure the loss of phase stabilization that has occurred in these parts.

It is not a phase-stabilization issue. This is a much more subtle issue that takes many, many factors over many, many years. And sometimes in certain vehicles—sometimes in one vehicle it will perform perfectly well. The same part in another vehicle and the same exact area will have issues.

So there are a number of things we don't understand. But that is why we felt it was time to act and get the parts out of the field, so we could continue this analysis of the parts.

Senator BLUMENTHAL. You are continuing to use ammonium nitrate but with a different design?

Mr. KENNEDY. We have many designs that use phase-stabilized ammonium nitrate. I think, of the six that are involved in this, most are out of—I think five of the six are out of production. There is another one that will be out very shortly. So the ones involved in these particular issues and these particular recalls are not in serial production any longer.

Senator BLUMENTHAL. Looking forward, are you replacing the batwing propellants or inflators out there now with inflators that have ammonium nitrate?

Mr. KENNEDY. Some of them are still using—it is a completely different inflator design, a completely different propellant design, but some of them do still use phase-stabilized ammonium nitrate.

But, as Mr. Kunselman said, we are—I think, in May, 50 percent of the inflator kits that we sent included inflators from our competitors. By the time we get to December, 70 percent are estimated to be with outside inflators.

So most of the replacements that we are having are alternative propellant designs. But even the ones that aren't are using later versions of ammonium nitrate, for the most part, at this point.

Senator BLUMENTHAL. Have you tested these new designs?

Mr. KENNEDY. Yes, sir, we have.

Senator BLUMENTHAL. How rigorously?

Mr. KENNEDY. Very rigorously. And most of them have been in production for a number of years.

Senator BLUMENTHAL. Have they shown signs of moisture?

Mr. KENNEDY. Not to my knowledge, sir.

Senator BLUMENTHAL. But you are continuing to use ammonium nitrate.

Mr. KENNEDY. Yes, sir. We are continuing to use phase-stabilized ammonium nitrate.

Senator BLUMENTHAL. And, Mr. Kunselman, that is one of the reasons why you are going to TRW, correct?

Mr. KUNSELMAN. Thank you.

As I stated, the path to the TRW inflator was fortuitous because it fit the inflation characteristics in our car and provided me with, absent a root cause, the most confidence that it would be a permanent solution.

Senator BLUMENTHAL. Well, I think that is a very genteel and nice way of saying you want a safe propellant and so you are going with a company that does not use ammonium nitrate. Correct?

Mr. KUNSELMAN. That is accurate.

Senator BLUMENTHAL. Mr. Kennedy, your company filed for a patent in 2006 that, in effect, demonstrated the knowledge of moisture's effect on ammonium nitrate, correct?

Mr. KENNEDY. I am sorry, I am not involved in the patents on inflators, Senator, but if you give me a little more information, I might be able to comment.

Senator BLUMENTHAL. I will give you information that is available to all of us, which is that your company explained that moisture could seep into the inflator and might cause the propellant to become more unstable. It said that numerous times.

It filed for a patent back in 2006 that demonstrated it was aware of that problem in that year, correct?

Mr. KENNEDY. Well, again, I am not familiar with the patent you are referring to, but I can tell you that moisture seepage into any inflator is a known issue, and moisture in particular with ammonium nitrate is a known issue. And that is why we have addressed that in our designs and in our manufacturing processes.

Senator BLUMENTHAL. Are you familiar with the chemical known as desiccant?

Mr. KENNEDY. Yes, sir. Yes, Senator, I am aware of desiccant.

Senator BLUMENTHAL. At what point did Takata begin to add desiccant to its—

Mr. KENNEDY. I believe it was—it was in that timeframe that you had mentioned there. I think 2007, 2008.

Senator BLUMENTHAL. And the reason it added desiccant was to reduce the effects of moisture in making the ammonium nitrate more unstable.

Mr. KENNEDY. Well, there were a number of changes that were made—we call them X series inflators. There was a number of design changes that were made in the X series inflators in that timeframe. The propellant formulation was changed, desiccant was added, a number of the other components were updated. It is just part of what—in Japan, they call it “kaizen”; it is continuous improvement. We are constantly looking at ways to improve the parts.

And in those particular parts, on the passenger side we were able to shrink the size of the inflator by 10 millimeters, which saved weight and saved space in the vehicle that helped meet

CAFE requirements and helped our customers meet their goals of weight reduction and performance improvements.

Senator BLUMENTHAL. Continuous improvement?

Mr. KENNEDY. Yes, sir.

Senator BLUMENTHAL. Your term?

Mr. KENNEDY. Yes, sir. "Kaizen," that is what the Japanese call it.

Senator BLUMENTHAL. "Kaizen"—

Mr. KENNEDY. Yes, sir.

Senator BLUMENTHAL.—in Japanese, sounds to me like a euphemism for trying to avoid exploding airbags.

Mr. KENNEDY. No, sir, not at all. I disagree. Like I said, it was a continuous improvement to improve the product. I think every manufacturer of every product is—

Senator BLUMENTHAL. How did it improve the product, besides avoiding the propellants exploding as a result of moisture?

Mr. KENNEDY. Well, as I said, there were a number of changes that were implemented into the inflators at that time. The addition of desiccant was one of them. It allowed us to make the inflators smaller; it allowed us to make the inflators lighter. I mean, those were all things that we are always looking to do.

Senator BLUMENTHAL. Isn't it fair to say that one of the reasons for that continuous improvement was the presence of moisture inside the inflator?

Mr. KENNEDY. Well, as I said, moisture in any inflator is a problem. And every inflator has leak paths that allow moisture in, every inflator that is out there. I mean, at the end of the day, an inflator is full of holes in order to let gas come out. So if there are holes to let gas come out, there are holes to let moisture in. So it is an issue that every inflator manufacturer deals with.

Senator BLUMENTHAL. Your new inflators, have they shown evidence of moisture?

Mr. KENNEDY. I am not sure if I can answer that completely, Senator, because I don't know that we have gotten parts back from the field on these newer ones and looked at that on every one of them. So I can't—

Senator BLUMENTHAL. I thought your testimony here today was that they have been rigorously tested.

Mr. KENNEDY. They have. They have.

Senator BLUMENTHAL. But you don't know whether moisture has been found in them.

Mr. KENNEDY. I don't know the answer to that specific question, Senator.

Senator BLUMENTHAL. Where I am going here, Mr. Kennedy, essentially, is that there is a lot of evidence that ammonium nitrate is a root cause and that there may well need to be a recall of the recalls and continuing problems.

GM at least redesigned and remanufactured the defective product that caused deaths on the road as a result of the defective ignition switch. But the continued use of ammonium nitrate leads me to believe there may well need to be a recall of the recall parts.

Mr. KENNEDY. Well, that is why as part of the consent order we have agreed to continue to test the remedy parts. We have continued all of our efforts, internal and external, with the consortium

of OEMs that Mr. Kunselman mentioned, with individuals OEMs, automakers, that are doing their own testing.

We have not stopped anything, Senator, in relation to this issue. We are continuing to look, and we are continuing to look everywhere, to make sure that we understand this issue.

Senator BLUMENTHAL. Good.

Have you issued—I just have one more question—two more questions.

The CHAIRMAN [presiding]. Well, yes, we need to keep moving, Senator.

Senator BLUMENTHAL. And I have been actually asking a few extra questions because I knew my colleague Senator Klobuchar was going to be here.

Senator KLOBUCHAR. Oh, yes. You are so kind. Thank you.

Senator BLUMENTHAL. Let me ask Mr. Schostek: Would you commit to supporting a bill that I have offered, S. 900, that requires used car dealers to repair any outstanding safety recalls prior to selling or leasing them?

Mr. SCHOSTEK. Senator Blumenthal, we do support that concept. Right now, Honda dealers sell both new cars and used cars, and we expect those recalls to be taken care of before the used cars are sold. They may have a product from another manufacturer on the lot; similarly a Chrysler dealer and so forth. And then there are independent used car dealers.

We would like to discuss about the need to ensure the responsibility of the OEM to make sure that repair is completed and who is effecting the repair. But, most definitely, sir, we support the concept.

Senator BLUMENTHAL. Because I know you have reached out to two of the Honda owners who were affected here, but you couldn't contact them because they had bought the car used, correct? Carlos Solis and Hien Tran both died as a result of this product.

Mr. SCHOSTEK. Indeed, Senator. The unfortunate aspect of the fatalities that have been experienced in our vehicles are—these are older-model vehicles; they have tended to change hands, sometimes through used car dealers, independent used car dealers, and we have not been able to contact the appropriate parties. So we definitely support the concept.

Senator BLUMENTHAL. Thank you.

Thanks, Mr. Chairman.

The CHAIRMAN. Senator Klobuchar?

Senator KLOBUCHAR. Thank you very much, Mr. Chairman. I will be brief here.

Mr. Kennedy, last November, as evidence emerged that the airbags might be susceptible in regions outside of high-humidity climates, I called on an expanded recall. In December of last year, Takata responded to NHTSA's recall request letter stating that it firmly believed that the data and currently available information did not support a nationwide recall.

What information did Takata have last month that it didn't have earlier that triggered the expanded recall?

Mr. KENNEDY. Senator, that is a great question, and I would be very happy to answer that.

We have much, much more test data now than we had before. We have completed—I checked last night, and, as of last night, over 57,000 deployment tests, most of those in the last 6 months, that have really helped us to understand where these issues are and what is causing them.

And we don't have definitive root cause, but also in that time-frame we had a 2-day meeting at our inflator facility, where we brought all of the NHTSA people in and their experts and we had our third party, Fraunhofer, report directly to them. It was not filtered by Takata at all. We did the same thing with the OEMs affected.

We have continued to work with a number of other outside experts, as I mentioned earlier: Penn State University, Georgia Tech—

Senator KLOBUCHAR. But it is just that this goes back to, what, 2006? And I am glad you have done this, but it seems like such a long period of time, and we have heard so many different explanations for the cause of the defect. Why the different explanations, and why did all of this take this long, nearly 10 years, to get done?

Mr. KENNEDY. Well, Senator, there has been a lot done in those 10 years. There has been a number of recalls that have been issued, starting I believe in 2008 was the first one. So we have participated and supported multiple recalls in that timeframe.

And it was really just on this latest issue that really got started in 2013. End of 2013 was when the first incident outside of previous recall populations occurred. And—

Senator KLOBUCHAR. OK, so—go ahead.

Mr. KENNEDY. I am sorry.

Senator KLOBUCHAR. Now with this major recall that you have decided to undertake, with a lot of prodding I will say, and it is going to involve, you know, a lot of vehicles, how do you prioritize these vehicles in terms of getting fixed? Is it geographically? Is it by the age of the vehicle? How are you going to triage this?

Mr. KENNEDY. Yes, that is, again, a very good question and one that was contemplated in the defect information reports.

And it varies by design somewhat. The driver-side ones, where we have had the most issues in the field, those are being prioritized based on location. And that would be a location of where they are currently registered, originally registered, or ever registered. Some of the other ones are prioritized by age.

And, as Administrator Rosekind mentioned in his testimony, that is part of the consent order that we have agreed to. They call it the coordinated remedy. And we will be working with NHTSA and all of the automakers in order to do that prioritization and to increase supply so we get the right parts to the right owners at the right time.

Senator KLOBUCHAR. And then how many replacement parts is Takata producing every month?

Mr. KENNEDY. As of a couple days ago, we passed 5 million replacement kits. I think this month we will probably produce close to 700,000—

Senator KLOBUCHAR. And how many are there going to be total that you need to have?

Mr. KENNEDY. Well, the total replacement—again, the numbers of a little bit elusive, but somewhere in the 32 million range.

Senator KLOBUCHAR. Wow.

Mr. KENNEDY. That is vehicles that were ever manufactured, so some of those still may not be on the road.

Senator KLOBUCHAR. OK. So how long do you think it will take to do that?

Mr. KENNEDY. Well, we are going to be at a million units a month here very shortly. We have already done 5 million. That 32 million assumes that actually all of those vehicles are still on the road, and we know vehicles that are 15 years old, a number of those are not on the road still. So it will be somewhat less than that.

Senator KLOBUCHAR. OK.

Just one last question here, because I want to keep in my time limit.

Mr. Kunselman, Mr. Schostek, how many affected Honda and Chrysler vehicles have received replacements?

Mr. KUNSELMAN. Have received replacements?

Senator KLOBUCHAR. Yes.

Mr. KUNSELMAN. On the driver side, we had just shy of 50,000 units that were replaced with a like bag. And we have now implemented a recall where we will replace with a TRW inflator.

Senator KLOBUCHAR. OK.

Mr. KUNSELMAN. So those are just in its infancy, maybe 1,000 units so far. It was just released on June 8.

Senator KLOBUCHAR. OK.

Mr. Schostek?

Mr. SCHOSTEK. Yes, Senator, we have replaced nearly 2 million inflators, Takata inflators, in our vehicles.

Senator KLOBUCHAR. OK. Very good. So it sounds like there are going to be a lot more. They are not all your vehicles, obviously, but more to come.

All right. Thank you very much.

The CHAIRMAN. Senator Nelson has one question to ask, so he will be back in here momentarily.

So, until he gets back, let me ask our manufacturers if your companies or other auto manufacturers are looking into what role, if any, the vehicle design may have played with regard to persistent high humidity affecting the performance of the airbag inflators. And, if so, what have you learned?

Mr. SCHOSTEK. Mr. Chairman, I will answer that first. You are referring to the report recently that Takata is mentioning a theory about the vehicle design. I think this is mainly on the passenger side, not the driver side, where this theory of theirs is grounded.

We have not received much information from Takata about this vehicle design theory, and when we do, we will be happy to look into it. But we have not begun a study of our own on that idea.

Mr. KUNSELMAN. I would reiterate that. We are not doing our own study on that. We are aware of Takata seeing this trend in the data and are asking the ITC if they see a similar trend based on the parts that have been tested coming from the field.

The CHAIRMAN. OK.

Senator Nelson?

Senator NELSON. Just one quick question, Mr. Schostek. Do you think that rental car companies should be prohibited from leasing vehicles under recall until they are fixed?

Mr. SCHOSTEK. Thank you, Senator Nelson.

I am aware of S. 2819, the Rental Car Recall Act, that would prohibit rental car companies from renting if they had—we are in support of that concept, Senator. We support the concept.

The young woman who lost her life in southern California was driving a Honda vehicle that she rented from an agency in the San Diego area.

Understand, from our business model, Senator, Honda, we do not sell to fleets, so we don't sell to big rental car companies such as Hertz, Avis, and so forth. But, nevertheless, there are Honda vehicles that end up in rental car inventory. Our dealers might sell to one of those large rental car companies, but, of course, the small rental car companies also might buy our vehicle on the used market.

We strongly support the concept that they should be fixed before they are rented to a customer. And if that had happened in the case of the young women in southern California—who, by the way, we notified the auto auction that owned the vehicle before the rental car agency bought it, and we also notified the rental car agency, and neither of them took that repair. It is to our everlasting regret that that had an impact in this incident.

Senator NELSON. Thank you.

The CHAIRMAN. Thank you, Senator Nelson.

Well, I would just point out that the hearing record is going to remain open for 2 weeks, during which time Senators are asked to submit any questions for the record.

Upon receipt, the witnesses are requested to submit their written answers to the Committee as soon as possible.

I want to thank our panelists, our witnesses here today for your testimony, and for your responses. It continues to shape the record that we build with regard to this very important issue which has had life-and-death consequences for people across this country. And we want to make sure that we are doing everything we can to get the accountability and provide, hopefully, the solutions that will prevent this sort of thing from ever happening again.

With that, the hearing is adjourned. Thanks.

[Whereupon, at 12:34 p.m., the hearing was adjourned.]

A P P E N D I X

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN THUNE TO HON. MARK R. ROSEKIND

Question 1. Does NHTSA have a way to track how many visitors have been to safercar.gov and, on average, how many visit the site every day? If so, what are those numbers?

Answer. Yes, NHTSA can track how many visitors have been to safercar.gov. For example, the three month period of April to June, 2015 averaged approximately 132,000 visits per day.

a. How does this compare to the use of manufacturers' sites for safety recall information?

Answer. NHTSA does not collect or have information regarding visits to manufacturers' websites.

b. Does NHTSA have any information on what percentage of Americans know about safercar.gov?

Answer. Based on qualitative analysis from focus groups conducted for consumer outreach in support of the Office of Defects Investigation, the agency has found that generally Americans have a low awareness of safercar.gov. In order to increase awareness of safercar.gov NHTSA has completed and/or is planning to execute the following:

- Direct consumers to safercar.gov from all public-facing information, *e.g.*, ads, videos, advisories;
- Promote safercar.gov through the [safercar](http://safercar.gov) mobile app; and,
- Launch a national consumer awareness campaign to increase the submission of complaints as well as recall compliance and use of the VIN Look-Up Tool.

Question 2. In your testimony, you mention that 32 million vehicles have been recalled due to defective Takata inflators. Some have raised concerns that this number may include duplications, for instance, if a particular vehicle is subject to both the driver side and the passenger side recalls. How did NHTSA calculate this number and verify its accuracy? Is this still the number of vehicles subject to recall as of today?

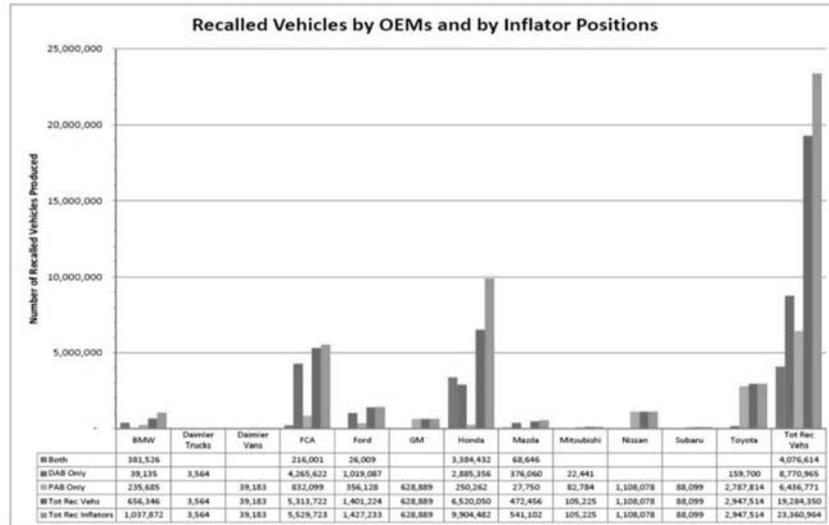
Answer. The original estimate of 32 million vehicles was based on information provided by Takata. In an initial effort to verify this figure NHTSA tabulated the total number of recalled inflators from all the Takata related recalls, and the results were consistent with Takata's estimate. At the time of the hearing, this was the best available information.

NHTSA recognized that the estimate would need to be refined once the automakers determined the actual number of inflators and vehicles involved by VIN. As part of the Coordinated Remedy Program, NHTSA requested by July 9, 2015 a detailed breakdown of the recalled vehicle data by make, model and model year. In reviewing this data, Takata reported that its original estimate included inflators slated for foreign markets. In addition, NHTSA finally was provided more specific information indicating the number of vehicles containing both defective driver and passenger side inflators. Using the automakers' detailed responses NHTSA has determined that approximately 23.4 million total inflators in approximately 19.3 million vehicles are affected. These figures include all prior Takata recalls from 2008–2015. The attached chart identifies the breakdown of the recalled inflator position—both driver air bag (DAB) only, or passenger air bag (PAB) only, by each automaker.

a. What is the number of vehicles subject to both the defective driver side and passenger side air bag recalls?

Answer. Based on the most recent data acquired through the Coordinated Remedy Program the number of vehicles subject to both driver and passenger recalls is approximately 4.1 million.

ATTACHMENT (QUESTION 2)



Question 3. NHTSA's Workforce Assessment states that the "New Paradigm" will require \$89 million in funding, which apparently doesn't include the additional 380 new full time equivalent employees (FTEs) for the Office of Defects Investigation alone. What is the funding request estimate *including* costs for the requested increase in FTEs?

Answer. The Workforce Assessment responds to a previous commitment to the U.S. Department of Transportation's Office of Inspector General to assess NHTSA's workforce in light of the breathtaking advances in vehicle technology. The Workforce Assessment was not intended to match the President's FY 2016 budget, which was issued before the Workforce Assessment was completed. Rather, the Workforce Assessment is a comprehensive examination of the defects investigation system we need to build, and can build incrementally with resources from Congress that commits to a vehicle safety system as robust as those that keep our skies and railways safe. The total cost would be approximately \$149 million. This estimate includes \$89 million identified in NHTSA's Workforce Assessment and \$60 million for the estimated cost for the 380 positions, which is based on an average cost of \$157,000 (includes salaries and benefits) for each FTE.

Question 4. NHTSA's *Workforce Assessment* was conducted pursuant to a 2011 recommendation by the Department of Transportation Office of Inspector General (OIG). NHTSA hired an outside contractor to conduct the assessment, which began in July 2013.

a. When did NHTSA receive the contractor's written assessment?

Answer. NHTSA received the contractor's final written assessment in February 2014.

b. How much did it cost the agency to conduct this assessment?

Answer. The contractor was under contract to perform multiple tasks, including the workforce assessment. The cost of the entire contract was approximately \$424,000. The cost to conduct the workforce assessment was about \$147,000.

c. Why did it take until June of 2015, four years after the OIG recommendation, for NHTSA to issue this assessment?

Answer. The workforce assessment was initiated prior to the GM and Takata recalls. Therefore, completion of the assessment was extended due to additional work conducted by the agency, including a business assessment, to produce a more comprehensive evaluation. While the contractor's final written assessment met the minimum contract requirements the final product did not fully capture all the current and future business needs of ODI or other offices that directly support the defects investigation program. As a result, the report was reworked to reflect lessons learned from these events in order to adequately reflect workforce needs given the large increase in recalls and consumer complaints.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. BILL NELSON TO
HON. MARK R. ROSEKIND

Question. Administrator Rosekind, you said at the hearing that NHTSA is currently implementing 44 actions to ensure that ODI does not miss the next GM ignition switch defect or the next Takata airbag crisis and that the list would be provided to the Committee. Please list the 44 actions.

Answer. NHTSA continuously seeks to enhance our processes and procedures, as demonstrated by the attached list of process improvements and our recently published Path Forward report. The list of process improvements continues to grow and now includes 45 distinct actions implemented and initiated.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

DEFECT AND RECALL SYSTEM IMPROVEMENTS

The following improvements in NHTSA's defects and recalls system have been implemented or initiated in response to a variety of efforts. These include the 2011 Office of the Inspector General Report, NHTSA's Path Forward and Workforce Assessments reports, and the 2015 OIG Report. These improvements include actions that directly address 10 of the 17 2015 OIG recommendations.

Oversight of System Improvements—As recognition of the need for ongoing evaluation and improvement, NHTSA devised a mechanism for tracking implementation and applying improvements Agency-wide.

1. NHTSA's Risk Control Innovations Program will monitor, track and review system improvements and apply the methodology and enhancement Agency-wide, where appropriate.

Workforce Assessment and Training—Improving the NHTSA's ability to identify safety defects and manage recalls requires investments in the Agency's people as well as improvements to the defect-recall system.

2. NHTSA developed a training plan to assist the organization in the development of its current and future workforce to ensure continuity of institutional knowledge, and to ensure that Office of Defect Investigations (ODI) staff is made aware of and become proficient in new automotive, investigative, and vehicle safety technologies.
3. At OIG's recommendation, NHTSA hired a contractor to conduct a workforce assessment to determine the number of staff required to ensure that ODI met its objectives and determined the most effective mix of staff to improve defects analysis in the future. In November 2014, ODI conducted its own workforce assessment to supplement the contractor's efforts in order to address the staffing and resource needs required to meet growing defects analysis needs in light of several high profile recalls. This effort also strategically assessed the needs and expectations of the defects program, and set a vision of how NHTSA will improve its defects management process.

Improved Tracking and Documentation—NHTSA implemented processes and documentation requirements to improve the tracking of defect issues and investigations, to provide consistent rules for reconsideration, and to provide records of decisions that can inform future investigations. NHTSA is currently establishing new documentation requirements in response to the 2015 OIG recommendations.

4. NHTSA added a new process to require its investigators to provide office director briefings prior to exceeding the ODI guidance for investigation timelines. The briefing must include justification for the additional time along with an action plan to bring closure to the issue.
5. NHTSA implemented a system to track complaints relevant to each investigation.
6. NHTSA began systemically tracking pre-investigation work.
7. NHTSA created standardized forms and a repository to document Defects Assessment Panel meetings and decisions.
8. NHTSA created a standardized process and an Investigation Documentation Checklist for storing evidence and investigation documents.
9. NHTSA is developing rules that require the defect assessment panel to revisit an issue if certain criteria are met. *This action responds to 2015 IG Recommendation No. 16.*

10. NHTSA is developing a plan to improve reviews of vehicle owner complaints. *This action responds to 2015 IG Recommendation No. 11.*
11. NHTSA is developing procedures to improve documentation of the outcomes of weekly meetings where pre-investigative issues are discussed. *This action responds to 2015 IG Recommendation No. 13.*
12. NHTSA is defining appropriate timeframes for opening an investigation and a process for justifying departures from these timeframes. *This action responds to 2015 IG Recommendation No. 17.*

Improved Information Collection—NHTSA is addressing ways to improve the quality and the focus of information it receives, and to streamline the analysis of that data.

13. NHTSA is working on ways to facilitate consumers' provision of more complete information to the agency through the Vehicle Owner's Questionnaire ("VOQ") process, including offering more flexibility in how consumers can describe their complaint and making it easier to upload supporting documentation and pictures related to the complaint. *This action responds to 2015 IG Recommendation No. 6.*
14. NHTSA has initiated efforts to provide more clarity to manufacturers about Early Warning Reporting (EWR) requirements. NHTSA will support manufacturers' efforts to implement best practices to comply with their obligations to provide complete EWR data. *This action responds to 2015 IG Recommendation Nos. 1, 2, and 3.*
15. NHTSA implemented revised procedures for Death and Injury (DI) reports, requiring manufacturers to provide their opinions and theories about the cause of an incident or accident. NHTSA is following up on all reports involving fatalities. In addition, where related litigation is initiated, NHTSA will require the manufacturer to provide copies of documents reflecting the final disposition of the lawsuit.
16. NHTSA is developing a dedicated outreach and reporting system for law enforcement involved with crash responses as a communication channel to not only collect information, but give feedback to the submitter. Based on lessons learned from this initiative, ODI may also broaden the plan to include communities such as EMS and insurance adjustors/investigators. *This action responds to 2015 IG Recommendation No. 12.*

Improved Collaboration and Assessment—ODI will continue to leverage expertise from throughout the Agency when assistance is needed, specifically if research is required or when additional real-world crash data can inform defects assessments or investigations. The Agency will be challenging automatic assumptions and request assistance from manufacturers and suppliers when necessary.

17. NHTSA now has research engineers from NHTSA's Vehicle Research and Test Center (VRTC) regularly participate in Defect Assessment Panels.
18. NHTSA hosted an international Enhanced Safety of Vehicles conference, with a special session on enforcement-related issues. Nine countries participated in the event, and they agreed to establish a worldwide network for enforcement information of mutual interest.
19. NHTSA established a process for determining when a third-party or the VRTC should be used to verify manufacturer information or to assist in identifying a potential defect.
20. NHTSA now formally involves VRTC vehicle research engineers in pre-investigative activities to research unfamiliar or technically complex potential safety hazards by conducting high level research and basic tests to better understand these systems.
21. NHTSA has implemented a number of new initiatives and efforts to enhance coordination between ODI and other NHTSA crash investigation programs. For example, the Special Crash Investigations office (SCI) is now included as an active participant in ODI's decisions about initiating formal investigations. *This action responds to 2015 IG Recommendation No. 12.*
22. When ODI is monitoring a high-hazard issue but has insufficient evidence of a possible defect to warrant opening an investigation, or where something that appears to be an unlikely explanation has been posited, NHTSA will now reach out to the relevant vehicle manufacturer (OEM). This communication will be documented as a pre-investigative notification of interest, creating a record that NHTSA has informed the OEM of the issue and reiterating the OEM's responsibility to provide relevant and timely information about the

issue to the agency, including information critical to the potential safety system interactions of the issue. *This action responds to 2015 IG Recommendation No. 15*

23. NHTSA's Office of Vehicle Safety Research and ODI are working together to increase and expand meetings with the automotive industry in order to enhance NHTSA's working knowledge about new and emerging technologies and the interrelationships between vehicle systems. Based on these meetings with manufacturers, NHTSA is developing an additional set of inquiries to be used during screening and investigating new safety systems.
24. NHTSA began to specifically request EDR data from manufacturers, vehicle "health check" files, and downloads from any related sub-modules. NHTSA is currently requesting that automakers provide detailed information on what additional data is available on vehicles that could be helpful in assessing potential safety defects.
25. NHTSA is expanding previous efforts to apply an enhanced systems safety approach to the analysis of defects, considering whether one possible defect is a symptom of another system failure.
26. Using the computerized Corporate Information Factory (a suite of software tools to improve organizational efficiency in predictive analysis, data visualization, case management, customer-driven communication, and program planning), NHTSA continues to increase its efforts to more effectively utilize and cross-reference Early Warning Reporting (EWR) data, Death and Injury (DI) reports and inquiries, SCI investigation reports, and other data from manufacturers and the public that may provide critical details about incidents and vehicles.
27. NHTSA is developing a common system data standard that is paired with a centralized database (called the vPIC-List) for information obtained from manufacturers associated with Vehicle Identification Number (VIN) requirements and Manufacturer Identification Requirements.

Improved Enforcement

28. When NHTSA finds that an OEM has failed to meet its obligation for a timely recall, the agency considers enhanced oversight, as it has done in recent consent orders for GM and Hyundai. In addition, NHTSA is exploring mechanisms to have manufacturers conduct regular audits of their internal processes for finding potential safety defects, and ensure that failures identified during these audits lead to consequences appropriate to the findings.

Improved Outreach to Consumers—Defect identification is only the first step in an effective recall system. Unless the recalls are remedied, unsafe vehicles remain on the road and a risk to drivers and passengers. NHTSA has implemented new and better ways to notify consumers of defects and continues to identify ways to improve recall completion rates.

29. NHTSA implemented a subscription service to allow consumers to receive e-mail alerts when the make and model of their vehicle has an active recall.
30. NHTSA developed and implemented the SaferCar mobile application for Apple products that provides real-time vehicle safety information and allows consumers to file complaints, register for recall notifications, locate child seat inspection stations, and search 5-Star safety ratings.
31. NHTSA recently expanded the SaferCar mobile application to Android phones.
32. NHTSA now requires new, distinctive recall labels on mailings that notify owners of recalled vehicles or equipment.
33. NHTSA developed a VIN Lookup tool that allows consumers to search electronically for open recalls on their vehicles using their VIN number.
34. NHTSA made it possible for Manufacturers to file recall reports electronically via manufacturer submission portals.
35. NHTSA hosted the first of a series of industry meetings, Retooling Recalls, where NHTSA will define an issue in need of collaborative effort and facilitate the sharing of best practices.
36. NHTSA recently launched a recalls spotlight web page dedicated to information specific to breaking news and trending recalls.
37. NHTSA created a recalls-specific account on Twitter (@NHTSARECALLS) to alert followers and consumers about vehicle, tires, car seats, and equipment recalls.

38. NHTSA released a recalls process video educating consumers on how recalls notices are sent and that recalls repairs are free of charge.
39. NHTSA will produce a VIN Look-Up Demonstration (July 2015).
40. NHTSA plans to launch a Recalls Consumer Awareness Campaign (Fall 2015).
 - a. Messages and Goals of the Campaign include:
 - i. To encourage consumers to use the VIN Look-Up tool
 - ii. To urge consumers to comply with recall notices
 - iii. To have consumers sign up for recall alerts
 - b. The Campaign will include online advertising and a suite of informational videos.
41. NHTSA will implement an enhanced e-mail engagement process to allow consumers who file complaints or sign up for e-mail alerts to stay informed of news affecting their vehicles. The existing infrastructure already allows NHTSA to reach consumers via e-mail with a list of recalls within a given time period.
42. NHTSA revised its current e-mail engagement language to inform consumer expectations of how complaints will be handled and what will happen in the event of a vehicle recall.
43. Using analytics tools, NHTSA identified the top online automotive websites used by consumers as an additional source of consumer complaints to identify potential defect trends. They include KBB.com, Edmunds.com, and Cars.com. NHTSA has built relationships with these and other organizations for purposes of sharing new vehicle safety content.
44. Presently, manufacturers' defect reports are technically focused, making them of limited use to consumers, who need this information most. NHTSA has established a defect report review process that will ensure that consumers are receiving recall information in comprehensible plain language and format.

Protecting Confidential Consumer Information

45. NHTSA now requires a second level of review to ensure that confidential information collected from manufacturers is redacted prior to web mounting.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. JOHN THUNE TO
HON. CALVIN L. SCOVEL III

Question. Based on your audit of NHTSA's Defect Identification and Investigation process, what are the problems with NHTSA's statistical practices? What could statistical analyses of TREAD Act data provide that NHTSA's analyses cannot?

Answer. Sound statistical analyses of TREAD Act data could point NHTSA personnel to the automotive defects most warranting further investigation. They could do this by identifying which data trends and outliers are statistically significant, meaning they are unlikely to have appeared through random variation. This focusing of agency attention could increase the likelihood of early identification of safety defects and support efficient use of agency resources.

NHTSA's current statistical analyses cannot achieve these ends because the agency omits critical steps in standard statistical practice when analyzing TREAD Act aggregate data. Those steps involve developing a base case of what statistical test results should look like in the absence of anomalies, against which actual test results can be compared. NHTSA calculates results from a variety of tests, but does not develop a base case against which to compare any of them. Consequently, agency personnel have no way of knowing which, if any, of the results from the different tests were unlikely to have occurred by chance. Instead, they use ad hoc approaches to determining which test values they consider indicate a defect warranting further investigation.

Sound statistical practice also involves periodically assessing the predictive performance of the analytical methods used. This enables adjustment and refinement of the methods, leading to improvements in accuracy over time. NHTSA has not checked the ability of its analyses of TREAD Act aggregate data to identify safety defects since their implementation, let alone addressed issues of their accuracy.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN THUNE TO
KEVIN M. KENNEDY

Question 1. In your testimony, you stated: "In addition to supporting these ongoing testing efforts, we are continuing to support the work of the independent Quality Assurance Panel, led by former Secretary of Transportation Samuel K. Skinner, to ensure that best practices are in place for the production of safe inflators. We are committed to adopting the recommendations his panel puts forth, and sharing the findings of the report with you and with the public."

Question 1a. What is the progress of the Quality Assurance Panel to date?

Answer. The Quality Assurance Panel has completed reviews of, and site visits to, Takata's facilities in Armada, Michigan, Moses Lake, Washington, and Monclova, Mexico. The Panel is planning to visit Takata's facilities in Japan in August 2015. Takata has assisted, and continues to assist, the Panel by regularly providing requested information and producing relevant personnel for interviews. Takata understands that the full Panel has met on several occasions and plans to meet regularly on an ongoing basis to review collected data, evaluations and recommendations.

Question 1b. Have you changed any production practices since the recalls began? If so, what and when?

Answer. Takata continually acts to strengthen and improve its manufacturing and production processes. However, because the Panel has to date not issued a report or recommendations on how Takata may improve its production practices, Takata has not altered its production practices as a result of the Panel's ongoing review.

Question 1c. When can we expect the Panel to complete its report, and when can we expect the report to be provided to the Committee?

Answer. Takata's current understanding is that the Panel expects to complete its report by November 2015. Takata intends to make the Panel's report available to the Committee and the public when it is issued.

Question 2. How many recalled inflators has Takata obtained from the field to date?

Answer. As of July 27, 2015, Takata has received from automobile manufactures approximately 3,600,000 inflators that they have collected from recalls and other safety campaigns.

Question 2a. How many returned inflators has Takata tested thus far?

Answer. As of July 27, 2015, Takata has tested approximately 97,000 returned inflators, including conducting approximately 70,000 ballistic tests, 15,000 live dissection tests and 12,000 CT scans.

Question 2b. How many inflators does Takata expect to collect each month going forward?

Answer. Takata currently expects to receive from automobile manufacturers approximately 500,000 inflators per month on an ongoing basis.

Question 2c. How many inflators has Takata provided to other entities for testing, as directed under the preservation order?

Answer. Pursuant to the Preservation Order and Testing Control Plan dated February 25, 2015 ("Preservation Order"), Takata has provided recalled and/or returned inflators to NHTSA, an automobile manufacturer, and a consultant retained by automobile manufacturers. As of July 27, 2015, Takata has provided approximately 2,073 recalled and/or returned inflators to those parties for testing.

Question 2d. To which entities has Takata provided inflators for testing?

Answer. As of July 27, 2015, Takata has provided inflators to Toyota, NHTSA and Orbital ATK for testing pursuant to the Preservation Order.

Question 2e. Does Takata plan to test a certain percentage of the recalled inflators? If so, what is that percentage?

Answer. Takata's testing program is not designed to test to a target percentage, but rather Takata intends on testing to its full capacity until it determines the root cause of rupturing inflators. Since September 2014, when Takata began receiving from automobile manufacturers inflators collected pursuant to the regional safety campaign, Takata expanded its testing capacity from approximately 1,000 inflators per month to its current testing capacity of between 16,000 and 20,000 inflators per month.

Question 2f. Has Takata received any testing results thus far?

Answer. Takata has compiled, and continues to compile, results from its own testing program and reports those results on a regular basis to NHTSA and the automobile manufacturers. Takata has provided prior summaries of its test results to the Committee. To date, Takata has not received test results from the other parties who are testing returned inflators.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BILL NELSON TO
KEVIN M. KENNEDY

Question 1. At the current pace of production, how long do you anticipate it will take Takata (and other airbag manufacturers) to produce sufficient replacement parts to cover all recalled vehicles?

Answer. Takata has taken significant steps to increase its capacity to produce replacement inflators and kits and it is currently in the process of further increasing its production capacity. Similarly, Takata has significantly increased the number of replacement inflators manufactured by third parties that it is supplying in replacement kits. In May 2015, Takata produced approximately 730,000 replacement inflators and 1,167,000 replacement inflator kits, which contain inflators manufactured by Takata and third-party manufacturers. In June 2015, Takata produced approximately 830,000 replacement inflators and 1,450,000 replacement inflator kits, which also contain inflators manufactured by Takata and third-party manufacturers. Takata estimates that, by October 2015, it will have the capacity to produce approximately 850,000 replacement inflators and 1,900,000 replacement inflator kits per month, subject to its ability to obtain the necessary components from third-party suppliers. In addition, once Takata's ongoing expansion of production lines is completed (which Takata expects to occur by February 2016), its global monthly production capacity for replacement inflators will increase to approximately 1,200,000.

To date, Takata's production capacity for replacement inflators and replacement inflator kits has been sufficient to meet the demands of automobile manufacturers. Takata, however, cannot currently estimate the date by which it will be able to produce or supply sufficient replacement inflator kits to cover all recalled automobiles as the number of necessary replacement inflators and kits will depend on, among other things, the demands of the automobile manufacturers, the number of recalled automobiles that are still on the road, and the coordinated remedy program being prepared jointly by NHTSA and the automobile manufacturers.

Question 2. Please detail your current internal product safety audit program, including any external third-party audits.

Answer. Takata's current safety audit program in North America is designed to ensure that its propellants, inflators, and air bag modules are manufactured safely and correctly. Takata's audit teams evaluate Takata's practices with respect to, among other things, propellant handling, proper disposal of scrap material, on-site security, functionality of information systems, effectiveness of manufacturing processes, and compliance with Takata's quality assurance policies and procedures. Specifically, Takata conducts internal quality audits, during which a team of auditors at each Takata factory conducts audits of processes within the factory on a weekly basis. These internal audits are documented and verified by the External Registrar during onsite visits every six months. In addition, the Horizontal Deployment Group, a subset of the Takata Corporate Quality Group, conducts monthly audits at each Takata plant for the purpose of confirming that prior issues have been effectively addressed and remedied. These audits also function as part of Takata's document retention program.

Takata also regularly retains third-parties to conduct independent audits of its safety and quality assurance practices. For instance, Takata hires third parties to conduct environmental, quality systems, and personal and workplace safety audits at its North American facilities. These audits confirm Takata's compliance with quality systems as set forth by the ISO/TS-16949 Quality Standard. Takata has also engaged outside energetic materials expert and risk analysis consulting group Baker Engineering and Risk Consultants, Inc. ("BakerRisk") to conduct several manufacturing and safety audits, including: (1) a review of manufacturing processes at Takata's Moses Lake, Washington and Monclova, Mexico facilities between 2009 and 2010; (2) a review of manufacturing and quality assurance processes at Moses Lake for 2004L propellant, including safeguards for handling storage of 2004L materials and finished propellant and mitigation of a potential accidental explosion at the facility, in 2011; (3) an audit of procedures at Monclova for receiving 2004L propellant and for quality assurance of new propellant, bulk storage of propellant, and material handling during assembly in the waste stream, in 2011; and (4) safety audits at Moses Lake and Monclova in 2013. In addition, Takata has engaged the International Center for Automotive Research to review its X-Series inflator manufacturing processes in Monclova in 2011 and to review 13X desiccant handling on Monclova inflator lines in 2012. Automobile manufacturers also routinely audit Takata's manufacturing facilities.

Finally, the Takata Product Testing Laboratories are accredited to the A2LA Standard, which confirms that the laboratories within Takata meet the industry standards for testing.

Question 3. In Takata's statement in response to the Committee's Minority staff report titled, "Danger Behind the Wheel: The Takata Airbag Crisis and How to Fix Our Broken Auto Recall Process," Takata said that it has "convened an independent Quality Assurance Panel to conduct a comprehensive review to ensure Takata's current manufacturing procedures meet best practices."

Question 3a. When was this Quality Assurance Panel established?

Answer. Takata established the Quality Assurance Panel in December 2014.

Question 3b. What instigated Takata to take this step?

Answer. Takata is, and always has been, dedicated to public safety. Its primary mission is to make products that save lives and prevent injuries. Accordingly, Takata formed the Quality Assurance Panel as part of its response to field incidents involving rupturing Takata airbag inflators. The Quality Assurance Panel reflects Takata's practice of continuously improving its products.

Question 3c. What, specifically, is the role of this panel? What are its functions that were not part of Takata's existing quality control programs?

Answer. The purpose of the Quality Assurance Panel is to audit and prepare an independent report regarding Takata's current manufacturing procedures for best practices in the production of safe inflators, including inflator propellant. The Quality Assurance Panel's functions are not significantly different from those of Takata's internal auditing program, but its independent status will hopefully provide Takata with input that will advance the safety of Takata's manufacturing procedures, practices and policies.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO
KEVIN M. KENNEDY

Question 1. Are there any circumstances in which ammonium nitrate can become moist and remain safe for use in airbag propellants? What level of moisture in ammonium nitrate mixtures is sufficient to cause safety concerns—Is there a standard used by Takata to determine how much moisture is acceptable in its new inflator designs?

Answer. All ammonium nitrate propellants, and indeed all propellants, contain some level of moisture. As such, all Takata PSAN-based inflators, whether new or old, contain moisture. The vast majority of those inflators have operated safely in the field. Takata is unable to quantify as a single number the level of moisture that is sufficient to cause safety concerns because that determination depends on the environmental exposure experienced by the inflator over its lifetime. For example, a certain level of moisture present in an inflator that spent a lifetime in a mild climate, like Seattle, will have a different effect than if the automobile resides in a high temperature climate, like Miami. Takata's current field data suggests that moisture in mild climates, without persistent high temperatures, will not degrade the performance of the propellant.

Question 2. At the hearing on June 23, 2015, you stated that you were unable to answer "completely" whether Takata's newly designed inflators had shown evidence of moisture. What has Takata's testing revealed regarding evidence of moisture in these inflators?

Answer. Takata interprets the phrase "newly designed inflators" to refer to Takata's inflators that contain the 2004L propellant. Takata is not currently aware of any incidents from either its manufacturing process (including related testing) or root cause analysis that would indicate that the 2004L propellant in its newly designed inflators may experience an alteration over time that could potentially lead to over-aggressive combustion in the event of an air bag deployment. Takata also conducted substantial internal induced moisture testing, which demonstrates that inflators with 2004L propellant perform better than inflators with 2004 propellant when exposed to the same level of moisture and aging.

Furthermore, pursuant to the Consent Order dated May 18, 2015 between Takata and NHTSA (the "Consent Order"), Takata has provided NHTSA with a proposed plan regarding the service life and safety of its non-recalled PSAN inflators, including those containing the 2004L propellant, which includes testing Takata that will perform to determine whether they are susceptible to over-pressurization and/or rupturing.

Question 3. How has Takata determined what level of moisture in the newly designed inflators is safe? What assurance can Takata provide that aging of its new inflators will not lead to a second cascading crisis as moisture continues to infiltrate?

Answer. Takata conducted a battery of tests on its propellants to determine the level of moisture that is safe in its inflators. Takata is not currently aware of any incidents from either its manufacturing process (including related testing) or root cause analysis that would indicate that the 2004L propellant in its newly designed inflators may experience an alteration over time that could potentially lead to over-aggressive combustion in the event of an air bag deployment. Furthermore, pursuant to the Consent Order, Takata has provided to NHTSA a proposed test plan regarding the service life and safety of these inflators, which includes testing that Takata will perform to determine whether they are susceptible to over-pressurization and/or rupturing.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN THUNE TO
SCOTT KUNSELMAN

Question 1. We are all aware that, historically, recall completion rates are unacceptably low. What more can be done to improve these rates?

Answer. FCA US's primary goal is to remedy all recalled vehicles. However, there are a number of factors and challenges affecting participation rates that are outside of the control FCA U.S. and other automakers control that we strive to overcome.

Among these factors is whether vehicle owners respond to the recall notices they receive by scheduling an appointment with their dealer so that the needed remedy can be performed free of charge.

Another factor impacting participation rates is vehicle age. An analysis commissioned by the Alliance of Automobile Manufacturers (initiated in 2008 and 2009) determined that participation rates varied markedly based on the age of the vehicle involved in the recall. Among the findings:

- For newer vehicles, the completion rate averaged 83 percent;
- For vehicles 5–10 years old, the rate dropped nearly in half to 44 percent; and
- For vehicles older than 10 years old, the completion rate dropped by another two-thirds to 15 percent.

Because there continues to be a general lack of understanding of why so many vehicle owners fail to respond to multiple notices and other efforts to inform them that their vehicle needs free repairs to fix a safety-related defect or non-compliance, the Alliance of Automobile Manufacturers, of which FCA U.S. is a member, has commissioned a major research effort to study consumer attitudes about vehicle recalls and reasons why free repairs are sought or not sought.

a. For each recall involving defective Takata air bags, please provide FCA's current recall completion rates.

Answer.

FCA US' Takata Recall Campaign Status as of August 6, 2015

NHTSA #	FCA US #	Details
14V-354	P40	No longer active. Absorbed into 14V-817 (P81)/14V-770 (P78)
14V-770	P78	6%
14V-817	P81	Never Launched. Replaced with 15V-313 (R25)
15V-313	R25	3% Total—Phased Launch (5 phases) <ul style="list-style-type: none"> • Phase 1 start June 8, 2015 • Phase 2 start TBD • Phase 3–5 start TBD
15V-312	R26	0% Planned start November
15V-444	R37	0% Phased launch (2 phases) <ul style="list-style-type: none"> • Tied to R25 Phase 3 and Phase 5

b. What has your company done to facilitate the recall process in terms of reaching out to its own customers?

Answer. FCA U.S. monitors the pace of vehicles being remedied at a regular frequency. The effectiveness of an outreach campaign may be lower where there are factors such as vehicle age, lack of current name on vehicle title, or even the owner-perceived ability to self-diagnose or self-assess the risk.

In the event that the standard outreach plan is not producing results that are acceptable to FCA U.S. or NHTSA, additional actions may be taken. These actions would be considered outside of the norm or extraordinary measures. Each recall is different, and the same strategy may not necessarily work for all campaigns. FCA U.S. evaluates each recall campaign to understand the individual issues and challenges occurring during the execution of remedy repair and deploys a directed response.

Some activities that may be included in an expanded outreach strategy include the creation of general URLs on the subject as well as personal URLs directing customers to a live person that will facilitate the remedy's completion. FCA U.S. is also working with demographic expert Urban Science to program and leverage the organization's StreetSmart[®] tool to identify the specific location of vehicles that have not yet had their recall remedy completed.

As a recent example, FCA U.S. has initiated expanded outreach activities for Recall 14V-770 (P78). We will use a phased approach, beginning with robo calls to determine "bad" phone numbers. Shortly thereafter, the outreach activities will progress to follow-up outbound phone calls and e-mail notifications to the owners in the target areas as well as follow-up mailers. Additional outreach activities will be determined as necessary.

Question 2. What is the process, generally, for remedying a recall and repairing the defective part?

Answer. FCA sends owner letters to all affected customers informing the customer their vehicle is involved in a recall. The owner letter informs the customer of the issue and consequence of the recall to the customer. The owner letter also informs the customer of the specific repair and the estimated time to complete the repair. The customer has the option to either schedule a service repair in advance or drive to a dealer and have the recall remedy performed.

Dealers are notified of the recall by a release of the repair instructions by FCA U.S. to the dealer computer network. When a customer brings a vehicle to the dealer, the dealer enters the VIN into the dealer computer system, which informs the dealer that the VIN is associated with a specific recall.

a. How long does it typically take to procure and then ship replacement parts to the dealers?

Answer. Each recall is different so there is no way to characterize a "typical" length of time to procure and ship parts to dealers for recall campaigns.

b. What can be done to make the repair process more hassle-free for customers?

Answer. The safety of our customers is paramount, as is the trust our customers place in their vehicles. We recognize that people rely on their vehicles for many important purposes.

FCA U.S. Customer Assistance Centers assist customers with getting their recalls completed in several ways, including:

1. Agents contact dealers on behalf of customers to schedule appointments when remedy parts are available;
2. When remedy parts are not available, customer information is retained and the customer will be notified when parts become available; and
3. Agents provide information about open recalls and estimated timing when remedy parts are not available.

When conducting a recall, it is our primary goal to have the parts available and promptly remedy vehicles. When that cannot be accomplished, we make loaner cars available upon request. On July 1, 2015, FCA U.S. enhanced its Courtesy Transportation/Dealer Service Loaner Program making it easier for dealers to provide loaner vehicles to owners waiting for recall completion.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. ROY BLUNT TO
SCOTT KUNSELMAN

Question. Do you have suggestions on how to protect consumers from rental cars with open safety recalls?

Answer. Safety is our top priority at FCA US. Ensuring that unsafe vehicles are off the road is critical to motor vehicle safety. FCA U.S. believes that all customers, including rental car companies, should be able to have their recalled vehicles repaired in a timely manner and that all customers should be treated equally whether they are driving their own vehicle or one they rented. For this reason, FCA U.S. continues to support the Alliance of Automobile Manufacturers' legislative proposal regarding rental vehicles subject to recalls. This proposal would prevent rental car companies from renting vehicles unless the prospective renter is notified of the recall or the vehicle is subject to a do not drive notice. This would hold rental car companies to the same standards as auto manufacturers and ensure rental car customers have the same access to vehicle recall and safety information as customers who own an affected vehicle.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RON JOHNSON TO
SCOTT KUNSELMAN

Question 1. Does your company support a process where consumers should continue to be able to rent a car or truck if the vehicle is under an open safety recall?

Answer. FCA U.S. supports requiring that rental car companies ground all vehicles subject to a stop drive recall until they are repaired. For all other recalls, we continue to support requiring that rental car companies ground vehicles until they are repaired, unless the rental car company: (1) provides customers with written notification of any un-remedied defect or noncompliance, including pre-remedy precautions; and (2) receives a written acknowledgement by the customer of receipt of notification.

Question 2. If not, what are your legislative recommendations for Congress to pursue to stop driver deaths that continue to occur in rented, recalled vehicles?

Answer. FCA U.S. supports the Alliance of Automobile Manufacturers' legislative proposal regarding rental vehicles subject to recalls. This proposal would prevent rental car companies from renting vehicles unless the prospective renter is notified of the recall or the vehicle is subject to a do not drive notice. This would hold rental car companies to the same standards as auto manufacturers and ensure rental car customers have the same access to vehicle recall and safety information as customers who own an affected vehicle.

Question 3. What other stakeholders besides your company would you expect to support your recommendations, and does the car rental industry support your ideas? If not, why not?

Answer. It is our understanding that nearly all of the member companies of the Alliance of Automobile Manufacturers support its legislative proposal, which ensures that rental car customers have the same access to vehicle recall and safety information as customers who own an affected vehicle by requiring that rental car companies ground vehicles until they are repaired, unless the rental car company: (1) provides customers with written notification of any un-remedied defect or non-compliance, including pre-remedy precautions; and (2) receives a written acknowledgement by the customer of receipt of notification.

It is our understanding that all major rental car companies have entered into a voluntary agreement to park their vehicles subject to a safety recall. It is also our understanding that the same rental car companies support the *Raechel and Jacqueline Houck Safe Rental Car Act*.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BILL NELSON TO
SCOTT KUNSELMAN

Question 1. What is your company's position on renting to the public vehicles under open safety recalls?

Answer. Safety is our top priority at FCA US. Ensuring that unsafe vehicles are off the road is critical to motor vehicle safety. FCA U.S. believes that all customers, including rental car companies, should be able to have their recalled vehicles repaired in a timely manner and that all customers should be treated equally whether they are driving their own vehicle or one they rented.

FCA U.S. supports requiring that rental car companies ground all vehicles subject to a stop drive recall until they are repaired. For all other recalls, we support requiring that rental car companies ground vehicles until they are repaired, unless the rental car company: (1) provides customers with written notification of any un-remedied defect or noncompliance, including pre-remedy precautions; and (2) receives a written acknowledgement by the customer of receipt of notification.

Question 2. Your company has not publicly supported S. 1173, the Raechel and Jacqueline Houck Safe Rental Car Act, which was reintroduced on April 30, 2015.

Question 2a. Do you support S. 1173? Why or why not?

Answer. No. FCA U.S. supports the Alliance of Automobile Manufacturer's (the "Alliance") legislative proposal regarding rental vehicles subject to recalls. This proposal would prevent rental car companies from renting vehicles unless the prospective renter is notified of the recall or the vehicle is subject to a do not drive notice. This would hold rental car companies to the same standards as auto manufacturers and ensure rental car customers have the same access to vehicle recall and safety information as customers who own an affected vehicle.

Question 2b. If not, do you have alternative proposals or ideas as to how consumers can be better protected from rental cars under recall? If so, please detail them.

Answer. FCA U.S. supports the Alliance legislative proposal, as described above.

Question 3. In response to a proposal offered by the Alliance of Automobile Manufacturers (“the Alliance”), NHTSA analyzed the number of recalls in which the manufacturer advised the owner to not drive the recalled vehicle (so-called “do not drive” recalls). In a November 5, 2014, letter to the Senate, NHTSA reported that, from 2010–2013, “do not drive” recalls issued by members of the Alliance accounted for only 4.9 percent of the total number of recalled vehicles. Furthermore, the recalled vehicles that were driven by Raechel Houck and Jewel Brangman were not subject to a “do not drive” advisory. In light of these facts, does your company agree with the Alliance’s position that only recalled vehicles subject to a “do not drive” advisory should be grounded and not rented until they have been repaired?

Answer. Yes, as described above, FCA U.S. supports the Alliance’s position.

Question 4. The Alliance has also proposed that vehicles subject to a safety recall, other than “do not drive” recalls, should be able to be rented before they are repaired—as long as the consumer is informed of the recall when renting the vehicle. Do you agree with the Alliance’s position that disclosure to the customer of a safety recall is sufficient to protect the safety of that customer?

Answer. FCA U.S. agrees that the Alliance legislative proposal ensures that rental car customers have the same access to vehicle recall and safety information as customers who own an affected vehicle by requiring that rental car companies ground vehicles until they are repaired, unless the rental car company: (1) provides customers with written notification of any un-remedied defect or noncompliance, including pre-remedy precautions; and (2) receives a written acknowledgement by the customer of receipt of notification.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN THUNE TO
RICK SCHOSTEK

Question 1. We are all aware that, historically, recall completion rates are unacceptably low. What more can be done to improve these rates?

Answer. Honda continues to believe that there is substantial promise in tying the annual state vehicle registration process to a requirement that safety defects be addressed before completion of vehicle registration. We recognize that there are a number of issues about this concept that require further discussion. But we are convinced that this is the single most significant step we can take to achieve very high recall and remedy rates.

a. For each recall involving defective Takata air bags, please provide Honda’s current recall completion rates.

Answer. As of August 5, 2015, with respect to Takata inflator recalls initiated in 2014 and later, American Honda’s recall completion rate by inflator repair type is:

Driver-Side	29.0%
Passenger-Side	27.1%
Overall	28.3%

b. What has Honda done to facilitate the recall process in terms of reaching out to its own customers?

Answer. Over and above the required mailed notification, we have pursued new ideas and methods to encourage our customers to check their vehicle identification number and recall status in order to increase the rate of response to recall notifications.

We provide multiple notices in both English and Spanish. We have consulted with the U.S. Postal Service to try new methods to get people to open recall mailings. One idea was a free calendar inserted with the recall notice. This did not prove successful. We have used overnight delivery of follow-up notifications. There was no material change in the rate of recall completion.

We have, and continue to contact customers by phone. In support of the Takata inflator campaigns, we have called more than 1.5 million hard-to-reach customers, using both direct and automated calls. An automated call just before notification or reminder mail has been successful in raising response rate. It is now our practice to use automated calls to alert customers in advance of mailed notifications.

We have enhanced our general recalls websites and created a new microsite dedicated to air bag inflator recalls to keep our customers informed and to make it easy for them to check their vehicles for open recalls. We extended our Customer Relations department call center hours to receive calls from customers seven days per week as well as engage with customers on Honda’s Twitter and Facebook pages.

In some markets, we have enlisted a special investigative firm as part of our effort to contact hard-to-reach owners of older model vehicles affected by the Takata

airbag inflator recalls. We also have worked with CARFAX to add open recall alerts to the CARFAX history report for affected vehicles. In addition, CARFAX is sending us an alert if there is a change to their history report for some vehicles with the affected Vehicle Identification Numbers (VINs). This helps us to obtain additional information to contact a hard-to-reach customer.

Honda also voluntarily initiated a multi-million dollar bi-lingual regional advertising campaign in March to implore customers to repair their vehicles. This campaign was designed to gain the attention of customers in the nine states and two U.S. territories that experience the most consistently high temperatures and absolute humidity to immediately check for open recalls and safety improvement campaigns. Complementing this print and radio effort was a social media campaign via Facebook advertising

c. In your testimony, you commended the effectiveness of Honda's social media campaign regarding the air bag recalls. On what metrics does Honda rely in evaluating the success of this social media campaign?

Answer. Honda evaluated this social media campaign's success upon impressions (reach) and engagement rate (percent of people who interacted in some manner with the post such as clicking, liking, sharing). The campaign achieved more than 6.4 million impressions and more than 124,000 engagements. Ideally, regarding the air bag inflator recall social media campaign, we would measure success upon number of affected vehicles that were repaired. However, due to the multitude of media channels (print, radio, personal phone calls, post cards, as well as social media) utilized this past spring, it was not possible to clearly attribute the number of repairs solely to the social media campaign. We do know, however, that of the total Honda and Acura recall website views during the campaign, 52.2 percent came from the Facebook social media ads.

d. What did those metrics show about this social media campaign in particular?

Answer. We created a two-part Facebook ad campaign. The first was launched March 18, 2015 targeting national Honda and Acura owners in the U.S.. The engagement rate (ER) for this group was 2.23 percent (above our benchmark of 1.10 percent) and the click through rate (CTR) was 2.73 percent.

The second portion of the Facebook ad campaign was launched March 19, 2015 and geo-targeted Honda and Acura owners residing in California and states and territories identified as high absolute humidity regions (Texas, Louisiana, Mississippi, Alabama, Georgia, Florida, South Carolina, Hawaii, Puerto Rico, and U.S. Virgin Islands). The ER for this group was also greater than our benchmark (1.80 percent versus 1.10 percent) and the CTR was 2.33 percent. Overall the limiting factor for this effort-or any social media effort-, particularly for older vehicles that have changed hands one or more times, is having the current owner's e-mail address.

Question 2. What is the process, generally, for remedying a recall and repairing the defective part?

Answer. Once an automaker notifies NHTSA that it has determined a safety defect exists in one of its vehicles, the automaker has 60 days to notify registered vehicle owners of the defect and, if available, the process for remedying it. If there is no available remedy, then the automaker will have to send a second notification letter to vehicle owners to advise them once a remedy is available. (Whether a remedy is available at the time of the initial owner notification often times depends on whether the defect is one of manufacture or design. If it is the latter, then it may take time to design, test and manufacture replacement parts). Once the remedy is available and owners are notified, much of the process depends on the vehicle owner recognizing the automaker notice and responding to it, typically by calling either their local dealer to schedule a service appointment or the automaker's customer relations department to identify a dealer and schedule an appointment. When the owner arrives at the dealer for a scheduled recall repair appointment, the dealer will repair the vehicle for free.

a. How long does it typically take to procure and then ship replacement parts to the dealers?

Answer. There are many different factors affecting procurement and shipment of replacement parts to dealers, including tooling availability, raw material availability, component part lead-times, required testing, capacity limitations, and logistics lead-time. Procurement lead-time can vary from as little as a few days to many months. The general procurement timeframe, from the time the purchase order is generated until the time the parts arrive at American Honda, is typically between 30 and 60 days. After American Honda receives the parts, the timeframe to have them available to the dealer is typically about a week.

b. What can be done to make the repair process more hassle-free for customers?

Answer. We have asked our dealers to expand service hours and to never turn away a customer with an affected vehicle. In the event a customer may have forgotten to schedule or include the recall repair on an earlier scheduled appointment with the dealership, we require dealers to check the VIN for every vehicle that comes into their dealership.

We also have reinforced with our dealers Honda's firm policy to offer affected customers a loaner or rental car free of charge while their vehicle is being repaired or if they are waiting for a replacement part to be delivered. All dealers are authorized to make a vehicle available to a customer without prior approval from Honda. We have been actively monitoring the availability of loaner and rental cars and engaging with our dealers to ensure that they offer such vehicles so we can meet our customers' needs.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. ROY BLUNT TO
RICK SCHOSTEK

Question. Do you have suggestions on how to protect consumers from rental cars with open safety recalls?

Answer. As noted in our response to Senator Johnson's first question, Honda supports legislation S.1173, the Raechel and Jacqueline Houck Safe Rental Car Act of 2015—to require car rental companies to remedy safety defects before a vehicle can be rented.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RON JOHNSON TO
RICK SCHOSTEK

Question 1. Does your company support a process where consumers should continue to be able to rent a car or truck if the vehicle is under an open safety recall?

Answer. We believe that the defect in a vehicle rented to the public should be remedied before the vehicle is rented. It is for this reason that Mr. Schostek expressed at the June 23 hearing Honda's support for S.1173, the Raechel and Jacqueline Houck Safe Rental Car Act of 2015 and supported its inclusion in the Senate-passed Developing a Reliable and Innovative Vision for the Economy (DRIVE) Act.

Question 2. If not, what are your legislative recommendations for Congress to pursue to stop driver deaths that continue to occur in rented, recalled vehicles?

Answer. Please see our response to Question 1.

Question 3. What other stakeholders besides your company would you expect to support your recommendations, and does the car rental industry support your ideas? If not, why not?

Answer. Honda is not in a position to speak for other stakeholders on their legislative positions.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BILL NELSON TO
RICK SCHOSTEK

Question 1. What is your company's position on renting to the public vehicles under open safety recalls?

Answer. As a manufacturer of motor vehicles, Honda is responsible for the safety of our vehicles. While we establish high standards of design, materials and manufacture for all aspects of our vehicles, at times the resulting product may not meet the level of intended safety performance. In those circumstances where it becomes necessary to recall a vehicle for a safety related defect, we strive to locate and notify owners of affected vehicles of the need to bring the vehicle to a dealer for inspection and remedy where needed. Our objective is reach as many owners as we are able and to remedy their vehicles. We believe that the defect in a vehicle rented to the public should be remedied before the vehicle is rented.

Question 2. Your company has not publicly supported S. 1173, the Raechel and Jacqueline Houck Safe Rental Car Act, which was reintroduced on April 30, 2015. Do you support S. 1173? Why or why not?

Answer. Mr. Schostek announced Honda's support for S. 1173 at the hearing on June 23, 2015. That support was reiterated in a letter to Senator Schumer, the sponsor of the legislation, on July 9, 2015. A copy of that letter, which explains our reasons for supporting the bill, is appended hereto.

ATTACHMENT

HONDA NORTH AMERICA, INC.
Washington, DC, July 9, 2015

Hon. CHARLES E. SCHUMER,
SH-322 Hart Senate Office Building,
Washington, DC.

Dear Senator Schumer:

I write to offer Honda's support for S. 1173, the Raechel and Jacqueline Houck Safe Rental Car Act of 2015.

Honda North America's Executive Vice President, Rick Schostek, announced our support of the legislation during his testimony before the Senate Commerce, Science, and Transportation Committee on June 23, 2015. As a manufacturer of motor vehicles, we are responsible for the safety of our products. Despite our best efforts, from time to time it becomes necessary to recall a vehicle to remedy a system or component that may not meet the level of intended safety performance. When this occurs, we strive to locate all of our customers with an affected vehicle and urge them to bring their vehicle to our dealers for repair at their earliest convenience.

As a matter of corporate policy, Honda generally does not sell its vehicles to rental car fleets. However, our dealers are free to do so, which means that some Honda and Acura vehicles do end up in rental car fleets. Additionally, some rental car companies purchase older vehicles in the used car market. As such, we believe S.1173 will facilitate our ability to repair these vehicles and assist us in protecting our customers and those who drive our vehicles.

We congratulate you and your colleagues for sponsoring this important legislation.
Sincerely,

EDWARD B. COHEN,
Vice President,

Government and Industry Relations.

Cc: Senator Barbara Boxer
Senator Claire McCaskill
Senator Kristen Gillibrand
Senator Robert Casey, Jr.
Senator Dianne Feinstein
Senator Richard Blumenthal
Senator Bill Nelson

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