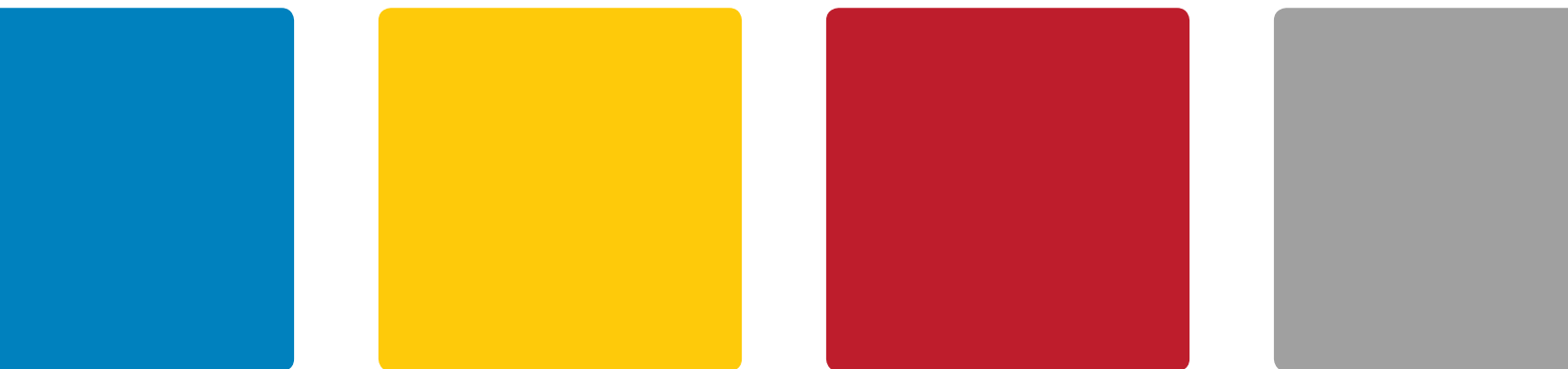




2016

Proactive Safety Principles

A YEAR IN REVIEW



U.S. Department
of Transportation

Four Proactive Safety Principles:

- **Enhance and Facilitate Proactive Safety**
- **Enhance Analysis and Examination of EWR Data**
- **Maximize Safety Recall Participation Rates**
- **Enhance Automotive Cybersecurity**



Introduction

On January 15, 2016, the U.S. Department of Transportation, the National Highway Traffic Safety Administration, and 18 automobile manufacturers adopted an historic set of Proactive Safety Principles. Crafted as a response to unprecedented recall and enforcement activity, the group broadly committed to improving the safety culture of the industry by exploring a more effective dialog on cross-industry safety issues and trends, to foster proactive safety solutions and enhance timely, consistent issue identification.

Reactive enforcement after safety defects has led to catastrophic outcomes, and shifting away from this 50-year paradigm has been no small task; much work remains to be done. We are excited by the progress made in one short year, and remain committed to partnering with industry and others to build proactive safety into the automobile industry as a way to prevent injuries and fatalities on our roads.

NHTSA and the automobile industry have acted on the voluntary Proactive Safety Principles signed in January 2016, and have expanded proactive safety concepts with partners across other sectors of transportation. This document highlights some of the groundbreaking actions taken over the past year, showing what is possible when safety is put first.

Enhance and Facilitate Proactive Safety

OBJECTIVE:

Continue to emphasize and actively encourage processes that promote steady improvement in vehicle safety and quality within our respective organizations, across the industry, and with other stakeholders.

NHTSA

Automatic Emergency Braking

On March 17, 2016, NHTSA and the Insurance Institute for Highway Safety (IIHS) announced a groundbreaking commitment by 20 automobile manufacturers to provide Automatic Emergency Braking (AEB) in nearly all passenger vehicles by 2022. This historic commitment means that a feature previously available only on high-end models will be a standard safety feature on virtually all new cars by 2022, and on heavier trucks and SUVs by 2025.

Read more: www.nhtsa.gov/press-releases/us-dot-and-iihs-announce-historic-commitment-20-automakers-make-automatic-emergency

Federal Automated Vehicles Policy

On September 20, 2016, the Department released the Federal Automated Vehicles Policy, an unprecedented, proactive measure that will guide the safe testing and deployment of automated vehicles while promoting innovation. The four-part policy was thoughtfully developed with extensive public input, including two public meetings and an open public docket to engage as many stakeholders as possible. NHTSA remains committed to seeking input to the Policy, and has held two public meetings since its release.

Read more: www.nhtsa.gov/AV

Technology To Prevent Drunk Driving

In 2016, NHTSA and the Automotive Coalition for Traffic Safety (ACTS) accelerated efforts to advance the deployment of the Driver Alcohol Detection System for Safety. ACTS represents 17 automobile manufacturers, and this effort is a collaborative research partnership between the group and NHTSA that began in 2008.

Enhancing Safety Culture in Transportation Forum

On April 22, 2016, NHTSA partnered with the Federal Aviation Administration to host *Enhancing Safety Culture in Transportation*, which was attended by top officials from U.S. airlines, along with aerospace and automobile manufacturers. The forum aimed to discuss how safety lessons from aviation can be applied to the auto industry.

Read more: www.nhtsa.gov/press-releases/us-department-transportation-convenes-aviation-and-automobile-industry-forum-safety

Improving Efforts To Identify Defects

While moving to protect the driving public by enforcing the 2014 GM ignition switch recall, we also took steps to improve the structure, resources and processes within the Office of Defects Investigations (ODI). Since the GM recall, ODI has evolved to allow the agency to identify defects and trends earlier, despite a historic increase in consumer

complaints and other data sources. We are restructuring the investigative process within ODI to incorporate risk-based methodology, to strategically maximize expertise and resources. We continue to leverage the success of past Consent Order activities, and incorporate analytical tools to further enhance the agency's and industry's abilities to identify and remedy safety-related issues.

Expanding Proactive Safety Principles

On September 26, 2016, NHTSA met with equipment suppliers in Troy, Michigan, in an effort to expand the proactive safety principles further into the industry. Approximately 40 suppliers met with NHTSA to discuss research, supplier obligations and proactive safety principles that can be adopted by suppliers.

Industry

On December 6, 2016, FCA US hosted the "Vehicle Safety Training Best Practices Workshop" at the Walter P. Chrysler Museum in Auburn Hills, Michigan, providing an opportunity for 12 global automakers, including FCA US, to discuss, learn about and share current approaches for improving vehicle safety training. FCA has made its mandatory training program available to other OEMs. FCA US is also planning on expanding this training program to its suppliers in the coming year.

Enhance Analysis and Examination of EWR Data

OBJECTIVE:

To continue to incorporate advanced methods in data analytics into the analyses and examinations of Early Warning Reporting (EWR) data to better identify potential risks earlier.

NHTSA

EWR Data

In 2014, we began implementing the Corporate Information Factory (CIF) to integrate multiple databases that facilitate data mining across internal and external data sources. New online information technology tools and data mining capabilities allow us to more effectively analyze information from multiple sources in one virtual workspace. Within the CIF working environment we have improved our proficiencies in applying analytical methodologies to large datasets to more readily identify potential vehicle safety defects.

NHTSA also met with MITRE to explore how collaborative data sharing might be feasible across the automotive industry.

Industry

On October 6, 2016, Fiat Chrysler Automobiles (FCA), along with Honda and the IIHS hosted the *Advancing Safety Through Data Conference*, which included the sharing of best practices in data analytics for the early identification of issues before they become safety defects.

Maximize Safety Recall Participation Rates

OBJECTIVE:

Explore and employ new ways to increase safety recall participation rates by the public by working toward the aspirational goal of 100-percent participation.

NHTSA

Safe Cars Save Lives

During the Washington Auto show in January 2016, NHTSA launched a national *Safe Cars Save Lives* recall campaign to raise public awareness of the importance of finding out if your vehicle is under a recall and getting it fixed if it is. It features a dedicated campaign landing page on SaferCar.gov - www.safercar.gov/Vehicle-Owners/Check-For-Recalls/CheckForRecalls, which prominently features the VIN Lookup tool. Additionally, it also features NHTSA's Driven by Safety videos that educate consumers on a wide variety of safety subjects related to their vehicles as well as offers consumers the opportunity to sign up for e-mail alerts and to file a complaint about their vehicles.

In August, NHTSA launched the *Safe Cars Save Lives* bus tour, which traveled to nine cities from Florida to Alabama, Louisiana, and Texas to spread the word about vehicles and passenger safety. A team of experts were deployed to each stop to teach motorists about recalls, tires, car seats and heatstroke.

Read more:

www.nhtsa.gov/press-releases/us-department-transportation-launches-new-public-awareness-campaign

www.nhtsa.gov/press-releases/nhtsa-kicks-%E2%80%98safe-cars-save-lives%E2%80%99-bus-tour-august-9-13

Outreach

In May 2016, NHTSA launched Takata Spotlight section on SaferCar.gov to highlight consumer information on air bags recalls. The section features a list of all vehicles affected, a timeline of NHTSA actions, press releases, related events and documents, FAQs, and completion rates

Takata Monitoring Group and NHTSA Regions

On November 3, 2015, Takata entered into a Consent Order and Coordinated Remedy Order with NHTSA in order to accelerated the recall of defective Takata air bags. As part of this Consent Order, NHTSA appointed an Independent Monitor to assist with the Coordinated Remedy Program. In 2016, the Independent Monitor, along with NHTSA's regional offices have increased outreach at the State level to improve recall completion rates.

Takata Monitoring Group

The Takata Monitoring Group created a program of door-to-door canvassing in Houston and Dallas, focusing on owners of older Honda and Acura vehicles, identified by NHTSA as having "alpha inflators," with a substantially higher risk of deploying/rupturing in a crash. Additionally, they worked with a grassroots firm in Houston to convene an informal coalition – consisting of local elected officials,

civic associations, business groups, educational organizations, social service and providers, and faith-based groups – to raise awareness of the recall and to motivate affected consumers to have their vehicles repaired. These efforts are expected to be replicated in Southern Florida and Southern California.

Region 6

NHTSA's Region 6, which includes Mississippi, Louisiana, Oklahoma, Texas, New Mexico and the Indian Nations, several of the States most affected by Takata air bag recall, participated with the Takata Monitoring group on several outreach events in Texas focusing on the vehicles with alpha inflators, which NHTSA identified as in urgent need of recall in June 2016.

- Briefing to the Houston-Galveston Area Council (HGAC)
- Worked with TXDOT to provide the Outreach Strategists Monitoring Groups contractor in Houston the opportunity to present at the HGAC Regional Safety Council Meeting
- Participated in the Texas Safety Summit held by the TX Department of Insurance and discussed vehicle recall issues
- Alerted local Dallas-Fort Worth (DFW) community partners about the Takata Air Bag Monitoring Groups local initiative to notified citizens of the DFW area of the alpha vehicles, identified by NHTSA as having a substantially higher risk of deploying/rupturing in a crash.
- Participated with the Takata Monitoring group to address the Dallas City Council's Public Safety Committee

Region 2

On September 29, 2016, NHTSA's Region 2 arranged and moderated a session at the Pennsylvania Safety Symposium on motor vehicle recalls.

Additionally, NHTSA met with Puerto Rico Governor García Padilla, PR DOT Secretary Miguel Torres, and Honda representative Danielle Vasquez Alsina to discuss remedying recall issues in Puerto Rico. As a result, Puerto Rico linked five of its governmental agency websites to Safercar.gov, and NHTSA provided our Spanish-language social media assets to help improve recall outcomes.

NHTSA and Industry

Volvo Trucks

On February 17, 2016, Volvo Trucks North America proactively announced the recall of certain model year 2016-2017 VNL, VNX, and VNM heavy trucks due to a steering shaft defect that could have caused the truck driver to unexpectedly and suddenly experience a complete loss of steering.

On October 31, 2016, NHTSA and FMCSA announced the last of nearly 16,000 these vehicles were identified and repaired, achieving an outstanding 100-percent completion rate, in a very short span of time.

Read more: www.nhtsa.gov/press-releases/usdot-announces-volvo-truck-recall-achieves-100-percent-completion

Fiat Chrysler Automobiles (FCA)

FCA US has rolled out and tested a variety of initiatives aimed at dealers and customers designed to boost recall completion rates and accelerate recall execution. To this end, they began developing best practices and refining procedures in collaboration with NHTSA to improve replacement-part procurement and distribution.

In an effort to provide enhanced support and communication for campaigns, FCA US has launched a new recall bulk VIN search tool to quickly identify inventories of FCA Group vehicles subject to open recalls. In cooperation with the NHTSA, FCA US developed a public database search tool. While conventional VIN lookups restrict users to individual inquiries, the FCA US portal allows multiple VINs within a single search. The new tool identifies vehicles that are subject to open recalls, promising time-savings and improvements throughout for fleet operators, independent used-vehicle dealers, and its dealer network. FCA US has demonstrated this VIN lookup to other OEMs and has gained their agreement to develop a common tool in the future that will process VINs from multiple OEMs.

Industry

On May 25, 2016 FCA hosted the first Automotive Safety Recall Best Practices Summit to explore innovative ways to improve recall completion rates across the automotive industry. Building on the success of the May Summit, FCA, with Honda and the Insurance Institute for Highway Safety, hosted the Second Automotive Safety Recall Best Practices Summit November 17–18.

Enhance Automotive Cybersecurity

OBJECTIVE:

Continue to emphasize and actively encourage processes that promote steady improvement in vehicle safety and quality within our respective organizations, across the industry, and with other stakeholders.

NHTSA

Cybersecurity Roundtable

On January 19, 2016, NHTSA convened a Cybersecurity Roundtable in Washington, DC. More than 300 people from cybersecurity experts from industry, academia, government and more gathered to discuss vehicle cybersecurity standards and best practices. By proactively bringing manufacturers, suppliers, technology companies, researchers, and government agencies together, we identified actionable steps to continuously improve vehicle cybersecurity.

Proposed Guidance

On October 24, 2016, NHTSA issued proposed cybersecurity best practices that focused on layered solutions to ensure vehicle systems are designed to take appropriate and safe actions, even when an attack is successful. The guidance recommends risk-based prioritized identification and protection of critical vehicle controls and consumers' personal data. Further, it recommends that companies should consider the full life-cycle of their vehicles and facilitate rapid response and recovery from cybersecurity incidents.

This guidance also highlights the importance of making cybersecurity a top leadership priority for the automotive industry, and suggests that companies should demonstrate it by allocating appropriate and dedicated resources, and enabling seamless and direct communication channels though organizational ranks related to vehicle cybersecurity matters.

Read more: www.nhtsa.gov/staticfiles/nvs/pdf/812333_CybersecurityForModernVehicles.pdf

Industry

Information Sharing and Analysis Center

In January 2016, the automotive industry, at NHTSA's recommendation, stood up an information sharing and analysis center (ISAC) to identify and share vulnerabilities across the industry. The Auto-ISAC role is to coordinate the voluntary sharing of cybersecurity threats across the industry, as well as to enhancing it with common countermeasures over time. The Proactive Safety Principles show strong support of the Auto-ISAC, and we remain committed to providing proactive leadership to be ahead of, and eliminate, potential vehicle cybersecurity challenges. The Auto-ISAC released cybersecurity best practices for light-duty vehicles in July 2016.

Read more: www.automotiveisac.com/best-practices/

Bug Bounty

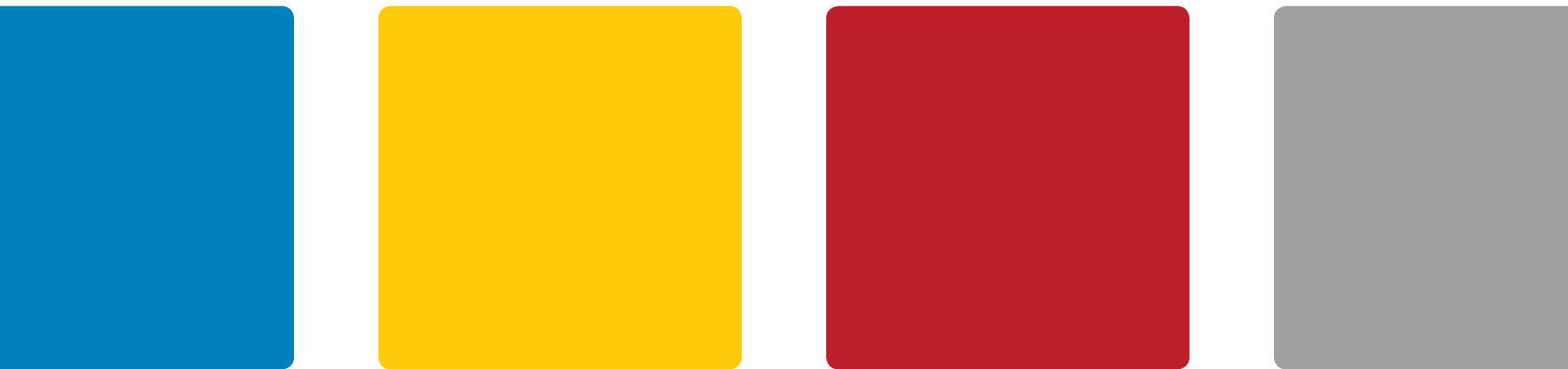
On July 13, 2016, FCA US launched a bug bounty program through Bugcrowd, which provides a forum for cybersecurity researchers to responsibly disclose potential vulnerabilities to FCA, in return for a financial reward for such disclosures.

Continued Commitment to Proactive Safety

True safety means preventing tragedy from happening. NHTSA and industry members have made solid first steps on improving the safety culture of the auto industry, and restoring consumer confidence by working toward the Proactive Safety Principles adopted one short year ago. Our collaborative efforts have led to innovative solutions and the inclusion of new partners to help us keep safety at the forefront.

As we move toward a future where vehicles can help prevent a crash from ever occurring, the work we have done over the last year to improve proactive safety will serve us all well. Cross-industry communications on safety issues can help lead to early detection and mitigation of defects before they turn catastrophic.

Change is never easy, but we are encouraged by industry's collaboration and actions over the past year. We at NHTSA remain committed to working with vehicle and equipment manufacturers to make proactive safety the industry norm. At the end of the day, we are all in roadway safety together, and the Proactive Safety Principles are a promising new tool to help protect our loved ones on America's roadways.



**U.S. Department
of Transportation**

