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THE GM IGNITION SWITCH RECALL: WHY DID IT TAKE SO LONG?

HEARING

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

OF THE

COMMITTEE ON ENERGY AND COMMERCE

HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRTEENTH CONGRESS

SECOND SESSION

APRIL 1, 2014

Serial No. 113–131

Printed for the use of the Committee on Energy and Commerce

energycommerce.house.gov

U.S. GOVERNMENT PUBLISHING OFFICE

89–888 WASHINGTON : 2015

For sale by the Superintendent of Documents, U.S. Government Publishing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

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[1] The information has been retained in committee files and is available at *http://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=102033*.

THE GM IGNITION SWITCH RECALL: WHY DID IT TAKE SO LONG?

TUESDAY, APRIL 1, 2014

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 2:00 p.m., in room 2123, Rayburn House Office Building, Hon. Tim Murphy (chairman of the subcommittee) presiding.

Present: Representatives Murphy, Burgess, Blackburn, Gingrey, Scalise, Harper, Olson, Griffith, Long, Barton, Upton (ex officio), Terry, DeGette, Braley, Schakowsky, Castor, Welch, Tonko, Yarmuth, Green, Dingell (ex officio-nonvoting), and Waxman (ex officio).

Staff Present: Carl Anderson, Counsel, Oversight; Gary Andres, Staff Director, Charlotte Baker, Deputy Communications Director; Mike Bloomquist, General Counsel; Sean Bonyun, Communications Director; Matt Bravo, Professional Staff Member; Leighton Brown, Press Assistant; Karen Christian, Chief Counsel, Oversight; Brad Grantz, Policy Coordinator, O&I; Brittany Havens, Legislative Clerk; Sean Hayes, Deputy Chief Counsel, O&I; Kirby Howard, Legislative Clerk; Peter Kielty, Deputy General Counsel; Alexa Marrero, Deputy Staff Director; Brian McCullough, Senior Professional Staff Member, CMT; Brandon Mooney, Professional Staff Member; Paul Nagle, Chief Counsel, CMT; John Ohly, Professional Staff, O&I; Krista Rosenthall, Counsel to Chairman Emeritus; Peter Spencer, Professional Staff Member, Oversight; Shannon Weinberg Taylor, Counsel, CMT; Tom Wilbur, Digital Media Advisor; Jessica Wilkerson, Legislative Clerk; Michele Ash, Minority Chief Counsel, CMT; Phil Barnett, Minority Staff Director; Brian Cohen, Minority Staff Director, O&I, and Senior Policy Advisor; Elizabeth Ertel, Minority Deputy Clerk; Kiren Gopal, Minority Counsel; Hannah Green, Minority Staff Assistant; Elizabeth Letter, Minority Press Secretary; Karen Lightfoot, Minority Communications Director and Senior Policy Advisor; and Stephen Salsbury, Minority Investigator.

OPENING STATEMENT OF HON. TIM MURPHY, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PENNSYLVANIA

Mr. MURPHY. I now convene this hearing of the Oversight and Investigations subcommittee, entitled the "GM Ignition Switch Recall: Why Did It Take So Long?"

Ms. Barra, if you would like to take a seat, please. Thank you.

This question is the focus of our investigation. As soon as the Chevy Cobalt rolled off the production line in 2004, customers began filing complaints about the ignition switch. These customers told General Motors that just by bumping the key with their knee while driving the Cobalt, it would shut off. In 2004 and 2005, GM engineers twice considered the problem and even developed potential solutions to fix it, but GM decided the, quote, "tooling cost and piece prices are too high," unquote, and that, quote, "none of the solutions represent an acceptable business case," end quote.

The solution GM ultimately settled for was to tell their dealers to ask Cobalt drivers to remove heavy objects from their key chains, and yet just a year later, GM decided to fix the ignition switch. In 2005, GM told their supplier, Delphi, to increase the torque in the ignition switch so the key wouldn't move out of the run position and into accessory mode.

GM was not alone in examining problems with the Cobalt. The lead government safety regulator, the National Highway Traffic Safety Administration, known as NHTSA, was also evaluating concerns with the Cobalt. But NHTSA didn't look at the ignition switch problem, just air bag nondeployment. In 2007, 3 years after the Cobalt's release, the chief of NHTSA's Defects Assessment Division proposed that the agency investigate the Cobalt because he spotted a, quote, "pattern of nondeployments," unquote, in Cobalt air bags that didn't exist with similar sedans.

An internal NHTSA presentation noted a spike in warranty claims for Cobalt air bags, a total of 29 crashes causing 25 injuries, 4 deaths, and 14 field reports. Yet NHTSA ultimately decided not to investigate. Even when the issue was again raised 3 years later in 2010, NHTSA again passed on investigating.

GM was also looking into the air bag nondeployments. As early as 2007, GM started tracking incidents where Cobalt air bags did not deploy in car crashes.

In 2011 and 2012, GM assigned at least two groups of engineers to examine the problem. According to GM's public statements, it wasn't until December 2013 the company finally put the pieces together and linked the problems with the air bags with the faulty ignition switch, almost 10 years after customers first told GM the Cobalt ignition switch didn't work.

We know this. The red flags were there for GM and NHTSA to take action, but for some reason, it did not happen. Why didn't GM and NHTSA put the pieces together for 10 years? Why didn't anyone ask the critical important questions? Why did GM accept parts below their own company standards and specs? When GM decided to get a new ignition switch for the Cobalt in 2006, did GM do so because they recognized that the faulty switch posed a safety problem? Why did GM keep the old part number which led to confusion? When GM replaced the ignition switch, did engineers also consider how the faulty ignition impacted other systems in the car like air bags? Why did GM the replace the ignition switch in new cars but not the older models? Why did GM think a memo about the size of key chains was enough to solve the problems? Why did NHTSA twice decide not to investigate the Cobalt? And why didn't

NHTSA make the link between the keys being in the accessory position and air bags not deploying? Did anyone ask why?

And for both GM and NHTSA, are people talking to one another? Do GM and NHTSA have a culture where people don't pass information up and down the chain of command? To borrow a phrase, what we have here is a failure to communicate, and the results were deadly, a failure to communicate both between and within GM and NHTSA. Today we will ask GM and NHTSA what they are doing to not just fix the car but to fix the culture within a business and a government regulator that led to these problems. This is about restoring public trust and giving the families and crash victims the truth about whether this tragedy could have been prevented and if future ones will be prevented. It is my hope and expectation that today we will not hear a blame game or finger pointing. All the brilliant engineers and workers in the world won't matter if the people don't really care, and as the old saying goes, people don't care that you know until they know that you care.

This investigation is only 3 weeks old, and we are determined to find the facts and identify the problem so a tragedy like this won't ever happen again. This investigation is bipartisan, it is a priority of all the members of this committee. I want to thank Mary Barra for being here and also the head of NHTSA, David Friedman, ranking members Waxman, DeGette, and Dingell for working with us, and I now yield the remaining amount of my time to Dr. Michael Burgess.

[The prepared statement of Mr. Murphy follows:]

PREPARED STATEMENT OF HON. TIM MURPHY

I now convene this hearing of the Oversight and Investigations Subcommittee, entitled "The GM Ignition Switch Recall: Why Did It Take So Long?"

This question is the focus of our investigation.

As soon as the Chevy Cobalt rolled off the production line in 2004, customers began filing complaints about the ignition switch. These customers told GM that just by bumping the key with their knee while driving, the Cobalt would shut off. In 2004 and 2005, GM engineers twice considered the problem and even developed potential solutions to fix it. But GM decided the "tooling cost and piece price are too high" and that "none of the solutions represents an acceptable business case." The solution GM ultimately settled for was to tell their dealers to ask Cobalt drivers to remove heavy objects from their key chains.

And yet, just a year later, GM decided to fix the ignition switch. In 2005, GM told their supplier, Delphi, to increase the torque in the ignition switch so the key wouldn't move out of the run position and into accessory mode.

GM wasn't alone in examining problems with the Cobalt. The lead government safety regulator, the National Highway Traffic Safety Administration, was also evaluating concerns with the Cobalt.

But NHTSA didn't look at the ignition switch problem, just airbag non-deployment.

In 2007, 3 years after the Cobalt's release, the chief of NHTSA's Defects Assessment Division proposed that the agency investigate the Cobalt because he spotted a "pattern of non-deployments" in Cobalt airbags that didn't exist with similar sedans.

An internal NHTSA presentation 1A[1] noted a spike in warranty claims for Cobalt airbags: a total of 29 crashes causing 25 injuries and four deaths; and 14 field reports. Yet, NHTSA ultimately decided not to investigate. Even when the issue was again raised 3 years later, in 2010, NHTSA again passed on investigating.

GM was also looking into the airbag non-deployments. As early as 2007, GM started tracking incidents where Cobalt airbags didn't deploy in car crashes. In 2011 and 2012, GM assigned at least two groups of engineers to examine the problem.

[1] 1A1 Office of NHTSA Defects Investigation panel to the Defects Assessment Division

According to GM's public statements, it wasn't until December 2013 that the company finally put the pieces together and linked the problems with the airbags with the faulty ignition switch—almost 10 years after customers first told GM the Cobalt ignition switch didn't work.

We know this: the red flags were there for GM and NHTSA to take action—but they didn't.

Why didn't GM and NHTSA put the pieces together for 10 years? Why didn't anyone ask the critically important questions?

Why did GM accept parts below their own company standards and specs?

When GM decided to get a new ignition switch for the Cobalt in 2006, did GM do so because they recognized that the faulty switch posed a safety problem?

Why did GM keep the old part number, leading to confusion?

When GM replaced the ignition switch, did engineers also consider how the faulty ignition impacted other systems in the car like the airbags?

Why did GM replace the ignition switch in new cars but not the older models?

Why did GM think a memo about the size of keychains was enough to solve a problem?

Why did NTSHA twice decide not to investigate the Cobalt?

Why didn't NHTSA make the link between the keys being in the accessory position and airbags not deploying? Did anyone ask why?

And for both GM and NHTSA: are people talking to one another? Do GM and NHTSA have a culture where people don't pass information up and down the chain of command?

To borrow a phrase, "what we have here is a failure to communicate"—and the results are deadly.

A failure to communicate both between and within GM and NHTSA.

Today we will ask what GM and NHTSA are doing—not just to fix the car—but to fix a culture within a business and government regulator that led to these problems. This is about restoring public trust—and giving the families of crash victims the truth about whether this tragedy could have been prevented and if future ones will be prevented.

It is my hope and expectation that today we will not hear a blame game or finger pointing. All the brilliant engineers and workers in the world won't matter if the people don't think you care. As the old saying goes: "People don't care that you know, until they know that you care."

This investigation is only 3 weeks old. We are determined to find the facts and identify the problems so a tragedy like this never happens again. This investigation is bipartisan and is a priority of all members on this committee.

I thank GM Chief Executive Officer Mary Barra and NHTSA Acting Administrator David Friedman for appearing before the committee today to answer our questions. I thank Ranking Members Waxman, DeGette and Dingell for working with us.

Mr. BURGESS. I thank the chairman for yielding.

I thank our witnesses for being here. I thank our witnesses for being so responsive to the committee staff request. We are here to examine a very important matter. The hearing is appropriately named. We do have questions for General Motors.

We have questions for the National Highway Traffic Safety Administration. Two chances to open up formal investigations into the recalled General Motors cars: Both in 2007 and 2010, NHTSA initially examined problems with the vehicles and both times—both times—decided that no investigation was needed.

We need to hear from NHTSA today how you intend to improve the process going forward, and we were just here 5 years ago with the Toyota investigation. We heard a lot of things out of NHTSA on those hearings. I would like to know how they have improved the process and how we can expect to have confidence in their ability going forward.

I yield back.

Mr. MURPHY. I now recognize the ranking member of the committee, Ms. DeGette, of Colorado.

OPENING STATEMENT OF HON. DIANA DEGETTE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO

Ms. DEGETTE. Thank you very much, Mr. Chairman.

Like all of us, I am deeply troubled about what our investigation has revealed about GM's business practices and its commitment to safety.

Here is what we know. We know that GM has recalled over 2.5 million vehicles because of defective ignition switches. We know they should have done it much, much earlier. We know that GM failed to provide Federal regulators with key information, and sadly, we know that at least 13 people are dead. And there have been dozens of crashes because GM produced cars that had a deadly effect.

Mr. Chairman, I have a copy of the ignition switch assembly for one of these vehicles, and this is it. A spring inside the switch, a piece that cost pennies, failed to provide enough force causing the switch to turn off when the car went over a bump.

GM knew about this problem in 2001. They were warned again and again over the next decade, but they did nothing. And I just want to show how easy it is to turn this key in this switch. If you had a heavy key chain, like my long key chain, or if you were short and you bumped up against the ignition with your knee, it could cause this key to switch right off.

Mr. Chairman, we now know that these switches were defective from the start. In February of 2002, GM's ignition switch supplier, Delphi, informed the company that the switch did not meet GM's minimum specifications, but GM approved it anyway.

Now, yesterday, we sent Ms. Barra a letter about this decision. I would like unanimous consent to make that letter a part of the hearing record.

Mr. MURPHY. Without objection.

[The information appears at the conclusion of the hearing.]

Ms. DEGETTE. Soon after this approval, the defective cars were on the road, and it didn't take long for problems to appear. In 2003, June 2003, the owner of a Saturn Ion with 3,474 miles on the odometer made a warranty report that he or she, quote, "bumped the key and the car shut off." GM would receive more than 130 similar warranty claims from owners about this problem over the next decade, but it never informed the public or reported the problem to Federal safety regulators.

The minority staff conducted this warranty analysis, and again, we prepared a memo about these claims. I would also ask unanimous consent to put that in the record, Mr. Chairman.

Mr. MURPHY. Without objection.

[The information appears at the conclusion of the hearing.]

Ms. DEGETTE. Initially, GM opened multiple investigations into the ignition switch issue, each which concluded the switch was bad; it didn't meet the minimums. In 2005, GM identified solutions to the problem but concluded that, quote, "the tooling cost and piece price are too high... Thus none of the solutions represents an acceptable business case."

Documents provided by GM show that this unacceptable cost increase was only 57 cents.

And Mr. Chairman, we have this document that we got from GM. Somehow it is not in the binder. I would ask unanimous consent to put this in the record as well.

Mr. MURPHY. Without objection, so ordered.

[The information appears at the conclusion of the hearing.]

Ms. DEGETTE. Another technical investigation completed in 2005 led GM to issue a technical service bulletin advising dealers to distribute key inserts to help reduce the problem. This was a simple fix to reduce the force on the switch.

And Mr. Chairman, these are the keys of one of my staff members who actually owns one of these cars, and as you can see, there is a long, long insert. What the key inserts were supposed to do is go in the middle and just create a little hole so the key and the keys wouldn't go back and forth. Unfortunately, GM never made this bulletin public. More than 500 people out of the thousands of drivers who had cars with faulty switches got the key insert, and GM knew it.

Soon after this decision, company officials quietly redesigned the switch, but they never changed the part number, and astonishingly, this committee has learned that when GM approved a new switch in 2006, they did it still knowing that the new switch didn't meet specifications. The company even put more cars with bad switches on the road from 2008 until 2011, and we still don't know all the information about this.

Between 2003 and 2014, GM learned hundreds of reports of ignition switch problems through customer complaints, warranty claims, lawsuits, press coverage, field reports and even more internal investigations, but time and time again, GM did nothing. The company continued to sell cars, knowing they were unsafe.

I know we have a lot of family members here, Mr. Chairman, and I want to express my deepest sympathies to them, but I want to tell them something more. We are going to get to the bottom of this. We are going to figure out what happened, and we are going to make sure it doesn't happen again.

Now, Mr. Chairman, I want to thank Ms. Barra for coming. She is brand new at the company. I believe she is committed to fixing this situation. We have a lot of questions to ask today, though, and I know every member of this committee is concerned about this. Thank you very much.

Mr. MURPHY. And the gentlelady's time expired.

I now recognize the chairman of the full committee, Mr. Upton, for 5 minutes.

OPENING STATEMENT OF HON. FRED UPTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. UPTON. Well, thank you, Mr. Chairman.

We know that with a 2-ton piece of high velocity machinery, there is in fact a zero margin for error. Product safety is indeed a life or death issue, but sadly, vehicle safety has fallen short, and it is not the first time.

During the late summer of 2000, in this very room, I led the oversight hearings that examined the Ford-Firestone recalls, a tire malfunction was causing violent crashes, and Americans did not feel safe behind the wheel. We gathered testimony from the com-

pany and agency officials and reviewed thousands and thousands of pages of documents, and we found that the system indeed had failed. Information about the defective tires had been shared with the companies and with NHTSA, the parties failed to protect the public safety, and over 100 people died.

After that investigation, I introduced the TREAD Act to correct many of the problems that contributed to the Ford-Firestone tragedy. That bill was meant to ensure data about safety is reported so that defects can be quickly identified and fixed and lives ultimately saved. The TREAD Act has now been law since November of 2000, yet here we are investigating another safety failure. It is déja vu all over again.

One month ago, GM issued a recall for an ignition switch defect in six vehicles, totalling 1.6 million cars. And last Friday, they called another 900,000 vehicles. GM acknowledges that a dozen people have died in automobile crashes associated with that defect. Two were teenagers from my own community.

Testifying today are GM CEO Mary Barra and NHTSA Acting Administrator David Friedman, a first step in our quest to find out what went wrong.

The committee's purpose is the same as it was in 2000, making sure that drivers and families are protected and cars are safe. And I will repeat what I said at the first oversight hearings on Firestone tires in 2000. Today's hearing is very personal to me because I come from Michigan, the auto State, the auto capital of the world. That is no less true today. Michigan is proud of its auto industry, and while Michigan citizens build cars, obviously, we drive them, too.

Documents produced to the committee show that both NHTSA and GM received complaints and data about problems with ignition switches and air bags. These complaints go back at least a decade. NHTSA engineers did crash investigations as early as 2005 and twice examined whether complaints with air bags constituted a trend. GM submitted early warning reports to NHTSA, including data about crashes in the recalled cars. With all that information available, why did it take so long to issue the recall?

In this case, just as it was with Ford-Firestone, it was news reports that brought the problem to the Nation's attention. This investigation of the recall is indeed bipartisan, as it should be. We will follow the facts wherever they lead us, and we are going to work until we have the answers and can assure the public that indeed they are safe. I would like to note that the chairman of our CMT subcommittee, Mr. Terry, will be joining us for questions this afternoon. With his subcommittee's record on motor vehicle safety issues, he will be watching closely as this investigation unfolds so that he can take our findings and determine whether and what changes may be needed to the laws designed to keep drivers safe on the road. After all, our goal on every issue follows the Dingell model: Identify the problem or abuse fully, and where needed, fix it with legislation so that it won't happen again.

I yield to the vice chair of the committee, Mrs. Blackburn.

[The prepared statement of Mr. Upton follows:]

PREPARED STATEMENT OF HON. FRED UPTON

With a two-ton piece of high-velocity machinery, there is zero margin for error; product safety is a life or death issue. But sadly, vehicle safety has fallen short. And it's not the first time. During the late summer of 2000, in this very room, I led the oversight hearings that examined the Ford-Firestone recalls. A tire malfunction was causing violent crashes, and Americans did not feel safe behind the wheel. We gathered testimony from company and agency officials and reviewed thousands of documents. And we found that the system had failed. Information about the defective tires had been shared with the companies and with NHTSA. The parties failed to protect the public's safety, and over 100 people died.

After that investigation, I introduced the TREAD Act to correct many of the problems that contributed to the Ford-Firestone tragedy. That bill was meant to ensure data about safety is reported so that defects can be quickly identified and fixed—and lives can be saved.

The TREAD Act has been law since November 2000, yet here we are, investigating another safety failure. It's déja vu all over again. One month ago, GM issued a recall for an ignition switch defect in six vehicles, totaling 1.6 million cars. Last Friday, they recalled another 900,000 vehicles. GM acknowledges that 12 people have died in automobile crashes associated with this defect. Two were teenagers from southwest Michigan.

Testifying today are GM CEO Mary Barra and NHTSA Acting Administrator David Friedman, a first step in our quest to find out what went wrong. The committee's purpose is the same as in 2000: making sure drivers and families are protected and cars are safe.

I will repeat what I said at the first oversight hearing on Firestone tires in 2000: "today's hearing is very personal to me, because I come from Michigan, the auto state, the auto capital of the world." That is no less true today. Michigan is proud of its auto industry, and while Michigan citizens build cars, we drive them, too.

Documents produced to the committee show that both NHTSA and GM received complaints and data about problems with ignition switches and airbags. These complaints go back at least 10 years. NHTSA engineers did crash investigations as early as 2005 and twice examined whether complaints with airbags constituted a trend. GM submitted Early Warning Reports to NHTSA, including data about crashes in the recalled cars. With all this information available, why did it take so long to issue the recall? In this case, just as it was with the Ford-Firestone affair, it was news reports that brought the problem to the nation's attention.

This investigation of the recall is bipartisan—as it should be. We will follow the facts where they lead us. And we will work until we have those answers, and can assure the public that they are safe.

I'd like to note that the Chairman of our Commerce, Manufacturing, and Trade Subcommittee, Mr. Terry, will be joining us for questions this afternoon. With his subcommittee's record on motor vehicle safety issues, he will be watching closely as this investigation unfolds so that he can take our findings and determine whether and what changes may be needed to our laws designed to keep drivers safe on the road. After all, our goal on every issue follows the "Dingell model"—identify the problem or abuse fully, and where needed, fix it with legislation so that it can't happen again.

Mrs. BLACKBURN. Thank you, Mr. Chairman.

And Ms. Barra, thank you very much for being here today. We really owe this hearing to the American people, to GM customers, and to the relatives of the 12 individuals that have lost their lives. And it is important that we get to the bottom of this and to see what the roles of GM and NHTSA were in this, figure out who is at fault, and we want to know who knew what when.

And Ms. Barra, that includes you. We are going to want to know what your exposure was to this issue as you took the helm at GM as the CEO.

You know, in my district, we have the GM plant. The Saturn Ion has been recalled. That was made at that plant there in Spring Hill, so this is something that is important to my constituents. Those that have worked with GM, I thank you for being here, and we look forward to the answers.

I yield back.

Mr. MURPHY. Thank you. The gentlelady yields back.

I now recognize the ranking member of the full committee, Mr. Waxman, for 5 minutes.

OPENING STATEMENT OF HON. HENRY A. WAXMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. WAXMAN. Thank you very much, Mr. Chairman. I have a sad sense of déja vu as I sit here today. I was part of this committee when we held our Ford-Firestone hearings in 2000. I led the committee's hearings on Toyota's problems with unintended acceleration in 2010. Each time, we heard about how auto manufacturers knew about potential defects and about how Federal safety officials at the National Highway Traffic Safety Administration missed signals that should have alerted them to defective cars on the road, and here we are today under similar circumstances.

Over the last month, the full dimensions of another auto safety disaster have unfolded. General Motors has recalled 2.5 million vehicles due to a defective ignition switch, and the company has acknowledged that these cars have caused dozens of crashes and 13 fatalities.

Mr. Chairman, I know the families of some of these victims are in the audience for today's hearing. I want to acknowledge them, thank them for coming. We owe it to them to find out what happened.

The facts that we already know are hard to believe. GM has known for years about this safety defect and has failed to take appropriate action to fix the problem. The company installed an ignition switch it knew did not meet its own specifications. Numerous internal investigations resulted in nothing but a nonpublic technical service bulletin that partially fixed the problem for fewer than 500 drivers.

A new analysis I released this morning revealed that over the last decade, GM received over 130 warranty claims from drivers and GM technicians who experienced and identified the defect. Drivers reported that their car shut off after hitting bumps or potholes at highway speeds when they did something as simple as brushing the ignition switch with their knee. One GM technician even identified the exact part causing the problem, a spring that would have caused at most as much as a few postage stamps, a couple of dollars.

Because GM didn't implement this simple fix when it learned about the problem, at least a dozen people have died in defective GM vehicles. What is more, new information the committee received last week suggests that GM still has failed to fully own up to potential problems. GM finally modified the ignition switch for later model cars, but Delphi, the manufacturer of the ignition switch, told the committee that the switches installed in model year 2008 to 2011 vehicles still did not meet GM's own specifications. GM finally announced a recall of these vehicles last Friday but told the public that it was because of bad parts installed during repairs, not because of defective parts originally installed in the vehicles.

There are legitimate questions we need to ask about whether NHTSA did enough to identify and uncover this problem. In retrospect, it is clear that the agency missed some red flags, but NHTSA was also laboring under a handicap. There appears to have been a lot of information that GM knew but they didn't share with the National Highway Traffic Safety Administration. We need to make sure that NHTSA and the public have access to the same information about safety as auto executives.

That is why today I am introducing the Motor Vehicle Safety Act of 2014. This bill is modeled on the legislation that the committee passed in 2010 but was never enacted into law. It will make more information on defects available to the public, and it will increase NHTSA's funding and increase civil penalties for manufacturers when companies like GM fail to comply with the law.

Mr. Chairman, we should learn as much as we can from this investigation. Then we should improve the law to make sure we are not here again after another auto safety tragedy in the near future. I want to yield back my time. Thank you.

Mr. MURPHY. The gentleman yields back.

I would now like to introduce the witness on the first panel for today's hearing. Ms. Mary Barra is the chief executive officer of General Motors Company and has been in this role since January 15th, 2014, when she also became a member of its board of directors.

She has held a number of positions in this company. From 2008 to 2009, Ms. Barra served as vice president of global manufacturing engineering, and from 2005 to 2008, she was executive director of vehicle manufacturing engineering. She has also served as a plant manager and director of competitive operations engineering as well as numerous other positions.

I will now swear in the witness.

Ms. Barra, you are aware that the committee is holding an investigative hearing and, when doing so, has a practice of taking testimony under oath. Do you have any objections to testifying under oath?

Ms. BARRA. No.

Mr. MURPHY. The chair then advises you that under the Rules of the House and under the rules of the committee, you are entitled to be advised by counsel. Do you desire to be advised by counsel during today's hearing?

Ms. BARRA. No.

Mr. MURPHY. In that case, if you would please rise and raise your right hand, I will swear you in.

[Witness sworn.]

Mr. MURPHY. Thank you. Ms. Barra, you are now under oath and subject to the penalties set forth in Title 18, Section 1001 of the United States Code. You may now give a 5-minute summary of your written statement.

STATEMENT OF MARY T. BARRA, CHIEF EXECUTIVE OFFICER, THE GENERAL MOTORS COMPANY

Ms. BARRA. Thank you, Mr. Chairman and committee members.

Mr. MURPHY. Please pull your microphone close to your mouth and make sure it is on. Thank you.

Ms. BARRA. Can you hear me? OK.

Thank you, Mr. Chairman and committee members. My name is Mary Barra, and I am the chief executive officer of General Motors. I appreciate the opportunity to be here today. More than a decade ago, GM embarked on a small-car program. Sitting here today, I cannot tell you why it took so long for a safety defect to be announced for this program, but I can tell you we will find out.

This is an extraordinary situation. It involves vehicles we no longer make, but it came to light on my watch, so I am responsible for resolving it.

When we have answers, we will be fully transparent with you, with our regulators, and with our customers.

While I cannot turn back the clock, as soon as I learned about the problem, we acted without hesitation. We told the world we had a problem that needed to be fixed. We did so because whatever mistakes were made in the past, we will not shirk from our responsibilities now or in the future.

Today's GM will do the right thing. That begins with my sincere apologies to everyone who has been affected by this recall, especially the families and friends of those who lost their lives or were injured. I am deeply sorry.

I have asked former U.S. Attorney Anton Valukas to conduct a thorough and unimpeded investigation of the actions of General Motors. I have received updates from him, and he tells me he is well along with his work. He has free rein to go where the facts take him, regardless of outcome. The facts will be the facts. Once they are in, my leadership team and I will do what is needed to help assure this does not happen again. We will hold ourselves fully accountable.

However, I want to stress I am not waiting for his results to make changes. I have named a new vice president of global vehicle safety, a first for General Motors. Jeff Boyer's top priority is to quickly identify and resolve any and all product safety issues. He is not taking on this task alone. I stand with him, and my senior leadership team stands with him as well, and we will welcome input from outside of GM, from you, from NHTSA, from our customers, our dealers, and current and former employees.

The latest round of recalls demonstrates just how serious we are about the way we want to do things at today's GM. We've identified these issues, and we brought them forward and we're fixing them. I have asked our team to keep stressing the system at GM and work with one thing in mind, the customer and their safety are at the center of everything we do. Our customers who have been affected by this recall are getting our full and undivided attention. We are talking directly to them through a dedicated Web site with constantly updated information and through social media platforms. We have trained and assigned more people, over 100, to our customer call centers, and wait times are down to seconds. And of course, we are sending customers written information through the mail.

We have empowered our dealers to take extraordinary measures to treat each case specifically. If people do not want to drive a recalled vehicle before it is repaired, dealers can provide them with a loaner or a rental car free of charge. Today, we provided nearly

13,000 loaner vehicles. If a customer is already looking for another car, dealers are allowed to provide additional cash allowances for the purchase of a lease or new vehicle.

Our supplier is manufacturing new replacement parts for the vehicles that are no longer in production. We have commissioned two lines and have asked for a third production line. And those parts will start being delivered to dealers next week. These measures are only the first in making things right and rebuilding trust with our customers. And as I have reminded our employees, getting the cars repaired is only the first step. Giving customers the best support possible throughout this process is how we will be judged.

I would like this committee to know that all of our GM employees and I are determined to set a new standard. I am encouraged to say that everyone at GM, up to and including our board of directors, supports this. I am a second generation GM employee, and I am here as our CEO. But I am also here representing the men and women who are part of today's GM and are dedicated to putting the highest quality, safest vehicles on the road.

I recently held a town hall meeting to formally introduce our new VP of safety. We met at our technical center in Michigan. This is one of the places where the men and women who engineer our vehicles work. They are the brains behind our cars, but they are also the heart of General Motors. It was a tough meeting. Like me, they are disappointed and upset. I could see it in their faces. I could hear it in their voices. They had many of the same questions that I suspect are on your mind. They want to make things better for our customers and, in that process, make GM better. They particularly wanted to know what we plan to do for those who have suffered the most from this tragedy.

That is why I am pleased to announce that we have retained Kenneth Feinberg as a consultant to help us evaluate the situation and recommend the best path forward. I am sure this committee knows Mr. Feinberg is highly qualified and is very experienced in handling matters such as this. Having led the compensation efforts involved with 9/11, the BP oil spill, and the Boston marathon bombing, Mr. Feinberg brings expertise and objectivity to this effort.

As I have said, I consider this to be an extraordinary event, and we are responding to it in an extraordinary way. As I see it, GM has civil responsibilities and legal responsibilities. We are thinking through exactly what those responsibilities are and how to balance them in an appropriate manner. Bringing on Mr. Feinberg is the first step.

I would now be happy to answer your questions. Thank you.

Mr. MURPHY. Thank you, Ms. Barra.

[The prepared statement of Ms. Barra follows:]

Written Testimony of General Motors Chief Executive Officer Mary Barra
Before the House Committee on Energy and Commerce
Subcommittee on Oversight and Investigations
"The GM Ignition Switch Recall: Why Did It Take So Long?"
April 1, 2014

INTRODUCTION

Chairmen Murphy and Upton, Ranking Members DeGette and Waxman, members of the committee...

My name is Mary Barra, and I am the Chief Executive Officer of General Motors.

I appreciate the opportunity to be here today.

More than a decade ago, GM embarked on a small car program. Sitting here today, I cannot tell you why it took years for a safety defect to be announced in that program, but I can tell you that we will find out.

When we have answers, we will be fully transparent with you, with our regulators, and with our customers.

As soon as I learned about the problem, we acted without hesitation. We told the world we had a problem that needed to be fixed. We did so because whatever mistakes were made in the past, we will not shirk from our responsibilities now and in the future. Today's GM will do the right thing.

That begins with my sincere apologies to everyone who has been affected by this recall... especially to the families and friends of those who lost their lives or were injured. I am deeply sorry.

I've asked former U.S. Attorney Anton Valukas to conduct a thorough and unimpeded investigation of the actions of General Motors. He has free rein to go where the facts take him, regardless of the outcome. The facts will be the facts. Once they are in, my management team and I will use his findings to help assure this does not happen again. We will hold ourselves fully accountable.

However, I want to stress that I'm not waiting for his results to make changes.

I've named a new vice president for Global Vehicle Safety, Jeff Boyer (announcement is included below). This is a first for GM. Jeff's first priority is to quickly identify and resolve any and all product safety issues. He is not taking on this task alone. I stand with him. My senior management team stands with him. And we will welcome input from outside GM — from you, from NHTSA, from Mr. Valukas' findings, from our customers, from our dealers, and from our current and former employees.

This latest round of recalls demonstrates just how serious we are about the way we will do things at the new GM. We identified these issues. We brought them forward and we are fixing them. I have asked our team to keep stressing the system at GM and work with one thing in mind — our customers and their safety are at the center of <u>everything</u> we do.

CUSTOMERS

Our customers who have been affected by this recall are getting our full and undivided attention. We're talking directly to them through a dedicated website, with constantly updated information, and through social media platforms. We've trained and assigned more people to our customer call centers, and wait times are down to seconds. And, of course, we're sending customers written information through the mail.

We've empowered our dealers to take extraordinary measures and to treat each case specifically—and they are doing a great job taking care of our customers. Here's what we are doing with our dealers: if people do not want to drive a recalled vehicle before it is repaired, dealers can provide them a loaner or rental car — free of charge. If a customer is already looking for another car, dealers can provide an additional cash allowance for the purchase or lease of a new vehicle.

Our supplier is manufacturing new replacement parts for the vehicles that are no longer in production. We have commissioned two and asked for a third production line, and those parts will start to be delivered to dealers as soon as possible.

These measures are only the first in making things right and rebuilding trust with our customers. As I've reminded our employees, getting the cars repaired is only the first step. Giving customers the best support possible throughout this process is how we will be judged.

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I'm a second-generation GM employee and I'm here as the CEO, but I'm also here representing the men and women who are part of today's GM and are dedicated to putting the highest-quality and safest vehicles on the road.

I recently held a town hall meeting to formally introduce our new VP of global vehicle safety to the company. We met at our Technical Center, one of the places where the men and women who engineer our vehicles work. They are the brains behind our cars, but they are also the heart of GM.

It was a tough meeting. Like me, they are disappointed and upset. I could see it in their faces, and could hear it in their voices. They had many of the same questions that I suspect are on your minds. They want to make things better for our customers, and in the process, make GM better.

That's what I'm committed to doing.

I would now be happy to answer your questions.

Thank you.

2014-03-18

GM Announces New Vehicle Safety Chief
Jeff Boyer named Vice President, Global Vehicle Safety

DETROIT – General Motors CEO Mary Barra today named a new vehicle safety leader whose first priority will be to quickly identify and resolve product safety issues.

Jeff Boyer, has been named to the newly created position of Vice President, Global Vehicle Safety, effective immediately. Boyer, who has spent nearly 40 years in a wide range of engineering and safety positions at GM, will have global responsibility for the safety development of GM vehicle systems, confirmation and validation of safety performance, as well as post-sale safety activities, including recalls.

Boyer will provide regular and frequent updates on vehicle safety to Barra, senior management and the GM Board of Directors.

"Jeff's appointment provides direct and ongoing access to GM leadership and the Board of Directors on critical customer safety issues," said Barra. "This new role elevates and integrates our safety process under a single leader so we can set a new standard for customer safety with more rigorous accountability. If there are any obstacles in his way, Jeff has the authority to clear them. If he needs any additional resources, he will get them."

"Nothing is more important than the safety of our customers in the vehicles they drive," said Boyer. "Today's GM is committed to this, and I'm ready to take on this assignment."

Boyer, 58, will report to John Calabrese, Vice President of Global Vehicle Engineering and become a member of Global Product Development staff, led by Mark Reuss, Executive Vice President, Global Product Development, Purchasing and Supply Chain.

Boyer began his GM career in 1974, as a co-op student and has held several senior engineering, safety and process leadership positions, including the role of a total vehicle integration engineer. His most recent position since 2011 was Executive Director of Engineering Operations and Systems Development. Before that, Boyer served as Executive Director of Global Interior Engineering and Safety Performance where he was responsible for the performance and certification of GM vehicle safety and crashworthiness. He holds a Bachelor of Science in Electrical Engineering from Kettering University and a Masters of Business Administration from Michigan State University.

Mr. MURPHY. I also want to acknowledge all the families that are here today and know that we are aware and you have sympathies of all the committee here. One Kelly Erin Ruddy of Scranton, Pennsylvania, is one of those who we offer sympathy to the family, but we have all of your in our hearts.

Ms. Barra, our committee reviewed more than 200,000 pages of documents. What we found is that as soon as the Cobalt hit the road in 2004, drivers began to immediately complain to General Motors that the car's ignition systems didn't work properly. You can imagine how frightening it is to drive a car that suddenly you lose your power steering and power brakes. When the switch for the Cobalt was being built back in 2002, GM knew the switch did not meet its specification for torque. Am I correct?

Ms. BARRA. Yes.

Mr. MURPHY. GM engineers began to look at the problem and try to figure out how to address it. GM understood the torque and the switch as measured below its own specifications. Is that right?

Ms. BARRA. Yes.

Mr. MURPHY. Is it common practice for GM to accept a part that does not meet GM specifications?

Ms. BARRA. No, but there is a difference between a part meeting or not meting specifications and a part being defective.

Mr. MURPHY. So under what scenario is accepting parts that don't meet GM specs allowable?

Ms. BARRA. An example of that would be when you are purchasing steel. You will set a specification for steel, but then because of the different suppliers and availability of steel to make products, you will assess the performance, the functionality, the durability, you know, the aspects of the part, or in this case, steel, that is necessary to live up to what the performance and the durability the safety needs to be.

Mr. MURPHY. Well, let's——

Ms. BARRA. So that is an example of when you would have a part or have material that doesn't meet the spec that was set out but is acceptable from a safety, from a functionality perspective, performance as well.

Mr. MURPHY. Is that switch acceptable?

Ms. BARRA. The switch—I am sorry, the switch.

Mr. MURPHY. Is the switch acceptable?

Ms. BARRA. At what timeframe, I am sorry?

Mr. MURPHY. Well, at the beginning. It didn't meet the specs for GM, so is that what you would consider acceptable?

Ms. BARRA. As we clearly know today, it is not.

Mr. MURPHY. So, in 2006, GM changed its ignition switch, and GM's switch supplier Delphi put in a new spring to increase the torque. Am I correct?

Ms. BARRA. I didn't hear the last part. I am sorry.

Mr. MURPHY. GM switch supplier Delphi put a new spring in to increase the torque. Is that correct?

Ms. BARRA. There was a new part.

Mr. MURPHY. Thank you. Now, in that binder next to you, if you would turn to tab 25. This is an e-mail exchange between Delphi employees in 2005 discussing the changes to the ignition switch. The e-mail notes that a GM engineer is asking for information

about the ignition switch because, quote, "Cobalt is blowing up in their face in regards to turning the car off with the driver's knee," unquote.

If this was such a big problem, why didn't GM replace the ignition switch in the cars already on the road, the cars where the torque fell well below GM's specifications, instead of just the new cars, why?

Ms. BARRA. What you just said does not match under tab 25.

Mr. MURPHY. It is the bottom of the page; there should be something there. Well, just note that what I have said—I apologize for that.

Ms. BARRA. OK.

Mr. MURPHY. But there was a statement made, that Cobalt is blowing up in their face just by a bump of the driver's knee.

Ms. BARRA. Clearly, there were a lot of things that happened. There has been a lot of statements made as it relates. That is why we have hired Anton Valukas to do a complete investigation of this process. We are spanning over a decade of time.

Mr. MURPHY. But you don't know why they didn't just replace the switch on the old cars as well as the new cars?

Ms. BARRA. I do not know the answer to that, and that is why we are doing this investigation.

Mr. MURPHY. Well, given the number of complaints about ignitions turning off while driving, why wasn't this identified as a safety issue?

Ms. BARRA. Again, I can't answer specific questions at that point in time. That is why we are doing a full and complete investigation.

Mr. MURPHY. Well, then, another one, in the chronology GM submitted to NHTSA, GM states it didn't make the connection between the ignition switch problems and the air bag nondeployment problems until late 2013. So my question is, when GM decided to switch the ignition in 2006, did the company ever examine how a faulty ignition switch could affect other vehicle systems like the air bags?

Ms. BARRA. Again, that is part of the investigation.

Mr. MURPHY. Should they?

Ms. BARRA. Should we understand?

Mr. MURPHY. Should they look at how it affects other vehicle systems?

Ms. BARRA. Yes.

Mr. MURPHY. Let me ask another question then. So when GM concluded, and you heard from my opening statement, that the tooling cost and price pieces are too high, what does that mean?

Ms. BARRA. I find that statement to be very disturbing. As we do this investigation and understand it in the context of the whole timeline, if that was the reason the decision was made, that is unacceptable. That is not the way we do business in today's GM.

Mr. MURPHY. Well, how does GM balance cost and safety?

Ms. BARRA. We don't. Today, if there is a safety issue, we take action. If we know there is a defect in our vehicles, we do not look at the cost associated with it. We look at the speed in which we can fix the issue.

Mr. MURPHY. Was there a culture in GM at that time that they would have put cost over safety?

Ms. BARRA. Again, we are doing a complete investigation, but I would say, in general, we have moved from a cost culture after the bankruptcy to a customer culture. We have trained thousands of people on putting the customer first. We have actually gone with outside training. It is a part of our core values, and it is one of the most important cultural changes we are driving in General Motors today.

Mr. MURPHY. I understand today. We are asking about then.

I am out of time.

Ms. DeGette, you are recognized for 5 minutes.

Ms. DEGETTE. Thank you very much, Mr. Chairman.

Ms. Barra, GM knew about the defect in the ignition switches as far back as 2001, 13 years before the recall. Correct? Yes or no will work.

Ms. BARRA. The investigation will tell us that.

Ms. DEGETTE. You don't know when GM knew about the defect?

Ms. BARRA. I would like——

Ms. DEGETTE. Take a look at tab 7 in your notebook, Ms. Barra. This is a GM document, and what this GM document talks about is this switch. It says, Tear down evaluation on the switch revealed two causes of failure, low contact force and low detent plunger force.

Do you recognize that document, ma'am?

Ms. BARRA. This is the first I have seen this document.

Ms. DEGETTE. OK. Well, so you don't know how long GM knew about this, right?

Ms. BARRA. And that is why—and that is why I am doing an investigation.

Ms. DEGETTE. OK. In fact, Delphi, the manufacturer of the ignition switch, informed GM in 2002 that the switch was supposed to be 15 minimum torque specification, but in fact, these switches were between 4 and 10, didn't it?

Ms. BARRA. The specification is correct that it was supposed to be 20, plus or minus 5.

Ms. DEGETTE. And these switches were between 4 and 10, correct? Yes or no will work.

Ms. BARRA. We know that now.

Ms. DEGETTE. And GM was notified by Delphi of this, correct, yes or no?

Ms. BARRA. I am not aware of being notified.

Ms. DEGETTE. OK. Then——

Ms. BARRA. Can I also correct I was not aware that——

Ms. DEGETTE. I need a yes or no. I only have 5 minutes. I am sorry.

So, as far back as 2004, 10 years ago, GM conducted a problem resolution tracking system inquiry after it learned of an incident where the key moved out of the run condition in a 2005 Chevrolet Cobalt. Is this correct?

Ms. BARRA. Again, you are relating specific incidents that happened——

Ms. DEGETTE. You don't know?

Ms. BARRA [continuing]. In our entire investigation.

Ms. DEGETTE. You don't know about that? Take a look at tab 8, please. And by the way, ma'am, I am getting this information from the chronology that GM provided to NHTSA.

Ms. BARRA. Right. And they are——

Ms. DEGETTE. So, let me ask you again, as far back as 2004, GM conducted a problem resolution tracking system inquiry after it learned of an incident where the key moved out of the run condition. Is that correct?

Ms. BARRA. Yes.

Ms. DEGETTE. Thank you.

Now, after the PRTS inquiry, one engineer advised against further action because there was, quote, "no acceptable business case to provide a resolution and the PRTS was closed." Is that correct?

Ms. BARRA. If that is true, that is a very disturbing fact.

Ms. DEGETTE. Yes, it is.

Ms. BARRA. That is not the way we make decisions.

Ms. DEGETTE. OK. Again in 2005, GM received more reports of engines stopping when the keys were jerked out of the run condition. Further investigations were conducted, and engineers proposed changes to the keys. Is that correct?

Ms. BARRA. It is part of our investigation to get that complete timeline.

Ms. DEGETTE. Much of this I am taking from the timeline GM has already done.

Ms. BARRA. Which was a summary.

Ms. DEGETTE. OK. So, as a result of the investigation, a technical service bulletin was issued to dealers that if car owners complained, they should be warned of this risk and advised to take unessential items from the key chain, but this recommendation was not made to the public. No public statements were issued. No recall sent. Is that correct?

Ms. BARRA. To my understanding, yes.

Ms. DEGETTE. Thank you.

In 2006, GM contracted with Delphi to redesign the ignition switch to use a new detent plunger and spring that would increase torque force in the switch. Is that correct?

Ms. BARRA. Yes.

Ms. DEGETTE. And for some reason, though, the new switch was not given a part number and instead shared a number with the original defective switch. Is that correct?

Ms. BARRA. Yes.

Ms. DEGETTE. Now, this new switch also did not meet GM's minimum torque specifications either. This one, Delphi said, was in the range of 10 to 15, and it really should have been 15 at a minimum. Is that correct?

Ms. BARRA. I have not seen the test results from that.

Ms. DEGETTE. You don't know that. OK.

Now, despite these facts, GM continued to manufacture its car with these same ignition switches for the model years 2008 to 2011. Is that correct?

Ms. BARRA. Yes.

Ms. DEGETTE. And between 2004 and 2014, no public notices were issued as a result of GM's knowledge of these facts and no

recalls were issued for the over 2.5 million vehicles manufactured with these defective ignition switches. Is that correct?

Ms. BARRA. Yes.

Ms. DEGETTE. And finally, three recalls were made this year, 2014, two in February, and one just last Friday. Is that right?

Ms. BARRA. Related to this ignition switch?

Ms. DEGETTE. Now, I have just a couple of more questions.

The first question I have, Ms. Barra, GM is intending to replace all the switches for those cars beginning on April 7th. Is that right?

Ms. BARRA. We will begin shipping material or new parts this week.

Ms. DEGETTE. Now, are you going to put a completely redesigned switch, or are you going to put the old switches from 2006 into those cars?

Ms. BARRA. It is going to be a switch that meets the——

Ms. DEGETTE. Is it going to be a newly designed switch or is it going to be the old switch from 2006?

Ms. BARRA. It is the old design that meets the performance that is required to operate safely.

Ms. DEGETTE. OK. I have more questions, Mr. Chairman. Perhaps we can do another round. Thank you.

Mr. MURPHY. But an important part, a follow up of several members being concerned about this, too. You are saying that there is an ongoing investigation; you cannot comment on these yet. Are you getting updates on a regular basis as this is going on?

Ms. BARRA. From Mr. Valukas?

Mr. MURPHY. From anybody in the company regarding these proceedings, are you getting updates?

Ms. BARRA. Yes, I am.

Mr. MURPHY. Thank you.

Now go to the chairman of the full committee, Mr. Upton for 5 minutes.

Mr. UPTON. Thanks, again, Ms. Barra, for being here this afternoon. I want to make sure that we ask similar questions of both you and of NHTSA. We want to learn about the documents that were submitted on a timely and appropriate basis to NHTSA, and in fact, what did they do with that information.

The documents that we have looked at as produced show that GM received complaints about its Cobalt ignition switches for about 2 years that ultimately resulted in a redesigned ignition switch in 2006. Who within GM would have known about those specific complaints? What was the process back then?

Ms. BARRA. I was not a part of that organization at the time. That is why I am doing the investigation to understand that.

Mr. UPTON. So you don't know the folks that it would have been reported to at this point. Is that right?

Ms. BARRA. I don't know the people who would have been handling this issue at that point.

Mr. UPTON. But you are getting updates, and what is supposed to happen? Looking back, what should have happened when these reports came in?

Ms. BARRA. In general, when you have an issue, a product issue, a safety issue, a field incident, any type of issue that comes in, you have a team of engineers that are the most knowledgeable that

work on that. If they see there is an issue, they elevate it to a cross-functional team that looks at it, and then it goes to a group for decision.

Mr. UPTON. Now, we know that the ignition switch was in fact redesigned because it didn't meet the specs that were there. Is that right?

Ms. BARRA. Yes.

Mr. UPTON. Now, I would guess engineering 101 would normally require that when you assign a new part or replace a new part or replace a part with a new part, that that newly redesigned part, in fact, should have a different number on it. Is that right?

Ms. BARRA. That is correct.

Mr. UPTON. And that didn't happen, right, did not happen?

Ms. BARRA. That is correct.

Mr. UPTON. Who within GM made the decision to move forward with that redesigned switch without a new part number? Do you know who that is?

Ms. BARRA. I do not know the name of the individual.

Mr. UPTON. Are you going to be able to find that out for us?

Ms. BARRA. Yes, I will.

Mr. UPTON. And will you give that name to our committee?

Ms. BARRA. And provide that.

Mr. UPTON. Is it likely that that same person was the one that decided not to recall the defective version? Where in the timeline is that?

Ms. BARRA. I don't know, but that is part of the investigation that we are doing.

Mr. UPTON. Do you know when it was that it was discovered, what year, where in the timeline that it was discovered that in fact a new part number was not assigned?

Ms. BARRA. I became aware of that after we did the recall and the timeline was put together.

Mr. UPTON. So that was just in the last month or so. Is that right?

Ms. BARRA. That is when I became aware.

Mr. UPTON. But when did GM realize that no new part number had been assigned?

Ms. BARRA. Again, that is part of our investigation. I want to know that just as much as you because that is an unacceptable practice. It is not the way we do business.

Mr. UPTON. So, you stated publicly that something went wrong with our process. How is the process supposed to work? How are you redesigning the process to ensure that in fact it should work the way that it needs to work?

Ms. BARRA. Well, one of things we are doing is the investigation by Mr. Valukas. I have some early findings from Mr. Valukas. As we look across the company, it appears at this time there was information in one part of the company, and another part of the company didn't have access to that. At times, they didn't share information just by course of process or they didn't recognize that the information would be valuable to another area of the company. We have fixed that. We have announced a new position. Jeff Boyer, who is the vice president of Global Vehicle Safety, all of this we will report to him. He will have additional staff and will have the

ability to cut across the organization and will also have the right functional leadership that understands what is going on in the different areas, so that is a fix we have already made, and he is operating that way today.

Mr. UPTON. So, when GM received complaints about the ignition switches for a number of years and ended up resulting in the redesigned ignition switch in 2006, when was it that anyone linked up the ignition switch problems to look at the Cobalt's air bags not deploying? Was that at about the same time? Was that later? What is the timeline on that?

Ms. BARRA. That is something I very much want to understand and know, but again, we are doing an investigation that spans over a decade, and it is very important, because designing a vehicle is a very complex process, that we get a detailed understanding of exactly what happened because that is the only way we can know that we can fix processes and make sure it never happens again.

Mr. UPTON. When was it that GM informed NHTSA that in fact a redesigned—did in fact GM inform NHTSA that the ignition switch had been redesigned?

Ms. BARRA. I don't know that.

Mr. UPTON. I yield back.

Mr. MURPHY. The gentleman yields back.

I now recognize the ranking member of the full committee, Mr. Waxman, for 5 minutes.

Mr. WAXMAN. Thank you, Mr. Chairman.

Ms. Barra, we heard about how in 2002, GM approved the use of faulty ignition switches in Cobalts, Ions, and other cars. That is what caused many of the problems that led to the recall of the cars from model years 2003 to 2007. So new ignition switches were designed and approved by General Motors. These were switches that were in use in the model years 2008 to 2010. Does that all sound right to you? Am I correct in what I am saying?

Ms. BARRA. There are a couple of statements you made at the beginning that I don't know to be true.

Mr. WAXMAN. Well, in 2002 GM approved the use of what turned out to be faulty ignition switches in several of these cars.

Ms. BARRA. They were actually in—they were parts that went into a 2003 was the earliest model.

Mr. WAXMAN. Well, the tests were done in 2002, but the cars were 2003 to 2007, so we had a recall of those cars.

Ms. BARRA. Right.

Mr. WAXMAN. And then there was a new switch, new ignition switch designed and approved by GM, and these new switches were in use in the model years 2008 to 2010 Cobalts and Ions. Is that——

Ms. BARRA. To the best of my knowledge, that's correct.

Mr. WAXMAN. OK. But in a briefing last week, Delphi told committee staff that these new switches also did not meet GM specifications. They told us the force required to turn these switches was about two-thirds of what GM said it should be, and documents that were provided to the committee also confirmed that top GM officials were aware of the out-of-spec switches in 2008 to 2010 vehicles in December 2013.

So, there's a document, if you want to look it up, it's tab 39, page 6 of your binder. There was a December presentation for GM's high level executive field action decision committee, at that meeting they show that the performance measurement for almost half of the 2008, so you go to 2008–2010 model year vehicles, ignition switches were below the minimum GM required specifications. My question to you is, are you concerned that many 2008 to 2010 model year cars have switches that do not meet the company specifications?

Ms. BARRA. As we assess the situation, my understanding that there was work going on to look at the switches again, looking at just because a switch, or a part, any generic part doesn't meet specifications does not necessarily mean it is a defective part. As that analysis was going on, at the same time we were doing the look across to make sure we could get all of the spare parts, and when we recognized that spare parts might have been sold through third parties that have no tracking to know which VIN, we made the decision to recall all of those vehicles.

Mr. WAXMAN. Well, your own executives were informed that a lot of these cars, that those model years had switches that were just as defective as the 2003 to 2007 cars, that—those cars were recalled, but you didn't recall the model year 2008 to 2011 vehicles until a month later on March 28th. Why did the company delay in recalling these newer vehicles?

Ms. BARRA. The company was looking—my understanding is the company was assessing those switches, but again, at the same time, in parallel, they were looking at the spare parts issue, and the spare parts issue became very clear we needed to go and get all of those vehicles because we couldn't identify which vehicles may have had a spare part put in them, and we then recalled the entire population.

Mr. WAXMAN. But you recalled those vehicles. You recalled them later.

Ms. BARRA. Yes, we did.

Mr. WAXMAN. But not when you knew there was a problem.

Ms. BARRA. Well, we recall them——

Mr. WAXMAN. Your recall of these later vehicles did not mention the faulty switches that were originally installed in the cars. They mention only, quote, "faulty switches may have been used to repair the vehicles."

Why did the company not announce that subpar switches may have been installed in those vehicles in the first place?

Ms. BARRA. Again, there was an assessment going on to understand if the specification—the parts performance was adequate.

Mr. WAXMAN. Well, wasn't it misleading to say that that company didn't tell them sub par switches may have been installed in the first place? What if I owned a later model car with its original ignition switch? Your recall implies that I don't have to do anything, but my car might still have a sub par switch. Will your company conduct a detailed analysis of these late model vehicles to determine if they are safe and will you provide the committee with warranty reports and other information so we can do our own analysis?

Ms. BARRA. I believe we're recalling all of those parts. All of those vehicles are being recalled.

Mr. WAXMAN. They are all being recalled.

Well, I must say, in conclusion, Mr. Chairman, I am concerned. I know you have taken this job in an auspicious time; you are trying to clean up a mess that was left behind for you by your predecessors, but I have one last question. How can GM assure its customers that new switches being installed beginning April 7 will finally meet GM's requirements?

Mr. MURPHY. Thank you.

Ms. BARRA. We are working very closely with our supplier. Our executive director responsible for switches is personally looking at the performance of the new switches. We will do 100 percent end-of-line testing to make sure that the performance, the safety, the functionality of these switches are safe.

Mr. MURPHY. Thank you. Gentleman's time expired.

Ms. Barra, you are being asked a number of questions. I just want to be clear. Did you review the documents that GM submitted to the committee?

Ms. BARRA. No, I did not. There was over 200,000 pages, my understanding.

Mr. MURPHY. How about the document Mr. Waxman was talking about? Did you review that?

Ms. BARRA. This page right here?

Mr. MURPHY. Yes.

Ms. BARRA. I actually saw this for the first time I think a day ago.

Mr. MURPHY. Thank you.

I now recognize Mrs. Blackburn for 5 minutes.

Mrs. BLACKBURN. Thank you, Mr. Chairman.

Ms. Barra, you've mentioned several times in your comments "today's GM," so my assumption is that you are going to run GM in a different manner than it has been run in the past.

Ms. BARRA. That is correct.

Mrs. BLACKBURN. And that you are making some changes.

I want to ask you just a little bit about timeline, helping us to get our hands around this because this is the first investigation we are going to do. We are going to have others and continue to look at this to get answers and figure out what has happened here between you all and NHTSA and also within what happened at GM.

So you mentioned in your testimony that this came to light on your watch, so I am assuming that there was no widespread knowledge in GM about this issue until you became CEO. Am I correct on that?

Ms. BARRA. At the senior level of the company, we learned of this after the recall decision was made on January 31st. I was aware in late December there was analysis going on on a Cobalt issue, but I had no more information than that. But I can assure you, as soon as we understood, the senior leadership understood this issue and that a recall decision had been made, we acted without hesitation.

Ms. BLACKBURN. OK. Then, how did you find out about it? Was it through someone bringing the issue to you to say, "Ms. Barra, we have a real problem here" or, in doing your due diligence, did you find out about it?

Ms. BARRA. The leadership committee responsible for making recall decisions made a decision on January 31. They notified Mark Royse, who immediately picked up the phone and called me.

Ms. BLACKBURN. OK. And could you submit to us the members of that leadership committee that makes those recommendations.

Ms. BARRA. Yes.

Ms. BLACKBURN. Thank you.

And then was Mr. Akerson, your predecessor, was he aware of this issue?

Ms. BARRA. Not to my knowledge.

Ms. BLACKBURN. He was not.

Are any of the members of the leadership committee also—were they a part of his leadership committee?

Ms. BARRA. There are members of today's team that were also members of Mr. Akerson's leadership team. And, to my knowledge, they were not aware.

Ms. BLACKBURN. Do you think there was a coverup or it was sloppy work?

Ms. BARRA. That is the question I have asked Mr. Valukus to uncover, and I am anxiously awaiting the results from his study.

Ms. BLACKBURN. OK. Do you think it had anything to do with the auto bailout?

Ms. BARRA. I am sorry?

Ms. BLACKBURN. With the auto bailout. Do you think it had any——

Ms. BARRA. Again, I need to get the results of the study to make all determinations.

Ms. BLACKBURN. And going back to what Mr. Upton said, you are going to be sharing that information with us?

Ms. BARRA. Yes. We will be transparent.

Ms. BLACKBURN. OK. The engineers that were responsible for this, have you brought them into the process? I know this is something that the part was actually created by Delphi. Correct?

Ms. BARRA. Correct.

Ms. BLACKBURN. And they have an engineering team that was working on that; so, they have a shared responsibility and liability in this entire issue.

Have you met with them and with the engineering team that was responsible for this switch?

Ms. BARRA. I have not met with the specific engineering team that is responsible, but I am speaking to leadership. And those individuals are being interviewed as part of the investigation conducted by Mr. Valukus.

Ms. BLACKBURN. OK. Now, going back, did you say that this was a defective part when you talked about it earlier?

Ms. BARRA. We have learned when we knew—when the recall decision was made and we later went back and looked at the chronology, there are points that suggest, and that is why we are doing the investigation.

Ms. BLACKBURN. OK. All right. Now, I think that you are going to hear from more than one of us about not having a new part number assigned.

Who made that decision? Was that strictly a Delphi decision or did that come into the GM supply chain for that decision to be made as to how that part number would be coded?

Ms. BARRA. At a general level, General Motors is responsible for General Motors' parts numbers. But, again, that is part of the investigation, to understand how that happened.

Ms. BLACKBURN. OK. Does that seem inconceivable to you?

Ms. BARRA. Yes. It is inconceivable. It is not our process, and it is not acceptable.

Ms. BLACKBURN. OK. I would think that it probably is not.

Have you asked Delphi if you can have access to their documentation and their e-mail chain dealing with this issue?

Ms. BARRA. I have not. And, again, Mr. Valukus will go—as the investigation takes him to get the information he needs to make a complete and accurate account of what happened.

Ms. BLACKBURN. My time has expired.

Thank you, Mr. Chairman. I yield back.

Mr. MURPHY. Just for clarification, Ms. Blackburn, we have asked for that e-mail chain from Delphi and we will let you know when we get that.

Now recognize Chairman Emeritus of the committee, Mr. Dingell, for 5 minutes.

Mr. DINGELL. Mr. Chairman, I thank you for your courtesy.

I begin by telling the families of those who were injured or killed by the defective General Motors' vehicles they have our sympathy, and we believe the events here are tragic, indeed. And I join everyone in expressing my condolences to the families who were killed or injured in those crashes.

Now it is incumbent upon the Congress, Federal regulators, and General Motors to determine how these deaths could have happened and to take reasonable steps to ensure that the safety of American motorists and their families are moving forward. I expect that this investigation will be thorough. And I counsel all the stakeholders to be unabashedly forthright.

Now, Ms. Barra, I would like to build on Chairman Murphy's line of questioning. And all of my questions will require "yes" or "no" answers. If you cannot answer some of my questions, I expect that you will submit responses for the record and all available relevant supporting materials.

Now, Ms. Barra, is it correct that GM has now recalled approximately 2.5 million small cars in the United States due to defective ignition switches? Yes or no?

Ms. BARRA. Yes.

Mr. DINGELL. Now, Ms. Barra, is it correct that GM recently expanded its recall of small cars because it was possible that defective ignition switches may have been installed as replacement parts? Yes or no?

Ms. BARRA. Yes.

Mr. DINGELL. Ms. Barra, is it correct that the ignition switch in question was originally developed in the late 1990s and approved by General Motors in February of 2002? Yes or no?

Ms. BARRA. Yes.

Mr. DINGELL. Ms. Barra, is it correct that General Motors' own design specifications for such ignition switch required 20 plus or

minus 5 newton centimeters of torque to move the switch from the accessory position to the run position? Yes or no?

Ms. BARRA. Yes.

Mr. DINGELL. Ms. Barra, is it correct that General Motors approved production of such ignition switch despite test results by Delphi during the production part approval process, or PPAP, showing that the switch did not meet GM's torque requirement? Yes or no?

Ms. BARRA. It is not clear to me.

Mr. DINGELL. Now, Ms. Barra, is it correct that General Motors approved a redesign of the ignition switch used in the presently recalled vehicles in April of 2006?

Ms. BARRA. Yes.

Mr. DINGELL. Ms. Barra, is it correct that GM's torque requirement for the redesigned switch remained the same as for the original ignition switch? Yes or no?

Ms. BARRA. It is not clear to me. And that is why we are focusing the investigation on that area specifically.

Mr. DINGELL. When that information becomes available, would you submit it to the committee, please?

Ms. BARRA. Yes, I will.

Mr. DINGELL. Ms. Barra, to your knowledge, did the redesigned ignition switch meet GM's torque requirements? Yes or no?

Ms. BARRA. I——

Mr. DINGELL. Want me to say it again?

To your knowledge, did the redesigned ignition switch meet GM's torque requirement? Yes or no?

Ms. BARRA. It is part of the investigation.

Mr. DINGELL. Ms. Barra, will you please submit for the record an explanation of the factors that GM takes into consideration when approving a part for production. Are there circumstances where GM may approve parts for production when such parts do not make such design specifications? Yes or no?

Ms. BARRA. Yes.

Mr. DINGELL. If so, could you please submit materials for the record explaining when and why that might occur.

Ms. BARRA. Yes.

Mr. DINGELL. Ms. Barra, I appreciate the lengths to which GM, under your leadership, is going to recall the vehicles and ensure that they are safe to drive.

GM's cooperation with the committee is necessary in order to understand the process by which—and the reasons decisions were made leading up to the 2014 recall. You may have so far done so, and I expect that you will continue to do so.

Thank you for your courtesy, Mr. Chairman.

Thank you, Ms. Barra.

I yield back the balance of my time.

Mr. MURPHY. The gentleman yields back.

I now recognize the Chairman Emeritus of the majority, Mr. Barton of Texas, for 5 minutes.

Mr. BARTON. Thank you, Mr. Chairman.

Before I ask my questions, I want to make just a general observation. This is probably the last major investigation that this sub-

committee and full committee is going to conduct where we have the services of Mr. Dingell and Mr. Waxman.

We have had a history on this committee and this subcommittee going back at least 40 to 50 years that, when we have major issues, we try to approach them on behalf of the American people in a nonpartisan, very open way. And it certainly appears that we are going to continue that tradition today.

So I hope that we can show the best to the American people, that the Congress at its best gets the facts, presents the facts, and does so in a way that in the future we protect the public health and safety for the American people.

Now, with that caveat, I do have a few questions.

A number of congressmen so far have made the point that these ignition switches didn't appear to meet specifications.

And my assumption is that you have agreed that they did not meet specifications. Is that correct?

Ms. BARRA. We have learned that as we did the recall.

Mr. BARTON. Now, I am an industrial engineer. I used to be a registered professional engineer. I am not currently registered, but I have been in the past.

Why in the world would a company with the stellar reputation of General Motors purchase a part that did not meet its own specifications?

Ms. BARRA. I want to know that as much as you do. It is not the way we do business today. It is not the way we want to design and engineer vehicles for our customers.

Mr. BARTON. I mean, I just don't understand that. I have never worked in an auto assembly environment. I have worked in a defense plant, an aircraft plant. I was plant manager of a printing plant.

I have done very limited consulting in the oil and gas industry, but I have never been a part of an organization that said, "We set the specs. When a part doesn't meet the specs, we go ahead and buy it anyway."

You know, you are currently the CEO, but at one time, I think, before you became CEO, you were the vice president for Global Product Development, purchasing and supply chain.

Is it your position now that General Motors will not accept parts that don't meet specifications?

Ms. BARRA. We will not accept parts that don't meet our performance, safety, functionality, durability requirements. As I mentioned before in the steel example, there will be times where there will be a material or a part that doesn't meet the exact specification, but after analysis and looking at the performance, the safety, the durability, the reliability, the functionality, it will be OKed. That happens very often as we buy steel to make the bodies of the vehicles.

Mr. BARTON. Well, then, you don't need specifications—with all respect——

Ms. BARRA. No. But——

Mr. BARTON [continuing]. What you just answered is gobbledygook. It is your own specification. It is your company's specification.

If a part doesn't meet the specification, why in the world would you not refuse it and only accept a part that meets the specification?

Ms. BARRA. There needs to be a well-documented process if you accept a part that doesn't meet the original specifications.

Ms. DEGETTE. Would the gentleman yield?

Mr. BARTON. Briefly, yes.

Ms. DEGETTE. Do you have that information?

Ms. BARRA. On steel?

Ms. DEGETTE. No. On starters.

Ms. BARRA. On the ignition switch——

Ms. DEGETTE. Yes.

If it didn't meet specifications, do you have the information on these starters that it met all those other criteria?

Ms. BARRA. That is part of the investigation. But, clearly, by the fact that we made a recall, it did not meet the performance specifications.

Mr. BARTON. We have the advantage, as a subcommittee, that we know now what happened in the past. We know now that there is a real problem. We know now that a number of young people have lost their lives apparently because of this defect.

So we have the advantage of hindsight. So I understand that. But as Ms. DeGette just said and a number of others, there is no reason to have specifications if you don't enforce them.

This next question is not a trick question, but it is an important question. Right now, how many parts are being used in General Motors' products that don't meet your own company's specifications?

Ms. BARRA. I don't have that exact number. But I can tell you the parts that we are using today meet the performance and the reliability, the safety, that they need to. If we find we have a part that is defective, that doesn't meet the requirements, we then do a recall.

Mr. BARTON. Well, again, with due—that is not an acceptable answer, I think, to the American people.

We are not telling you the specifications to set. Now, there are some safety specifications that—by law and NHTSA, by regulation, sets, but there shouldn't be a part used in any GM product or, for that matter, any other automobile product that is sold in the United States that doesn't meet the specifications.

At what level was the decision made to override and to use this part even though it didn't meet specification? Was that made at the manufacturing level, at the executive level, or even at some subcomponent purchasing level? Do you know that right now?

Ms. BARRA. That is part of our investigation to answer that question.

Mr. BARTON. All right. Thank you.

Thank you, Mr. Chairman.

Mr. MURPHY. Thank you. The gentleman's time has expired.

I now recognize Mr. Braley for 5 minutes.

Mr. BRALEY. Thank you, Mr. Chairman.

Ms. Barra, we have had different perspectives during this hearing. You have been appropriately focusing your attention on the members of this committee and answering our questions.

I have been staring at these photographs on the back wall. And I see young women the same age as my daughter. I see young men

the same age as my two sons. My son Paul owns one of your Cobalts.

I see a young Marine in his dress blues, and I am reminded of the photograph I have in my office upstairs of my father at the age of 18 in his dress blues at Camp Pendleton.

And the focus of this hearing so far has been on GM's commitment to safety, which I think we all agree on is an important topic for this hearing.

You testified in your opening—and I think I am quoting—"Our customers and their safety are at the center of everything we do."

And you responded to a question from Ms. Blackburn and told us that you were going to run GM differently than it has been run in the past.

And I have a copy of GM's March 18 press release announcing Jeff Boyer as your new vice president of Global Vehicle Safety.

And in this press release he is quoted as saying, "Nothing is more important than the safety of our customers and the vehicles they drive. Today's GM is committed to this, and I am ready to take on this assignment."

Twenty years before this hearing an Iowa family harmed by another defective GM vehicle gave me this promotional screwdriver set that they got from their local GM dealer. And if you look at it, on the outside it has a slogan, "Safety comes first at GM."

So my question for you and I think the question that these families back here want to know is: What has changed at GM? Isn't it true that, throughout its corporate history, GM has represented to the driving public that safety has always been their number one priority?

Ms. BARRA. I can't speak to the statements that were made in the past. All I can tell you is the way we are working now, the training that we have done, we have changed our core values, the decisionmaking we are leading, we are leading by example.

One of the process changes that we have also made is, in addition to when the technical community makes their decision about a safety recall or a recall, we are going to be reviewing it, Mark Royce, the head of Global Product Development, and myself, to see if there is more that we want to do.

Mr. BRALEY. Haven't the core values of General Motors always been that safety comes first?

Ms. BARRA. I have never seen that part before.

Mr. BRALEY. Isn't it true that throughout the history of the company, it has made representations like this to the driving public as a way of inducing them to buy your vehicles?

Ms. BARRA. Today's General Motors—all I can tell you is today's General Motors, we are focused or safety. We have over 18 vehicles that have a five-star crash rating. Our entire Buick lineup meets that requirement. We take it very seriously.

Mr. BRALEY. But we are talking about these vehicles and what has changed.

Have you had a chance to read this article in the Saturday New York Times, "A Florida Engineer's Eureka Moment With a Deadly G.M. Flaw?"

Ms. BARRA. I believe I read a portion of that article.

Mr. BRALEY. This is an article by a writer named Bill Vlasic. And he wrote in here about an engineer named Mark Hood who is "at a loss to explain why the engine in Brooke Melton's Cobalt had suddenly shut off, causing her fatal accident in 2010 in Georgia."

Then he bought a replacement for $30 from a local G.M. Dealership, and the mystery quickly unraveled. For the first time, someone outside G.M., even by the company's own account, had figured out a problem that it had known about for a decade, and is now linked to 12 deaths.

Even though the new switch had the same identification number, Mr. Hood found big differences.

And then the article continues, "So began the discovery that would set in motion G.M.'s worldwide recall of 2.6 million Cobalts and other cars, and one of the gravest safety crises in the company's history."

Do you agree with the author that this is a grave safety crisis in the history of General Motors?

Ms. BARRA. I have said that this incident took way too long, it is not acceptable, and that is why we are making a radical change to the entire process, adding more resources, naming a vice president of Global Vehicle Safety who is tremendously experienced and of the highest integrity, and we will continue to make process changes and people changes as we get the results of the Mr. Valukus investigation, and we will take all of those recommendations and we will make changes.

Mr. BRALEY. Before I yield back, Mr. Chairman, I would like to ask unanimous consent to have this article added to the record for the hearing, if it is not already a part of the record.

Mr. MURPHY. Without objection.

[The information appears at the conclusion of the hearing.]

Ms. BLACKBURN. If the gentleman would yield his remaining second, Ms. Barra said they had changed their core values. I think it would be great if she could submit to us what those new core values for GM are so we would have those for the record.

Mr. MURPHY. We will ask that for the record.

Mr. BRALEY. I would also like to have any prior statement of core values from General Motors over the last 20 years so that we can see what has changed, Mr. Chairman.

Mr. MURPHY. We will be asking members for several questions to submit to GM for the record.

Now recognize the vice chair of the subcommittee, Dr. Burgess, for 5 minutes.

Mr. BURGESS. I thank the chairman.

And thank the witness for spending so much time with us this afternoon.

You mentioned, Ms. Barra, at the start of your written testimony that, over a decade ago, General Motors embarked upon a small car program.

Do you recall why that was?

Ms. BARRA. I am sorry?

Mr. BURGESS. Why did GM embark upon a small car program 10 years ago, over a decade ago?

Ms. BARRA. To have a complete portfolio, I believe.

Mr. BURGESS. But the mission—or the type of car that was manufactured by GM previously had not fit that model; so, this was an entirely new business line that GM was undertaking?

Ms. BARRA. The Cobalt—and there are several products. But if you are speaking specifically about the Cobalt, it was following a previous small car, but it was an all-new program architecture, et cetera.

Mr. BURGESS. Was any part of this done because of the CAFE standards that were changing? Was any of this done because of congressional action that had occurred previously?

Ms. BARRA. I cannot answer that question. I wasn't in on decisionmaking at that point.

Mr. BURGESS. Let me ask you this. When Mr. Waxman was giving his opening statement, he said it was a shame that the National Highway Traffic Safety Administration did not have access to the same information that General Motors had.

Do you think that was a fair statement for him to have made?

Ms. BARRA. As part of the investigation we are doing, I am looking at what information was provided and when.

Mr. BURGESS. And that becomes, then, the troubling part of all of this.

I think Ranking Member DeGette had you look at tab 8 in the information binder, and this was talking about the ignition key cylinder assembly. And the date of the PDF that I have is January 1 of 2005. Again, you will find that under tab 8.

But later on in the same document it says, "We are closing this with no action. The main reasons are all possible solutions were presented. The lead time for solutions is too long. The tooling costs and piece price are too high, and none of the solution seems to fully countermeasure the possibility of the key being turned off."

So that was all in January of 2005. And then, you know, as part of our document evaluation for getting ready for this hearing, there were several accident reports that were supplied to us. And one of those occurred not too far away in Maryland in the middle of the summer of 2005.

And in that accident sequence, a Cobalt hit a series of trees at the end of a cul-de-sac. The driver was fatally injured during that. She wasn't wearing a seatbelt. She wasn't a terribly large individual. She weighed about 100 pounds.

Because the air bag did not deploy, though—or it would be my—well, you just have to wonder. Had the air bag deployed, would her small frame have been protected?

I mean, she broke the rim off the steering wheel because of the impact of the collision, her body with the steering wheel and steering column.

Of course, the steering wheel, being somewhat indented toward the driver—the lower part of the driver's body, hit her under the ribcage, apparently resulting in a liver laceration, which resulted in the exsanguination and the time sequence to get her out of the crash and get her to the hospital.

You can't help but wonder—because the other injuries that were reported with that crash are really fairly mild. You have got to believe the air bag would have made a difference there.

I just can't help but think that the people evaluating this must have asked themselves why no air bag went off with this type of crash. She was going 70 miles an hour and hit an oak tree.

Wouldn't that be a logical place for an air bag to deploy?

Ms. BARRA. First of all, it is a very tragic situation. Some of the fatalities in these vehicles, again, we see as a tragedy, and we have apologized.

As I read the document that you asked me, I find that unacceptable, that any engineer would stop at that point if there was an issue that they felt was a safety defect.

That is why we are doing the investigation, again, to put a complete timeline together. And I commit to you, we will take action. We have made process changes. We will fix the process. Our goal is to have a world-class safety process.

Mr. BURGESS. And I respect you for being here and answering that way.

One of the other accidents that is recorded in our binder under tab 20 was a head-on collision that occurred, I believe, in Pennsylvania where the Cobalt was not at fault.

Another car went over the center line, and there was a head-on impact. Again the Cobalt air bags did not deploy. The driver of the other vehicle—the air bag did deploy.

I mean, it seems to me this should be a red flag to the people who investigate air bag non-deployments as an occurrence or as an issue.

In fairness, let me just state that all of the front-seat occupants of both vehicles were deceased as a result of that accident; so, the deployment of the air bag in that situation did not protect, preserve the life of the driver.

But, still, you would have to ask the question. You have a Cobalt and a Hyundai meeting head on. Why did the Cobalt's air bags not deploy?

It was the exact same force for both vehicles. There was no intercedent jarring of the vehicle. They didn't run off the curb. They didn't run over another tree first. So the air bag did not deploy.

Why would that have been the case in that particular accident?

Ms. BARRA. Again, it is a tragic situation anytime there is a loss of life in a traffic situation. Again, this is not an investigation that was done by GM. I can't answer your questions because it is usually very complex as they look at that. So I can't comment on this particular study.

Mr. BURGESS. If that is part of your internal investigation, though, I would like for you to make that information available to the committee staff and to the committee.

Ms. BARRA. We will make whatever information we have available.

Mr. BURGESS. Thank you. And thanks for being here.

Mr. MURPHY. The gentleman's time is expired.

I will now recognize Ms. Schakowsky for 5 minutes.

Ms. SCHAKOWSKY. Thank you, Mr. Chairman.

Mr. Braley talked about the pictures in the back, and I think that what must make it even more painful is that these deaths were needless.

So I want to ask you about something a little bit more than an apology. One of the many questions raised about GM is how you will handle accidents that happened prior to the company's bankruptcy.

GM filed for bankruptcy in June 2009, emerging as new GM about 6 weeks later. So that means that new GM, the company as it exists today, I have been told, may not be liable for accidents that occurred prior to July 2009.

Is that your understanding, Ms. Barra?

Ms. BARRA. We at General Motors want to do the right thing for our customers, and that is why we feel this is an extraordinary situation, as I have said.

It took too long to get to the answers and the understandings about this part. That is why we have hired Mr. Feinberg.

We feel Mr. Feinberg has had extensive experience and he will bring his experience and objectivity to assess what are the appropriate next steps, because we do understand that we have civic responsibilities as well as legal responsibilities.

Ms. SCHAKOWSKY. Are you saying that the hiring of Mr. Feinberg indicates that GM will give some kind of settlement to the families whose loved ones lost their lives?

Ms. BARRA. We have just begun to work with Mr. Feinberg. In fact, our first meeting will be on Friday. It will take probably 30 to 60 days to evaluate the situation. So we have not made any decisions. We have just started this process with Mr. Feinberg.

Ms. SCHAKOWSKY. And that might include people who have been injured as well?

Ms. BARRA. Again, we have not made any decisions.

Ms. SCHAKOWSKY. Let me ask you this: During GM's restructuring, did the company disclose what it knew about this ignition switch defect? By 2009, there is no doubt that officials in GM were aware of this problem.

Ms. BARRA. I was not aware of this issue. I can't speak to what was disclosed. So, again, our investigation will cover if there was any information. But, to my knowledge, it was not known at the senior leadership of the company.

Ms. SCHAKOWSKY. So does GM accept responsibility for the accidents caused by the company's defective vehicles?

Ms. BARRA. First of all, I again want to reiterate we think the situation is tragic and we apologize for what has happened and we are doing a full investigation to understand——

Ms. SCHAKOWSKY. I am talking about responsibility and even liability.

Ms. BARRA. Responsibility—I am sorry. I don't understand your question.

Ms. SCHAKOWSKY. And even liability.

Do you take responsibility? Is the company responsible? The new GM, is it responsible?

Ms. BARRA. We will make the best decisions for our customers, recognizing that we have legal obligations and responsibilities as well as moral obligations. We are committed to our customers, and we are going to work very hard to do the right thing for our customers.

Ms. SCHAKOWSKY. I hope that you do do the right thing.

Let me ask you about some of the people who potentially knew about this.

So you have appointed for the first time a president of Global Vehicle Safety. I have to tell you I am underwhelmed by that, thinking that it is such an obvious thing to have someone high up that would, in fact, be able to connect the departments so everybody knew. I guess it is a good thing, however, that it is finally done.

So we know that Ray DeGiorgio was the GM engineer who approved the ignition switch redesign in 2006. Is he still an employee of your company?

Ms. BARRA. I believe he is.

Ms. SCHAKOWSKY. Do you know who signed off on the initial faulty ignition switch that did not meet your specifications?

Ms. BARRA. I don't. But that is what I will learn with the investigation. And after we have a complete investigation from a very complex process, we will take action.

We will change process, and we will deal with any people issues. I think we demonstrated in the issues we learned in India with the Tavera about a year ago, we will take serious steps and hold people accountable.

Ms. SCHAKOWSKY. So no one right now has lost their job as a result of this knowledge about this defective part?

Ms. BARRA. We are just a few weeks into the investigation by Mr. Valukus. We have already made process changes.

And as I return to the office after this, we will begin to look at the implications, now that we have more data coming from the investigation, and take the appropriate steps.

Ms. SCHAKOWSKY. Thank you.

I yield back.

Mr. MURPHY. Gentlelady yields back.

Now recognize the gentleman from Georgia, Dr. Gingrey, for 5 minutes.

Mr. GINGREY. Mr. Chairman, thank you very much.

This hearing is much appreciated, pretty poignant to me, since Brooke Melton lived in my congressional district at the time.

And had it not been for an outstanding plaintiff's attorney in the Cobb Judicial District of Georgia in bringing this case—I am sure it was against a local dealership—resulted in a settlement, but it brought to light what is going on now and the purpose. And, hopefully, some good can come from this hearing.

And I want to thank Chairman Murphy for holding it and investigating the root cause of the General Motors recall of over 2.6 million vehicles linked to these ignition defects. Unfortunately, Ms. Barra, I heard just yesterday that the recall now includes 6.3 million vehicles.

And I do want to speak a little about this young lady named Brooke Melton, a nurse in Paulding County, Georgia, which, at the time, was in the district I represent.

And she was, as you know, tragically killed March the 10th, 2010, on her 29th birthday in a horrific side-impact accident on Highway 92, and the ignition switch in the accessory position.

Just the day before, just the day before, her death, she took her 2005 Chevy Cobalt into the dealership for service, and the service

report stated, "Customer states engine shut off while driving. Please check."

Despite the fact that a service bulletin was issued from General Motors for faulty ignition switches back in 2005 for that make and that model, the on-site mechanic cleaned the fuel line, cleaned the fuel injection, told her to come pick up her car, which she did.

Brooke Melton's tragic death is not acknowledged as part of this recall because it involved a side impact instead of a front impact. Ms. Melton's parents, Ken and Beth—they are not here today, I don't think, but they deserve answers.

Ms. Barra, is Brooke Melton included in General Motors' death count? Yes or no?

Ms. BARRA. To my knowledge, no.

Mr. GINGREY. No?

Ms. BARRA. Because it was a side impact and we——

Mr. GINGREY. Right.

Why did General Motors not include the non-deployment of air bags from side-impact accidents resulting in loss of life or injury in this recall?

Ms. BARRA. As you look at a frontal collision and the way the air bag is to operate, I believe the assessment was made that would potentially be related to the switch.

Mr. GINGREY. Yes. But, Ms. Barra, if you connect the dots—I mean, the ignition gets knocked over to the accessory position. There was a problem using faulty, even by your own standards, equipment.

And so maybe what happened was that all of a sudden the car stalls. She is driving perfectly, trying to control without any power steering, without any power brakes, and may very well have—and I don't know the details of that accident—but may very well have run through a four-way or a red light and was slammed into from the side.

Whether it was a head-on collision or a side collision, it was for the same reason, and she is dead. And that was almost 4 years ago.

I don't understand why General Motors does not include the non-deployment of air bags from side-impact accidents resulting in loss of life or injury in this recall. Can you explain that to us.

Ms. BARRA. Well, first of all, all of the accidents and fatalities are very tragic, as you have indicated, and we are deeply sorry for those.

We have been very clear of the number that we put forward. There has been a lot of analysis that has gone on to look at potential incidents and——

Mr. GINGREY. Well, did General Motors investigate or do you plan to investigate whether this condition relates to the non-deployment of air bags in side-impact crashes?

Ms. BARRA. We have individuals that are looking at the available information from accidents——

Mr. DINGELL. You told us about your recent hire, and I hope—well, lastly, Ms. Barra, to what extent did GM regularly inform dealerships, like the dealership, obviously, in Cobb County, of its 2005 technical service bulletin on faulty ignition switches so that these service technicians, these young guys, maybe working there

6 months to a year, that they could properly address a customer complaint like Brooke had the day before her death?

Ms. BARRA. I am sorry. Was your question how do we communicate service bulletins?

Mr. GINGREY. How do you make sure that these dealerships all across the country and their service departments are making sure that their technicians are getting and receiving the instruction?

Ms. BARRA. We can provide details on exactly how we communicate service bulletins and how that is rolled out to each of our dealerships across the country.

Mr. GINGREY. I hope you will. Thank you, Ms. Barra.

And, Mr. Chairman, I yield back.

Mr. MURPHY. Ms. Barra, related to his questions, with all these cars in recall and waiting for parts, what are drivers supposed to do in the meantime while their cars sit in the driveway?

Ms. BARRA. We have communicated and we have done extensive testing that, if you have just the ignition key with the ring or just the ignition key, the vehicle is safe to drive.

If people are not comfortable with that, we are making loaners or rentals available. They can go to their dealer. We have over 13,000 customers that have these vehicles in rentals or loaners right now.

Mr. MURPHY. And you are assuring people that it is safe to drive if they just take the other things off the key?

Ms. BARRA. There has been extensive testing done by the engineering team. And with just the key and the ring or just the key, we believe it is safe based on our testing.

Mr. MURPHY. Recognize Mr.——

Ms. DEGETTE. Excuse me, Mr. Chairman.

Is that true of the earlier ignitions as well as the 2006, all of them? All these cars, that's true?

Ms. BARRA. Yes.

Ms. DEGETTE. Thank you.

Mr. MURPHY. Mr. Tonko, you are recognized for 5 minutes.

Mr. TONKO. Thank you, Mr. Chair.

Ms. Barra, thank you for appearing before the committee.

And I have to believe, for the family members and friends of the victims of this tragic outcome, it must be a very painful process to sit here and listen to the exchange.

Just a comment at first. We are hearing a lot about information that will come post the investigation or the review.

However, I hold in my hands a February report and a March report to NHTSA on behalf of GM under your watch that provides detailed timelines with a whole bit of knowledge exchanged.

And I am confused somewhat about that fair amount of knowledge that has been formally exchanged to NHTSA and, at the same time, we are hearing, "Well, we don't know until the investigation is complete."

So there is a conflict that I think is brought to bear here in terms of an exchange that has been detailed in the last few weeks under the watch of the new General Motors, today's GM.

And at the same time, when I was listening to our representative from Illinois ask about the corporate chart and the changes, no changes have been made. We are waiting for that pending the in-

vestigation. But at the same time, we have characterized—or relabeled it as today's General Motors.

So while we are all products of the environment that produces us, the cultural impact of GM seems to still be in play with a number of people who have perhaps shifted positions, but are all part of that organization.

So comfort me by telling me that there is a new thinking, there is a new culture, that has beset GM while all the players are there in the corporate chart. Tell me how the company has restructured and reorganized so as to bring comfort to the consumer.

Ms. BARRA. First, there are many new people in the company as well as people who have experience across the company. There is a new structure. For instance, in Global Product Development, we have streamlined, eliminated bureaucracy.

We took out an entire layer of management in the product development. We have completely redone the quality processes over the last—it started in the 2011–2012 time frame.

We have changed our test procedure. We have added additional validation. So there has been a complete remake of the way we drive quality. We test to failure instead of testing to a standard. That is just one example.

And we have looked across the entire organization. We have rebuilt our supplier quality organization, adding over 100 resources just in this country alone.

So systematically we have gone across the company and we are making changes, even in the chronologies which I think you held up.

Those are the most detailed chronologies that we have ever provided, sharing, again, in a summary fashion, the information we have now, but then we are conducting an investigation with Mr. Valukus.

We have also rolled out new values with the customer as our compass, relationships matter and individual excellence. We have trained thousands of people.

But, most importantly, it is leadership at the top. It is the leadership of how we behave, of how we demonstrate when we make decisions, and that we make decisions that focus on the customer, focus on safety, focus on quality. And I can tell you, from my leadership team and the next layer, we continue to drive that every day.

We recognize culture change doesn't happen in a year or two, but we are well on that journey, and we are dedicated to it and we very clearly want to have the safest vehicles on the road.

Mr. TONKO. And will you make that list public from the report that you are anticipating?

Ms. BARRA. I am sorry?

Mr. TONKO. Will you make the list that will be coming forth public? Will you share it?

Ms. BARRA. That's the list of? I am sorry.

Mr. TONKO. The full report coming from Mr. Valukus.

Ms. BARRA. Mr. Valukus will give us findings and we will make the appropriate findings available to this body, to our customers, and to our employees.

Mr. TONKO. The appropriate findings.

What about the full report?

Ms. BARRA. I don't know if he will give a report or if he will share findings.

Mr. TONKO. If he does, will you share the full report?

Ms. BARRA. We will share the appropriate information.

Mr. TONKO. Not the full report?

Ms. BARRA. Again, I don't know if there will be a full report. But we will share——

Mr. TONKO. If there will be a full report, will you share it?

Ms. BARRA. I commit that we will be very transparent and we will share what's appropriate.

Mr. TONKO. So, in other words, there is no commitment to share the full report?

Ms. BARRA. I am saying I will share what is appropriate.

Mr. TONKO. I hear the answer.

Mr. Chair, I yield back.

Mr. MURPHY. Gentleman yields back.

Recognize the gentleman from Louisiana, Mr. Scalise, for 5 minutes.

Mr. SCALISE. Thank you, Mr. Chairman. I appreciate you having this hearing.

Ms. Barra, I thank you for being here.

Let me say first my prayers are with all the families of those who lost their lives and others who have been impacted by this. I want to thank you all for being here in this room as well.

Obviously, the questions we have are even more pertinent to the families that are here, and that is why it is important that we ask the questions and get answers.

And if we are going to make sure that we can prevent something like this from happening again, we have got to get into the real details of what went on during that period of years, unfortunately, years, where it seemed somewhere inside of General Motors there was knowledge that this was a problem before it got to the level of recall.

I want to first take you, Ms. Barra, to the tab you have got there, Number 38. Tab 38 is the signoff. This is what is called a General Motors commodity validation signoff. This is the actual sheet that the engineer signed off on that approved the design change in the faulty ignition switch.

Have you seen that document before?

Ms. BARRA. This is the first time I have seen this document that is labeled "Delphi."

Mr. SCALISE. Now, what we are talking about here—how long have you been aware of the problem with these faulty ignition switches?

Ms. BARRA. I was aware that there was a faulty ignition switch on January 31.

Mr. SCALISE. Of this year?

Ms. BARRA. Of this year.

Mr. SCALISE. OK. So as you are going through—I'm sure some of the questions you have and are asking and maybe some of the ones we are having—the first question you would want to ask is: What did we know about it? When did we know? Did we know well in advance? And why didn't we prevent it from happening?

The first thing we all are talking about is when was this found out within GM to the point where they actually made a change. I mean, you all made a design change.

The letter I have got here, this form, is dated April 25 of 2006. So 2006 is when your engineers—and there is a name on this sheet. There is an actual engineer who you just said under oath earlier is still employed with GM.

There is an engineer that actually signed this document requesting—not requesting—approving a change in this ignition switch, in fact, with the part number. The part number is on here.

To your knowledge, has anyone in GM taken this—he is an employee of yours. You can just pull him aside right now and ask him, "When you signed off on this in 2006, number one, why didn't you change the part number? And, number two, why did you approve a change in the ignition switch and not bring it to the level of recall?"

In 2006—clearly people lost their lives after this was signed off on. So do you know right now—and you are under oath—do you know of anyone that has asked the person that signed this—that signed off on this—have any of you all asked him those basic questions?

Ms. BARRA. I know this is part of the Anton Valukus investigation. And I want to know the answers to the questions you are asking as well as you.

Mr. SCALISE. Do you know of anyone that's asked him that question? I mean, he's an employee of yours right now. You can pull him aside right when you leave here today and ask him these questions.

Ms. BARRA. I think it is very important as we do an independent investigation that we let Mr. Valukus go do a thorough investigation, talk to people, that there are not a lot of side investigations going on. He is the one standard that we are going to use in this investigation. He brings the objectivity to it.

Mr. SCALISE. Clearly, there—I mean, you talk about a new culture.

Has anyone been held accountable as of now for what's happened?

Ms. BARRA. Again, we learned of this on January 31.

Mr. SCALISE. Well, again, you have a design change in 2006 related to what we are talking about. This is not a 2014 issue.

The recall was issued in 2014, but the product, the faulty ignition switch we are talking about, was redesigned in 2006 by one of your engineers who's still an employee of General Motors.

If you can't get me that information—and if you do find that information out, by the way, would you get that to the committee?

Ms. BARRA. It will be part of the investigation and we will share that.

Mr. SCALISE. The other question I want to ask you—because later on we are going to have the acting administrator of the National Highway Traffic Safety Administration.

Some of the things he says in his testimony—before you leave, I would like to get at least some responses. He says, number one, "We are pursuing an investigation of whether GM met its timeli-

ness responsibilities to report and address this defect under Federal law."

Are you aware of whether or not GM has met its obligations of timeliness?

Ms. BARRA. That will be part of the investigation that we are doing.

Mr. SCALISE. But you are not aware at this time, though. I mean, if you are aware of something, that would be a violation of Federal law.

If you are aware of that already, can you share that with us?

Ms. BARRA. I am aware of the findings that I have already shared from Mr. Valukus today.

Mr. SCALISE. And another question he asks—in the brief time I have left, he says, "GM had critical information that would have helped identify this defect."

That's the gentleman that's testifying right after you. You don't have the opportunity to come behind him and respond. He is going to be saying this. He is writing this in his testimony.

What would you say in response to his statement that GM had critical information that would have helped identify this defect?

Ms. BARRA. As I have already said, we have already learned through Mr. Valukus's investigation that there were points in time where one part of the organization had information that wasn't shared across to the other side of the organization. You can call it a silo.

At some point, they didn't understand that the information would be valuable to another party. So I have already shared that we have found that to be true and we have already made changes to the structure and to the responsibilities of people. So that won't happen again.

Mr. SCALISE. We appreciate getting the full range of answers to all these questions.

And, with that, I yield back the balance of my time. Thank you, Mr. Chairman.

Mr. MURPHY. Time is expired.

I now recognize Mr. Green for 5 minutes, of Texas.

Mr. GREEN. Thank you, Mr. Chairman.

Ms. Barra, first of all, congratulations on being the CEO of General Motors. Like a lot of my constituents, I have been a customer of GM. In fact, I can't list the number of vehicles I think I have owned. Although my wife drives a Tahoe, I lease a Malibu. I have a Blazer. And, you know, we keep them for a long time. So I appreciate GM products.

And you have heard the questioning today, and it seems like on a bipartisan basis we are trying to find out what is happening, although—Mr. Chairman, I know you heard it—I was surprised because Dr. Gingrey is a good friend of mine and a physician and, to say he thanked a plaintiff's lawyer for something, you have at least gotten Republicans and Democrats on the same side on something. Phil's not here now, but there is a reason we have a civil bar.

You have gone down the litany with the other questions of the problems that were happening. In 2002, the switch was acknowl-

edged it was below specs. In 2005, the dealers were notified of a problem, but it was because of heavier key rings.

And I thought about my wife's key ring that she uses. It has everything in the world on that key ring. So I couldn't imagine that would be an issue.

But, I guess, getting down to the concern I have—and in 2007 you modified the switch ignition for future models, but—though the switch ignition still fell below the initial torque standards by GM.

Let me give you an example of what this has caused. I have a constituent who I talked to yesterday before I left Houston whose mother, Lois, owns a 2003 Regal, which is 10 years old. And she has owned GM products, like I guess I have, for many years.

But the Regal began stalling and turning off in February of 2013 and even the car had less than 50,000 miles. Since she's owned the car, it's gone to the GM dealer six times.

The battery has been replaced, and each time the dealer did not fix the problem. She ended up finding—and I quote Mrs. Knutson who told it to me—she finally found a shade tree mechanic who actually fixed it.

And I guess what bothers me, if you go back to the dealer this many times—and I hold the dealers' repair shops to a higher level simply because they know the product—that what has happened—can you confidently say that these stalling issues are limited only to the Cobalt, the HHR, the Pontiac G5, the Solstice and Saturn Ion, and the Sky models of vehicles or is it other ones like the Regal or maybe like the Malibu I drive?

Ms. BARRA. Again, I am not aware of any other stalling issues. If we have an issue, we put it into our recall process and make decisions. So if there is a defect that you are aware of, I would appreciate the information, and I will definitely look into it.

Mr. GREEN. Well, we will get you that information.

I have a couple minutes left. But I represent a very industrial area. We have refineries and chemical plants. What we do is inherently dangerous. And so you have to take extra concern about it.

It looks like in the last 10 years GM has not—somewhere along that line, the culture of the company is not there to deal with that. And, as the new CEO, I would hope you would make sure it happens.

And I have said this many times. When I have a chemical plant or a refinery that has an accident and somebody dies and—we have been able to pinpoint sometimes with civil justice, but sometimes through Chemical Safety Board, on what decision was made that they didn't do that caused people to die.

That is what happened here. And General Motors is a much greater company than to do that, and I would hope the culture of your corporation would be better so it would continue to earn the respect that both this lady and I have.

But that is your job now as CEO, but you need to fix it and fix it as quick as you can because it is going to cause problems, obviously.

Ms. BARRA. I agree with you. It is completely my responsibility, and I will work day and night. We have already made tremendous change at General Motors. We will continue to do that, and I recognize it is my responsibility.

Mr. GREEN. The last thing in my 30 seconds is: Should my constituent—should she have her mother in Phoenix take that Regal back and have it checked by a dealer now and see what happened?

Ms. BARRA. Yes. And I wish you would send a note to me, and I will——

Mr. GREEN. I will get you that information.

Ms. BARRA. Thank you.

Mr. GREEN. Thank you, Mr. Chairman.

Mr. MURPHY. I now recognize Mr. Griffith for 5 minutes.

Mr. GRIFFITH. Thank you, Mr. Chairman.

Ms. Barra, you have indicated that not having a new part number when the part was changed in 2006 is not acceptable. Is that correct?

Ms. BARRA. That is correct. Yes.

Mr. GRIFFITH. And I guess it is hard to figure that somebody would have just done that by accident and that there had to be a reason.

Because that was a breach of protocol, wasn't it?

Ms. BARRA. I don't think there is an acceptable reason to do that.

Mr. GRIFFITH. OK. And while there may not be an acceptable reason, you would have to acknowledge that a reason in somebody's mind, while not acceptable, might be that it is actually harder to track the problem with the old part when you have an improved new part that is put in its place. Isn't that correct? Yes or no?

Ms. BARRA. Yes.

Mr. GRIFFITH. And while you have indicated that you did not know the individual name of the person who made that decision, do you know whose job title it was or in whose chain of command it was to make the decision not to create a new part number for that part?

Ms. BARRA. I don't. It would be within the engineering organization, but I will learn that from the investigation and we will take appropriate action.

Mr. GRIFFITH. And would that engineering department have been under your chain of command at some point in your tenure with GM?

Ms. BARRA. Since February of 2011.

Mr. GRIFFITH. But it never got to you? Nobody ever brought this to your attention?

Ms. BARRA. No, it did not.

Mr. GRIFFITH. I appreciate that.

I do have this question, and I think that the answer probably is that your investigation will reveal this.

But it is somewhat concerning that, while the trial lawyer that uncovered this may be very savvy and his expert might be pretty sharp, you all have sharp people working at GM as well; do you not?

Ms. BARRA. I believe we do.

Mr. GRIFFITH. It is one of those questions that I am sure your investigation will uncover. But why didn't your team of engineers connect the dots and figure out that, when the ignition slips into that auxiliary position, the air bags won't function properly?

Ms. BARRA. Congressman, those are the questions I want to answer and, as I have said, it has taken way too long. And we will

learn from this and we will make changes and we will hold people accountable.

Mr. GRIFFITH. And not only holding people accountable, but you were asked earlier—and I know you are in a tough spot on that—as to what kind of liability GM will end up accepting because there is legal liability and moral liability. And you have said that.

One of the questions that I would have—it would have been a whole lot easier just to have actually listed these liabilities in the bankruptcy; would it not? It would have been easier to do it in the bankruptcy instead of having to come out now, wouldn't it?

Ms. BARRA. The best thing in the world would be, as soon as we find a problem, we fix it and it doesn't exist in the marketplace and doesn't affect our customers and doesn't create tragedies.

Mr. GRIFFITH. And here is one of the things that concerns me. Have you been given any estimates yet by Mr. Feinberg or others as to what a best-case or worst-case scenario is on your civil liabilities?

Ms. BARRA. We have just been in initial conversations with Mr. Feinberg. I believe we will work through him to evaluate the situation over the next 30 to 60 days.

Mr. GRIFFITH. Has anybody else given you a best-case or worst-case scenario over liability issues related to this problem?

Ms. BARRA. There has been a lot of estimates done in the public, but none given specifically to me.

Mr. GRIFFITH. OK. Would those liability issues have negatively impacted the prospects of either a bailout by the Federal government, or prior to the bailout, the people who were lending you money to keep GM afloat with its heavy liabilities already existing, would not the additional liabilities that would have come forward by this problem have had the potential to dissuade private investors or the Federal government from giving cash to GM?

Ms. BARRA. As I look at it, as soon as we identify an issue and fix it, then there aren't liabilities or the liabilities are contained. As we look at problems as we go forward, we want to fix them as soon as we can. If there is a safety issue, we are going to make the change, make the right investment, and accept that.

Mr. GRIFFITH. But in the real world of business, if there is a new set of liabilities that come onto the page that weren't there before, it is harder to get money from both public and private sources; isn't that true?

Ms. BARRA. I think it depends on the situation. So it is a general question. I don't feel appropriate commenting.

Mr. GRIFFITH. I appreciate that.

Let me ask this last question. When this issue first came up, the corresponding Problem Resolution Tracking System report document identified the issue of severity 3. What does that mean?

Ms. BARRA. I am sorry, I didn't hear you.

Mr. GRIFFITH. Severity 3. I am referencing back to some of the documents that you have given and your folks have given us. And it is initial assessment in 2004, 2005 when your Problem Resolution Tracking System report came out, it related this problem as being severity 3. What does that mean?

Ms. BARRA. I don't have a specific definition for that. I——

Mr. GRIFFITH. Can you get one for us?

Ms. BARRA. I can.

Mr. GRIFFITH. I appreciate that.

And I yield back.

Mr. MURPHY. Can I ask a clarifying question to what Mr. Griffith was saying.

Did GM purposely, willfully negotiate, during the bankruptcy issues or in the process of obtaining the loans, did they purposely withhold any information that they may have known about pending lawsuits or things that would be emerging in the future about the Cobalt or other cars?

Ms. BARRA. I am not aware. I personally did not withhold any information. I am not aware, but I can't speak to every single person.

Mr. MURPHY. Thank you.

Mr. Welch, you are recognized for 5 minutes.

Mr. WELCH. Thank you.

I have to congratulate General Motors for doing the impossible: You have got Republicans and Democrats working together. And I thank my colleagues for their focus on this hearing.

Couple of things. How many cars have been recalled as of this date?

Ms. BARRA. Related to the ignition switch?

Mr. WELCH. Right.

Ms. BARRA. Over 2.5 million.

Mr. WELCH. Now, this ignition switch issue, it came to light in 2006; is that correct?

Ms. BARRA. Through our investigation, we will know when it came to light. It came to light to me on January 31st, 2014.

Mr. WELCH. That is totally irrelevant to the people who lost their lives.

Ms. BARRA. I understand.

Mr. WELCH. I mean, you are the current CEO, but that is not relevant to the question I asked.

Ms. BARRA. I'm sorry, I thought you asked when I became aware of it.

Mr. WELCH. No. GM.

Ms. BARRA. Again, that is what we will learn in our investigation.

Mr. WELCH. Well, you changed the switch after 2006. You began in 2007 changing the switch; right?

Ms. BARRA. Yes, there were changes made.

Mr. WELCH. So would it be a logical inference that somebody thought there was a reason to change the switch that had been in use in 2006 to 2007?

Ms. BARRA. As we do our internal investigation, I hope to get those answers.

Mr. WELCH. Wouldn't that be a starting point? Somebody for some reason decided to change the very critical part in the car, between 2006, 2007; correct?

Ms. BARRA. Correct.

Mr. WELCH. So let me ask you this: If you had recalled cars and acted on this aggressively in 2006, when you were making the decision that you had to change this—GM, not you.

Ms. BARRA. I am sorry.

Mr. WELCH. GM changed the switch, how many cars would you have had to recall had you acted in 2007 when you made the decision to change the switch?

Ms. BARRA. I can get you the exact number. But it would have been significantly less. I don't know.

Mr. WELCH. Give me an estimate. You can talk to your back row there if you want.

Ms. BARRA. Again, I will confirm with an answer, but I would assume it is something around more 1.2 million.

Mr. WELCH. Just from 2000—so you would have cut it down at least in half, and maybe more——

Ms. BARRA. Because, again, we are starting with vehicles that the Saturn Ion was in production in 2003.

Mr. WELCH. Let me just get a business-type question here. What do you estimate would have been the cost to GM of this recall had they done it in 2007?

Ms. BARRA. When we looked at the population from 2003 to 2007, actually, if I look at all of the vehicles that had this, it would have been a higher number, I believe it was 1.8. And that would have probably—the estimated costs for those two pieces is something less than a hundred million.

Mr. WELCH. OK. And what do you estimate will be the cost of the recall now that it is being done 8 years later?

Ms. BARRA. Well, there is a larger population. We can provide the information.

Mr. WELCH. I want an estimate. I want people to be able to hear this. A decision delayed is money and lives at risk. So I am trying to get an opinion from you, and it is ballpark so it can be adjusted, as to what the costs would have been had you acted 8 years ago versus acting now. You, GM.

Ms. BARRA. Well, if we would have acted at that point we would have had a smaller population, as we talked about.

Mr. WELCH. I know that. That is obvious.

Ms. BARRA. I am sorry, I am not trying to be difficult. I don't understand your question.

Mr. WELCH. You know what? If I were on the board of directors and I had an obligation to shareholders, and I had a company that could have acted 8 years ago, to deal with a problem but by not acting let that problem increase in magnitude, do more damage to shareholders, do more damage to the bottom line, do enormous damage to the reputation of this company, and cause we don't know how much harm to citizens, I would want an answer to the question.

Ms. BARRA. I agree. It would have been substantially less at that time frame had we done it than what it will be now.

Mr. WELCH. GM was involved in litigation concerning allegations that this switch was defective and caused problems; correct?

Ms. BARRA. Yes.

Mr. WELCH. And GM settled some of these litigation matters; correct?

Ms. BARRA. Correct.

Mr. WELCH. After very aggressive defense. Those settlements were secret?

Ms. BARRA. They are confidential by both parties.

Mr. WELCH. By both parties—some of us have been in court. By "both parties" usually means by the request of the party that is paying the damages.

Ms. BARRA. I wasn't involved in those settlements. All I know is confidential was by both parties.

Mr. WELCH. OK. This is not good. You are the company right now. All right?

Ms. BARRA. I am.

Mr. WELCH. Let me ask this question. Do you believe that when a company that has been sued about a matter involving product safety, where a person has been seriously injured or has died, that the company that settles as a matter of policy, should be entitled to keep secret what that settlement was about?

Ms. BARRA. I am not—I think that there are issues associated with that that every settlement is unique and it is a decision that is agreed to by both parties. And I don't have any comment beyond that. Each one is unique.

Mr. WELCH. Let me ask you this: If a company, GM or any other company, settles litigation and pays a substantial amount of money pertaining to an allegation about serious bodily injury or death, should that company be permitted to keep secret that settlement from the governmental agency whose responsibility it is to protect the public safety?

Ms. BARRA. If that is information required by that government agency, then we would provide it if the two parties involved in the settlement agree to it, that is their agreement.

Mr. WELCH. So if you don't have to do it, you won't do it?

Ms. BARRA. If both parties want that. I am making the assumption that both parties agreed to it, which what is I have been told.

Mr. WELCH. I yield back.

Thank you.

Mr. MURPHY. Gentleman's time has expired.

Now recognize the gentleman from Missouri for 5 minutes, Mr. Long.

Mr. LONG. Thank you, Mr. Chairman.

And thank you for being here, Ms. Barra.

And I want to thank the families that are here today for keeping safety in the forefront of America's and Congress's consciousness when it comes to automobile safety. And we have heard about the same subcommittee in the past, dealing with the issue before I came to Congress, the Ford Explorer/ Firestone tire situation. We have heard about the Toyota accelerating car issue. And, like I say, I wasn't here, but I can imagine that the questions were similar: Who knew what when? Who was responsible? Did you know this person? Have you done anything about it?

I want to take a little different tack with my line of questioning, as I normally do. And that is that, people ask me all the time, Do you think you make a difference? When you go to Congress, you are up here a few years, do you think you are making a difference? And that is hard to quantify, to explain to somebody whether you are making a difference or not. But today this is a day I want to look back on and say, you know, I think I made a difference. I think that we got some answers to questions in the future to prevent—I don't want to be here again and I don't want to have them

say Ford Explorer/Firestone tire, Toyota accelerating, and you remember the GM faulty ignition switch. So that is what I would like to say, yes, we made a difference.

And with that, like I say, I thank the families for being here and keeping it in the forefront of safety so there is not other people sitting in those same seats next time we approach an issue like this. Because hopefully there won't be a next time. And the finger pointing, the old analogy, when you are pointing your finger, you got three fingers pointing at yourself. There is going to be a lot of finger pointing in this.

But I would really like to drill down on and get answers to is how the NHTSA, or whatever they are calling it, the National Transportation—National Highway Transportation—or excuse me, National Highway Traffic Safety Administration and you all, as an automobile manufacturer, if you can work to see that this doesn't happen again so that the two organizations can work together and drill down on these problems when we first learn them, whatever the next problem may be, that would be my goal for here today.

In answer to one of Chairman Upton's, the Chairman of full committee's questions awhile ago, and I don't even know what he was asking about exactly. But you said "I was not part of that organization at the time."

I am sure that was something within General Motors. Because you, like I, have a history that goes back I think to when you were 18 years old with General Motors. So you were there at the time as far as the overall organization but not whatever part he asked your father, I believe, worked 39 years for Pontiac. So you indeed go way back.

I go back to 18 years old with General Motors too. When I was 18, my folks bought me a 1973 GM Jimmy. If you think of a big Suburban today, cut off two doors, and that was a Jimmy, or a Blazer; Chevrolet called theirs a Blazer. I was in the real estate and auction business for years, from 1973 to about 2005, I drove nothing but General Motors Suburbans. I remember times when the key would be in there and you would go to put your key in and it wouldn't work. Why wouldn't it work? Because I had a big key chain a big key ring. And it would vibrate. And it would tear the teeth off the keys to where the key no longer functioned.

But never once did I have that shut off, never once did I have that fail to act or shut off in the middle of driving. So, to me, from 1973 to 2005, with my experience, they made pretty good ignition switches.

Can you tell me how many models GM makes today?

Ms. BARRA. Oh, around the globe, over a hundred.

Mr. LONG. Hundred different models. Can you tell me how many ignition switches they make?

Ms. BARRA. Well, we sell over 8 million vehicles.

Mr. LONG. No, I mean how many per—if you have a hundred models, how many different ignition switches would there be?

Ms. BARRA. I can't answer that question. I don't know.

Mr. LONG. To me, GM has proven in the past, and other companies have, that you can—I just don't understand this reinventing the wheel, that every car has to have a different ignition switch

with a different set of circumstances made by somebody down in Mexico to make sure that it meets the qualifications.

So I would recommend two things: That you work hard with us. Our next witness from the National Highway Traffic Safety Administration says that a car, when it shuts off that the airbag will still deploy for 60 seconds. I can't imagine being in a cash that a car shut off and you continue for more and 60 seconds. So that is a question that I am going to have for him.

But I would ask that you reach out and work not only with your engineers, saying, hey, we have got some pretty good—why do we reinvent the wheel every time we go to invent a new ignition switch for all these different models? And also hope that you will reach out and work with the National Highway Traffic Safety Administration so.

Ms. BARRA. I would welcome the opportunity to have our technical experts look at how we can improve the way the system works. Because airbag deployment is part of the system, and I would welcome the opportunity if there are improvements that can be made, we would want to be in the forefront of making them.

Mr. LONG. In communication with NHTSA.

Ms. BARRA. And work closely with NHTSA——

Mr. LONG. I appreciate it. I thank the families.

Mr. Chairman, I yield back.

Mr. MURPHY. Now recognize Mr. Yarmuth for 5 minutes.

Mr. YARMUTH. Thank you, Mr. Chairman.

I, at the outset, want to express my condolences to the family of the victims of this tragedy. And I know it must be frustrating to you to listen to this testimony. And you are looking for answers and so are we and so is GM right now. And I hope we do get answers because I was frustrated by the same questions that my colleague had just mentioned. I have been driving a long time, and this is a pretty well established technology, sticking a key into an ignition and turning it. Are you aware of any other ignition problems that have been discovered or—in GM or any other vehicle over the history of key ignition systems?

Ms. BARRA. I have not reviewed every incident we have ever had. But I—we do, as we find issues, we document them and take them through our process. And in this particular case it took way too long.

Mr. YARMUTH. And there is a new technology. I have been driving a car for 4 ½ years. I confess it is a Ford product, not a GM product, that has a push-button ignition. I was in a GM car last week, very nice one, by the way, which has a push-button ignition system.

How do you make the judgment as to whether a car has a push-button ignition system and/or a key ignition system and what are the differences?

First of all, in terms of safety, we know that this particular situation wouldn't occur with a push-button ignition system. But how do you make that decision as to what goes into which car?

Ms. BARRA. We evaluate. And actually the push-button start is something that we are evaluating putting across the portfolio. As you look at the specifics of a push-button start versus the traditional ignition, I would like our experts to provide that information.

Because again—the ignition switch and how it is a component that operates as part of a system of the vehicle especially as it relates from a safety perspective. I think we would be better served to have our experts cover that.

Mr. YARMUTH. But you are doing an analysis of whether a push-button ignition system is safer than a key ignition system?

Ms. BARRA. We can definitely do that. I think there has been work done that both can be designed to be safe. But we are looking because of the customer, it is a function, it is a delighter, usually when the vehicle has a push-button start, we have them on some of our vehicles. We continue to roll those out across our entire portfolio, and we are looking at doing it across the board.

Mr. YARMUTH. I have no idea if there is a difference in the safety. There may be none. But it would be worth doing that analysis.

One of my staff members has a 2005 Malibu that was recalled because of a power steering issue, and she called the dealership, and the dealership said that they didn't know how to fix it. So my question to you is, are you confident that GM knows how to fix the vehicles it recalls for the variety of problems that have——

Ms. BARRA. Well, first of all, if we find a situation that is not safe and we don't know how to fix it, we are still going to recall the vehicles and we will take those actions. In this case, there may be a communication lag, because there is a fix, whether it is a check or a replacement of the product. So that does exist for that specific vehicle.

Mr. YARMUTH. So she is getting bad information from her dealership or they haven't been told yet?

Ms. BARRA. I would assume. I can follow up if you would like.

Mr. YARMUTH. I mean, I think the public be would want to know that——

Ms. BARRA. Right.

Mr. YARMUTH. Because you now have——

Ms. BARRA. Right. That there is——

Mr. YARMUTH [continuing]. Millions of vehicles out there under recall. And she was told to go ahead and drive the vehicle if she felt safe. And I am not sure that every driver would know whether they should feel safe or not.

I mean, some people, if the power steering goes out are strong people and maybe it has happened to them before and they know that it is going to take a little more effort to steer, other people might not. So, I mean, I don't even know how the average consumer is supposed to know whether they feel safe or not after a vehicle has been recalled.

Doesn't the company have some disclosure responsibility to say these things, at least these things could happen?

Ms. BARRA. Yes, and we have done that, and that is a part of the letter that we send to the customer when we notify them of this issue, and then we provide information to the dealers as well.

Mr. YARMUTH. OK. One final question.

We talk about and we are going to have the NHTSA representative here later. One of the things that you are not required to do is to provide warranty data proactively to the National Highway Traffic Safety Administration. Do you think that that is something that ought to be considered, that might be helpful? In this case,

maybe dots could have been connected sooner if all that data had been——

Ms. BARRA. I welcome the opportunity to look at what information that NHTSA would feel of value to submit.

Mr. YARMUTH. Thank you. I yield back.

Mr. MURPHY. Thank you, the gentleman yields back.

I will now recognize Mr. Harper for 5 minutes.

Mr. HARPER. Thank you, Mr. Chairman.

And to the family members that are here, our hearts indeed go out to you. And we will continue to get to the bottom of this.

And Ms. Barra, I know this is not the most enjoyable experience to go through this. But we are in a situation that, we don't trust the company right now. And we have to get to the bottom of this. And so we want to continue to ask some questions.

If I can get you to refer to tab 28 in your binder. And I want to direct your attention to that e-mail that is found at tab 28. In September of 2005, a few months after General Motors decided that there was not an acceptable business case to implement changes to the ignition switch, an engineering group manager e-mailed Lori Queen and other GM personnel including Raymond DeGiorgio about proposed changes for model year 2008 ignition switch.

So this engineer obviously explains that a more robust ignition switch will not be implemented in model year 2008 vehicles because it appears that piece cost could not be offset with warranty savings. In his e-mail he references "piece cost." Is that just the ignition switch?

Ms. BARRA. Generally, when people refer to piece cost, they refer to the part.

Mr. HARPER. So he is just referring to that ignition switch. That is a yes?

Ms. BARRA. Again, I didn't write this note. But I am just telling you generally when people use the term "piece cost," that is what it means.

Mr. HARPER. As he notes in that e-mail, an increase of 90 cents; is that correct?

Ms. BARRA. I am sorry?

Mr. HARPER. Does the e-mail say there would be an increase of 90 cents?

Ms. BARRA. Yes, I see that.

Mr. HARPER. And since the warranty offset was only 10 cents to 15 cents, GM didn't make the change.

Ms. BARRA. And that is not something that I find acceptable. If there is a safety defect, there is not a business case, this analysis is inappropriate.

Mr. HARPER. And I appreciate that you don't find that acceptable. But that indeed is what happened here. Correct?

Ms. BARRA. And that is—exactly. And that is one piece of data as we go through the investigation as we put the pieces together we will take action. Because this is not the type of behavior that we want in our company today with our engineers today.

Mr. HARPER. And understand, we are trying to go back and figure out what happened and understand that so we can indeed make sure as you do that this never happens to anyone else again.

Now Lori Queen, what was her position at the time?

Ms. BARRA. 2005, I believe she was a vehicle line executive. But I can go back and confirm that.

Mr. HARPER. If you would let us know, please.

How does cost factor into decisions about safety?

Ms. BARRA. They don't.

Mr. HARPER. Has——

Ms. BARRA. But they——

Mr. HARPER. Go ahead.

Ms. BARRA. Again, I can only speak to the way that we are running the company. And if there is a safety issue, if there is a defect identified, we go fix the vehicle, fix the part, fix the system. It is not acceptable to have a cost put on a safety issue.

Mr. HARPER. And that is obviously your position and your goal and the way you want it to be now, but that is not the case of what we are going back and looking at.

So you are telling us that General Motors has changed its position on how it handles costs and is safety issues. It hasn't been this way before, but this is how you want it now. Am I correct?

Ms. BARRA. This is how it is, I think we in the past had more of a cost culture, and we are going to a customer culture that focuses on safety and quality.

Mr. HARPER. When we go back and look at who first authorized the use of an ignition switch that did not meet specifications.

Ms. BARRA. And that is something we will learn in our investigation.

Mr. HARPER. Now, one of the things that concerns us, of course, is when General Motors filed bankruptcy in 2009, it wasn't an overnight problem with money or with the loss of profits or losing money each year. In 2005, I know General Motors lost 10.6 billion; jump to 2007, lost 38.7 billion, 2008, lost 30.9 billion, and then filed for bankruptcy in 2009.

The fact that General Motors was going through many years of financial issues, did that impact how this was categorized and was not dealt with at that time as it should have been?

Ms. BARRA. I can't answer that question. I want to know the answer to that question, and when I do, I will take action.

Mr. HARPER. You indicated earlier that a specific traffic death was not included in the count of fatalities that may have been associated with this issue, I would like to see other traffic deaths or serious injuries that were looked at but the determination was made that it was not part of this total. Can you get us that information?

Ms. BARRA. Through our TREAD information, yes.

Mr. HARPER. Will you get that for us?

Ms. BARRA. Yes.

Mr. HARPER. Thank you very much. I yield back.

Mr. MURPHY. Gentleman yields back.

Now recognize Ms. Castor for 5 minutes.

Ms. CASTOR. Thank you.

Natasha Weigel, age 18, was killed October 24th, 2006 while riding in a 2005 Chevy Cobalt. Sarah Troutwine, age, 19 was killed on June 12th, 2009, after losing control of her 2005 Chevy Cobalt, and Allen Ray Floyd, age 26, was killed on July 3rd, 2009 after losing control of his 2006 Chevy Cobalt.

I understand that Ms. Weigel's parents and Ms. Troutwine's family are in attendance at the hearing today. Others have been killed because of GM's defective ignition switch. The fact is, we do not know yet the full extent of the fatalities, injuries, and accidents. But evidence is growing through this investigation and that in the press and hopefully your own investigation, that the deaths could have been avoided if GM had addressed this issue long ago.

We know that GM knew about this problem as far back as 2001. The committee learned last week that the supplier of the faulty switch, Delphi, conducted tests, that year, 2001 which showed that the switch didn't meet GM's specifications. But GM used this switch in Cobalts and Ions and other vehicles anyway.

Ms. Barra, the committee sent you a letter about this issue. And documents were received yesterday that show that these inadequate switches were approved by GM in May 2002. I have a document here and it has been placed before you and it is at tab 54 in the binder as well. This document shows that the force required to turn the ignition switch was too low. That specification is clearly marked "not OK." Ms. Barra, does this document show that GM officials were aware that the ignition switch did not meet company standards in 2002?

Ms. BARRA. If this document was provided to the engineers, again, that is something I will learn in our investigation.

Ms. CASTOR. Internally, GM knew there were problems. By 2004, they are considering ways to fix the problem by redesigning the faulty switch.

This document, which is also placed before you, this is at tab 8 in that notebook as well. From 2004, shows that GM did reject alternative designs. It mentions 1-year lead times and says, quote, the tooling costs and piece prices are too high. It concludes, "Thus none of the solutions represents an acceptable business case."

Other documents present the piece-cost increase for a potential solution as 57 cents per unit. Ms. Barra, do you know who at GM would have made the decision about whether to make this change in 2004?

Ms. BARRA. Well, first of all, I find that decision unacceptable, as I have stated. If there is a safety defect, the cost is not the issue that we look at. We look at what is going to take the fix the problem and make the vehicle safe. As we go through our investigation, we will put all the pieces together of incidents and actions that were taken or not taken over a more than and decade period and make the appropriate process changes.

Ms. CASTOR. So, in retrospect, do you think that a repair cost of 57 cents was too costly for GM to undertake?

Ms. BARRA. Again, if we are making a decision on safety, we don't even look at costs. We make the change.

Ms. CASTOR. But there was a major disconnect between what GM told the public and what it knew in private. In private, GM approved the switch that it knew it was defective, and then the company appeared to reject other changes because of cost of 57 cents per fix was too high a price to pay.

Now also in 2005, the New York Times ran a review in which the author wrote about his wife encountering a problem with a Chevy Cobalt. He, quote, said, "She was driving on a freeway when

the car just went dead. The only other thing besides a key on the ring was a remote control fob provided by GM. The GM spokesman at that time, Allen Adler, issued a statement saying, In rare cases, when a combination of factors is present, a Chevrolet Cobalt driver can cut power to the engine by inadvertently bumping the ignition key to the accessory or off position while the car is running. When this happens, the Cobalt is still controllable."

So I find it baffling that not only did GM know about this serious problem over a decade ago but that it was discussed on the pages of the New York Times. And when GM responded publicly, it essentially told drivers, no big deal. Engines cut off all the time.

When your engine suddenly cuts off when you are driving on the highway, would you consider this a safety issue?

Ms. BARRA. Yes.

Ms. CASTOR. And you have indicated that you were not even aware that GM was investigating the Cobalts until December 2013; is that correct?

Ms. BARRA. I was aware that there was analysis going on related to a Cobalt.

Ms. CASTOR. But at the time the New York Times wrote their report in 2005, what was your position?

Ms. BARRA. In 2005, I believe I was in the manufacturing engineering organization of the company.

Ms. CASTOR. So you were a high-level executive at GM responsible for vehicle manufacturing?

Ms. BARRA. The equipment that we use to build vehicles.

Ms. CASTOR. And one of the Nation's largest newspapers raised the issue in this important new vehicle launch for GM and you did not know about it at the time?

Ms. BARRA. I don't have a recollection of that article.

Ms. CASTOR. Do you recall it being a concern for GM?

Ms. BARRA. I was not aware that this was this issue until the recall was introduced on January 31st. I only knew at the end of December that there was an issue with the Cobalt. I did not know it was an ignition switch issue.

Ms. CASTOR. Thank you, Mr. Chairman.

Mr. MURPHY. Thank you.

That concludes our members, but I would like to see if Mr. Terry of Nebraska, who is the subcommittee chairman of Commerce, Manufacturing, and Trade would have an opportunity for 5 minutes. Is there any objection.

Mr. TERRY. Thank you.

Mr. MURPHY. Without objection, you may proceed Mr. Terry.

Mr. TERRY. Thank you.

I appreciate this. And I am sorry for being late, but my plane was canceled for mechanical reasons, probably an ignition switch. USAir.

So, getting back to NHTSA. I chair the subcommittee over jurisdiction with NHTSA and the TREAD Act. And the TREAD Act clearly requires manufacturers to inform NHTSA within 5 days of any, quote, "noncompliance or defects that create an unreasonable risk of safety."

Did GM at any time contact or notice NHTSA of any noncompliance or defects regarding the ignition switch?

Ms. BARRA. That is something I hope to learn as we go through our investigation.

Mr. TERRY. OK. What is the difference between noncompliance and a defect?

Ms. BARRA. That is a very broad question.

Mr. TERRY. No. It is a very specific question.

Ms. BARRA. I think it depends on the specific situation that you are talking about.

Mr. TERRY. Regarding an ignition switch.

Ms. BARRA. So your question is what is a noncompliant——

Mr. TERRY. Yes, a noncompliant ignition switch.

Ms. BARRA. My understanding of when there is a noncompliance it is a very specific term used by NHTSA to standards.

Mr. TERRY. Right.

Mr. BARRA. But I can get you the specific definition of that, versus when we feel we have found a defect with one of our parts. That is my understanding.

Mr. TERRY. And that is why it is "or." So when an ignition switch is substandard, it is noncompliant. And a defect, then, is a higher level. And I think that is what we are looking for here.

Ms. BARRA. Congressman, I think in the language that we use with NHTSA there are very specific definitions. And I would like to provide those to you as opposed too——

Mr. TERRY. I can get the definitions from NHTSA. I am not asking you to do that.

Ms. BARRA. You are asking a very specific question related to this, and I am trying to be truthful.

Mr. TERRY. OK. I am not trying to beat up on you here, but just repeating back NHTSA's definition I am asking specifically how it applies to the ignition switch. And NHTSA's going to testify there was no notice.

Ms. BARRA. I am sorry, I didn't hear. NHTSA is going——

Mr. TERRY. My understanding is that NHTSA said GM did not contact them of noncompliance.

Ms. BARRA. If I find through our investigation that we did not provide the appropriate information to NHTSA, that will be a very serious issue and we will take——

Mr. TERRY. OK.

Ms. BARRA [continuing]. Appropriate action with the individuals involved.

Mr. TERRY. All right, thank you.

I yield back.

Mr. MURPHY. The gentleman yields back.

I think there are no further questions.

Although, Ms. DeGette, you had a clarifying question?

Ms. DEGETTE. I just had two questions, Mr. Chairman. Thank you.

The first one is, I have been sitting here thinking about these new ignition switches that you are putting into the recalled cars. They are based on the 2006 specs. But what you are saying, Ms. Barra, is that they are going to meet the highest safety standards when they are manufactured; is that right?

Ms. BARRA. Our engineering team is going through extensive validation testing to make sure that they meet the requirements.

Ms. DEGETTE. And, on the component technical specification, it is tab 53 of your notebook, which was December 6, 2012, it says, The minimum torque required by the switch on the return side of the ignition switch, from crank to the run position must be 15 N–CM. So would that be the standard, then, since it says it must be that?

Ms. BARRA. From the position of run to accessory?

Ms. DEGETTE. Yes.

Ms. BARRA. Fifteen is the minimum. The spec is 20 plus——

Ms. GEGETTE. Right.

Ms. BARRA [continuing]. Or minus five.

Ms. DEGETTE. But yes OK.

And my final question is, I am impressed, this committee has had experience with Kenneth Feinberg before. Because he was appointed to help administer the fund that was set up by BP after Deepwater Horizon, which was this committee's investigation. He was also appointed to administer the fund after the Boston Marathon terrorist attacks.

But I want to make sure that what you are doing when you hire him is you are really doing something. Because he is usually hired to sort out the value of people's claims. And then assign money. And I am assuming GM's hiring him to help identify the size of claims and then help compensate the victims; is that right? Is GM willing to put together some kind of a compensation fund for these victims that Mr. Feinberg will then administer? Is that why you have hired him?

Ms. BARRA. We have hired Mr. Feinberg to help us assess the situation. We understand——

Ms. DEGETTE. So really there is no money involved in this at this point?

Ms. BARRA. We have just hired him and will begin work with him on Friday.

Ms. DEGETTE. So really you hired him, you announced it today. But so far he has not being given any ability to compensate victims; is that what you are saying?

Ms. BARRA. We are going to work with him to determine what the right course of action is.

Ms. DEGETTE. And might that include victim compensation here?

Ms. BARRA. We haven't made any decisions on that yet.

Ms. DEGETTE. OK.

Thank you so much, Mr. Chairman.

Mr. MURPHY. Thank you, Ms. Barra. We thank you for your time today. GM has cooperated with this investigation, and we expect your company will continue to cooperate. Let me make a couple requests. One is, members will have other questions for you, and we hope that you respond to those within a timely manner. We also plan to conduct further interviews with General Motors officials and employees involved in the recalled part and maybe requesting more records. Will you make sure you make those available to us?

Ms. BARRA. We will absolutely cooperate.

Mr. MURPHY. Thank you.

And also on behalf of Chairman Upton and I, we would also like to be notified when you get your internal report and would like to discuss with you a chance to review that report as well.

Ms. BARRA. We will notify you.

Mr. MURPHY. Thank you very much.

I thank you, Ms. Barra. You will be dismissed.

But while this is taking place and waiting for Mr. Friedman to sit down, we are going to take a 5-minute break to allow Mr. Friedman to take his seat, and we will reconvene this hearing in 5 minutes. Thank you.

[Recess.]

Mr. MURPHY. Thank you. This hearing of the Oversight and Investigations Subcommittee of Energy and Commerce will now continue with our second witness.

Mr. David Friedman has served as the acting administrator of the National Highway Traffic Safety Administration since January 18th, 2014. He was sworn in as deputy administrator on May 15th, 2013. Before becoming NHTSA's, which is the National Highway Traffic Administration's, deputy administrator, Mr. Friedman worked for 12 years at the Union of Concerned Scientists as a Senior Engineer, Research Director, and as the Deputy Director of the Clean Vehicles Program.

I'll now swear in the witness.

Mr. Friedman, you are aware that the committee is holding an investigative hearing, and when doing so, has the practice of taking testimony under oath. Do you have any objections to testifying under oath?

Mr. FRIEDMAN. I do not.

Mr. MURPHY. Thank you.

The chair then advises you under that under the rules of the House and the rules of the committee, you are entitled to be advised by counsel. Do you desire to be advised by counsel during your testimony today?

Mr. FRIEDMAN. I do not.

Mr. MURPHY. In that case, would you please rise and raise your right hand.

[Witness sworn.]

Mr. MURPHY. Let the record show the witness is now under oath and subject to the penalties set forth on Title 18, Section 1001 of the United States Code.

Mr. Friedman, you may now give a 5-minute summary of your written statement.

TESTIMONY OF DAVID FRIEDMAN, ACTING ADMINISTRATOR, NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Mr. FRIEDMAN. Chairman Murphy, Ranking Member DeGette, and members of the committee, thank you for the opportunity to testify before you today.

To begin, I would like to say that on behalf of everyone at NHTSA, we are deeply saddened by the lives lost in crashes involving the General Motors' ignition switch defect. The victims' families and friends some of whom I believe are here today, have suffered greatly, and I am deeply sorry for their loss.

Safety is NHTSA's top priority, and our employees go to work every day trying to prevent tragedies just like these. Our work reducing dangerous behaviors behind the wheel, improving the safety

of vehicles, and addressing safety defects has helped reduce highway fatalities to historic lows not seen since 1950.

In the case of the recently recalled General Motors vehicles, we are first, focused on ensuring that General Motors identifies all vehicles with a defective ignition switch, fixes the vehicles quickly, and is doing all it can to inform consumers on how to keep themselves safe.

We are also investigating whether General Motors met its responsibilities to report and address this defect as required under federal law. If it failed to do so, we will hold General Motors accountable, as we have in other cases over the last 5 years, which have led to record fines on automakers.

Internally at NHTSA and the department, we have already begun a review of our actions and assumptions in this case to further our ability to address potential defects. Today I will share what I have learned so far.

NHTSA used consumer complaints and early warning data, three special crash investigations on the Cobalt, industry Web sites, and agency expertise on airbag technology. Some of that information did raise concerns about airbag non-deployments. So in 2007, we convened an expert panel to review the data. Our consumer complaint data on injury crashes with airbag non-deployments showed that neither the Cobalt nor the Ion stood out when compared to other vehicles.

The two special crash investigation reports we reviewed at the time were inconclusive on the cause of non-deployment. The reports noted that the airbags did not deploy and the power mode was in accessory. But these crashes involved unbelted occupants and off-road conditions that began with relatively small collisions where, by design, airbags are less likely to deploy in order to avoid doing more harm than good. Further, power loss is not uncommon in crashes where airbags deploy and did not stand out as a reason for non-deployment. In light of these factors, NHTSA did not launch a formal investigation.

We continued monitoring the data and in 2010 found that the related consumer complaint rate for the Cobalt had decreased by nearly half since the 2007 review. Based on our engineering expertise and our process, the data available to NHTSA at the time was not sufficient to warrant a formal investigation.

So what does all this mean? It means that NHTSA was concerned and engaged on this issue. This was a difficult case where we used tools and expertise that over the last decade have successfully resulted in 1,299 recalls, including 35 recalls on airbag non-deployments. These tools and expertise have served us well, and we will continue to rely on and improve them. For example, we have already invested in advanced computer tools to improve our ability to spot defects and trends, and we are planning to expand that effort. But what we know now, also means that we need to challenge our assumptions, we need to look at how we handle difficult cases like this going forward.

So we are looking to better understand how manufacturers deal with power loss and airbags. We are also considering ways to improve the use of crash investigations in identifying defects. We are reviewing ways to address what appear to be remote defect possi-

bilities. And we are evaluating our approach to engaging manufacturers in all stages of our defects process. Between these efforts and those of the department's inspector general, I know that we will continue to improve our ability to identify vehicle defects and ensure that they are fixed.

But I want to close on one last important note. Our ability to find defects also requires automakers to act in good faith and to provide information on time. General Motors has now provided new information definitively linking airbag non-deployment to faulty ignition switches. Identifying the parts change and indicating potentially critical supplier conversations on airbags. Had this information been available earlier, it would have likely changed NHTSA's approach to this issue. But let me be clear, both NHTSA and the auto industry as a whole must look to improve.

Mr. Chairman, Ranking Member DeGette, I greatly appreciate the opportunity to testify before you today. Thank you.

[The prepared statement of Mr. Friedman follows:]

STATEMENT OF
THE HONORABLE DAVID FRIEDMAN
ACTING ADMINISTRATOR, NATIONAL HIGHWAY
TRAFFIC SAFETY ADMINISTRATION

Before the

COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON OVERSIGHTAND INVESTIGATIONS
U.S. HOUSE OF REPRESENTATIVES

Hearing on

The GM Ignition Switch Recall: Why Did It Take So Long?

April 1, 2014

Chairman Murphy, Ranking Member DeGette, and members of the Committee:

Thank you for the opportunity to appear before you today to discuss the recall process of the National Highway Traffic Safety Administration (NHTSA) and the General Motors (GM) ignition switch recall.

Let me begin my testimony by saying, on behalf of everyone at NHTSA, that we are deeply saddened by the loss of life in vehicle crashes involving the GM ignition switch defect. Our deepest sympathies are with the families and friends.

It is this kind of tragedy that our defects investigation team works long hours trying to prevent. Our core mission to save lives and prevent injuries on America's roadways is something we take very seriously, whether we are trying to curb dangerous driver behavior, improve the safety of vehicles, or find safety defects and ensure that automakers correct them.

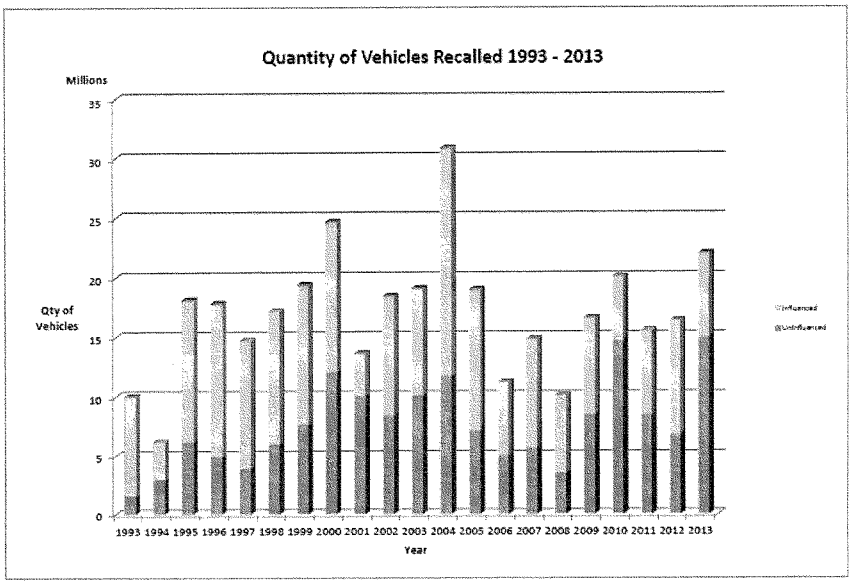
In today's testimony, I will give you an overview of NHTSA, who we are and what we do. I will go over the agency's defects investigation and recalls process that have led to thousands of recalls of millions of vehicles. Next, I will discuss where we are on each of three key priorities regarding this case.

Our first priority is the recall; we need to ensure that GM gets the vehicles fixed quickly and that it is doing all it can to keep consumers at risk informed and to identify all vehicles that may have a defective ignition switch. Second, we are pursuing an investigation of whether GM met its timeliness responsibilities to report and address this defect under Federal law—an investigation that will end with holding GM accountable if it failed in those responsibilities. Third, we are

examining the new facts and our efforts in this case to understand what took place and to determine how to continue to improve our efforts.

NHTSA has an aggressive and effective defects investigation program with staff who is deeply and personally dedicated to their mission, often working nights and weekends in pursuit of potential defects. That work has resulted in thousands of recalls involving hundreds of millions of vehicles and items of motor vehicle equipment, which have helped to protect millions of consumers from unanticipated safety hazards in their vehicles (**Figure 1**).

Figure 1. Total Number of Vehicle Recalls, 1993-2013



Based on our review of NHTSA's actions concerning airbag non-deployment in the recently recalled GM vehicles, we know the agency examined the available information multiple times using consumer complaints, early warning data, special crash investigations, manufacturer information about how air bags function, and other tools, but did not find sufficient evidence of a possible safety defect or defect trend that would warrant opening a formal investigation. This

was a difficult case pursued by experts in the field of screening, investigations and technology involving airbags that are designed to deploy in some cases, but not in cases where they are not needed or would cause greater harm than good. GM had critical information that would have helped identify this defect. With that and other information in hand, we can look for lessons learned from this experience that may further improve our process.

An Overview of NHTSA and its Mission

NHTSA is not a large agency. We currently have 591 employees. The President's budget for fiscal year 2015 requests $5.2 million for additional staff to help strengthen our ability to address the enormous safety mission that this agency faces.

NHTSA is a data-driven organization that approaches highway safety by considering both the behavioral and the vehicle aspects of crashes. Human behavior remains the leading cause of highway crashes and deaths, so NHTSA places an emphasis on reducing impaired driving, encouraging seat belt use at all times, and underscoring the dangers of distracted driving. These programs have shown enormous success over the years in driving down the number of deaths involving alcohol and driving up the percentages of vehicle occupants who wear seat belts. More work, however, is required, as nearly one-third of fatalities involve alcohol and more than half involve an unbelted occupant.

As those efforts seek to change human behavior, NHTSA's vehicle safety program focuses on ways to save lives through safety improvements to vehicles, ensuring that vehicles meet all safety standards, and eliminating vehicle defects that pose an unreasonable risk to safety.

Our research and rulemaking priorities concentrate on finding the areas of highest risk where new or amended vehicle standards can make a significant impact on reducing the death toll on our nation's highways. In 2012, there were 5.6 million police-reported crashes in America, and tragically, 33,561 Americans died in fatal crashes. Because we know that most fatal crashes are caused by human behavior, and we know that vehicles are driven and controlled by humans who will make errors, we must continue to find more ways to protect drivers and passengers when crashes happen. NHTSA's regulation of occupant crash protection has resulted in significant improvements in the crashworthiness of today's vehicles. These standards have saved many thousands of lives and prevented countless injuries. Highway fatalities over the past five years are at lows not seen since 1950. NHTSA has also used its vehicle crash ratings to inform consumers and motivate vehicle manufacturers to voluntarily improve the safety of their vehicles above the federal standards. This New Car Assessment Program (NCAP), known generally as the government's 5-star safety rating program, has been an overwhelming success in driving improvements in vehicle safety. NHTSA was the first vehicle safety agency in the world to implement such a program. Today, these programs have been implemented around the world.

Fatal crashes where a vehicle problem is a cause or contributing factor are relatively rare in comparison to crashes caused by human factors in properly functioning vehicles. But such cases receive significant scrutiny because NHTSA requires that automakers sell vehicles that meet specific safety standards and that they find and fix defects as soon as they are aware of them. As a result, we invest significant effort to find those problems through NHTSA's vehicle safety enforcement program.

For vehicles and vehicle equipment in the U.S., manufacturers must certify that their products meet applicable Federal Motor Vehicle Safety Standards (FMVSS). The Office of Vehicle Safety Compliance (OVSC) tests a sample of new vehicles and equipment each year to determine whether they meet those standards. If the vehicles or equipment do not comply, manufacturers must recall them and provide a remedy to the consumer.

The Office of Defects Investigation (ODI) has a different mission. ODI searches through consumer complaints, manufacturer data, data from NHTSA's National Center for Statistics and Analysis (NCSA), special crash investigations, and other sources for information that might indicate the presence of a defect or defect trend. Where it can find a possible defect or defect trend posing an unreasonable risk to safety, it investigates. If NHTSA can demonstrate that a defect exists and that it poses an unreasonable safety risk, the agency can order a recall.

NHTSA's ability to influence or order recalls is its greatest strength in safeguarding against problems in the vehicles traveling our roads today. Since 2000, NHTSA has influenced, on average, the recall of nearly 9 million vehicles every year, as well as millions of items of equipment, for safety related defects.

An Overview of the Defects Investigation and Recall Process

Defects Investigations

Each potential defect investigation is unique and dependent on the data gathered in each case. NHTSA uses a number of tools and techniques to gather and analyze data and look for trends that warrant a vehicle safety investigation, and possibly a recall. These tools include customer complaints to NHTSA, early warning data, as well as other sources that might provide related information, such as crash investigations and industry-related websites. Additionally, the law requires manufacturers to inform NHTSA within five business days of any noncompliance or defects that create an unreasonable risk to safety. They are then required to initiate a recall to remedy the defect and notify affected consumers.

NHTSA's defects investigation office, ODI, has a staff of 51 people. Their goal is to find possible defects or defect trends that may indicate significant safety risks in particular makes,

models, and model years; determine whether there is an unreasonable safety risk apparently being caused by a defect; and, if so, persuade—or require— the manufacturer to conduct a recall. The staff also performs other important functions, such as responding to inquiries and tracking the hundreds of recalls that occur each year. That entails monitoring quarterly reports on completion rates, ensuring the scope of the recalls is correct, and compiling information on recalls for the public.

The defects investigation process begins with the screening of incoming information for evidence of a potential safety defect. Complaints from consumers are the primary source of information. NHTSA receives over 45,000 complaints a year through *SaferCar.gov* and the Vehicle Safety Hotline, and reviews each one promptly. Human eyes review every single complaint. Follow-up is sometimes required to get additional information, and in cases of interest, NHTSA staff will contact the complainants directly to obtain clarifying information. Screeners also look at technical service bulletins issued by manufacturers, reports of foreign recalls, crash investigations done by NHTSA's Special Crash Investigations office, and supplemental information such as occasional reports from insurance companies and information available on the Internet. When appropriate, the screeners consult NHTSA's crash databases, including the Fatality Analysis Reporting System (FARS) and National Automotive Sampling System (NASS). Also, members of the public may file petitions asking NHTSA to investigate and order a recall on a particular matter. The agency carefully reviews each petition before making a decision on whether to grant or deny it. If granted, a formal investigation is opened. Since 2004, the agency has opened 980 investigations. These safety defect investigations have resulted in 1,299 recalls involving more than 95 million vehicles, equipment, tires, and child restraints, which have helped reduce vehicle fatalities to historic lows. For example, a NHTSA investigation recently led to the recall of over 4 million child safety seats and is still underway regarding the possible recall of infant seats.

Another important source of information is Early Warning Reporting (EWR) data submitted quarterly by manufacturers of vehicles, tires, and child seats. For light vehicle manufacturers, the data include counts of property damage claims, warranty reports, consumer complaints, and field reports, which are efforts by the automaker to look into specific incidents. These aggregate data are broken down by make, model, and model year and by component category (e.g., steering, braking, engine, speed control). Manufacturers must also submit brief reports on each claim against the company for death or injury allegedly related to a possible vehicle defect. The volume of the data received is enormous. NHTSA uses sophisticated data mining techniques to identify trends in the data that may be evidence of a safety defect. When potential trends are found, the EWR division can make a referral to the team involved in the screening process.

Those who screen NHTSA's various sources of information are in constant communication and support each other in their efforts to identify potential defect issues. When patterns emerge from any source, the screeners look very carefully at what may be behind the patterns. Where there is

possible evidence of a defect trend, the screening staff recommends that the appropriate investigating division consider opening an investigation. ODI staff meets regularly to determine which recommendations warrant opening an investigation and which may warrant continued monitoring. With preliminary evidence and 16 investigators, ODI must analyze all of the fact patterns and discern whether potential defects likely involve more serious risks or are likely to reveal a defect trend.

If it is determined that an investigation is warranted, a preliminary evaluation begins. This often entails detailed interviews with complainants, requesting relevant information from the manufacturer, and analysis to determine whether there is sufficient evidence either to seek a recall or continue to a more in-depth investigation. If it is determined that sufficient evidence exists, the next stage is the engineering analysis, which involves gathering additional information from consumers and the manufacturer, perhaps testing of vehicles or equipment by NHTSA's Ohio based test facility, surveys of peer vehicle experience, and further in-depth analysis of the underlying problem.

If, at any stage, ODI staff believes there is enough information to determine that a specific defect exists and that it creates an unreasonable risk to safety, they urge the manufacturer to conduct a recall. Where the manufacturer is not persuaded by NHTSA to undertake a recall, NHTSA's Associate Administrator for Enforcement may issue an initial decision requiring that the manufacturer conduct the recall. Following the initial decision, NHTSA convenes a public meeting in which interested parties—including the manufacturer, consumers, suppliers, public interest groups—may provide testimony. The manufacturer is given another opportunity to submit comments on the testimony heard at the public meeting. If, after review of all the information generated by the administrative process, the Administrator concludes that a recall should occur, the Administrator issues a recall order. A recall order is not self-enforcing. If the manufacturer does not follow the order, NHTSA would seek enforcement. To prevail in court, NHTSA must be able to prove that a defect exists and that the defect creates an unreasonable safety risk.

Manufacturers generally adhere to their legal duty to identify non-compliance or safety defects and initiate recalls, but the NHTSA investigation process helps to ensure that these steps are occurring and to recognize when they are not. Over the last 10 years, manufacturers have recalled more than 83 million vehicles for safety defects where NHTSA has not investigated, and have recalled over 86 million additional vehicles based on NHTSA's defect investigations. No other country has a defects investigation program of this scope.

Recalls

When a manufacturer recalls a vehicle at NHTSA's urging during or after an investigation, we call it an "influenced recall." Whether a recall is influenced or not, the recall process is the same. When a manufacturer recalls a vehicle model or vehicle equipment, the manufacturer files a defect information report with NHTSA under 49 CFR Part 573, known in the industry as a "573 Report." Certain information is required in the report under 49 CFR 573.6(c), including, for example, identification of the line of vehicles or vehicle equipment under recall, the number of affected vehicles or pieces of vehicle equipment, a description of the defect, and a description of the remedy.

The regulations require manufacturers to submit the 573 report within five business days of their determination that a defect is safety related. For this reason, the 573 report must also include a chronology of events that led to the recall decision. NHTSA reviews every recall to ensure that the manufacturer has met its obligation to inform the agency of safety-related defects or to make a timely decision that its products contain a safety defect. If indications show that it has not, NHTSA may open another investigation called a Timeliness Query (TQ) to collect additional relevant information. This Administration has placed an emphasis on timeliness in order to safeguard the integrity of the process and encourage automakers to aggressively pursue potential safety defects. Since 2009, automakers have paid record fines totaling more than $85 million for lack of timeliness in reporting vehicle safety defect issues to NHTSA. Because of this emphasis, we believe that all manufacturers in the automobile industry are now paying much closer attention to their responsibility to protect their customers and the driving public.

Upon receipt of a 573 report, NHTSA enters it to NHTSA's Artemis database as ODI investigators screen it for completeness, proper scope, timeliness, and effectiveness of the proposed remedy. NHTSA sends an acknowledgement letter and recall summary to the manufacturer, requesting the manufacturer to supply any missing information. NHTSA posts each new recall on its website at *SaferCar.gov*.

Under 49 CFR Part 577, manufacturers are required to notify owners of vehicles and vehicle equipment under recall. The "577 letter" must state that the manufacturer has determined that there is a safety defect in a vehicle or piece of vehicle equipment that the consumer owns. It must provide information about where and when a remedy to the defect can be acquired, and it must inform the consumer that the remedy will be provided by the manufacturer free of charge.

The manufacturer must then track how many of the items under recall receive the remedy ("recall completion") and report the numbers to NHTSA for six quarters. NHTSA uses these numbers to later calculate a completion rate analysis and work with manufacturers where the completion rate is below average.

We believe our defects investigation program and recalls process has functioned extremely well over the years in identifying defects that create unreasonable risks and ensuring that recalls occur whenever appropriate. Even so, we continually seek ways to improve. In 2011, the Department of Transportation's IG reviewed the ODI investigation process and issued 10 recommendations for improvement. In response to actions taken and/or information provided by the agency, the IG has closed nine of the 10 recommendations and we are in the process of finalizing our report to the IG addressing the remaining recommendation which concerns developing a staffing model. A list of the recommendations is attached (**Attachment 1**).

In addition to implementing the IG recommendations, ODI has taken steps to further improve its ability to find defects. One recent improvement is the deployment of a new Business Intelligence and Natural Language Processing suite focused on our consumer complaints, which helps supplement the human review process and has expanded our ability to harvest data and identify defect trends. Even after implementing this software and all of the IG's recommendations, we will continue to look for ways to make our processes more effective.

An Overview of NHTSA's Special Crash Investigation (SCI) program

NHTSA's Special Crash Investigations (SCI) Program provides in-depth crash data ranging from basic information obtained from routine police and insurance crash reports to comprehensive data from reports by professional crash investigators. Hundreds of data elements relevant to the vehicle, occupants, injury mechanisms, roadway, and safety systems involved are collected for each of more than 130 crashes studied annually.

SCI investigations are quite different from ODI defects investigations. While defects investigations look for defect trends in a line of vehicles or vehicle equipment, SCI investigations provide data and observations associated with a specific incident that are useful for examining new, emerging, and rapidly changing technology, including the safety performance of alternative fueled vehicles, child safety restraints, adapted vehicles, safety belts, air bags, vehicle-pedestrian interactions, and potential safety defects. SCI investigators locate and analyze unique real-world crashes to generate data that can be used to improve the performance of automotive safety systems. This information may be helpful to NHTSA's research and rulemaking offices in considering possible new or amended standards, to ODI in considering whether to investigate an issue or in support of an ongoing investigation, or to industry and other interested observers. Cases of interest are selected from a diverse network of sources, including NHTSA's Auto Safety Hotline, the Department of Transportation's National Response Center, NHTSA's regional offices, NASS FIELD Offices, automotive manufacturers, other government agencies, law enforcement agencies, engineers, and medical personnel.

Professional crash investigators obtain data and take photographs of the crash sites. They locate the vehicles involved, photograph them, measure the crash damage, and identify interior locations that were contacted by the occupants, and if equipped, obtain the Event Data Recorder

(EDR) data for evaluating safety system performance. The investigators follow up their on-site investigations by interviewing crash victims and other involved parties, and by reviewing medical records to determine the nature and severity of injuries. Each investigation provides extensive information about pertinent pre-crash, crash, and post-crash events involving the occupants, vehicles, rescue, and environmental factors, which may have contributed to the event's occurrence or severity. Included in each report is an analysis and determination of the occupant kinematics and vehicle dynamics as they occurred throughout the crash. The reports provide detailed performance evaluations of the air bag, the use of seat belts, and any other safety features.

NHTSA and DOT's Current Efforts on GM's Recall

GM's Recall

GM reported this defect and initiated its recall on February 7, 2014. As of March 28, 2014, the GM recall currently covers approximately 2.1 million vehicles, including the 2005-2007 Chevrolet Cobalt, 2007 Pontiac G5, 2003-2007 Saturn Ion, 2006-2007 Chevrolet HHR, 2006-2007 Pontiac Solstice and 2007 Saturn Sky vehicles. NHTSA is working to ensure that GM has accounted for the full scope of vehicles that may be covered by the recall, is ensuring that consumers receive the needed remedy as soon as possible, and is providing consumers information and resources essential to keep them safe until the vehicles can be fixed. GM has indicated to dealers that it expects to have parts on or about April 7 and will notify consumers that it can begin scheduling repairs soon after that date. Given the number of vehicles, the repairs may take several months to be completed.

At this time, NHTSA urges owners and drivers to follow GM's recommendation to "use only the ignition key with nothing else on the key ring" when operating the vehicle, contact GM about added resources available to keep themselves safe, and seek the permanent repair remedy from GM as soon as replacement parts become available.

NHTSA's Timeliness Investigation

GM first provided NHTSA a chronology of events on February 24, 2014. The information in GM's chronology raises serious questions as to the timeliness of GM's recall. As a result, on February 26, NHTSA opened its present investigation, a timeliness query. On March 4, to obtain more detailed information than GM provided in its recall notification letter, NHTSA issued a special order seeking answers and documents, submitted under oath, to questions relevant to how quickly GM acted on information about the defect. GM's response is due to NHTSA on April 3.

NHTSA is a data driven organization and we will take whatever action is appropriate based on our findings, including issuing civil penalties of up to the statutory limit of $35 million.

NHTSA and DOT's Processes

NHTSA and DOT's Office of General Counsel (OGC) are currently engaged in a continuous improvement and due diligence process regarding past efforts on airbag non-deployments in GM vehicles under its ignition switch defect recall. Secretary Foxx recently requested the Department of Transportation Inspector General to initiate an agency audit in connection with the GM recall. These efforts will ensure that DOT and NHTSA have a full understanding of the facts regarding the GM recall and can take corrective actions to enhance NHTSA's safety function to the extent necessary and appropriate. These processes will also benefit from any findings from NHTSA's timeliness investigation, which may shed light on what additional information NHTSA could have had in evaluating airbag non-deployments in this case.

NHTSA's Past Efforts on Airbag Non-Deployments in the GM Vehicles

NHTSA's timeliness investigation and joint due diligence review with OGC are ongoing, and the DOT OIG audit is pending, so any understanding of NHTSA's past efforts is preliminary at this time. We are not aware of any information to suggest that NHTSA failed to properly carry out its safety mission based on the data available to it and the process it followed. NHTSA examined the available information multiple times using consumer complaints, early warning data, special crash investigations, manufacturer information about how air bags function, and other tools, but did not find sufficient evidence of a possible safety defect trend that would warrant opening a formal investigation. This was a difficult case pursued by experts in the field of screening, investigations and technology involving airbags that are designed to deploy in some cases but not others. GM had critical information that would have helped identify this defect.

What follows is an outline of our current understanding of NHTSA's past efforts and related background information.

Background on Advanced Airbags

Airbags are a vitally important, supplemental restraint system used to mitigate injuries and death in the event of a crash. The term "supplemental" is used with regard to airbags because it enhances the protection of the seat belts, which are the primary occupant restraint system in a vehicle. NCSA estimates that in 2012, 2,213 lives were saved by frontal air bags, adding to the estimated 12,174 lives saved by seat belts. Between 1986 and 2012, frontal air bags are estimated to have saved almost 37,000 lives.

Advanced airbags are not intended to deploy in all crashes, even frontal crashes. Advanced airbag systems are designed not to deploy when doing so will cause more harm than good. Smaller occupants who sit closer to the airbag are at risk as are unrestrained occupants, because those occupants will move closer to the airbags during the course of a crash, putting them at risk of being hit with the force of a rapidly expanding bag. Airbags also may not deploy during crashes that occur off-road with multiple minor impacts because such minor impacts involve

much slower changes in speed than on-road vehicle-to-vehicle crashes. Even on-road, airbags may not deploy if the crash was not severe enough to warrant the supplemental protection.

Advanced airbags began to be introduced in the 2004 model year in response to a May 2000 NHTSA rule intended to reduce injuries and deaths resulting from previous airbag designs. These prior designs presented risks to smaller occupants and infants in rear-facing car seats placed on the front passenger seat. Advanced airbags factor in additional data to determine when to deploy, such as the size of the individual, the change in velocity, location of the individual within the vehicle, and whether the occupants are belted.

Special Crash Investigations Regarding Vehicle Subject to the GM Recall

The Model Year (MY) 2005 Chevrolet Cobalt was among the first vehicles equipped with advanced airbag features, although the Cobalt's advanced airbag system was not certified as such by GM until 2006.

In 2005, a fatal crash in Maryland came to the attention of our SCI team. SCI investigated the Maryland accident as well as two others involving MY2005 Cobalts, one in Wisconsin in 2006 and one in Pennsylvania in 2009. All three crashes, tragically, resulted in the deaths of unrestrained occupants. All three also involved airbags that did not deploy and event data recorder (EDR) information indicating the vehicle power was in an accessory position. (When a vehicle is an accessory position, certain features, or accessories, such as the radio are powered, but others remain off to prevent the vehicle's battery from being drained.) The 2005 and 2006 crashes involved vehicles exiting the roadway and striking trees. The 2009 crash involved being struck by an oncoming vehicle in the wrong lane.

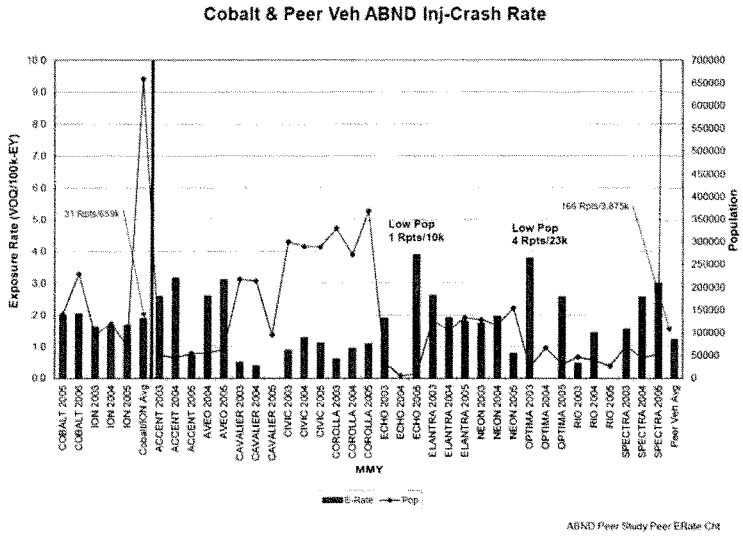
Office of Defects Investigation Activities Regarding the Subject Vehicles

As the SCI team examined these individual crashes, NHTSA reviewed other sources of available data to determine whether a problem existed related to airbag non-deployment in certain GM vehicles. In particular, NHTSA's early warning division (EWD) collected and reviewed available data on airbag non-deployment in Cobalts. After receiving early warning data from GM, and searching through available information sources, EWD identified 43 incidents where airbags may not have deployed in a crash. As a result, in 2007, EWD referred the case to NHTSA's data analysis division (DAD) for further screening.

Following this referral, DAD reviewed data on non-deployment of airbags in the Cobalt and Ion. In connection with this evaluation, DAD considered a variety of sources of data, including complaints concerning alleged non-deployments and available information concerning the relevant special crash investigations described above. During the course of this evaluation, NHTSA brought the airbag non-deployment issue to the attention of GM on at least one occasion.

A defects assessment panel convened in 2007 to review the available information on non-deployment of airbags in the Cobalt and Ion, considering vehicle owner questionnaire (VOQ) complaints reporting non-deployments, early warning data, SCI investigations, and the circumstances of the crashes. The data available at the time of this evaluation did not indicate a safety defect or defect trend that would warrant the agency opening a formal investigation. In particular, the available data did not indicate that the Cobalt or Ion were overrepresented compared to other peer vehicles with respect to injury-crash incident rates (**Figure 2**). Moreover, the crash data available to NHTSA included incidents involving unbelted occupants and off-road, long-duration events, where it could not be determined that the air bag should have deployed.

Figure 2. 2007 NHTSA Chart of Airbag Non-Deployment Injury-Crash Incident Rates

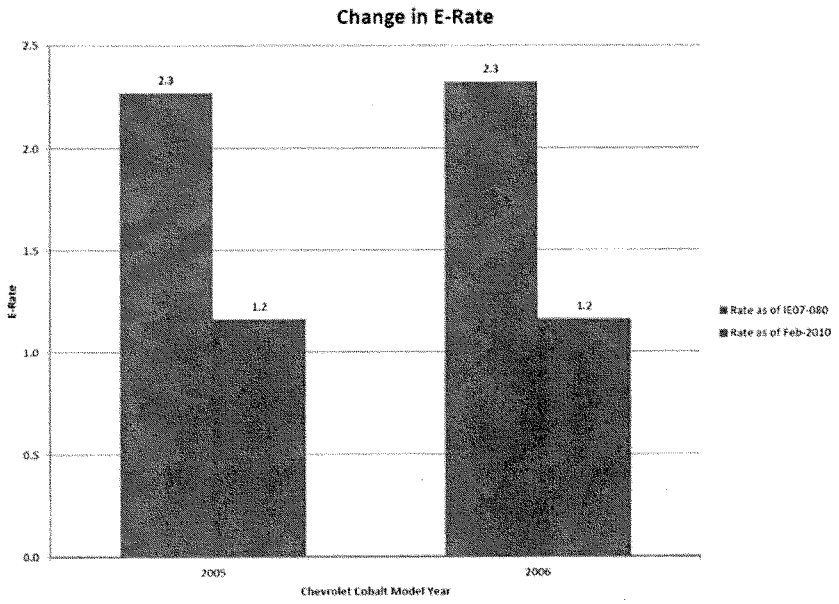


Against this backdrop, NTHSA continued to monitor the performance of the Cobalt in frontal crashes, including EWR information, consumer complaints, and one additional SCI report. Again in 2010, NHTSA reviewed cumulative data on consumer complaints for data the airbag non-deployment rate of Cobalts (**Figure 3**). The data showed that the injury-crash incident rate for Model Year 2005 and 2006 Cobalts had decreased by nearly half since the 2007 review and did not provide a basis for a formal investigation.

At the time of these reviews, NHTSA did not have the information that GM has since provided—for instance, new evidence linking airbag non-deployment to faulty ignition

switches—which is why we have launched an aggressive investigation into the timing of their recall.

Figure 3. 2010 NHTSA Chart of Airbag Non-Deployment Injury-Crash Rates



Critical Issues Regarding ODI Work and the Subject Vehicles

In evaluating the potential for a defect or defect trend, ODI relies on expertise regarding the technology and the dynamics of the incidents involved. In this case, ODI was looking for a defect or defect trend regarding airbag non-deployment in circumstances where it appeared a deployment should have occurred. At the time, ODI did not have clear evidence of a connection between the ignition switch being in the accessory mode and the airbag non-deployment.

Our understanding at the time was that airbag systems were designed to continue to function in the event of power loss during a crash, which is not uncommon. ODI's understanding of airbag systems, which was verified by available GM service literature reviewed during our due diligence effort, was that an airbag system would be armed and ready to fire for up to 60 seconds after all power to the system was cut off. At the time ODI was evaluating whether to open an

investigation, the two SCI reports showed indications of power loss and identified the vehicle power mode as accessory. The preliminary SCI report on the 2006 Wisconsin crash did identify the issue of the ignition switch being in the accessory position, raising the possibility of an issue, but concluded that, "At this point, it appears the yielding of the tree may have been the likely cause of the non-deployment." The final report produced in 2008 identified both the yielding nature of the impact and power loss due to movement of the ignition switch prior to impact as potential causes of non-deployment, but removed any conclusion as to which was the likely cause. However, due to the timing of the report and investigation, the final version of the report was not complete prior to the determination of whether or not to open an investigation.

As noted previously, advanced airbags are designed to deploy in some cases, but not in others. The two SCI cases used in making the 2007 determination of whether or not to open an investigation included unrestrained occupants in vehicles that exited the roadway and struck yielding objects before rapidly decelerating and coming to rest. These situations, where unrestrained occupants may be out of position, are instances where airbags are less likely to deploy because doing so may harm the occupants.

When data available to NHTSA reveals a basis to investigate a potential risk to motor vehicle safety, the agency takes decisive action. Over the last 10 years, NHTSA investigations have influenced 35 recalls related to airbags involving 6.5 million vehicles, including 18 recalls of 3.5 million vehicles specifically involving non-deployment. In those cases, information available to NHTSA demonstrated the need to investigate.

In February 2014, GM submitted information to NHTSA that, for the first time, acknowledged a link between the ignition switch to the airbag non-deployment, as well as key information regarding parts changes, discussions with suppliers, and other efforts currently under consideration in our Timeliness Query. Had the information newly provided to NHTSA by GM been available before now, it would have better informed the agency's prior reviews of airbag non-deployment in GM vehicles and likely would have changed NHTSA's approach to this issue.

Conclusion

NHTSA's dedicated and professional staff works to monitor and secure the safety of the U.S. automotive fleet. The work that they do saves lives on a daily basis, and the importance of that work cannot be overstated. NHTSA continually seeks new ways to improve our processes. We are reviewing the events leading up to this recall to see if there areas that can be improved. We are looking to improve our understanding of the way that various manufacturers design airbags to function when the vehicle loses power, considering whether we need to improve the use of Special Crash Investigation (SCI) in our defects screening process, reviewing ways to better incorporate information about remote defect possibilities into the investigative process, and evaluating our process for engaging manufacturers around issue evaluations.

I greatly appreciate the opportunity to testify before you today. I believe it is important that the Members, and the American public, have a better understanding of the vitally important safety work that we do at NHTSA. I look forward to your questions.

Attachment #1

Office of Inspector General Audit Report:
PROCESS IMPROVEMENTS ARE NEEDED FOR IDENTIFYING AND ADDRESSING VEHICLE SAFETY DEFECTS

National Highway Traffic Safety Administration
Report Number: MH-2012-001
Date Issued: October 6, 2011

RECOMMENDATIONS

We recommend that the National Highway Traffic Safety Administrator:

1. Revise the pre-investigation processes to ensure that the review of each complaint is recorded and that complaints are tracked to associated investigations in Artemis.

2. Establish pre-investigation processes for retaining and storing pre-investigation records, such as investigation proposals and insurance company data.

3. Require that decisions made and actions taken by ODI Defect Assessment Panels are recorded, including justifications for not proceeding to investigations.

4. Establish systematic processes for determining when a third-party or the Vehicle Research Test Center should be used to verify manufacturer information or assist in identifying a potential defect.

5. Revise the ODI investigation process to require justifications for continuing or closing investigations that exceed timeliness goals for PEs and EAs.

6. Revise the ODI investigation process to establish criteria for documenting evidence, such as associated complaints, meetings with manufacturers and other stakeholders, and third-party analysis or testing conducted.

7. Strengthen ODI's redaction policy and process to better protect consumers' personal information from public availability, such as by using automated redaction software.

8. Conduct a workforce assessment to determine the number of staff required to ensure that ODI meets its objectives and determines the most effective mix of staff.

9. Develop a formal training program to assist ODI staff in acquiring the knowledge and staying abreast of ODI processes and current and new automobile technologies.

10. Develop and implement a strategy for increasing coordination with foreign countries to enhance ODI's ability to identify safety defects and to exchange information on foreign recalls.

Mr. MURPHY. Thank you.

Now recognize myself for 5 minutes.

Now Mr. Friedman, with the understanding you just got in this position of acting administrator just a couple months ago. And for the last 12 years, you were involved in other groups that focused on green energy and fuel cell technology. We understand if you are unable or uncomfortable answering specific questions about automobile engineering and safety, you are more than welcome to ask someone else, some of your support staff behind you.

So, I wanted to find out how NHTSA is communicating to the public about this recall. And I believe I have a slide available, or I have a poster here. I went to your Web site to see what I could learn.

And do we have that image available about this? And what it shows—this is all. This is all I could find on your Web site about the recall notice. No information about the broader recalls, about parts replacement, investigation, or anything. I can't even click on this. It simply says, get rid of your car key fobs. But there is nothing else a person could do.

Can you fix the Web site so people could use to it get more useful information, please?

Mr. FRIEDMAN. Congressman, if there is added information that should be on there to make sure that people can get to the information available on our Web site, we will take those steps. Right now, consumers can go to our Web site and get all of the details associated with this recall. If they go to that "search" button and select the 2005 Cobalt.

Mr. MURPHY. Just to make it easier, because no one trusts government Web sites——

Mr. FRIEDMAN [continuing]. Links right there, sir, absolutely.

Mr. MURPHY. In 2007, the chief of NHTSA's Defect Assessment Division proposed opening an investigation of airbag non-deployment to the Chevy Cobalts. Am I correct about that date?

Mr. FRIEDMAN. Yes.

Mr. MURPHY. Now, if you turn to tab 19 in your binder, it is labeled as the DAD Panel for November 15, 2007.

This is the PowerPoint presentation made to the Defect Assessment Panel on November 15th. At Bates stamp 4474, those little numbers at the bottom of the page, the presentation states that there have been 29 complaints about the Cobalt airbags, four fatal crashes, and 14 field reports; is that correct?

Mr. FRIEDMAN. That sounds correct.

Mr. MURPHY. At Bates stamp 4480, there is a chart of airbag warranty claims for Cobalt airbags as compared to other comparable vehicles. Do you agree that the number of warranty claims for Cobalt airbags is much higher than other cars?

Mr. FRIEDMAN. Congressman, Mr. Chairman, that is one of the issues that did raise concerns on our part. What that chart shows is warranty claims, some of which are likely associated with airbag non-deployments, some of which may also and are very likely to be associated with warning lights on airbags or other potential problems.

This is a gross look at the data, and important look at the data that is provided by our early warning data system that we use to

decide whether or not we need to look further into one of these issues, which is what we did do in this case.

Mr. MURPHY. But still NHTSA panel decided there was not a trend here and decided not to investigate, despite the number of complaints, the fatal crashes, and the warranty claims. Why was NHTSA convinced that an investigation was not warranted? I believe this happened on two occasions.

NHTSA decided twice, don't move forward with an investigation. What specific information did you have that said don't go forward?

Mr. FRIEDMAN. Mr. Chairman, when we look at these cases and when they looked at this case at the time, they look at the whole body of information. You can't just rely necessarily on one piece of information. The core pieces of information that they relied on in the determination there wasn't sufficient enough information.

First was an analysis of the complaints, the injury crash complaints associated with airbag non-deployment and the exposure, the number of those divided by the number of vehicles that were on the road and the number of years they were on the road. That gives you a sense of how large the problem is in comparison to other vehicles.

When the team did that comparison, the Cobalt did not stand out. It was a little bit above average, but there were several vehicles that were significantly higher, there were some vehicles that——

Mr. MURPHY. I understand. But twice, employees of NHTSA, raised a red flag on this. It wasn't just once. A second time too they said something is not right here.

So I am wondering if you did something different when that occurred the second time in reviewing it.

And such as, did anybody ask questions of why an airbag doesn't deploy? I mean, I looked at the statements there and had a number of things about power losses or how much longer battery power would be involved on an airbag deployment in case of an accident.

But did anybody ask a question, was there anything else, any other reason why an airbag wouldn't deploy, within NHTSA? Did anybody ask those questions.

Mr. FRIEDMAN. Mr. Chairman, my understanding is folks were trying to understand why the airbags did not deploy. When they looked at the special crash investigations in 2007, as well as the data available, those special crash investigations were inconclusive. Why? Because they indicated that these crashes were happening in off-road conditions with unbelted occupants.

Mr. MURPHY. I understand. I am looking at reasons why airbags wouldn't deploy. And so you were talking among yourselves, according to what we understand, the PowerPoints.

What specifically did NHTSA ask GM? For example, and this is very important: Did NHTSA raise a question with GM, tell us the reasons why an airbag would not deploy in one of your cars? Did you ask GM that question?

Mr. FRIEDMAN. I don't have a record of that. I know our team did bring up concerns over this case to General Motors in a meeting, but I don't have records of us asking that specific question.

Mr. MURPHY. I mean, it is important, because you are saying GM didn't provide you information. But you are also saying you don't

know if you asked them for the information. I mean, it is important for the families to know what happened and if this key government agency which is tasked with protecting the safety of the public. I just want to know if those kinds of questions get asked?

Mr. FRIEDMAN. Mr. Chairman, those questions typically do get asked of the car companies when we move into the investigation phase.

What this phase and where this was, was a phase where concerns are raised and it is discussed whether or not there is sufficient information to move to the point of asking those questions of automakers. Roughly in these defects panels, roughly half of the cases that are brought up are brought into investigations, roughly half are not.

One of the things that we are looking at relative to this process going forward is, do we need to make any changes when it comes to how we present this information and when we present our concerns to automakers. I do believe that there are some changes that we can make to engage automakers earlier in the process to put them in the position of letting us know if our concerns are shared by them and if they——

Mr. MURPHY. Certainly I know the family members would want to know in retrospect what would you change in this whole process. But I am out of time.

I now recognize Ms. DeGette for 5 minutes.

Ms. DEGETTE. Thank you, Mr. Chairman.

Mr. Friedman, NHTSA investigated airbag non-deployment. But as you talked about, it was never able to connect the dots between that problem and the defective ignition switch.

So what I want to know is, if NHTSA had the relevant information it needed to make a fully informed determination and what the agency believed about the connection between the ignition switch position and airbag non-deployment during the time of its special crash investigations?

In your written testimony, you know that when NHTSA was investigating the airbag non-deployment issue, the agency mistakenly believed based on GM's service literature that the airbags would function up to 60 seconds after the power cut off.

Why did NHTSA think that?

Mr. FRIEDMAN. Thank you, Ranking Member.

That knowledge was actually based on years of experience and previous experience with earlier airbags where there was actually a problem, where airbags would go off long after the vehicle was turned off.

Ms. DEGETTE. And——

Mr. FRIEDMAN. Airbag systems have capacitors in them, and those capacitors are designed to store energy, so that if power is lost, the airbag can still deploy. Because power is often lost in some of these kinds of crashes.

Ms. DEGETTE. But that is based on the GM service literature or the agency's experience or both?

Mr. FRIEDMAN. That is a very important question.

Ms. DEGETTE. Right.

Mr. FRIEDMAN. My understanding is that was based on the agency's experience. My understanding is—and I apologize if I was not

clear enough in my testimony. We have since, after General Motors made this recall, found that service information that confirmed our understanding at the time, which was that airbags are designed to be powered when the power is lost. So a power loss would not typically stand out——

Ms. DEGETTE. So OK. So you were base—so NHTSA was base—you weren't there—but NHTSA was basing its determination on its experience. How is that, then, that it failed to connect the dots between the airbag non-deployment problem and the ignition switch problem?

Mr. FRIEDMAN. I believe there are two situations here.

First of all, the information we had at the time indicated that, you know, there were two possibilities put in front us in one of the special crash investigation reports. One of them was that the ignition being off could have been a cause. Another one was that the circumstances of the crash could have been the cause.

In those two cases, the more likely scenario was that the circumstances of the crash were more likely to yield to the airbags not deploying.

Ms. DEGETTE. So you also said that GM had critical information that would have helped identify this defect that NHTSA didn't have. What information could GM have given you that the agency—that would have helped identify the real problem?

Mr. FRIEDMAN. Well, I made that statement based on looking at the chronology that General Motors provided with this recall.

Ms. DEGETTE. OK.

Mr. FRIEDMAN. And there were at least a few things, in that chronology that raised serious concerns for me.

Ms. DEGETTE. And what were those things?

Mr. FRIEDMAN. The first was that there was a change in part number relative to the ignition switch, and we were never informed of that change.

The second is that there were some conversations with suppliers about their control algorithm, the control systems for airbags. We were never informed of that conversation, to my knowledge. And we did not have the details on how those algorithms worked.

Third, and most importantly, General Motors created a direct connection in their recall between the airbag non-deployment and the ignition switch. If we had any of those pieces of information, I truly believe it would have changed the way NHTSA would have approached this.

Ms. DEGETTE. Now, if GM is changing a part, are they legally required to inform NHTSA of that change?

Mr. FRIEDMAN. It is not clear to me that that is a legal requirement. But I can get back to you to make sure.

Ms. DEGETTE. I would appreciate it. Because it seems to me that is critical.

Now, in your opening statement, you said that in order for NHTSA to be able to make a correct determination, you need all of the information, as you just said. And you need the company to be acting in good faith.

Based on what you know now, do you think that at the time that all of this was happening GM was acting in good faith towards the agency?

Mr. FRIEDMAN. Congresswoman, we have an open investigation to answer that exact question. And if we find out that they were not, we will hold them accountable.

Ms. DEGETTE. And I would hope that you would inform this committee, irrespective of your determination, whether they did or didn't.

Mr. FRIEDMAN. Absolutely.

Ms. DEGETTE. When do you expect to finish that investigation?

Mr. FRIEDMAN. I can't put an exact timeline on it. We are getting hundreds of thousands of documents from General Motors. The deadline is April 3rd for them to provide those documents. It is not clear that they will be able to provide all the documents at the time.

But we have been making sure that they are continuously producing documents so that we can understand. As soon as my team is able to find information in those documents that indicate that General Motors had information that they should have acted on sooner, we will determine how to move forward to hold General Motors accountable; or, if we don't find that information, then we will also let you know.

Ms. DEGETTE. Thank you.

Mr. MURPHY. The gentlelady yields back.

With regard to Ms. DeGette's question about if there is a change in a part, do they need to notify you. Will you also let us know if they make a change in a part, do they also have to have a different part number? I don't know what NHTSA's requirements are on that. That is an issue. Just you can submit that for the record.

Mr. FRIEDMAN. I will go back to you to be clear.

Mr. MURPHY. We also need to know what information you were reviewing with regard to these airbags, GM cars or specific to the Cobalt. And would you please provide that information to the committee.

Mr. FRIEDMAN. Mr. Chairman, I believe we provided a significant amount of documentation, but we will continue to do so.

Mr. MURPHY. On this, we would like to know what you are viewing.

We would like to know what you are reviewing.

I now recognize the chairman of the full committee, Mr. Upton, 5 minutes.

Mr. UPTON. Well, thank you, Mr. Chairman, and I just want to—I know you are, as well as our committee, is literally, we are looking through boxes of information, thousands and thousands of pages. And that continues and looks like we will be getting some more down the road.

Well, as you know, I wrote the TREAD Act, which passed unanimously in the Congress. President Clinton signed it into law, and the whole point or a major point of that law was that NHTSA would in fact get the information that it needed to detect a trend as quickly as they could. So when NHTSA considered whether to investigate the Cobalt for an air bag defect back in 2007, the early warning data was one of the factors that was cited in the Defect Assessment Division's recommendation to investigate it, correct?

Mr. FRIEDMAN. That is correct.

Mr. UPTON. So looking back, what is the problem? Did GM not report the information that the law required? Or was NHTSA unable to sort through the information that it had to find the problem or both?

Mr. FRIEDMAN. Congressman, we have an open investigation to determine whether or not General Motors failed in their responsibility to provide information, and we will definitely report to this committee the results of that effort.

In terms of what our team did. Our team looked at all the available information using the approach that we have used successfully to lead to over 1,299 recalls influenced by NHTSA over the last 10 years. We use that process to look into the early warning data, to look at the consumer complaint data, to look at special crash investigations, and a variety of other information.

We dug into that data. We analyzed it. We tried to see if there was a defect trend that stood out. The data didn't support that. It showed that the Cobalt did not stand out when it came to air bag nondeployments.

We looked at the special crash investigations. Those available at the time were inconclusive. This was a case where the team worked very hard to try to understand what was happening and wasn't able to see a significant enough trend or a clear enough defect.

What I am learning from this and where we have to go in the future is we need to look more carefully at remote defect possibilities. We need to reconsider the way we are using special crash investigations. We need to continue to invest in tools. We are already investing in computer tools basically grown out of the Watson IBM software to be able to more effectively, more efficiently use our resources to spot trends. We've got to put all these tools forward, and we've got to look for opportunities to make changes, look in better spots that——

Mr. UPTON. So, as you look to embark on an investigation, do you consider the number of deaths? I mean, is there some trigger that you use to warrrant further exploration, whether it is 1 death, 4 deaths, 10 deaths, 20, 100, I mean, is there some type of standard equation that you put into place?

Mr. FRIEDMAN. Congressman, there is not. Our goal, what I would love to be able to do is to find each and every one of these defects before there's a single death. It is the manufacturer's responsibility to be reporting all of these defects and getting them fixed. When they do not, it is our job to try to find them. We don't have a simple rule-of-thumb because each case is different. In some cases, we have opened investigations after one incident where it was clear that it was a defect. In other cases, we have had to rely on the trend data that indicates that this stands out. I can't give you a specific——

Mr. UPTON. So let's play Monday morning quarterback. So, today is April 1st, 2014. These problems arose over the last 10 years. What would you have liked to have had on your platter from GM specifically in terms of information today that you didn't have in the last 8 or 10 years?

Mr. FRIEDMAN. Well, at a minimum, what I can tell you, based on their chronology, I would have liked to have had information

that they had changed the parts on the ignition switch. I would have liked to have had information that they were talking to their suppliers, because they appear to have had concerns about the algorithm associated with air bag nondeployments. I would have certainly liked to have any information they had directly linking the ignition switch defect to air bag nondeployments. As we go through our investigation, I should be able to come back to you and let you know if there is additional information they should have had——

Mr. UPTON. And are you pretty certain that today that they did not provide that information to you?

Mr. FRIEDMAN. It is my understanding that none of that information was available. We are continuing our efforts to try to make sure that we understand what happened, so I can't say that I can give you a comprehensive and definitive answer, but my understanding at this point is that, no, we did not have that information.

Mr. UPTON. I know Mr. Long wanted my last 15 seconds, so I—that is now gone.

I yield back.

Mr. LONG. Thank you, Mr. Chairman.

I will have my friend Mr. Terry here assist me, and the chairman of the subcommittee showed you this picture a while ago and said he couldn't navigate past this page, and you said that if any new information became available to you, that you would get that on the Web site.

Something we learned in the first hearing that I think is very germane is that if you will take your car to General Motors, they will give you a loaner at no cost or a rental car at no cost. I would call that very germane. I would call it critical, and if somebody has got an 2005, 2006, 2007, I think it would be enticing to drive a 2014 for a little while they repair your car, so that would be a suggestion to put on there.

I yield back.

Mr. MURPHY. Thank you.

I might note to the gentleman, I received a call from one of my constituents who said he has tried to get a loaner car, and the dealer told him he couldn't have one, too.

Ms. DEGETTE. One more thing, too, you could put on there is take all your keys off the key ring except for the ignition key. That is the other thing Ms. Barra said. Is that on there?

Mr. FRIEDMAN. I believe that is very clearly on there. In fact, just to be clear, the reason why we did that is because safety is our top priority. We are all focused on investigating this case, but safety, safety is our top priority, which is why the first thing I wanted people to see when they came to that Web site was how to keep themselves safe. So I do just want to be clear, that is why we have that limited information there because I didn't want anyone out there who came to our Web site not to understand the steps how to keep themselves safe. I agree it is a good idea to put on there—I will have to see if we can fit it in the space we've got, or if there is another way to point people to it, but I agree it is a good idea to let them know that——

Mr. MURPHY. People need to know if it is safe to drive their current cars.

Mr. Dingell, you are now recognized for 5 minutes.

Mr. DINGELL. Mr. Chairman, I thank you.

Mr. Friedman, let's look at NHTSA's internal decisionmaking processes. These questions will require a yes or no answer.

Is it correct that contractors for NHTSA's special crash investigations program conducted three separate investigations of Chevy Cobalt in 2005, 2006, and 2009 related to air bag nondeployment?

Mr. FRIEDMAN. Yes, that is correct.

Mr. DINGELL. Now, is it correct that NHTSA's Office of Defects Investigation reviews early warning reporting data and consumer complaints in deciding whether to open a formal defect investigation?

Mr. FRIEDMAN. Yes, those are parts of the process.

Mr. DINGELL. Now, is it correct that GM submitted EWR data to NHTSA concerning Chevrolet Cobalts, subject to NHTSA's 2005 and 2006 special crash investigations? Yes, or no.

Mr. FRIEDMAN. I'm sorry, sir. Could you repeat that, please?

Mr. DINGELL. I'll give it to you again. Is it correct that GM submitted EWR data to NHTSA concerning Chevrolet Cobalts, subject to NHTSA's 2005 and 2006 special crash investigations?

Mr. FRIEDMAN. Yes, that's correct. Those are important bits of our investigation.

Mr. DINGELL. Now, is it correct that the Office of Defects Investigation, ODI, follows a multistep process in order to determine whether a defect exists in the vehicle? Yes or no.

Mr. FRIEDMAN. Yes.

Mr. DINGELL. Now, and that process includes an initial evaluation, a preliminary evaluation, and an engineering analysis. Is that correct?

Mr. FRIEDMAN. Yes, that is the standard process, but we will act earlier in that stage if we have compelling information that there's a defect. We do not wait necessarily to go through that whole process if we have sufficient information to act on.

Mr. DINGELL. All right. Now, let's clarify something. NHTSA's Special Crash Investigation program is something separate and distinct from the formal ODI investigations process. Is that correct?

Mr. FRIEDMAN. That is correct

Mr. DINGELL. Now, is it correct that the Office of Defects Investigation convened an initial evaluation panel in 2007 to investigate the nondeployment of air bags in the 2003, 2006 Chevy Cobalts and Ions, yes or no?

Mr. FRIEDMAN. That is correct

Mr. DINGELL. Now, is it correct that the review was prompted by 29 consumer complaints, 4 fatal crashes, and 14 field reports?

Mr. FRIEDMAN. That was one of the reasons for the review. The additional——

Mr. DINGELL. What were the other reasons?

Mr. FRIEDMAN. In addition, we were looking at consumer complaints. Those complaints raised concerns as well, and I can get back to you on the record with each of the pieces of information that were involved, but we do have a memo that was provided when it was proposed to potentially move this to a defect that lays out early warning data, consumer complaint data concerns on the record, special crash investigation——

Mr. DINGELL. Would you submit that for the record, please?

Mr. FRIEDMAN. Yes.

Mr. DINGELL. Now, were there other things that triggered this review?

Mr. FRIEDMAN. My understanding is that it was all of the items in that memo that triggered this review.

Mr. DINGELL. So there weren't other things.

Now, is it correct that ODI decided not to elevate that review to a more formal investigation because there was a lack of discernible trend, yes or no?

Mr. FRIEDMAN. Yes, that was one of the reasons.

Mr. DINGELL. What were the other reasons?

Mr. FRIEDMAN. The other reason is that the crash investigation information we had was inconclusive and did not—was not able to point to a specific defect.

Mr. DINGELL. All right. Now, to be clear, at the time of the 2000 initial evaluation, NHTSA had concluded that the Chevy Cobalt was not over representated compared to other peer vehicles with respect to injury crash incident rates. Is that correct?

Mr. FRIEDMAN. That's correct.

Mr. DINGELL. Is there any other reason?

Mr. FRIEDMAN. Was there any—the other——

Mr. DINGELL. Was there any other reason that you came to that conclusion?

Mr. FRIEDMAN. In 2007.

Mr. DINGELL. Now, also to be clear, NHTSA did not have information at the time of the 2007 investigation that, for example, linked air bag nondeployment to ignition switch position. Is that correct?

Mr. FRIEDMAN. We do not have any specific information that provided a direct link.

Mr. DINGELL. So you are agreeing?

Mr. FRIEDMAN. I believe so.

Mr. DINGELL. OK. Now, Mr. Chairman, I am troubled here. It appears that we have a flaw in NHTSA's decisionmaking process which is related to defects and their inquiries into defects. I fully recognize, and I am like most of the members of this committee, I think, critical of the fact that NHTSA is short staffed and underfunded. At the same time, I am compelled to agree with Acting Administrator Friedman that Congress may need to examine the use of special crash investigations in the defect screening process, how best to get NHTSA the information it needs for that process, and how best to engage manufacturers around issue evaluations. In so doing, I think we will help to better ensure the safety of American motorists and their families.

And I yield back the balance of my time.

Mr. MURPHY. The gentleman yields back.

Now recognize Dr. Gingrey from Georgia for 5 minutes.

Mr. GINGREY. Mr. Chairman, thank you.

Mr. Friedman, in your written testimony, you suggested that NHTSA, your agency, did not pursue investigations into the issues with Cobalts and Ions because they were unaware of information developed by General Motors. In the years leading up to this recall, has NHTSA had any concerns with General Motors' responsiveness or lack thereof to safety defects and concerns?

Mr. FRIEDMAN. Congressman, I would like to get back to you on the record with that just to defer.

Mr. GINGREY. Let me do this. You may not have to do that. Just look at tab 34. It is right there in front of you. In July 2013, the head of ODI e-mailed General Motors with a number of concerns. It is the second page, bottom of the second page, sent to Carmen. You see where I am—you with me?

Mr. FRIEDMAN. I have not seen this before, but yes, I see it.

Mr. GINGREY. OK. You want to read that first paragraph and then look up and I will know that you have read it?

Mr. FRIEDMAN. Yes.

Mr. GINGREY. He stated, The general perception is that General Motors is slow to communicate, slow to act and, at times, requires additional efforts of ODI that we do not feel is necessary with some of your peers. You read that, didn't you?

Mr. FRIEDMAN. Yes.

Mr. GINGREY. Were you aware of the concerns raised by ODI, and I guess that was July 2013?

Mr. FRIEDMAN. I was not aware of this specific e-mail, but I have been in at least one meeting where we sat down with General Motors and made clear to them that they needed to make sure that they were following an effective process when it came to their recalls.

Mr. GINGREY. So there was definitely some concern.

Mr. FRIEDMAN. Well, with each and every automaker, we need to make sure that they have a good and effective process to quickly deal with this. This e-mail clearly indicates some very specific concerns.

Mr. GINGREY. Did the agency have similar concerns in 2007, 2010, when it declined to advance any investigations into nondeployment of air bags in these GM vehicles?

Mr. FRIEDMAN. I don't know

Mr. GINGREY. You weren't with NHTSA at the time?

Mr. FRIEDMAN. No. I joined NHTSA back last year, I have been there for almost a year now.

Mr. GINGREY. Do you think NHTSA did enough to get the information that it needed?

Mr. FRIEDMAN. I believe in this case that the team looked very clearly and very carefully at the data. I believe that the reason why we didn't move forward was because the data indicated that the Cobalts didn't stand out and that we didn't have conclusive information as to a very specific intent.

Mr. GINGREY. Well, in 2005, GM issued this technical services bulletin—and that's tab 12, if you want to flip quickly to tab 12 of your document binder—this technical service bulletin to its dealers, and it recommended a solution for complaints of this inadvertent key turn due to the low torque, particularly by these Chevrolet Cobalts. The technical service bulletin instructed the dealers exactly what to do to provide an insert that converted a key from a slot design to a hold design. I don't know exactly what that means, but they do. General Motors believed that this would help reduce the force exerted on the ignition while driving from maybe shaking of the keys or bumping it with your knee.

In 2006, the technical services bulletin was expanded to include additional make and model years. Unfortunately, in the case of this young girl, 29-year old Brooke Melton, a nurse from my congressional district that was killed the day after she took her car in, saying, Hey, this engine is cutting off for no reason. And, you know, I know they must have gotten the technical service bulletin about this issue, but all they did was clean out a fuel line, gave her the car the next day, and led her to her death.

Administrator Friedman, yes or no, was NHTSA aware of General Motors' 2005, 2006 technical service bulletins related to low ignition key cylinder torque effect?

Mr. FRIEDMAN. Mr. Gingrey, first, if I may, Brooke's death was a tragedy. And it's a tragedy that we work each and every day to avoid. I do believe we were aware, as part of our efforts and as part of the special crash investigation, that we were aware of that technical service bulletin. At the time, that technical service bulletin would not have been seen as being associated with air bag nondeployment.

Mr. GINGREY. Yes. Listen, I believe you, Mr. Friedman, I believe you, and obviously, when people are driving impaired or texting or e-mailing or whatever, they don't change the oil when they should and their tires are low and the brakes are worn out, there's some responsibility, some personal responsibility. But when they're doing everything the right way and they take their car in, and they trust the service department of the local dealership and they get a situation like this, you can understand why she's gone, but her parents, obviously—and all these parents, these families are just irate because the expectation, if they're doing the right thing, they ought to be safe.

Mr. FRIEDMAN. Congressman, I completely understand, and I would actually argue that consumers should expect that their cars should function as they're designed no matter the cause of the crash.

Mr. GINGREY. Absolutely. Thank you, Mr. Friedman.

I yield back.

Mr. MURPHY. I venture to say that they would assume the car keys don't have to be monitored——

Mr. FRIEDMAN. Correct.

Mr. MURPHY [continuing]. And checked.

Mr. MURPHY. Mr. Green, you are recognized for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman.

Mr. Friedman, thank you for appearing today. NHTSA has a central role for consumer safety, and I would like to understand better how long it took for NHTSA to identify this fault. In your opinion, how did NHTSA not identify the deadly trend.

Mr. FRIEDMAN. Congressman, when our team looked at the data, the trend did not—there was not a trend that stuck out. In fact, when it came to air bag nondeployments, the Cobalt was not an outlier.

Mr. GREEN. Was GM forthcoming with their data?

Mr. FRIEDMAN. Well, that's the exact question and that's the exact reason why we have an open investigation to them. I do have concerns about the parts change, about conversations they had with suppliers, and any of their information they may have had,

which is exactly why we opened up an investigation to them, and if they did not follow the law in their requirements to get information to us and to respond quickly, we're going to hold them accountable as we have with many other automakers.

Mr. GREEN. OK. Earlier this month, the New York Times reported on NHTSA's response to the consumer complaints over the years about ignition switch issues used for the recalled vehicles. According to the Times, many of the complaints detailed frightening scenes which moving cars suddenly stalled at high speeds on highways, in the middle of city traffic and while crossing railroad tracks. A number of the complaints warned of catastrophic consequences if something was not done. NHTSA received more than 260 of these consumer complaints over the past 11 years about GM vehicles suddenly turning off while driving, but it never once opened an effective investigation with the ignition switch issue. If consumers submitted these complaints to NHTSA, many were met with a quote of just silence.

Mr. Friedman, Mary Ruddy's daughter died in a crash involving a 2005 Cobalt. Ms. Ruddy has repeatedly tried to contact NHTSA for information but has only received form letters. She told the New York Times that, quote, I just want someone to hear from me. We've had no closure. We still have no answers. Ms. Ruddy was—I don't know if she's still here today, but she was in the audience. Has NHTSA been in contact with Ms. Ruddy?

Mr. FRIEDMAN. Mr. Congressman, my understanding of what happened with Ms. Ruddy—well, first of all, Ms. Ruddy deserves answers, and that is exactly why we are looking into what GM did. That is exactly why we are making sure we understand what happened. What she has been through, it is a tragedy, and we've got to work to make sure that those don't happen again.

In terms of my understanding of Ms. Ruddy's contacts with NHTSA, those contacts were made through our complaint system. In those complaint systems, as we do note on the Web site, we do not necessarily respond to all of those complaints because what we are doing with those complaints is we are looking for potential problems, and if those complaints don't contain sufficient information, if we have questions about them, we do follow up with consumers. But if they have the information we need, we do not, because the goal of those complaint databases is to try to find problems.

In this case, my understanding is Ms. Ruddy provided those complaints after being notified of a recall that NHTSA did influence. We got the Cobalt recalled.

Mr. GREEN. I only have 5 minutes, but did NHTSA really receive 260 consumer complaints over 11 years about this automatic shutdown of your engines?

Mr. FRIEDMAN. I don't have that exact number, but what I do know is that at NHTSA, human eyes look at every single one of these complaints to try to find out if there is something that stands out. My understanding of the complaints you are referencing are that they were for stalls and that only a very small number of them were related to air bag nondeployments. What we were looking for——

Mr. GREEN. I know but 260 complaints on the car stopping.

Mr. FRIEDMAN. Right.

Mr. GREEN. On the freeway or wherever it's at. I don't know if that is a high number or a low number over 11 years, but you might need to have somebody or who actually looks at complaints, and I assume they come from different parts of the country, so somebody identifies and said, Hey, we need to focus on these 260 complaints.

Mr. FRIEDMAN. Congressman, in this case, a human eye looked at each and every one of those, and whether that's a large or a small number based on the analysis that I've seen relative to the number of Cobalts that were out on the road, that was not a very large number compared to a lot of the other stall complaints that do happen for a variety of other vehicles that are out there.

Mr. GREEN. Well, you told me about how NHTSA responds to consumer complaints, but it seems like in this case, NHTSA might look at how they respond to consumer complaints much better because I know as a Member of Congress, believe me, if we don't respond to e-mails and letters, we will hear about it, and if I get a number of e-mails on a certain subject, we obviously respond to it.

So, Mr. Chairman, I know I'm almost out of time, and thank you for your courtesy.

Mr. MURPHY. The gentleman yields back.

I now recognize the gentleman from Louisiana, Mr. Scalise, for 5 minutes

Mr. SCALISE. Thank you, Mr. Chairman.

And Mr. Friedman, thank you for being with us and participating in this investigative hearing as well. I know earlier you had talked about the decision back in 2007 when the chief of Defect Assessment Division at your agency had suggested opening an investigation and then ultimately, some time after, it was decided not to open that investigation. When was the decision made not to open the investigation?

Mr. FRIEDMAN. That was also made in 2007, and basically what the chief of the defect investment—sorry, Defects Assessment Division was doing was exactly what his job requires him to do. He is supposed to look for potential defect cases and bring those up to a panel where those are considered, where a broad set of evidence is considered.

Mr. SCALISE. Is that the trend in relation to peers, I think that's the language that you all were using when you're looking at, I guess, similar cars that were having similar problems with air bags?

Mr. FRIEDMAN. That's one of the pieces of information that's used as well as crash investigations and other EWR data that is involved. About half of those that are brought up do not end up going to investigation, but we have designed our system to make sure that we have at least two teams always looking for potential problems. The Defects Assessment Division is always looking for potential problems and raising that question. That's what——

Mr. SCALISE. And then I'd be curious to get the information that you got within NHTSA that helped make that decision not to move forward with the investigation between September 2007, when the Defect Assessment Division decided—that suggested to go forward, and then when you subsequently, your agency subsequently decide

not to because when you look at this chart we got from 2007, the Cobalt versus Peer crash rate, there is a chart, and you've got the other peers and you've got some fairly static numbers and then you've got the spike here in what's called exposure rate per population that seems to spike with the Cobalt, and so if the internal decision making was that they were similar to their peers, it doesn't seem to mesh from this chart from 2007. So if you can get me or get the committee whatever information you have on what decision making went into NHTSA's final call to reject what was a warning or so from the Defect Assessment Division, and can you get us that information?

Mr. FRIEDMAN. Well, I believe we provided that information to the committee already, but if there is additional information, I'll make sure committee has——

Mr. SCALISE. And were you all——

Mr. FRIEDMAN. I'm sorry, sir

Mr. SCALISE. You had something else you wanted to add to that?

Mr. FRIEDMAN. Thank you, yes, I apologize. I just wanted to make clear about what the data shows. I believe you're referring to this chart. The bars here represent the defect, the potential defect, or really the complaint rate, and what you'll see with these bars is they're not spiking, they're not standing out in comparison to these others. The average is here, and they're just above average.

Mr. SCALISE. The blue line there on your chart.

Mr. FRIEDMAN. Right. And that's what I was wondering if you were pointing to. The blue line is the volume of—I believe that's the volume of reports. No, that's the volume of sales, so that indicates how many vehicles were sold, but the complaint rate that's the important data that we're looking at are the bars.

Mr. SCALISE. OK. Did you take action on any of those other cars that are identified in that chart?

Mr. FRIEDMAN. In some cases, we took action. In some cases, we did not.

Mr. SCALISE. So in some, you did. If you can get the committee the list of those cars where you did take action because clearly you made the choice not to take action in the case of the Cobalt, so we appreciate if you can get us that.

I do want to ask a few other questions because in your testimony, you'd made a few, I don't know if you'd call them accusations, but I guess you could call them that. I mean, here you're saying we're pursuing an investigation of whether GM met its timeliness responsibilities to report and address this defect under Federal law. I know you addressed this a little bit earlier, but if you've got any specifics that you're referring to when you make that statement, can you get that to the committee?

Mr. FRIEDMAN. Yes. Well, the specifics, I believe, are in my testimony that there are three things that I am concerned about based on their chronology. First and foremost is that they have identified that there's a link between the ignition switch and air bag nondeployment. Second is that they changed a part. And third is they appear to have had conversations with their suppliers about the air bag algorithm in relationship to the key——

Mr. SCALISE. Final question, and I know I am out time, GM had—this is your statement: GM had critical information that would have helped identify this defect. Have you gotten our staff that critical information already that you feel GM had that would have helped identify this defect?

Mr. FRIEDMAN. So that information is the information that was referred to in General Motors' chronology. I believe the committee has asked for all that information.

Mr. SCALISE. So we don't yet have that, as far as you know?

Mr. FRIEDMAN. I am not aware of exactly what documents you do or don't have, but if you don't have that information——

Mr. SCALISE. If you can make sure we get that information if you have it.

Mr. FRIEDMAN. I also just wanted to clarify. We don't only look for trends. If there is a clear defect, we move forward into the investigation as well, I don't know the answer but on some of these cases, there may have not been as large of a trend, but if there was a clear defect, we would have investigated this——

Mr. SCALISE. Thanks for your testimony.

And I yield back the balance of my time, Mr. Chairman.

Mr. MURPHY. I just want to make sure, so we're very clear on this, when he's referring to the information given this committee, if you could highlight very specifically the information you did not have that GM later gave you that would have changed your decision, you make sure the committee has that. I know you said it was a parts switch, and that's what we have.

Mr. FRIEDMAN. Well, so, what I'm referring to, and I can highlight it in GM's chronology, is I'm referring to specific items that are identified in General Motors' chronology that brought concerns. We are getting that information from General Motors.

Mr. MURPHY. Thank you.

I now recognize the gentlewoman from Florida, Ms. Castor, for 5 minutes.

Ms. CASTOR. Thank you, Mr. Chairman.

Administrator Friedman, GM has confirmed that it knew as early as 2001 that its ignition switches contained defects. And by 2004, GM had a body of consumer complaints that raised enough questions for them to open an internal engineering inquiry of the switches. Meanwhile, the National Highway Traffic Safety Administration, your agency, was beginning to receive its own body of consumer complaints of cars stalling and ignition switch failures, and in 2005, as your agency was monitoring air bag nondeployment issues, its special crash investigation of a 2005 Cobalt found that the ignition switch was in the accessory position when the air bags did not deploy. You said, At this point, it was not clear to the Highway Traffic Safety Administration what was happening.

But then information came out subsequently that you can tell us, should this have pointed NHTSA in the right direction, in 2007 agency investigated a second crash of a 2005 Cobalt where the air bags did not deploy, I think you said, At this point, still, it did not stick out. And you've testified that you didn't see trends.

The crash report found that the nondeployment could be the result of, quote, "power loss due to movement of the ignition switch just prior to impact." But at this point, GM was also providing your

agency with early warning reports in the third quarter of 2005, the fourth quarter of 2006, in addition to the special crash investigation, so we're all trying to figure out how it took so long for these defective ignition switches to trigger a recall at GM and then raise red flags at NHTSA and how the Highway Traffic Safety Administration could have noticed this issue sooner if GM had been more forthcoming.

So the committee's investigation has revealed that GM approved switches for these cars that did not meet the company specifications in 2002 and again in 2006. Did GM ever inform the Highway Traffic Safety Administration of this fact?

Mr. FRIEDMAN. Of which specific fact? I apologize.

Ms. CASTOR. That the ignition switches did not meet the company specifications?

Mr. FRIEDMAN. It's my understanding that we did not have that information.

Ms. CASTOR. OK. The supplemental memo released this morning by the committee staff also reveals that GM had over 130 warranty claims on the recalled vehicles that specifically referred to problems with the ignition switch turning the car off when going over bumps or when drivers accidentally hit the key with their knee or leg. Is it true that GM provided early warning reports aggregate data of the warranty information but not the specific warranty claims listed one by one in the comments from consumers?

Mr. FRIEDMAN. What all car companies provide are aggregate numbers associated with warranties, and so we don't know when we get those counts what the reason for those warranties could be. For example, on the air bag side, I believe I mentioned before, the complaints could be because the air bag light was going off when they thought it shouldn't or because the passenger sensor was not working. So, when we have that count, we do not have the information as to the detail of exactly what each and every one of those warranty claims is.

Ms. CASTOR. So if GM had shared the specific warranty claims, would that have been helpful to your agency?

Mr. FRIEDMAN. The specific warranty claims I believe you're speaking of are related to the ignition switch itself?

Ms. CASTOR. Yes, the 130 that have now come out due to the committee investigation.

Mr. FRIEDMAN. And my honest answer is I don't know, and that is in part because at the time, we did not have the information we now have for General Motors directly connecting the ignition switch to the air bag recalls.

Ms. CASTOR. So the state of the law currently is that in early warning reports on any type of vehicle problem, the car companies do not have to provide you the specific warranty claims?

Mr. FRIEDMAN. I believe that's the case.

Ms. CASTOR. They can give you a summary in general?

Mr. FRIEDMAN. Yes, I believe that's the case.

Ms. CASTOR. And that's true whether it is a warranty problem with the radio or a warranty problem that could be a serious safety defect?

Mr. FRIEDMAN. I believe that's correct.

Ms. CASTOR. Do you think it's time to look at the law if a car company has so many, here, 130 warranty claims that are specific and they relate to a serious safety defect, do you think that would be helpful to your agency, maybe change the law and say when a car company becomes aware that they have so many of these serious safety defects, they have to provide you the specific warranty complaints from the consumer?

Mr. FRIEDMAN. Congresswoman, I have to look at the exact data before I would be able to tell you whether or not it would be valuable, but what I will——

Ms. CASTOR. But certainly if a company had gathered a critical mass of serious safety defect complaints, that would be helpful——

Mr. FRIEDMAN. Well——

Ms. CASTOR [continuing]. Correct?

Mr. FRIEDMAN [continuing]. If they have information regarding a defect, I believe that information they would, without a doubt, have to provide to us. I believe the information——

Ms. CASTOR. But the law does not require that currently?

Mr. FRIEDMAN. Well, if they have information about a defect, I believe the law does. I believe what you're referring to are warranty claims, which may or may not be associated with a defect.

Ms. CASTOR. OK. Well, I think this is an important issue for the committee to look at. There might be some new line drawing or directions on what these early warning reports and if there is serious safety information that a car company has gleaned through their own internal investigation, it really needs to be provided to the agency.

Mr. MURPHY. Thank you.

Mr. FRIEDMAN. And Congressman—Chairman——

Mr. MURPHY. Now recognize Dr. Burgess for 5 minutes. Thank you.

Mr. BURGESS. Thank you, Mr. Chairman.

Thank you, Mr. Friedman, for being here with us. It's been a long afternoon. Now, your testimony, I think you stated that, in 2007 and 2010, there was not enough evidence to conduct a formal investigation into General Motors' Chevrolet Cobalt, despite the number of complaints and four fatal crashes that had already shown up, but in 2012, your agency, the National Highway Traffic Safety Administration opened an investigation into an air bag problem that some Hyundai models—my understanding is this was based on a single complaint, and that is OK. I think the air bag nondeployment is a serious issue, but why wasn't it a serious issue when the complaints were coming in about the Cobalt? Given the fact that you initiated the investigation with much less evidence in the case of Hyundai, how can you assert that there was not enough evidence to proceed with General Motors' case?

Mr. FRIEDMAN. Congressman, safety is our priority, and air bag nondeployments is a serious issue and we treat them very, very seriously. I would have to get back to you on specifics of the Hyundai case, but it goes back to one of the points I made before, which is we are looking for two potential things. The best thing and the easiest ability—the best thing to be able to find and the clearest thing to be able find is when there's an obvious indication of a defect. All it takes is one if that's clear.

Mr. BURGESS. Yes. And I agree completely, and I don't know—you were not here when the CEO testified when we posed questions. One of questions I posed was for the accident that occurred in Maryland in July of 2005 where a Chevy Cobalt went down a street that ended in a cul-de-sac, maybe was driving too fast, a lot of problems that night, but the air bag didn't deploy when the car impacted some trees. And it was a pretty serious impact. In fact, it was so serious that the driver was then pushed up, compressed against the steering wheel with such force, I mean, she only weighed 106 pounds, and she broke the rim off the steering wheel, and that's a massive amount of force for a little 106-pound body to exhibit. So the air bag didn't deploy, I got your report here that it was in fact investigated in December of 2006, but that's a big deal that that air bag didn't deploy.

Different from all of the other accidents that we were given information about, because of the nature of this person's injuries, because of the cause of her demise, I can't tell you that the air bag would have saved her life, but I know, without the air bag, there was no chance at all, and of course, that was proven that night. But an air bag might have made a difference because the steering wheel that she broke off actually compressed against the upper dome, just below the diaphragm, below the rib cage, and lacerated the liver, and over the course of the next hour and 45 minutes, small woman, small blood volume, she bled out. I mean, an air bag might have made a big difference that night.

Now, contrasting that with another accident that occurred in Pennsylvania in 2009, where there was a head-on collision between a Hyundai and a Cobalt, and as I pointed out to the GM CEO, the Cobalt was not at fault, and that is, the driver of the Cobalt was not at fault. The Hyundai came over the center line, and there was a head-on collision. Closing speed was probably close to 100 miles an hour when you add the two speeds of the automobiles together. Everyone who was in the front seat of those vehicles died, but the Cobalt air bag did not deploy. The Hyundai did. Now, unfortunately, it didn't make any difference as to the overall fatality of that accident, but here you've got a side-by-side, identical speeds with which the impact occurred, the deceleration forces were identical in both automobiles. Hyundai deploys, Cobalt doesn't, this is a problem. Don't you agree?

Mr. FRIEDMAN. Congressman, when air bags don't deploy, that's a serious issue. There's also a serious issue sometimes when air bags do deploy. Over 200 people died because air bags, earlier air bags, deployed when they shouldn't have or deployed too strongly when they shouldn't have. Part of the challenge with all this, part of the reason why this information ended up not being conclusive for us is because air bags are designed, even in some difficult crashes, to not go off because that's the safest thing, that's the best way to avoid potential harm.

Mr. BURGESS. Sir, in all due respect, I cannot imagine—and I'm not an engineer, and I'm not a lawyer, but I cannot imagine any circumstance where impacting an oak tree at 70 miles an hour or a head-on collision at 45 miles per hour per vehicle would not be a situation where you did not want the deployment of the air bag.

I can't think of a single reason why the air bag deploying would add to the lethality of that accident sequence.

Mr. FRIEDMAN. Congressman, I completely understand why—why you have—why you feel that and why you have that impression. In the case of the 2005 crash and in general with these air bags, if you have an unbelted occupant and a small strike first, the risk at play here is that the occupant may be moving forward during that crash. If you're moving forward during that crash and the air bag is opening, yes, it actually could cause more harm than good. When the air bag system is trying to decide whether or not to deploy——

Mr. BURGESS. It couldn't have possibly done more harm that night. I would just submit that first impact was with a 5-inch pine tree, and although the pine tree yielded to the Cobalt, it was still a pretty significant impact when that happened.

Thank you, Mr. Chairman. I will yield back.

Mr. MURPHY. The gentleman's time is expired.

I will now recognize Mr. Barton for 5 minutes.

Mr. BARTON. Thank you. And I want to apologize to the other members that are still here. I have been watching the hearing as I've been doing meetings, but I apologize for not being here physically to go ahead of some of you folks, and having said that, I'm going to go ahead.

I have listened to most of what you said today on the television, and I think it's obvious that GM has some real questions that they've not done a very good answering today, but I also think, as the Federal regulator on the block, there are some valid questions for your agency to answer. My first question is, at what level of accidents or deaths or incidents of malfunction triggers more than normal NHTSA review, not necessarily a full fledged investigation, but in this case, we, in hindsight, have got 13 deaths that we feel are attributable to this ignition problem over a 10-year period. I don't know how many accidents, how many injuries, but when would NHTSA really start looking at something and say, there's an anomaly here, we need to check it out?

Mr. FRIEDMAN. Congressman, first, I appreciate your question, and part of what you started with is there are important questions that NHTSA has to answer in addition to General Motors, and I think this is an incredibly important process because we have questions, you have questions. What my focus is in addition to the recall is making sure NHTSA does everything we can to improve the way we deal with these cases.

When it comes to your question about, is there a specific level? Each case ends up being different. Ideally, what I would like to have happen, is that we find first, that automakers find and fix these defects right away. If they don't, ideally, I want to find and fix these defects——

Mr. BARTON. But there is some internal reporting system or monitoring system and like if a specific model started showing up, 100 accidents a month that were unexplainable, that would be a big enough blip that somebody at NHTSA would say, well, what's going on there. I mean, if you had a steering problem, if you had a brake problem, if you had a gasoline tank problem that kept exploding over and over again, not once every decade, but I mean, enough

that you could see in your reporting, somebody at NHTSA would say, Hey, we need to check that out.

Now, I am told that at the staff level, there were some internal NHTSA employees, some employees at NHTSA said, you know, before GM admitted that there was a problem, there were some NHTSA midlevel people that said we need to look at it and a decision was made within NHTSA that it wasn't at a level that was worthy of further investigation. Is that true?

Mr. FRIEDMAN. Congressman, we have a process to do exactly what you just said. We have people who are reading every single one of the more than 45,000 complaints that come in. We have a team dedicated to do that. We have a team dedicated to looking at all the early warning data that comes in. In this case, redflags were raised. Concerns were raised, and it was proposed, because of that exact process, the exact process that you're talking about that we do have, concerns were raised. And this was brought to a panel. The job of that panel is to consider all of the evidence, the initial evidence as well as more detailed look at the data, whether or not there's a clear trend, whether or not there's enough information to have concern over a specific defect. The panel did that in this case. What I'm learning, what I'm seeing from all this is that we need to reconsider and look at, how do we deal with cases where there may be something that's considered a remote explanation? Should we change the way we follow up on it? Should we change the way we follow up on that with the car company? These are things that I think we're learning, lessons that——

Mr. BARTON. My time is just about out. I want to make one general comment and then one final question. You know, we pointed out to the GM executive that was here that their part didn't meet their own specifications, and it didn't just almost not meet them; it didn't meet them by a long way. I mean, like a third, it was like two-thirds off. It was way below, not just a little bit, and that's not NHTSA's problem, and the NHTSA people aren't expected to know things at that level. But on the general point that Dr. Burgess was asking about, when the air bag doesn't deploy when it runs into a tree at 40 or 50 miles an hour and the general response from NHTSA is that we didn't know how that particular air bag system was supposed to work, I don't think that's a very good answer. Isn't NHTSA supposed to know how the air bag systems work, and if they are not, if NHTSA doesn't know, aren't you, in your agency, supposed to find out?

Mr. FRIEDMAN. Congressman, the circumstances of these crashes were much more complicated than that. We applied expertise, we applied our understanding, we applied a process that has worked to generate over 1,299 recalls over the last decade. Are there improvements that we need to make to that process based on what we've learned today? Yes, absolutely.

Mr. BARTON. OK.

Mr. FRIEDMAN. And I'm committed to making sure that that happens, but I wish these crashes were as simple as they appear to be. I wish the connection was as direct as we now know it is. At the time and with the information that we had——

Mr. BARTON. Hindsight is always easier than current sight.

Mr. FRIEDMAN. As before, hindsight is 20/20, and ideally, we——

Mr. BARTON. Thank you, Mr. Chairman.

Mr. MURPHY. The gentleman yields back.

I'll recognize Mr. Griffith of Virginia for 5 minutes.

Mr. GRIFFITH. Thank you very much. I appreciate it. I appreciate you being here today, and I would ask several questions following up, you know, on why didn't NHTSA know, and it is true that hindsight is 20/20, but it appears that some of your folks were at least sent enough warning signals.

I am looking at what I believe is tab 18, and the DAD, which is the Defects Assessment Division, and I know you know that, but not everybody watching on TV knows that, and so I want to make sure they know because I had to look it up, sent out and said in one of their e-mails in 2007, said, Notwithstanding GM's indications that they see no specific problem pattern, DAD perceives a pattern of nondeployments in these vehicles that does not exist in their peers and that their circumstances are such that in our engineering judgment merited a deployment and that such a deployment would have reduced injury level or saved lives.

When you combine that flag with the flag I think you mentioned earlier in your testimony that you were getting a number, if I remember correctly, was about 200-and-some complaints on this particular Cobalt vehicle, that they were stalling out in the road or the engine was cutting off, and you start adding those together along with the fact that I believe you all knew that there were at least, I think it was three where the air bag didn't deploy and the ignition was in the accessory mode, it would seem that somebody ought to start an investigation that those coincidences might have been more than coincidences. And I would ask, I know you're trying to do things better, but apparently, the person who put all this together was an investigator for a one-man law firm. He did have somebody of counsel, but basically you've got a one man law firm with an engineering investigator who figures this out. So I would say to you, what can you do better and have you called on that investigator to come in and maybe train some of your folks to look at some of these coincidences because when you start seeing a series of negative things happen, that might be where you ought to be looking.

Mr. FRIEDMAN. Congressman, our team was looking at this issue. The Defects Assessment Division was doing exactly their job. We have a system that is designed to raise those red flags. About half of the time, the recommendations of those Defects Assessment Division end up moving on to investigations. What I see in this case is one of the things I mentioned before, which is one of the things we need to look at is, how do we make connections between remote defect possibilities?

In this case, you had one theory that was put forth, which was that the key being in the accessory position could have caused air bag nondeployments. In the crashes that we looked at, the circumstances of those crashes led the investigators to believe that it was much more likely that the air bags didn't go off because of the circumstances of that crash. I completely understand why it looks like——

Mr. GRIFFITH. Well, but let me——

Mr. FRIEDMAN. It should have been clear, but it's clear now in part because we have that clear connection from General Motors.

Mr. GRIFFITH. Well, but let me raise this concern. This memo indicates that there's a reliance, and I'm implying this from the wording, notwithstanding GM's indication that they see no specific pattern problem. That statement shows a reliance on GM. Likewise, in your testimony, you state that this understanding was verified—talking about the power loss situation—by GM service literature during our due diligence effort.

Now, if you've got a company that's got a car that is not functioning the way it is supposed to, I would like to think that with 51 employees versus that one-man law firm out of Georgia, that you would look at something other than the service literature and not necessarily rely on GM indications that they see no specific pattern or problem pattern. So, I am concerned that there may have been too much reliance on theinformation from GM, including their service—let me make sure I get the wording right—their service literature and what they saw as problem patterns when in fact I think that you all are supposed to be finding the problem patterns.

Now, I understand it is easy, in hindsight, sitting up here to say that, but these are warning signs that go off to me as a legislator that maybe you all need to take a look at that, and you know, when you see problems, maybe the service literature of the company that you're looking at is not the best place to get your information.

Mr. FRIEDMAN. Congressman, just to be clear, we did not rely on General Motors when it came to defects, whether or not there was a defect trend. We did our own analysis of the data, and our own analysis indicated that the Cobalt did stand out. I also wonder if I haven't been clear enough relative to that service bulletin. We did not rely on that service bulletin at the time. We did not rely on that information from General Motors. We relied on our expert's understanding of air bag systems.

Mr. GRIFFITH. But their understanding of the air bag system in the Cobalt was based on the service literature for the Cobalt, according to your written testimony. Am I not correct? Is that not what you said?

Mr. FRIEDMAN. My testimony sounds like it was not clear enough. What happened was once we found out about this defect, we looked into the service literature to confirm our understanding at the time, and the service literature that we looked at this year for that vehicle confirmed our understanding at the time, which was that——

Mr. GRIFFITH. Your understanding at the time and the service literature were both wrong. Isn't that correct, yes or no?

Mr. FRIEDMAN. Yes, that's correct.

Mr. GRIFFITH. Thank you.

I yield back.

Mr. MURPHY. The gentleman yields back.

Now recognize Mr. Long for 5 minutes.

Mr. LONG. Thank you, Mr. Chairman.

I want to thank the chairman and the ranking member and all of the members on both sides that have been here today. We originally weren't scheduled to be in this soon, and so a lot of us had

to change our travel plans to get in today, and a lot of us have been sitting here through the entire hearing today because it is a very, very important issue, of course, that we're discussing.

And thank you, Mr. Friedman, for being here with us today with your testimony. When I think of NHTSA, I think of Number 66 for the Green Bay Packer's linebacker Ray Nitschke, and all day we've been talking about NHTSA, NHTSA. Tell me what NHTSA is.

Mr. FRIEDMAN. NHTSA is the National Highway Traffic Safety Administration. It's an organization of nearly 600 people, whose mission is to save lives and reduce injuries by addressing issues like drunk driving, unbelted occupants, vehicle safety, and the subject we're talking about today, which is finding vehicle defects when automakers don't find them themselves, which is their first and foremost responsibility.

Mr. LONG. I just wanted to get that out there on the record. I, of course, know what it is, but I think a lot of people when they hear that NHTSA, NHTSA, NHTSA all day, they're thinking, what exactly is this? So the next question I would have would be do you have any way to track consumer complaints to auto dealers short of waiting for them to reach out to you, not the dealers, but the consumers that are having a problem? Do you have any way to track people coming in and my car stopped, it died, it did this, it did that, do you have any way to track that, or do you have to wait for someone to contact you all?

Mr. FRIEDMAN. We have early warning data which tracks the cases where warranty services are provided on vehicles

Mr. LONG. So anytime a warranty service is provided, you will be notified of that?

Mr. FRIEDMAN. We're notified of a count. We have a total number—a count of the number of those and the part that that's associated with.

Mr. LONG. And how often——

Mr. FRIEDMAN. Not the reason for the complaint.

Mr. LONG. Do you get that annually, semi-annually, quarterly, how often?

Mr. FRIEDMAN. Once a quarter——

Mr. LONG. Once a quarter.

Mr. FRIEDMAN [continuing]. Have the information we need, it's required once a quarter.

Mr. LONG. What kind of marketing do you do? How would a consumer learn about the National Highway Traffic Safety Administration? What kind of marketing do you do? If I took my car in, had a problem, it wouldn't pop into my head to call you, so how do you market yourself? How can we let the American public know if they do have an issue and they're not satisfied with their dealer, how can they contact you or what can we do to better augment that, I guess?

Mr. FRIEDMAN. Well, some of the things that we're already looking at doing and we're already making sure that happens is on every single recall letter that goes out, both NHTSA's name is on that letter, even though it's sent from the automaker, and it's in clear red letters that this is important safety recall information. We also have apps that are available online that we try to make sure the consumers download. These apps allow people to lodge

complaints directly to us. They allow them to track their recalls. We're also moving forward later on this year with a tool that will allow all consumers to come to our Web site, put in their VIN number to find out if there is a recall associated with their very specific vehicle that has yet to be addressed.

We have additional efforts where we try to make sure that people are aware of who NHTSA is, but yes, I have seen the same data, and one of the things I've talked to any staff about is that I'm concerned that we are not at the top of the list when people have complaints, and we've been talking about ways to make sure that we have campaigns to make people aware that if you've got a complaint, if you've got a concern, come to NHTSA. We need that information. Consumer complaint data is one of the vital tools that we have to try to find these defects, and I would appreciate any help anyone can provide to make sure that people are aware, that people go to SaferCar.gov to report these defects.

Mr. LONG. Where tomorrow you're going to be able to see on there that you could take your car in and get a free loaner or a free rental, right?

Mr. FRIEDMAN. Absolutely.

Mr. LONG. Very good. My last question. At what point is a consumer supposed to reach out to you?

Mr. FRIEDMAN. At any point they have a concern. I mean, you know——

Mr. LONG. At what point is that, though? If I go home this evening, in the mail I get a recall on my vehicle, and they want me to bring it in and fix this switch or that doodad there or whatever, do I run to the phone or call you and say, Hey, I've got a recall? Or do I wait until I'm not satisfied with the dealer? At what point should consumers reach out to you?

Mr. FRIEDMAN. Well, in that case, if you get a recall letter, the first thing you should do, without a doubt, is contact your dealer and get your vehicle fixed as soon as possible. These are——

Mr. LONG. Yes, but I'm talking about contacting you. At what point do I—if it's just a standard thing, I don't need to contact you on that?

Mr. FRIEDMAN. If it's a standard recall and you're concerned and you want to reach out to us, absolutely, but typically, when we want people to contact us is well before there's a recall. We rely on and look at over 45,000 consumer complaints every single year to try to spot these trends, so I want someone to reach out to NHTSA the instant they have a serious concern about their vehicle and they feel that their safety is at risk so that we can have that information. Right now, we've got 45,000 complaints. I'd like to see that number get up to 50,000; 60,000; 75,000 complaints relative to safety issues so that we can have more information to be able to track down these problems.

Mr. LONG. OK. Mr. Chairman, I don't have any time left, but if I did, I'd sure yield back.

Mr. GRIFFITH [presiding]. Thank you.

I thank the gentleman.

The gentleman from Nebraska, Mr. Terry, 5 minutes.

Mr. TERRY. Thank you, Acting Chair.

You had testified, Mr. Friedman, or in your testimony, you showed or testified that there were two SCI reports that showed indications of power loss and identified the vehicle power mode as accessory. I think one of these has been highlighted in several newspaper articles that the SCI noted during air bag investigation a problem with the accessory.

So the question I have is, did these reports merely report the vehicle power mode as a fact, or did it report this and identify it as a potential contributing factor?

Mr. FRIEDMAN. Well, the two reports handled the case differently. My understanding and my memory is that in one of the reports, it simply had an entry in the EDR data, in the event data recorder data, that indicated that the vehicle power mode was accessory. That's typically not reported. In the other case, it was included in the special crash investigation that there were two possible reasons why the air bag did not deploy. One possible reason was because of the ignition switch. The other possible reason was because the yielding nature of the trees wasn't sufficient.

Mr. TERRY. You mean, they're hard when they're hit?

Mr. FRIEDMAN. I'm sorry?

Mr. TERRY. I'm being sarcastic. You said the yielding nature of the tree is kind of—they're hard and objects hit them and——

Mr. FRIEDMAN. Well, different trees have different sizes. In this case——

Mr. TERRY. Well anyway, I don't want to get bogged down into the force of the impact of a tree, but the point is that they were noted in two SCI reports but not acted upon what is the communication process between the SCI and the ODI? Someone has got to take that up and say, Gee, there's a problem with an ignition switch that's been noted; maybe we should follow up on that. What's the process?

Mr. FRIEDMAN. So the process, it depends on the circumstance. In some cases, our Office of Defects Investigation will actually ask the special crash investigators to go out and look at a crash so that they can seek new information. In other cases, when the special crash investigators follow up on a crash, they will bring it to the attention of the Office of Defects Investigation. So we try to make sure that both teams are talking to each other and sharing critical information.

Mr. TERRY. OK. So in these two SCI reports that were filed, did the SCI, the special crash investigator, communicate that there was a problem, other than noting it in those reports on those two occasions to the ODI?

Mr. FRIEDMAN. I don't know if SCI specifically communicated the accessory issue, but when the team did look at especially the investigation that indicated that there were two possible reasons for that.

Mr. TERRY. Yes. So the ODI knew that there may have been, that the switch may have been part of the problem, let's say?

Mr. FRIEDMAN. ODI would have been aware of exactly?

Mr. TERRY. So ODI was aware?

Mr. FRIEDMAN. I believe so because my understanding is that——

Mr. TERRY. Because it looks like you have one group of people that's not talking to another group of people.

Mr. FRIEDMAN. Our teams do talk to each other, but as you'll notice in my testimony, one of the things I do think we need to discuss is, are there ways that we can change the way these crash investigations are used in our defective products?

But in this case, I do want to note that the draft version of this report that the team had at the time, at that moment, indicated that the crash investigators thought the more likely reason that the air bags did not go off was because of the circumstances.

Mr. TERRY. I would think if you note that there was a problem with the switch automatically turning to accessory, that that would be significant enough to just follow up on, whether or not it was deemed to be a contributing factor or the sole factor. I need to ask, though, on the early warning reports, you were receiving early warning reports from GM. Correct?

Mr. FRIEDMAN. That's correct.

Mr. TERRY. In my question to the president of GM, she said that they were submitting those. Were they required, when they know or feel that there is a problem with a specific item in that car like the ignition, to report that? Or is that just one of the many items to be submitted within the EWR?

Mr. FRIEDMAN. Well, my understanding is that if they're aware of a problem that relates to a safety defect, that that actually is not reported within EWR. That needs to be directly reported——

Mr. TERRY. Under the TREAD Act, they have to support that separately.

Mr. FRIEDMAN. Well, under the TREAD Act, they're required to report warranty claims and a variety of other pieces of information to us. But if they saw a defect, then they needed to report that to us completely separate from, that's simply——

Mr. TERRY. What's noncompliance? I'm over my time, but I do need to get on the record, what is noncompliance versus defect? And you have 2 seconds.

Mr. FRIEDMAN. Sure. Really quickly, noncompliance means you did not meet the standards that we have. A safety defect means that you may have met the standards, but there's something wrong with the vehicle that poses an unreasonable risk to safety.

Mr. GRIFFITH. I thank the gentleman.

I would ask for unanimous consent that the members' written opening statements be introduced into the record.

Without objection, the documents will be entered into the record. Hearing none.

I will ask unanimous consent that the contents of the document binder be introduced into the record and to authorize staff to make appropriate redaction.

Without objection, the documents will be entered into the record with any redactions that staff determines are appropriate. Hearing no objections.[1]

Mr. GRIFFITH. In conclusion, I would like to thank all the witnesses.

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[1] The information has been retained in committee files and is also available at *http://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=102033*.

Thank you, Mr. Friedman, and members that participated in today's hearing. I remind members that they have 10 business days to submit questions for the record, and I ask that the witnesses all agree to respond promptly to the questions.

Anything else? Thank you very much. This hearing is adjourned.

[Whereupon, at 6:07 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

FRED UPTON, MICHIGAN
CHAIRMAN

HENRY A. WAXMAN, CALIFORNIA
RANKING MEMBER

ONE HUNDRED THIRTEENTH CONGRESS

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March 31, 2014

Ms. Mary T. Barra
Chief Executive Officer
General Motors Company
P.O. Box 33170
Detroit, MI 48232-5170

Dear Ms. Barra:

We are writing regarding new information we have obtained about the defective ignition switches in Chevrolet, Pontiac, and Saturn vehicles recalled by General Motors (GM) in February and March 2014. These defective switches have been identified as the cause of dozens of crashes and at least 13 deaths.

Information received by the Committee last week indicates that GM approved the defective ignition switch for use in these vehicles in February 2002 despite being presented with testing results showing that it repeatedly failed to meet the company's specifications. This information also reveals that the switch that was redesigned in 2006 for use in 2007 and later model year cars was also approved by GM despite again not meeting company specifications.

This information raises important new questions about what GM knew, when GM knew about the risks from this faulty ignition switch, and how the company has handled the recalls of affected vehicles, including the recall of the 2008 – 2011 model year vehicles that was announced just three days ago.

The GM Recall and GM Ignition Switch Specifications

GM has recalled 2.6 million Chevrolet Cobalts and HHRs, Saturn Ions and Skys, and Pontiac G5s and Solstices because of defective ignition switches. According to GM, "a condition with the ignition switch…may allow the key to unintentionally move or switch to the 'accessory' or 'off' position, turning off the engine and most of the electrical components on the

vehicle," causing air bag failure in the event of a crash.[1] The defect in the recalled vehicles has been associated with 31 frontal crashes, causing 13 fatalities.[2]

The specific defect in the switch involves low torque – the force required to turn the switch. During design and development of the switch in 2001, GM specified that the torque required to turn the switch from run to accessory is 20±5 newton centimeters (N-cm), meaning that the torque must be between 15 to 25 N-cm.[3] GM has acknowledged the importance of this specification in the recall notice, stating:

> If the torque performance is not to specification, and the key ring is carrying added weight or the vehicle goes off road or experiences some other jarring event, the ignition switch may inadvertently be moved out of the "run" position.[4]

In public filings with the National Highway Traffic Safety Administration (NHTSA), GM reported that the company first became aware of the problem in production vehicles in 2003 and that GM proposed changes to the ignition switch on April 26, 2006.[5] GM indicated that the changes proposed in 2006 "increased torque force in the ignition switch" and were installed in affected vehicles beginning with model year 2007.[6] Additional information provided by GM reveals that between 2003 and 2014, a series of internal company analyses, investigations,

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[1] General Motors, GM Expands Switch Recall (Feb. 25, 2014) (online at media.gm.com/media/us/en/gm/news.detail.html/content/Pages/news/us/en/2014/Feb/0225-ion.html) (accessed on Mar. 29, 2014).

[2] General Motors, GM Expands Switch Recall (Feb. 25, 2014) (online at media.gm.com/media/us/en/gm/news.detail.html/content/Pages/news/us/en/2014/Feb/0225-ion.html).

[3] General Motors Corporation, *Component Technical Specification* (Finalized Mar. 22, 2001).

[4] General Motors, GM Expands Switch Recall (Feb. 25, 2014) (online at media.gm.com/media/us/en/gm/news.detail.html/content/Pages/news/us/en/2014/Feb/0225-ion.html).

[5] General Motors, Letter to Nancy Lewis, National Highway Traffic Safety Administration, re: NHTSA recall No 14V-047 (Mar. 11, 2014). GM's chronology also indicates that a 2001 report "during pre-production development of the Ion addressed an issue relating to the ignition switch's "passlock" system . . . include[ing] low detent plunger force in the ignition switch, and stated that an ignition switch design change had resolved the problem."

[6] General Motors, Letter to Nancy Lewis, National Highway Traffic Safety Administration, re: NHTSA recall No 14V-047 (Mar. 11, 2014).

reports, and lawsuits clarified that the problems with the ignition switch presented a significant safety risk and culminated in the recall of the vehicles.[7]

The recall occurred in three stages: February 7 (2005-2007 Chevrolet Cobalts and 2007 Pontiac G5s); February 25 (2006-2007 Chevrolet HHRs, 2006-2007 Pontiac Solstices, 2003-2007 Saturn Ions, and 2007 Saturn Skys), and March 28 (2008-2011 models of all affected vehicles).

GM in 2002 Approved an Ignition Switch that Did Not Meet Company Specifications

On March 27, 2014, Committee staff received a two-and-a-half-hour briefing on issues related to the faulty ignition switch from key staff with Delphi Automotive, the manufacturer of the original switch and its subsequent redesigns.[8] At this briefing, Delphi officials informed the Committee of important new information regarding the process by which production of the switch was approved and accepted by GM.

Delphi explained the general process – known as the Production Part Approval Process (PPAP) – used when the supplier works with large customers like GM. The purchaser provides a design and set of specifications; Delphi then builds the product and tests it against specifications and presents the results of this testing to the purchaser for final production approval.

In the case of the ignition switch for the recalled vehicles, Delphi told the Committee that the switch was designed, built, and then approved in February 2002 by GM via this PPAP process.[9] Delphi told the Committee staff that they had been unable to locate all documents associated with this PPAP, but that they had identified documents reporting the torque performance testing results conducted as part of the PPAP.

Delphi officials stated that it was "well documented" in 2002 that the switch did not meet the required minimum torque specifications.[10] The testing results were in fact far below GM's specifications. Delphi told the committee that there were 12 torque performance tests conducted on the switch at the time, that most tests showed a torque of between 4 and 10 N-cm, and that only two of the 12 tests showed the switch surpassing 10 N-cm. GM's specifications called for torque levels between 15 and 25 N-m, significantly above the results of the performance tests.

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[7] General Motors, Letter to Nancy Lewis, National Highway Traffic Safety Administration, re: NHTSA recall No 14V-047 (Mar. 11, 2014).

[8] Briefing of Energy and Commerce Committee Staff by Delphi Automotive (Mar. 27, 2014).

[9] Briefing of Energy and Commerce Committee Staff by Delphi Automotive (Mar. 27, 2014).

[10] Briefing of Energy and Commerce Committee Staff by Delphi Automotive (Mar. 27, 2014).

Delphi also told the Committee that despite these test results, GM officials approved the switch for production and that it was used in the recalled vehicles in model years 2003-2007.[11]

The Modified Switches Used in 2007–2011 Vehicles Were Also Approved by GM Despite Not Meeting Company Specifications

Delphi also told the Committee about the subsequent redesign of the switch that was produced beginning in April 2006. According to Delphi officials, GM began discussions with Delphi about the need to modify and re-test the switch in mid-2005, agreed to modify the design switch, approved a design with a longer spring, and had Delphi produce prototypes and conduct testing as part of a new PPAP that was approved by GM on April 26, 2006.[12] GM has provided the Committee with documentation verifying that a Ray DeGiorgio, lead design engineer for the Cobalt ignition switch, signed off on a Delphi ignition switch change on April 26, 2006.[13]

Delphi officials also indicated that they did not have complete documentation of this 2006 PPAP process, but that the company had recovered documented testing results for the April 2006 PPAP.[14] According to Delphi, most torque test results for the 2006 switches were in the 10 to 15 N-cm range, and while these switches had a higher average torque than the older models, they still did not meet GM's documented specification.[15]

Delphi confirmed that these testing results mean that the ignition switches currently in use in 2008–2011 vehicles do not meet GM performance specifications.[16]

As far as we know, GM has not publicly revealed that the company approved a switch in 2002 and again in 2006 that did not meet company specifications.

The company has also never acknowledged that switches that do not meet GM specifications were also installed in model year 2008–2011 vehicles. GM's recall notice for the 2008–2011 vehicles makes no mention of this fact. To the contrary, it states that the cars were

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[11] Briefing of Energy and Commerce Committee Staff by Delphi Automotive (Mar. 27, 2014).

[12] Briefing of Energy and Commerce Committee Staff by Delphi Automotive (Mar. 27, 2014).

[13] General Motors production, GMHEC000003128.

[14] Briefing of Energy and Commerce Committee Staff by Delphi Automotive (Mar. 27, 2014).

[15] Briefing of Energy and Commerce Committee Staff by Delphi Automotive (Mar. 27, 2014).

[16] Briefing of Energy and Commerce Committee Staff by Delphi Automotive (Mar. 27, 2014).

recalled because inadequate switches may have been used to repair these cars, not because inadequate switches were installed during production. According to GM:

> [F]aulty switches may have been used to repair the vehicles. The parts are at the center of the company's recently announced ignition switch recall ... faulty switches were sold to dealers and aftermarket wholesalers. ... Because it is not feasible to track down all the parts, the company is taking the extraordinary step of recalling 824,000 more vehicles in the U.S. to ensure that every car has a current ignition switch.[17]

Risks from Out-of-Specification Ignition Switches in 2008–2011 GM Vehicles

It is difficult to assess the risks from the ignition switches installed in the recalled 2008–2011 GM vehicles. Because the torque on these switches was higher than the torque on the older switches, problems could potentially be reduced.

GM has stated that it is "unaware of any reports of fatalities with this group of vehicles where a frontal impact occurred, the front air bags did not deploy, and the ignition is in the 'accessory' or 'off' position."[18] But an analysis of NHTSA Early Warning Report data shows that there are 14 fatal crashes in the recalled 2008–2011 vehicles involving a potential problem with an airbag, steering, electrical, or unknown component. The Center for Auto Safety has identified a similar set of crashes in earlier GM vehicles as those that "could indicate the ignition airbag defect."[19]

GM and GM engineers have also repeatedly stressed the importance of meeting the torque specifications of 15-25 N-cm. Company engineers, in depositions in a Georgia case involving the defective ignition switch in a 2005 Cobalt, were asked about this specification. Gary Altman, the program engineer for the Cobalt, was asked the following series of questions:

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[17] General Motors, GM Moves to Secure Recalled Ignition Switches (Mar. 28, 2014) (online at media.gm.com/media/us/en/gm/news.detail.html/content/Pages/news/us/en/2014/mar/0328-ignition-service.html).

[18] General Motors, GM Moves to Secure Recalled Ignition Switches (Mar. 28, 2014) (online at media.gm.com/media/us/en/gm/news.detail.html/content/Pages/news/us/en/2014/mar/0328-ignition-service.html).

[19] Letter from Clarence Ditlow, Executive Director, Center for Auto Safety to the Honorable David Friedman, NHTSA (Mar. 7, 2014) (online at www.autosafety.org/sites/default/files/imce_staff_uploads/Friedman%20Letter%20March%207%202014%20Full_3.pdf).

Q:	And the vehicle never should have been sold if it didn't meet GM's minimum torque performance requirements, should it? ...
[Altman]:	That's correct.
Q:	And the reason is because that could be dangerous under certain situations because the key can move from run to accessory? ...
[Altman]:	Yes.[20]

Similarly, Ray DeGiorgio, the lead design engineer for the Cobalt ignition switch was asked "Why do you have a minimum torque requirement from run to accessory?" He replied, "It's a design feature that is required. You don't want anything flopping around." He was asked if "the intent was also to make sure that when people were using the vehicle under ordinary driving conditions, that if the key was in the run position, it wouldn't just move to the accessory position?" He replied, "That is correct."[21]

Another GM engineer, Brian Stouffer, also indicated in a deposition that the torque values of the ignition switches on the later model vehicles were not significantly different from the torque values on the older models. According to Mr. Stouffer, "The values are not substantially higher on the '08s and '09s. . . . there's a slight trend upwards, but '08s and '09s are not drastically different. The highest was only – we were never higher than 20 newton centimeters. We never had one exceed that. . . . there is a slight trend upward [in torque values] from '07, but there's definitely not separation. They overlap. The ranges [of ignition torque in pre-2007 and post 2007 vehicles] overlap."[22] If true, this could indicate that there are significant risks from the ignitions switches in the 2008–2011 vehicles.

Documents provided to the Committee confirm that top GM officials were aware of the out-of-spec switches in 2008-2010 vehicles for at least several months before announcing the recall. A presentation for GM's December 17, 2013 high-level Executive Field Action Decision Committee meeting showed that torque performance measurements for five of 12 2008 – 2010 model year vehicles ignition switches were below the minimum GM required specifications.[23]

GM again acknowledged the importance of this specification in the March 28, 2014 recall notice, which stated:

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[20] Deposition of Gary Altman (June 12, 2013), *Melton v. General Motors* (Case No. 2011-A-2652).

[21] Deposition of Ray DeGiorgio (Apr. 29, 2013), *Melton v. General Motors* (Case No. 2011-A-2652).

[22] Deposition of Brian Stouffer (May 1, 2013), *Melton v. General Motors* (Case No. 2011-A-2652).

[23] General Motors, EFADC Presentation (GMHEC000002899).

> If the torque performance is not to specification, and the key ring is carrying added weight or the vehicle goes off road or experiences some other jarring event, the ignition switch may inadvertently be moved out of the "run" position.[24]

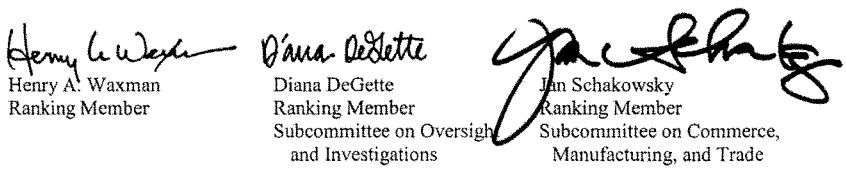
Questions for GM

These new facts reveal that GM approved for production in 2002 and in 2006 an ignition switch that did not meet the company's design specifications. This raises a number of important questions:

1. Has GM informed NHTSA that GM approved for production ignition switches used in 2003-2011 Chevrolet Cobalts and HHRs, Saturn Ions and Skys, and Pontiac G5s and Solstices despite the knowledge that these switches did not meet minimum specifications?
2. How and why were these switches approved despite not meeting specification, and who at GM was aware of this approval?
3. Has GM conducted a detailed analysis of the recalled 2008–2011 model years to determine if the out-of-specification switches have caused crashes?
4. Why did GM wait so long to recall the model year 2008–2011 vehicles if the company was aware that they contained switches that did not meet company specifications?
5. Why has GM not informed the owners of these vehicles that their vehicles contain ignition switches that do not comply with company specifications? Why did the March 28 recall describe the reason for the recall as concern about replacement switches instead of concern about the switches that were originally installed in these vehicles?

We look forward to your testimony on April 1, 2014, and ask that you come prepared to address these and other important questions.

Sincerely,



Henry A. Waxman
Ranking Member

Diana DeGette
Ranking Member
Subcommittee on Oversight and Investigations

Jan Schakowsky
Ranking Member
Subcommittee on Commerce, Manufacturing, and Trade

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[24] General Motors, GM Expands Switch Recall (Feb. 25, 2014) (online at media.gm.com/media/us/en/gm/news.detail.html/content/Pages/news/us/en/2014/Feb/0225-ion.html).

FRED UPTON, MICHIGAN
CHAIRMAN

HENRY A. WAXMAN, CALIFORNIA
RANKING MEMBER

ONE HUNDRED THIRTEENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115

Majority (202) 225-2927
Minority (202) 225-3641

SUPPLEMENTAL MEMORANDUM

April 1, 2014

To: Subcommittee on Oversight and Investigations Democratic Members and Staff

Fr: Committee on Energy and Commerce Democratic Staff

Re: GM Warranty Claims for Ignition Switch Defects on Recalled Vehicles

In February and March 2014, General Motors (GM) recalled 2.6 million Chevrolet Cobalts and HHRs, Saturn Ions and Skys, and Pontiac G5s and Solstices because of defective ignition switches. According to GM, "a condition with the ignition switch … may allow the key to unintentionally move or switch to the 'accessory' or 'off' position, turning off the engine and most of the electrical components on the vehicle," including causing air bag failure in the event of a crash.[1] GM has linked the defect to 31 frontal crashes and 13 fatalities.[2]

To analyze the extent to which GM may have been aware of problems with these vehicles and whether the company appropriately reported information to federal authorities, the minority staff analyzed the company's warranty claims database for the recalled vehicles. The staff analysis looked for cases where customers or GM technicians reported problems with vehicles that were unexpectedly stalling or turning off.

The analysis identified 133 cases – dating from June 2003 through June 2012 – of consumers raising concerns directly to GM dealers about vehicles that were unexpectedly stalling or turning off when going over bumps or when the key was bumped. In many of these warranty claims, the comments from consumers and GM technicians indicate that they had identified the ignition switch as the likely cause of the problem. Yet at the same time that GM

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[1] General Motors, GM Expands Switch Recall (online at media.gm.com/media/us/en/gm/news.detail.html/content/Pages/news/us/en/2014/Feb/0225-ion.html) (accessed on Mar. 29, 2014).

[2] General Motors, GM Expands Switch Recall (online at media.gm.com/media/us/en/gm/news.detail.html/content/Pages/news/us/en/2014/Feb/0225-ion.html) (accessed on Mar. 29, 2014).

was receiving these consumer complaints, the company continued to deny any defect. To this day, GM has not reported the vast majority of these incidents to National Highway Traffic Safety Administration (NHTSA) or revealed them to the public.

The GM Warranty Database

One source of information about potential flaws in a motor vehicle is the warranty claims database. When customers with cars under warranty have problems, they often take their vehicles to dealers, who attempt to resolve the problems. This data is not reported to NHTSA or the public. But it can provide an early warning of vehicle defects.

At the request of the Committee, GM provided copies of the warranty claims database relating to ignition switch problems, stalls, and airbag problems in the recalled vehicles. This production consisted of approximately 150,000 records.[3] The minority staff analyzed this database, conducting basic text searches to identify cases where consumers reported to GM dealers that their cars were stalling after going over bumps or potholes or if the ignition system was jostled.

Findings

The staff analysis of GM's warranty database identified 133 reports between June 2003 and June 2012 where customers indicated to dealers and service technicians that their vehicles stalled or turned off when the car went over a bump, hit a pothole, or when they otherwise inadvertently jostled the ignition system or struck the key.

The first case occurred in June 2003, when the owner of a 2003 Ion with 3,474 miles on the odometer reported that he or she "bumped [the] key and car shut off," with a note indicating that the GM "tech duplicated [the] concern."[4] The most recent case occurred in June 2012, when the owner of a 2006 Cobalt with 48,568 miles on the odometer reported that the "ignition lock cylinder will move and shut off vehicle when hitting bumps."[5]

The minority staff identified five warranty claims from 2003, 10 from 2004, 14 from 2005, 16 from 2006, 37 from 2007, 31 from 2008, seven from 2009, eight from 2010, four from 2011, and one from 2012. There were 22 reports for the Cobalt, two for the G5, one for the Solstice, 87 for the Ion, and 21 for the HHR.

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[3] General Motors production: GMHEC000200859, GMHEC000200860, GMHEC000200861, GMHEC000200862, GMHEC000218424, GMHEC000200863, GMHEC000200864, GMHEC000200865, GMHEC000200866, GMHEC000218423, GMHEC000218425, GMHEC000218426, GMHEC000218427, GMHEC000218428, and GMHEC000218429.

[4] Warranty Claim from 2003 Saturn Ion Owner (June 6, 2003).

[5] Warranty Claim from 2006 Chevrolet Cobalt Owner (June 25, 2012).

Examples of comment associated with the records include: "customer states sometimes when bumping ignition switch area vehicle will shut off"; "vehicle stalls out when hitting bump/pothole in road, noticed at 50 MPH"; "customer states when driving vehicle died at highway speeds"; "engine cuts out after hitting bumps"; "vehicle quit running while driving about 70 MPH after hitting bump in the highway"; "most likely cause was key turning to off position when hitting bumps"; "ignition key turns off when going over bumps"; "vehicle will shut off if key is bumped – tech verified concern"; "vehicle shuts off intermittently ... caused by bumping ignition with knee while driving"; "tech noted there is a potential for driver to inadvertently turn off the ignition"; and "key ring heavy and shutting off ignition."[6]

The comment continue: "car dies while driving … tech test drove found that ignition turn[s] really easy [and] when you hit a bump the switch rolls back"; "car dies out at times when hitting a bump. Looks like ignition turns off. Tech road tested. Found weak spring in ignition switch as cause"; "when hitting bumps in road vehicle has died four times"; "3x when going over bumps the car died"; "ignition turning itself off when hitting bump"; "technician found vehicle stalling due to too heavy of a key chain causing ignition to rotate to 'off' position when hitting bump"; and "customer bumped key and car shut off … tech duplicated concern [and] found key not returning to proper spec after starting causing key to easily turn and shut off."[7]

Table 1 contains information on all 133 ignition switch defect-related warranty reports identified by the minority staff for 2003-2007 Chevrolet Cobalts and HHRs, Saturn Ions and Skys, and Pontiac G5s and Solstices. Because this analysis was based on a simple text search relating to vehicles stalling over bumps, it most likely underestimates the number of warranty reports related to this issue received by GM.

Manufacturers must provide a broad summary of warranty data to NHTSA through Early Warning Reporting and defect chronologies, and NHTSA may request warranty claims as part of a defect investigation.[8] Nevertheless, there is currently no requirement for auto manufacturers to

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[6] Warranty Claim from 2007 Chevrolet Cobalt Owner (Sept. 29, 2010); Warranty Claim from 2006 Chevrolet Cobalt Owner (Sept. 8, 2010); Warranty Claim from 2007 Pontiac G5 Owner (July 28, 2010); Warranty Claim from 2006 Chevrolet HHR Owner (Aug. 6, 2010); Warranty Claim from 2006 Saturn Ion Owner (July 21, 2009); Warranty Claim from 2006 Saturn Ion Owner (Nov. 29, 2008); Warranty Claim from 2006 Chevrolet HHR Owner (Feb. 28, 2008); Warranty Claim from 2006 Saturn Ion Owner (Feb. 25, 2008); Warranty Claim from 2006 Saturn Ion Owner (Jan. 17, 2008); Warranty Claim from 2006 Saturn Ion Owner (Aug. 29, 2007); Warranty Claim from 2006 Saturn Ion Owner (Aug. 10, 2007).

[7] Warranty Claim from 2006 Saturn Ion Owner (July 2, 2007); Warranty Claim from 2006 Saturn Ion Owner (Jan. 16, 2007); Warranty Claim from 2003 Saturn Ion Owner (July 26, 2006); Warranty Claim from 2004 Ion Owner (June 29, 2005); Warranty Claim from 2004 Saturn Ion Owner (Sept. 21, 2004); Warranty Claim from 2003 Saturn Ion Owner (April 22, 2004); Warranty Claim from 2003 Saturn Ion Owner (June 6, 2003).

[8] 49 C.F.R. § 573.6 (1978); 49 C.F.R. 579.5(a), formerly at 49 C.F.R. 573.8 (1978);49 C.F.R. 579.21 (2002).

proactively submit warranty claims to the agency. In this case, GM has not reported the vast majority of these claims to federal safety officials or to the public.

Table 1: GM Warranty Claims for Defective Ignition Switches

Model	Model Year	Vehicle Miles	Complaint Date
ION	2003	3,474	6/6/2003
ION	2003	9,300	7/1/2003
ION	2003	10,027	7/14/2003
ION	2003	10,639	7/21/2003
ION	2003	10,639	7/21/2003
ION	2003	7,807	3/15/2004
ION	2003	18,568	3/15/2004
ION	2003	16,108	4/8/2004
ION	2003	16,192	4/12/2004
ION	2003	9,554	4/22/2004
ION	2003	15,031	5/1/2004
ION	2003	17,222	6/21/2004
ION	2004	18,209	6/24/2004
ION	2004	138	9/21/2004
ION	2004	6,583	3/1/2005
ION	2004	12,883	3/17/2005
ION	2004	8,182	4/20/2005
ION	2004	10,387	5/7/2005
ION	2004	7,945	6/29/2005
ION	2005	16,767	7/18/2005
ION	2004	19,963	7/22/2005
ION	2004	13,743	8/18/2005
ION	2004	31,456	8/25/2005
ION	2006	2,470	9/19/2005
HHR	2006	445	10/24/2005
ION	2004	17,185	12/5/2005
ION	2004	13,716	12/13/2005
ION	2005	12,420	1/9/2006
ION	2004	32,688	1/10/2006
ION	2006	10,221	1/27/2006
ION	2006	3,468	2/23/2006
ION	2005	7,042	6/14/2006
ION	2005	17,375	7/11/2006
ION	2005	17,375	7/11/2006
ION	2006	9,057	7/25/2006
ION	2003	53,753	7/26/2006
ION	2005	13,929	7/29/2006
HHR	2006	13,464	8/3/2006
ION	2006	9,112	8/7/2006
ION	2004	36,911	10/16/2006

Model	Model Year	Vehicle Miles	Complaint Date
ION	2005	25,505	11/2/2006
ION	2004	12,850	11/29/2006
ION	2004	12,850	11/29/2006
ION	2006	30,439	1/16/2007
Cobalt	2005	15,123	3/5/2007
ION	2004	34,084	4/9/2007
HHR	2007	2,143	4/30/2007
Cobalt	2005	32,096	5/2/2007
Cobalt	2006	17,214	5/7/2007
ION	2006	26,819	5/19/2007
ION	2006	22,937	5/21/2007
ION	2006	15,791	5/30/2007
ION	2006	17,025	6/7/2007
Solstice	2006	9,749	6/20/2007
ION	2006	31,500	7/2/2007
HHR	2006	25,940	7/19/2007
ION	2005	17,303	8/2/2007
ION	2006	24,741	8/2/2007
ION	2006	24,741	8/2/2007
Cobalt	2005	29,551	8/6/2007
ION	2006	11,161	8/6/2007
HHR	2006	35,804	8/7/2007
ION	2006	25,486	8/10/2007
ION	2005	28,000	8/11/2007
ION	2004	21,814	8/16/2007
ION	2004	21,814	8/16/2007
ION	2006	8,638	8/21/2007
HHR	2007	13,982	8/28/2007
ION	2006	30,221	8/29/2007
ION	2007	12,257	9/10/2007
Cobalt	2006	18,460	9/12/2007
ION	2006	12,421	9/20/2007
HHR	2006	23,241	10/9/2007
ION	2007	7,884	10/12/2007
ION	2006	33,477	10/15/2007
HHR	2006	29,383	10/23/2007
HHR	2006	40,859	10/24/2007
HHR	2006	49,914	10/30/2007
ION	2004	57,642	10/30/2007
ION	2005	31,006	11/7/2007
HHR	2006	29,358	12/12/2007
Cobalt	2006	23,058	1/3/2008
ION	2006	23,883	1/17/2008

Model	Model Year	Vehicle Miles	Complaint Date
HHR	2006	30,808	1/31/2008
ION	2006	29,725	2/8/2008
ION	2007	15,247	2/13/2008
ION	2007	15,247	2/13/2008
ION	2006	20,513	2/25/2008
HHR	2006	24,811	2/28/2008
ION	2007	26,043	3/6/2008
ION	2007	7,538	3/10/2008
HHR	2006	24,955	3/14/2008
ION	2006	28,568	3/14/2008
ION	2007	11,594	3/17/2008
ION	2005	21,919	3/24/2008
ION	2006	21,942	5/21/2008
ION	2006	21,942	5/21/2008
ION	2006	21,942	5/21/2008
HHR	2006	27,363	6/19/2008
ION	2006	29,177	6/25/2008
Cobalt	2006	32,014	6/28/2008
ION	2006	23,889	7/9/2008
Cobalt	2005	62,512	7/22/2008
Cobalt	2006	49,509	8/22/2008
Cobalt	2006	49,509	8/26/2008
Cobalt	2007	24,357	9/2/2008
ION	2006	32,805	11/29/2008
ION	2007	13,696	12/2/2008
ION	2007	28,760	12/5/2008
ION	2007	35,611	12/5/2008
Cobalt	2006	21,310	12/18/2008
ION	2007	19,342	12/29/2008
G5	2007	27,270	1/5/2009
Cobalt	2006	35,514	6/1/2009
ION	2006	49,934	7/21/2009
HHR	2007	23,203	8/24/2009
ION	2003	36,770	8/24/2009
Cobalt	2006	26,040	8/28/2009
Cobalt	2007	31,328	12/18/2009
HHR	2007	32,629	2/15/2010
G5	2007	36,226	7/28/2010
Cobalt	2006	49,186	8/5/2010
HHR	2006	54,499	8/6/2010
HHR	2006	35,939	9/2/2010
Cobalt	2006	47,432	9/8/2010
Cobalt	2007	24,443	9/29/2010

Model	Model Year	Vehicle Miles	Complaint Date
ION	2006	40,820	11/4/2010
Cobalt	2005	70,380	6/15/2011
HHR	2006	51,404	9/12/2011
Cobalt	2007	58,321	9/13/2011
HHR	2006	39,692	9/28/2011
Cobalt	2006	48,568	6/25/2012

THE COMMITTEE ON ENERGY AND COMMERCE

MEMORANDUM

March 30, 2014

TO: Members, Subcommittee on Oversight and Investigations

FROM: Committee Majority Staff

RE: Hearing on "The GM Ignition Switch Recall: Why Did It Take So Long?"

On Tuesday, April 1, 2014, at 2:00 p.m. in 2123 Rayburn House Office Building, the Subcommittee on Oversight and Investigations will hold a hearing entitled "The GM Ignition Switch Recall: Why Did It Take So Long?" The hearing will review the recent recall by the General Motors Company (GM) of over 2 million cars in the United States for problems related to the ignition switch. In particular, the Subcommittee will examine how GM and the National Highway Traffic Safety Administration (NHTSA) responded to complaints from customers about the ignition switch and non-deployment of airbags.

I. WITNESSES

Ms. Mary T. Barra
Chief Executive Officer
The General Motors Company

The Honorable David Friedman
Acting Administrator
National Highway Transportation Safety Administration

II. BACKGROUND: THE GM RECALL

A. The GM Recall

On February 7, 2014, GM informed NHTSA that it had determined a defect existed in the 2005-2007 model year (MY) Chevrolet Cobalt and the 2007 Pontiac G5 vehicles.[1] GM stated that the "ignition switch torque performance" may not meet GM's specifications. If the torque performance is not to specification, and the key ring is carrying added weight or the vehicle goes off road or experiences some other jarring event, the ignition switch may inadvertently be moved out of

[1] Letter from M. Carmen Benavides, Director, Product Investigations and Safety Regulations, General Motors LLC, to Nancy Lewis, Associate Administrator for Enforcement, NHTSA (Feb. 7, 2014) available at http://www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM450012/RCDNN-14V047-1347P.pdf (hereinafter "GM February 7, 2014, Letter to NHTSA").

the run position.[2] GM explained that depending on the time the ignition moved out of the "run" position the airbags of the affected vehicles would not deploy. The recall was announced on February 10, 2014, and applied to 619,122 vehicles. Two weeks later, GM expanded the recall on February 25, 2014, to include an additional 748,024 vehicles: the 2006-2007 MY Chevrolet HHR, the 2006-2007 MY Pontiac Solstice, the 2003-2007 MY Saturn Ion, and the 2007 MY Saturn Sky Vehicles.[3] In its recall notices, GM stated that it is "very important that customers remove all items from their key rings, leaving only the vehicle key. The key fob . . . should also be removed from the key ring."[4] In a March 17, 2014, notice to GM dealers, GM stated that they expected the initial supply of new ignition switch parts would be available on April 7, 2014.[5]

Last Friday, March 28, 2014, GM again expanded the ignition switch recall to cover all model years of the Chevrolet Cobalt and HHR, the Pontiac G5 and Solstice, and the Saturn Ion and Sky in the United States. GM states that its reason for expanding the recall was that faulty switches may have been used in these later models. GM stated that it is "unaware of any reports of fatalities with this group of vehicles where a frontal impact occurred, the front air bags did not deploy and the ignition is in the 'accessory' or 'off' position."[6] This second expansion of the ignition switch recall covers an additional 824,000 vehicles in the U.S., bringing the number of recalled vehicles to 2,191,146.

B. The TREAD Act

In the wake of the Firestone tire recalls involving Ford Explorer vehicles, Congress in 2000 enacted the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act.[7]

The TREAD Act amended Title 49 of the United States Code to require Early Warning Reporting (EWR) by manufacturers.[8] EWR reports are filed quarterly.[9] Manufacturers must file a report on each incident involving one or more deaths or injuries that is identified in a claim against the manufacturer and which alleges that the injury or death was caused by a possible defect.[10] In

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[2] *Id.*

[3] Letter from M. Carmen Benavides, Director, Product Investigations and Safety Regulations, General Motors LLC, to Nancy Lewis, Associate Administrator for Enforcement, NHTSA (Feb. 25, 2014) available at http://www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM450732/RCDNN-14V047-7510.pdf (hereinafter "GM February 24, 2014, Letter to NHTSA").

[4] *See, e.g.*, GM February 7, 2014, Letter to NHTSA; GM February 24, 2014, Letter to NHTSA; and Letter from M. Carmen Benavides, Director, Product Investigations and Safety Regulations, General Motors LLC, to Nancy Lewis, Associate Administrator for Enforcement, NHTSA (Mar. 11, 2014) available at http://www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM451430/RCDNN-14V047-9346P.pdf (hereinafter "GM March 11, 2014, Letter to NHTSA").

[5] Memorandum from GM Customer Care and Aftersales to All General Motors Dealers (Mar. 17, 2014) available at http://www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM452894/RCMN-14V047-3409.pdf .

[6] Press Release, General Motors, GM Moves to Secure Recalled Ignition Switches (Mar. 28, 2014) available at http://media.gm.com/media/us/en/gm/news.detail.html/content/Pages/news/us/en/2014/mar/0328-ignition-service.html .

[7] Pub. L. 106-414 (2000).

[8] *See* 49 U.S.C § 30116 (l) and (m); 49 C.F.R. § 579.21.

[9] *See* 49 C.F.R. § 570.4 (c).

[10] *See* 49 U.S.C. § 30166(m)(3)(A)(i).

addition, for the incidents involving death or injury, the manufacturer must report certain information about the vehicles involved, including the make, model, and Vehicle Identification Number (VIN), and identify each system or component that allegedly contributed to the incident.[11] EWR also includes aggregate data on the number of property damage claims, consumer complaints, warranty claims, and field reports for certain vehicle systems.[12] Copies of field reports must be provided each quarter.[13]

In addition to the quarterly reports, TREAD requires that manufacturers notify NHTSA about recalls and safety campaigns in foreign countries within five working days if the vehicle is "identical or substantially similar" to a vehicle in the United States.[14] Manufacturers must submit within five working days of the end of the month in which they were issued certain communications with dealers or customers, including bulletins, notices, consumer advisories, and warranty communications.[15]

TREAD also established certain safety standards for tires, tire pressure monitoring systems, and rollover stability. Further, upon enactment, the law set civil penalties of up to $5,000 per motor vehicle per day with a maximum penalty of $15 million for all violations or refusals to comply with a NHTSA regulation. NHTSA adjusted those penalties in late 2012 to $7,000 for each violation or a total of $17.35 million for all violations.[16] Those maximum penalties were increased again when President Obama signed into law the "Moving Ahead for Progress in the 21st Century Act" which increased the maximum civil penalty for all violations of motor vehicle safety rules to $35 million.[17] The law contained factors the Secretary of Transportation must consider when determining a penalty amount, as well as a directed rulemaking interpreting such penalty factors.

C. NHTSA's Role

An agency within the Department of Transportation (DOT), NHTSA was established in 1970 by the Highway Safety Act of 1970. According to its website, NHTSA is responsible for "reducing deaths, injuries and economic losses resulting from motor vehicle crashes."

Within NHTSA, the Office of Defects Investigation (ODI) is responsible for reviewing customer complaint data as well as EWR from manufacturers to determine if an investigation of a possible safety defect should be conducted. Customer complaints may be submitted to NHTSA by letter, phone, or to a database located at www.safercar.gov. In a briefing with Committee staff on March 10, 2014, NHTSA officials estimated that the agency receives 45,000 to 55,000 complaints a year to its database, although not all complaints submitted to the database refer to or implicate

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[11] *See* 49 C.F.R. § 579.21 (b)(2). The systems or components specified in the regulation include steering system, suspension system, service brake system, parking brake, engine and engine cooling system, fuel system, power train, electrical system, exterior lighting, visibility, air bags, seat belts, structure, latch, vehicle speed control, tires, wheels, seats, fire, and rollover. The manufacturer can also indicate that the component or system identified in the claim is not covered by the statute or that no component or system was specified in the claim.
[12] *See* 49 C.F.R. § 579.21 (c). Those systems are listed in footnote 5.
[13] *See* 49 U.S.C. 30166(l); 49 C.F.R. § 579.21(d).
[14] 49 C.F.R. § 579.11 and §479.12.
[15] *See* 49 C.F.R. § 579.5
[16] *See* 49 C.F.R. § 578.6 (a) available at http://www.gpo.gov/fdsys/pkg/FR-2012-11-27/pdf/2012-28694.pdf.
[17] *See* Pub. L. 122-141 (2012) available at http://www.gpo.gov/fdsys/pkg/PLAW-112publ141/pdf/PLAW-112publ141.pdf.

safety.[18] NHTSA states that each complaint in its database is read by an ODI reviewer. This is referred to as a "Level I" review. Certain complaints then receive a "Level II review" or are sent to an investigator where additional follow-up is conducted to determine the facts of a complaint.

To determine whether a potential safety-related defect exists, NHTSA opens an Initial Evaluation (IE). A referral to a NHTSA investigative division to open a defect investigation requires the approval of the ODI director. An ODI defect investigation has two phases. The first is a Preliminary Evaluation (PE). During this phase, the agency may request information from the manufacturer in order to determine whether more analysis is need. The second is an Engineering Analysis (EA). The EA is a more extensive investigation, and may involve additional requests to the manufacturer, other manufacturers, and testing and inspection of vehicles.

In addition to reviewing customer complaints and EWR, NHTSA also conducts Special Crash Investigations. NHTSA currently contracts with three different firms to perform these investigations. NHTSA may either assign a specific crash or the contractor can propose a case to NHTSA for investigation; in most instances, the investigations are assigned by NHTSA. In a briefing with Committee staff, NHTSA Special Crash Investigations (SCI) Program officials estimated that the office performs 100-125 investigations a year, depending on the complexity of the cases.[19]

The purpose of NHTSA's SCI Program is not to identify a defect or determine the cause of a crash. Instead, the purpose of these investigations is to document the condition of the vehicle as it was found after the crash and tie the injuries suffered by its occupants to the vehicle's safety systems and components so that vehicle performance is improved.[20] NHTSA officials explained during a briefing with Committee staff that the SCI Program often focuses its investigations on new and emerging automobile technologies. For example, NHTSA SCI Program officials explained that the office has been closely involved in investigations of airbag systems, in particular, the adoption of advanced systems in vehicles beginning in 2004 in order to meet the requirements of Federal Motor Vehicle Safety Standard 208.[21] The SCI Program has performed over 1,200 airbag investigations.

Contractors for the SCI Program performed three investigations of crashes in the Chevrolet Cobalt where the air bags did not deploy. These crashes occurred in July 2005, October 2006, and April 2009. Additional information about these investigations is provided in Part III, below.

III. THE COMMITTEE'S INVESTIGATION

On March 10, 2014, the Committee announced that it would conduct a bipartisan investigation of the GM ignition switch recall. On March 11, 2014, Committee members sent letters to GM and NHTSA requesting certain documents and information about the GM recall.

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[18] NHTSA Office of Defects Investigation, Briefing to Committee Staff (Mar. 24, 2014) (hereinafter "NHTSA ODI Briefing").
[19] NHTSA Special Crash Investigations Program, Briefing to Committee Staff (Mar. 24, 2014) (hereinafter "NHTSA SCI Briefing").
[20] *See id.*
[21] *See id.*

Since sending these requests, the Committee has received and reviewed over 200,000 pages of documents from GM and approximately 6,000 pages from NHTSA. Committee staff received a briefing from GM officials on March 18, 2014. Committee staff has received three briefings from various offices within NHTSA, including a briefing from NHTSA ODI officials on March 10, from SCI Program staff on March 24, and a demonstration of NHTSA ODI software on March 24. In addition, Committee staff was briefed by two GM suppliers, Delphi (the ignition switch supplier for the recalled vehicles) and Continental Corporation (the supplier of the airbag Sensing Diagnostic Module, or SDM, for the recalled GM vehicles). Finally, Committee staff conducted briefings with employees of the two NHTSA contractors that performed the SCI of Chevrolet Cobalts for non-deployment of airbags, Calspan Corporation and Indiana University Transportation Research Center.

Set forth below is a timeline of key facts and events leading up to the GM ignition switch recall. It is important to note that the Committee's investigation is ongoing, and the Committee expects to receive additional documents from both GM and NHTSA and to conduct additional interviews. While Committee staff now has a better understanding of the chronology leading up to the recall, until additional documents have been received, the information in the timeline is preliminary and incomplete. This information is presented to inform Committee members and serve as a basis for additional inquiry during the April 1, 2014, hearing before the Subcommittee.

- Late 1990s/Early 2000s: GM and supplier Eaton Mechatronics finalized the specifications for the ignition switch for the Saturn Ion.[22] Eaton Corporation sold its Vehicle Switch/Electronic Division to Delphi Automotive Systems ("Delphi") on March 31, 2001.
- 2001: A pre-production report for the MY 2003 Saturn Ion identified issues with the ignition switch.[23] In a section entitled "Root Cause Summary," the report stated that the "two causes of failure" were "[l]ow contact force and low detent plunger force."[24] The report stated that a design change resolved the problem.[25]
- February 2002: Delphi, GM's ignition switch supplier for the recalled vehicles, submitted a Production Part Approval Process (PPAP) document for the switch. During a briefing, Delphi officials told Committee staff that GM approved the PPAP even though sample testing of the ignition switch torque was below the original specifications set by GM.[26]
- November 2004: GM opened an engineering inquiry, Problem Resolution Tracking System N172404 ("2004 PRTS"), to examine the complaint "vehicle can be keyed off with knee while driving" in a 2005 Chevrolet Cobalt.[27]

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[22] Delphi, Briefing to Committee Staff (March 27, 2014) (hereinafter "Delphi Briefing").
[23] *See* Report/Complaint regarding "Electrical Concern" Opened July 31, 2001, GMHEC000001980-1990. GM referenced the report in the chronology attached to the GM March 11, 2014, Letter to NHTSA.
[24] *Id.* at GMHEC000001986.
[25] The chronology attached to the GM March 11, 2014, letter to NHTSA states that the 2001 Saturn Ion ignition switch report was uncovered in February 2014 when GM Was conducting "additional analyses" of the Saturn Ion, HHR, Solstice, and Sky vehicles.
[26] Delphi Briefing.
[27] *See* Problem Resolution Tracking System N172404, originated Nov. 19, 2004, GMHEC000001727-41 (hereinafter "2004 PRTS").

- February 2005: As part of the 2004 PRTS, GM engineers met to consider possible solutions to address low key torque. The PRTS document indicates that the engineers considered increasing or changing the ignition switch "torque effort," but were advised by the ignition switch engineer that it is "close to impossible to modify the present ignition switch" as the switch is "very fragile and doing any further changes will lead to mechanical and/or electrical problems."[28] The 2004 PRTS document indicates that potential solutions were developed for consideration. After internal evaluations, engineers were directed to look into a key slot change as a "containment," including developing cost and timing estimates.[29]
- March 2005: The Cobalt Program Engineering Manager's (PEM) "directive" was to close the 2004 PRTS "with no action."[30] The main reasons cited for the decision were "lead-time for all solutions is too long," "tooling cost and piece price are too high," and "[n]one of the solutions seems to fully countermeasure the possibility of the key being turned (ignition turned off) during driving."[31] The PRTS entry concluded that "none of the solutions represents an acceptable business case."[32] The documents produced to the Committee to date do not explain the criteria for an "acceptable business case" and how the decision was made in this case.[33]

- May 2005: A new Problem Resolution Tracking System (PRTS N182276 or "2005 PRTS") is opened to examine the 2005 Chevrolet Cobalt after a customer complaint that the "vehicle ignition will turn off while driving."[34] The 2005 PRTS document noted that the same issue was addressed in the 2004 PRTS (N172404) and closed, but "[d]ue to the level of buyback activity that is developing in the field , Brand Quality requests that the issue be reopened."[35] One proposed solution was changing the key ring slot to a hole and using a smaller key ring.[36] In the chronology attached to the GM February 24, 2014, Letter to NHTSA, GM acknowledges that this proposal was approved but later cancelled.
- July 2005: A 2005 Chevrolet Cobalt crashed in Maryland, killing the driver. On August 15, 2005, NHTSA Special Crash Investigations Program assigned Calspan to conduct a SCI, which found that the frontal airbag system did not deploy. The SDM data indicated that the "vehicle power mode status" was in "Accessory."[37]
- August 2005: NHTSA begins the Special Crash Investigation of the July 2005 accident. Documents produced to the Committee indicate that GM reported this crash in its Third

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[28] 2004 PRTS at GMHEC000001733.
[29] 2004 PRTS at GMHEC000001734.
[30] 2004 PRTS at GMHEC000001735.
[31] *Id.*
[32] *Id.*
[33] *Id.*
[34] See Problem Resolution Tracking System N182276, originated May 17, 2005, GMHEC000001742-54 (hereinafter "2005 PRTS").
[35] *Id.* at GMHEC000001743.
[36] *Id.* at GMHEC000001750.
[37] Calspan Corporation Crash Data Research Center, Calspan On-site Air Bag Non-deployment Investigation Case No: CA05-049, Vehicle: 2005 Chevrolet Cobalt (July 2005) (hereinafter "2005 SCI Report").

Quarter 2005 EWR to NHTSA. NHTSA responded to the report on March 1, 2006, and requested certain information which GM provided.[38]

- December 2005: GM issued a Service Bulletin 05-02-35-007 with the subject "Information on Inadvertent Turning Off of Key Cylinder, Loss of Electrical System and No DTCs" for the Chevrolet Cobalt and HHR, Saturn Ion, and Pontiac Solstice and Pursuit (Canada only).[39] In the GM February 24, 2014 chronology, GM states that the 2005 PRTS process led to this bulletin. The Service Bulletin informed the dealer of the identified issue with the ignition and recommended potential remedies including removing heavy items from key rings. According to the February 24, 2014, chronology submitted to NHTSA, "GM concluded in December 2005 that the service bulletin and field service campaign were the appropriate response to the reported incidents, given that the car's steering and braking systems remained operational even after a loss of engine power, and the car's engine could be restarted by shifting the car into either neutral or park."[40]
- April 26, 2006: A GM design engineer responsible for the ignition switch in the recalled vehicles signed a form entitled "General Motors Commodity Validation Sign-Off" authorizing Delphi to implement changes in the ignition switch.[41] The form explained that a "new detent plunger . . . was implemented to increase torque performance in the switch."[42] According to Delphi officials, sample testing prior to this approval suggested a significant increase in torque performance but the values were still below GM's original specifications.[43] The modified ignitions began to appear in 2007 model year vehicles for all models affected by the recall. In its chronology submitted to NHTSA on February 24, 2014, GM acknowledged that the new ignition switch, however, was not reflected in a corresponding change in part number.[44]
- October 2006: A 2005 Chevrolet Cobalt crashes in Wisconsin, killing the front right and back right passengers. NHTSA SCI Program assigned Indiana University Transportation Research Center to investigate the crash, and the contractor inspected the vehicle on November 6, 2006.[45] GM reported this crash in its Fourth Quarter 2006 EWR filing.[46] On May 7, 2007, NHTSA requested additional information from GM which it provided on June 7, 2007.[47]

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[38] *See* Letter from Christina Morgan, Chief, Early Warning Division, Office of Defects Investigation, to Gay P. Kent, Director, General Motors Corp. (Mar. 1, 2006) and Letter to Christina Morgan from Gay P. Kent, Director, Product Investigations (Apr. 6, 2006), GMHEC00198137-198210. *See also* GMHEC00197893.
[39] Service Bulletin 05-02-35-007, "Information on Inadvertent Turning Off of Key Cylinder, Loss of Electrical System and No DTCs," (October 2006) at GMHEC000000001.
[40] GM March 11, 2014, Letter to NHTSA, attached chronology.
[41] General Motors Commodity Validation Sign-Off (Apr. 26, 2006), GMHEC000003201.
[42] *Id.*
[43] Delphi Briefing (Mar. 27, 2014).
[44] GM February 24, 2014, Letter to NHTSA, attached chronology.
[45] Indiana University Transportation Research Center, On-site Air Bag Non-deployment Investigation Case No: IN06-033, Vehicle: 2005 Chevrolet Cobalt (Oct. 2006) (hereinafter "2006 SCI Report").
Id. at ii.
[46] *See* Letter from Christina Morgan, Chief, Early Warning Division, Office of Defects Investigation, to Gay P. Kent, Director, General Motors Corp. (May 7, 2007) and Letter to Christina Morgan from Gay P. Kent, Director, Product Investigations (June 7, 2007), GMHEC00198410-198414.
[47] *See id. See also* GMHEC00197898.

- October 2006: GM updated the December 2005 Service Bulletin (05-02-35-007) to include additional models and model years: the 2007 Saturn Ion and Sky, 2007 Chevrolet HHR, and 2007 Pontiac Solstice and G5. As a result of the Service Bulletins, GM provided key inserts to 474 customers who brought their vehicles to the dealer for service.[48]
- March 2007: NHTSA and GM met to discuss occupant restraint systems.[49] To date, the Committee has received limited documentation associated with this meeting. GM's February 24 chronology indicates that a NHTSA representative informed GM about a July 29, 2005 fatal crash. It appears this is the same crash that was the subject of the SCI. After the meeting, GM began tracking front impact crashes involving Cobalts where the air bags did not deploy in order to track similarities in the incidents. GM identified 10 incidents by the end of 2007. In four cases the ignition had moved into the "accessory" position. Comparable information was unavailable for the Saturn Ion because the SDM sensors installed in these vehicles did not record whether the engine was running.[50]
- April 25, 2007: Indiana University submitted its draft of the 2006 SCI to the NHTSA SCI Program. The SCI report stated that the "crash is of special interest because the vehicle was equipped with . . . dual state air bags that did not deploy."[51] The SCI report concluded that the airbags did not deploy "as a result of the impact with the clump of trees, possibly due to the yielding nature of the tree impact or power loss due to the movement of the ignition switch just prior to impact."[52] The event data recorder (EDR) for the vehicle indicated that the power node status was "accessory" at the time of impact.[53] The report also noted that the investigation revealed that contact with the ignition switch could result in "engine shut down and loss of power," and cited the service bulletin issued on October 25, 2006. The report stated that it was unclear what role "if any" the ignition switch issue played in the non-deployment of the airbags.[54]
- August 2007: GM met with its SDM supplier, Continental, to review SDM data from a crash of a 2005 Chevrolet Cobalt where the airbags failed to deploy.[55]
- September 2007: The Chief of the Defects Assessment Division (DAD) within ODI emailed other ODI officials and proposed an investigation of "frontal airbag non-deployment in the 2003-2006 Chevrolet Cobalt/Saturn Ion."[56] The Chief of the Defects Assessment Division went on to state that the "issue was prompted by a pattern of reported non-deployments in VOQ [Vehicle Owners' Questionnaire] complaints that was first observed in early 2005. Since that time, [the Defects Assessment Division] has followed up on the complaints, enlisted the support of NCSA's Special Crash Investigations (SCI) team, discussed the matter with GM, and received a related EWD

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[48] *See* Service Bulletin 05-02-35-007, "Information on Inadvertent Turning Off of Key Cylinder, Loss of Electrical System and No DTCs," (October 2006, revised) at GMHEC000000002.
[49] GM February 24, 2014, Letter to NHTSA, attached chronology.
[50] *Id.*
[51] 2006 SCI Report.
[52] *Id.* at ii.
[53] *Id.* at 7.
[54] *Id.*
[55] *See* Continental Automotive Systems US, Inc., Field Event Analysis Report, GMHEC00003143-3153.
[56] Email from Chief of Defects Assessment Division, ODI, to NHTSA staff (Sept. 05, 2007, 4:54:16 PM), NHTSA Bates NHTSA-HEC-004491.

Referral. Notwithstanding GM's indications that they see no specific problem pattern, DAD perceives a pattern of non-deployments in these vehicles that does not exist in their peers . . . ."[57]

- November 15, 2007: ODI IE panel reviewed the proposal to open an investigation into non-deployment of airbags in 2003-2006 Cobalts and Ions. A PowerPoint presentation prepared by the DAD and dated November 17, 2007, states that its review was prompted by 29 Complaints, 4 fatal crashes, and 14 field reports.[58] During a briefing with Committee staff, ODI officials explained that the panel did not identify any discernable trend and decided not to pursue a more formal investigation.[59]
- February 2009: GM opened another investigation into the ignition resulting in a redesign of the ignition key for model year 2010 Cobalt.[60]
- April 2009: A 2005 Chevrolet Cobalt crashed in Pennsylvania, killing the Cobalt driver and front-seat passenger. NHTSA SCI Program assigned the Calspan Crash Data Research Center to investigate the crash, and the contractor inspected the vehicle on April 6 and 7, 2009.[61]
- May 15, 2009: GM again met with its SDM supplier, Continental, and requested that Continental download SDM data from a 2006 Chevrolet Cobalt accident where the airbags failed to deploy.[62]
- February 2010: Calspan Crash Data Research Center submitted its 2009 SCI Report, finding that the airbags did not deploy at the time of the crash and that the "cause of the air bag non-deployment in this severe crash could not be determined."[63] The data from the Cobalt's SDM indicated that the Vehicle Power Mode Status was in "Accessory."[64]
- 2010: ODI again considered Cobalt trend information on non-deployment but determined the data did not show a trend.
- August 2011: GM initiated a Field Performance Evaluation (FPE)[65] to examine a group of frontal impact crashes involving the 2005-2007 Chevrolet Cobalt and the 2007 Pontiac G5 and airbag non-deployment. The FPE included a review of information related to the Ion, HHR and Solstice.[66]

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[57] *Id.*
[58] Defects Assessment Division, DAD Panel (Nov. 17, 2007) at NHTSA-HECC-004462-4483.
[59] NHTSA ODI Briefing.
[60] GM February 24, 2014, Letter to NHTSA, attached chronology at 2.
[61] Calspan Corporation Crash Data Research Center, Calspan On-site Air Bag Non-deployment Investigation SCI Case No: CA09022, Vehicle: 2005 Chevrolet Cobalt (April 2009) (hereinafter "2009 SCI Report").
[62] *See* Continental Automotive Systems US, Inc., Field Event Analysis Report, GMHEC00003129-3142.
[63] 2009 SCI Report at 9.
[64] *Id.* (SDM data report, attached to 2009 SCI Report).
[65] *See* GM March 11, 2014 Letter to NHTSA, attached chronology. The FPE involves several steps. An investigation is conducted by Field Performance Assessment Engineers (FPAE) to ascertain the technical issues. Their analysis and proposed solutions are presented to the Field Product Evaluation Recommendation Committee (FPERC). Based on their review, the FPERC's recommendations are presented to the Executive Field Action Decision Committee (EFADC). The EFADC is responsible for deciding on a course of action.
[66] According to GM, this examination included "...reviewing data relating to complaints of stalling in the Ion for all model years; reviewing data relating to crashes involving Ions from certain model years in which airbags had not deployed; testing the torque performance of ignition switches from salvage yard vehicles, including Ions, HHRs, Cobalts and G5s (but not Solstice or Sky vehicles); measuring the difference among a wide variety of GM vehicles in the distance between a driver's knee and the ignition; and studying vehicles' different steering columns and

- May 2012: GM engineers tested the torque performance of 44 vehicles across a range of make and model years. Results revealed that the majority of vehicles tested from model years 2003 to 2007 exhibited torque performance at or below 10 Newton centimeters (Ncm), below the original specifications established by GM. The results also revealed a shift in torque performance beginning in MY2007 vehicles built late in 2006 and all subsequent model years. The torque performance for these vehicles ranged from just below 15 Ncm to 20Ncm. At the time, GM engineers could not explain the shift or discrepancies in torque performance.[67]
- September 2012: A GM Field Performance Assessment Engineer emailed a GM Red X Engineer to request assistance in examining the changes between the 2007 and 2008 Chevrolet Cobalt Models.[68] Based on a briefing with GM, Committee staff's understanding is that GM Red X engineers are assigned to find the root cause of engineering or technical problems.
- April 2013: GM learned there was a difference in the torque performance of a GM service part ignition switch purchased after 2010 compared to the original ignition switch installed in a 2005 Cobalt.[69] In response, GM hired an outside engineering firm to conduct a thorough ignition switch investigation. The external expert concluded that ignition switches installed in early model Cobalt and Ion vehicles did not meet GM's torque specification and that a change to the switch made several years later provided a likely explanation for the variance in torque performance.[70] Data within the external report also indicated that vehicles with the modified ignition switch exhibited torque performance consistent with GM's design specification.[71]
- October 2013: GM received documentation from Delphi demonstrating that a change to the ignition switch in the Cobalt and other vehicles was made in April 2006.[72]
- December 2013: The Field Performance Assessment Engineer presented the results of their analysis to the Field Product Evaluation Recommendation Committee (FPERC) and the Executive Field Action Decision Committee (EFADC).[73]
    - December 17, 2013: The EFADC met to review the findings. Questions were raised at the meeting that prompted additional analysis.
- January 31, 2014: A second EFADC meeting was convened and resulted in a decision to conduct a safety recall of model year 2005-2007 Chevrolet Cobalt and Pontiac G5 vehicles.[74] At the time, the EFADC was only asked to consider a recall of these vehicles.[75]
- February 2014: Additional analysis was performed of data related to the Saturn Ion, Chevrolet HHR, and Pontiac Solstice and Sky vehicles. This analysis revealed earlier

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shrouds, including those of the Ion and the Cobalt." GM March 11, 2014, Letter to NHTSA, attached chronology at 3.

[67] *Id.* at 4. *See also* GMHEC000221427.

[68] Email from GM Field Performance Assessment Engineer to GM Red X Team Engineer (Sept. 6, 2012, 1:29:14 PM), GMHEC000136204.

[69] GM March 11, 2014, Letter to NHTSA, attached chronology at 4.

[70] *Id.*

[71] *See* GMHEC000003156-3180.

[72] *Id.* at 5.

[73] *Id.*

[74] *Id.*

[75] *Id.*

reports of concerns with the ignition switch in Ion vehicles (noted earlier in timeline).[76]

- February 13, 2014: GM announced a recall of 2005-2007 model year Chevrolet Cobalt and Pontiac G5 vehicles to address a fault with the ignition switch that may permit the key to inadvertently turn to the "off" or "accessory" position, resulting in a loss of power to the engine and many electrical components in the vehicle.
- February 24, 2014: GM submitted a detailed timeline to NHTSA pertaining to the Cobalt and Pontiac G5 recall.
- February 24, 2014: GM convened another EFADC meeting to review additional analysis related to the Saturn Ion and Sky, Chevrolet HHR, and Pontiac Solstice. The EFADC ordered a safety recall for certain model years of these vehicles.[77]
- February 25, 2014: GM expanded the recall to include additional 2003-2007 model year vehicles. These include the MY 2003-2007 Saturn Ion, MY 2006-2007 Chevrolet HHR and Pontiac Solstice, and MY 2007 Saturn Sky. As a result of this expansion, the total number of vehicles subject to the recall rose to approximately 1.6 million worldwide, including more than 1.3 million in the United States.
- March 4, 2014: NHTSA opened Timeliness Query TQ14-001 "to evaluate the timing of GM's defect decisionmaking and reporting of the safety defect to NHTSA."
- March 11, 2014: GM submitted a detailed timeline to NHTSA related to the subsequent recall of the Saturn Ion, Saturn Sky, Chevrolet HHR and Pontiac Solstice.
- March 21, 2014: Transportation Secretary Anthony Foxx asked the Department of Transportation Inspector General to conduct an audit to determine whether federal regulators responded quickly enough to evidence of potential defects in GM vehicles.
- March 28, 2014: GM again expanded the ignition switch recall to cover all model years of the Chevrolet Cobalt and HHR, the Pontiac G5 and Solstice, and the Saturn Ion and Sky in the United States. This second expansion of the ignition switch recall covers an additional 824,000 vehicles in the U.S., bringing the number of recalled vehicles to 2,191,146.

IV. ISSUES

The following issues may be examined at the hearing:

- Why did GM not identify a safety defect and order a recall in its Chevrolet Cobalt and HHR, Pontiac G5 and Solstice, and Saturn Ion and Sky until February 2014? What prevented GM from identifying this defect sooner?
- Does GM have appropriate processes in place to identify potential safety defects and take prompt action?
- Why did GM approve ignition switches that did not meet its specifications for torque performance? What was GM's assessment of the implications for performance and safety?

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[76] *Id.*
[77] *See* GM March 11, 2014, Letter to NHTSA, attached chronology at 6.

- In 2007 and 2010, why did NHTSA determine there was not a safety defect trend for airbag non-deployment in Chevrolet Cobalts in 2007? What did NHTSA do to investigate whether a trend existed? What data did it consider?
- What prevented NHTSA from identifying a safety defect in GM recalls relating to airbag non-deployment?

V. STAFF CONTACTS

If you have any questions regarding this hearing, please contact John Ohly or Karen Christian of the Committee staff at (202) 225-2927.

An Engineer's Eureka Moment With a G.M. Flaw

http://www.nytimes.com/2014/03/29/business/a-florida-engineer-unlocked-the-mystery-of-gms-ignition-flaw.html

By BILL VLASICMARCH 28, 2014

DETROIT — Somewhere inside the two-inch ignition switch from the 2005 Chevrolet Cobalt was the clue that Mark Hood was seeking.

Mr. Hood, an engineer in Florida, had photographed, X-rayed and disassembled the device in the fall of 2012, focusing on the tiny plastic and metal switch that controlled the ignition. But even after hours of testing, Mr. Hood was at a loss to explain why the engine in Brooke Melton's Cobalt had suddenly shut off, causing her fatal accident in 2010 in Georgia.

It was no small matter to her family, which had hired Mr. Hood for their lawsuit against General Motors.

Then he bought a replacement for $30 from a local G.M. dealership, and the mystery quickly unraveled. For the first time, someone outside G.M., even by the company's own account, had figured out a problem that it had known about for a decade, and is now linked to 13 deaths.

The discovery was at once subtle and significant: Even though the new switch had the same identification number — 10392423 — Mr. Hood found big differences. A tiny metal plunger in the switch was longer in the replacement part. And the switch's spring was more compressed. And most important, the force needed to turn the ignition on and off was greater.

"There was a substantial increase in the torque of the switch," Mr. Hood said. "We took measurements. And they were very different."

So began the discovery that would set in motion G.M.'s worldwide recall of 2.6 million Cobalts and other cars, and one of the gravest safety crises in the company's history.

Mr. Hood came to realize that G.M., and the supplier that made the part, Delphi, had quietly changed the switch sometime in 2006 or early 2007, making it less likely that an unsuspecting driver could bump the ignition key and cause the car to cut off engine power and deactivate its air bags. The change was made so quietly that G.M. hired outside consultants last year to help identify which Cobalt model years contained the original switch.

Now, the details behind the change have become critical issues in determining whether the automaker intentionally concealed a safety defect. Next week, G.M.'s chief executive, Mary T. Barra, and the nation's top auto safety regulator, David Friedman, will testify before the House and Senate about events leading up to the wide-ranging recall.

Mr. Hood's work in the Melton case was a turning point in solving the mystery of the faulty switches, and led to the first depositions by G.M. engineers that confirmed years of internal studies of ignition problems in the Cobalt. G.M. settled the wrongful-death suit brought by the Melton family last year.

"It was obvious they changed the switch, and we showed G.M. that," said Lance Cooper, the Georgia lawyer who represented the Melton family.

It was hardly a straight path to Mr. Hood's finding. After taking the case in 2011, Mr. Cooper first hired a mechanic to see if the crash was related to a power steering problem that was the subject of a G.M. recall at the time.

But data taken from the car's black box pointed to ignition failure — and Mr. Hood, a veteran investigator of the engineering of airplanes, cars, trains and medical devices, was given the task of analyzing it.

Mr. Hood zeroed in on how the switch functioned. He learned that the small plastic-and-metal component at one end controlled whether the car's engine was in the on, off, or accessory position. The accessory position allows certain electronics, like the radio, to run.

Once he determined that the original part from Ms. Melton's car differed from the store-bought replacement, Mr. Hood began combing junkyards, acquiring more switches from Cobalts — 18 in all.

By the time Mr. Cooper started taking depositions from G.M. engineers in April 2013, Mr. Hood had documented the change in the part so thoroughly that the company could not escape the facts.

In one deposition, Mr. Cooper confronted Raymond DeGiorgio, the head switch engineer on the Cobalt, with the differences between the original switch and the replacement. While Mr. DeGiorgio said he saw the differences, he could not explain why the part had been changed without a corresponding change in its identification number.

"I was not aware of a detent plunger switch change," he said. "We certainly did not approve a detent plunger switch change."

But in federal filings for the recall in February, G.M. said that an unnamed engineer had in fact signed a document in April 2006 approving design changes in the switch suggested by Delphi.

In the same filing, the automaker also acknowledged that Mr. Hood's detective work on the switch changes was the first time an outsider had "observed and documented" the switch change.

Government investigators have requested that G.M. provide any documents chronicling the switch change and who within the company approved it.

The change of a basic part on a high-volume vehicle like the Cobalt is unusual, and correspondence between G.M. and Delphi on the switch could be seen as evidence that the automaker knew the original part was defective.

It was not just the Cobalt that contained the switch. In addition to the 2005-7 Cobalt, G.M. also recalled the 2007 Pontiac G5, the 2003-7 Saturn Ion; the 2006-7 Chevrolet HHR and Pontiac Solstice; and the 2007 Saturn Sky. On Friday, G.M. added 971,000 later model Cobalts and other cars to the recall. Late Friday, G.M. raised the number of deaths linked to the faulty switches from 12 to 13, after confirming an additional fatality related to an ignition-switch accident in Canada.

Mr. Hood's research could also play a part in class-action suits filed against G.M. covering all owners of Cobalts and other vehicles in the recall.

He said his investigation was nothing extraordinary in scope, just a meticulous breakdown of a commodity auto part found in millions of vehicles.

The newer, improved switch has now gone back into production at a Delphi plant in Mexico. Ms. Barra said two shifts of workers were making the switch, with a goal of having initial shipments ready for dealers by early April.

G.M. has said it will replace the old switch with the new one, at no charge to vehicle owners. In the interim, Ms. Barra told customers in a video on a company website that the recalled cars were safe to drive, as long as there were no objects attached to the ignition key.

The moment that will linger for Mr. Hood is when he removed the switch from the ignition assembly salvaged from Ms. Melton's car. He then replaced it with the store-bought part, and realized how much better the entire part worked.

"It's satisfying to me because I'm working on behalf of the Meltons," he said. "It won't bring their daughter back, but if it goes toward a better understanding of the problem, it might save someone else."

FRED UPTON, MICHIGAN
CHAIRMAN

HENRY A. WAXMAN, CALIFORNIA
RANKING MEMBER

ONE HUNDRED THIRTEENTH CONGRESS

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April 24, 2014

Ms. Mary T. Barra
Chief Executive Officer
General Motors Company
P.O. Box 33170
Detroit, MI 48232-5170

Dear Ms. Barra:

Thank you for appearing before the Subcommittee on Oversight and Investigations on Tuesday, April 1, 2014, to testify at the hearing entitled "The GM Ignition Switch Recall: Why Did It Take So Long?"

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

Also attached are Member requests made during the hearing. The format of your responses to these requests should follow the same format as your responses to the additional questions for the record.

To facilitate the printing of the hearing record, please respond to these questions and requests with a transmittal letter by the close of business on Thursday, May 8, 2014. Your responses should be mailed to Brittany Havens, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, D.C. 20515 and e-mailed in Word format to brittany.havens@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

Tim Murphy
Chairman
Subcommittee on Oversight and Investigations

cc: Diana DeGette, Ranking Member, Subcommittee on Oversight and Investigations

Attachments

Committee on Energy and Commerce
U.S. House of Representatives

GM's Responses to April 24, 2014 Questions for the Record[1]

Additional Questions for the Record

The Honorable Tim Murphy

1. **In April 2009, NHTSA conducted a Special Crash Investigation (SCI) of a fatal accident in Pennsylvania involving a Cobalt. The airbags failed to deploy and the vehicle was found in the accessory position. Unlike previous crashes investigated by SCI, this accident did not involve an off-road incident. [Tab 20]**

   a. **Was GM aware of the April 2009 accident in Pennsylvania that was investigated by NHTSA? If so, when did GM learn of this tragic accident? How did you become aware of this accident?**

   RESPONSE:

   Based on GM's investigation to date, GM did not learn of this accident prior to late February 2014. Subject to ongoing investigation, GM believes that the first time it learned about the accident was in late February 2014 when an engineer viewed the report on the NHTSA website. The SCI does not name the individuals involved in the accident.

   b. **Did GM inform NHTSA of this accident?**

   RESPONSE:

   Based on GM's investigation to date, GM was not aware of this accident prior to late February 2014. The accident was included in GM's April 25, 2014 Supplemental, Restated, and Consolidated Response to the Special Order issued by the Secretary of Transportation on March 4, 2014.

[1] By agreement with Committee staff, GM submitted responses to these questions on May 30, June 7, June 9, and June 11. This document contains a compilation of the responses originally submitted on those dates, with the exception of the June 7 confidential responses. GM included cover letters with the prior submissions noting that because no single person at GM was involved in all of the events and issues covered by the questions, the answers reflect input from different personnel and sources within GM.

c. **Was GM aware that NHTSA conducted a Special Crash Investigation of this accident? If not, why not? If so, when did you learn of the Special Crash Investigation?**

RESPONSE:

Based on GM's investigation to date, GM was not aware of the NHTSA Special Crash Investigation until late February 2014.

d. **Was this accident included in GM's list of 31 accidents involving death or serious injury that may be associated with this recall condition?**

RESPONSE:

This accident was included in GM's April 25, 2014 Supplemental, Restated, and Consolidated Response to the Special Order issued by the Secretary of Transportation on March 4, 2014.

i. **What factors did GM consider to make this determination?**

RESPONSE:

In GM's April 25, 2014 Supplemental, Restated, and Consolidated Response to the March 4, 2014 Special Order, GM submitted to NHTSA a list of lawsuits, NISMs, incidents without claims, and customer complaints made to GM identified as involving frontal-impact crashes in which the recall condition may have caused or contributed to the airbags' non-deployment. The numbers of injuries and fatalities reported relate to frontal occupants, and do not include injuries or fatalities of passengers in the back seat. This list includes 54 crashes, one of which is the April 2009 accident in Pennsylvania referenced in the SCI report at issue.

2. **Documents produced to the Committee reveal that in 2011 you were informed about an ongoing NHTSA investigation involving the electric power steering in the Saturn Ion. This was a separate defect investigation but the email demonstrates that some product investigations did reach your level within GM.**

a. **In 2011, were there specific criteria for when a product or safety investigation was brought to your attention?**

RESPONSE:

In 2011, Mary Barra held the position of Senior Vice President, Global Product Development. Ms. Barra is not aware of specific criteria that were used in 2011 to

determine whether others would bring a product or safety investigation (as opposed to a final recall determination) to her attention in that position.

b. In the example of electric power steering in the Saturn Ion, why was this brought to your attention in 2011?

RESPONSE:

Ms. Barra does not know why Mr. Woychowski sent the above-referenced e-mail to her in 2011, but notes that Mr. Woychowski's e-mail states "FYI."

c. How was this process changed?

RESPONSE:

It is not clear what process the question is referring to. With respect to GM's product safety process changes more generally, Jeff Boyer discussed these topics in a conference call with Committee staff on May 1. Mr. Boyer described a number of changes as of May 1 and noted that additional changes were in progress. With respect to processes relating to Question 2(a) and (b) above, some of the process changes include the following:

- In addition to briefings in the ordinary course from Mr. Boyer to Ms. Barra on safety issues, Mr. Boyer will immediately advise Ms. Barra of issues related to safety under certain predefined circumstances; Ms. Barra will in turn inform the Board of Directors as appropriate.
- Mark Reuss has been added to the Safety and Field Action Decision Authority (SFADA) and will be a deciding member along with four other executives for all recall decisions.
- Mr. Reuss will review investigations to be discussed and decided upon by SFADA two days in advance with Ms. Barra.
- Mr. Reuss and Ms. Barra can upgrade any recall decision by SFADA to a higher level (*e.g.,* Customer Satisfaction upgraded to Safety Recall).
- A team within Global Safety has been formed to prepare immediate (*i.e.,* within hours) action after any recall decision in terms of communication to NHTSA, dealers, Customer Call Centers, GM upper management, media, etc.
- Mr. Boyer will inform Ms. Barra of recall decisions directly after each SFADA.

The Honorable Henry A. Waxman

1. **Did GM engineers investigate the placement of the steering column as a contributing factor to accidental ignition switch position movement? If so, what were their conclusions?**

   RESPONSE:

   GM engineers considered changing the location of the ignition on the steering column from a low-mount to a high-mount module. This option was not seen as a complete fix because it would reduce the casing around the parts, would not be durable, and would not address the torque issues.

2. **Does the placement of the steering column in vehicles affected by this recall increase the likelihood of a driver inadvertently jostling the key out of position through contact with the driver's knee or body?**

   RESPONSE:

   GM does not believe that the placement of the steering column (and consequently the ignition key cylinder) in the recalled vehicles increases the likelihood of a driver inadvertently contacting the ignition key with the driver's knee or body.

   The placement of the steering column during vehicle development is done according to standard design practices used at GM. To position the steering column within the driver's side interior occupant compartment of a new vehicle design, GM first positions the occupant in the vehicle seat, as specified in the Society of Automotive Engineers (SAE) standard J826. Next, GM positions the steering wheel rim relative to the occupant. The positioning of the steering wheel is within an area or "zone" to provide a comfortable driving experience. After the occupant and steering wheel have been positioned, the steering column will be aligned to the steering wheel. In general, the placement of the ignition key cylinder in relation to the center line of the steering column is placed within acceptable reach zones and is influenced by other components on the column such as multi-functional switch levers, column mounted shift mechanisms, and power adjustment switches.

   Positioning the occupant, steering wheel, steering column and eventually the ignition key cylinder in the interior compartment will vary some from vehicle segment to vehicle segment. A Sport Utility Vehicle (high roof) is designed to feel different than a sedan (low roof) vehicle. The design distance between the occupant's knee and ignition key cylinder on the recalled vehicles is well within the range of distances on other GM vehicles (i.e., some GM vehicles have smaller design distances between the knee and ignition key cylinder and some have larger design distances).

3. **Does GM believe that there is any safety problem with the placement of the steering column in vehicles affected by this recall?**

RESPONSE:

GM does not believe that the placement of the steering column (and consequently the ignition key cylinder) in the recalled vehicles poses a safety problem. The distance between the design position of the knee and ignition key cylinder are well within the distances found in other GM vehicles.

4. **What are the risks of the ignition switch implicated in this recall not meeting minimum torque performance specifications?**

RESPONSE:

GM explained in letters to NHTSA in February and March 2014 that the ignition switch torque performance may not meet General Motors' specification. If the torque performance is not to specification, the ignition switch may unintentionally move from the "run" position to the "accessory" or "off" position with a corresponding reduction or loss of power. This risk may be increased if the key ring is carrying added weight or the vehicle goes off road or experiences some other jarring event. The timing of the key movement out of the "run" position, relative to the activation of the sensing algorithm of the crash event, may result in the airbags not deploying, increasing the potential for occupant injury in certain kinds of crashes. When the ignition switch is in the "accessory" or "off" position, the vehicles will lose motive power and will not have power steering assist or power brakes, although the loss of power brakes is not immediate.

The torque performance of the ignition switch is the result of the plunger spring interacting with the detent profiles on the underside of the rotor as the plunger moves through the various detents. Should the detent plunger spring exert insufficient force on the detent profiles, low ignition switch torque could lead to unintended rotation or movement of the ignition switch out of the "run" position, even momentarily, to the "accessory" or "off" positions if the key ring is carrying added weight.

In the course of physical and analytical testing that GM has conducted (as produced to NHTSA in response to the Second Special Order), the ignition switch did not turn from the "run" to "accessory" position in any of the tests conducted with only a typical key ring and the production key in the lock cylinder. GM has determined that, if the key ring is carrying additional weight, various combinations of the following outside influences affect the likelihood that low ignition switch torque could lead to unintended rotation or movement of the ignition switch out of the "run" position, even momentarily:

- mass of additional objects hanging from the key ring;
- length of additional objects hanging from the key ring;
- length of the slot in the key (through which the key ring is placed);
- physical position of the ignition cylinder axis in the steering column (plan view, side view, side view, rear view and angle);

- significant vertical (up/down) and longitudinal (fore/aft) road inputs; and
- size of occupant, position of seat and column angle relative to ignition key.

According to GM's tests, including application of the principles of physics, when only the production ignition key is inserted in the lock cylinder, sufficient torque (twisting force) will not be generated to turn the ignition key from the "run" to "accessory" position due to road inputs. This is due to the symmetry of the production key, as there is no unbalanced mass that can react to acceleration from road inputs and create the necessary twisting force on the ignition key. As a result, our analyses show that a production key in the lock cylinder by itself will not exert sufficient torque to turn the ignition switch to the "accessory" position.

Physical testing over a variety of aggressive road surfaces producing significant vertical and longitudinal road inputs confirmed this analysis and that the addition of a typical key ring does not affect the performance, i.e., the ignition switch position did not move out of "run."

5. **If an ignition switch fails to meet specification, does that mean it is unsafe? If not, what factors determine safety for the part? Does GM have a formal documented process or any guidelines for determining whether an ignition switch is safe?**

RESPONSE:

Component parts are subject to both development validation testing and production validation testing by the supplier. The failure to meet any single aspect of a component specification does not necessarily mean that a part or vehicle is unsafe. In general, safety is assessed, tested, and validated at a vehicle system level. GM's Global Vehicle Development Process (GVDP) includes vehicle-level and component-level validation testing and Integration Vehicle Engineering Reviews prior to launch. If there are issues with the part's performance during vehicle level testing, a part can be further evaluated before going into production.

6. **In December 2005, GM decided to issue a Technical Service Bulletin (TSB) letting dealers know about ignition switch problems and provided a key insert to fix them. Why did GM issue a TSB instead of addressing this serious safety concern directly by issuing a recall?**

RESPONSE:

Based on its investigation to date, GM believes that GM engineers concluded in December 2005 that the Service Bulletin and field service campaign were the appropriate response to the reported incidents, given that the car's steering and braking systems remained operational after a loss of engine power, and that the car's engine could be restarted by shifting the car into either neutral or park.

7. **How many people actually received key inserts as a result of the December 2005 TSB?**

RESPONSE:

GM has produced to the Committee a copy of the briefing materials prepared for the EFADC meeting of February 24, 2014. The table on page 2 of that PowerPoint presentation includes the number of key inserts provided by make, model, and model year. Upon further review, only 423 of the key inserts were provided to customers in the United States. The remaining customers provided key inserts were located in Canada or Mexico. GM also previously produced a spreadsheet of warranty data that reflects the number of key inserts provided to customers in North America, including the make, model, and date provided.

8. **At the time GM issued the December 2005 TSB, did any company engineers know that changes to the key wouldn't completely solve the problem of the ignition switch position inadvertently moving from run to accessory?**

RESPONSE:

Based on its investigation to date, GM believes that in December 2005, some GM engineers believed that, while the proposed changes to the key (i.e., changing the key head design from a "slot" to a "hole" design and providing a smaller key ring) would help address the inadvertent shut-off issue, they did not believe that it would completely eliminate the problem. In 2005 presentations and e-mails discussing potential solutions to the issue, engineers characterized the key design change and smaller key ring as a "short term" solution.

9. **When the ignition switch position moves from run to accessory, what's the actual problem? Is it that power is disconnected from the airbags, meaning that they wouldn't deploy in an accident, or is the engine shutting down in and of itself the problem?**

RESPONSE:

Please see response to Question 4, above, as well as GM's April 25, 2014 Supplemental, Restated, and Consolidated Response to the March 4, 2014 Special Order, No. 3.

10. **Has GM looked at possible accidents or fatalities related to the defective ignition switch where airbag nondeployment did not occur? If not, why not?**

RESPONSE:

Although GM is not certain what is meant by the phrase "possible accidents or fatalities," GM has reviewed data concerning a number of accidents, including some accidents in

which airbags deployed. As part of GM's April 25, 2014 Supplemental, Restated, and Consolidated Response to the March 4, 2014 Special Order, GM submitted to NHTSA a list of lawsuits, NISMs, incidents without claims, and customer complaints made to GM identified as involving frontal-impact crashes in which the recall condition may have caused or contributed to the airbags' non-deployment. The numbers of injuries and fatalities reported relate to frontal occupants, and do not include injuries or fatalities of passengers in the back seat.

11. **Does GM monitor its own warranty claims for defects and other problems?**

RESPONSE:

Yes.

The Honorable G.K. Butterfield

Ms. Barra, as you know, the underlying focus of the hearing today is protection of consumers and others against injury from safety defects. The recall system mandated by the Motor Vehicle Safety Act and supplemented by the Transportation Recall Enhancement, Accountability and Documentation (TREAD) Act are in place for that purpose. Recently, the Senate Commerce Committee took bi-partisan action to further protect consumers by approving legislation (S. 921) that would ensure that vehicles subject to a safety recall and that are part of rental car company fleets may not be rented until the required repairs are done. The legislation essentially codifies the current practice of rental car firms into a single, uniform nationwide standard. The major rental car companies--likely GM's biggest single customers--support and have endorsed S. 921 as well as the American Car Rental Association (ACRA) on behalf of the industry as a whole.

1. **Does General Motors support S.921?**

RESPONSE:

Placing our customers' safety and peace of mind at the center of all that we do is what drives us. We are presently reviewing the provisions of S.921. General Motors believes that the goal of S.921 -- not renting or leasing vehicles that are in need of modification or repair due to a safety recall -- is very important.

2. **Given that the major car rental companies are some of GM's largest customers; do you agree that a uniform, nationwide standard pertaining to recalls and cars in rental car fleets is desirable?**

RESPONSE:

General Motors believes that the goal of S.921 -- not renting or leasing vehicles that are in need of modification or repair due to a safety recall -- is very important.

3. **Will you commit to work with those of us in the Congress to enact legislation to make sure that cars that consumers rent are not under a safety recall?**

RESPONSE:

Yes, and we are discussing the provisions of S.921 with its author and cosponsors.

4. **Some organizations believe that S.921 may encourage car rental firms to bring "loss of use" suits by the major rental car companies against auto manufacturers. Do you share those concerns?**

RESPONSE:

It is likely that car rental firms would request compensation from auto manufacturers for "loss of use." S.921 should provide a mechanism that will enable auto manufacturers to be appropriately shielded from lawsuits brought by car rental companies in this regard. This could be done by pre-emption of individual state laws, or could be accomplished contractually. We are likewise concerned that if car rental companies are, by force of their numbers, allowed to have their vehicles repaired more quickly than retail customers, retail customers will naturally be relegated to the back of the line, and will experience a delay in getting their cars repaired. Retail customers, not rental car companies, represent the vast majority of our customer base.

5. **What has been GM's experience with loss of use claims?**

RESPONSE:

None to date.

6. **Are loss of use issues a matter of negotiation that are addressed in the contracts between you – the manufacturer – and the rental car company?**

RESPONSE:

Not at present.

The Honorable Paul D. Tonko

1. **What is the part number of the faulty ignition switch that was approved in 2002 despite being below GM specifications? Will the replacement ignition switch that will be installed beginning this month continue to have this part number?**

RESPONSE:

The part number for the ignition switch that was approved in 2002 was 12450250. Replacement ignition switches installed as part of the recall will not have this part number.

2. **Can you please explain the modifications that will be made to vehicles when they are brought in under the recall? Will the entire ignition switch be replaced or only certain components? Will all recalled vehicles receive the 2006 switch?**

RESPONSE:

Dealers are to replace the ignition switch on all recalled vehicles. In addition, dealers will replace the ignition cylinder on all vehicles which have not previously had the ignition cylinder replaced with the redesigned part. Dealers will also cut and, if necessary, re-learn two new keys for each vehicle, and provide them on new 13mm (1/2") key rings. Customers whose vehicles were built with or whose ignition cylinder was replaced with the redesigned ignition cylinder will receive a new ignition switch and two new keys on new 13mm (1/2") key rings. Customers are also being instructed to turn their keys into the GM dealer.

The entire ignition switch will be replaced on all recalled vehicles.

Not all recalled vehicles will receive the same switch. The ignition switch for the 2008-2011 model year recalled vehicle population is different because the 2008-2011 model year vehicles have a different vehicle security system. Please also see Response No. 4, below.

3. **Has the 2006 switch been redesigned or reengineered since it was first approved?**

RESPONSE:

Since the changes approved by the General Motors Commodity Validation Sign-Off dated April 26, 2006, the ignition switch (part number 10392423) has been changed pursuant to Engineering Work Order #573556 (GMHEC000247578-93), initiated on October 12, 2005. The Engineering Work Order states: "revise OFF/RUN/CRANK circuit to include 1.3 K ohm resistor; 1% Tolerance; ¼ Watt; revise art work on PCB, i.e. move VIAs, increase trace width." This Engineering Work Order applied to the ignition switch for production in the Chevrolet Cobalt (GMX001), Pontiac Solstice (GMX020), Saturn Sky (GMX023), and Chevrolet HHR (GMT001). In addition, this Engineering Work Order cancelled part number 10392423 and established part number 15886190. This Engineering Work Order was closed on June 12, 2006.

4. **Have quality control or manufacturing processes for this switch been changed in light of the recall?**

   RESPONSE:

   The new ignition switch Delphi began providing to GM during the 2007 model year and then for the model year 2008-2010 Chevrolet Cobalt and Pontiac G5 is the same ignition switch that is being used for the recall. The parts make-up for the ignition switch being used for the recall, including the spring, plunger, housing, grease, and rotor are the same as those used for the redesigned ignition switch Delphi began providing to GM at some point during the 2007 model year.

   The circuit board for the ignition switch being used for the recall is being provided by a different manufacturer because Delphi no longer does business with the supplier that provided the circuit board for the redesigned switch that first was used at some point during the 2007 model year. The design for the circuit board, however, has not changed. While the parts make-up is the same, the part number for the ignition switch has changed.

   GM's end-of-line testing for the ignition switch also has changed. This testing now is more stringent, and GM requires a verification of every ignition switch to six parameters. (See GMHEC000284521-23 (February 21, 2014 e-mail regarding the validation plan for Cobalt ignition switches).)

5. **Has GM established a minimum torque requirement for replacement switches that will be installed in recalled vehicles?**

   RESPONSE:

   Yes. The torque specification for moving the switch position from RUN to ACC is 20 N-cm +/- 5 (minimum torque is 15 N-cm). During manufacturing of the replacement switch, all parts are checked to be within this range.

6. **Generally speaking, at what level within GM's corporate structure is part approval done?**

   RESPONSE:

   Generally speaking, the GM Production Part Approval Process (PPAP) is aligned with the global AIAG (Automotive Industry Action Group) process. Responsibility for detailed PPAP documentation retention lies with the supplier.

   Currently, GM's Design Release Engineer (DRE), Validation Engineer, and Supplier Quality Engineer are responsible for PPAP approval within GM.

7. **Your written testimony stated, "If people do not want to drive a recalled vehicle before it is repaired, dealers can provide them a loaner or rental car – free of charge." My office heard from at least one Upstate New Yorker that this offer wasn't being recognized by at least one dealership. What information was sent to GM dealerships to inform them of this policy?**

   RESPONSE:

   The information sent to dealers includes the following: On March 4, 2014, GM sent its dealers a communication with an attached Q&A regarding the ignition switch recall advising dealers that they were empowered to place customers who were concerned about operating their vehicle into alternate courtesy transportation vehicles. On March 14, 2014, GM sent another communication to its dealers reemphasizing that customers who express concern about driving their vehicle should be provided a rental vehicle, and providing additional processing details. On April 23, 2014, GM sent another communication regarding rental cars for customers referencing the expanded population of recalled vehicles.

8. **How many of the recalled models have been sold outside the United States?**

   RESPONSE:

   Confidential response submitted June 7, 2014.

9. **Do the models sold outside the United States use the same ignition switch?**

   RESPONSE:

   All of the recalled vehicles outside of the United States use the same ignition switch parts as their US counterparts.

10. **Have there been any previous recalls, safety investigations, or complaints of these models in other countries?**

    RESPONSE:

    Confidential response submitted June 7, 2014.

11. Are manufacturers required to notify NHTSA about recalls in other countries?

RESPONSE:

With respect to motor vehicles or items of motor vehicle equipment outside the U.S. that are identical or substantially similar to vehicles or items of equipment sold or offered for sale in the U.S., 49 CFR Part 579 (part of the TREAD Act regulations) requires manufacturers to notify NHTSA not later than five working days after the manufacturer determines to conduct a safety recall in a foreign country, or receives written notification that a foreign government has determined that a safety recall must be conducted in its country. The manufacturer is not required to report the foreign recall to NHTSA if the manufacturer is also recalling the same scope of U.S. vehicles for the same or substantially similar reasons; the component or system at issue in the foreign recall does not perform the same function in U.S. vehicles; or the subject of the foreign recall is a label affixed to a vehicle or item of equipment.

12. Are manufacturers required to notify NHTSA if a regulatory or safety agency in another country launches a safety investigation?

RESPONSE:

Manufacturers are not required to notify NHTSA that a foreign regulatory or safety agency has launched a safety investigation into the manufacturer's products. As stated in response to Question No. 11 above, with respect to motor vehicles or items of motor vehicle equipment outside the U.S. that are identical or substantially similar to vehicles or items of equipment sold or offered for sale in the U.S., 49 CFR Part 579 (part of the TREAD Act regulations) requires manufacturers to notify NHTSA if the manufacturer receives written notification that a foreign government has determined that a safety recall must be conducted in its country. The manufacturer is not required to report receipt of written notification that a foreign government has determined that a safety recall must be conducted in its country if the manufacturer is also recalling the same scope of U.S. vehicles for the same or substantially similar reasons; the component or system at issue in the foreign recall does not perform the same function in U.S. vehicles; or the subject of the foreign recall is a label affixed to a vehicle or item of equipment. Id. § 579.11(d)(1).

Member Requests for the Record

During the hearing, Members asked you to provide additional information for the record, and you indicated that you would provide that information. For your convenience, descriptions of the requested information are provided below.

The Honorable Fred Upton

1. **Who within GM made the decision to move forward with the redesigned switch without a new part number?**

   RESPONSE:

   Based on our investigation to date, Ray DeGiorgio made that decision.

The Honorable Marsha Blackburn

1. **During the hearing you said that General Motors has changed its core values. Please submit to the Committee what General Motors' core values are.**

RESPONSE:

Our vision is to design, build and sell the world's best vehicles. These vehicles are supported and enabled by:

- The highest levels of safety, quality and customer service in any industry
- Strong brands
- A commitment to profitable growth around the world
- A fortress balance sheet

Our values are shared with a passion by everyone who is part of the General Motors team – including our dealers, partners and suppliers.

Our Customers are Our Compass

Our decision-making starts and ends with our customers. We listen intently to their needs and provide them with:

- A high level of expertise
- Complete transparency
- Unparalleled convenience
- Genuine appreciation for their business

Relationships Matter

We work with and care for all team members across the GM enterprise with complete respect, transparency and appreciation of one another's unique strengths. We partner to solve problems and look out for one another when difficulties arise. We leverage diverse thinking, collaborative teams and partnerships to create new ideas for our customers.

Individual Excellence is Crucial

Each of us strives to perform at our highest level and can be trusted to serve our customers and fellow team members with personal integrity and accountability. Each of us has a thirst for creativity, ingenuity and innovation – and has the tenacity to win.

The Honorable Gregg Harper

1. **What was Lori Queen's position at General Motors in 2005?**

   RESPONSE:

   Vehicle Line Executive – Small Cars

2. **In the email reviewed at the hearing (GMHEC000219123), Ms. Queen stated, "I'm not sure it's ok to wait. I want to discuss at PET ... "**

   What is "PET?"

   RESPONSE:

   PET refers to the Program Execution Team, which as a general matter considered platform-wide business decisions and included representatives from marketing and planning, as well as from the CPIT and VAPIR processes.

   After the date of this email, September 28, 2005, did Ms. Queen have any influence over changes made to the switch? If so, what did she do and when did this occur?

   RESPONSE:

   Based on GM's investigation to date, there is no evidence outlining Ms. Queen's involvement in this issue after September 28, 2005. In January 2006, Ms. Queen transitioned to a position relating to GM trucks.

3. **During the hearing, you indicated that a specific traffic death was not included in the count of fatalities that may have been associated with this issue. Please provide the Committee with the information regarding the other traffic accidents that resulted in a fatality or serious injury that were looked at but the determination was made that it was not part of this total.**

In GM's April 25, 2014 Supplemental, Restated, and Consolidated Response to the March 4, 2014 Special Order, GM submitted to NHTSA a list of lawsuits, NISMs, incidents without claims, and customer complaints made to GM identified as involving frontal-impact crashes in which the recall condition may have caused or contributed to the airbags' non-deployment. The numbers of injuries and fatalities reported relate to frontal occupants, and do not include injuries or fatalities of passengers in the back seat. In identifying the injuries described above, GM did not attempt to distinguish between "serious" and "non-serious" injuries.

The type of information GM reviewed generally included police and accident reports, medical reports, event data recorder ("EDR") data, photographs, and certain customer complaints, but the type and extent of information available varied from incident to incident (*e.g.*, there was not a police or accident report for each incident, or EDR data for each incident, etc.)

Please also see GM's April 25, 2014 Supplemental, Restated, and Consolidated Response to the March 4, 2014 Special Order, Nos. 4, 5.

The Honorable Morgan Griffith

1. **The 2004/2005 Problem Resolution Tracking System report (N172404) identified the issue of Severity 3. Please explain what Severity 3 means.**

RESPONSE:

The definitions have not been constant over the past 10 years. Based on our investigation to date, we believe that in and around the 2004/2005 time period, "Severity 3" could mean "Moderate Issues – fix on next trip to dealership or cause moderate cost or labor impact at the assembly plant."

The Honorable John D. Dingell

1. **Is it correct that General Motors' torque requirement for the redesigned switch remained the same as the torque requirement for the original switch?**

RESPONSE:

Yes.

2. **Please submit to the Committee an explanation of the factors that General Motors takes into consideration when approving a part for production.**

   RESPONSE:

   The specific factors that are taken into consideration when approving a part for production would vary considerably depending on the specific part and intended use. As a general matter, part approvals are subject to standardized guidelines known as the Production Part Approval Process (PPAP). Standardized PPAP guidelines were developed by multiple manufacturers working under the auspices of the Automotive Industry Action Group. The general purpose of the PPAP is to determine if all customer design record and specification requirements are properly understood by the supplier and that the process has the potential to produce product consistently meeting those requirements during an actual production run at the quoted production rate.

3. **Are there circumstances where General Motors may approve parts for production when such parts do not meet design specifications? If so, please submit materials explaining when and why that might occur.**

   RESPONSE:

   Yes.

   There are circumstances when parts may be approved for production even if they do not meet all aspects of a specification. There are many different aspects to the specification of an automotive part. For a particular part, some parameters may be defined such as mechanical performance, electrical performance, and durability and environmental requirements (how the part performs under various conditions such as temperature, humidity, etc.). A specification may allow for some engineering judgment to be used to determine an acceptable performance level during development.

   Moreover, specifications may be changed to resemble the actual performance of the part (e.g., the part provides the desired feel) and memorialized in the component technical specifications for the part.

   Please also see GM's Response to Question No. 5 from The Honorable Henry A. Waxman.

The Honorable Bruce Braley

1. **Representative Blackburn asked you to submit General Motors' current core values.**

   Please also submit to the committee any prior statements or core values from General Motors over the last 20 years so that we can see what has changed.

   RESPONSE:

   It would be difficult to identify all prior statements over the past twenty years relating to GM's core values. GM is in the process of looking for examples of such statements to provide to the Committee.

The Honorable Peter Welch

1. **How many cars would GM have had to recall had you acted in 2006 when the company made the decision to change the switch?**

   RESPONSE:

   The number would depend on a variety of factors, including when during 2006 such a recall would have occurred. GM estimates that the number of vehicles in the recall population produced as of the end of 2006 was approximately 890,000.

2. **What do you estimate will be the cost of the recall now that it is being done 8 years later? How does that amount compare to what you estimate the cost would have been 8 years ago?**

   RESPONSE:

   GM explained the following in GM's 10-Q filing on April 24, 2014:

   In the three months ended March 31, 2014 we experienced a significant increase in the number of vehicles subject to recall in North America resulting in incremental charges for the estimated costs of parts and labor to repair these vehicles and courtesy transportation for certain recalls. Currently there are approximately 7 million vehicles subject to recalls announced during this period. This reflects the results of our ongoing comprehensive safety review, additional engineering analysis and our overall commitment to customer satisfaction.

   In the three months ended March 31, 2014 we announced a recall to repair ignition switches in vehicles that we are no longer producing that under certain circumstances could result in a loss of electrical power that may prevent front airbags from deploying in

the event of a crash. It was originally estimated that approximately 800,000 vehicles were equipped with ignition switches needing repair. These vehicles include model years 2005–2007 Chevrolet Cobalt, 2007 Pontiac G5 and 2005–2006 Pursuit. In the three months ended December 31, 2013 we recorded approximately $40 million in Automotive cost of sales to cover the repairs as these costs were considered probable and estimable at that time. In the three months ended March 31, 2014 we expanded this recall by approximately 1.8 million additional vehicles for the same issue. These vehicles, consisting of model years 2008–2010 Chevrolet Cobalt, model years 2006–2011 HHR, model years 2008–2010 Pontiac G5, model years 2006–2010 Solstice, model years 2003–2007 Saturn ION and model years 2007–2010 Sky, were not included in the initial recall. In the three months ended March 31, 2014 we recorded approximately $90 million in Automotive cost of sales to repair these vehicles and approximately $270 million in Automotive cost of sales to provide courtesy transportation to owners of affected vehicles. These recalls, relating to ignition switches, are collectively referred to as the "Ignition Switch Recall".

Refer to Note 10 to our condensed consolidated financial statements for litigation associated with the Ignition Switch Recall. A second repair was added to these vehicles as a result of the comprehensive review described below to fix ignition lock cylinders that could allow removal of the ignition key while the engine is running, leading to possible rollaway or crash. In the three months ended March 31, 2014 we recorded approximately $320 million in Automotive cost of sales to repair ignition lock cylinders.

As a result of the Ignition Switch Recall senior leadership initiated a comprehensive review and engineering analysis to identify any additional issues which could potentially result in safety or satisfaction concerns for our customers. As part of our normal process and a result of these reviews we announced the following additional recall campaigns in the three months ended March 31, 2014:

- Approximately 1.9 million vehicles were recalled to replace either the power steering motor, the steering column, the power steering motor control unit or a combination of the steering column and the power steering motor control unit as the electric power steering could fail under certain circumstances — model years 2004–2006, 2008–2009 Chevrolet Malibu, model years 2004–2006 Malibu Maxx, model years 2006–2010 HHR, model years 2005–2010 Cobalt, model years 2008–2009 Saturn Aura, model years 2003–2007 ION, model years 2007–2010 Pontiac G5, model years 2005–2006, 2008–2009 G6 and model years 2005–2006 Pursuit and G4. We recorded approximately $340 million in Automotive cost of sales to repair these vehicles.

- Approximately 1.3 million vehicles were recalled that are prone to non-deployment of the side impact restraints if vehicles are not serviced when the Service Air Bag warning light is illuminated — model years 2008–2013 Buick Enclave and GMC Acadia, model years 2009–2013 Chevrolet Traverse and model years 2008–2010 Saturn Outlook. We recorded approximately $185 million in Automotive cost of sales to repair these vehicles.

• Approximately 1.2 million vehicles were recalled for other matters — certain model years 2009–2014 Chevrolet Express and GMC Savana, model years 2011–2014 Chevrolet Cruze, model year 2014 Chevrolet Silverado 1500 and GMC Sierra 1500 and model year 2015 Chevrolet Suburban, Tahoe, GMC Yukon and Cadillac Escalade. We recorded approximately $70 million in Automotive cost of sales to repair these vehicles.

In total we recorded approximately $1.3 billion for the above-described actions in the three months ended March 31, 2014.

In addition to the information discussed above in the April 24, 2014 filing, on May 20, 2014, GM issued a press release and filed a Form 8-K with the SEC regarding four separate safety recalls of certain models for the correction of various conditions affecting approximately 2.42 million vehicles. GM stated on May 20, 2014 that it expects to record a charge of up to approximately $400 million in the three months ending June 30, 2014 for primarily the cost of these and other safety recalls announced in this quarter, including up to $200 million previously disclosed in connection with the five recalls announced May 15, 2014.

GM believes the amounts listed above are higher than if the ignition switch recall would have occurred eight years ago but GM has not calculated what the difference might be.

The Honorable John Yarmuth

1. **How do you make the decision as to which type of ignition, push button or traditional, goes into what car?**

   RESPONSE:

   This is decided at a program level based on competitive market influences and customer preferences.

2. **You also mentioned that General Motors is conducting an analysis on which type of key ignition switch is safer. Please share the findings of this analysis with the Committee.**

   RESPONSE:

   GM has concluded that both push-button and traditional ignition switch systems can be safely implemented. GM is migrating our vehicle lines toward push-button technology as products are redesigned based on customer expectations. In addition, GM continues to use advanced engineering techniques to analyze vehicle systems and their design and safety.

FRED UPTON, MICHIGAN
CHAIRMAN

HENRY A. WAXMAN, CALIFORNIA
RANKING MEMBER

ONE HUNDRED THIRTEENTH CONGRESS

Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515–6115
Majority (202) 225-2927
Minority (202) 225-3641

April 24, 2014

The Honorable David J. Friedman
Acting Administrator
National Highway Traffic Safety Administration
1200 New Jersey Avenue, S.E.
West Building
Washington, D.C. 20590

Dear Acting Administrator Friedman:

Thank you for appearing before the Subcommittee on Oversight and Investigations on Tuesday, April 1, 2014, to testify at the hearing entitled "The GM Ignition Switch Recall: Why Did It Take So Long?"

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

Also attached are Member requests made during the hearing. The format of your responses to these requests should follow the same format as your responses to the additional questions for the record.

To facilitate the printing of the hearing record, please respond to these questions and requests with a transmittal letter by the close of business on Thursday, May 8, 2014. Your responses should be mailed to Brittany Havens, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, D.C. 20515 and e-mailed in Word format to brittany.havens@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

Tim Murphy

Tim Murphy
Chairman
Subcommittee on Oversight and Investigations

cc: Diana DeGette, Ranking Member, Subcommittee on Oversight and Investigations

Attachments

QUESTIONS FOR THE RECORD
For the Honorable David J. Friedman, Acting Administrator
National Highway Traffic Safety Administration

April 1, 2014 Hearing on
"The GM Ignition Switch Recall: Why Did It Take So Long?"

Committee on Energy and Commerce
Subcommittee on Oversight and Investigations

Questions from the Honorable Tim Murphy:

1. *In April 2009, NHTSA conducted a Special Crash Investigation (SCI) of a fatal accident in Pennsylvania involving a Cobalt. In that crash, the airbags failed to deploy and the vehicle was found in the accessory position. Unlike previous crashes investigated by SCI, this accident did not involve an off-road incident.*

   a. *In light of previous Special Crash reports [sic] had also noted the ignition was in "accessory" and the airbags failed to deploy - and the 2007 proposal to open an investigation that NHTSA ultimately rejected- did NHTSA do anything to follow-up on this SCI investigation? Did it request any information from GM?*

      NHTSA is currently conducting an internal due diligence review with the Office of the Secretary of Transportation. Based on those efforts to date, the SCI report was reviewed by the NHTSA Office of Defects Investigation (ODI), but our review has found no documentation of further follow up of the SCI report. The absence of additional documentation in the SCI files was expected because SCI's routine procedure to assure cooperation with crash victims and witnesses is not to retain any records related to an investigation following publication of a final report. Our review has also found no record that NHTSA spoke with or contacted GM regarding the 2009 Pennsylvania crash.

   b. *Can you confirm today that this report was shared with the Office of Defects Investigation?*

      Yes. The SCI report was reviewed in 2010 by ODI staff.

   c. *Did NHTSA reach a conclusion as to why the airbags failed to deploy in this tragic accident? If not, why not?*

      As indicated above, NHTSA is currently conducting an internal due diligence review with the Office of the Secretary of Transportation. NHTSA's review has found no records indicating that a conclusion beyond that expressed in the SCI report was reached by either SCI or ODI.

NHTSA continually seeks new ways to improve our processes. As noted above, we are reviewing the events leading up to this recall to see if there are areas that can be improved. As part of that effort we are considering ways to improve the use of crash investigations in identifying defects.

d. *Was this accident included in early warning report data provided by GM?*

GM did not include the crash in their early warning reporting data. GM is required to report a "claim" or a "notice" of a death or injury. A claim is defined at 49 C.F.R. Part 579.4 as "a written request or written demand for relief ... related to a motor vehicle crash ..." A notice is defined as "a document, other than a media article, that does not include a demand for relief, and that a manufacturer receives from a person other than NHTSA." Not every crash results in a claim against, or notice to, a manufacturer. While GM often reports death and injury incidents beyond the minimum requirement, in this case it did not.

e. *If not, did NHTSA inquire why it was not included in GM's early warning report data?*

There is no record of NHTSA asking GM about this issue prior to 2014. Reportable death and injury incidents are claims against, or notices to, a manufacturer stemming from an injury or a death. Not every crash results in a claim against, or notice to a manufacturer. EWR death and injury claims are not and were never intended to represent a census of all severe incidents occurring on the road.

2. *Did NHTSA ever ask GM to provide any follow-up information about the crashes studied in the Special Crash Investigations?*

NHTSA asked for more information on the Maryland and Wisconsin SCI crashes via a death and injury request letter after those crashes were reported in GM's early warning reporting submissions.

3. *When considering a possible investigation in 2007- did NHTSA ask GM for its service information so it knew how its airbags worked?*

We have not identified any formal or written requests for information submitted to GM in connection with the 2007 evaluation of the Cobalt and Ion vehicles. However, as the committee is already aware, there were informal discussions between NHTSA and GM's safety office staff in early 2007 concerning the air bag system performance in the Maryland crash. Knowledge of these discussions was provided by staff and former staff recalling information from seven years ago. It appears that during those discussions GM responded to NHTSA's concerns that there was an air bag system performance problem by stating instead that they did not see any indications that the air bag system performed improperly. Despite GM's position on this matter, the issue was referred to an ODI panel to consider whether or not to open an investigation.

We have no indication that NHTSA sought the service information from GM in 2007. However, we have since reviewed the service information for the Cobalt and it warns those servicing the vehicles not to attempt to service the air bags for up to 60 seconds after de-powering the vehicle because of the hazard of the bags possibly deploying. Information available to emergency responders concerning these vehicles contained a similar warning. This information is consistent with NHTSA's understanding, at the time, of how the reserve power would have been present to ensure air bag deployment even after loss of engine power. However, if NHTSA had suspected that the ignition switch position could play a role in air bag deployment, we would not have relied on service information. To understand the details of how an air bag system worked, we would speak with the design engineers and obtain their perspective and input.

4. *Was NHTSA aware of GM's 2005 and 2006 Technical Service Bulletins related to "low ignition key cylinder torque/effort?"*

   a. *At the time, did the agency take any steps to review the underlying problem and GM's proposed solution?*

      Manufacturers must provide NHTSA with all technical service bulletins, and NHTSA reviews all that it receives for safety issues. GM's 2005 and 2006 technical service bulletins about the ignition switch did not contain information about a link between switch position and air bag deployment. NHTSA is currently conducting an internal due diligence review with the Office of the Secretary of Transportation. We have not uncovered any evidence in NHTSA's records suggesting that NHTSA followed up with GM or conducted any activity regarding these bulletins.

   b. *On its own, does NHTSA consider a low torque ignition switch to be a safety defect?*

      Yes. The answer to this question differs from what it would have been in 2007, at which time NHTSA did not have an understanding or notification of the effect of ignition switch position on air bag deployment in some vehicles. In 2007, a low detent torque ignition switch condition leading to stalls was viewed as a vehicle stall consequence (occurring coincident with external vehicle disturbance) with immediate restart capability, which would have been deemed as a lower hazard level stall (as opposed to a stalling hazard where restart was not possible, especially in those situations where the stalled/stopped vehicle would be in proximity to other vehicles moving at high speed). These and other stall-related concerns were pursued by NHTSA, leading to 42 stalling investigations resulting in 31 recalls involving 5.1 million vehicles from 2004 through 2013.

   c. *Is NHTSA aware of any accidents that were caused by inadvertent key rotation in GM vehicles?*

With regard to those crashes NHTSA has investigated involving GM vehicles, we are not aware of any where the defect ignition switch caused the accident (as opposed to being the likely cause of air bag non-deployment). We are aware that, at least since the 2014 recall, some have alleged that crashes may have been caused by that condition due to its effects on steering or braking. Of course, the recalls that are underway will remedy the condition so that, whether the concern is air bag non-deployment or a possible reduction in braking or steering capability, the recall should address the concern.

As of March 7, 2014, NHTSA found in its database 317 complaints with stalling related keywords in the summary description for Model Years 2003 to 2007 vehicles recalled under NHTSA Recall 14V-047 (Ion, Cobalt, HHR, etc.). In those 317 complaints, eight are marked for a crash. None of the 8 crash complaints cite or allege that the ignition switch was the cause of, or related to the stall. Further, one of the eight crash complaints does not involve a stall; three appear to be a generic engine system problem as the cause of the stall; and four are ambiguous as to the cause of the stall.

d. *In NHTSA's opinion, is this an airbag recall or an ignition switch recall?*

GM's recalls are for defects in the ignition switch and ignition cylinder, but the hazard identified by GM for those defects is air bag non-deployment. Of course, the recalls that are underway will remedy the condition so that, whether the concern is air bag non-deployment or any other condition resulting from an inadvertent key off condition, the recall should address the concern.

5. *In general, how frequently does NHTSA request additional information from manufacturers based on death and injury reports?*

   a. *Is this information effective? If so, how? If not, why not?*

   NHTSA receives about 1,500 death and injury reports each quarter from manufacturers, and NHTSA requests additional information on about 150 per quarter. Yes, this information is helpful and, in some cases, provides NHTSA with an additional facet of information to analyze in combination with all other data sources to make a judgment about the possibility of a safety defect.

6. *Since 2001, how many investigations has NHTSA conducted involving non-deployment of airbags in frontal impact crashes? Please provide details of these investigations including but not limited to the vehicles involved, the timing and outcome of the investigation.*

   a. *In that same time period, how many investigations has NHTSA conducted involving unwanted deployment of airbags? Please provide details of these investigations including but not limited to the vehicles involved, the timing and outcome of the investigation.*

Since 2001, NHTSA has conducted 21 investigations involving non-deployment of a frontal air bag and 16 investigations involving inadvertent deployment of a frontal air bag. The following tables provide investigation numbers and whether the investigation resulted in a recall.

Frontal Air Bag Non-deployment Investigations (2001-2013)

Investigation Number	Investigation Resulted in Recall(s)?
SQ01-015	
EA02-009	
EA02-010	
EA02-020	Yes
PE02-022	
PE02-038	
EA03-010	
EA03-020	
PE03-002	
EA04-013	Yes
PE04-053	Yes
RQ04-001	
PE05-061	
EA06-003	Yes
PE07-045	
EA08-001	Yes
EA08-012	Yes
EA09-017	Yes
PE09-034	
RQ09-003	Yes
PE11-019	Yes

Frontal Air Bag Inadvertent Deployment Investigations (2001-2013)

Investigation Number	Investigation Resulted in Recall(s)?
PE01-018	
EA02-008	Yes
PE02-010	
PE02-026	
RQ02-004	
PE04-076	
PE08-017	
PE09-046	
EA10-001	
PE11-035	
EA12-001	Yes
PE12-023	
PE13-020	Yes
RQ13-002	
PE01-018	Yes
EA02-008	Yes

The investigation files are available via NHTSA's website at: http://www-odi.nhtsa.dot.gov/owners/SearchSafetyIssues. Select "ID Number" and check "Investigations." Enter associated investigation number in the box and press "Go."

7. *How does NHTSA's new software improve the agency's ability to track and identify defects?*

   NHTSA acquired the IBM software in fiscal year 2012. NHTSA purchased four software packages including Cognos Business Intelligence, ICA Content Analytics, Advanced Case Manager, and SPSS predictive analytics. The new software will enable NHTSA to fuse data across the Office of Defects Investigation, providing faster, more consistent, more relevant, and more accessible results to data calls. It will also provide for the first time alerts to staff based on predefined business rules. These alerts can rely on multiple data sets rather than just one. Cognos and ICA were implemented in initial capability in the third quarter of fiscal year 2012. Plans are underway for fuller implementation of each portion of the IBM software by the end fiscal year 2015.

   a. *Has NHTSA initiated a recall as a result of the information presented by this software?*

      No. The software is at an initial operational capability and is in limited use by the Defects Assessment staff as a supplement. It has been used primarily to demonstrate broader trends to put the daily complaint reviews in perspective.

   b. *Has the agency been able to quantify its benefits, to date?*

      The software has not been used broadly to demonstrate an impact on regular business processes. IBM Cognos, the business intelligence package, furnishes regular reports and complaint rankings on demand that formerly required hours to create. IBM Content Analytics, the search package, has allowed us to conduct specialized searches over a decade's worth of complaints for topics not readily found by filtering on component codes or using simple Boolean keyword searches.

   c. *What is NHTSA doing to improve its ability to leverage the capabilities of this technology?*

      NHTSA is working on two essential elements needed to fully exploit the IBM software: construct a proper operational data store that will allow it to fuse data collected across all of the agency's business lines; and, continue requirements-capture and implementation to absorb more business processes into the software.

8. *Is the warranty information currently provided to NHTSA through early warning reports valuable to the agency's safety mission?*

   Yes, this aggregate information is helpful and, in some cases, provides NHTSA with an additional facet of information to analyze in combination with all other data sources to make a judgment about the possibility of a safety defect.

a. *How frequently does the agency initiate investigation based on the warranty data provided by the manufacturers?*

Since 2004, there were16 cases in which warranty claim data was used in the agency's defect trend analysis to open an investigation. Additionally, warranty claim data is frequently used in the course of other agency investigations.

b. *If NHTSA received every specific warranty claim received by manufacturers, how would the agency process this information?*

NHTSA obtains warranty claims if it believes they would shed light on an issue. In our judgment, it would not be helpful to receive "all" warranty data from a manufacturer, as such a large volume of data contains data that has no safety relevance, such as data relating to radios, paint and upholstery. Presently, NHTSA requests that the manufacturer provide underlying information if the agency's analysis indicates a possible problem. However, if a manufacturer were to provide all warranty claims to NHTSA, the agency would have to create a digital database to store all warranty claim information and take sufficient steps to enter all the information or establish a requirement for industry to submit the information in a standard electronic format. If a problem were indicated by the counts, the agency would then need to access its database rather than requesting that the manufacturer send the claims to NHTSA. There would be little to no value in having staff read every warranty claim, even if NHTSA could sort the claims preliminarily to exclude those that are not safety-related (e.g., audio systems, paint, etc.) because NHTSA's current methods to analyze warranty claims detect problem areas more efficiently.

i. *Does the agency have the IT infrastructure to manage this volume of information?*

No. NHTSA would need to conduct an analysis to determine the technical specifications for an appropriate system. It is likely that new information technology resources would have to be added to NHTSA's data warehouse and analysis systems. The agency's IBM software would also require additional configuration to accommodate the volume of data. The agency also does not have sufficient personnel at present to manage this volume of information.

ii. *Would it be of any use to the agency or would it potentially have the adverse effect of drowning investigators in information?*

In most cases, NHTSA would likely continue to analyze warranty claims using the agency's current methods, so having manufacturers provide all warranty claims would have little direct impact on the agency's safety defect investigations. However, it would provide a burden on NHTSA resources to create the infrastructure needed to input and maintain the

additional warranty claim data. NHTSA currently lacks the resources to do this without cutting back on some other work within the Office of Defects Investigation.

9. *NHTSA has unfulfilled 2007 legislative requirements to produce and implement the Tire Fuel Efficiency Consumer Information Program (TECIP). Despite publishing a proposed final rule in 2010, soliciting and analyzing comments and taking years to conclude work, the agency has failed to finalize the tire labeling requirement. It is my understanding that NHTSA is now drafting a supplemental notice of proposed rulemaking (SNPRM). Please answer whether NHTSA has completed the data gathering and research phase of the rulemaking, and when the supplemental rulemaking will be completed and published.*

   a. *Does NHTSA intend to allow for a public comment period, and if so, for how long?*

      NHTSA published a final rule in 2010 establishing test methods that would be used for the new consumer information program on tire fuel efficiency. However, in order to provide NHTSA with the time needed to conduct additional consumer testing to evaluate the most effective format in which to provide the information provided and to resolve important issues raised by public comments on the proposal, the 2010 final rule did not specify the content or requirements of the consumer information and education portions. The agency has conducted additional consumer research and is in the process of drafting a supplemental notice (SNPRM), which would have the typical 60-day comment period.

   b. *Finally, does NHTSA intend to conduct any pilot programs for evaluating the results of a tire rating label?*

      As discussed above, we have done consumer research on the label. NHTSA also conducts evaluations of the effectiveness of its consumer-oriented regulations, such as bumpers, theft protection, fuel economy and the New Car Assessment Program (NCAP) on a periodic basis. The TECIP would be a candidate for such evaluation once sufficient time has passed after implementation of the final rule.

Questions from the Honorable Henry A. Waxman:

1. *With passage of the TREAD Act, Congress acknowledged that NHTSA was underfunded and understaffed. NHTSA also needed additional staffing resources in order to implement the Act and establish the Early Warning Reporting system. In 2001, NHTSA' Office of Defects Investigation (ODI) had 52 employees; in 2002, that number increased to 59, and yet now, ODI has one fewer employee than when the TREAD Act passed A recent headline for a Bloomberg News article was: "Auto Regulator Has 51 People Tracking 250 Million Cars." ODI is funded at $10.6 million and the Department of Transportation has requested no increase in FY 2015. I understand that NHTSA has many important*

functions. But 51 staff members is low particularly when only a portion of those 51 are investigators.

a. *Please indicate that different offices or divisions composing ODI and state the role of each of its employees.*

   Please see the attached document that details the functions of each ODI division and the role of each of its employees.

b. *For a short time, in FY 2002, ODI had as many as 59 employees. Please detail what ODI could do in FY 2015 if it added ten more individuals to its current staff of 51 employees.*

   With an additional ten individuals, ODI would add three additional defect screeners to the Defects Assessment Division, two investigators to the Vehicle Integrity Division, three investigators to the Vehicle Control Division, one analyst to the Early Warning Division, and add a new position for a dedicated records manager to alleviate the burden of records management from the investigative staff, allowing them to focus more time on mission critical tasks.

c. *As cars have grown in complexity, has NHTSA added staff who understands these advances? How many electrical and software engineers does NHTSA employ?*

   The agency has a diverse and experienced workforce with extensive experience in automobile safety, including experts conducting defects investigations and experts researching and testing vehicle safety at NHTSA's Vehicle Research and Test Center. NHTSA currently has a total of 17 electrical, electronics and software engineers on staff. NHTSA continually assesses ODI's needs to determine what additional staff with expertise in electrical and software engineering or other areas of specialization are needed. In addition, ODI also obtains resources from outside the agency in specialized fields of expertise to ensure that its analyses are thorough and comprehensive, when such a course of action is necessary.

While ODI uses a variety of data sources to determine whether a safety-related defect may exist or that an issue may warrant further scrutiny, ODI officials have indicated in bipartisan briefings with Committee staff that the information provided by consumers to NHTSA's consumer complaints database plays a particularly important role. In response to member questioning at the Subcommittee hearing on April 1, 2014, you stated: "Right now, we've got 45,000 complaints. I'd like to see that number get up to 50,000; 60,000; 75,000 complaints relative to safety issues so that we can have more information to be able to track down these problems."

d. *It is my understanding that the NHTSA consumer complaint database represents a sample; i.e. there are many incidents that might involve a potential safety-related defect that are not reported by consumers to the agency. Is that correct?*

Yes, this is correct.

e. *Please discuss the benefits of an increase in the number of consumer complaints submitted to NHTSA. If NHTSA's consumer complaint database included 75,000 complaints relevant to safety issues, what are likely ways that this development might aid NHTSA in its safety mission?*

Consumers file complaints with NHTSA for a variety of reasons, only some of which are safety- related or useful to screening and investigations. More safety-related complaints would provide better trend information, more opportunities to find clear defects, and better insight into emerging vehicle safety issues. More safety-related complaints could also indicate that consumers are more aware of NHTSA's role in defects investigations and therefore more likely to report problems to us in addition to reporting them to automakers.

f. *Does NHTSA receive more or fewer potentially safety-related consumer complaints, on a per-model basis, when compared to auto dealers and manufacturers? What is the ratio of complaints to manufacturers compared to complaints to NHTSA?*

NHTSA does not collect or maintain statistics comparing complaint rates it receives with rates received by auto dealers and manufacturers. However, based on EWR complaint data and experience from defect investigations, manufacturers usually receive significantly more complaints than NHTSA. The ratios vary and may be influenced by several factors, such as: the manufacturer, vehicle type and brand, the type of defect condition, the perceived safety risk, and vehicle age.

g. *Please identify at least the three most consequential steps the agency would need to take to accomplish the goal of substantially increasing the number of consumer complaints in NHTSA's database, and indicate what resources would be necessary to carry out these efforts.*

To accomplish the goal of substantially increasing the number of consumer complaints in NHTSA's database, NHTSA will first increase its outreach to consumers. NHTSA will launch a new outreach campaign in late fiscal year 2014 to increase awareness about ODI to consumers. Another part of this effort is to complete the MAP-21 requirement to promote vehicle defect reporting by requiring a label in the glove compartment or other readily accessible location that provides information about how to submit a complaint to NHTSA. However, even though every owner's manual already contains information on how to file complaints with NHTSA, focus group results show that consumers are unaware of the resources that NHTSA and its ODI provide to the public in keeping the nation's roadways safe. Generally, consumers do not know that they can file complaints about vehicle safety issues that could potentially lead to vehicle recalls. The resources needed to carry out this effort include contractor support,

television and radio announcements, additional outreach materials, and partnership engagement with automotive and consumer safety organizations.

Second, NHTSA will update its website and mobile application to create a robust medium to communicate important vehicle safety information with consumers. This effort will require information technology contractor support, including three additional contractors to expedite enhancements and maintain ODI's website, mobile app and intranet applications.

Third, NHTSA will revise its vehicle owner questionnaire to provide a simple, user-friendly format for consumers to easily file complaints. This effort will require information technology contractor support.

h. *Please indicate specific ways in which NHTSA can improve the analysis of information in its consumer complaints database.*

NHTSA's adoption of the IBM software is improving its ability to search specific complaint topics and to display broader complaint trends quickly and consistently. Next steps are spread across three packages and the general area of data management.

The next major step to improving the utility of the complaint database is to utilize the IBM software to fuse complaints with information from other data sources. For example, a consumer complaint may correspond to an EWR Field Report, D&I claim, or SCI / NASS case. The IBM software (Cognos) and related operational data store would cross-reference these separate areas to add more detail to that one complaint. This functionality would be married (drill-through capability) to the existing reports that show problem rankings. In essence, 15 – 30 minutes of searching and documentation would be replaced with an on-demand concise report. ODI has built the needed operational data store to achieve this. The next step is to establish the needed business rules to define relationships among the data sets and to proof out sample reports.

Coupling the above approach with Advanced Case Manager (ACM) will marry complaint and related incident data to ODI decision-making / screening / investigative history, assuring a consistent, data-driven approach. ACM still requires more implementation and detailed requirements capture for deployment. When deployed, ACM will improve documentation of screening work and improve cooperation across lines of business.

To take the IBM software beyond the basic functionality in place, further refinement of the data elements and available collections, and implementation of custom dictionaries are needed (e.g., is the mist an oil leak or weather condition?)

None of these tools require advanced database skills, meaning that they will offer fast, consistent command of the right information at the analyst level freeing our screeners and investigators to focus on incident follow-up /research.

Taken as a whole, this suite of tools is expected to fuse data and decision-making effectively from across the organization to enable us to move quickly and accountably, and to allow our screening and investigative staff to focus on their fields of expertise rather than managing data.

Relatedly, I understand that NHTSA's Crash Investigation Division (CID), which oversees the Special Crash Investigations (SCI) commissioned by the agency, has a staff of nine people. SCI reports for crashes in 2005, 2006, and 2009 provided NHTSA with the first detailed information on crashes involving what would later be determined as the General Motors (GM) ignition switch/air bag non-deployment defect. At the time, the investigations focused on the non-deployment of air bags, and could not conclusively identify the position of the ignition switch as the likely cause of the crashes that were investigated.

i. *Please provide a table showing the total number of Special Crash Investigations undertaken each year from 2000 to 2013.*

Special Crash Investigation Cases 2000-2013
Total Number of Cases Assigned

Year	Total
2000	124
2001	118
2002	131
2003	180
2004	202
2005	294
2006	120
2007	126
2008	156
2009	166
2010	109
2011	102
2012	128
2013	93
Total	**2049**

SCI cases vary year to year due to several factors. Namely, Agency priorities dictate the types of cases that are investigated by SCI. SCI is not a census type

program; its yearly cases reflect the specific requests from various NHTSA Offices. Therefore the number of investigations varies from year to year.

Additionally, the types of cases play a major role in the number of cases that can be investigated. As an example, motorcoach crashes require significantly more resources to investigate than a single vehicle crash. To further account for the fluctuation, SCI periodically conducts special study-type investigations that have a specific time-sensitive focal area and are typically not counted in SCI full crash investigation case numbers. For example, in 2013, SCI conducted an increased number of special study-type cases on heavy truck crashworthiness so that the Agency could provide a report to Congress. SCI completed 88 such special study-type cases, but these cases were not counted in our overall total of full investigation cases.

j. *Please detail the impact on NHTSA's safety mission of a funding boost allowing for a 25% increase in the number of Special Crash Investigations undertaken annually. Would such an increase provide a greater body of evidence for NHTSA to draw on when determining that a safety-related defect may exist or that a particular issue at least warrants further scrutiny? Please explain what NHTSA capabilities would be enhanced by such a change and address whether it could help speed NHTSA's identification of defects.*

The SCI program supports the agency by providing topical in-depth crash data to support our Research Office, Rulemaking Office, Traffic Injury Control programs, as well as immediate response to requests from ODI. Currently, the SCI program budget ($1.7M) is sufficient to support approximately 130 in-depth investigations from professional crash investigators each year.

An increase in the SCI budget of 25% could potentially allow for up to 20-25 additional in-depth SCI cases per year to support various agency needs and would also help defray the rising costs in collection and help keep the investigators equipped with the most up-to-date equipment.

With increased funding SCI would certainly continue to investigate certain crashes of interest to ODI. However, SCI would still be just one of many sources that ODI could use to look for trends that warrant a vehicle safety investigation or recall.

In your testimony at the Subcommittee hearing on April 1, 2014, you stated, "We are... considering ways to improve the use of crash investigations in identifying defects. We are reviewing ways to address what appear to be remote defect possibilities."

k. *Please provide details on how NHTSA plans to improve the use of crash investigations in identifying defects.*

NHTSA's ODI will continue its close collaboration and information sharing with SCI. A recent change was made to ensure that SCI is represented at all ODI defect panel decision meetings. Additionally, NHTSA is exploring ways to better leverage technology to automate internal notifications between SCI and ODI staff as to the availability of new information and to bring relevant SCI and other crash investigations into discussions around potential defects.

l. *Would an increase in the number of Special Crash Investigations that are undertaken enable the agency to have more data on those issues that, in your words, "appear to be remote defect possibilities"? Please explain your answer.*

An increase in the number of SCI cases would provide additional data to various stakeholders in NHTSA that rely on these data. NHTSA is also exploring the potential of other field investigative resources in addition to SCI that may be beneficial for specific types of crashes or fires such as those involving rollovers, hybrid or alternative fuel vehicles. In addition to crash investigations, we are considering other ways to address remote defect possibilities, especially by ensuring that manufacturers evaluate those possibilities promptly.

2. *In written testimony submitted for the Subcommittee hearing on April l, 2014, you wrote that "GM had critical information that would have helped identify this defect," that NHTSA did not possess. I would like to explore this point further. Press reports from the hearing have gone as far as saying that GM withheld information from NHTSA. I would like to focus on what exact information GM failed to provide to NHTSA before the existence of a safety-related detect was formally determined. In response to members questioning, you stated that there are several pieces of information you would have "liked" to have had at a minimum from GM, including "information that they changed the part in the ignition switch [in 2006]," "information that they were talking to their suppliers" because of "concerns about the algorithm associated with air bag nondeployments," and "any information they had directly linking the ignition switch defect to air bag nondeployments." You also indicated that NHTSA's ongoing investigation may determine additional information possessed by GM that would have been useful for NHTSA defect identification activities.*

Perhaps this information, if known by GM, should have been reported to NHTSA as a matter of principle. However, it is not clear that this principle is enshrined in federal law or regulations in a manner that ensures NHTSA receives that information it needs to identify possible safety-related defects.

a. *What pieces of information that NHTSA did not receive may have helped the agency ascertain the safety problem earlier, if it had received them? Please include the three kinds of information mentioned above that you said you "would have liked" to have had.*

Through its timeliness query investigation, NHTSA found that GM had specific information indicating that it knew or should have known that a safety-related

defect existed in these vehicles well in advance of when it recalled them. Specifically, GM's supplier notified it as early as 2009 that the air bags in the Cobalt would not work unless the key was in the "run" position. Moreover, at least as of 2012, GM personnel investigating reports of crashes were aware that in many of the crashes that the ignition was in "accessory" or "off" when the impact occurred and that, with the ignition in that position, the air bags will not deploy. Around the same time, GM was discussing potential remedies, including the possibility of revising the ignition switch to increase the effort to turn the key out of the "run" position. GM had already made such a change for its later model years vehicles.

b. *For each piece of information listed as potentially helpful that NHTSA did not receive:*
   i. *Please state what law or regulation requires that manufacturer submit such information to NHTSA;*
   ii. *Please indicate if such information is or is not currently required to be submitted to NHTSA, based on the current language of federal law and regulations; and*
   iii. *For any information not required to be submitted by law or regulation, please submit language that would make such helpful information required to be submitted by law.*

   Based on the information described above, GM was aware that a safety-related defect existed in its vehicles. As GM admitted in a Consent Order with the agency, GM violated the Safety Act by failing to provide notice to NHTSA of that safety-related defect within five working days as required by 49 U.S.C. § 30118(c)(1), 49 U.S.C. § 30119(c)(2), and 49 C.F.R. § 573.6(b). Therefore, all of the information noted above should have been provided to NHTSA under current law.

c. *GM, like all manufacturers, is required to submit to NHTSA several different kinds of information, including: defect and noncompliance reports pursuant to 49 C.F.R. Part 573.6; notices, bulletins, customer satisfaction campaigns, consumer advisories, and other communications, pursuant to 49 C.F.R. Part 579.5; and Early Warning data pursuant to 49 C.F.R. Part 579.21. I know this list is incomplete, so please list all types of information manufacturers are required to submit to NHTSA that the agency then reviews for possible safety-related defects. In addition, what information is required to be sent to NHTSA once a defect is formally determined?*

   Under the TREAD Act manufacturers are required to submit quarterly counts of death and injury claims and notices, warranty claims, property damage claims, and consumer complaints. Actual documents that are required to be submitted to NHTSA are field reports (quarterly), service bulletins (monthly), and substantially similar vehicle lists (annually). Additionally, the TREAD Act also requires manufacturers to report foreign recalls and other safety campaigns in foreign

countries within five days of a determination to conduct a recall or campaign (either by the manufacturer or a foreign government).

Once a defect has been formally determined, a manufacturer must send an information report to NHTSA for each defect or non-compliance. 49 C.F.R. § 573.6 outlines the specific information which must be included in the defect or non-compliance information report. Additionally, manufacturers must also submit a quarterly report for each defect or non-compliance campaign. 49 C.F.R. § 573.7 outlines the specific information which must be included in the quarterly reports.

As a result of its Consent Order with NHTSA, GM is also required to submit additional information to NHTSA. With respect to this recall, GM must submit a comprehensive written plan of how it intends to maximize the completion rate for its recall along with reports on the progress of the recall on a biweekly basis for six months and monthly basis thereafter for a total reporting period of three years. Other information that GM must provide to NHTSA pursuant to the Consent Order includes a monthly list of every safety-related issue under consideration by any GM Product Investigator or otherwise under consideration by GM's Global Vehicle Safety organization. This requirement applies for one year.

3. *The bipartisan investigation by the Committee on Energy and Commerce has found that GM approved, at least twice, the inclusion of ignition switches in its vehicles that did not meet the company's own specifications for torque performance between the run and accessory positions. In fact, the ignition switches of certain vehicles in the 2003-2007 model years had torque, between run and accessory, that measured between 4 and 10 Newton centimeters (Ncm) rather than meeting the GM specification of 20 Ncm (plus or minus 5 Ncm). In making the decision to accept ignition switches that did not meet its torque performance specifications, GM put the safety of its customers at great risk. Yet, to the surprise of many of my colleagues, such a move did not violate federal motor vehicle safety standards (FMVSS), because there is no FMVSS provision on ignition switch torque performance.*

   a. *Please describe the process NHTSA employs in determining new safety hazards that warrant being regulated under FMVSS.*

   NHTSA is a data-driven agency, and the process begins by considering relevant available motor vehicle safety information. We prioritize our existing rulemaking resources and look first at possible regulations that are likely to save many lives. We also consider whether a proposed standard is reasonable, practicable, and appropriate for the particular type of motor vehicle or motor vehicle equipment for which it is prescribed. New standards must be practicable, meet the need for motor vehicle safety, and be stated in objective terms. Furthermore, in most cases, the agency is required to conduct a cost-benefit analysis and determine that the benefits of a proposed standard justify the costs imposed by the standard.

b. *Is NHTSA evaluating, or does NHTSA plan to evaluate, whether an FMVSS is needed for ignition switches?*

NHTSA will consider all of the relevant safety information and determine whether a standard is warranted.

c. *Aside from issuing or amending an FMVSS, what are other methods that NHTSA can use to monitor known safety hazards in individual vehicle parts and ensure that manufacturers do not place their customers at risk from these hazards?*

Manufacturers have a legal duty to inform NHTSA of any unreasonable risk to safety. If they change a part to address such a risk, they must do so as a recall. NHTSA pursues recalls when a motor vehicle or item of motor vehicle equipment does not comply with an FMVSS or when there is a safety-related defect in the vehicle or equipment. Generally, a safety defect is defined as a problem that exists in a motor vehicle or item of motor vehicle equipment that poses an unreasonable risk to motor vehicle safety. In fact, most of the recalls that NHTSA pursues are for safety-related defects and not for noncompliance with an FMVSS.

4. *At different occasions during the Subcommittee hearing on April 1, 2014, you stated that NHTSA will "hold General Motors accountable" if the agency's investigation determines that GM failed to meet its legal responsibilities to report and address the ignition switch defect, including by failing to act quickly or in good faith toward the agency. However, the maximum civil penalty that NHTSA can issue for a related series of standards or compliance violations is $35 million. (It can also issue up to $35 million for a related series of violations of inspection, investigation, and records standards.) I do not believe that the prospect of these fines is an adequate deterrent to unsafe practices by major automakers, whose annual revenue can top $150 billion.*

a. *The Motor Vehicle Safety Act of 2014, which I introduced, would increase the maximum civil penalty NHTSA can levy for a related series of violations to $200 million. Please detail the impact on NHTSA's deterrent capabilities if the agency's maximum total civil penalty for a related series of violations was increased to $200 million. Would such a development help NHTSA ensure that manufacturers are accountable for the safety of their customers?*

Secretary Foxx recently unveiled the GROW America Act, which would increase the maximum civil penalty for a related series of violations of the Motor Vehicle Safety Act to $300 million. NHTSA supports this increased civil penalty amount to enhance the penalty's deterrent effect and help NHTSA ensure that manufacturers are held accountable for failures regarding safety defects and noncompliance under the law.

On March 4, 2014, NHTSA sent GM a Special Order (essentially, an administrative subpoena) with 107 questions that the company must answer pertaining to the ignition switch/air bag non-deployment safety defect and its handling of related recalls. GM's

answers were due to NHTSA on April 3, 2014. An April 8, 2014, letter from NHTSA to GM indicated that the company was not in compliance with the agency's investigation, having failed to "respond to over a third of the requests" and to "answer under oath as required."

Because GM did not fully respond to the Special Order, the agency demanded civil penalties of the statutory maximum of $7,000 a day, pursuant to 49 C.F.R. Part 578. As of April 15, 2014, GM has still failed to fully comply with the requests of the NHTSA Special Order.

b. *Is GM's failure to respond to significant portions of the NHTSA Special Order unusual? Has a manufacturer previously simply disregarded NHTSA's inquiries for weeks on end in favor of paying civil penalties?*

   Yes, this is unusual. Manufacturers typically comply, as they must, with the agency's information requests pursuant to 49 U.S.C. § 30166(g).

c. *Please detail the likely impact on manufacturer compliance with NHTSA requests for information if the agency's maximum daily civil penalty was substantially raised. Would such a change help NHTSA ensure that manufacturers are accountable and responsive to the agency's inquiries?*

   Secretary Foxx recently unveiled the GROW America Act, which would increase the maximum daily civil penalty for failing or refusing to perform an act required by 49 U.S.C. § 30166, or a regulation prescribed thereunder, to $25,000. NHTSA supports this increased civil penalty amount to enhance the penalty's deterrent effect.

5. *In a March 2010 hearing before the Subcommittee on Commerce, Trade, and Consumer Protection, then-NHTSA Administrator David Strickland acknowledged an inconsistency: when a consumer reports a safety problem directly to NHTSA, the report goes into a publicly searchable database; however, when a consumer instead reports the safety problem to a car company, that report becomes confidential business information. I would like you to discuss the regulations that implement the Early Warning Reporting (EWR) system and why they are so restrictive of public accessibility. If consumers had more access to EWR information earlier, they could influence defect investigations and even bring about earlier auto recalls, which could prevent injuries and save lives.*

   At that same hearing, Administrator Strickland explained the Administration's commitment to transparency, and said, "the more transparency we have, the better."

   a. *It is my understanding that NHTSA grants confidential treatment to all submissions in certain classes of EWR information, including: data relating to warranty claims and warranty adjustments; data relating to field reports and copies or field reports; data relating to consumer complaints; production*

numbers, other than of light vehicles; and Common Green Identifiers. Is this correct?

Upon an appropriate showing, NHTSA grants confidential treatment to reports and data relating to vehicle warranty claim information and tire warranty adjustment information; reports and data relating to field reports, including dealer reports, product evaluation reports, and hard copies of field reports; and reports and data relating to consumer complaints. See 49 C.F.R. Part 512, Appendix C (a).

Upon an appropriate showing, NHTSA also grants confidential treatment to reports or production numbers for child restraint systems, tires, and vehicles other than light vehicles; and lists of common green tire identifiers. See 49 C.F.R. Part 512, Appendix C (b).

b. *Please state the rationale for the agency's confidential treatment of all EWR data relating to consumer complaints. How can information submitted by consumers be considered confidential business information?*

Exemption 4 of the Freedom of Information Act protects, "trade secrets and commercial or financial information obtained from a person [that is] privileged or confidential." See 5 U.S.C. § 552(b)(4). Under Exemption 4, the standard for assessing the confidentiality of required submissions of information is whether disclosure is likely either to cause substantial competitive harm to the originating entity or to impair the government's ability to obtain necessary information in the future. See *National Parks & Conservation Ass'n v. Morton*, 498 F.2d 765, 770 (D.C. Cir. 1974). Meeting the competitive harm standard requires that there be, "actual competition and a likelihood of substantial competitive injury," from disclosure of the information. See *CNA v. Donovan*, 830 F.2d 1132, 1152 (D.C. Cir. 1987). Assessing the effect of disclosure under the impairment prong requires a "rough balancing" of the extent of impairment and the information's importance against the public's interest in disclosure. See *Washington Post v. Dep't of Health and Human Services*, 690 F.2d 252, 269 (D.C. Cir. 1982).

NHTSA typically does not consider individual consumer complaints to be confidential business information. When all the complaints filed with a manufacturer are aggregated into a single database, the data has competitive value. Aggregate complaint data could be monitored, mined, analyzed or manipulated by other manufacturers to the detriment of the submitter.

Motor vehicle and motor vehicle equipment manufacturers who are required to submit EWR data contend that they operate in a highly competitive business environment. See http://stats.bls.gov/oco/cg/cgs012.htm (generally describing the nature of the motor vehicle and parts industry). In light of the competitive environment in which these manufacturers operate, the comprehensive EWR data that they submit has commercial value. Further, these data are standardized and

the EWR reports contain identical informational elements for each regulated manufacturer category under the EWR rule. See 49 C.F.R. Part 579 subpart C. Each manufacturer in a regulatory category reports on the same systems and components and provides a snapshot of that manufacturer's experience for each of the standard informational elements. If this information was publicly available, competing vehicle manufacturers, parts suppliers and other entities may have ready access to data that they could use to exploit weaknesses in the submitter's performance or improve their own position at the submitter's expense.

Public release of this aggregate complaint data may also provide a substantial incentive for manufacturers to collect as little of it as possible. Under the TREAD Act, manufacturers need only produce that information which they already collect. Disclosure of categories of EWR information that could cause competitive harm is likely to cause manufacturers to scale back their collection efforts, which would impair the agency's ability to obtain the data in future submissions and impair the effectiveness of the EWR program.

c. *It is my understanding that manufacturers may submit individual requests for confidential treatment of additional EWR information, relating to reports of incidents involving death and injury, numbers of property damage claims, and/or production for light vehicles. Such requests must conform to all requirements of NHTSA's confidential business information regulation (at 49 C.P.R. Part 579 [sic]), including adequate support that the release of EWR data will cause competitive harm and that such harm will be substantial. Is this correct?*

Manufacturers may submit individual requests for confidential treatment of EWR information to the extent the confidentiality of such information is not otherwise determined via the class determinations set forth in 49 C.F.R. Part 512, Appendix C. Such requests must conform to all requirements for confidential treatment including but not limited to the requirements set forth in 49 C.F.R. Part 512.

d. *What is the broadest amount of EWR data to which such an individual request for confidential treatment may apply? Are manufacturers required to make such a request for each individual EWR report for which they are seeking confidential treatment?*

As explained in response to question "c" above, manufacturers may submit individual requests for confidential treatment of EWR information to the extent the confidentiality of such information is not otherwise determined via the class determinations set forth in 49 C.F.R. Part 512, Appendix C. Such requests would have to be filed with each submission. An entity requesting confidential treatment can make their requests as broad as their judgment allows. NHTSA may either grant or deny such requests as dictated by applicable legal standards.

e. *What percentage of all individual manufacturer requests for confidential treatment of EWR data is granted? What percentage of such requests that are*

determined to comport with the requirements of 49 C.F.R. Part 512 - including the requirement to support an assertion of substantial competitive harm - is granted?

If the "EWR data" referred to in this question is limited to the quarterly reports filed by manufacturers under our EWR reporting requirements, NHTSA rarely receives requests for confidential treatment for information not encompassed by the class determinations described in our responses to the previous questions. To the extent the agency received such requests during the early years of the EWR reporting program, those requests were generally denied.

f. Please detail the process of determining whether a manufacturer has provided adequate support that the release of EWR data will cause competitive harm and that such harm will be substantial. In this explanation, please include the criteria used to make such a determination.

Requests for confidential treatment are reviewed by NHTSA's Office of Chief Counsel. As explained in response to question "b" above, the standard for assessing the confidentiality of required submissions of information is whether disclosure is likely either to cause substantial competitive harm to the originating entity or to impair the government's ability to obtain necessary information in the future. See *National Parks & Conservation Ass'n v. Morton*, 498 F.2d 765, 770 (D.C. Cir. 1974).

g. Please detail the role that the spirit of transparency plays in NHTSA's decisions on whether or not to grant confidential treatment to manufacturers when they make individual requests for such treatment. Are manufacturers' requests weighed against the public interest in the transparency of safety data? If so, how?

NHTSA's confidentiality determinations include careful consideration of many factors, including existing legal requirements and the public's right to know about important vehicle safety information.

Several statutes apply directly to information the agency receives in pursuit of its mission. Section 30167(a) of Title 49 of the United States Code (49 U.S.C. § 30167) prohibits public disclosure of information within the scope of the Trade Secrets Act (18 U.S.C. § 1905) unless the Secretary determines that such disclosure is necessary to carry out the purposes of the Safety Act (49 U.S.C. §§ 30101 et. seq.) Similarly, § 30166(m)(4)(C) provides that none of the information collected pursuant to NHTSA's early warning regulations shall be disclosed pursuant to § 30167(b) unless the Secretary determines the disclosure of such information will assist in carrying out those sections of the Safety Act related to defect and noncompliance determinations, notification and remedy (§§ 30117(b) and 30118 through 30121). Section 30167(b) declares that NHTSA must disclose defect or noncompliance information that it decides will assist in carrying out the

Safety Act's provisions regarding the defect or noncompliance determination, notification and remediation sections of the Act.

The courts have determined that the scope of the Trade Secrets Act is coextensive with Exemption 4 of the Freedom of Information Act (5 U.S.C. § 552(b)(4)) *CNA Financial Corp. v. Donovan,* 830 F2d 1132, 1141 (D.C. Cir. 1987). Therefore, NHTSA determinations regarding the confidentiality of manufacturer information must be guided by both the Trade Secrets Act and Exemption 4. In instances where materials are not provided voluntarily, the touchstone for according confidential treatment is the test in *National Parks & Conservation Ass'n v. Morton,* 498 F.2d 765 (D.C. Cir. 1974). Under that test, information is confidential under Exemption 4 of the Freedom of Information Act if its disclosure would be likely to cause substantial competitive harm to the submitter or to impair the government's ability to collect the information in the future. Moreover, the D.C. Circuit has firmly rejected the contention that a consideration of the public's interest is a factor in considering the release of competitively valuable information. *Public Citizen Health Research Group v. FDA*, 185 F.3d 898, 904-05 (D.C. Cir. 1999).

In view of the foregoing, NHTSA accords confidential treatment only to those materials whose disclosure would be likely to cause competitive harm or impair the agency's ability to collect the information in the future. Further, NHTSA releases some classes of information under § 30167(a) when necessary to carry out the purposes of the Safety Act. For example, the agency routinely denies requests for confidential treatment for test data establishing that vehicles meet NHTSA's safety standards.

h. Please state whether granting confidential treatment to EWR information precludes NHTSA from posting such information on its website with sensitive business or personal information redacted. If so, please detail what kind of treatment of this information would permit NHTSA to make the information publicly accessible, except with sensitive business or personal information redacted. If not, please detail whether the agency does or does not post such information on its website, with sensitive business or personal information redacted, in cases where there it would be in the interest of safety or transparency to do so.

Again, our response is premised on the conclusion that your question employs the phrase "EWR information" to mean the data in EWR quarterly reports. As stated above, NHTSA's view that certain categories of EWR data are entitled to confidential treatment is based primarily on the aggregate nature of the data rather than the content of individual data points in the submissions. Accordingly, NHTSA could release some portions of some EWR submissions without necessarily causing the submitter to suffer substantial competitive harm or by redacting portions of the submissions. Some of the data at issue is not submitted or stored by the agency in a form where redaction would be feasible. Other

information, such as field reports, could be released in limited quantities and/or redacted to protect competitively valuable information.

Implementation of such a partial release policy would impose significant burdens and costs without producing clear tangible benefits other than in cases where we have determined it is necessary to carry out the purposes of the Safety Act. Public release of limited quantities of EWR data would provide public access to fragmented and potentially misleading information. While the data made available would have little value, releasing it would require the expenditure of scarce agency resources and reduce the volume and quality of EWR information provided by manufacturers. As noted above, manufacturers are only required to provide NHTSA with data they already collect. Release of portions of the EWR data would provide these manufacturers with an incentive to collect less information and reduce the effectiveness of the EWR program. Selective release of EWR data could also require that the agency abandon or modify the existing class determinations in Appendix C of 49 C.F.R. Part 512. Doing so would require NHTSA to process requests for confidential treatment for large quantities of information that are submitted each and every quarter.

If NHTSA were to attempt to process individualized requests for confidentiality of individual EWR submissions, the agency would be overwhelmed. A huge backlog would develop and grow. During the time that NHTSA was processing these requests for confidentiality, nothing would be released. The situation would be similar to the substantial FOIA request backlog experienced at some agencies. Moreover, submissions would not be released until the individual processing was completed. The net effect would be to hamper agency efforts to address these claims for confidential treatment expeditiously and likely divert resources from other efforts, including pursuing other enforcement activities. The U.S. District Court for the District of Columbia recognized this possibility when it ruled that categorical rules that address the confidentiality of EWR data are necessary "to allow the agency to administer the EWR program effectively," *Public Citizen, Inc. v. Mineta*, 427 F. Supp. 2d 7, 13 (D.D.C. 2006), and that the agency was "justified in making categorical rules to manage the tasks assigned to it by Congress under the TREAD Act." Id.

i. It is my understanding that [NHTSA] has the authority to rewrite federal regulations pertaining to EWR information (at 49 C.F.R. Part 579) and confidential business information (at 49 C.F.R. Part 512). Is this correct?

Yes, this is correct, to some extent. The regulations governing confidential business information must remain consistent with the Trade Secrets Act 18 U.S.C. § 1905.

j. Please detail whether, and how, [NHTSA] is reviewing these regulations in the spirit of enhancing transparency and the public accessibility of EWR data.

The agency is currently reviewing 49 CFR Part 512. As regulated entities continue to create and retain increasing volumes of electronic data, review of individual requests for confidential treatment is becomingly increasingly burdensome to an agency, like NHTSA, operating with limited resources. In regard to EWR data, any action taken by NHTSA must be consistent with the command in § 30166(m)(4)(C) that none of the information collected under the EWR rule shall be disclosed pursuant to § 30167(b) unless the Secretary determines the disclosure of such information will assist in carrying out those sections of the Safety Act related to defect and noncompliance determinations, notification and remedy (§§ 30117(b) and 30118 through 30121). Any agency action must also comply with the protections given to commercially valuable information under *National Parks & Conservation Ass'n v. Morton*, 498 F.2d 765 (D.C. Cir. 1974).

Because of its aggregate nature and the comprehensive embrace of EWR reporting, NHTSA has concluded that wholesale release of consumer complaint, warranty, field report and certain kinds of production data would be likely to cause submitters to suffer competitive harm and impair NHTSA's ability to obtain similar information in the future. As noted above, partial releases of EWR data might protect the interests of submitters while providing greater public access. The utility of such access would, however, provide little benefit.

6. *NHTSA's second Special Crash Investigation report from 2007 discusses the ignition switch problem raised by the December 2005 TSB, stating, "it is not known what role, if any, this may have played in the non-deployment of the air bags." The report later says looking into the issue would be "beyond the scope of this investigation." Did others in NHTSA then follow-up on this issue? If not, why not?*

   NHTSA is currently conducting an internal due diligence review with the Office of the Secretary of Transportation to identify what information was available prior to this recall. This thorough review is also identifying what information was known and when. From interviews of those involved in the 2007 evaluation, the prevailing theory was that the air bag system contained a reserve power system intended to provide backup power in the event of power disruption. Movement of the key from the run position was seen as one of many power disruptions that the reserve power system would have been intended to address. At that time, ODI personnel were not aware that air bag systems could be disabled during this type of scenario.

   NHTSA continually seeks new ways to improve our processes. As part of our due diligence effort we are considering ways to more rapidly update our knowledge base on key safety technologies and how to address remote defect possibilities.

7. *When the ignition switch position moves from run to accessory, what's the actual problem? Is it that power is disconnected from the airbags or is the engine shutting down inherently a safety problem?*

As stated by GM in its February 7, 2014 defect notification letter, "The timing of the key movement out of the 'run' position, relative to the activation of the sensing algorithm of the crash event, may result in the air bags not deploying, increasing the potential for occupant injury in certain kinds of crashes." Thus, a primary factor affecting the safety risk associated with the ignition key defect is the "timing" for when the switch is prone to move out of the "run" position relative to a severe frontal crash event. Because they are susceptible to movement out of the "run" position when subjected to inertial forces that often occur in the initial stages of severe crashes, such as from weight on a key chain in a vehicle that is bouncing on uneven terrain following a road departure, the ignition switches in the recalled vehicles may disable the front air bag protection in the critical seconds just prior to severe impacts when front occupants need them most. However, if the crash forces have caused the enablement of the air bag deployment algorithm before the key moves out of the "run" position, air bag deployment will not be affected.

The ignition switch may also move out of the "run" position in circumstances that are not associated with a crash event. This would result in engine stall, which would present a different set of potential safety hazards based on frequency of occurrence and other factors, such as vehicle speed, traffic density, availability and accessibility of a road shoulder or convenient location to remove the vehicle from traffic, and the ability to promptly restart the engine. Experience has shown that the most severe crashes involving stalled vehicles, though infrequent, generally result from impacts from traffic approaching the slowing or stopped vehicle from the rear or if the vehicle stalled in a hazardous location such as in the middle of an intersection or on railroad tracks. Front air bags would not provide protection for these types of crashes as they would typically involve rear or side impacts.

8. *For conducting future investigations, has NHTSA formally changed its procedures to make sure that ignition switch position is an issue that should be monitored more closely? Does NHTSA have formal procedures that would apply here?*

NHTSA's usual practice for investigating potential safety defects in the nation's fleet includes considering prior recalls for patterns and similarities. The GM Cobalt recall brought to light new information that NHTSA will use in the future to evaluate stalling issues. As part of this process, NHTSA will certainly consider ignition switch position when available in evaluating complaints of stalling and air bag non-deployment, loss of power steering and loss of power brakes and other circumstances where we now know key position to be relevant. Key position information, however, is not provided in most consumer complaints or crash reports submitted to the agency.

NHTSA is also actively engaging automakers and suppliers about other potential issues associated with air bag control algorithms and will take appropriate action as warranted.

9. *NHTSA is using new IBM software to search for patterns, but does NHTSA currently have in operation any software which predicts safety defect trends? If not, why not?*

NHTSA does not currently have in operation any software which predicts safety defect trends. NHTSA reads every consumer complaint as it is received. The current consumer complaint data is not structured or consistent enough in its content to support reliable predictive analytics with the systems that NHTSA utilizes. However, the IBM software contains capabilities that are expected to ultimately support predictive analysis.

The new IBM software will enable ODI to fuse data across its operation, providing faster, more consistent, more relevant, and more accessible results to data calls. The software is at an initial operational capability and is in limited use by ODI's Defects Assessment staff as a supplement to its other screening tools. It has been used primarily to demonstrate broader trends to put daily complaint reviews in perspective. The software has not yet been used broadly within ODI to demonstrate an impact on regular business processes. NHTSA has acquired four IBM software packages (Case Manager, Cognos, ICA, and SPSS). Cognos, the business intelligence package, furnishes regular reports and complaint rankings on demand that formerly required hours to create. ICA, the search package, has allowed us to conduct specialized searches over a decade's worth of complaints for topics not readily found by filtering on component codes or using simple Boolean keyword searches. ODI plans to use Case Manager to manage several critical workflows.

ODI is working on two essential elements needed to fully exploit the IBM software: construction of a proper operational data store that will allow it to fuse data collected across all of the agency's business lines; and, continue requirements-capture and implementation to absorb more business processes into the software.

10. *What criteria does NHTSA use to determine when it opens a safety defect investigation? Is the criteria used consistently across all possible investigations?*

NHTSA's process is data-driven, and decisions are based on input from around the agency. NHTSA uses the basic principles of risk analysis when deciding what issues to investigate and which investigations involve issues that should be the subject of a safety recall. Under those principles, the risk involved in a situation can be determined by considering both the frequency of the potential harm and the severity of the potential consequences of the harm. During both the pre-investigation and investigation processes, NHTSA applies these risk analysis principles.

At the pre-investigative stage the analysis is focused on spotting possible defect trends or defects that might warrant an investigation. A frequency assessment provides information regarding current failure rates and, often, data from peer vehicles or from prior similar investigations and recalls. A failure trend may be included as part of the frequency assessment to show if complaints are increasing, decreasing or constant as a function of time in service. The severity assessment provides an analysis of the harm that has resulted from the failures that have already occurred and the potential for harm to occur in the future. The harm is measured not only by the number of crashes, fires, and injuries that have occurred, but also by their severity and the likelihood that similar events will occur. In general terms, then, this process is designed to surface for

investigation the issues presenting a significant degree of safety risk, with priority given to those that may pose the highest risk. These criteria are generally consistent across all possible investigations but cannot be reduced to a formula.

11. *When considering whether to open an investigation, what sources of data does NHTSA rely on? Does it seek outside sources like safety advocates in addition to consumer complaints and EWR reports? If not, why not?*

When considering whether to open an investigation, NHTSA relies on the information it collects using the authority delegated by Congress -- consumer complaint data, manufacturer communications including field reports and technical service bulletins, EWR reports, precedent in prior investigations, and peer vehicle data. Additionally, defect assessment screeners may also obtain information from other experts within the agency (e.g., SCI, VRTC, OVSC), as well as consumer forums, petitions from safety advocates and other individuals, and materials posted in the public domain by safety advocates.

NHTSA has opened investigations at the behest of safety advocates, such as the recall of certain Jeep vehicles due to a defect making them more likely to experience fires in rear-end crashes than their peers. While using what the advocates provided, the agency still needed to develop the case using its own analysis of all relevant factors, and ultimately obtained a recall on a broader category of vehicles than those that the advocates requested be recalled in their defect petition.

While NHTSA evaluates all safety allegations and supporting information furnished to us including those from safety advocates, it is essential that the information provided contain sufficient detail to be actionable. We do receive concerns about cases where NHTSA is already evaluating, but bringing new information to NHTSA's attention is critical to this process.

NHTSA will continue to evaluate all safety allegations furnished to us including those from safety advocates. NHTSA is currently exploring ways to engage members of the safety community, such as trial lawyers, to increase opportunities for us to receive actionable information on potential safety defects. NHTSA also has activities planned to increase consumer reporting of potential safety defects to further improve our access to safety allegations. Safety advocates have various means of contacting the agency directly to request action. Please note, however, that no safety advocate group, or private attorney, had requested action by NHTSA concerning air bag non-deployment in the recalled GM vehicles prior to GM's February 2014 recall.

12. *What methodology does NHTSA use to analyze vehicle safety complaints?*

NHTSA's first review of vehicle safety complaints is the initial read of each complaint as received by a defects assessment screener with extensive field experience. Select complaints are referred to subject matter experts for additional review and follow-up. These complaints are cross-referenced against ODI history and other data sources. This

work is complemented by searches for broader trends and comparisons to other data sets. NHTSA expects its IBM software to enhance the agency's vehicle safety complaint analysis.

13. *What information does NHTSA receive about vehicle safety that is not made available to the public?*

Among other things, NHTSA receives the following information about vehicle safety that is not made available to the public:

- Names and other personal details about consumers who file complaints with the agency.
- Actual field reports (hardcopy documents).
- The last six characters of the vehicle identification number in an incident-level record (death/injury).
- Production volumes of any product other than a light motor vehicle.
- Common green, original equipment fitment, and SKU-to-type code information for tires.
- Some 49 C.F.R. § 579.5 submissions. These include certain communications between manufacturers and dealers such as certain technical service bulletins, customer satisfaction campaigns and consumer advisories involving the repair or replacement of motor vehicle equipment.
- Whistleblower- type referrals from other government agencies such as the U.S. Department of Labor.
- Material submitted by a manufacturer with a request for treatment as confidential business information, pending agency determination whether or not to grant the request.

Questions from the Honorable G.K. Butterfield:

1. *Mr. Friedman, NHTSA is on record in support of S. 921, the Raechel and Jacqueline Houck Safe Rental Car Act. As you know, at its core the legislation is straightforward- it requires cars that are under a safety recall to be repaired before they are rented to customers. The legislation has been approved by the Senate Commerce Committee on a bi-partisan basis.*

    a. *Given that current law prohibits a dealer from selling a new car subject to recall before it is repaired, can you think of any reason why a dealer should be able to rent such a vehicle?*

    No. While current law allows the rental of vehicles subject to a recall, I cannot think of a reason why the law should not be changed. Further, sales and leases of used vehicles are also not subject to the same prohibition, so dealers may continue to sell or lease/rent defective or noncompliant used vehicles to purchasers, unless the law is changed. Secretary Foxx recently unveiled the GROW America Act,

which includes language that would change the law to prohibit the rental or sale or lease of vehicles subject to a safety recall.

b. *The car rental industry strongly supports S. 921 as approved by the Senate Commerce Committee. Some have suggested that S. 921 should distinguish between "serious" and "minor" recalls. What is your view on this idea? Do you think recalls should be "tiered" into categories based on the level of safety hazard?*

No. All safety recalls involve either defects with unreasonable risks to safety or noncompliance with minimum federal safety standards. After a manufacturer makes a defect determination that a vehicle or equipment involves an unreasonable risk to safety, it is imprudent for rental car companies or others to suggest that the unreasonable risk can be ignored because they consider other recalls to be more "serious". NHTSA opposes any policy to stratify recalls and thereby suggest or imply to owners and drivers that some recalls are "more important" than others. The direct consequence of this policy would be to imply to owners and drivers that if NHTSA does not expressly state that a recall is one of its top concerns, this means that it is not important.

Member Request from the Honorable Tim Murphy:

1. *If General Motors makes a change to a part, do they also have to have a different part number? What are NHTSA's requirements with regard to that?*

While it is standard procedure for manufacturers like GM to assign a different part number when they make a change to a part, they are not legally required to do so. If, however, GM makes a change to a part, and communicates that change to more than one dealer, distributor, lessor, lessee, other manufacturer, owner, or purchaser in the United States, it must provide a copy of such communication to NHTSA. See 49 C.F.R. § 579.5(b).

Member Request from the Honorable Steve Scalise:

1. *During the hearing we discussed a chart that showed the number of sales and the correlating complaint rates with those vehicles. You explained that the Cobalt did not stand out when compared to peer vehicles. Of the peer vehicles included on that chart, please provide the Committee with a list of the cars where NHTSA decided to take action.*

NHTSA opened an investigation that influenced Hyundai to conduct Recalls 08V532 and 08V522 on the 2001-2003 Elantra. During this period (2007-2013), NHTSA air bag investigations led to four other recalls for air bag non-deployment. We are also currently evaluating other peer vehicles on that chart with higher air bag non-deployment rates than the Cobalt and will take appropriate action as warranted.

2. *In your testimony you say that NHTSA is pursuing an investigation or whether GM met its timeliness responsibilities to report and address this defect under Federal law. Please explain the specifics of how you came to that conclusion.*

   When GM notified NHTSA on February 7, 2014 of an ignition switch defect in certain models, and provided a chronology regarding its actions relating to the defect on February 24, 2014, these submissions raised questions as to whether GM met its obligations to report and address this defect in a timely manner. In particular, they raised a question as to whether GM met its obligation to report this defect to NHTSA within five working days as required by 49 C.F.R. § 573.6(b). On February 26, 2014, NHTSA opened a timeliness query (TQ) to investigate whether GM acted in a timely manner. No conclusion on timeliness had been made at that time or at the time of my testimony.

   On May 16, 2014, GM and NHTSA entered into a Consent Order in which GM admitted "that it violated the Safety Act by failing to provide notice of the safety-related defect that is the subject of Recall No. 14V-047 within five working days" as required by law. NHTSA determined that such an admission of untimeliness was warranted and appropriate based on information indicating that GM knew or should have known that the vehicles contained a safety-related defect well in advance of February 2014.

3. *Please provide a clear and detailed explanation of what information NHTSA believes GM failed to provide to the agency, the reason why OM would be required to provide that information to NHTSA at the time a specific event or action took place and how that information would have benefited NHTSA's evaluation of this specific issue.*

   Through its timeliness query investigation, NHTSA found that GM had specific information indicating that it knew or should have known that a safety-related defect existed in these vehicles well in advance of when it recalled them. Specifically, GM's supplier notified it as early as 2009 that the air bags in the Cobalt would not work unless the key was in the "run" position. Moreover, at least as of 2012, GM personnel investigating reports of crashes were aware that in many of the crashes that the ignition was in "accessory" or "off" when the impact occurred and that, with the ignition in that position, the air bags would not deploy. Around the same time, GM was discussing potential remedies, including the possibility of revising the ignition switch to increase the effort to turn the key out of the "run" position. In a Consent Order with the agency, GM admitted that it violated the Safety Act by failing to provide notice to NHTSA of the safety-related defect within five working days as required by 49 U.S.C. § 30118(c)(1), 49 U.S.C. § 30119(c)(2), and 49 C.F.R. § 573.6(b). If NHTSA had this information, it would have pursued a different course of action regarding a potential investigation. Further, NHTSA would have benefitted from timely knowledge of the safety-related defect so that it could ensure that GM carried out its legal obligations to notify owners and to remedy the vehicles.

Member Request from the Honorable Diana DeGette:

1. *If General Motors is changing a part, are they legally required to inform NHTSA of that change?*

   If GM makes a change to a part, and communicates that change to more than one dealer, distributor, lessor, lessee, other manufacturer, owner, or purchaser in the United States, GM must provide a copy of such communication to NHTSA. See 49 C.F.R. § 579.5(b).

Member Request from the Honorable John D. Dingell:

1. *During the hearing you stated that there were additional reasons that a review was prompted other than the 29 consumer complaints, 4 fatal crashes, and 14 field reports. Please explain the additional reasons.*

   In addition to the information described during my testimony, other supporting information considered during the issue evaluation conducted in late 2007 included photographs, EDR data and SCI investigation data.

Office of Defects Investigation

(NVS-210)

Director's Office

Program Specialties

Office Director

Special Assistant - COTR, Project Management, Policy, Social Media, Special Projects

Administrative Staff Assistant - Administration, Scheduling, Timekeeping

Program Assistant - FOIA, Document Management/Retention, Auto Shows

Defects Assessment Division – NVS211

Program Specialties

Division Chief

Safety Defects Specialist - Child Safety Seats, Safety Belts, Airbags

Safety Defects Engineer - Steering, fires, general light vehicle defect screening

Safety Defects Specialist - Airbags, recreational vehicles, EMTs, medium heavy trucks

Safety Defects Specialist - Heavy truck complaints, EWR field reports, technical service bulletins

Safety Defects Engineer - Tires, Wheels, Brakes, general light vehicle defect screening

Safety Defect Specialist - Vehicle Drivability (engine / powertrain controls), HEV / EV, general light vehicle screening

Safety Defects Specialist - Powertrain Systems

Vehicle Integrity Division – NVS212

Program Specialties

Division Chief

Safety Defects Specialist - Child seats, fuel systems, door latch systems

Safety Defects Engineer - Airbags, seat belts, structure

General Engineer - Airbags, fire, restraints

Safety Defects Engineer - Airbags, occupant classification, seat belts

General Engineer - Structure, door latch, fires

Program Analyst - Child seats, vehicle lighting

Vehicle Control Division – NVS213

Program Specialties

Division Chief

Administrative Staff Assistant - Inventory, Timekeeping, Travel

Safety Defects Engineer - Steering systems, wheels, stalling, advance technologies

General Engineer - Brakes systems, tires, wheels, suspensions

Program Analyst - Engine stalling, wheels, vehicle throttle control

Safety Defects Engineer - Brake systems, fires, advance technologies

Electronics Engineer - Vehicle electronics and embedded controls systems

Medium & Heavy Duty Vehicles Division – NVS214

Program Specialties

Division Chief

Safety Defects Engineer - Heavy trucks – engine controls, braking, fuel

systems

Safety Defects Engineer - Fires – light & heavy vehicles

Safety Defects Specialist - Motorcycles – all aspects

Safety Defects Engineer - Medium Trucks – engine controls; RV's – braking

Safety Defects Engineer - School & transit Buses – all aspects

Recall Management Division – NVS215

Program Specialties

Division Chief

Recall Analyst - School bus, child seat, tires, and equipment

Recall Analyst – Processing, updating, and uploading recalls

Sr. Recall Analyst - Technical engineering expert responsible to review, analyze and investigate safety recalls, and to prepare special recall information reports as requested for internal and external clients

Recall Specialist - Recall audits & consumer information

General Engineer - Enforcement of recall-related regulations; recall queries

Correspondence Research Division – NVS216

Program Specialties

Division Chief

Technical Writer – Draft technical correspondence for Congressional and consumer inquiries

Writer – Draft correspondence for Congressional and consumer inquiries

Investigative Case Assistant - Coordination and redaction of sensitive materials

Writer/editor – Draft correspondence for Congressional and consumer

inquiries

Writer – Draft correspondence for consumer inquiries

Early Warning Division – NVS217

Program Specialties

Division Chief

Program Analyst - Analysis of TREAD Act records; Buses; Medium/Heavy Vehicles

Safety Defects Engineer - EWR data screening; EWR tires

Mathematical Statistician - EWR programming

Safety Defects Specialist – EWR data screening

OFFICE OF DEFECTS INVESTIGATION

MISSION. To conduct testing, inspection, and investigation necessary for the identification and correction of safety-related defects in motor vehicles and motor vehicle equipment under the National Traffic and Motor Vehicle Safety Act of 1966, as amended. To ensure that recalls are effective and are conducted in accordance with Federal law and regulations.

FUNCTIONS

a. Examines the records, reports, and other information requested from the manufacturers with respect to actual or alleged safety-related defects.

b. Conducts tests, inspections, and investigations necessary to uncover potential, or to confirm the existence of suspected or alleged, safety related defects in motor vehicles and related equipment.

c. Communicates with manufacturers regarding existing or potential safety-related defects, which may lead to safety recalls.

d. Develops and monitors data and information gathering and proof testing requirements necessary to assist in the confirmation of existing, potential, or alleged safety-related defects.

e. Recommends for issuance the appropriate disclosures of information developed during the testing, inspection or investigation activities relating to existing or potential safety-related defects.

f. Administers the recall, reporting, and related provisions of the National Traffic and Motor Vehicle Safety Act together with implementing regulations.

g. Prepares and transmits cases indicating safety-related defects to the Associate Administrator for coordination and review with the Office of Chief Counsel and other appropriate officials.

h. Completes and establishes public files of defect investigations and related materials.

i. Receives and maintains consumer complaints regarding defects in motor vehicles and motor vehicle equipment from a variety of sources including those forwarded from the Auto Safety Hotline.

Defects Assessment Division – NVS211

MISSION. Collects and analyzes motor vehicle information from all sources to identify potential safety defects or recall inadequacies that may warrant the opening of defect or recall investigations involving motor vehicle or motor vehicle equipment.

FUNCTIONS

a. Evaluates and monitors safety-related information from all sources including vehicle owner complaint letters, fleet reports, field inspections, various manufacturer submissions, crash reports, media reports, vehicle inspection reports, research reports, consumer group submissions, manufacturer's bulletins and communications, and other government agency documents. Analyzes and develops the information to identify (a) potential safety defect trends and (b) potential safety recall problems requiring further investigation.

b. Provides extensive reviews and analyses of all manufacturers' data to ensure that service-oriented campaigns and service bulletins are not utilized to circumvent the statutory requirements for formal safety defect recalls.

c. Conducts defect petition analyses and initial evaluations to identify potential safety-related defects involving any system or component of motor vehicles and items of motor vehicle equipment. Conducts recall petition analyses pertaining to the effectiveness and appropriateness of a manufacturer's safety recall performance in accordance with Federal law and supporting regulations.

d. Utilizes contractors retained to supplement leads and information to survey specific groups of vehicles, and to interview vehicle owners reported to have experienced specific problems regarding potential safety defects. Reviews contract work statements and evaluates technical contract proposals relating to testing and other technical service contract work in support of defect identification and safety recall performance.

e. Provides the technical expertise for ODI and NHTSA elements relating to the identification of potential safety defects and the effectiveness of safety recalls.

f. Establishes and maintains extensive contacts with industry representatives, safety groups, government organizations, consumers, manufacturers and other sources to gather all appropriate data as required to timely identify potential safety defects, recall problems, and to exchange views and information on the latest technology.

g. Develops, maintains, and administers such systems and programs as appropriate for the identification of potential safety defects in motor vehicles and motor vehicle equipment. Identifies and recommends changes in methods and priorities to improve the effectiveness of the alleged safety defect trend identification.

h. Conducts field studies, surveys, and inspections to identify developing safety-related vehicle problems and to clarify alleged safety-related defect information received by the agency.

Vehicle Integrity Division – NVS212

MISSION. Conducts investigations into alleged safety defects in motor vehicles or motor vehicle equipment involving the integrity of vehicles or their components.

FUNCTIONS

a. Opens new investigations (Preliminary Evaluations, Recall Queries, and Engineering Analyses) on information developed by the Defects Assessment Division and other evidentiary material.

b. Conducts Preliminary Evaluations, Recall Queries, and Engineering Analyses, including collection of evidentiary material for possible litigation, to determine the existence of potential motor vehicle safety-related defects involving the safety-related integrity of items such as fuel, exhaust, and electrical systems.

c. Establishes requirements for and monitors laboratory testing and analyses performed by contractors and the NHTSA Vehicle Research and Test Center. Utilizes technical service contractors, retained to supplement leads regarding possible safety defects, to survey specific groups of vehicles and to interview vehicle owners reported to have experienced specific malfunctions.

d. Establishes and maintains extensive contacts with industry representatives, safety groups, Government organizations, consumers, manufacturers, and other sources to gather all appropriate data required to make timely safety defect determinations and to exchange views and mutually benefit from the latest technology.

e. Operates programs to establish or identify inherent weaknesses in the design or construction of motor vehicles and related equipment.

f. Provides the engineering and technical expertise for ODI and other NHTSA elements relating to the integrity of vehicle fuel, exhaust, and electrical systems.

g. Reviews contract work statements and evaluates technical contract proposals relating to testing and other technical service contract work in support of defects investigations.

Vehicle Control Division – NVS213

MISSION. Conducts investigations into alleged safety defects in motor vehicles or motor vehicle equipment involving the control of vehicles or their components.

FUNCTIONS

a. Opens new investigations (Preliminary Evaluations, Recall Queries, and Engineering Analyses) on information developed by the Defects Assessment Division and other evidentiary material.

b. Conducts Preliminary Evaluations, Recall Queries, and Engineering Analyses, including collection of evidentiary material for possible litigation, to determine the existence of potential motor vehicle safety-related defects involving vehicle control systems such as steering, brakes, or suspension.

c. Establishes requirements for and monitors laboratory testing and analyses performed by contractors and the NHTSA Vehicle Research and Test Center. Utilizes technical service contractors, retained to supplement leads regarding possible safety defects, to survey specific groups of vehicles and to interview vehicle owners reported to have experienced specific malfunctions.

d. Establishes and maintains extensive contacts with industry representatives, safety groups, Government organizations, consumers, manufacturers, and other sources to gather all appropriate data required to make timely safety defect determinations and to exchange views and mutually benefit from the latest technology.

e. Operates programs to establish or identify inherent weaknesses in the design or construction of motor vehicles and related equipment.

f. Provides the engineering and technical expertise for ODI and other NHTSA relating to vehicle control systems.

g. Reviews contract work statements and evaluates technical contract proposals relating to testing and other technical service contract work in support of defects investigations.

Medium & Heavy Duty Vehicle Division – NVS214

MISSION. Conducts investigations into alleged safety defects in motor vehicles or motor vehicle equipment involving medium and heavy duty trucks and their components.

FUNCTIONS

a. Opens new investigations (Preliminary Evaluations, Recall Queries, and Engineering Analyses) on information developed by the Defects Assessment Division and other evidentiary material.

b. Conducts Preliminary Evaluations, Recall Queries, and Engineering Analyses, including collection of evidentiary material for possible litigation, to determine the existence of potential motor vehicle safety-related defects in medium and heavy-duty trucks, school buses, transit buses, recreational vehicles, and items of motor vehicle equipment related to those vehicles.

c. Establishes requirements for and monitors laboratory testing and analyses performed by contractors and the NHTSA Vehicle Research and Test Center. Utilizes technical service contractors, retained to supplement leads regarding possible safety defects, to survey specific groups of vehicles and to interview vehicle owners reported to have experienced specific malfunctions.

d. Establishes and maintains extensive contacts with industry representatives, safety groups, Government organizations, consumers, manufacturers, and other sources to gather all appropriate data required to make timely safety defect determinations and to exchange views and mutually benefit from the latest technology.

e. Operates programs to establish or identify inherent weaknesses in the design or construction of motor vehicles and related equipment.

f. Provides the engineering and technical expertise for ODI and the Office of Chief Counsel in the event of litigation relating to the safety of medium and heavy-duty vehicles.

g. Reviews contract work statements and evaluates technical contract proposals relating to testing and other technical service contract work in support of defects investigations.

Recall Management Division – NVS215

MISSION. Administers NHTSA's safety recall program, provides for the monitoring and verification of manufacturer notification and remedy campaigns, and ensures that the recalls are effective and are conducted in accordance with Federal law and implementing regulations. Provides surveillance of manufacturers' defect/noncompliance notification and remedy campaigns involving vehicles, equipment, and tires.

FUNCTIONS

a. Receives, processes, reviews, analyzes, and codes all manufacturers' safety-related campaign notices and quarterly reports. Reviews and evaluates manufacturers' recall program to ensure timely and comprehensive notification to the agency and technically sound corrective action; reviews manufacturers' submission of data for technical compliance with Part 573; reviews owner notification letters for technical compliance with Part 577 to ensure that owners receive adequate notification; and provides technical assistance to the Office of Chief Counsel in establishing and amending regulations to require manufacturers to provide information necessary to monitor recall campaigns.

b. Analyzes recall performance information concerning the application, recall service problems, and the adequacy of the notification process of safety recalls ensuring the statutory requirements are met and that the recalls are effective. This can include field reviews, surveys, data analyses, and the collection of evidentiary material for investigation and possible litigation. Furnishes the manufacturer with information regarding problems the manufacturer can correct, such as parts supply, dealer apathy, vehicles not corrected properly, etc.

c. Conducts recall petition analyses pertaining to the adequacy and appropriateness of a manufacturer's safety recall performance in accordance with Federal law and supporting regulations.

d. Develops, maintains, and administers such systems and programs as appropriate for the analysis, effectiveness, or improvement of safety recall in motor vehicles and motor vehicle equipment. Identifies and recommends changes in methods and priorities to improve the effectiveness of the safety recall campaign.

e. Conducts audits of manufacturer compliance with applicable requirements of the statute and Federal regulations pertaining to the reporting of safety defect information and conducting safety recalls.

Correspondence Research Division – NVS216

MISSION. To collect information and data from consumers concerning potential safety-related defects, to develop technical summaries, reports, statistical data, presentations and analyses, and to prepare replies to correspondence relating to the ODI mission.

FUNCTIONS

a. Produces reports which can be used to analyze vehicle system failures and failure trends and special studies of possible safety-related problems in vehicles, components, or systems.

b. Operates and maintains documentation systems, procedures, and files for all ODI investigative actions, audits, petitions, and service manuals. Manages requests for information from within NHTSA and other responsible agencies.

c. Develops the functional requirements and assists in the development of plans, programs, and systems to improve the capability to collect, store, retrieve, and analyze data and information to identify patterns or trends of a potential safety-related defect.

d. Prepares replies to correspondence, e.g., Congressional inquiries and requests for recall campaign information. Develops systems to assure availability of public information.

e. Processes responses to Freedom of Information and Privacy Act requests.

Early Warning Division – NVS217

MISSION. Develops plans, programs, goals, accomplishments, and objectives for the daily management of the Early Warning Reporting (EWR) data. This includes the EWR manufacturer account management, submission control, reporting compliance, outreach to non-reporting manufacturers, data quality concerns, and preliminary analysis of the data.

FUNCTIONS

a. Manages the submission of all EWR data, conducting reviews and assessments as necessary to ensure that the manufacturers are complying with the spirit and intent of the regulation and that the data is of the highest quality.

b. Conducts analyses of the EWR aggregate data that may indicate an underlying safety concern. Based on the additional clarifying information received from the

manufacturer, new safety issues or supporting information relevant to ongoing ODI investigations may be identified.

c. Manages the submission, review, summarization, and analyses of EWR field report submissions, ensuring that the submissions are made as appropriate, and that the data is summarized into the ARTEMIS system in a timely, useful manner.

d. Manages the foreign campaign reporting required under 49 CFR Part 579 Subpart B, ensures that the reports are submitted in accordance with the regulation. Ensures that the campaigns are accurately reviewed and summarized into ARTEMIS. Supervises and/or conducts analyses of these foreign campaigns to determine whether such campaigns should be extended to the United States.

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