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June 9, 2014

The Honorable Calvin L. Scovell, III
Inspector General
U.S. Department of Transportation
1200 New Jersey Avenue, S.E., 7th Floor
Washington, DC 20590

Dear Inspector General Scovell:

The Center for Auto Safety (CAS) is pleased that you have decided to investigate the National Highway Traffic Safety Administration's (NHTSA's) role in the delayed recall of General Motors vehicles with a deadly ignition switch defect.

It is, of course, troubling that NHTSA did not obtain a recall of these vehicles as early as 2007, when the agency would have been fully aware of the defect and its consequences. Even more troubling is the fact that the agency neglected to even open a defect investigation to explore numerous reports of fatalities and injuries in the subject vehicles. The opening of a defect investigation would have provided notice to the public of the dangers of the GM ignition switch, and given NHTSA's Office of Defects Investigation (ODI) an opportunity to demand more information from General Motors. ODI twice failed to take this step, even as crashes related to the faulty ignition switch piled up in various data sources available to investigators.

As we have outlined below, there are a number of information systems available to NHTSA that, if properly utilized, could have picked up on the ignition defect and triggered an investigation and recall. Moving forward, NHTSA should recognize and correct these systemic failings that prevented this defect trend from coming to light, in order to prevent similar failures in the future.

I. NHTSA has not properly implemented the Early Warning Reporting (EWR) tools provided by Congress in the TREAD Act and subsequent legislation, requiring manufacturers to submit a bare minimum of claim information that is simply not sufficient to provide the agency with the ability to quickly and accurately locate defect trends.

For the purposes of this discussion, we refer you to the Excel File that you can download here: 2003-2013 Consolidated GM EWR Death and Injury Reports. This file contains all of the EWR Death and Injury Reports that NHTSA has received from General Motors since the beginning of the EWR program in 2003.[1]

[1] NHTSA claims not to have a flat data file containing all EWR Death and Injury Reports (see FOIA), so a survey of other manufacturers is beyond our capabilities. The EWR public data files are organized by quarter, manufacturer, and report type. Each must be downloaded and compiled before they are of use in identifying defect trends across quarters. We can only hope that the NHTSA has a more effective means of to use the EWR data than the files that have been made available for public use.

One of the first things you may notice about these reports is the strikingly large number of airbag-related claims that are included. In fact, airbags show up as a component involved in approximately 60% of all GM EWR Death and Injury Reports, 13,416 of 22,463 records.

While the sheer rate of airbag claims compared to other components is interesting, what catches our eye at CAS is the fact that ***no further information on the component involved is included.*** An investigator looking at the file is provided with no information as to whether the airbag failed to deploy, deployed aggressively, deployed inadvertently, deployed late, or any other number of potential airbag failures. EWR does not even include critical information such as the location of the airbag in the vehicle, an incredibly simple detail that is of obvious importance at even this early stage of defect analysis.

All of this information could have been required of manufacturers pursuant to the TREAD Act's Early Warning provisions. However, NHTSA's initial rule and subsequent rulemakings only require manufacturers to provide a bare minimum of information on each crash. The current EWR component descriptions are far too broad to effectively identify emerging defect trends, so broad as to make the data useless for discovery of all but the most obvious of defects.

E. Component/System Codes by Reporting category: Codes to be used on Death/Injury incident template.

Table C-12 Light Vehicle Component Codes

Component Code	Description	Component Code	Description
01	Steering System	14	Airbags
02	Suspension System	15	Seat Belts
03	Service Brake System	16	Structure
05	Parking Brake System	17	Latch
06	Engine and Cooling System	18	Vehicle Speed Control
07	Fuel System	19	Tires
10	Power Train	20	Wheels
11	Electrical System	22	Seats
12	Exterior Lighting	23	Fire
13	Visibility	24	Rollover
		Death/Injury Report Only	
		98	System/Component Not Covered Above
		99	No System/Component Specified

Note: 18 system/component codes, plus fire and rollover (secondary events).

New vehicles may contain 30,000 parts, with multiple systems interacting. As we see in the GM Ignition Switch defect, one component may be capable of producing failures in multiple vehicle systems. The ignition switch defect shows up in EWR coded as steering, electrical system, airbag, service brake system or unknown. The limited codes available in EWR were simply not sufficient to identify the ignition switch defect, nor are the codes sufficient to identify defects that will arise as vehicle systems interaction becomes more complex.

This problem with the current component code system has been recently confirmed by GM Consultant Anton Valukas in his report to General Motors regarding the ignition switch recall. In evaluating GM's TREAD database, which serves GM both as a means to file EWR reports with NHTSA and to support company investigations, Mr. Valukas observed:

> Although the database is organized into the 24 systems-based categories, the ignition switch is not one of those categories. A defect such as the recall condition here may be found in at least five different categories: Airbags, Electrical, Engine and Engine Cooling, Steering, and Brakes. The only method to search for incidents that may have involved the recall condition would be to search by key word in each section of the database. However, the TREAD database does not allow Boolean searches; in other words, there is no way to limit the records retrieved based upon the relative placement of different terms in relation to each other *(e.g.*, "stall w/20 ignition") or based upon their frequency or common appearance in a single record *(e.g. ,* "stall *and* airbag"). Accordingly, all of the records in which any of the key words selected appear will be retrieved.
>
> In 2014, each record contains a "verbatim" description of the problem as recorded by the dealer, technician, customer service representative, or GM employee. Prior to 2007, verbatims for warranty claims were not readily available to GM. The database would indicate the action taken *(e.g.*, replacement of the ignition switch), but would not explain the problem experienced by the customer. Prior to 2007, GM would have to follow-up with the dealer to get additional information.
>
> In order to determine whether a record involved the ignition switch defect, an investigator would be required to review each of these "verbatim" descriptions manually. Typical descriptions are limited in length and diagnostic value, and are often unclear as to the source and impact of the problem as a result.
>
> Once a record is identified as describing a potentially relevant incident, the investigator must obtain the additional material, if any exists, from the underlying database from which the TREAD record was derived. Only after an investigator has obtained and reviewed those materials (and possibly made additional inquires for information) can it be determined whether an incident is related to a particular defect in the vehicle or, instead, just describes an issue with features similar to those seen in incidents known to be caused by the defect.

In short, GM has been forced in the wake of the ignition switch crisis to improve upon the limited component system by using verbatim description and investigation, because the EWR data alone is insufficient to allow them to make internal decisions on defects. The EWR data used by NHTSA and made available to the public contains none of these additional descriptions that would be invaluable to anyone analyzing the death and injury reports for evidence of a defect. Without this more specific information, NHTSA's EWR system is simply not useful for identifying defect trends.

Although NHTSA could and should have implemented a system that made EWR reports more detailed and useful to investigators, the agency continues to maintain that the broad component categories are sufficient. CAS has raised this problem with NHTSA on a number of occasions, particularly in the agency's most recent rulemaking involving EWR. Our concerns were strangely deemed "outside the scope of the current rulemaking," even though that rulemaking was focused on the addition of new EWR component codes.

Had GM been required to make EWR reports beginning in 2003 that more accurately detailed the vehicle component involved in the claim, i.e. expanded component codes for "Ignition Switch" or "Airbag Nondeployment," NHTSA and the public would have had better information with which to assess the ignition switch defect.

Furthermore, lack of specific EWR component codes hinders NHTSA's ability to proceed effectively through the process of requesting additional information from manufacturers. In order to gather information on specific claims, NHTSA routinely sends letters to manufacturers requesting more specific information on crashes reported in EWR. These Death Inquiry (DI) letters are used to gather more information on particular claims reported in EWR. Information that is provided will typically include crash reports, autopsy reports, and lawsuit documentation. Requesting and analyzing these documents is a large burden to the agency, so it is important that the agency have the best information available on each claim prior to gathering documentation via the DI request.

The limited information in the EWR Death and Injury reports hinders this process. Without expanded EWR component codes that accurately identify the specific components involved in a claim, NHTSA employees are largely operating in the dark when it comes to selecting which claims to follow up on for more information via the DI letter. With limited agency resources focused on this process, it only makes sense to provide EWR screeners with more information on involved components so that they can more finely hone their requests and track down defects in a more efficient manner.

II. NHTSA sent GM Death Inquiry request letters for underlying EWR Records, but did not use them

From 2004 through 2012, NHTSA received from GM at least 51 EWR reports of death claims in the US involving an airbag, steering, electrical or unknown component on the 2005-07 Chevrolet Cobalt or 2003-07 Saturn Ion, that could indicate the ignition airbag defect. NHTSA sent DI request letters to GM for 29 of these 51 EWR reports. For the crucial period of 2004-07 when GM was investigating the ignition airbag defect, NHTSA sent GM 17 Death Inquiries on 19 EWR death claims that could have been due to the ignition airbag defect.

Although it is now known that these DI's covered confirmed ignition switch death cases such as Amy Rademaker and Natasha Weigel in Wisconsin, Amber Marie Rose in MD and Brooke Melton in GA, they were not used to open an investigation. See CAS Letters to Acting NHTSA Administrator David Friedman on March 7 and March 13, 2014. From Toyota Unintended Acceleration to Jeep Grand Cherokee Fuel System Crash Fires to the GM Ignition Switch debacle, the public record shows NHTSA pays little, if any, attention to EWR Death and Injury Reports in opening defect investigations.

III. ODI has and continues to open Airbag PE's based on far less complaint, injury, and death data.

Review of all NHTSA Airbag Preliminary Evaluation Defect Investigations opened since 2000 show the Agency has opened Defect Investigations with far less information than the Agency had on the recalled GM ignition switch vehicles when it did not to see a Defect Trend. NHTSA has opened 39 airbag investigations from January 1, 2000 through June 1, 2014. (See CAS' March 26, 2014, letter to NHTSA Acting Administrator David Friedman which included a review of all these airbag investigations in Attachment A and the Opening Resume of each Defect Investigation in Attachment B.) Of the 39 investigations, 26 investigations were opened with fewer than 10

complaints. Only 3 of the 39 investigations had a death and only one had two deaths when opened. 15 of the 39 investigations involved injuries, mostly minor.

Review of these Defect Investigation show that some were opened on the basis of Special Crash Investigations, Technical Service Bulletins, all of which were present in the recalled GM vehicles but which NHTSA said did not show a defect trend. For example, NHTSA opened PE03-002 into front airbag nondeployment on 480,000 2000 Ford Taurus based on a Special Crash Investigation of a fatal crash and no other information. NHTSA opened PE03-021 into front airbag door detachment on 350,000 1998-02 VW Passat based on a Special Crash Investigation of a fatal crash and a NHTSA inspection at a salvage yard of one other vehicle. NHTSA opened PE02-038 into 20,000 2002 Nissan Xterra for airbag clockspring failures based on a Technical Service Bulletin and one complaint. NHTSA opened PE04-053 into 240,193 2004 Honda Accord based on two NHTSA vehicle compatability crash tests in which the airbag failed to fully inflate and no other information. NHTSA opened PE08-017 into airbag nondeployment on 340,000 2001-03 Hyundai Elantra based on 35 complaints and two Special Crash Investigations of fatal crashes where the airbags failed to deploy. To show that as few as one complaint can still trigger a defect investigation, NHTSA opened PE12-012 into a side airbag deployment on 123,000 2012 Hyundai Elantra based on a single complaint that the airbag lacerated a person's ear.

Testimony and submissions by NHTSA to Congress on GM ignition switch showed the agency had every indicator used to open defect investigation into airbag failure in other companies but failed to do so. The agency had multiple crash investigations, TSB's, consumer complaints and the highest airbag warranty failure rate by far of any competitor.

IV. NHTSA failed to effectively utilize Fatality Analysis Reporting System (FARS) data or National Automotive Sampling System Special Crash Investigations (SCI) cases, both of which contained evidence of a defect trend

In CAS' March 13, 2014 letter to NHTSA, we called on the agency to evaluate why information from the (FARS) database and NASS-SCI case system was not sufficient to trigger a recall and/or a defect investigation. We have to date received no response. In that letter, we pointed out the FARS data showing 303 deaths had occurred in 2005-07 Cobalts and 2003-07 Ions with no airbag deployment in crashes without rear impact. These deaths began to show up in FARS after the introduction of models containing the faulty ignition switch, and increased significantly as more of these vehicles were sold.

FARS data is invaluable as a tool for defect investigation. The FARS data contains a record of all fatal crashes reported in the Unites States each year. Additionally, FARS contains far more information on individual crashes than you will find in EWR reports or consumer complaints. FARS data becomes available to NHTSA staff at a slower rate than complaint and EWR data[2], and thus may not be useful for assessing defect trends on newer vehicles. However, in the present case, the agency would have had years of data on vehicles containing defective ignition switches. This data could have been used to support the opening of a defect investigation, however the agency's

[2] FARS data for a specific data year is finalized around 20 months after the end of that year, and a preliminary file is available 8-10 months after the end of the data year. For example, the 2013 preliminary file is due for release in fall 2014, and the final version will be released in the fall of 2015.

Defects Assessment Division (DAD) did not use FARS in their 2007 assessment of the Cobalt and Ion vehicles. In 2010, when DAD again considered opening an investigation, sufficient FARS data to support an investigation was certainly available.

Another NHTSA crash data system, Special Crash Investigations (SCI), contains even better information on individual crashes than FARS, albeit on a far smaller sample of crashes. These investigations are conducted by professional crash investigation teams who file reports that include a written investigation and hundreds of data points relevant to all phases of a crash. Three SCI investigations from 2004-2007 focused on fatal crashes involving the ignition switch defect.

One of these SCI investigations covered the 2006 Wisconsin crash of a 2005 Chevrolet Cobalt, which killed Amy Rademaker and Natasha Weigel. SCI investigators determined that the vehicle was in "Accessory" power mode at the time of the crash, and noted that GM had issued a service bulletin in October of 2006 indicating the potential for drivers to inadvertently turn off the ignition during operation. A copy of the service bulletin was attached to the investigation report. SCI investigators also located six complaints in the NHTSA complaint database matching the described defect. The report noted that an analysis of airbag non-deployment as related to the key position in "On" or "Accessory" was beyond the scope of the SCI investigation.[3]

The information contained in the Wisconsin SCI report should have put NHTSA on notice for the potential of a widespread and deadly defect involving the subject vehicles as early as 2007. ODI should have made the Wisconsin SCI report and GM Service Bulletin Exhibits A and B in a preliminary evaluation that would have sought more information from GM, and likely would have uncovered evidence of mounting ignition switch failures. Instead, the agency passed on conducting a formal defect investigation both in 2007 and 2010 as deaths due to the defective ignition failure continued to climb.

V. NHTSA failed to recognize the stalling defect cause by ignition switch failure

NHTSA failed to investigate a far simpler defect in the GM ignition switch that could and should have resulted in a recall and that would have prevented the airbag deaths - **stalling due to ignition switch failure.** There have been well over 300 safety recalls conducted for vehicle stalling.[4] Two of these recalls are virtually identical to the GM ignition switch failure - Chrysler recall 11V-139 and VW recall 11V-141. Both recalls pointed out rough roads or driver interaction with the key fob could cause the ignition to go from run to accessory and shut off the engine just as in the GM recall.[5]

In the 1970's, NHTSA litigated a series of defect cases in the federal courts that established loss of vehicle power on the road as a safety defect. In U.S. v. General Motors Corp., 413 F.Supp. 933 (D.D.C. 1976), Judge June Green held: "Even if this "defect" were not *per se* related to "motor vehicle safety", the uncontested facts of this case establish that fuel inlet plug failure results in several obvious and undeniable safety hazards. First, once the plug fails, the car 'will stop running'."

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[3] http://www.autosafety.org/sites/default/files/imce_staff_uploads/SCI%20Report%202005%20Cobalt%20WI.pdf

[4] See compendium of 329 safety recalls from 1966 through 2013 for safety defects ranging from ignition switches to ignition modules to fuel pumps and other components that cause vehicle stalling. Excluded from this list are recalls due to catastrophic engine failure.

[5] See May 21, 2014, CAS letter to Acting Administrator Friedman for more details on the VW and Chrysler recalls.

In a memo summarizing the successful defects litigation cases in the 1970's, former NHTSA Chief Counsel Frank Berndt wrote:

> "If a defect causes failure of a critical vehicle component or of a major vehicle control system, it is safety related. . . . [A]ny defect which disables a vehicle causing it to park along the roadside presents an unreasonable risk to safety because of the hazards attendant to such parked vehicles."

In the case of ignition switch failure stalling, the consumer is lucky to get to the side of the road and is more likely to be stranded in the middle of the road, exposing occupants and other motorists to a greatly increased risk of crash. Despite numerous reports to NHTSA via its complaint database and other sources of stalling in models containing the defective ignition switch, the agency was unable to recognize the danger posed to owners.

VI. Complaints

Your office recognized the value of consumer complaints in finding and investigating defects. "ODI's primary means for determining whether an investigation is warranted are consumer complaints."[6] Beginning about 2006, NHTSA stopped a 40 year practice of integrating consumer complaints from safety groups and state agencies in its own database. The agency's previous policy of including consumer complaints from outside sources in the agency's complaint database and investigatory process created a more robust system that led to quicker and more comprehensive defect investigations and safety recalls.

The GM ignition switch debacle is proof positive that the new system of excluding outside safety complaints and information from agency decision-making can only have negative results. According to NHTSA testimony before and document submissions to the agency, it relied only on complaints in own VOQ database when it decided not to open an investigation in 2007 and 2010. Yet CAS had 6 complaints in its vetted online database including 4 crashes where the airbags failed to deploy in 2005-07 Cobalts and 2003-07 Ions. Failure to include CAS' complaints on airbag nondeployment and ignition switch problems in Cobalts and Ions in the agency's complaint database impaired the agency's ability to spot this tragic defect.

Historically, consumer complaints received by outsiders and forwarded to the agency played major roles in most, if not all, of the litigated defect cases in the 1970's. Complaints from Ralph Nader opened the Kelsey-Hayes wheel investigation and then forced a recall of all GM pickups with Kelsey-Hayes wheels after NHTSA settled for a partial recall. (U.S. v. General Motors, 518 F.2d 420 (D.C. Cir. 1975). Complaints from CAS opened the Cadillac Pitman Arm investigation (See U.S. v. General Motors, 561 F.2d 923 (D.C. Cir. 1977). Analysis and submission of complaints by the Public Interest Research Group resulted in reopening of the Rochester Quadrajet Carburetor investigation after GM falsely alleged all failures occurred at low mileage. (See U.S. v. General Motors, 565 F.2d 754 (D.C. Cir. 1977).

The Center has repeatedly complained to NHTSA about how this new policy hamstrings its defect investigations. Our May 22, 2014, letter to NHTSA Acting Administrator Friedman provides more details on this nearsighted policy.

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[6] http://www.oig.dot.gov/sites/dot/files/ODIHearing_LongStatement_FINAL.pdf

VII. The NHTSA Nod

GM Consultant Valukas described the "GM Nod" as part of the accepted practice General Motors used when ignoring defects. This practice seems to be in place in NHTSA as well. The "NHTSA Nod" lets industry know not to worry about a defect. In a graphically revealing expose, Section V.B.8 of the Valukas Report describes a series of secret NHTSA-GM communications, meetings and demonstrations at MM's Milford Proving Grounds over a two year period of time from 2004-05.

After these communications, GM walked away with the understanding that NHTSA did not consider stalling to be a per se safety defect and that the agency would not take action unless the frequency was inordinately high - 20-30 incidents per 1,000 vehicles over a three year period was acceptable. (For 3 million vehicles on the road for 3 years, this translates to 60,000 to 90,000 stalling events or 20-30,000 per year.) If this had been conducted in public, the perception that up to 30,000 stalling events in a fleet of 3 million vehicles is acceptable would have been laughed out of the room, not given a wink, a blink, and a nod.

VIII. Conclusion

NHTSA has multiple information sources that could have been used to determine that a defect trend existed in the vehicles with the ignition switch defect, triggering a formal investigation and a recall well in advance of 2014. The evidence suggests that the agency simply did not take advantage of the wealth of information available, and in some events deliberately ignored clear evidence of a defect. Despite the fact that GM employees misled the agency and withheld pertinent information, NHTSA had everything it needed to open a formal defect investigation into GM ignition switch failures years before the actual recall.

We look forward to the results of your audit of NHTSA's investigatory system. Please do not hesitate to contact us should you have any questions or desire further information.

Sincerely,

Clarence M. Ditlow
Executive Director

CC:
Secretary Anthony Foxx
Administrator David Friedman
Senator Jay Rockefeller
Senator John Thune
Senator Claire McCaskill
Senator Richard Blumenthal
Senator Edward Markey
Senator Dean Heller

Rep. Fred Upton
Rep. Henry Waxman
Rep. Tim Murphy
Rep. Diana DeGette