## Statement of Clarence M. Ditlow Executive Director, Center for Auto Safety On Toyota Sudden Unintended Acceleration Before the Senate Commerce, Science & Transportation Committee March 2, 2010

Mr. Chairman and members of the Committee, thank you for the opportunity to testify on sudden unintended acceleration in Toyota vehicles and the regulatory response of the National Highway Traffic Safety Administration (NHTSA). The Center for Auto Safety (CAS) is a consumer group founded by Consumers Union and Ralph Nader in 1970 to be a voice for consumers on auto safety.

The Toyota unintended acceleration crisis, which has claimed at least 56 lives, was a long time building. Draconian cuts in NHTSA's enforcement budget and staffing, failure to follow up on early research into electronic controls and adopting safety standards based on the research, lax enforcement, flawed research on electronic controls, manufacturers exploiting weaknesses in NHTSA's regulatory programs, inadequate crash data collection programs, and failures to implement the Early Warning Reporting System mandated in the TREAD Act all played significant roles. Even worse for consumers is that more Toyota's remain to be recalled.

Unrecalled Camrys Lead Deaths: The only Toyota Camrys being recalled are the 2007-10 model years. The Toyota that leads the known death list in unintended acceleration is the 2005 Camry - there are 5 known crashes with 7 deaths. There are 7 other crashes with 8 deaths in 2002-04 and 06 Camrys not subject to the recall according to public records obtained by the Los Angeles Times. Unrecalled 2002-06 Camrys with electronic throttle control total 12 crashes with 15 deaths compared to 6 crashes with 7 deaths for 2007-10 Camrys. The unrecalled 2002-06 Camrys have twice as many fatal crashes and deaths as the recalled 2007-10 Camrys based on public records of known 2002-10 Camrys linked to unintended acceleration.

Name	Date	State	Model Year
Barbara Schwarz	September 20, 2007	Yukon OK	2005
Anne Ezal	February 25, 2007	Pismo Beach CA	2005
Guadalupe Alberto	April 19, 2008	Flint MI	2005
Ella Mae & Lon Braswell	June 5, 2005	Athens GA	2005
Adegoke & Adeolu Aladegbemi	March 1, 2009	Marietta GA	2005
Noriko Uno	August 28, 2009	Upland CA	2006
NHTSA Withheld Name	March 14, 2004	НІ	2002
Juanita Grossman	March 16, 2004	Evansville IN	2003
Blossom Malick	March 15, 2004	Delray Beach FL	2003
Ethyl Marlene Foster	March 14, 2004	Phoenix OR	2004
George & Maureen Yago	January 22, 2004	Las Vegas NV	2002

Maria Cafua	September 4, 2003	Wilmington MA	2002
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**NHTSA Investigations:** Beginning in 2001 with the introduction of electronic throttle control (ETC) in 2002 Camry and Lexus ES300, consumer complaints increased by 4-fold in Toyota and Lexus models. In response NHTSA received five defect petitions of which it denied four and granted one. It opened three Preliminary Evaluation (PE) investigations, two of which became Engineering Evaluations. None of these investigations was concluded with a vehicle safety recall.

Investigation	Year/Make/Model	Outcome
<u>DP04-003</u>	2002-03 Camry, Camry Solara, Lexus ES300	PE04-021
<u>DP05-002</u>	2002-05 Camry, Solara, Lexus ES	Denied
<u>DP06-003</u>	2002-06 Camry, Solara	Denied
<u>DP08-001</u>	2004-08 Tacoma	Denied
<u>DP09-001</u>	2007 Lexus ES350, 2002-03 Lexus ES300	Denied
PE07-016/EA07-010	2007-08 Camry, Lexus ES350	<u>07E-082</u>
PE08-025/EA08-014	2004 Sienna	Safety Improvement Campaign

The investigations as a whole show significant weakness in the NHTSA enforcement program which Toyota exploited to avoid recalls until the <u>tragic crash in San Diego in August 2009</u>, that resulted in 4 deaths in a Lexus driven by an experienced highway patrol officer who was unable to bring the vehicle to a stop. But for the crash being <u>caught on a 911 tape</u>, the recent recalls would not have occurred because the crash would have gone unnoticed like so many before it.

**Early Warning Reporting System Failure:** When the TREAD Act was passed in 2000, Congress required NHTSA to set up an Early Warning Reporting System (EWR, named ARTEMIS by NHTSA) to prevent another Ford-Firestone crisis that led to TREAD. Obviously, it didn't work because we now have a Toyota unintended acceleration crisis. The DOT Inspector General has twice criticized EWR which costs \$9.4 million to set up through 2004 and an estimated \$11.5 million in operating and maintenance costs from 2005 through 2009. According to the IG:

Although ARTEMIS became fully operational in July 2004, it does not have the advanced analytical capabilities originally envisioned to help point analysts to potential safety defects. For example, the system cannot automatically notify analysts if consumer-reported complaints and manufacturer-reported warranty claims are both increasing due to vehicle steering problems. According to NHTSA officials, delays in acquiring these capabilities will prevent NHTSA from obtaining full value from the EWR information manufacturers report. While ARTEMIS will automatically point analysts to deaths that manufacturers report so that trends in small numbers of fatalities can be detected, ARTEMIS will not, as currently developed, link deaths to an alleged defect or identify relationships between the categories of EWR information. In short, ARTEMIS cannot perform more advanced trend and predictive analyses that were originally envisioned as being needed to identify defects warranting investigation. . . .

[T]he public will have access to only a portion of the EWR information being reported by manufacturers prior to NHTSA formally opening a defect investigation. Since only NHTSA will have access to the majority of the EWR information, it is critical that it establish procedures to ensure congressional concerns expressed in September 2000 about NHTSA's ability to use the data it possessed to spot trends related to failures in Firestone tires have been addressed. Consequently, much will be riding on the ability of NHTSA's eight analysts, who are responsible for reviewing the large volume of EWR information and drawing conclusions about potential safety defects. This will be especially true until such time as more advanced analytical capabilities are acquired to complement ARTEMIS.

We don't know whether there are data in EWR on Toyota unintended acceleration and what use NHTSA made of it. Unless a defect investigation in the form of a PE or an EA is opened, the public does not have access to NHTSA's analysis of EWR data. One thing is clear - NHTSA has opened hundreds of investigations under EWR which are not made public like other defect investigations. We have gotten access to only one EWR investigation so far – Ford Explorer deaths labeled as DI06-Explorer. While NHTSA may refer to these as inquiries, CAS applies the duck test – if they look like a duck, waddle like a duck and quack like a duck, they are a duck. NHTSA's secretiveness in concealing EWR investigations is unreal but for the fact it used to conceal PE investigations. The agency just doesn't like the public to see what it's doing behind closed doors.

The Center <u>filed a FOIA</u> for all EWR investigatory files and lists of EWR investigations but <u>NHTSA responded</u> by asking us to pay \$55,000 in advance. We <u>limited our requests</u> to just lists of EWR investigations to see if any inquiries were made to Toyota that would have given an early inquiry into Toyota acceleration but no response yet. There are only two answers to the EWR Toyota unintended acceleration defect – either (1) EWR worked and gave NHTSA a heads up which NHTSA failed to act on or (2) EWR is a \$20 million flop in failing to detect the biggest defect that came down the pike since Firestone tires on Ford Explorers. In order to assess NHTSA performance, EWR investigations must be made public.

NHTSA Electronics Capability: Sudden unintended acceleration has always been recognized as a serious safety hazard. Early unintended acceleration recalls involved mechanical failures that were easy to detect and remedy. With the advent of electronic ignition systems and cruise control systems in the late 1970's and early 1980's unintended acceleration complaints without clear mechanical failures began to appear. NHTSA opened more and more unintended acceleration investigation. Some resulted in recalls for electronic control failures. The first two Toyota unintended acceleration recalls were for replacement of the cruise control computer which could cause unintended acceleration on start up.<sup>1</sup>

(1) 1989 Sudden Acceleration Study Led to Invalid Rejection of Toyota Complaints: As investigations mounted into unintended acceleration in a wide range of vehicles, in January 1989 DOT's Transportation System Center (TSC) conducted a review of unintended acceleration in which it concluded that absent evidence of throttle sticking or cruise control malfunction, driver

<sup>&</sup>lt;sup>1</sup>(86V-132, 90V-040). CAS filed a defect petition (DP86-08) on vehicles recalled in 1990 which was denied as there wasn't a "reasonable possibility" of a recall. More complaints led to PE90-021 and a recall.

error must have caused the unintended acceleration.<sup>2</sup> The studies by the Institute for Telecommunications Sciences in 1975 and 1976 and their detailed analytical methods were neither cited nor used. TSC also did not look at electronic throttle control or computer software malfunctions. The vehicles examined in the study were 1983-86 models, none of which had electronic throttle controls or advanced microprocessors systems found in 2002-10 Toyota vehicles.

Based on TSC's finding that brakes could stop a vehicle suddenly accelerating from start up, NHTSA ruled out complaints that the brakes failed or could not stop a unintended acceleration from start up as driver error. A classic example of NHTSA's use of the TSC study is its denial of a defect petition (DP03-003) into unintended acceleration in 1997-00 Lexus LS and GS model which had mechanical accelerator cables:<sup>3</sup>

"At the conclusion of TSC's effort, comprising thousands of person-hours gathering data, comprehensively testing vehicles including their systems and equipment, interviewing owners and drivers, and inspecting crash scenes and the vehicles involved, a report was released with the following conclusion: "For a unintended acceleration incident in which there is no evidence of throttle sticking or cruise control malfunction, the inescapable conclusion is that these definitely involve the driver inadvertently pressing the accelerator instead of, or in addition to, the brake pedal."

In the defect petitions, most consumer complaints were excluded because they were long duration events or where the driver said the brakes could not bring the vehicle to a stop. Not a single defect petition resulted in a recall. The one that was granted (<u>DP04-003</u>) and became an investigation (<u>PE04-021</u>) was closed without a recall after NHTSA excluded most complaints.<sup>4</sup>

(2) Phantom VRTC EMI Interference Test on 2007 Lexus ES350: In the most crucial investigation, PE07-016/EA07-010, the agency conducted a test of a 2007 Lexus ES350 to: "Determine whether reported incidents of unintended acceleration were caused by a vehicle system malfunction [electronic controls] or mechanical interference [floor mats]." Later during DP09-001 which the petitioner asked the agency to look at causes of unintended acceleration other than mechanical interference such as electronic controls, the agency used the test report from EA07-010 to deny the petition without even sending a single information request to Toyota.

This should have been the definitive test of whether its floor mats or electronic controls. In DP09-001, NHTSA said: "ODI and VRTC also conducted design reviews and testing to evaluate the possibility of other potential causes of unintended acceleration in the subject vehicles. Some of this work is summarized in the following excerpt from the <u>VRTC test report</u>:

The Vehicle Research and Test Center obtained a Lexus ES350 for testing. The vehicle was fully instrumented to monitor and acquire data relating to yaw rate, speed, acceleration, deceleration, brake pedal effort, brake line hydraulic pressure, brake pad temperature, engine vacuum, brake booster vacuum, throttle plate position, and accelerator pedal position. Multiple electrical signals were introduced into the electrical system to test the robustness of the electronics against single point failures due to electrical

<sup>&</sup>lt;sup>2</sup> "An Examination of Unintended acceleration," HS-807-367, Jan. 1989 – Main Report, App. A-D

Defect Petition DP03-003 Denial

<sup>&</sup>lt;sup>4</sup> NHTSA Memo to File by S Yon Restricting Scope of PE04-021 Investigation, March 23, 2004.

interference. The system proved to have multiple redundancies and showed no vulnerabilities to electrical signal activities. Magnetic fields were introduced in proximity to the throttle body and accelerator pedal potentiometers and did result in an increase in engine revolutions per minute (RPM) of up to approximately 1,000 RPM, similar to a cold-idle engine RPM level. Mechanical interferences at the throttle body caused the engine to shut down.

Yet when CAS filed a FOIA for the test results and test procedure, NHTSA said it had no test data or any records of test procedure. NHTSA couldn't say what it did, how it did it or what the results were.<sup>5</sup>

**Safety Improvement Campaigns & Equipment Recalls:** To make matters worse, in EA07-010, Toyota agreed to only do an equipment recall of 55,000 all weather floor mats, <u>07E-082</u>. That was a recall destined to fail. The notification letters to owners did not even require the vehicles be brought in for inspection to see what mats were in the vehicles or how they were secured. The equipment recall <u>saved Toyota \$100 million</u> in recall costs according to Toyota's own estimate.

The only other investigation that resulted in an action was <u>PE08-025/EA08-014</u> which resulted in a <u>Safety Improvement Campaign</u> which is not even recognized under the Motor Vehicle Safety Act. After a private meeting between NHTSA and Toyota including three former NHTSA employees representing Toyota (Erica Jones, Chris Tinto and Chris Santucci),<sup>6</sup> Toyota Vice President Chris Tinto agreed to only a Safety Improvement Campaign as follows:

Thank you for taking the time to meet with me and my staff on October 14. Toyota has taken your message seriously and is extending this offer to conduct a field action in order to address the concern raised in EA08-014, an investigation into the Toyota Sienna. . . . Toyota has not determined that the condition at issue in EA08-014 is a 'safety-related defect" within the meaning of the federal vehicle safety laws, and - a summarized below - it continues to believe that no such defect exists.

How anyone can say unintended acceleration is not a safety defect is beyond reason.

The first Safety Improvement Campaign came in 1995 when Chrysler balked at recalling minivans for tailgates that spring open in low impact crashes and killed over 40 people. They are not subject to any sanctions under the Safety Act if they are not carried out. They are not safety recalls and they are not as effective as safety recalls in getting defects remedied. NHTSA defends Safety Improvement Campaigns as the only thing they can get the manufacturer to do because the manufacturers otherwise just say no. This is a self-fulfilling prophecy.

The latest manufacturer to join the "just say no" group is Honda on February 26 which refused to do a safety recall on 2005 Honda Odyssey minivans for tailgate lift struts that fail because NHTSA had let Toyota get away with Safety Improvement Campaign on its minivan. The Honda refusal is all the more troubling because NHTSA had convened a rare Safety Panel that approved

<sup>&</sup>lt;sup>5</sup> CAS Letter to NHTSA Administrator David Strickland - 2/2/10

<sup>&</sup>lt;sup>6</sup> S. McHenry Memo to EA08-014 File, October 15, 2008.

sending a letter to Honda requesting the company to do a voluntary recall. When Honda just said no, the agency blinked and agreed to the non-statutory recall.

Toyota Knew & Exploited NHTSA's Regulatory Weaknesses: From 2001 to the October 2009 floor mat recall (09V-388) generated by the August 2009 San Diego crash, all NHTSA's enforcement effort got was an ineffective equipment recall that saved Toyota \$100 million and a Safety Campaign that's not enforceable under the law. Why? First, Toyota knew the investigatory system and exploited it. Only some acceleration complaints were submitted. It knew the agency had limited resources and would agreed to do remedies less than a full vehicle recall because the agency needed to move on to other investigations. Toyota didn't tell the agency about foreign recalls for floor mat interference with the gas pedal that would have caused more emphasis on an earlier vehicle floor mat recall. Toyota requested confidentiality for a wide range of materials that prevented full public scrutiny of the record.

- (1) Lax Enforcement Program: Toyota was well aware of the fact that from 2004 to 2008, the agency stopped imposing civil penalties for failing to do timely recalls and only imposed \$150,000 in penalties since then even though Congress increased the maximum penalty from \$800,000 to \$15 million inflation adjusted to \$16.4 million in the 2000 TREAD Act. In August 2004, NHTSA imposed a \$1 million fine, about 7% of the maximum against GM in a windshield wiper recall. In the 1970's NHTSA used to routinely obtain fines from \$100,000 to \$400,000 which represented up to 50% of the maximum fine instead of 7%.
- (2) Inflated Influenced Recall Statistics: NHTSA tries to make its recall record look good by referring to 524 recalls involving 23.5 million vehicles obtained as a result of its investigations. These numbers are not what they seem to be. First, 9.3 million came from Ford Cruise Control Deactivation Switch Fire recalls where the agency first launched an investigation in 1998 and got a small recall in 1999. After parked Ford's starting catching on fire in garages and burning houses down, NHTSA belatedly opened more investigation and obtained more recalls. But not until October 2009 did NHTSA obtain the last of the Ford Cruise Control Deactivation Switch Fire recalls, some 11 years after its first investigation. Rather than being a regulatory success, this is a regulatory failure.

The number of recalls is unduly inflated by very small vehicle recalls influenced by a single equipment recall. For example, Dometic made defective refrigerators for recreational vehicles and trailers which resulted in a single equipment recall but 77 vehicle recalls in 2008. Similarly, Ricon made defective wheelchair lifts that resulted in two equipment recalls but nearly 100 vehicle recalls of just a few vehicles each. In each case, the real influenced recall was the equipment recall and the vehicle recall inflated the numbers cited by NHTSA. The 524 recalls should be more less than 300 recalls when the incidental small vehicle recalls are excluded.

(3) Reduced Budget & Programs: In 1980, there were 146 million vehicles on the road. Today there are 256 million. In 1980, there 119 people in enforcement, today there are only 57. In 1980, NHTSA had 2 cents per vehicle for enforcement, today it has less than a penny. The agency doesn't have its own test facility and must rent space from Honda in East Liberty OH. Anyway one looks at it, the agency is underfunded. In terms of safety, the best way to look at it is

motor vehicles are responsible for 95% of the nation's transportation deaths but only 1% of the Transportation budget.

(4) Crash Investigations: The National Accident Sampling System (NASS) is another system that could have helped detect Toyota unintended acceleration earlier. The current budget is just over \$12 million and investigates only 4,000 crashes per year. This compares with a budget of around \$10 million per year in the early 1980s providing about 10,000 cases. The original design would have produced nearly 19,000 cases per year which, at current costs, would require a budget of around \$60 million.

Had NASS been operating at its original design size, the agency could have spotted the problem with Firestone tires on Ford Explorers much earlier. The savings in life and limb from that discovery, even a few months earlier, alone would have been sufficient to cover the extra cost of NASS at its full design size. Explorers were introduced in 1990 and the defective Firestone tires were on some of the earliest models. If the excessive Explorer rollovers resulting from failures of Firestone tires could have been spotted by the mid-1990s, it could have saved hundreds of lives and at least one billion dollars for Ford & Firestone.

**Conclusion:** Toyota and NHTSA need to move forward. First and foremost, Toyota needs to install electronic brake override systems in all vehicles with electronic throttle control. Toyota must also agree to release all information submitted to NHTSA during the investigations and agree to conduct a fully public engineering investigation of its electronic controls with independent scientists and engineers with no ties to the auto industry.

NHTSA needs to issue safety standards:

- A new accelerator standard requiring fail-safe protection that updates the existing 1973 standard, which was written before the advent of electronically controlled accelerators.
  - A standard requiring electronic brake override in all automobiles.
  - A standard providing electronic magnetic interference protection.
- A standard mandating installation of Event Data Recorders, standard read outs for them and the collection of more information including on rollover crashes.

NHTSA needs to make public all its EWR investigations. Full minutes of all meetings with auto industry officials must be made public to prevent secret deals in all types of investigations. All submissions by manufacturers in investigations must be sworn under penalty of perjury. Elimination of non-statutory recalls such as Safety Improvement Campaigns and regional recalls where only some vehicles in some states get recalled. The whole enforcement program needs to be reinvigorated beginning with assessment of penalties at the top of the scale rather than the bottom. When people are killed by vehicle defects, fines should not be measured in a few dollars, if not a few cents per vehicle.