

# 2008 SAE Government / Industry Meeting

**Update on NHTSA Crash Data  
Collection of Event Data Recorders  
May, 2008**

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*May, 2008*

# Discussion Topics

- **NHTSA EDR Data Collection**
- **Recent Updates**
- **Access to EDR data**



# OEM Data Recording

## Current Event Data Recorders (EDR)

Primary Purpose:  
Deployment of Airbag

Secondary Purpose:  
\*Record Crash data



\*Recording Crash data becomes primary >2012



## NHTSA & EDRs

- Collecting EDR data since the 1990's
- Final Rule issued early this year
- Does not mandate EDR's in vehicles
- However, if there is an EDR
  - ◆ Capture uniform data in a uniform format
  - ◆ Standardized notification statement in vehicle owner's manual
  - ◆ Commercially available tool to access the data

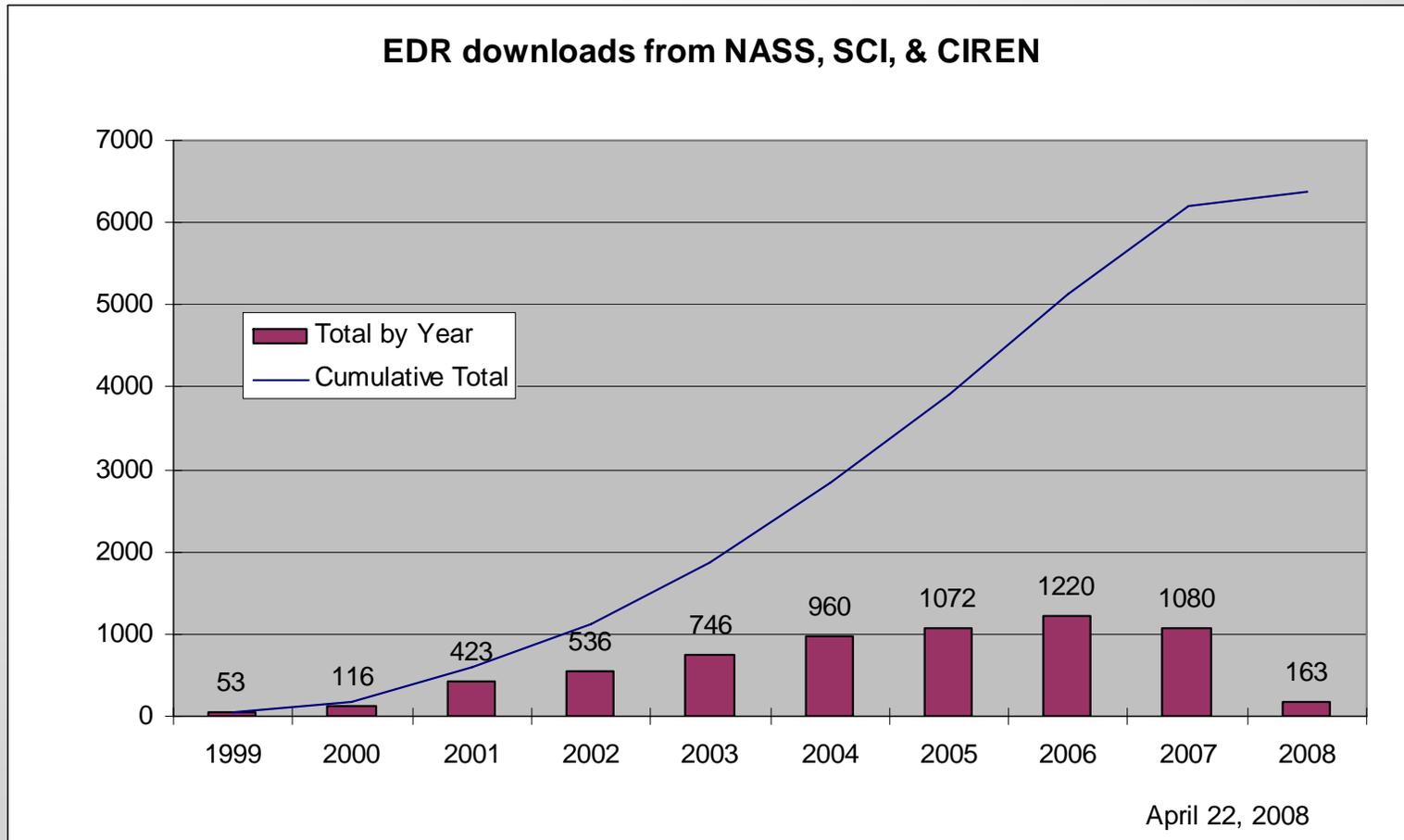
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# NHTSA & EDRs

- **NHTSA currently collects EDR crash data in three major vehicle crash programs:**
  - ◆ **NASS-CDS – A national statistically sampled data base, currently collecting data on about 4,500 crashes each year at 24 locations around the U.S.**
  - ◆ **SCI – A collection of targeted crash investigations looking at emerging safety issues**
  - ◆ **CIREN – A system of crash investigations conducted at hospitals, collecting about 400 cases per year**

- Over 6,300 downloads to date



- ***New EDR Rule takes effect with 2012 model year vehicles***
- ***If EDR equipped required items:***
  - ***Delta V Long***
  - ***Max Delta V long***
  - ***Time, Max Delta V***
  - ***Speed, vehicle indicated***
  - ***Engine throttle %***
  - ***Service brake on /off***
  - ***Ignition cycle, crash***
  - ***Ignition cycle, download***
  - ***Safety belt status, driver***
  - ***Frontal air bag warning lamp on/off***
  - ***Frontal air bag time to deploy – driver air bag***
  - ***Frontal air bag time to deploy – passenger air bag***
  - ***Multi-event – number of events***
  - ***Time from event 1 to 2***
  - ***Complete file recorded yes/no***



## Changes to EDR data Collection

- **January '08 – Vetronix owned by Bosch**
- **Software is by subscription (1-3 years)**
- **Hardware / cables are purchased separately**
- **Three releases per year**



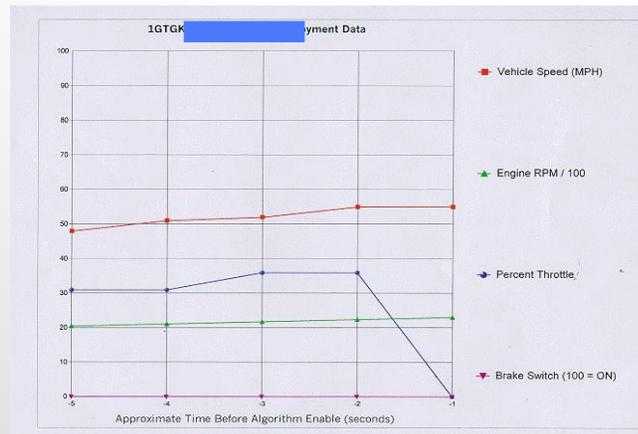
# NHTSA & EDRs

- **Currently three supported manufacturers**
  - ◆ **General Motors**
  - ◆ **Ford**
  - ◆ **Chrysler**
- **Varying level of data currently available**
- **Additional support available for the Ford Power Control Module**
  - ◆ **Some vehicles contain “minutes” of looped data – which can be overwritten!**



# Access to EDR data

- We can only read a limited number of vehicles
  - ◆ **Bosch Crash Data Retrieval System**
  - ◆ **Version 3.0 Software (Attempting to acquire)**
    - Most General Motors 1994 and newer
    - Some Ford and Mercury 2001 and newer
    - Chrysler 2004-2008
    - And others Isuzu Hombre 2000 - 2002 and Ascender 2003





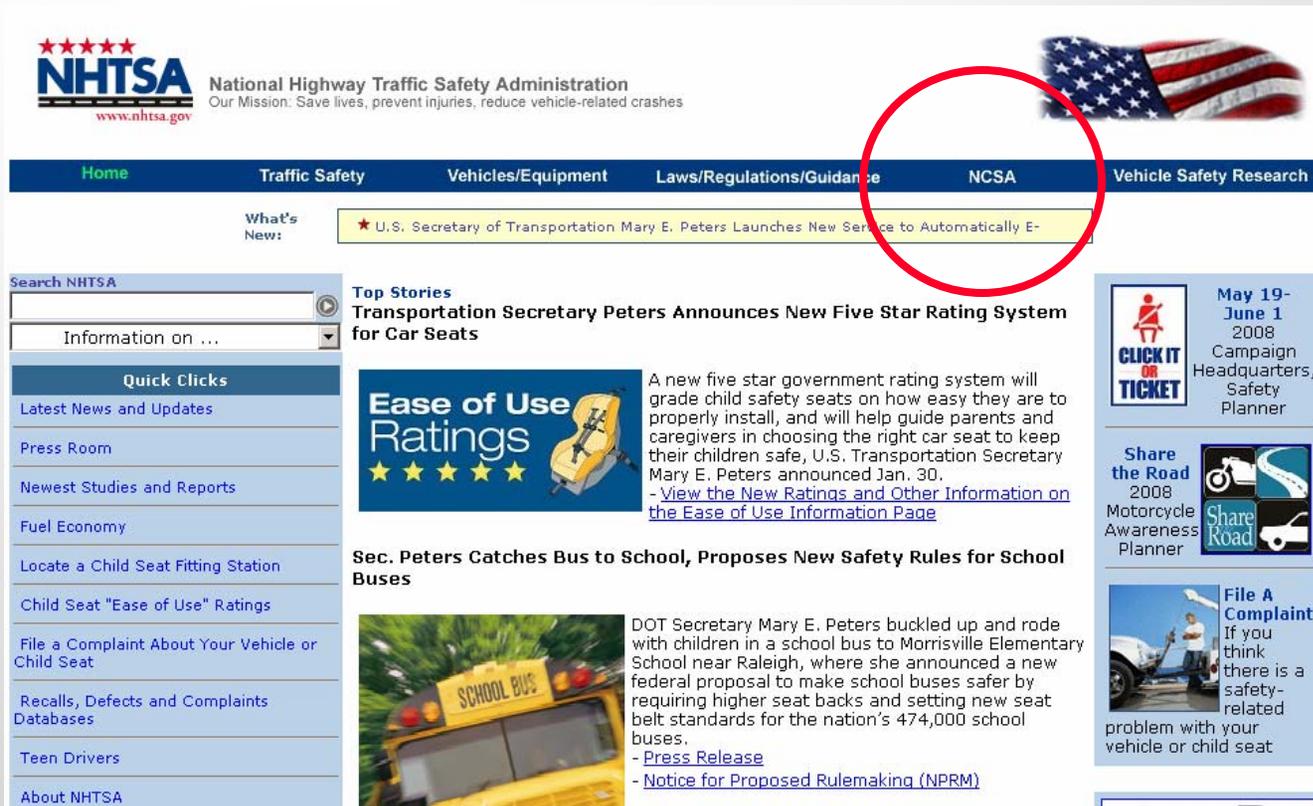
# EDR Program at NHTSA

- EDR's provide very useful information to crash reconstructions
- Supports a complete crash reconstruction
  - ◆ **Crash pulse, time to deployment, restraint usage, etc**
- Air bag timing and deployment levels cannot be determined by Investigators - EDR is the only source
- WinSmash vs. OEM EDR Delta-V's are comparable
- There are limitations to the EDR data

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# Access to EDR data on NHTSA Website

- To access the EDR Files go to NHTSA.dot.gov



The screenshot shows the NHTSA website homepage. At the top left is the NHTSA logo with the text "National Highway Traffic Safety Administration" and "Our Mission: Save lives, prevent injuries, reduce vehicle-related crashes". To the right is an American flag. Below the logo is a navigation bar with links: Home, Traffic Safety, Vehicles/Equipment, Laws/Regulations/Guidance, **NHTSA** (circled in red), and Vehicle Safety Research. Below the navigation bar is a "What's New" section with a yellow box containing the text: "★ U.S. Secretary of Transportation Mary E. Peters Launches New Service to Automatically E-". On the left side, there is a search bar and a "Quick Clicks" menu with links like "Latest News and Updates", "Press Room", "Newest Studies and Reports", "Fuel Economy", "Locate a Child Seat Fitting Station", "Child Seat 'Ease of Use' Ratings", "File a Complaint About Your Vehicle or Child Seat", "Recalls, Defects and Complaints Databases", "Teen Drivers", and "About NHTSA". The main content area features a "Top Stories" section with a headline: "Transportation Secretary Peters Announces New Five Star Rating System for Car Seats". Below this is a graphic for "Ease of Use Ratings" with five stars and an image of a car seat. To the right of the graphic is text explaining the new five-star rating system. Below that is another headline: "Sec. Peters Catches Bus to School, Proposes New Safety Rules for School Buses" with an image of a school bus and text about DOT Secretary Mary E. Peters' proposal. On the right side, there are three promotional boxes: "CLICK IT OR TICKET" (May 19-June 1, 2008 Campaign Headquarters, Safety Planner), "Share the Road 2008" (Motorcycle Awareness Planner), and "File A Complaint" (If you think there is a safety-related problem with your vehicle or child seat).

# Access to EDR data on NHTSA Website



Search NHTSA

<< **NCSA**

**Browse Topics**

- Latest Releases
- NCSA Publications
- Available Data
- Data Requests
- Analysis & Statistics
- Crash Research
- State Data Program**
- View Case Data**
- Regulatory Analysis
- Regulatory Evaluation
- State Traffic Safety Information (STSI)
- Traffic Records
- National Driver Register
- About NCSA
- Contact NCSA
- HIPAA Info



**NASS Case Viewers**

Use the links at right to access individual case information or to select and review scanned paper cases.

**Not In Traffic Surveillance (NITS)**

Not in Traffic Surveillance incidents can fall into a variety of categories, some are crashes (which occur in private driveways) and some are incidents (occupant getting caught in a power window, hyper/hypothermia, etc.). The SCI program is actively pursuing NITS crashes from its network of sources to provide in-depth information on the particulars of the incident or crash.

▶ [Current NITS Case Totals \(PDF\)](#)

**Related Links**

- [NASS/CDS EDR Reports \(2000-2005\) \(FTP Server\)](#)
- [NASS/CDS Case Viewer - XML Viewer \(2004-2005 Data\)](#)
- [NASS/CDS Case Viewer \(1997-2006 Data\)](#)
- [NASS/CDS Case Viewer - Preliminary Cases \(2007 Data\)](#)
- [NASS/CDS Scanned Paper Cases](#)
- [NASS Pedestrian Case Viewer](#)
- [SCI Electronic Case Viewer](#)

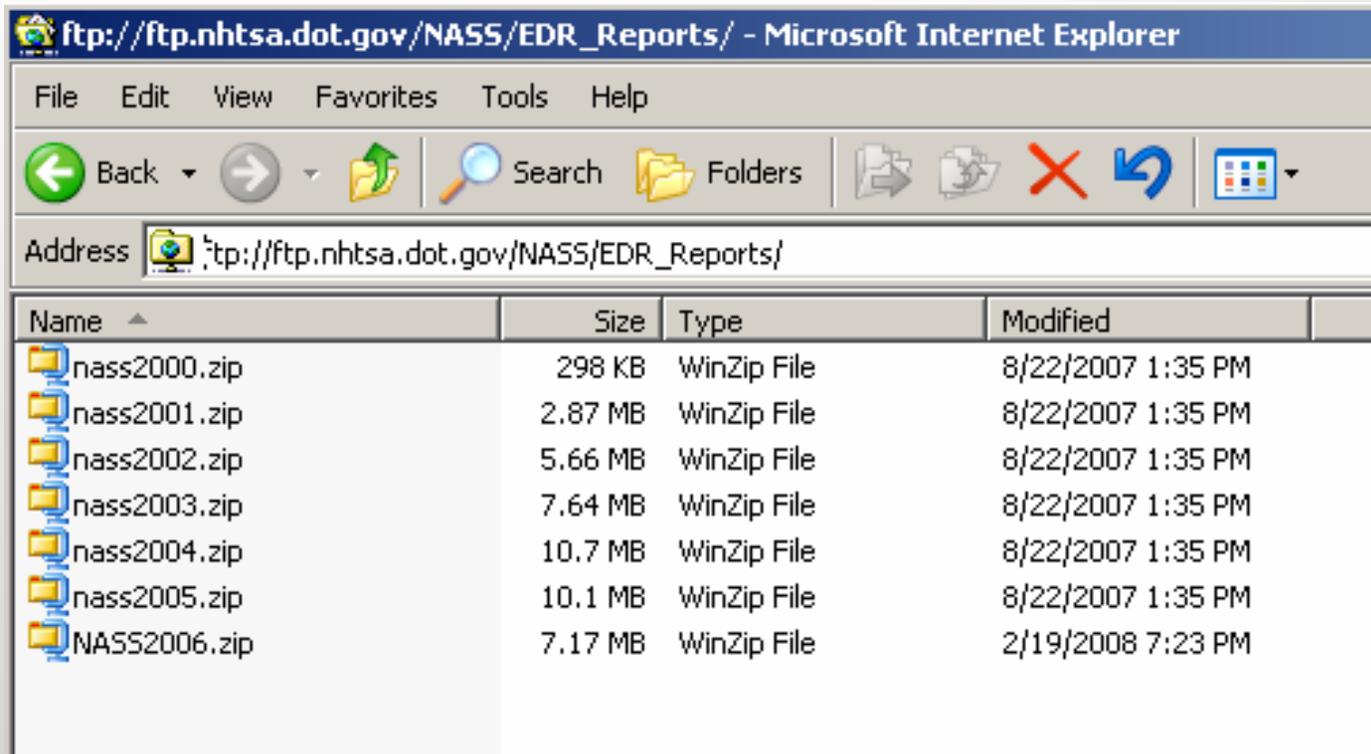
**More On The Web**

- [Not In Traffic Surveillance \(NITS\) Case Viewer](#)



# Access to EDR data on NHTSA Website

- To access the EDR Files go to:
- [ftp://ftp.nhtsa.dot.gov/NASS/EDR\\_Reports/](ftp://ftp.nhtsa.dot.gov/NASS/EDR_Reports/)



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# Summary

- **All OEMs that sell a 2012 vehicle equipped with an EDR**
  - ◆ **Inform consumer of presence of EDR in vehicle**
    - Identify the purpose of the EDR
    - Identify the type of data collected by the EDR
  - ◆ **Must capture the data in a uniform format**
    - There must be a tool available to access the data
- **Current OEM EDR data does NOT replace a crash reconstruction!**

# Thank You

