October 31, 2013, 02:00 pm

Regulatory rush job deprives many of health insurance plans they liked

By Jerry Ellig

The media-verse is all a-Twitter with the revelation that the Department of Health and Human Services (HHS) admitted in 2010 that between 40-67 percent of individuals would lose their then-current health insurance plans under the Affordable Care Act (ACA). News coverage focuses on the termination letters sent to hundreds of thousands of holders of individual health insurance policies, along with the substantial premium increases for individuals in the new insurance exchanges. And of course, pundits are pouncing on the stark contrast to the president's promise that if you like your current health insurance plan, you can keep it—but there's more to this controversy than what this media coverage conveys.

The root cause of this controversy is a regulation on the "grandfathering" of existing health plans, rushed into place just three months after the ACA's passage in March 2010. The regulatory rush job also prompted cursory analysis by HHS that requires a careful reading to discern any negative impacts from the ACA. A close inspection of the grandfathering regulation leads to even more shocking revelations: HHS expected the termination of many employer-sponsored plans because they run afoul of the strict requirements, and regulators actually knew that the ACA would increase health insurance premiums.

To prevent this kind of debacle in the future, Congress should require agencies to publish and seek public comment on a thorough analysis of their regulatory options before they make regulatory decisions.

In June 2010, HHS issued the regulation specifying conditions under which existing health plans could be "grandfathered" and hence not subject to all of the new mandates in the ACA. Grandfathered plans would not have to offer the extensive additional coverage the ACA requires new plans to provide, such as childbirth, substance abuse, pediatric vision care, and psychological services.

Previously, individuals who had no need for such coverage, or deemed it too expensive, could opt for cheaper insurance without such coverage. Indeed, HHS analysis admits that "grandfathering could potentially slow the rate of premium growth, depending on the extent to which their current plan does not include the benefits and protections of the new law."

HHS didn't calculate how much the participants in grandfathered plans would save, but such a figure would have highlighted the premium increases expected to flow from the ACA's new mandated coverages. Last year, Duke University health care economist Chris Conover estimated that even if the new mandates cost only $100 per policyholder, grandfathering would save consumers $5.6 billion annually by allowing them to avoid this cost.

But the HHS analysis contains an even more telling admission. Prior to the now oft-quoted discussion of individual policies, the analysis estimated that 39-69 percent of employer plans would no longer be grandfathered by 2013. In other words, between one-third and two-thirds of employers would no longer offer health insurance without costly ACA mandates.

These employer-provided plans would lose grandfathered status because they were expected to make changes in copayments, percentage cost-sharing, or the percentage of premiums covered by the employer that exceed the limits specified by the grandfathering rules. Many of the rules are either extremely narrow or arbitrary. Modest changes policyholders regard as routine could disqualify a plan from being grandfathered.

For example, any change in percentage cost-sharing between the patient and the health plan ("coinsurance") automatically disqualifies the plan from grandfathered status, even if all other terms of the plan remain the same. HHS declined to adopt a more flexible "actuarial equivalence" standard, which could allow an employer to adjust its health plan as long as it delivered the same dollar value of benefits to participants.

Actuarial equivalence is the concept used in the health care exchanges to determine whether a health plan is labeled "bronze," "silver," "gold," or "platinum." Yet HHS rejected an actuarial equivalence standard for grandfathered health plans as too complicated, while simultaneously preparing to use actuarial equivalence to regulate insurance plans offered on the exchanges.

Perhaps it's inevitable that a regulation rushed into place just three months after the ACA's passage would have substantial problems. Unfortunately, one of the biggest casualties was a transparent accounting of the ACA's likely effects. Congress could avoid this transparency problem in the future by requiring agencies to publish a thorough analysis of their regulatory options before writing regulations.

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March 2011

NHTSA Vehicle Safety and Fuel Economy Rulemaking and Research Priority Plan 2011-2013

I. INTRODUCTION

The National Highway Traffic Safety Administration's primary mission is to "save lives, prevent injuries, and reduce economic costs due to road traffic crashes." One of the most important ways in which the agency carries out its safety mandate is to issue Federal Motor Vehicle Safety Standards (FMVSS). Through these rules, NHTSA strives to reduce the number of crashes and to minimize the consequences of those crashes that do occur. NHTSA's mission also includes issuing Corporate Average Fuel Economy (CAFE) standards under the Energy Independence and Security Act of 2007. Increasing fuel economy not only contributes to energy security, but also addresses climate change by reducing tailpipe emissions of carbon dioxide (CO_2).

This NHTSA Vehicle Safety and Fuel Economy Priority Plan describes the projects the agency plans to work on in the rulemaking and research areas for calendar years 2011 to 2013. This is not an exhaustive list. Only programs and projects that are priorities or will take significant agency resources are listed. Furthermore, NHTSA's enforcement, data collection, and analysis programs -- vital elements in achieving NHTSA's goals -- have their own set of priorities that are not listed here. Each of these programs supports NHTSA's rulemaking and research priorities by providing necessary safety data, economic analysis, expertise on test procedures, and technical issues gleaned from enforcement experience.

This plan is an internal management tool as well as a means to communicate to the public NHTSA's highest priorities to meet the Nation's motor vehicle safety, energy and environmental challenges. Among them are programs and projects involving rollover crashes, children (both inside as well as just near vehicles), motorcoaches and fuel economy that must satisfy Congressional mandates or Secretarial commitments. Since these are expected to consume a significant portion of the agency's rulemaking resources, they affect the schedules of the agency's other priorities listed in this plan. This plan lists the programs and projects on which the agency anticipates working even though there may not be a rulemaking notice planned to be issued by 2013, and in several cases, the agency does not anticipate that the research will be completed by the end of 2013. Thus, in some cases, the next step would be an agency decision in 2013 or 2014. NHTSA is also currently in the process of developing a longer-term motor vehicle safety strategic plan that would encompass the period 2014 to 2020.

II. BACKGROUND

Motor vehicle crashes killed more than 33,000 people and injured over 2.2 million others in 2009. In addition to the terrible personal toll, these crashes make a huge economic impact on our society with an estimated annual cost of $230 billion,[1] an average of $750 for every person in the United States.

Motor vehicle crashes can be viewed through several different perspectives:

- Vehicle type;
- Crashworthiness;
- Crash avoidance;
- Crash partners;
- Body region injured; and
- Societal costs.

Figure 1 and Table 1 look at fatalities by vehicle type. Passenger vehicles still account for the majority of fatalities (69% or 23,382 fatalities), but also account for about 90 percent of the vehicle miles traveled (VMT).

Figure 1: Fatalities by Vehicle Type, 2009

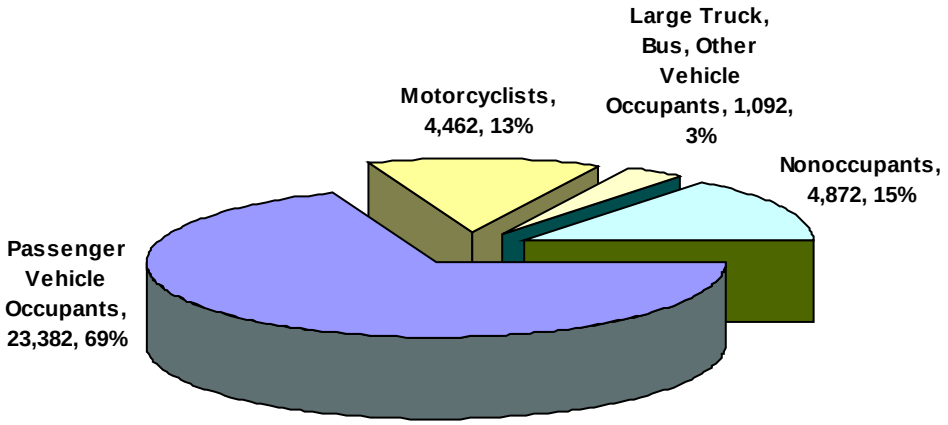


Table 1: 2009 U.S. Fatalities by Vehicle Type

	Fatalities
Total Fatalities	**33,808**
Passenger Vehicle Occupants	23,382
Motorcyclists	4,462
Large Truck, Bus, Other Vehicle Occupants	1,092
Nonoccupants	4,872
Pedestrian	*4,092*
Pedalcyclists	*630*

[1] These estimates are in year 2000 dollars.

From the crashworthiness perspective, NHTSA looks at occupant fatalities or crash types by what part of the vehicle was struck first. Typically for passenger vehicles the initial impact point in fatal crashes would be frontal in 55 percent of fatalities, side impacts in 26 percent, non-collisions (which include rollovers) in 7 percent, rear impacts in 5 percent, and other or unknown locations in 6 percent. However, rollovers can be examined as the initial impact, or as any event in the crash. If rollovers are examined as any event in the crash, almost 9,000 rollovers occur per year in fatal crashes, or about 20 percent of the vehicle total.

From the crash avoidance perspective, NHTSA looks at types of crashes that might be mitigated by new technologies. Based on the General Estimates System (GES) and the Fatality Analysis Reporting System (FARS), four types of crashes total 85 percent of all crashes. These include Run-Off-Road (23%), Rear-End (28%), Lane Change (9%), and Crossing Path (25%). Those same four types of crashes also equal 75 percent of all road fatalities. These include Run-Off-Road (41%), Rear-End (5%), Lane Change (4%), and Crossing Path (14%).

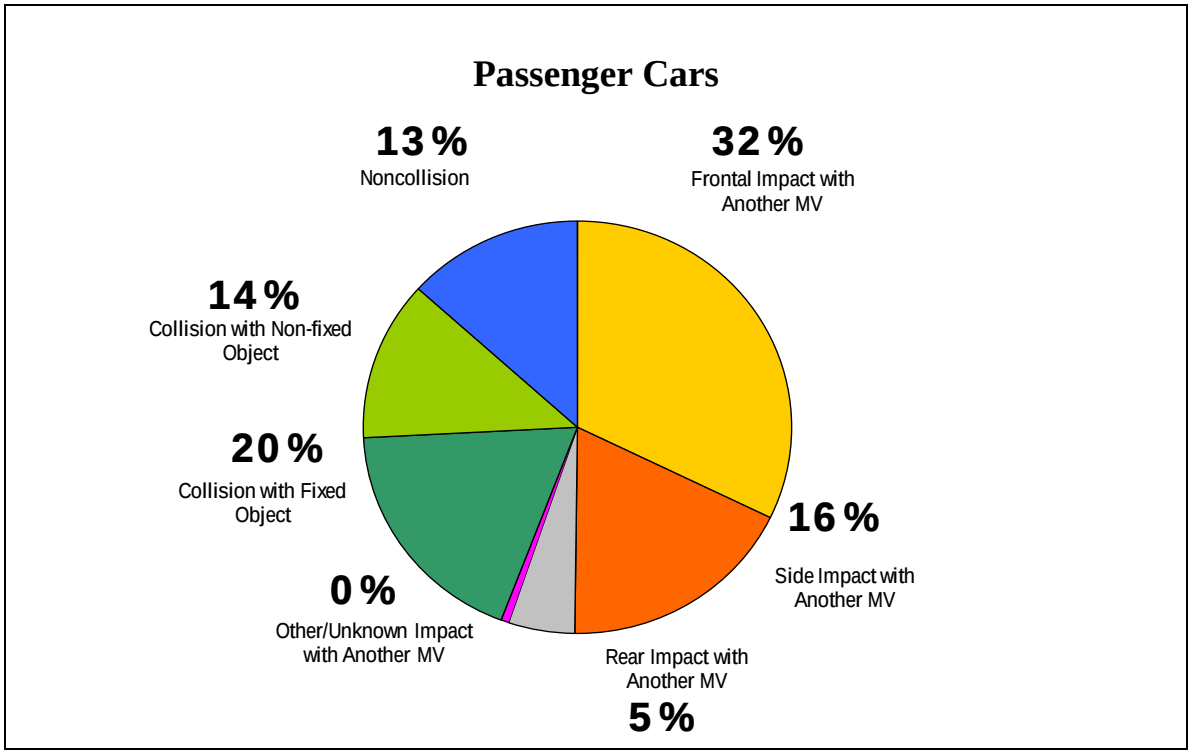
The fourth perspective of looking at fatal motor vehicle crashes is crash type with respect to what the vehicle impacted, if anything, as the most harmful event (see Figure 2). For both passenger cars and light trucks in 2009, frontal crashes with other motor vehicles account for the highest percentage of vehicles involved in fatal crashes, 32 percent and 36 percent respectively. For passenger cars in fatal crashes, side impacts with other motor vehicles account for 16 percent, and collision with fixed objects accounts for 20 percent of vehicles in fatal crashes. In fatal crashes involving light trucks, non-collisions (which include rollovers) remain an issue, accounting for 23 percent of vehicles involved.

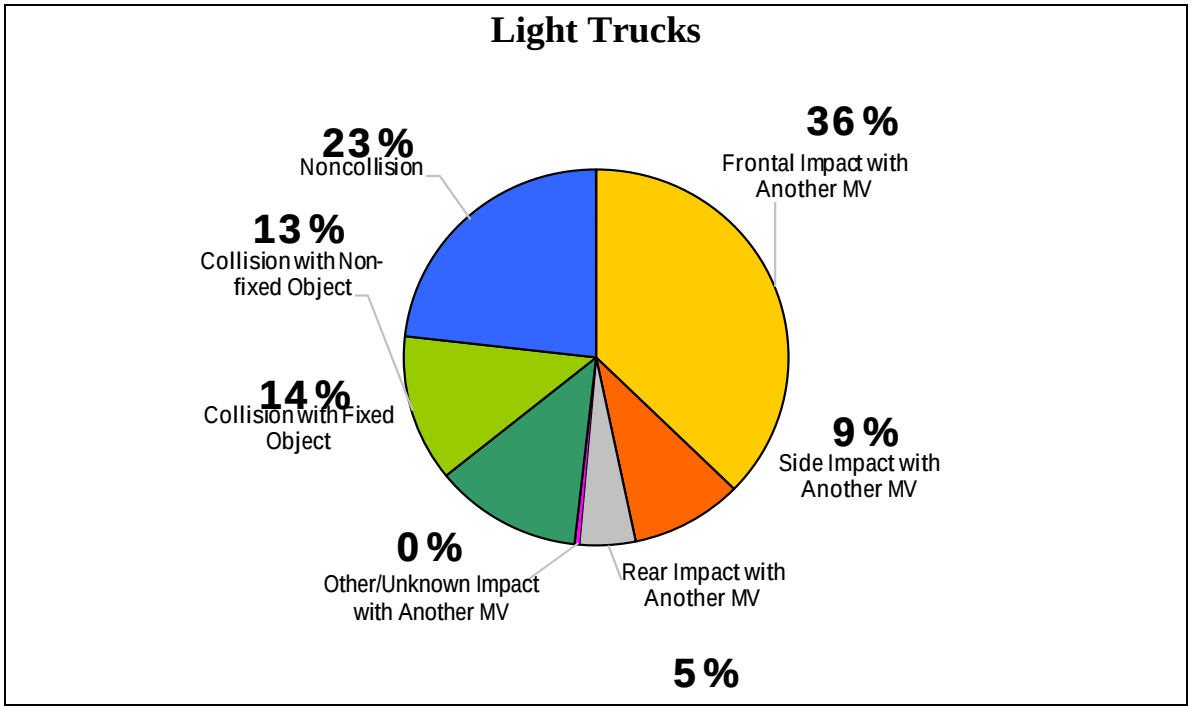
Electronic Stability Control (ESC) is changing the fatal crash picture as more and more new vehicles come equipped with ESC and the on-road fleet of ESC increases. ESC is dramatically reducing the number of run-off-road crashes and rollovers. NHTSA is performing a follow-up evaluation of ESC and is already assuming reductions in relevant target populations when new safety standards are being analyzed.

A fifth and a sixth perspective are those of body region injured and societal costs. Brain injuries and ankle and knee injuries that have long-term disability associated with them have very high societal costs.

NHTSA looks at crashes from all these different perspectives in determining the priorities for the agency. Countermeasures affect different types of crashes in different ways and have to be examined individually and compared to the applicable target population.

Figure 2: Vehicles Involved in Fatal Crashes by Most Harmful Event, 2009





Priority Programs and Projects
Programs and projects that warrant priority consideration fall into the following four categories: (1) large safety benefits; (2) vulnerable populations; (3) high-occupancy vehicles; and, (4) other considerations

Programs and projects that are in Category 1, large benefits, have the potential for large safety benefits based upon factors such as:

- The size of the target population;
- The effectiveness of countermeasures and their potential to save lives and prevent injuries;
- The availability and practicability of these countermeasures; and
- The potential that countermeasures could be developed in the future that could be reasonably effective against a large target population.

It should be noted that some projects require additional research before specific countermeasures can be identified and their benefits can be quantified and therefore the priority designation is based on the agency's judgment of potential safety impacts.

Programs and projects in Category 2, vulnerable populations, affect children, older people, the vision-impaired, or other populations that are considered vulnerable.

Category 3, high-occupancy vehicles, involves buses or motorcoaches and other high-occupancy vehicles.

Category 4, other considerations, includes priority projects that may not be captured in the other categories, but either reduce the impact of motor vehicles on energy security and climate change or address other specific items.

Other Significant Programs and Projects
This plan also includes a comprehensive list of other significant programs and projects on which the agency expects to work in the 2011-2013 timeframe. This area is fluid, because the agency receives petitions that require action, Congress may request that the agency address other areas, the Administration may set additional and/or different priorities, or some event may influence NHTSA's priority agenda. For example, the agency could add projects based on its evaluation of current standards as required by Executive Order 12866 of September 30, 1993 and the new Executive Order 13563 of January 18, 2011, Improving Regulation and Regulatory Review.

Some programs and projects described in the plan require additional research before any rulemaking action can be taken. These programs may not be priorities now because NHTSA is not confident that an effective countermeasure can be found. However, with research on-going, there is the possibility that countermeasures may be discovered that have significant death and injury reduction benefits.

Dates Provided
Programs and projects that are in the research stage are noted with milestones indicating when NHTSA plans to decide whether and how to proceed. In general, this is an agency

decision about whether the program or project is ready and worthy to move from the research stage into the rulemaking stage, whether the program or project requires further research, or whether the potential benefit does not warrant further allocation of resources. This "agency decision" is based on many factors, including estimates of the target population, readiness of technology, potential effectiveness of countermeasures, development of a test protocol, and what information remains unknown. (Dates are given in calendar years, not fiscal years.)

For projects that NHTSA believes will be in the rulemaking stage, the agency has indicated dates when it anticipates issuing a Notice of Proposed Rulemaking (NPRM) or a Final Rule. Those dates are subject to change for a variety of reasons, such as complications encountered in the research phase, or new priority activities interrupt a project's progress, etc.

Program Areas

The projects have been divided into the following program areas:
light-vehicle crash avoidance and mitigation advanced technologies, motorcycles, rollovers, front-impact occupant protection, side-impact occupant protection, rear-seat occupant protection, children, older people, global technical regulations (international harmonization), heavy vehicles, CAFE, and others (a catchall category for projects that don't fit in the listed program areas).

Crash avoidance projects and programs are listed first because their focus is on the first opportunity to save lives and reduce injuries by preventing crashes from occurring in the first place. In addition, they serve to reduce property damage and traffic congestion that are the inevitable result of most crashes.

III. PRIORITY PROJECTS BY PROGRAM AREA

LIGHT-VEHICLE CRASH AVOIDANCE AND MITIGATION - ADVANCED TECHNOLOGIES

Forward Collision Avoidance and Mitigation

Description: Develop performance criteria and objective tests to support the identification of effective advanced safety technologies that provide a warning of an impending forward collision and/or automatically brake/slow the vehicle. NHTSA has developed a forward crash warning test for New Car Assessment Program (NCAP) purposes that will appear in NCAP data on a warning system in model year 2011 vehicles The agency will decide whether to initiate rulemaking to require forward collision warning and/or automatic crash-imminent braking.

Priority Category: Large Benefit

Next Milestone: Agency decision in 2011

Vehicle Communications

Description: Advanced technologies that utilize vehicle-based sensors have been demonstrated to be effective at helping drivers avoid crashes. Vehicle-to-vehicle (V2V) communications can improve the effectiveness and availability of these safety systems. Communications can also enable numerous other safety applications, such as speed management and intersection collision avoidance. Human factors research to examine the interaction between driver, vehicle, and the environment is underway. Vehicle-to-infrastructure (V2I) work is also being considered. The agency will assess the research data, technologies and potential countermeasures and decide on next steps.

Priority Category: Large Benefit

Next Milestone: Agency decision in 2013

Distraction

Description: Driver distraction presents a significant and complex problem in highway safety. The agency published a comprehensive distraction plan in April 2010. This plan frames the issue, discusses safety consequences, presents agency goals, and lays out upcoming research initiatives that include both technological and behavioral approaches. The Strategic Highway Research Plan II (SHRP2) initiative will provide data on distraction.

Priority Category: Large Benefit

Next Milestone: Publish guidelines for visual manual distraction in 2011

Vehicle Based Alcohol Detection (Basic Research)
Description: NHTSA entered into a 5-year cooperative agreement with the Automotive Coalition for Traffic Safety (ACTS) in early 2008 aimed at conducting basic research on alcohol detection technologies to reduce drunk driving that could have widespread deployment and are non-invasive, reliable, accurate, and precise. To achieve this goal the project aims to: (1) assess the current state of alcohol detection devices, and (2) support the development and testing of prototypes and subsequent hardware that may be installed in vehicles. The prototypes would then undergo extensive laboratory and field testing. The agency will assess the research data and technologies and decide on next research steps.

Priority Category: Large Benefit

Next Milestone: Agency decision in 2013

CHILDREN

Child Restraints in Side Impacts
Description: Propose test procedures in FMVSS No. 213 to assess child restraint performance in near-side impacts. Amend Part 572 to add the Q3s dummy, the 3-year-old side impact version of the Q-series of child dummies.

Priority Category: Vulnerable Population

Next Milestone: NPRM in 2012

New Car Assessment Program Vehicle-Child Restraint System (CRS) Fit Program
Description: A consumer service program that provides vehicle-CRS "fit" recommendations on www.safercar.gov by encouraging vehicle manufacturers to voluntarily recommend child restraint models that "fit" in each vehicle.

Priority Category: Vulnerable Population

Next Milestone:
Request for comments: February 25, 2011
Final Notice: 2012

Rear Visibility of Vehicles
Description: A backover crash involving a light vehicle at low speed is tragic, with a small child or elderly person most often being the victim. The agency has conducted research on a variety of rear-visibility technologies to mitigate these types of crashes. NHTSA published a Notice of Proposed Rulemaking (NPRM) on rear visibility on 12/7/10.

Congressional Requirements: The Cameron Gulbransen Kids Transportation Safety Act of 2007

Priority Category: Vulnerable Populations

Next Milestone:
Public Hearing March 23, 2011
Final Rule: December 2011

Power Windows
Description: A rulemaking to consider requiring power windows on motor vehicles to automatically reverse direction when closing when such power windows detect an obstruction to prevent children and others from being trapped, injured, or killed. An NPRM was published September 1, 2009. After further review, the agency has withdrawn this rulemaking action.

Congressional Requirements: The Cameron Gulbransen Kids Transportation Safety Act of 2007

Priority Category: Vulnerable Population

Last Milestone: Withdrawal March 2, 2011

HEAVY VEHICLES[2]
Truck Tractor and Motorcoach Stability Control
Description: Develop test procedures for a standard on stability control systems for truck tractors and motorcoaches. The stability control system is aimed at addressing rollover and loss of control crashes.

Priority Category: Large Benefit

Next Milestone: NPRM: 2011

Medium Truck and Bus Stability Control
Description: Develop test procedures for a standard on stability control for medium trucks, buses, and all other vehicles over 10,000 pounds GVWR not covered in the truck tractors and motorcoaches activity. The agency will decide whether to initiate rulemaking to require such systems on these vehicles.

Priority Category: Large Benefit

[2] "Heavy vehicles" include most vehicles over 10,000 pounds GVWR, including truck tractors, single-unit trucks, buses, motorcoaches, etc.

Next Milestone: Agency decision in 2014

Heavy-Vehicle Forward Collision Avoidance and Mitigation
Description: Develop performance criteria and objective tests to support the identification of effective advanced safety technologies that provide warning of an impending forward collision and/or automatically brake/slow the vehicle. The agency will assess the research data, technologies and potential countermeasures and decide on next steps.

Priority Category: Large Benefit

Next Milestone: Agency decision in 2013

Motorcoach Lap/Shoulder Belts
Description: The NPRM, published August 18, 2010, proposed requiring lap/shoulder belts for motorcoaches. This action supports the DOT Motorcoach Safety Action Plan (HS 811 177) and related NTSB recommendations.

Priority Category: High-Occupancy Vehicle

Next Milestone: Final Rule: 2012

Motorcoach Fire Safety
Description: Consider upgrading the fire standards that apply to motorcoaches. This action supports the DOT Motorcoach Safety Action Plan (HS 811 177) and related NTSB recommendations. The agency will decide whether to initiate rulemaking to upgrade the fire standards that apply to motorcoaches.

Priority Category: High-Occupancy Vehicle

Next Milestone: Agency decision in 2012

Motorcoach Emergency Evacuation
Description: Consider upgrading the motorcoach evacuation standards. This action supports the DOT Motorcoach Safety Action Plan (HS 811 177) and related NTSB recommendations. The agency will decide whether to initiate rulemaking to upgrade the motorcoach evacuation standards

Priority Category: High-Occupancy Vehicle

Next Milestone: Agency decision in 2011

Motorcoach Rollover Structural Integrity
Description: Propose new rollover structural integrity requirements for motorcoaches. This action supports the DOT Motorcoach Safety Action Plan (HS 811 177) and related NTSB recommendations.

Priority Category: High-Occupancy Vehicle

Next Milestone: NPRM: 2011

FUEL ECONOMY

Passenger Car and Light-Truck Fuel Economy Standards (Corporate Average Fuel Economy (CAFE) standards) for Model Years 2017-2025
Description: Fuel economy regulation of light-duty vehicles. The Energy Independence and Security Act (EISA) requires that CAFE standards be prescribed separately for passenger automobiles and non-passenger automobiles for each model year and that combined fleet fuel economy achieves at least 35 mpg by model year 2020. For model years 2021 and beyond, EISA requires that the standards be set at the maximum feasible for each model year. On March 31, 2010, DOT and EPA issued a joint final rule for MY 2012-2016 passenger cars and light trucks. On May 21, 2010, President Obama issued a memorandum directing NHTSA and EPA to conduct a joint rulemaking (NHTSA regulating fuel economy and EPA regulating greenhouse gas emissions) for 2017-2025 model year vehicles, and to issue a Notice of Intent to Issue a Proposed Rule (NOI) by September 30, 2010.

Congressional Requirements: Energy Independence and Security Act (EISA)

Priority Category: Energy Security and Climate Change Benefits

Next Milestone: NPRM: 2011
Final Rule: 2012

Medium/Heavy-Duty Vehicles and Work Truck Fuel Efficiency Rules
Description: Fuel efficiency regulation of medium- and heavy-duty vehicles and work trucks. As required by EISA, the National Academy provided Congress with a report on March 18, 2010. The NHTSA study was issued October 25, 2010. EISA also requires NHTSA to complete a final rule establishing a fuel efficiency program for these vehicles 24 months after the completion of the NHTSA study and to provide at least 4 full model years of regulatory leadtime and 3 full model years of regulatory stability (i.e., the standards must remain in effect for 3 years before they may be amended). On May 21, 2010, President Obama issued a memorandum directing NHTSA and EPA to conduct a joint rulemaking (NHTSA regulating fuel efficiency and EPA regulating greenhouse gas emissions), and to issue a final rule by July 30, 2011. Under consideration are rules for trucks produced in 2014-2018. An NPRM was published 11/30/10.

Congressional Requirements: Energy Independence and Security Act

Priority Category: Energy Security and Climate Change Benefits

Next Milestone: Final Rule: 2011

Fuel Economy/Greenhouse Gas Labeling Rule
Description: EISA mandates NHTSA to develop a labeling system for new automobiles with information on fuel economy, greenhouse gas (GHG) emissions, and other emissions. EPA and NHTSA are combining efforts to create a rating system. An NPRM was published 9/23/10.

Congressional Requirements: Energy Independence and Security Act

Priority Category: Energy Security and Climate Change Benefits

Next Milestone: Final Rule: 2011 (per statute 6/19/11)

Consumer Education Campaign and Alternative Fuel Labeling
Description: EISA mandates NHTSA to develop a fuel economy education program. This entails: 1) Labeling vehicles with a permanent and prominent display of automobiles capable of operating on alternative fuels. 2) Requiring owner's manual for vehicles capable of operating on alternative fuels to include information describing capability and benefits of using alternative fuels (e.g., renewable nature and environmental benefits). 3) Improving consumer understanding of automobile performance with regard to fuel economy and greenhouse gas and other emissions. 4) Informing consumers of the benefits of using alternative fuel in automobiles. 5) Identifying locations of stations with alternative fuel capacity. 6) Establishing a consumer education campaign on fuel savings that would be recognized from the purchase of vehicles equipped with thermal management technologies, including energy efficient air conditioning systems and glass. 7) Requiring a label to be attached to the fuel compartment of vehicles capable of operating on alternative fuels, with the form of alternative fuel stated on the label.

Congressional Requirements: Energy Independence and Security Act

Priority Category: Energy Security and Climate Change Benefits

Next Milestone: NPRM: 2011

Tire Fuel Efficiency Consumer Information Program
Description: EISA mandated that NHTSA develop a national tire fuel efficiency consumer information program "to educate consumers about the effect of tires on automobile fuel efficiency, safety, and durability," and "to assist consumers in making more educated tire purchasing decisions." On March 30, 2010, NHTSA published a final rule to establish the test methods to be used by tire manufacturers for this new program, however it did not specify how the information will be explained and provided to consumers. This information will be provided to consumers at the point of sale and online and will encourage the purchase of better performing replacement tires. NHTSA

is conducting additional consumer testing and trying to resolve important issues raised by public comments on the agency's proposal regarding the program. NHTSA will proceed with the testing and then develop and publish a new proposal for these aspects of the new program.

Congressional Requirements: Energy Independence and Security Act

Priority Category: Energy Security and Environmental Benefits

Next Milestone: NPRM: 2012

OTHER

Alternative Fuel Systems

CNG

Description: Research is required to assess the causes of high pressured cylinder ruptures on aging CNG vehicles which have occurred during refueling and in vehicle-related fires. NHTSA is working with the Department of Energy and the Clean Vehicle Education Foundation to obtain used cylinders of the types that have failed for evaluation. The goal is to improve safety codes and standards to prevent these failure modes in future cylinder designs. The agency will assess the research data and decide on next steps.

Priority Category: Environmental Benefits/Safety Concerns

Next Milestone: Agency decision in 2013

Batteries

Description: NHTSA is researching the potential safety risks posed by battery storage devices through basic research and cooperative agreements with vehicle OEM's and/or battery manufacturers. The agency has initiated a basic study on the potential failure modes for lithium ion battery storage systems, and is developing an RFP for vehicle and battery OEMs to analyze risks and develop technical requirements, appropriate test procedures, and acceptance criteria, considering a broad range of potential lithium ion storage strategies. The agency will also develop a research approach to examine methods to ensure the safety of the complex electronic control systems that are inherent to these battery technologies. With the results of these programs, the agency will assess the research data and decide on next steps.

Priority Category: Environmental Benefits/Safety Concerns

Next Milestone: Agency decision in 2014

IV. OTHER SIGNIFICANT PROJECTS BY PROGRAM AREA

LIGHT-VEHICLE CRASH AVOIDANCE AND MITIGATION - ADVANCED TECHNOLOGIES

Lane Departure Prevention

Description: NHTSA has developed a test for NCAP purposes that will appear in NCAP MY 2011 data on a lane departure warning system. Lane departure prevention or automatic lane-keeping is the next step in development. NHTSA would work toward developing performance criteria and objective tests to support identification of effective advanced safety technologies that keep drivers in their lanes. The agency will assess the research data, technologies and potential countermeasures and decide on next steps.

Next Milestone: Agency decision in 2011

Blind Spot Detection

Description: Examine the potential of sensors and mirrors to detect vehicles in blind spots to assist in lane changing. The agency will assess the research data, technologies and potential countermeasures and decide on next steps.

Next Milestone: Agency decision in 2013

Sound for Hybrid and Electric Vehicles

Description: Develop performance requirements for a sound that allows blind and other pedestrians to detect a nearby electric or hybrid vehicle operating below speeds at which tire noise, wind resistance and other factors provide audible cues.

Congressional Requirements: Pedestrian Safety Enhancement Act of 2010.

Next milestones: NPRM: 2012

Pedestrian Detection

Description: Determine ability of sensor systems to detect a pedestrian and then reduce vehicle speed. The agency will assess the research data, technologies and potential countermeasures and decide on next steps.

Next Milestone: Agency decision in 2013

MOTORCYCLES

Motorcycle Helmet Labeling

Description: Amend labeling of motorcycle helmets to reduce sale and use of novelty helmets. The agency published an NPRM in October 2008.

Next Milestone: Final Rule: 2011

ROLLOVERS

Dynamic Rollover Test Research

Description: The agency is currently undertaking a multi-year project to study the feasibility of a dynamic rollover test to identify occupant injury risk. Issues such as the field-relevance, repeatability and reproducibility and adaptability to incorporate vehicle based countermeasures for such a test are being explored. Additional research is underway to determine an appropriate crash dummy that can predict rollover injury mechanisms as well as evaluate occupant restraint performance in rollover crashes such as pretensioners, integrated seat belts, 4-point belts, and air belts. The agency will assess the research data and decide on next steps.

Next Milestone: Agency decision in 2014

FRONT IMPACT OCCUPANT PROTECTION

Seat Belt Reminder Systems

Description: Seat Belt Reminder Systems tell drivers and front-right passengers they have not buckled up. Many different systems are currently being provided in new cars, but NHTSA does not have a standard requiring them. This project will consider whether to develop performance requirements for seat belt reminder systems to improve seat belt usage. The agency will decide whether to initiate rulemaking to improve seat belt usage.

Next Milestone: Agency decision in 2011

Small Overlap/Oblique Frontal Crashes

Description: Analysis of frontal-crash fatalities for those belted with air bags shows offset and oblique crashes as the second largest group of fatalities after those of extreme severity. NHTSA will develop test procedures for these crashes and examine the potential for reducing fatalities and injuries. The agency will decide whether to initiate rulemaking to address these types of crashes.

Next Milestone: Agency decision in 2011

Next Generation NCAP

Description: In the final decision notice published on July 19, 2008, the agency discussed possible future enhancement efforts (beyond the newly enhanced program) in frontal impact, side impact, rear impact and rollover programs. The agency will consider updating injury criteria in frontal and side impact programs, adjusting the baseline injury risk in all three programs to ensure that vehicles are measured against a meaningful benchmark, revising testing protocols, and providing improved consumer information. The agency also plans to conduct real-world crash data analyses to identify crash modes and additional beneficial advanced technologies for the NCAP program beyond ESC,

LDW, and FCW systems. Where appropriate, the agency will develop relevant advanced technology test procedures.

Next milestone: Multiple decisions from 2012 through 2013

REAR-SEAT OCCUPANT PROTECTION

Low Delta V Restraint Protection

Description: Evaluation of air belt or other technologies suitable for improving thoracic protection to older persons in low-speed crashes. The agency will assess the research data, technologies and potential countermeasures and decide on next steps.

Next Milestone: Agency decision in 2014

SIDE-IMPACT OCCUPANT PROTECTION

Side Impact Dummies – Adults

Description: The agency is participating in an international research effort to determine biofidelity, repeatability and reproducibility and associated injury criteria for the 5th percentile female and 50th percentile male family of WorldSID side-impact dummies. The efforts of this collaboration will help to prepare the dummies for federalization. The agency will decide whether to initiate rulemaking to federalize each or either of the dummies.

Next Milestone: Agency decisions in 2014

CHILDREN

Improve Frontal Protection for Children - Booster Seats

Description: Add into FMVSS No. 213 "Child Restraint Systems" requirements for booster seats for older children, and add a 10-year-old crash test dummy to Part 572. A SNPRM was published 11/24/10.

Next Milestone: Final Rule: 2011

Improve Frontal Protection for Children –- Lower Anchors and Tethers for Children (LATCH)

Description: Address issues related to using LATCH in the center rear seat, tether anchorage locations, weight limit differences between child safety seats and tether anchorages, and labeling of anchorage locations. The agency will decide whether to initiate rulemaking to address LATCH-related issues.

Next Milestone: Agency decision in 2011

Improve Frontal Protection for Children – Test Requirements
Description: Examine how well the test parameters of the FMVSS No. 213 sled test replicate the real world, including crash pulse, test velocity, excursion limits, the test seat, adding a lap/shoulder belt, etc. The agency will assess the research data, existing requirements and potential countermeasures and decide on next steps.

Next Milestone: Agency decision in 2013

OLDER PERSONS

Description: The agency is developing a plan to coordinate intra-agency older driver safety activities in data collection and analysis, vehicle, human factors and behavioral research and program activities to meet agency and departmental goals for older occupants. The results from this work may help to direct regulatory programs aimed at enhanced older occupant protection.

Next Milestone: Develop an agency plan in 2012

GLOBAL TECHNICAL REGULATIONS

Pedestrian
Description: Based on GTR 9, Pedestrian Impact Protection, NHTSA will propose regulations affecting the hood and bumper areas of light vehicles to reduce injuries and fatalities to struck pedestrians. The pedestrian dummy leg, if proposed, would be added to Part 572.

Next Milestone: NPRM: 2011

Head Restraints – Phase 1
Description: Amend FMVSS 202 based on the requirements in GTR 7.

Next Milestone: NPRM: 2011

Head Restraints – Phase 2
Description: Working with the international community under WP.29, the agency will assess several rear-impact dummies, including the BIORID II, determine the most biofidelic one, and assess next steps. The agency will also work with the international group on the development of a dynamic test to assess the potential for whiplash injuries based on the biofidelic responses of the rear-impact dummy. The agency will assess the research data, dummy performance and potential countermeasures and decide on next steps.

Next Milestone: Agency decision in 2013

Global Technical Regulation for Hydrogen-powered Vehicles - Phase 1:
Description: Develop and establish a Global Technical Regulation (GTR) for Hydrogen-powered Vehicles, including fuel-cell vehicles that: (1) attains or exceeds the equivalent levels of safety as those for conventional gasoline fueled vehicles; and, (2) is performance-based and does not restrict future technologies. The GTR will include performance requirements for the whole vehicle as well as specific components and subsystems with focus on the following areas:

- ☐ Performance requirements for fuel containers, pressure relief devices, and fuel lines.
- ☐ Electrical safety and protection against electric shock for in-use and post-crash situations.
- ☐ Performance requirements for sub-systems integration in the vehicle.
- ☐ Maximum allowable hydrogen leakage for in-use and post-crash situations.

Additionally, this work will encompass foundational research that will be necessary to determine future requirements, such as research on performance of high-pressure cylinders in fires, localized flame impingement on cylinders, electrical integrity of high-voltage fuel cell propulsion systems, and developing criteria for post-crash hydrogen leakage.

Next Milestone: Agency Decision in 2012

The agency will assess the research data and decide on next steps.

HEAVY VEHICLES

Heavy-Vehicle Event Data Recorders
Description: Develop performance requirements for heavy-vehicle event data recorders (EDRs). The agency will decide whether to initiate rulemaking to require EDRs in newly manufactured heavy vehicles.

Next Milestone: Agency decision in 2011

Heavy-Vehicle Truck Tires
Description: Upgrade the endurance test in FMVSS 119 “New Pneumatic Tires for Vehicles Other Than Passenger Cars” and add a new high-speed test for heavy-vehicle tires. The NPRM was published 9/29/10. The agency will assess the docket comments and research data and decide on next steps

Next Milestone: Agency decision: 2012

Heavy-Vehicle Speed Limiters
Description: NHTSA was petitioned by the American Trucking Association and Roadsafe America to require the installation of speed limiting devices on heavy trucks. In response, NHTSA has requested public comment on the subject and received

thousands of comments supporting the petitioner's request. Based on the available safety data and the ancillary benefit of reduced fuel consumption, NHTSA published a grant notice on 1/3/11 were we announced our intention to propose a new Federal Motor Vehicle Safety Standard that would require the installation of speed limiting devices on heavy trucks.

Next Milestone: NPRM: 2012

Truck Underride Guards
Description: Analysis of frontal fatalities for those with air bags and wearing seat belts showed truck underride as the third largest group of fatalities behind extreme severity crashes and corner/oblique impacts. Evaluation shows more severe intrusion in offset crashes. The agency will assess research data and decide on the next steps.

Next Milestone: Agency decision in 2012

OTHER
Biomechanics Program
Description: The biomechanics program develops injury assessment methods including advanced anthropometric test device (ATD) research and associated injury criteria. A comprehensive research plan has been developed that will generate injury mechanism data, advanced dummy performance characteristics and assessment of potential countermeasures to reduce injury. Priority programs and timelines are:

Next milestone:	Publish biomechanics plan in 2011
Rotational brain injury criteria	Agency decision 2011
Multi-point chest injury criteria	Agency decision 2012
THOR 50th percentile dummy	Agency decision 2013
THOR 5th percentile dummy	Agency decision 2014
Advanced 3-, 6-, 10-year-old child dummies	Agency decision 2014/2015

Advanced Automatic Collision Notification (AACN)
Description: AACN provides emergency personnel with pre-arrival information (crash severity, GPS coordinates, other occupant and vehicle data) when a severe crash occurs. The agency is working with the Centers for Disease Control (CDC) and EMS providers to examine required data elements and potential benefits and triage capabilities of AACN to transport those seriously injured to a Level 1 trauma hospital. The agency will review research results and decide on next steps.

Next Milestone: Agency decision in 2013

Lighting Standard
Description: Develop a performance-based standard for FMVSS No. 108 "Lamps, Reflective Devices, and Associated Equipment." The agency will decide whether to initiate rulemaking to upgrade FMVSS No. 108 to a performance-based standard.

Next Milestone: Agency decision in 2012

Tire Aging
Description: Require an oven-aging test for tires prior to running them through an endurance test. This could help reduce tread separations that occur in hot weather States. The agency will test tires that meet FMVSS 139 and then decide whether to initiate rulemaking to require an oven-aging test.

Next Milestone: Agency decision in 2012

Light Vehicle EDR Requirement
Description: Expand the availability and future utility of EDR data captured in light vehicles. The agency is developing a rulemaking proposal to require EDRs on light vehicles to which Part 563 applies and an advance proposal for future enhancements to their capabilities and applicability.

Next Milestone: NPRM: 2011
ANPRM: 2011

Update Accelerator Control Standard (FMVSS 124)
Description: The agency is considering several revisions to FMVSS No. 124. First, we are considering revisions to the test procedures for vehicles with electronically controlled throttles as well as electric vehicles and hybrid vehicles. These test procedures are the product of several workshops and public meetings. Second, we are considering adding a new requirement for a brake-throttle override system on light vehicles. Under certain conditions, this would require that the braking system overrides the throttle control in the event of a conflict.

Next Milestone: NPRM: 2011

Update FMVSS No. 114 for Keyless Ignitions
Description: The agency is considering several revisions to address emerging safety concerns regarding keyless ignition controls. The concerns are drivers who are unable to shut down the propulsion system of their vehicle in the event of any on-road emergency; drivers who shut off the propulsion system without putting their vehicle in "park" and walk away from the vehicle, leaving it prone to roll away; and drivers who do put their vehicle in park, but inadvertently leave the propulsion system active increasing the risk of carbon monoxide poisoning in a closed environment.

Next Milestone: NPRM: 2011

Pedal Placement

Description: Examine pedal placement and spacing and examine minimum clearances for foot pedals with respect to other pedals, the vehicle, floor, and any other potential obstructions. The agency will assess the research data and potential countermeasures and decide on next steps.

Next Milestone: Agency decision in 2013

V. CROSSWALK BETWEEN 2009-2011 RULEMAKING AND RESEARCH PRIORITY PLAN OF OCTOBER 2009 AND THIS PLAN

This section provides a comparison to the October 2009 plan, a project by project progress review, and a short description of what priority actions have occurred in the last year.

Comparison to the October 2009 Plan

The following bullets provide a summary comparison of the October 2009 published 2009-2011 plan and this 2011-2013 plan. The plan is a dynamic document that changes as new issues or circumstances arise. These tables were updated in early March 2011. Tables 2 and 3 at the end of this section provide a project by project short description of what has occurred over the past 2 years, the NPRMs and Final Rules issued, the decisions made, and the differences in the plans.

- There were 56 projects in the 2009-2011 plan and there are 53 projects in the 2011-2013 plan. Combining the two plans, there are 67 separate actions.

- Of the 56 projects in the 2009-2011 plan, 25 were priority projects and 31 were other significant projects. Of the 53 projects in the 2011-2013 plan, there are 23 priority projects and 30 other significant projects.

- Of the 25 priority projects in the 2009-2011 plan, the schedule for 1 was moved forward, 3 were completed with final rules, 1 had a final rule issued but more work is continuing, 7 project deadlines were met (typically issuing an NPRM or making an agency decision), progress has been made on an additional 4 projects and they are still on schedule, 1 was combined with the hydrogen GTR project in the other significant projects, and 8 projects are behind the original schedule.

- There were 3 new priority projects added for the 2011-2013 plan.

- Of the 31 “other significant projects” in the 2009-2011 plan, 1 was moved forward, 1 was completed with a final rule, 5 project deadlines were met by making an agency decision, progress has been made on 7 projects and they are still on schedule, 12 are behind schedule, 4 have been delayed beyond 2013, and 1 was dropped from the plan because we decided it did not reach a priority level of being an “other significant project”.

- 8 new “other significant projects” were added for the 2011-2013 plan.

In summary, in the last 2 years (2009-2010) the agency completed more projects and made more progress on its priority list (17 of 25 priority projects were completed or are on schedule), than on the “other significant projects” list (progress made on 14 of 31 projects).

Several abbreviations are used for Tables 2 and 3, to manage the width of the tables.

These are:
AD - Next agency decision
FR – Final Rule
Guide – Guidelines for visual manual distraction
HV – Heavy Vehicle
NI – Not included in the plan
Notice – A non-rulemaking notice, concerning issues like NCAP, consumer education, or a notice of intent.
NPRM – Notice of Proposed Rulemaking
RFC – Request for Comment
TBD – To be determined

Under the "Progress?" column, the abbreviations are:
+ Completed the action or completed the first milestone on time
+/- Completed an action but are behind the original schedule for the next action
- Behind original schedule
AS Ahead of Schedule
Delay Likely not to have staff available to work on this until after 2013
Drop Taken off the priority list
OS On Schedule, progress has been made and we remain on schedule

Table 2
Priority Projects
Comparison between the 2009-2011 Plan (October 2009) and this Plan for 2011-2013

Priority Projects	2009-2011 Plan	2011-2013 Plan	Progress?	Discussion of Changes
Forward Collision Warning	AD 2011	AD 2011	OS	
Lane Departure Prevention	AD 2011	AD 2011	OS	Moved out of Priority Projects to Other Significant Projects
Vehicle Communications	AD 2013	AD 2013	OS	
Distraction	Plan 2010	Guide 2011	+	Plan published April 2010
Alcohol Initiative	AD 2012	AD 2013	-	Need time to analyze results of research
Ejection Mitigation	NPRM 2009 FR 2011	NI	+ FR	Final Rule published 1/19/2011
Child Restraints in Side Impact	AD 2010	NPRM 2012	+	Agency decision was made in 2010 to move forward with an NPRM
NCAP Fit Program	Notice 2010	RFC 2011 Notice 2012	-	Decided to send out a Request for Comments
Rear Visibility	NPRM 2009	Hearing 2011 FR 2012	+/-	NPRM published 12/7/2010
Power Windows	NPRM 2009 FR 2010	Withdrawal 2011	+/-	NPRM published 9/1/2009; Final Decision date changed via Letter to Congress; Decision to Withdraw NPRM
Brake Transmission Shift Interlock	NPRM 2009 FR 2010	NI	+ FR	Completed, NPRM published 8/25/2009 FR published 3/31/2010
HV Truck Tractor Stability Control	NPRM 2010	NPRM 2011	-	Additional coordination required
Medium Truck and Bus Stability Control	NI	AD 2014	Add	Added to Plan
HV Forward Collision Avoidance	AD 2011	AD 2013	-	Resources reallocated to medium truck and bus stability control
Motorcoach Lap/Shoulder Belts	NPRM 2009 FR 2010	FR 2012	+/-	NPRM published 8/18/10, required additional coordination
Motorcoach Fire Safety	AD 2011	AD 2012	-	Staffing constraints forces delay
Motorcoach Evacuation	AD 2010	AD 2011	-	Staffing constraints forces delay
Motorcoach Rollover Structural Integrity	AD 2009	NPRM 2011	+	Previously named Motorcoach Roof Strength; Decision to proceed with rulemaking
Fuel Economy MY 2012-16 light vehicle CAFE	FR 2010	NI	+ FR	Completed, FR issued 3/31/2010
Fuel Economy MY 2017-25 light vehicle CAFE	NI	NPRM 2011 FR 2012	Add OS	Added to Plan; NOI published 10/13/10, SNOI published 12/8/10
Fuel Economy Medium/Heavy Truck	AD 2011	FR 2011	AS	NPRM published 11/30/10
CAFE/Greenhouse Gas	NPRM	FR 2011	+	NPRM published 9/23/10

Labeling Rule	2010			
Fuel Economy Consumer Education	NPRM 2010	NPRM 2011	-	Additional coordination required
Fuel Tank Labeling Program	NPRM 2010		OS	Combined with consumer education
Consumer Tire Rating Program	NPRM 2009	NPRM 2012	+ FR /-	NPRM published 6/22/2009 FR published 3/30/2010, but more work to do on label
CNG	NI	AD 2013	Add	Added to Plan
Batteries	AD 2011	AD 2014	-	Research ongoing

Table 3
Other Significant Projects
Comparison between the 2009-2011 Plan (October 2009) and this Plan for 2011-2013

Other Significant Projects	2009-2011 Plan	2011-2013 Plan	Progress?	Discussion of Changes
Blind Spot Detection	AD 2013	AD 2013	OS	
Sound for Electric Vehicles	AD 2010	NPRM 2012	+	New Act, have made significant progress
Pedestrian Detection	NI	AD 2013	Add	Added to plan
Motorcycle Helmet Labeling	FR 2010	FR 2011	-	More complicated than originally thought
Motorcycle Braking - ABS	AD 2010	NI	+	Decision to evaluate with more data later
Restraint Effectiveness in Rollovers	AD 2010	NI	+	Decision made to add into Dynamic Rollover project
Dynamic Rollover	NI	AD 2014	Add	Added to plan
Seat Belt Reminder System	AD 2011	AD 2011	OS	
Oblique/Low Offset Frontal	AD 2011	AD 2011	OS	Agency decided in 2010 to continue research
Compatibility	AD 2010	NI	+	Decision to remove from plan
Pre-Collision Air Bag/Safety System Activation	AD 2010	NI	Delayed	Staffing constraints forces delay
Next Generation NCAP	AD 2010-12	AD 2012-13	-	Staffing constraints forces delay
Monroney Label NCAP	NPRM 2009	NI	Drop	Taken off plan, not a priority FR planned for 2011
Rear Seat Low Delta V	AD 2012	AD 2014	-	Staffing constraints forces delay
Side Impact Dummies – Adults	AD 2011	AD 2014	-	International research effort
Children - Booster Seats	SNPRM 2009	FR 2011	-	SNPRM published 11/24/10. Staffing constraints forces delay
Children – LATCH	AD 2011	AD 2011	OS	
Children – 213 Frontal Test	AD 2010	AD 2013	-	Staffing constraints forces delay

Requirements				
Older Occupant Protection	AD 2010	Plan 2012	+	Agency decision to develop a plan
Pedestrian GTR	NPRM 2010	NPRM 2011	-	Staffing constraints forces delay
Motorcycle Brakes – GTR	FR 2010	NI	Delayed	Staffing constraints forces delay
Glazing – GTR	NPRM 2009	NI	Delayed	Staffing constraints forces delay
Head Restraints – Phase1 GTR	NPRM 2010	NPRM 2011	-	Staffing constraints forces delay
Head Restraints – Phase 2	AD 2013	AD 2013	OS	
Hydrogen GTR	NI	AD 2012	Add	Added to Plan
HV Stopping Distance	FR 2009	NI	+ FR	Completed – FR published 7/27/09
HV Event Data Recorder	AD 2010	AD 2011	-	Staffing constraints forces delay
HV Truck Tires	NPRM 2009	AD 2012	-	NPRM published 9/29/10, Staffing constraints forces delay
HV Speed Limiters	NI	NPRM 2012	Add	Granted petition 1/3/11 and added to plan
HV Truck Underride Guards	NI	AD 2012	Add	Added to Plan, Evaluation shows problem in offset crashes
Biomechanics Program	AD 2011-15	Plan 2011	OS	Publish biomechanics plan first
Advanced Automatic Collision Notification	AD 2010	AD 2013	-	Requires further study
Lighting Standard	AD 2012	AD 2012	OS	
Rear Turn Signals	AD 2009	NI	Delayed	Staffing constraints forces delay
Tire Aging	AD 2010	AD 2012	-	Assess tires that meet new FMVSS 139
Light Vehicle EDR	AD 2012	NPRM 2011 and ANPRM 2011	AS	Moved up and considering in two parts, issuing an NPRM for one and ANPRM for other
Brake Override and update FMVSS 124	NI	NPRM 2011	Add	Added to plan
Keyless Ignition Systems	NI	NPRM 2011	Add	Added to plan
Pedal Placement	NI	AD 2013	Add	Added to plan