



U.S. Department of
Transportation

BUDGET ESTIMATES

FISCAL YEAR 2017

NATIONAL HIGHWAY
TRAFFIC SAFETY
ADMINISTRATION

SUBMITTED TO
THE COMMITTEES ON APPROPRIATIONS

This Page Left Intentionally Blank

Table of Contents

STATEMENT OF THE ADMINISTRATOR.....	v
Overview	1
FY 2016 Requested FTE.....	7
FY 2017 Requested FTE.....	8
Section 2: Budget Summary Tables	10
Comparative Statement of New Budget Authority (Exhibit II-1)	10
Budgetary Resources by Appropriation (Exhibit II-2)	11
Budgetary Resources by Strategic Goals (Exhibit II-3 and II-3a).....	12
Budget Authority (Exhibit II-4).....	13
Budget Outlays (Exhibit II-5)	15
Analysis of Change Table (Appropriations, Obligation Limitation, and Exempt Obligations (Exhibit II-6)	16
Full-time Equivalent Employment (FTE) (Exhibit II-8)	22
Full-time Permanent Position (FTP) (Exhibit II-9)	23
Section 3: Budget Request by Account	24
Explanation of Major Initiatives	24
Explanation of Major Funding for FY 2017	25
Justification for Additional FTEs.....	28
Appropriation Language – Vehicle Safety	34
Appropriation Language – Highway Safety	35
Appropriation Language – Grants	36
Vehicle Safety Program and Financing Schedule.....	38
Vehicle Safety Object Class Schedule.....	39
Vehicle Safety – Summary by Program Activity (Exhibit III-1 and 1a)	40
Veicle Safety Program and Performance Statement.....	42
Highway Safety Program and Financing Schedule	94
Highway Safety Object Class Schedule.....	95
Highway Safety Research and Development – Summary by Program Activity (Exhibit III-1 and III-1a)	96
Highway Safety Research and Development Program and Performance Statement.....	98
Highway Traffic Safety Grants Program and Financing Schedule.....	168

Highway Traffic Safety Grants Object Class Schedule	169
Highway Traffic Safety Grants – Summary by Program Activity Table (Exhibit III-1 and III-1a)	170
Highway Traffic Safety Grants Program and Performance Statement.....	172
21st Century Clean Transportation Plan Investments.....	202
Ten-Year Appropriation History.....	206
Section 4: Research, Development and Technology.....	212
RD&T Request (Summary) (Exhibit IV-I)	212
Attachments.....	214
NHTSA Hiring Priorities –FTEs & FTPs	214
Congressional Reporting/Follow-Up to Action Plans	215

This Page Left Intentionally Blank

STATEMENT OF THE ADMINISTRATOR



Safety continues to be the top priority—for the Department of Transportation (DOT), for the National Highway Traffic Safety Administration (NHTSA), and for the people we serve. Over the past decade, NHTSA's dedicated staff worked with our many partners to reduce traffic fatalities by nearly 25 percent. During my tenure, we have worked to strengthen what works, fix what doesn't, and ensure that we're using every tool at our disposal to achieve our mission.

Despite decades of steady progress, we still have much work ahead of us. In 2014, 32,675 Americans died on our roadways and over 2.3 million people were injured. That's a mind-boggling 90 deaths every day and more than 260 people injured every hour. Those deaths and injuries were preventable. Those Americans and their families deserve our best efforts to prevent additional deaths and injuries. Regrettably, the statistics for the first half of 2015 reflect an increase of fatalities. This highlights the need for the continued important work performed by NHTSA.

NHTSA's Fiscal Year 2017 budget request supports the Agency's full spectrum of vehicle and behavioral safety areas. Vehicles on our Nation's roadways are the safest in the world, and we remain dedicated to making them safer every day, and to identifying and removing unsafe vehicles from the road. Continuing advances in automotive technology and vehicle innovation have created new possibilities and offer enormous safety potential.

But the data reminds us that three persistent facts remain in traffic safety—

- Fifty percent of passenger vehicle occupants killed in crashes are unbelted;
- Thirty percent of highway fatalities involve an impaired driver; and
- More than ninety percent of crashes involve an element of human error.

This is why NHTSA will continue to strengthen core safety programs. The Agency has well-established and successful campaigns with household names, such as "Click It or Ticket," "Drive

Sober or Get Pulled Over,” and more recently, “U Text. U Drive. U Pay.” These campaigns are changing attitudes, changing how Americans drive for the better, and saving lives.

Safety is a shared responsibility. Federal and State governments, community leaders, automobile and parts manufacturers, researchers, families and individuals all play a vital role in reducing fatalities and injuries on our roadways. The Agency provides grants to states and local governments that are vital to the success of our behavioral and data programs. These partnerships are to enforce laws against drunk and distracted driving, to provide technical assistance on graduated licensing and other safety issues, and to support a wide range of activities that save lives.

Our FY 2017 Budget Request is a key step in pursuit of our goals. The request totals \$1,181 billion and includes \$250 million for Vehicle Safety, \$145.9 million for Behavioral Safety, \$585.3 million for State Grants and High Visibility Enforcement Support and \$200 million for Autonomous Vehicle Development as part of the 21st Century Transportation Plan Investments initiatives. This budget is designed to increase safety across all modes of surface transportation, keep our economy moving forward and enhance our efforts to ensure automakers quickly find and fix safety defects. And while we can never put a price on a life lost, this budget seeks to address the fact that, in 2010 alone, motor vehicle crashes imposed \$836 billion in economic cost and societal harm on our Nation and citizens.

Our FY 2017 includes significant increases from the FY 2016 request for further improvements to our vehicle defect programs, our behavioral research efforts, and our work to modernize our data systems. This request also includes an increase from the FY 2016 enacted funding level for many of our other programs. These increases will help ensure that NHTSA has the people and funding it needs to carry out our mission, and that we can make the best possible use of the resources available by investing in innovation.

My vision as we move into FY 2017 is to develop a more robust and proactive defects recall program, expand on the success we have had to influence behavior via our media campaigns, and continue our research on safety initiatives. This budget provides us the resources to move forward on the safety programs to provide safer drivers, safer cars, and safer roads.

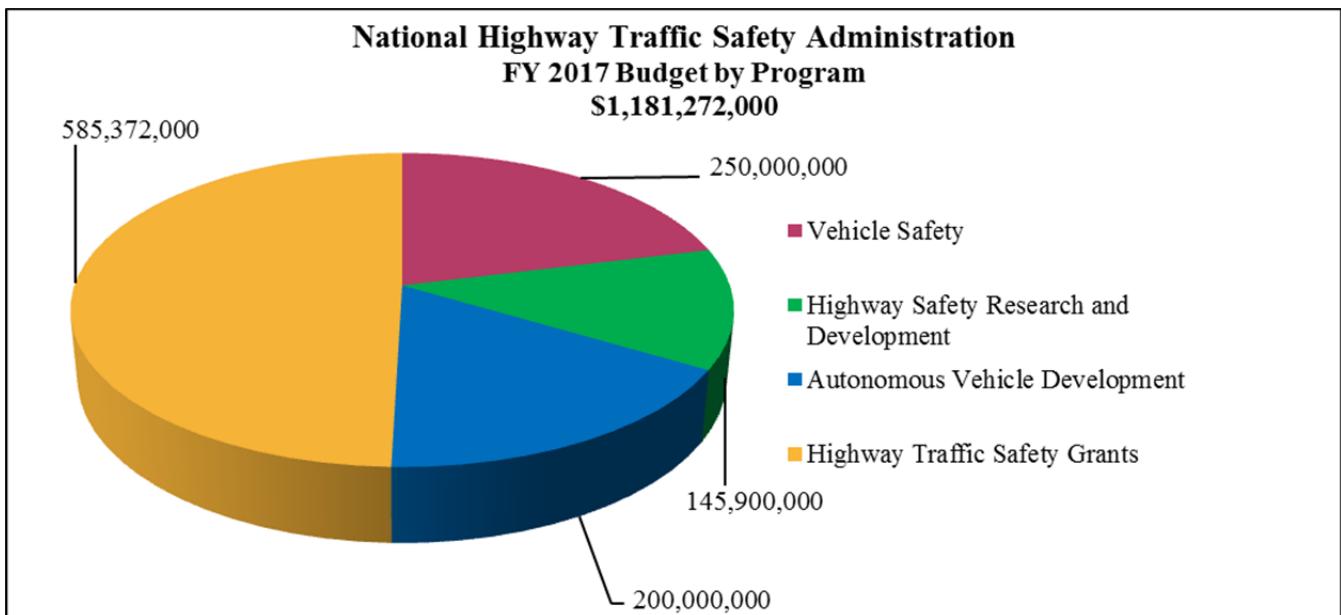
Over the last year, I have heard from our many partners, and we’ve made headway in identifying new ways to approach highway and vehicle safety. The Fiscal Year 2017 budget request will support our efforts and collaborate with all of our partners to achieve the greatest reduction in roadway crashes, injuries and fatalities in the most effective way possible with the budget that we have requested.

Mark R. Rosekind, PhD

This Page Left Intentionally Blank

National Highway Traffic Safety Administration
FY 2017 Budget Request

Overview



In 2014 the Nation lost 32,675 people in crashes on roadways. Additionally, the preliminary information for the first six months in 2015 reflects an increasing trend in fatalities. In the midst of this data, we are continuing to see a prolific increase of technology and working to ensure these technologies add to the safety of the public.

During 2014, we witnessed the largest vehicle recalls in the agency's history. These two overarching events have impacted the attitude and awareness of American drivers. Regrettably, we still have a lot of work to positively influence the driving behaviors as we move into FY 2017. NHTSA requests \$1.181 billion for FY 2017 to effectively continue its mission of ensuring safer drivers, safer cars, and safer roads.

Our FY 2017 budget request will allow NHTSA to influence the behaviors of drivers in order to reduce injuries and fatalities on our roadways, expand our efforts in rulemaking, enforcement, and vehicle research, as well as to develop and implement data-driven, workable, and self-sustaining highway safety programs. NHTSA also provides grants to States and local communities, and supports research, demonstration projects, and countermeasure programs designed to prevent motor vehicle crashes and reduce their associated economic costs. The hard work and dedication of NHTSA's staff and the programs they administer directly translate to the prevention of senseless motor vehicle crashes, and lives saved on our Nation's roadways.

Priority Areas

Vehicle Safety

NHTSA expects to build on the efforts initiated during FY 2015 and continuing into FY 2016 and FY 2017. Safe vehicles are a vital component of preventing roadway fatalities, and NHTSA has a long history of ensuring that the vehicles on our Nation's roadways are the safest they can be to protect occupants. The Vehicle Safety program includes vehicle research, enforcement, rulemaking, and data collection and analysis. We are seeking two significant budget increases in this area to enhance our ability to address important safety issues: (1) increased funding for the New Car Assessment Program (NCAP). The requested funding will enable us to revolutionize the NCAP program by incorporating new, world-leading, human-like crash test dummies; new, more stringent injury criteria, new tests; and update our current overall 5-star rating system to include crashworthiness, crash avoidance, and pedestrian ratings. The second important area that we will focus on is the Vehicle Electronics and Emerging Technologies program. It is aimed at conducting research to support agency decisions in the areas of electronics reliability, cybersecurity, vehicle control systems and emerging technologies that utilize sensors to achieve higher levels of automation. In FY 2017, the Vehicle Electronics and Emerging Technologies program will build upon research completed in FY 2016 and initiate new projects to close identified gaps in support of agency decisions on electronics reliability and cybersecurity. These activities aim to enhance the safety and security of automotive electronic control systems.

The requested funding will also support vehicle safety research into the reliability and security of complex safety-critical electronic control systems; studying the cybersecurity of vehicles; and assessing new and emerging technologies that can help drivers avoid crashes. Requested funding will also support developing enhanced computer modeling tools and expertise to quickly and efficiently identify changes in the vehicle fleet that could have safety ramifications, particularly in areas related to alternative fuel vehicles; advanced battery control modeling and analysis, assessment of crash notification technology and emergency response; and supporting the agency's other cross-cutting initiatives.

NHTSA will continue to expand the capabilities of the corporate information factory (CIF) that the agency has been implementing since FY 2014. The CIF will continue to integrate multiple databases and facilitate data mining and analysis across those various databases, including external data sources, for quicker identification of potential safety defects. These enhancements will help ensure that NHTSA detects unsafe vehicles and equipment earlier in the identification of the underlying safety problems and make sure that possible clues to such problems that may reside in different databases are found. The CIF will also provide new data analysis capability for other NHTSA staff and stakeholders.

NHTSA expects to strengthen its research and evaluation on vehicle automation. Our top priority with regard to vehicle automation remains to ensure these vehicles and their occupants are safe. Our research covers all levels of automation, including advances like automatic emergency braking systems that may save lives in the near term; while the recommendations to States help them better oversee self-driving vehicle development, which holds promising long-term safety benefits.

Vehicle-to-vehicle (V2V) communication technology continues to be an important initiative for NHTSA. This technology has the capacity to improve safety by allowing vehicles to "talk" to each other and ultimately avoid many crashes altogether by exchanging basic safety data, such as speed and position, ten times per second. By helping drivers avoid crashes, this technology will play a key role in improving the way people get where they need to go while ensuring that the U.S. remains the leader in the global automotive industry. NHTSA research indicates that safety applications using V2V technology can address a large majority of crashes involving two or more motor vehicles. NHTSA sees a convergence of the innovation streams of on-board active safety, vehicle-to-vehicle communications and vehicle automation, and we are preparing for the promise as well as the challenges of this technological confluence.

With alternative fuel systems of varying types and new sophisticated electronic control systems emerging in the market, NHTSA plans to expand our ability and capacity to test, monitor and trouble-shoot new technologies as expeditiously and efficiently as possible. With many new crash avoidance technologies under development, expanding our capability to test human interactions with these systems is also imperative. To address this, we propose in FY 2017 to expand technical capabilities to provide enhanced capability of advanced testing of emergent technologies.

In support of the Secretary's strategic objective of Environmental Sustainability, we will support ongoing rulemakings under the Corporate Average Fuel Economy (CAFÉ) program. The FY 2017 budget request will support work in the following areas of fuel economy regulation required by the Energy Independence and Security Act of 2007 (EISA):

- Conduct analytical work to support the development of model years 2022-2025 standards, including the development of Draft and Final Environmental Impact Statements.
- Initiate work by the National Academy of Sciences to develop a report evaluating medium-duty and heavy-duty truck fuel efficiency standards.
- Initiate work by the National Academy of Sciences to develop a report evaluating passenger car, light-duty truck and medium-duty passenger vehicle fuel economy standards.
- Continue operations and maintenance of the CAFÉ Management Suite including hosting, software and contract labor costs.

Highway Safety

While strengthening NHTSA's long-term focus on impaired driving and occupant protection, the FY 2017 budget includes a number of new approaches to address emerging safety concerns and to use resources more efficiently. Educating roadway users and community leaders to adopt safe behaviors, in conjunction with strong laws and effective law enforcement, have helped to reduce fatalities to the lowest levels in reported history.

With the requested funds, we will bolster the participation of law enforcement officers, prosecutors and judges in priority agency behavioral programs. Active participation of criminal justice professionals is crucial to the success of the agency's key programs, especially occupant protection and impaired driving initiatives, speed management, and driving while distracted by texting or cell phone usage. The agency will continue to mobilize and enable a network of peer outreach law enforcement liaisons (LELs) to advance NHTSA programs and provide ongoing technical assistance to law enforcement officials at the State and local level, and support the Data-Driven Approaches to Crime and Traffic Safety (DDACTS) program conducted in partnership with the Department of Justice. Of the amounts requested, NHTSA will use up to \$5 million for the development and placement of broadcast media to support the enforcement of State distracted driving laws. We are also requesting an additional \$1.6 million as a direct draw-down in the 402 grant program to support the Heatstroke media campaign. The heatstroke initiative will remind drivers to *Look Before You Lock* to save children from being left unattended in a parked car.

Also, with the requested funds, we will contribute to the National Drug Control Strategy promulgated by the Office of National Drug Control Policy. NHTSA's contributions will be in implementing a streamlined training program to assist law enforcement officers in recognizing drug-impaired drivers, developing new educational materials for prosecutors and judges, and expanding data collection on drugged driving cases. Additionally, we are requesting funding for our annual *Click It or Ticket* (CIOT) mobilization in an effort to increase seatbelt use, and for our Labor Day and December anti-impaired driving campaign. NHTSA plans significant new program and research initiatives in the areas of drug - impaired driving, fatigue and emergency medical services.

Drug - Impaired Driving

More comprehensive research in the area of drug – impaired driving is especially urgent as additional States consider legalization of marijuana use. NHTSA requests additional resources in FY 2017 to conduct research to improve the understanding of the magnitude of the drug – impaired driving problem so that States can appropriately scale and target countermeasure activities. In FY 2017, NHTSA will complete a study on marijuana-impaired driving as required by the FAST Act. In this study, NHTSA will examine the

effect of key State policy differences on the prevalence of marijuana use by drivers and will conduct a descriptive analysis of State policies to control the use of marijuana.

Driver Fatigue

NHTSA requests new resources for FY 2017 to build upon the work accomplished in FY 2016 to identify the extent of the drowsy driving problem and to translate ongoing and planned research results into behavioral countermeasures. National surveys show that most drivers do not recognize the risks of driving while drowsy. In order to change attitudes and behavior, motorists need increased awareness of associated crash risks and education on prevention techniques

NHTSA will supplement existing data sources by working with law enforcement to develop a reporting protocol and data collection mechanism related to drowsy driving. In addition, NHTSA will investigate the potential of state policies to change attitudes about drowsy driving through an in-depth analysis of states that have either enacted legislation to address drowsy driving or have undertaken initiatives to reduce this problem.

Emergency Medical Services

In FY 2017, NHTSA requests resources to build upon the FY 2016 EMS Compass Performance Measurement Project and to expand technical assistance to states for meeting performance benchmarks consistent with MAP-21 safety performance measures - *specifically the number of serious injuries in traffic crashes*. Serious injuries are difficult to measure and report consistently, but have great potential for improving understanding of traffic risks and assessing progress in traffic safety.

In FY 2017 we are requesting \$39 million in Highway Safety Research funds. This is the same as the FY 2016 enacted funding level. This amount does not include the \$500 thousand in Vehicle Safety Research funds to supplement Crash Data Collection. Funding at this level will allow us to maintain our core programs and continue implementation of the new modernized data collection systems. Key initiatives include: continuing to provide additional technical resources for traffic records systems improvements through “Go-Teams” to provide an in-depth analysis of a particular system chosen by the State; Provide the FastFARS data to publish quarterly and annual projections of motor vehicle traffic fatalities; operate the Crash Report Sampling System (CRSS), State Data Systems (SDS), Crash Investigation Sampling System (CISS); conduct on-site and remote crash investigations to identify unintended consequences of vehicle-related crashes or incidences, support potential recalls and other agency enforcement efforts and conduct countermeasures research; and increase the use of Electronic Data Transfer (EDT) to improve data timeliness and quality.

Traffic Safety Grants

The Fixing America's Surface Transportation (FAST) Act continues the grant programs established under Public Law 112-141, MAP-21. This includes funding for Section 402, Highway Safety Programs, Section 2009, High Visibility Enforcement, and Section 405, National Priority Safety Programs, which consolidated several behavioral safety grants and created new grants for Distracted Driving and State Graduated Driver Licensing. The FAST Act also created a new grant program, Non-motorized Safety, to reduce pedestrian and bicycle fatalities and injuries and also revived and revised the Section 1906 racial profiling program. The Section 2009 High Visibility Enforcement program will continue to provide funding for NHTSA's annual media campaigns.

States are vital partners in improving safety on our Nation's roadways. Implementation of the Highway Traffic Safety Grant program across the Nation has resulted in States using evidence – based data to identify traffic safety problems and selecting and implementing proven countermeasure strategies to address them. We request funding for the Section 402 State and Community Highway Safety and Section 405 National Priority Safety formula grants to help support the implementation of a comprehensive statewide traffic safety enforcement program to ensure continued traffic enforcement in resource challenged states and communities, and to pool funding across jurisdictions for joint highway safety programs.

We also request administrative expenses, including funds for modernization of grants data information systems improvements. Additionally, we request the authorized drawdown from the Section 402 grant program to establish important initiatives to improve the ability of States to manage traffic safety. Continuing the recently-developed cooperative research and evaluation program of highway safety countermeasures would allow further development of research and demonstration programs and projects with the States to respond to State-identified emerging issues.

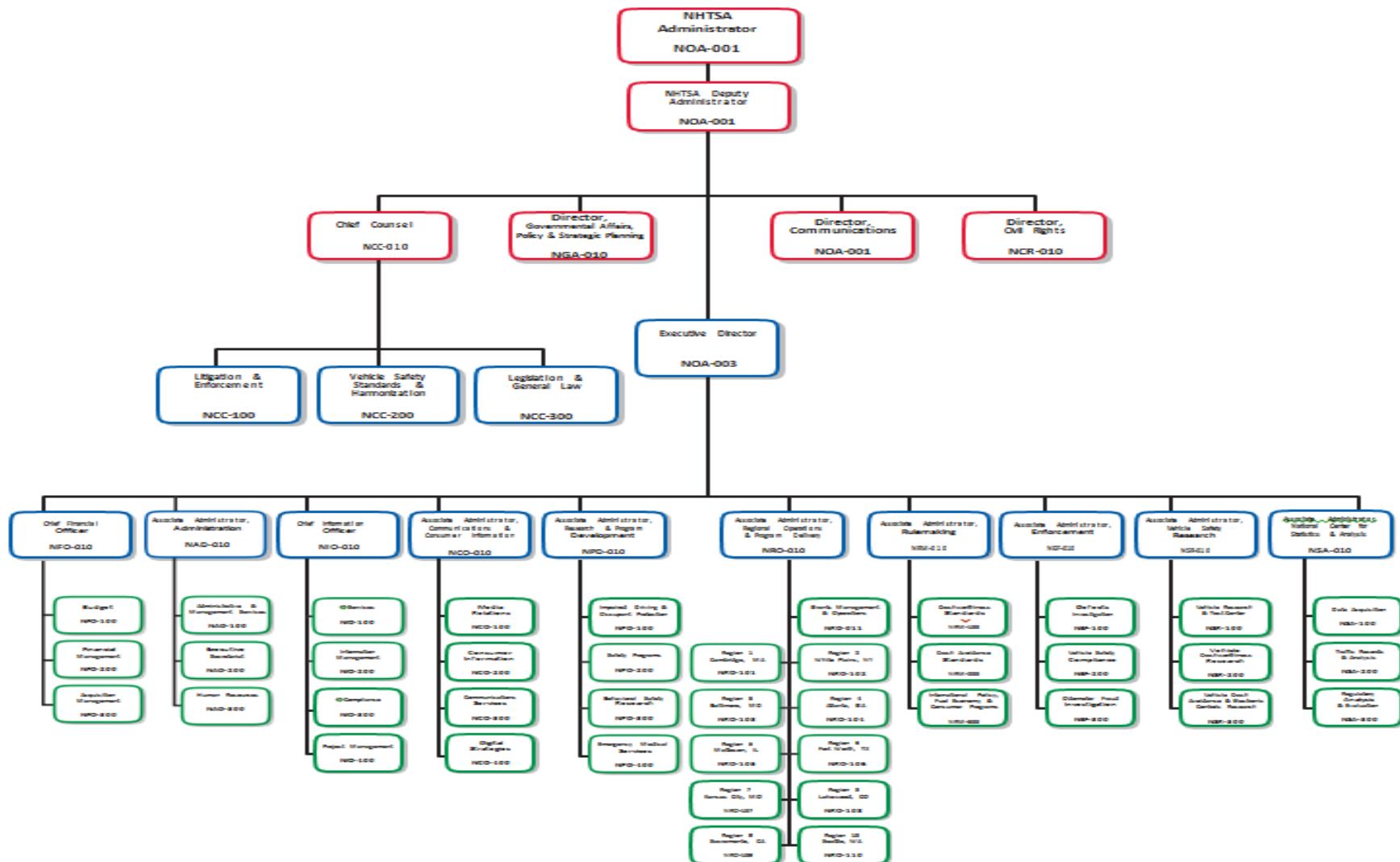
CONCLUSION

In conclusion, NHTSA's FY 2017 budget request of \$1.181 billion will continue to support the agency's on-going and new safety programs and activities, while ensuring that we keep pace with emerging roadway safety trends, such as driver distraction, vehicle electronics, and fuel economy. Funding at the requested level will allow the agency to continue to work toward its important mission to save lives and reduce injuries on our Nation's roadways.

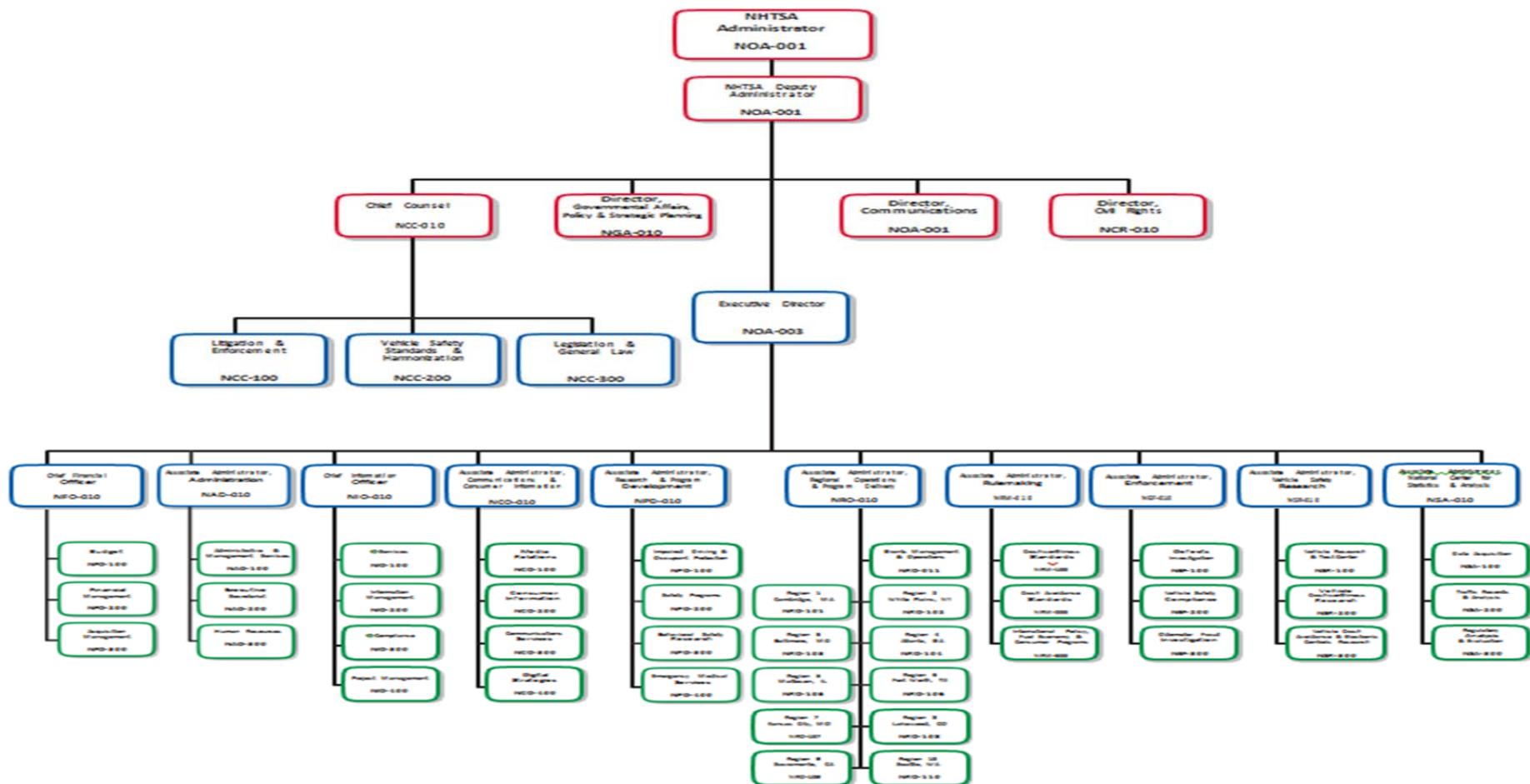
CONGRESSIONAL REPORTING/FOLLOW-UP TO ACTION PLANS

NHTSA will report to Congress on several directives as shown in the attachment.

FY 2016 REQUESTED FTE
National Highway Traffic Safety Administration
(Total 639 FTE/676 FTP)



FY 2017 REQUESTED FTE
National Highway Traffic Safety Administration
(Total 704 FTE/ 749 FTP)



This Page Left Intentionally Blank

EXHIBIT II - 1
FY 2017 COMPARATIVE STATEMENT OF NEW BUDGET AUTHORITY
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
(\$000)

<u>ACCOUNT NAME</u>	<u>FY 2015 ACTUAL</u>	<u>FY 2016 ENACTED</u>	<u>FY 2017 REQUEST</u>
Operations and Research	\$ 268,500	\$ 295,700	\$ 395,900
Vehicle Safety Research (GF)	130,000	152,800	-
Rescission/cancellation of unobligated balances	-	-	250,000
Vehicle Safety Research (TF)	-	-	145,900
Highway Safety Research & Development (TF)	138,500	142,900	145,900
Rescission/cancellation of unobligated balances	—————	—————	—————
Autonomous Vehicle Development (TF)	-	-	200,000
	—————	—————	—————
Highway Traffic Safety Grants (TF)	561,500	573,332	585,372
Highway Traffic Safety Grants (TF)	561,500	573,332	585,372
Rescission/cancellation of unobligated balances	—————	—————	—————
TOTAL	\$ 830,000	\$ 869,032	\$ 1,181,272

Note: Totals may not add due to rounding.

Note: In FY 2017, the Administration proposes to move a number of current General Fund programs into the Transportation Trust Fund. Vehicle Safety Research is funded from the Trust Fund in 2017 and re-based from the General Fund in 2016.

EXHIBIT II-2
FY 2017 TOTAL BUDGETARY RESOURCES BY APPROPRIATION ACCOUNT
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations
(\$000)

ACCOUNT NAME	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST
VEHICLE SAFETY RESEARCH (GF)	\$ 130,000	\$ 152,800	\$ -
Rulemaking	20,010	23,510	-
Enforcement	18,980	18,494	-
Research and Analysis	29,000	35,100	-
Program Unallocated	-	-	-
Administrative Expenses	62,010	75,696	-
Administrative Expenses Unallocated	-	-	-
VEHICLE SAFETY RESEARCH (TF)	\$ -	\$ -	\$ 250,000
Safety Performance (Rulemaking)	-	-	43,323
Safety Assurance (Enforcement)	-	-	38,350
Research and Analysis	-	-	86,350
Administrative Expenses	-	-	81,977
Administrative Expenses Unallocated	-	-	-
HIGHWAY SAFETY RESEARCH AND DEVELOPMENT (TF)	\$ 138,500	\$ 142,900	\$ 145,900
Highway Safety Programs	46,659	52,443	60,043
Research and Analysis - NCSA	33,645	39,093	39,093
Administrative Expenses	58,196	51,364	46,764
Administrative Expenses Unallocated	-	-	-
TOTAL OPERATIONS AND RESEARCH	\$ 268,500	\$ 295,700	\$ 395,900
AUTOMONOUS VEHICLE DEVELOPMENT (TF)			\$ 200,000
Autonomous Vehicle Development			200,000
HIGHWAY TRAFFIC SAFETY GRANTS			
Section 402 Formula Grants	235,000	243,500	252,300
Section 2009 High Visibility Enforcement Program	29,000	29,300	29,500
Section 405 National Priority Safety Programs	272,000	274,700	277,500
Section 405 Occupant Protection Grants	43,520	43,952	36,075
Section 405 State Traffic Safety Information System Grants	39,440	39,832	40,238
Section 405 Impaired Driving Countermeasures Grants	142,800	144,218	145,688
Section 405 Distracted Driving Grants	23,120	23,350	23,588
Section 405 Motorcyclist Safety Grants	4,080	4,121	4,163
Section 405 State Graduated Driver Licensing Laws	13,600	13,735	13,875
Sec 405- Non-Motorized Safety Ped/Bikes			13,875
Section 403h In-Vehicle Alcohol Detection Device Research	5,440	5,494	-
Administrative Expenses	25,500	25,832	26,072
Administrative Expenses Unallocated	-	-	-
TOTAL HIGHWAY TRAFFIC SAFETY GRANTS (TF)	\$ 561,500	\$ 573,332	\$ 585,372
TOTAL	\$ 830,000	\$ 869,032	\$ 1,181,272

Note: Totals may not add due to rounding.

Note: FY 2017 Target is only at the appropriation level. The variance from 2016 is only at the appropriation level and not at the individual program/activity level.

Note: In FY 2017, the Administration proposes to move a number of current General Fund programs into the Transportation Trust Fund. Vehicle Safety Research is funded from the Trust Fund in 2017 and re-based from the General Fund in 2016.

Budgetary Resources by Strategic Goals (Exhibit II-3 and II-3a)

EXHIBIT II-3
FY 2017 BUDGET REQUEST BY STRATEGIC GOAL AND PERFORMANCE GOAL
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations
(\$000)

STRATEGIC & PERFORMANCE GOALS BY PERFORMANCE MEASURE	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST
1. SAFETY STRATEGIC GOAL			
A. Roadway Safety			
a. Reduce the Roadway Fatality Rate per 100 million VMT	609,552	641,243	959,396
b. Reduce passenger vehicle occupant fatalities per 100 million VMT	53,802	53,842	45,965
c. Reduce motorcycle rider fatalities per 100,000 motorcycle registrations	6,253	6,418	6,460
d. Reduce non-occupant (pedestrian and bicycle) fatalities per 100 million VMT	2,173	2,298	2,298
e. Reduce highway fatalities involving large trucks and buses per 100 million VMT	1,900	1,900	1,900
B. Administrative Expenses	136,133	141,402	142,459
C. Other	-	-	-
Total - Safety Strategic Goal	809,813	847,103	1,158,478
2. STATE OF GOOD REPAIR	-	-	-
Total - State of Good Repair	-	-	-
3. ECONOMIC COMPETITIVENESS	-	-	-
Total - Economic Competitiveness	-	-	-
4. LIVABLE COMMUNITIES			
A. Safety Countermeasures	1,304	1,379	1,379
B. Administrative Expenses	582	514	468
Total - Livable Communities	1,886	1,893	1,847
4. ENVIRONMENTAL SUSTAINABILITY			
A. Fuel Economy Programs	7,900	7,650	7,650
B. Climate Control	10	10	10
C. Alternative Fuel Vehicle Safety	1,400	1,400	1,400
D. Administrative Expenses	8,991	10,976	11,887
Total - Environmental Sustainability	18,301	20,036	20,947
GRAND TOTAL	830,000	869,032	1,181,272
Note: Totals may not add due to rounding.			

EXHIBIT II-3(a)

**FY 2017 BUDGET REQUEST BY DOT OUTCOMES
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION**

(\$000)

DOT Outcome	Program	FY 2017 Request
SAFETY		\$1,158,480
Reduction in injuries and fatalities	Rulemaking	\$35,663
	Enforcement	\$38,350
	Vehicle Safety Research and Analysis	\$84,450
	Highway Safety	\$58,665
	National Center for Statistics and Analysis (Highway Safety Research and Analysis)	\$39,593
	Autonomous Vehicle Development	\$200,000
	Highway Traffic Safety Grants	\$559,300
Other	Administrative Expenses	\$142,459
STATE OF GOOD REPAIR		\$0
Increased percentage of highways in good condition		
Increased percentage of bridges in good and fair condition		
Increased percentage of transit assets in good condition		
Increased percentage of airport runways in good or fair		
Other		
ECONOMIC COMPETITIVENESS		\$0
Maximize economic returns		
Competitive transportation system		
Advance U.S. transportation interests abroad		
Expanded opportunities for businesses		
Other		
LIVABLE COMMUNITIES		\$1,847
Convenient and affordable choices	Highway Safety	\$1,379
Improved public transit experience		
Improved networks that accommodate pedestrians and bicycles		
Improved access for special needs populations		
Other	Administrative Expenses	\$468
ENVIRONMENTAL SUSTAINABILITY		\$20,947
Reduced carbon/emissions and dependence on fossil fuels and improved energy efficiency	Rulemaking	\$7,660
Reduced pollution impacts on ecosystems:	Vehicle Safety Research and Analysis	\$1,400
Environmentally sustainable practices and materials in transportation		
Environmentally sustainable practices in DOT services and facilities		
Other	Administrative Expenses	\$11,887
ORGANIZATIONAL EXCELLENCE (Non-Add)		\$8,000
TOTAL		\$1,181,272

EXHIBIT II-4
FY 2017 BUDGET AUTHORITY
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
(\$000)

<u>ACCOUNT NAME</u>	<u>Mandatory/ Discretionary</u>	<u>FY 2015 ACTUAL</u>	<u>FY 2016 ENACTED</u>	<u>FY 2017 REQUEST</u>
Vehicle Safety Research (Rebased GF)	D			\$ -
Vehicle Safety Research (TF)	M	130,000	\$ 152,800	\$ 250,000
Autonomous Vehicle Development (TF)	M			\$ 200,000
Autonomous Vehicle Development (TF)				\$ 200,000
Highway Safety Research & Develop. (TF)	M	\$ 138,500	\$ 142,900	\$ 145,900
Highway Safety Research & Develop. (TF)		\$ 138,500	\$ 142,900	\$ 145,900
Highway Traffic Safety Grants (TF)	M	\$ 561,500	\$ 573,332	\$ 585,372
Highway Traffic Safety Grants (TF)		561,500	573,332	585,372
Rescission/cancellation of unobligated balances	M			
TOTAL:		\$ 830,000	\$ 869,032	\$ 1,181,272
	M	830,000	869,032	1,181,272
	D	-	-	-

Note: In FY 2017, the Administration proposes to move a number of current General Fund programs into the Transportation Trust Fund. Vehicle Safety Research is funded from the Trust Fund in 2017 and re-based from the General Fund in 2016.

EXHIBIT II-5

FY 2017 OUTLAYS
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
(\$000)

	M/D	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST
Vehicle Safety Research (TF)	M	-	-	205,000
Vehicle Safety Research (GF) (Rebased)	D	127,000	138,000	-
Highway Safety Research & Development (TF)	D	108,000	134,000	148,000
Highway Traffic Safety Grants (TF)	D	655,000	749,000	720,000
Next Generation 911 Implementation Grants (TF)	M	-	(115,000)	69,000
Autonomous Vehicle Development	M	-	-	60,000
TOTAL OUTLAYS		890,000	906,000	1,202,000
Mandatory Outlays (M)		\$ -	\$ (115,000)	\$ 334,000
Discretionary Outlays (D)		\$ 890,000	\$ 1,021,000	\$ 868,000

Note: In FY 2017, the Administration proposes to move a number of current General Fund programs into the Transportation Trust Fund. Vehicle Safety Research is funded from the Trust Fund in 2017 and re-based from the General Fund in 2016.

Note: In FY 2016 NHTSA is projected to receive \$115M in funds to support Next Generation E911

Analysis of Change Table (Appropriations, Obligation Limitation, and Exempt Obligations (Exhibit II-6)

EXHIBIT II-6

**SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION**

**Appropriations, Obligation Limitations, and Exempt Obligations
(\$000)**

SUMMARY TABLE

Program Category	Baseline Changes										
	FY 2015 ACTUAL	FY 2016 ENACTED	Annualization of 2016 Pay Raises	Annualization of 2016 FTE	FY 2017 Pay Raises	GSA Rent	WCF Increase / Decrease	Inflation / Deflation	FY 2017 Baseline Estimate	Program Increases / Decreases	FY 2017 Request
PERSONNEL RESOURCES (FTE)											
Direct Program FTE	610	639	-	-	-	-	-	-	639	65	704
Reimbursable FTE	2	-	-	-	-	-	-	-	-	-	-
Total Direct and Indirect FTE	612	639	-	-	-	-	-	-	639	65	704
Salaries and Benefits (11 & 12)*	88,418	98,905	337	1,563	1,009	-	-	-	101,814	5,514	107,328
Travel (21)	1,421	1,421	-	-	-	-	-	-	1,421	-	1,421
Transportation of Things (22)	70	70	-	-	-	-	-	-	70	-	70
GSA Rent (23)	8,186	8,186	-	-	-	-	-	-	8,186	-	8,186
Rent, Communications & Utilities (23)	4,056	11,057	-	-	-	-	-	-	11,057	(6,500)	4,557
Printing (24)	357	357	-	-	-	-	-	-	357	-	357
Other Services (25)	27,795	26,780	-	-	-	-	-	-	26,780	-	26,780
Supplies (26)	14,380	5,091	-	-	-	-	-	-	5,091	-	5,091
Equipment (31)	1,025	1,025	-	-	-	-	-	-	1,025	-	1,025
Unallocated	-	-	-	-	-	-	-	-	-	-	-
Subtotal, Administrative	145,706	152,892	337	1,563	1,009	-	-	-	155,801	(986)	154,815
VEHICLE SAFETY AND HIGHWAY SAFETY PROGRAMS											
	148,294	168,640					-		168,640	298,519	467,159
Unallocated	-	-	-	-	-	-	-	-	-	-	-
VS - Rulemaking	20,010	23,510	-	-	-	-	-	-	23,510	19,813	43,323
VS - Enforcement	18,980	18,494	-	-	-	-	-	-	18,494	19,856	38,350
VS - Research and Analysis	29,000	35,100	-	-	-	-	-	-	35,100	51,250	86,350
AV - Autonomous Vehicle Development	-	-	-	-	-	-	-	-	-	200,000	200,000
HS - Highway Safety Programs	46,659	52,443	-	-	-	-	-	-	52,443	7,600	60,043
HS - Research and Analysis	33,645	39,093	-	-	-	-	-	-	39,093	-	39,093
HIGHWAY TRAFFIC SAFETY GRANTS											
	536,000	547,500	-	-	-	-	-	-	547,500	11,800	559,300
Sec. 402 Formula Grants	235,000	243,500	-	-	-	-	-	-	243,500	8,800	252,300
Sec. 2009 High Visibility Enforcement	29,000	29,300	-	-	-	-	-	-	29,300	200	29,500
Section 405 National Priority Safety Programs	272,000	274,700	-	-	-	-	-	-	274,700	2,800	277,500
Section 405 Occupant Protection Grants	43,520	43,952	-	-	-	-	-	-	43,952	(7,877)	36,075
Section 405 State Traffic Safety Information System Grants	39,440	39,832	-	-	-	-	-	-	39,832	406	40,238
Section 405 Impaired Driving Countermeasures Grants	142,800	144,218	-	-	-	-	-	-	144,218	1,470	145,688
Section 405 Distracted Driving Grants	23,120	23,350	-	-	-	-	-	-	23,350	238	23,588
Section 405 Motorcyclist Safety Grants	4,080	4,121	-	-	-	-	-	-	4,121	42	4,163
Section 405 State Graduated Driver Licensing Laws	13,600	13,735	-	-	-	-	-	-	13,735	140	13,875
Sec 405- Non-Motorized Safety Ped/Bikes	-	-	-	-	-	-	-	-	-	13,875	13,875
Section 403h In-Vehicle Alcohol Detection Device Research **	5,440	5,494	-	-	-	-	-	-	5,494	(5,494)	-
Subtotal, Programs	684,294	716,140	-	-	-	-	-	-	716,140	310,319	1,026,459
GRAND TOTAL	830,000	869,032	337	1,563	1,009	-	-	-	871,941	309,333	1,181,272

Note: Totals may not add due to rounding.

Note: In FY 2017, the Administration proposes to move a number of current General Fund programs into the Transportation Trust Fund. Vehicle Safety Research is funded from the Trust Fund in 2017 and re-based from the General Fund in 2016.

*The payraise for Salaries and Benefits is 1.0 percent for FY 2016 and FY 2017 (prorated at .01 for 1/4 of FY 2015 and .01 for 3/4 of FY 2016).

**The Administration may use up to 2% of Section 405 for In-Vehicle Alcohol Detection Device Research.

EXHIBIT II - 6
SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations
(\$000)

OPERATIONS AND RESEARCH
VEHICLE SAFETY RESEARCH

Baseline Changes

Program Category	Baseline Changes								Program Increases / Decreases	FY 2017 Request
	FY 2015 ACTUAL	FY 2016 ENACTED	Annualization of 2016 Pay Raises	Annualization of 2016 FTE	FY 2017 Pay Raises	GSA Rent	WCF Increase / Decrease	Inflation / Deflation	FY 2017 Baseline Estimate	
PERSONNEL RESOURCES (FTE)										
Direct Program FTE	341	370	-	-	-	-	-	-	370	55
Reimbursable FTE	-	-	-	-	-	-	-	-	-	-
Total Direct and Indirect FTE	341	370	-	-	-	-	-	-	370	55
Salaries and Benefits (11 & 12)*	50,495	58,216	196	-	587	-	-	-	58,999	5,499
Travel (21)	538	538	-	-	-	-	-	-	538	-
Transportation of Things (22)	70	70	-	-	-	-	-	-	70	-
GSA Rent (23)	1,522	1,522	-	-	-	-	-	-	1,522	-
Rent, Communications & Utilities (23)	2,987	3,487	-	-	-	-	-	-	3,487	-
Printing (24)	357	357	-	-	-	-	-	-	357	-
Other Services (25)	5,017	7,470	-	-	-	-	-	-	7,470	-
Supplies (26)	-	3,011	-	-	-	-	-	-	3,011	-
Equipment (31)	1,025	1,025	-	-	-	-	-	-	1,025	-
Unallocated	-	-	-	-	-	-	-	-	-	-
Subtotal, Administrative	62,010	75,696	196	-	587	-	-	-	76,479	5,499
PROGRAMS										
Unallocated	-	-	-	-	-	-	-	-	-	-
Rulemaking	20,010	23,510	-	-	-	-	-	-	23,510	19,813
Enforcement	18,980	18,494	-	-	-	-	-	-	18,494	19,856
Research and Analysis	29,000	35,100	-	-	-	-	-	-	35,100	51,250
Subtotal, Programs	67,990	77,104	-	-	-	-	-	-	77,104	90,919
TOTAL, VEHICLE SAFETY RESEARCH	130,000	152,800	196	-	587	-	-	-	153,583	96,418
										250,000

Note: Totals may not add due to rounding.

Note: In FY 2017, the Administration proposes to move a number of current General Fund programs into the Transportation Trust Fund. Vehicle Safety Research is funded from the Trust Fund in 2017 and re-based from the General Fund in 2016.

*The payraise for Salaries and Benefits is 1.0 percent for FY 2016 and 1.3 percent in FY 2017 (prorated at .01 for 1/4 of FY 2016 and .03 for 3/4 of FY 2017).

EXHIBIT II - 6
SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations
($\$000$)
OPERATIONS AND RESEARCH
HIGHWAY SAFETY RESEARCH & DEVELOPMENT

Program Category	Baseline Changes									Program Increases / Decreases	FY 2017 Request	
	FY 2015 ACTUAL	FY 2016 ENACTED	Annualization of 2016 Pay Raises	Annualization of 2016 FTE	FY 2017 Pay Raises	GSA Rent	WCF Increase / Decrease	Inflation / Deflation	FY 2017 Baseline Estimate			
<u>PERSONNEL RESOURCES (FTE)</u>												
Direct Program FTE	178	178	-				-	-	178	6	184	
Reimbursable FTE	2	-					-	-	-	-	-	
Total Direct and Indirect FTE	180	178	-				-	-	178	6	184	
Salaries and Benefits (11 & 12)*	25,871	27,531	94	1,251	282	-	-	-	29,158	273	29,431	
Travel (21)	506	506	-	-	-	-	-	-	506	-	506	
Transportation of Things (22)	-	-	-	-	-	-	-	-	-	-	-	
GSA Rent (23)	6,236	6,236	-	-	-	-	-	-	6,236	-	6,236	
Rent, Communications & Utilities (23)	1,069	7,570	-	-	-	-	-	-	7,570	(6,500)	1,070	
Printing (24)	-	-	-	-	-	-	-	-	-	-	-	
Other Services (25)	10,134	7,441	-	-	-	-	-	-	7,441	-	7,441	
Supplies (26)	14,380	2,080	-	-	-	-	-	-	2,080	-	2,080	
Equipment (31)	-	-	-	-	-	-	-	-	-	-	-	
Unallocated	-	-	-	-	-	-	-	-	-	-	-	
Subtotal, Administrative	58,196	51,364	94	1,251	282	-	-	-	52,991	(6,227)	46,764	
<u>PROGRAMS</u>												
Unallocated	-	-	-	-	-	-	-	-	-	-	-	
Highway Safety Programs	46,659	52,443	-	-	-	-	-	-	52,443	7,600	60,043	
Research and Analysis - NCSA	33,645	39,093	-	-	-	-	-	-	39,093	-	39,093	
Subtotal, Programs	80,304	91,536	-	-	-	-	-	-	91,536	7,600	99,136	
TOTAL, HIGHWAY SAFETY RESEARCH & DEVELOPMENT												
	138,500	142,900	94	1,251	282	-	-	-	144,527	1,373	145,900	

Note: Totals may not add due to rounding.

Note: Reimbursable FTE's are in addition to NHTSA's Affordable FTE's.

*The payraise for Salaries and Benefits is 1.0 percent for FY 2016 and 1.3 percent in FY 2017 (prorated at .01 for 1/4 of FY 2016 and .03 for 3/4 of FY 2017).

EXHIBIT II - 6
SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Appropriations, Obligation Limitations, and Exempt Obligations
(\$000)

HIGHWAY TRAFFIC SAFETY GRANTS

Baseline Changes

Program Category	FY 2015 ACTUAL	FY 2016 ENACTED	Annualization of 2016 Pay Raises	Annualization of 2016 FTE	FY 2017 Pay Raises	GSA Rent	WCF Increase / Decrease	Inflation / Deflation	FY 2017 Baseline Estimate	Program Increases / Decreases	FY 2017 Request
<u>PERSONNEL RESOURCES (FTE)</u>											
Direct Program FTE	91	91	-						91	4	95
Reimbursable FTE	-	-							-	-	-
Total Direct and Indirect FTE	91	91	-						91	4	95
Salaries and Benefits (11 & 12)*	12,052	13,158	47	311	140	-	-	-	13,656	(258)	13,398
Travel (21)	377	377	-	-	-	-	-	-	377	-	377
Transportation of Things (22)	-	-	-	-	-	-	-	-	-	-	-
GSA Rent (23)	428	428	-	-	-	-	-	-	428	-	428
Rent, Communications & Utilities (23)	-	-	-	-	-	-	-	-	-	-	-
Printing (24)	-	-	-	-	-	-	-	-	-	-	-
Other Services (25)	12,644	11,869	-	-	-	-	-	-	11,869	-	11,869
Supplies (26)	-	-	-	-	-	-	-	-	-	-	-
Equipment (31)	-	-	-	-	-	-	-	-	-	-	-
Unallocated	-	-	-	-	-	-	-	-	-	-	-
Subtotal, Administrative	25,500	25,832	47	311	140	-	-	-	26,330	(258)	26,072
<u>PROGRAMS</u>											
Unallocated	-	-	-	-	-	-	-	-	-	-	-
Sec. 402 Formula Grants	235,000	243,500	-	-	-	-	-	-	243,500	8,800	252,300
Sec. 2009 High Visibility Enforcement	29,000	29,300	-	-	-	-	-	-	29,300	200	29,500
Section 405 National Priority Safety Programs	272,000	274,700	-	-	-	-	-	-	274,700	2,800	277,500
Section 405 Occupant Protection Grants	43,520	43,952	-	-	-	-	-	-	43,952	(7,877)	36,075
Section 405 State Traffic Safety Information System Grants	39,440	39,832	-	-	-	-	-	-	39,832	406	40,238
Section 405 Impaired Driving Countermeasures Grants	142,800	144,218	-	-	-	-	-	-	144,218	1,470	145,688
Section 405 Distracted Driving Grants	23,120	23,350	-	-	-	-	-	-	23,350	238	23,588
Section 405 Motorcyclist Safety Grants	4,080	4,121	-	-	-	-	-	-	4,121	42	4,163
Section 405 State Graduated Driver Licensing Laws	13,600	13,735	-	-	-	-	-	-	13,735	140	13,875
Sec 405- Non-Motorized Safety Ped/Bikes	-	-	-	-	-	-	-	-	-	13,875	13,875
Section 403h In-Vehicle Alcohol Detection Device Research**	5,440	5,494	-	-	-	-	-	-	5,494	(5,494)	-
Subtotal, Programs	536,000	547,500	-	-	-	-	-	-	547,500	11,800	559,300
TOTAL, HIGHWAY TRAFFIC SAFETY GRANTS	561,500	573,332	47	311	140	-	-	-	573,830	11,542	585,372

Note: Totals may not add due to rounding.

*The payraise for Salaries and Benefits is 1.0 percent for FY 2016 and 1.3 percent in FY 2017 (prorated at .01 for 1/4 of FY 2016 and .03 for 3/4 of FY 2017).

**The Administration may use up to 2% of Section 405 for In-Vehicle Alcohol Detection Device Research.

EXHIBIT II - 6
SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Appropriations, Obligation Limitations, and Exempt Obligations
(\$000)

AUTOMONOUS VEHICLE DEVELOPMENT

Baseline Changes

Program Category	FY 2015 ACTUAL	FY 2016 ENACTED	Annualization of 2016 Pay Raises	Annualization of 2016 FTE	FY 2017 Pay Raises	GSA Rent	WCF Increase / Decrease	Inflation / Deflation	FY 2017 Baseline Estimate	Program Increases / Decreases	FY 2017 Request
<u>PERSONNEL RESOURCES (FTE)</u>											
Direct Program FTE											
Reimbursable FTE											
Total Direct and Indirect FTE											
Salaries and Benefits (11 & 12)*											
Travel (21)											
Transportation of Things (22)											
GSA Rent (23)											
Rent, Communications & Utilities (23)											
Printing (24)											
Other Services (25)											
Supplies (26)											
Equipment (31)											
Unallocated											
Subtotal, Administrative	-	-	-	-	-	-	-	-	-	-	-
<u>PROGRAMS</u>											
Unallocated									-	-	-
Autonomous Vehicle Development									200,000	200,000	-
Subtotal, Programs									-	200,000	200,000
TOTAL, AUTOMONOUS VEHICLE DEVELOPMENT									-	200,000	200,000

Note: Totals may not add due to rounding.

EXHIBIT II-7

**WORKING CAPITAL FUND
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
(\$000)**

	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	FY 2017 - FY 2016 CHANGE
DIRECT:	\$ 16,870	\$ 13,041	\$ 13,041	\$ -
SUBTOTAL	16,870	13,041	13,041	-
TOTAL	\$ 16,870	\$ 13,041	\$ 13,041	\$ -

EXHIBIT II-8

**NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
PERSONNEL RESOURCE - SUMMARY
TOTAL FULL-TIME EQUIVALENTS**

	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST
<u>DIRECT FUNDED BY APPROPRIATION</u>			
<u>Operations and Research</u>	480	548	609
Vehicle Safety Research (GF)	311	370	
Vehicle Safety Research (TF)	-	-	425
Highway Safety Research and Development (TF)	169	178	184
Highway Traffic Safety Grants (TF)	78	91	95
SUBTOTAL, DIRECT FUNDED	558	639	704
<u>REIMBURSEMENTS/ALLOCATIONS/OTHER*</u>			
Highway Safety Research and Development (TF)	1	-	-
SUBTOTAL, REIMBURSE./ALLOC./OTH.	1	-	-
TOTAL FTEs	559	639	704

Note: In FY 2017, the Administration proposes to move a number of current General Fund programs into the Transportation Trust Fund. Vehicle Safety Research is funded from the Trust Fund in 2017 and re-based from the General Fund in 2016.

EXHIBIT II-9

**NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
RESOURCE SUMMARY - STAFFING
FULL-TIME PERMANENT POSITIONS**

	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST
<u>DIRECT FUNDED BY APPROPRIATION</u>			
<u>Operations and Research</u>	519	584	654
Vehicle Safety Research (GF)	341	404	
Vehicle Safety Research (TF)	-	-	470
Highway Safety Research and Development (TF)	178	180	184
Highway Traffic Safety Grants (TF)	91	92	95
SUBTOTAL, DIRECT FUNDED	610	676	749
<u>REIMBURSEMENTS/ALLOCATIONS/OTHER*</u>			
Highway Safety Research and Development (TF)	1	-	-
SUBTOTAL, REIMBURSE./ALLOC./OTH.	1	-	-
TOTAL POSITIONS	611	676	749

Explanation of Major Initiatives

NHTSA's request of \$1,181,272,000 in FY 2017 will support vehicle and behavioral safety programs and activities to reduce serious injuries and fatalities on the Nation's roadways. The budget funding will support the following:

- Initiatives established by Moving Ahead for Progress in the 21st Century Act (MAP-21) and continued in the FAST Act.
- Support the funding structure included in the FAST Act.
- Streamline grant applications for States.
- Embrace a comprehensive, data driven approach to safety.

The FY 2017 request is \$312.04 million higher than FY 2016 Budget Enacted. The request will allow the agency to fund ongoing primary enforcement, safety and rulemaking activities, as well as NHTSA behavioral and State grant-making activities. In addition, the funding is requested for the salaries and benefits and the proposed 1 percent pay raise.

The FY 2017 request for Vehicle Safety is \$ 97 million higher than what was enacted for FY 2016. This includes approximately \$20 million to enhance the New Car Assessment Program, \$25 million to support Safety Defects Investigations and \$52 million to support Vehicle Electronics and Emerging Technology and Crash Data Collection.

The FY 2017 request for Highway Safety Research and Development is \$3 million higher than what was enacted in FY 2016. The increase is to support additional research and operating costs for important new research and program development in areas including National Occupant Protection, Emergency Medical Service and Crash Data Collection.

The FY 2017 Budget requests \$585.4 million for Highway Traffic Safety Grants. The request supports Section 402 Formula Grants, the consolidated Section 405 National Priority Safety Programs and High Visibility Enforcement. These grants now include other programs such as distracted driving grants and State graduated driver licensing laws.

As part of the 21st Century Clean Transportation Plan Investments, the FY 2017 budget requests \$200 million – and \$3.9 billion over ten years – in pilot deployments of safe and climate-smart autonomous vehicles to create better, faster, cleaner urban and corridor transportation networks: To accelerate the development and adoption of autonomous and connected vehicles, this program would fund large-scale deployment pilots to test autonomous vehicles and connected vehicle systems in designated corridors

throughout the country; and work with industry to ensure a common multi-state interoperability framework for autonomous and connected vehicles.

Explanation of Major Funding for FY 2017

The Highway Safety Research & Development and Highway Traffic Safety Grants funding is mandatory, attributed to the Transportation Trust Fund (TTF). In prior years, Vehicle Safety Research was funded as discretionary, attributed to the General Fund (GF). In FY 2017, under the Administration's Policy Proposal for Appropriation, Vehicle Safety will be funded through the Transportation Trust Fund.

OPERATIONS AND RESEARCH: The FY 2017 Budget requests \$396 million in Operations and Research activities. Specific initiatives include:

- **Office of Safety Defects Investigation:** \$47.5 million is requested to enable NHTSA's Office of Defects Investigation (ODI) to improve its effectiveness, and meet growing challenges to identify safety defects quickly, ensure remedies are implemented promptly, notify the public of critical information in an effective and innovative manner, and motivate the public to take prompt action to remedy their vehicle.
- **Research and Analysis:** \$125.4 million is requested to support NHTSA's safety goals through behavioral research, demonstrations, and technical assistance to States. NHTSA activities emphasize national leadership relating to alcohol and drug countermeasures; occupant protection; distraction; traffic law enforcement; motorcycle riders; pedestrian and bicycle safety; and, young and older driver safety programs. NHTSA coordinates these efforts with numerous Federal partners, State and local governments and other organizations and safety associations.
- **Crash Data Collection:** \$36.6 million is requested to support NHTSA's crash data collection activities in two major areas: the continuing systems of the Fatality Analysis Reporting System (FARS), State Data Systems (SDS), and Special Crash Investigations (SCI) as well as the implementation of the newly modernized systems of the Crash Report Sampling System (CRSS) and the Crash Investigation Sampling System (CISS), that will increase data reliability, expand data collection, and improve information technology.
- **New Car Assessment Program (NCAP):** \$35 million is requested to maintain test coverage at 85 percent of the new model year fleet and to plan and implement updates including expansion of the advanced crash avoidance technologies included in the program.

- **Corporate Average Fuel Economy (CAFÉ):** \$8.8 million is requested to support future rulemaking programs, including rulemaking activity for the post-2018 Medium- and Heavy-Duty Vehicle fuel efficiency program and comprehensive rulemaking for the CAFÉ program for model year 2022 and beyond.
- **Alternative Fuels, Electronics, and Emerging Technologies:** \$55.6 million is requested to conduct research on advanced and emerging technologies and alternative fuel vehicles that require thorough testing to ensure their level of safety, and the safety of vehicle occupants is comparable to that of other vehicles.

HIGHWAY TRAFFIC SAFETY GRANTS: The FY 2017 Budget requests \$585 million for Highway Traffic Safety Grants. The request funds Section 402 Formula Grants, the consolidated Section 405 National Priority Safety Programs that now include additional programs such as distracted driving grants and State graduated driver licensing laws.

- **State and Community Highway Safety Grants (Section 402):** \$252.3 million is requested for the State and Community Highway Safety grants program that is the backbone of NHTSA's State highway safety initiatives. These formula grants directly support the Department's safety goals by providing flexibility to States to address pervasive and emerging highway safety problems. This program also provides funding for a comprehensive State traffic safety enforcement program critical to maintaining State traffic safety improvements.
- **National Priority Safety Programs (Section 405):** \$277.5 million is requested to continue NHTSA's focus on occupant protection and impaired driving; improve State traffic safety information systems; and, oversee authorized grant programs aimed at incentivizing Graduated Driver Licensing Laws and the Distracted Driving laws. The FAST Act includes a new provision to incentivize States to increase resources applied to pedestrian and bicycle safety through a dedicated grant program. This request will also allow the States to increase the deployment of ignition interlocks, establish driving while intoxicated (DWI) Courts, expand the use of Traffic Safety Resource Prosecutors, and expand Advanced Roadside Interdiction and Detection training and drug recognition expert (DRE) training for law enforcement.

High Visibility Enforcement: \$29.5 million is requested to continue to promote and administer the highly successful annual *Click It or Ticket* mobilizations in an effort to increase seatbelt use, and the Labor Day and December anti-impaired driving campaign, and the *Drive Sober or Get Pulled Over* impaired driving initiative.

21st Century Clean Transportation Plan Investments: The FY 2017 Budget requests \$200 million for Autonomous Vehicle Deployment. The request supports investments to safely deploy the

technology and given its potential to reduce crashes help ensure its rapid adoption by the public. Today's transportation sector is undergoing a revolutionary transformation. New vehicles are being developed with technologies that are fundamentally changing energy consumption, improving safety, and helping reduce congestion. Whether it is vehicles with increased levels of automation, electric trains, traffic demand management, or technologies that help travelers plan their trips, we are living through an unprecedented period of development. These technologies need to be incorporated quickly and safely into our transportation networks, that mean developing interoperable standards for connected vehicles that keep all users safe, staying ahead of cybersecurity threats, and ensuring safety standards can adjust to the speed of innovation.

This funding will help develop and implement pilot programs to test connected and automated vehicle systems in designated corridors throughout the country, and work with industry to ensure a common multistate interoperability framework for connected and autonomous vehicles with the goal to increase the level of automation on the road. This will build consumer confidence in highly automated vehicle features through these proposed large scale deployment tests with connected and highly automated vehicles.

Additionally, NHTSA will work with state partners, manufacturers, and other stakeholders toward consistent national policy on these innovations as they relate to licensing , testing, and other state issues by supporting the sharing of information amongst states and the Federal government to further help speed the deployment of connected and automated vehicles. Safety must be paramount as the technology is deployed. This initiative will allow NHTSA to develop the new tools necessary for this new era of vehicle safety and mobility. This would include: establishing new testing specifications to support highly automated vehicles; establishing new test methods and tools that may involve simulations and that measure safety performance of highly automated vehicles including the performance of vehicles electronics; and, supporting the interoperability of connected and automated vehicles. New authorities may be needed when they are necessary to ensure that fully autonomous vehicles, including those designed without a human driver in mind, are deployable in large numbers when demonstrated to provide an equivalent or higher level of safety than is now available.

NHTSA
FY 2017 Administrative Expenses Overview Schedule

ACTIVITY	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	FY 2017 vs FY 2016 Change
<u>PERSONNEL RESOURCES</u>				
FTE - DIRECT	610	639	704	65
FTE - REIMBURSABLE	0	0	0	0
Total FTE	610	639	704	65
<u>Administrative Expenses</u>				
Salaries and Benefits (11 & 12)	\$88,417,745	\$98,904,630	\$107,326,130	\$8,421,500
Travel (21)	\$1,419,903	\$1,421,000	\$1,421,000	\$0
Transportation of Things (22)	\$70,184	\$70,000	\$70,000	\$0
Rent, Communications & Utilities (23)	\$12,241,516	\$19,243,000	\$12,743,000	(\$6,500,000)
Printing (24)	\$356,927	\$357,000	\$357,000	\$0
Other Services (25)	\$27,794,328	\$26,780,370	\$26,780,370	\$0
Supplies (26)	\$14,380,375	\$5,091,000	5,091,000	\$0
Equipment (31)	\$1,025,125	\$1,025,000	\$1,025,000	\$0
Unallocated	\$0	\$0	-	\$0
Administrative Expenses Total	\$145,706,103	\$152,892,000	\$154,813,500	\$1,921,500

Salaries and Benefits - \$107,326,130 (increases by \$8,421,500)

Funding increase is attributed to the annualized FTE requested in the FY 2016 budget, 1 percent pay raise for the FY 2016 budget and the proposed 1.3 percent pay raise for FY 2017 and the 36 new FTEs.

Justification for Additional FTEs

Office of Defects Investigations: 23.5 FTE/47 FTP

Having a sufficient number of qualified staff is critical to an effective defects investigation program. The Office of Defects Investigation (ODI) currently has 8 defect screeners and 4 Early Warning data analysts to identify potential safety defects and 16 investigators to conduct formal investigations. With over 250 million registered vehicles in the U.S., this creates a tremendous data collection and analysis burden that will only continue to grow. Additionally, the advancement of in-vehicle electronics and

automation will increase complexity of safety issues warranting attention and possible investigation. While ODI makes effective use of its resources, the outreach efforts currently underway and the improvements proposed above will necessitate the need for additional FTEs to process and analyze the additional data collected from consumer complaints. Use of data mining software will improve the information ODI receives, but without additional FTEs to analyze the data, the effectiveness of these improvements would be reduced.

ODI requests the following staffing increase:

- Early Warning Reporting (EWR) - mathematical statisticians to perform statistical analyses of EWR aggregate data and perform complex queries on an ad hoc basis as needed; data analysts to perform EWR reporting compliance audits and support data analysis requests in support of open investigations; and safety defect specialists to query all the EWR looking for potential defect trends including conducting inquiries on 100 percent of all death claims.
- Vehicle Control – engineers to conduct investigations; investigation coordinators to assist with investigation content control, complainant follow up, public file integrity, act as a liaison with the FOIA and Communications office, and other coordination functions.
- Vehicle Integrity – engineers to conduct investigations; investigation coordinators to assist with investigation content control, complainant follow up, public file integrity, act as a liaison with the FOIA and Communications office, and other coordination functions
- Defects Assessment – field investigators primarily responsible for conducting local vehicle inspections and dealer site visits, engineers, tire specialists, child passenger safety specialists and safety defects specialists trained to query and analyze consumer complaints and all available data sources to identify potential safety defect.
- Recall Management – program analysts to improve throughput of growing number of safety recalls and quarterly reports, engineers to conduct recall query investigations concerning scope and remedy adequacy, and safety defects specialists to conduct audits of manufacturers' recall administration.
- Medium and Heavy Duty Vehicle and Motorcycle - engineers with experience in crash avoidance technologies to address new and emerging technology; 1 safety defects specialist with experience in motorcycle design and operation.
- Correspondence Research - writers and an editor to prepare responses to incoming correspondence and technical editors with automotive expertise.
- PMO –create a Program Management Division to manage all the non-investigative tasks currently absorbed by the technical staff that reduces overall effectiveness. This includes records management, preparing responses to FOIA, contract oversight, consumer outreach, project and data integrity. This division will also manage tasks necessary to meet all of the OIG 2011 and 2015 recommendations.
- Trend Analysis - statisticians and data analysts with experience in standard data analysis and statistical software. This new division will be responsible for overarching, macro trend

analysis of all ODI data, other NHTSA databases, and external data sources, with special attention to input from NHTSA's Office of Vehicle Safety Research to identify near term and potential future risk associated with emerging technology. This division will also provide data analysis support to relieve the investigative divisions allowing them to maintain focus on their primary mission.

- Field Investigation and Testing - engineers and field investigators. The staff will be cross-trained in ODI basic procedures to act as supplemental staff when needed for surges in demand and reflects feedback from the OIG. This new division will be primarily responsible for conducting field investigation of specific vehicles involved in a crash, fire, or some other consequence of an alleged safety defect. Additionally, this new division will provide a significant increase in testing capability and provide resources for managing consent orders with vehicle manufacturers as NHTSA makes more use of this highly effective tool.
- Certified Project Manager - This position will provide, develop and implement a project management approach to ODI investigations, act as the ODI lead for conducting internal, triennial program assessments to capture lessons learned and best practices both internal and external and apply them where appropriate, and serve as the information technology system project manager for ARTEMIS, CIF and any other systems investment that serves ODI lines of business.

NCAP Justification for Additional Full-Time Positions 2.5 FTE / 5 FTP:

Our FY 2017 budget includes our request for five (5) additional full-time positions (FTPs) to support the future New Car Assessment Program described above. To enable the critical resource focus to develop, deliver and maintain, among other things, (1) the revolutionary transition to the modern THOR and WorldSID crash test dummies (2) a unique test for severe oblique crashes (3) rear seat test, (4) a pedestrian safety rating system for vehicles, and (5) the shift from the merely listing of three advanced technologies, to providing consumer ratings for ten advanced technologies. These new FTEs are essential to develop, deliver and maintain the modernization of NCAP and perpetuate the relevance of this consumer information program. This program incentivizes vehicle manufacturers to voluntarily make safety improvements that benefit of the American public.

Vehicle Electronics and Emerging Technology Justification for Additional Full-Time Positions 10 FTE / 20 FTP

We are requesting an additional \$3 million dollars to fund twenty (20) additional staff to effectively administer a much larger scoped research program. Currently, NHTSA has only 5 staff dedicated to electronic systems safety research including highly automated vehicles, cybersecurity, and electronics reliability. Thus, it is critical that funds for additional staff accompany increases in research funding.

Working Capital Fund - \$13,041,000

Increase will support overall Departmental request in common services shared by all modal administrations (Interagency Agreements, as well as cost for printing and distribution of all agency rulemakings).

Information Technology

Within 2015, NHTSA imposed safety recalls on the automotive industry that affected an unprecedented number of vehicles. The Takata Airbag recall affects 34 million cars and trucks and the resolution is anticipated to last for several years. As a result of these recalls, NHTSA's infrastructure, web and data systems have been significantly taxed by the increase in volume of data requests, requiring immediate technology enhancement for sustainment. For example, after the Takata recall press release, NHTSA's Safercar.gov lead the federal government in number of hits (over 1 million in a day) and 5 other NHTSA sites ranked in the top 20 visited federal government sites. These high visibility public information requests are just one example of how NHTSA's Information Technology (IT) infrastructure has been impacted recently, far beyond our original budget projections.

In addition to the identification of these new business needs, newly enacted policy such as the Federal IT Acquisition Reform Act (FITARA), has further defined NHTSA's business objectives placing emphasis on smart IT spending through the integration of IT agency wide. NHTSA is following the Department's priorities in FITARA by leveraging DOT-wide solutions and cloud vehicles like "Drupal" under Web Services, MS Azure Cloud and DOT Storage Architecture under IT Support Services. Building upon the enhancements made in 2015, NHTSA will continue to modernize its IT portfolio. These modernization efforts will include cloud migration and the implementation of technology and infrastructure upgrades. In addition, in response to the growing Cyber Security concerns, NHTSA executed and will continue to support Cyber-Sprint directives hardening the infrastructure. This document highlights the necessary increases in NHTSA's IT budget and points out the continuous improvement in the planning, programming, budgeting and execution of IT resources to keep pace with our changing business needs and support our strategic plan.

NHTSA020 Artemis **\$4,300,000**

NHTSA is requesting additional funding to support the modernization/replacement of the current Artemis application tool set. The Office of Defects Investigation (ODI) investigates possible defect trends, and where appropriate, seeks recalls of motor vehicles and motor vehicle equipment that pose an unreasonable safety risk. The legacy Artemis system, which is over a decade old, supports these business needs and encompasses several modules from collection of consumer complaint data, safety investigations, recall management, early warning reporting, etc. The Artemis system provides a wide range of information to consumer complaint screeners, safety engineers, ODI analysts, and safety investigators, to name a few. At current, this legacy system has undergone numerous software changes

to meet new functional requirements and evolving business needs. In 2015, due to the Takata airbag recall and the OIG report's recommendation, the business needs were further redefined, identifying the need for a holistic system design that addresses business process and rules changes. In alignment with NHTSA's strategic plan, these system changes will drive the efficiency and effectiveness of both the system's technology and the programs administration. For example: NHTSA is evaluating the consumer complaints screening process and it is expected that future changes in automated workflow will be required to build in additional quality control, potential defect identification, verification and validation. These are just some of the business drivers that exemplify the need for a wholesale modernization/replacement of the legacy Artemis system.

NHTSA88 Common IT Services	\$2,700,000
-----------------------------------	--------------------

This investment provides hosting services (e.g., servers, data storage, disaster recovery) for NHTSA's application systems in an efficiently managed shared and secure environment. Additional funding is requested to keep up with the significant increase in data being collected, processed/analyzed and distributed from several application systems. For example, The Crash Data Acquisition Network (CDAN) is NHTSA's major IT investment which is aimed at the collection of crash data and analysis on a national level.

CDAN leverages this investment for its infrastructure requirements. In order to support CDAN, NHTSA's infrastructure needs to be able to accommodate a significant increased volume and complexity of data from the agency's data modernization effort. In the last 2 years, NHTSA's computing environment has grown 100% while storage has increased 300% with increased projections into FY17. In addition to the large increase in data being collected, the type of data (e.g., high resolution, laser technology, capturing 3D crash scene information) requires new investments in optical storage. Likewise, in support of the data's volume and quality increase, infrastructure upgrades such as an increase in throughput, encryption services and WAN connection will be required. These upgrades and infrastructure additions are essential in supporting NHTSA's modernization plan to sustain current and projected business needs.

NHTSA310 Web Systems	\$700,000
-----------------------------	------------------

NHTSA is requesting an increase to support the conversion of a number of publicly facing web application services (e.g., Office of Vehicle Safety Compliance web application) currently residing on safercar.gov and nhtsa.gov. Many of these web applications were developed several years ago in outdated and currently unsecure programming language (e.g., Cold Fusion). As NHTSA redesigns its websites and migrates its content to the Department's cloud solution, Drupal, these web applications will need to be re-written in a secure modern programming language (e.g., Java) to live in this new environment. Upon completion, this environment will become more secure and adaptable to forthcoming changes in cyber security.

NHTSA501CAFÉ	\$1,000,000
---------------------	--------------------

NHTSA is requesting an additional 1 million dollars in support of the CAFÉ initiative. NHTSA has recently set standards to increase CAFÉ levels rapidly over the next several years, which will reduce greenhouse gas emissions (GHG) and save consumers money at the pump. In support of the new CAFÉ legislation and resulting standards, NHTSA is in the process of developing a new application system to support this program. The new system supports the tracking and trading of fuel efficiency credits among auto manufacturers as mandated by the legislation. The first module of the system which covers light weight vehicles is complete. This funding will be to automate (e.g., design, develop and implement) modules to support medium and heavy duty vehicles which have different business rules and algorithms for fuel efficiency credits. This funding request will support the continuous requirement to create efficiency through system automation and new technology.

Appropriation Language – Vehicle Safety

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
OPERATIONS AND RESEARCH
(LIQUIDATION OF CONTRACT AUTHORIZATION)
(LIMITATION ON OBLIGATIONS)
(TRANSPORTATION TRUST FUND)
VEHICLE SAFETY

Contingent upon enactment of multi-year clean transportation plan authorization legislation, for payment of obligations incurred to discharge the functions of the Secretary, with respect to traffic and highway safety authorized under chapter 301 and part C of subtitle VI of the title 49, United States Code, as amended by the Fixing America's Transportation Act, \$250,000,000, to be derived from the Transportation Trust Fund (other than the Mass Transit Account) and to remain available until expended: *Provided*, That none of the funds in this Act shall be available for planning or execution of programs the total obligations for which, in fiscal year 2017, are in excess of \$250,000,000: *Provided further*, That, within the \$250,000,000 obligation limitation for operation and research, \$20,000,000 shall remain available through September 30, 2018, and shall be in addition to the amount of any limitation imposed on obligations for future years.

(Department of Transportation Appropriations Act, 2016.)

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
OPERATIONS AND RESEARCH
(LIQUIDATION OF CONTRACT AUTHORIZATION)
(LIMITATION ON OBLIGATIONS)
(TRANSPORTATION TRUST FUND)

For payment of obligations incurred in carrying out the provisions of 23 U.S.C. 403, and chapter 303 of title 49, United States Code, \$145,900,000, to be derived from the Transportation Trust Fund (other than the Mass Transit Account) and to remain available until expended: Provided, That none of the funds in this Act shall be available for the planning or execution of programs the total obligations for which, in fiscal year 2017, are in excess of \$145,900,000, of which \$140,700,000 shall be for programs authorized under 23 U.S.C. 403 and \$5,200,000 shall be for the National Driver Register authorized under chapter 303 of title 49, United States Code: Provided further, That within the \$145,900,000 obligation limitation for operations and research, \$20,000,000 shall remain available until September 30, 2018, and shall be in addition to the amount of any limitation imposed on obligations for future years.

(Department of Transportation Appropriations Act, 2016.)

**HIGHWAY TRAFFIC SAFETY GRANTS
(LIQUIDATION OF CONTRACT AUTHORIZATION)
(LIMITATION ON OBLIGATIONS)
(TRANSPORTATION [HIGHWAY] TRUST FUND)**

For payment of obligations incurred in carrying out provisions of 23 U.S.C. 402, 404, and 405, and section 4001(a)(6) of the Fixing America's Surface Transportation Act, to remain available until expended, \$585,372,000, to be derived from the Transportation Trust Fund (other than the Mass Transit Account): *Provided*, That none of the funds in this Act shall be available for the planning or execution of programs the total obligations for which, in fiscal year 2017, are in excess of \$585,372,000 for programs authorized under 23 U.S.C. 402, 404, and 405, and section 4001(a)(6) of the Fixing America's Surface Transportation Act, of which \$252,300,000 shall be for "Highway Safety Programs" under 23 U.S.C. 402; \$277,500,000 shall be for "National Priority Safety Programs" under 23 U.S.C. 405; \$29,500,000 shall be for "High Visibility Enforcement Program" under 23 U.S.C. 404; \$26,072,000 shall be for "Administrative Expenses" under section 4001(a)(6) of the Fixing America's Surface Transportation Act: *Provided further*, That none of these funds shall be used for construction, rehabilitation, or remodeling costs, or for office furnishings and fixtures for State, local or private buildings or structures: *Provided further*, That not to exceed \$500,000 of the funds made available for "National Priority Safety Programs" under 23 U.S.C. 405 for "Impaired Driving Countermeasures" (as described in subsection (d) of that section) shall be available for technical assistance to the States: *Provided further*, That with respect to the "Transfers" provision under 23 U.S.C. 405(a)(1)(8), any amounts transferred to increase the amounts made available under section 402 shall include the obligation authority for such amounts: *Provided further*, That the Administrator shall notify the House and Senate Committees on Appropriations of any exercise of the authority granted under the previous proviso or under 23 U.S.C. 405(a)(1)(8) within five days.

(Department of Transportation Appropriations Act, 2016.)

ADMINISTRATIVE PROVISIONS—NATIONAL HIGHWAY TRAFFIC SAFETY
ADMINISTRATION

Sec. 140

An additional \$130,000 shall be made available to the National Highway Traffic Safety Administration, out of the amount limited for section 402 of title 23, United States Code, to pay for travel and related expenses for State management reviews and to pay for core competency development training and related expenses for highway safety staff.

Sec. 141

The limitations on obligations for the programs of the National Highway Traffic Safety Administration set in this Act shall not apply to obligations for which obligation authority was made available in previous public laws but only to the extent that the obligation authority has not lapsed or been used.

(Department of Transportation Appropriations Act, 2016.)

~~SEC. 142. None of the funds made available by this Act may be used to obligate or award funds for the National Highway Traffic Safety Administration's National Roadside Survey.~~

-Strike this section because it prohibits NHTSA from conducting roadside surveys on drugged driving.

~~SEC. 143. None of the funds made available by this Act may be used to mandate global positioning system (GPS) tracking in private passenger motor vehicles without providing full and appropriate consideration of privacy concerns under 5 U.S.C. chapter 5, subchapter II.~~

-Strike this section because it prohibits the use of funds to mandate global positioning system tracking in private passenger motor vehicles which would limit NHTSA's GPS work.

**OPERATIONS AND RESEARCH
VEHICLE SAFETY
PROGRAM AND FINANCING SCHEDULE**

Description	FY 2015 Actual	FY 2016 Enacted	FY 2017 Request
Obligations by Program Activity			
Rulemaking	32,940,324	24,010,000	-
Enforcement	17,847,098	18,994,000	-
Research and Analysis	18,473,813	35,600,000	-
Administrative Expenses	60,564,558	74,196,000	-
Total Direct Obligations	129,825,793	152,800,000	-
Reimbursable Program	-	-	-
Total new obligations	129,825,793	152,800,000	-
Budgetary Resources			
Unobligated balance brought forward, Oct 1	5,544,272	5,355,395	5,355,395
Resources available from recoveries	16,958	-	-
Anticip Recov prior year unpaid obligations unexpired	-	-	-
Unobligated balance brought forward, Oct 1 - Expired	-	-	-
Unobligated balance available (total)	5,561,230	5,355,395	5,355,395
Budget Authority			
Appropriation (disc.)	130,000,000	152,800,000	-
Appropriations transferred from other accts (disc)	-	-	-
Appropriations permanently reduced (disc.)	-	-	-
Appropriation (total)	130,000,000	152,800,000	-
Spending authority from offsetting collections (disc.)			
Collected	377,478	-	-
Expired Collections	-	-	-
Spending authority from offsetting collections (disc.) (total)	377,478	-	-
Total budgetary resources (disc and mand)	135,938,708	158,155,395	5,355,395
Change in Obligated Balance			
Unpaid obligations, brought forward, October 1 (gross)	71,620,746	72,878,300	87,605,774
Obligations incurred (gross) - Unexpired accounts	130,218,777	152,800,000	-
Obs Bal: Obligations Incurred: Expired Accounts	174,360	-	-
Obligations incurred (gross) - Outlays (gross)	(127,031,139)	(138,072,526)	(59,785,300)
Recoveries of prior year unpaid obligations, unexpired accts (-)	(16,958)	-	-
Recoveries of prior year unpaid obligations, expired accts (-)	-	-	-
Unpaid obligated balance, end of year (gross)	74,965,786	87,605,774	27,820,474
Outlays (disc) (gross)			
Outlays from new discretionary authority	76,966,319	88,765,300	-
Outlays from discretionary balances	50,064,820	49,307,226	59,785,300
Total outlays (gross)	127,031,139	138,072,526	59,785,300

NOTE: Vehicle Safety Research is funded from the Trust Fund in 2017 and re-based from the General Fund in FY 2016.

**OPERATIONS AND RESEARCH
VEHICLE SAFETY
OBJECT CLASS SCHEDULE**

Description	FY 2015 Actual	FY 2016 Enacted	FY 2017 Request
Direct Obligations			
Personnel Compensation			
Full-time permanent	34,854,709	46,000,000	-
Other than full-time permanent	334,583	-	-
Other personnel compensation	1,347,904	1,000,000	-
Total personnel compensation	36,537,196	47,000,000	-
Civilian personnel benefits	10,916,879	10,700,000	-
Travel and Transportation of Persons	377,997	400,000	-
Transportation of things	-	-	-
Rental payments to GSA	1,925,000	2,000,000	-
Communications, utilities, and miscellaneous charges	952,447	1,000,000	-
Advisory and assistance services	14,975,246	15,000,000	-
Other services from non-Federal sources	48,362,872	61,000,000	-
Other goods and services from Federal sources	6,347,578	6,000,000	-
Operation and maintenance of equipment	631,589	700,000	-
Supplies and materials	1,505,160	2,000,000	-
Equipment	3,843,750	4,000,000	-
Grants and subsidies	3,450,079	3,000,000	-
Total new obligations	129,825,793	152,800,000	-

NOTE: Vehicle Safety Research is funded from the Trust Fund in 2017 and re-based from the General Fund in FY 2016.

EXHIBIT III-1

**NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
OPERATIONS AND RESEARCH
VEHICLE SAFETY RESEARCH
Summary by Program Activity
Appropriations, Obligation Limitations, and Exempt Obligations
(\$000)**

	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	FY 2017 - FY 2016 CHANGE
Rulemaking	\$ 20,010	\$ 23,510	\$ 43,323	\$ 19,813
Enforcement	18,980	18,494	38,350	19,856
Research and Analysis	29,000	35,100	86,350	51,250
Unallocated	-	-	-	-
Administrative Expenses	62,010	75,696	81,978	6,282
TOTAL, VEHICLE SAFETY (GF)	\$ 130,000	\$ 152,800	\$ 250,000	\$ 97,200
Direct Funded	341	370	425	55
Reimbursable, allocated, other	-	-	-	-

NOTE: In FY 2017, the Administration proposes to move a number of current General Fund programs into the Transportation Trust Fund. Vehicle Safety Research is funded from the Trust Fund in 2017 and re-based from the General Fund in 2016.

EXHIBIT III - 1a
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
SUMMARY ANALYSIS OF CHANGE FROM FY 2016 TO FY 2017
Appropriations, Obligation Limitations, and Exempt Obligations

OPERATIONS AND RESEARCH
VEHICLE SAFETY RESEARCH
(\$000)

ITEM	Change from FY 2016 to FY 2017	Change from FY 2016 to FY 2017 FTEs by Program
Vehicle Safety Base	152,800	370
Adjustments to Base		
FY 2017 #FTE Per Program Change	370	55
Annualization of FY 2016 Pay Raise	196	
Annualization of FY 2016 FTE	-	
FY 2017 Pay Raise	587	
GSA Rent	-	
WCF	-	
Inflation	-	
Program Increases/Decreases	5,499	
Other Services	-	
Unallocated	-	
Subtotal, Adjustment to Base	6,281	55
Program Increases/Decreases	90,919	-
Total Net Increases/Decreases	97,200	55
FY 2017 REQUEST	250,000	425

VEHICLE SAFETY

Program and Performance Statement

The FY 2017 budget request includes \$250 million for Vehicle Safety activities to reduce highway fatalities, prevent injuries, improve fuel economy and significantly reduce the societal costs related to unsafe motor vehicles and equipment. These objectives are met through

- the issuance and enforcement of Federal Motor Vehicle Safety Standards (FMVSS),
- dissemination of consumer information,
- research involving electronics, advanced crash avoidance and mitigation technologies, crashworthiness, and alternative fuels,
- advanced testing of emergent technologies, and
- issuance and enforcement of fuel economy and efficiency standards.

In FY 2017 the Administration proposes to move the current General Fund programs into the Transportation Trust Fund.

FY 2017 – Vehicle Safety

\$250,000,000

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	Change FY 2017 - 2016
Rulemaking	\$20,010,000	\$23,510,000	\$43,322,500	\$19,812,500
Enforcement	\$18,980,000	\$18,494,000	\$38,350,000	\$19,856,000
Vehicle Safety Research and Analysis	\$28,500,000	\$34,600,000	\$85,850,000	\$51,250,000
National Ctr. For Statistics and Analysis	\$499,834	\$500,000	\$500,000	\$0
Vehicle Safety Administrative Expenses	\$62,010,166	\$75,696,000	\$81,977,500	\$6,281,500
Unallocated	\$0	\$0	\$0	\$0
Total	\$130,000,000	\$152,800,000	\$250,000,000	\$97,200,000

Note: In FY 2017, under the Administration's Policy Proposal for Reauthorization, Vehicle Safety will be funded through the Transportation Trust Fund.

Rulemaking Programs:	\$43,322,500
-----------------------------	---------------------

The activities funded through the Rulemaking programs will support the Department's safety goal through the issuance of Federal motor vehicle safety standards that govern newly-manufactured vehicles and related safety equipment. In FY 2017, Rulemaking programs will enhance safety by addressing potential safety issues related to advanced crash avoidance technologies, vehicle electronics, alternative fuel and electric vehicles, motorcoaches, pedestrians, and child passengers. The funding requested will support the planning, infrastructure and outreach to support the electronic registration of tire by independent dealers. This same infrastructure will facilitate a publicly available Tire Identification numbers (TIN) search application that will allow consumers, researchers, and other stakeholders the means to identify recalled tires and register for automated alerts. Rulemaking also supports the safety goal by developing consumer information through testing the vehicle fleet, as part of the New Car Assessment Program (NCAP). Requested funding will enable us to revolutionize the NCAP program by incorporating new, world-leading, human-like crash test dummies; new, more stringent injury criteria, new tests; and an update of our current overall 5-star rating system to include crashworthiness, crash avoidance, and pedestrian ratings. Additionally, Rulemaking programs issue

automotive fuel economy and efficiency standards, which support the departmental goal of environmental sustainability. Funding also supports the international harmonization of vehicle safety standards. Harmonization efforts help leverage the agency's rulemaking resources through the shared exchange of research and data.

Enforcement Programs:	\$38,350,000
------------------------------	---------------------

Activities in NHTSA's Enforcement programs support DOT Safety goals by ensuring industry compliance with motor vehicle safety standards, investigating safety-related defects in motor vehicles and motor vehicle equipment, enforcing the Federal odometer law, encouraging enforcement of State odometer laws, and by ensuring that manufacturers conduct recalls to remove unsafe motor vehicles and equipment from the highways. It also enhances NHTSA's current system for notification of open recalls to include text messaging and promote greater awareness of recalls and the defect identification process through an annual outreach campaign. Fixing America's Surface Transportation (FAST) Act requires NHTSA to implement a 2-year pilot program to evaluate the feasibility and effectiveness of a State process for informing consumers of open motor vehicle recalls at the time of motor vehicle registration in the State. The provision allows for up to 6 states to participate. After issuing an Request For Proposal (RFP), NHTSA will work with selected states to develop a system to advise consumers of open recalls during the registration process then evaluate the extent to which open recalls have been remedied. Lessons learned will be shared with all State Department of Motor Vehicles (DMVs) and other stakeholders. Funding will support enforcement initiatives to enhance import safety through oversight of new entrant manufacturers; improve the collection, storage, analysis and dissemination of defect and compliance data; increase CAFÉ-related enforcement and compliance activities and related civil penalty collections; and support the agency's other cross-cutting initiatives. Funding will enable Enforcement programs to address concerns with the effectiveness, reliability, interoperability, privacy and security of electronic control systems being introduced into the vehicle fleet with increasing frequency. This requested level also will enable the Office of Defects Investigation to improve its effectiveness and meet growing challenges to identify safety defects quickly, ensure remedies are implemented promptly, and inform the public of critical information in an effective manner.

Vehicle Safety Research and Analysis:	\$85,850,000
----------------------------------------------	---------------------

The Vehicle Safety Research and Analysis programs support DOT safety goals through conducting motor vehicle safety research and development on advanced vehicle safety technology, ways of improving vehicle crashworthiness and crash avoidance, and vehicle-based options for decreasing distracted driving and alcohol involvement in crashes. Requested funding will support vehicle safety research into the reliability and security of complex safety-critical electronic control systems; studying the cybersecurity of vehicles; and assessing new and emerging technologies that can help drivers avoid

crashes. Requested funding will also support developing enhanced computer modeling tools and expertise to quickly and efficiently identify changes in the vehicle fleet that could have safety ramifications, particularly in areas related to alternative fuel vehicles; advanced battery control modeling and analysis, assessment of crash notification technology and emergency response; and supporting the agency's other cross-cutting initiatives. NHTSA will also undertake further activities to enhance and expand testing capability of advanced emergent technologies at the Vehicle Research and Test Center (VRTC).

National Center for Statistics and Analysis (NCSA):	\$500,000
------------------------------------------------------------	------------------

NHTSA's crash data collection efforts are funded from both Vehicle Safety and Highway Safety. In FY 2016 \$500,000 of the total \$35,710,600 enacted for crash data collection is funded from Vehicle Safety. The enacted amount will enable the continuation of implementation of the data modernization project and support for the National Center for Statistics and Analysis' crash data collection efforts.

Detailed Justification for Rulemaking Programs

What Is the Request And What Funds Are Currently Spent on the Program?

FY 2017 – RULEMAKING - BUDGET REQUEST

***Updated to include Direct Salaries & Benefits as of FY17**

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	Change FY 2017 - 2016
Safety Standards Support	\$7,282,275	\$8,244,684	\$7,758,973	-\$485,711
New Car Assessment Program	\$10,888,390	\$14,852,892	\$35,043,479	\$20,190,587
Fuel Economy Program	\$8,936,455	\$8,752,892	\$8,781,795	\$28,903
Transportation/Climate Change Center	\$10,000	\$10,000	\$10,000	\$0
Total	\$27,117,120	\$31,860,468	\$51,594,247	\$19,733,779

What Is This Program and Why Is It Necessary?

The Rulemaking programs support the DOT strategic goals of improving safety and environmental sustainability by providing the technical support needed to develop Federal motor vehicle safety standards (FMVSSs) and other regulations in the key areas of crash avoidance, crashworthiness, consumer information and fuel economy.

In FY 2017, we are requesting \$51.6 million of which \$43.3 million is for Rulemaking programs, which is \$19.8 million more than the FY 2016 enacted funding level. The increase in funding is requested for updating our New Car Assessment Program (NCAP), which informs consumers of the safety performance of new vehicles and encourages vehicle manufacturers to voluntarily improve the safety of their vehicles beyond the minimum Federal safety standards. This increased funding amount will enable us to revolutionize the NCAP program by (1) incorporating new, world-leading, human-like crash test dummies and new, more stringent injury criteria, (2) adding a unique test for severe oblique crashes (3) adding rear seat testing, (4) testing and providing safety ratings for a total of ten

life-saving crash avoidance technologies, (5) adding testing and safety ratings to address pedestrian protection, and (6) updating our current overall 5-star rating system to include crashworthiness, crash avoidance, and pedestrian ratings. This funding increase will also allow us to advance unbiased safety information for consumers and continually incentivize vehicle safety improvements through market forces, thus preventing injuries and saving lives.

Funding at the requested level also will allow us to maintain our core programs and to advance key initiatives:

- Expand our ability to assess and address emerging safety needs to more expeditiously protect the public from safety risks, particularly in the areas of advanced crash avoidance technologies and vehicles using alternative fuels.
- Move faster on mandated regulations, such as those to enhance motorcoach and child passenger safety in MAP-21.
- Keep life-saving rulemakings, such as the vehicle-to-vehicle (V2V) rulemaking, moving towards the Department's goals.
- Further support the Secretary's initiatives on pedestrian and bicyclist safety.
- Continue to conduct analytical work to support light vehicle fuel economy rulemaking for model years 2022-2025, including the development of Draft and Final Environmental Impact Statements, and activities supporting the Medium- and Heavy-Duty Commercial Vehicles and Work Truck Fuel Efficiency program.

RULEMAKING**Safety Standards Support**

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Safety Standards Support	\$2,100,000	\$2,100,000	\$2,100,000	\$0
Salary and Benefits	\$5,182,275	\$6,144,684	\$5,658,973	(\$485,711)
Total	\$7,282,275	\$8,244,684	\$7,758,973	(\$485,711)

What Is This Program and Why Is It Necessary?

NHTSA's Safety Standards Support program provides the technical support needed to develop Federal motor vehicle safety standards (FMVSSs) and other regulations in the key areas of crash avoidance, crashworthiness and consumer information. This support includes test method development to upgrade existing standards or promulgate new ones, determination of injury reduction benefits and product testing to establish baseline performance. This program also supports international harmonization of vehicle safety standards and will continue to support rulemaking activities associated with MAP-21 and continued in the FAST Act.

The activities funded through the Safety Standards Support program will support the Department's safety priority through the promulgation of FMVSSs and other regulations. Crash avoidance, crashworthiness and consumer information activities are necessary to address emerging safety problems by developing and finalizing standards or developing consumer information activities that cross-cut several of the agency's vehicle safety programs.

Why Do We Want/Need To Fund The Program At The Requested Level?

In FY 2017 we are requesting \$7.7 million, of which \$2 million is specifically for the Safety Standards Support program, which is the same as the FY 2016 enacted funding level. Motor vehicle technology is becoming increasing complex. As noted by the Transportation Research Board in its 2012 report *The Safety Challenge and Promise of Automotive Electronics*, "The increasing role of electronic systems in automobiles creates new safety oversight challenges that NHTSA must address explicitly and proactively..." Further, as the ability of motor vehicles to sense and respond to the driving environment based on communications from other vehicles and on information from on-board sensors increases, the complexity of the standards must increase. As the technology becomes more complex, associated rulemaking development activities do so as well. Safety standards development also increasingly focuses on crash avoidance measures, which require more complex and varied compliance assurance test procedures than is typically necessary for crashworthiness standards. NHTSA must

expand resources to meet this challenge because the traditional issues in crash avoidance, such as tires, and in crashworthiness, such as air bags, still require focus and attention to ensure that consumers purchase safe vehicles.

Funding this request will enable us to move faster on mandated regulations, such as those to enhance motorcoach and child passenger safety in MAP-21, as well as to keep the life-saving rulemakings, such as the V2V rulemaking, moving towards the Department's goals, and further support the Secretary's initiatives on pedestrian and bicyclist safety. FY 2017 activities include the following:

- NHTSA will continue its rulemaking to require radio devices necessary to enable Vehicle-to-Vehicle (V2V) communications, including consideration of specific applications with potential to improve safety in various driving scenarios.
- NHTSA will continue to develop test procedures and safety performance requirements for alternative fuel vehicles such as compressed natural gas (CNG), liquid petroleum gas (LPG), and liquid natural gas in support of the President's goal of reducing U.S. dependence on foreign oil. NHTSA also will develop a final rule to harmonize FMVSSs with the United Nations Global Technical Regulation (GTR) No. 13 on hydrogen and fuel cell vehicles, as well as develop second phase requirements to improve the rule. The agency will also initiate regulatory activity to incorporate a GTR on battery electric vehicle safety into the FMVSSs.
- In accordance with MAP-21, safety recommendations from the National Transportation Safety Board (NTSB), and issues raised by stakeholders, NHTSA will work to finalize several regulations aimed at improving motorcoach and heavy truck vehicle safety. The regulations include developing a final rule on motorcoach advanced glazing and anti-ejection countermeasures, and responding to petitions for reconsideration regarding rear impact underride protection for heavy vehicles. NHTSA will also consider whether regulatory activity is needed on advanced crash avoidance technologies, such as automatic emergency braking, and where appropriate will develop a notice of proposed rulemaking to improve roadway safety.
- In accordance with MAP-21, NHTSA anticipates completing rulemaking efforts on rear seat belt reminder systems. NHTSA also expects to address petitions for reconsideration on final rules for improving child side impact protection.
- NHTSA expects to continue regulatory activities in the areas of pedestrian impact protection, advanced crash avoidance technologies involving varying levels of vehicle automation, and advanced crash test dummies.
- NHTSA expects to consider new rulemaking initiatives on lower interior impact protection, sun roof ejection mitigation, and frontal oblique crash protection.
- NHTSA will continue to support consumer information standards including theft prevention.

- NHTSA will also work with international partners in an effort to investigate alternative regulatory approaches, through bilateral and multilateral engagement, mitigate risks and set the stage for future harmonized standards.

What Benefits Will Be Provided to the American Public Through This Request?

Motor vehicle safety has improved over the years due to improved vehicle designs, many of which were a result of FMVSS developed through domestic rulemaking, international engagement and harmonization. We gauge the success of our programs by analyzing the projected benefits from each regulation we undertake. Similar analytical efforts allow us to gauge when to revise current standards to improve their effectiveness.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
New Car Assessment	\$10,000,000	\$13,750,000	\$33,562,500	\$19,812,500
Salary and Benefits	\$888,390	\$1,102,892	\$1,480,979	\$378,087
Total	\$10,888,390	\$14,852,892	\$35,043,479	\$20,190,587

What Is This Program and Why Is It Necessary?

The New Car Assessment Program (NCAP) informs consumers of the safety performance of new vehicles, which encourages vehicle manufacturers to voluntarily improve the safety of their vehicles beyond the minimum Federal safety standards. By providing safety ratings, based on a series of NHTSA-performed crash tests and evaluations on vehicles, NCAP improves vehicle safety and saves lives.

To maintain the relevance and effectiveness of NCAP, the agency has periodically updated the program to include new tests and assessments, more advanced crash test dummies, more stringent injury criteria, and new ratings, among other things. Currently, NCAP informs consumers of the relative safety of vehicles based on frontal and side impact crash tests, as well as rollover resistance tests, using a 5-star safety ratings system. Child safety seats are similarly rated for their ease of use. Certain advanced crash avoidance technologies are additionally recommended to consumers if they are certified to NCAP's performance specifications. Vehicle safety ratings, advanced technology recommendations, child safety seat Ease of Use ratings, child safety-related information, and other consumer information is provided on our website, www.safercar.gov. Safety ratings are also provided at the point of sale on the window sticker that is applied to new vehicles.

Why Do We Want/Need To Fund The Program At the Requested Level?

In April 2013, NHTSA requested public comments to help identify subject areas which, if added to NCAP, would have the greatest potential for producing safety benefits and saving lives. Commenters were generally supportive of the current program, but pushed for improvements and enhancements to be made. In recent months, Congress has also urged the agency to develop a more stringent vehicle safety testing and ratings program because a large percentage of vehicles currently achieve top safety ratings. In response, the agency published a Request for comments notice on December 16, 2015 announcing the enhancements NHTSA plans to make to the NCAP program in order to increase safety.

To plan and implement these program changes, we request \$35 million of which \$33.6 million is for NCAP in FY 2017. This is \$19.8 million more than the FY 2016 enacted funding level. The requested increase in funding will enable us to revolutionize the NCAP program by (1) incorporating new, world-leading, human-like crash test dummies and new, more stringent injury criteria, (2) adding a unique test for severe oblique crashes (3) adding rear seat testing, (4) testing and providing safety ratings for a total of ten life-saving crash avoidance and advanced technologies, (5) adding testing and safety ratings to address pedestrian protection, and (6) updating our current overall 5-star rating system to include crashworthiness, crash avoidance, and pedestrian ratings. This funding increase will also allow us to advance unbiased safety information for consumers, and continually incentivize vehicle safety improvements through market forces, thus preventing injuries and saving lives. The requested amount will also support our effort to improve consumer awareness of our 5-star safety ratings program, including information on life-saving advanced crash avoidance technologies as well as child safety information.

More specifically, the requested funding for FY 2017 will support continuation of the following activities:

- Continuation of testing of two life-saving crash avoidance technologies (forward collision warning and lane departure warning).
- Continuation of rollover resistance and dynamic testing to provide consumers with new safety ratings based on an updated rollover risk curve and reformulated rating system.
- Continuation of Ease of Use assessments for child safety seats, with ratings posted on www.safercar.gov, in agency publications, and at the point of sale.
- Continuation of side air bag testing to protect out-of-position occupants.
- Promotion of up-to-date information about dangers to children in and around vehicles, and other vehicle safety information such as 15-passenger van and tire safety.
- Continuation of operations and maintenance of the NCAP infrastructure, including software and contract labor costs.
- Provide test coverage under the current program for 75 percent of MY 2018 vehicles.

Increased funding request will fund the following NEW activities:

- ALL-NEW frontal oblique offset crash testing using THOR, the most advanced human-like crash test dummy in the world, which will have the potential to save up to an estimated 1,593 lives annually in this type of crash.
- Full-frontal barrier crash testing using the ALL-NEW human-like THOR dummy to drive safety improvements for front seat occupants, and a small female dummy newly added to the rear seat to encourage equivalent safety protection for rear seat occupants.

- Side impact barrier and pole crash testing using the most advanced side impact dummy, the ALL-NEW WorldSID, to drive improved safety protection in side impact crashes.
- ALL-NEW testing to replicate head-, leg-, and pelvis-to-vehicle impacts, to promote pedestrian protection for adults and children will have the potential to help prevent some of the 4,884 pedestrian deaths and estimated 65,000 injuries that occurred in 2014.
- ALL-NEW testing and final test procedure verification of eight additional life-saving crash avoidance technologies including: crash imminent braking, dynamic brake support, rear automatic braking, lower beam headlighting performance, semi-automatic headlamp beam switching, amber rear turn signal lamps, blind spot detection, and pedestrian automatic emergency braking.
- Incorporation of a completely reinvented overall rating system comprised of updated crashworthiness ratings, and ALL-NEW crash avoidance and pedestrian ratings.
- Acquisition and maintenance of 24 new test dummies, 24 pedestrian impactors, a year's supply of spare parts, instrumentation, and related test equipment, including data acquisition systems, calibration rigs, and pedestrian impactor launchers.
- Hiring of five (5) full-time positions to support the planning and implementation of these revolutionary program changes planned for the following fiscal year
- Development and implementation of an ALL-NEW semi-automated data collection system to modernize the new vehicle information collection process and improve the daily operational efficiency of the program.
- Market research to better understand how to most effectively convey ratings and additional safety information to the public on www.safercar.gov and at the point of sale.
- Redesign and enhancement of web pages and mobile apps to incorporate revolutionary program changes and to provide consumers with one-stop shopping for unbiased safety information.
- Outreach and education campaigns to promote the program's revamped 5-Star Safety Ratings and increase consumer awareness of the revolutionary changes made to the program.
- Development of materials to be used to inform vehicle dealers and prospective vehicle purchasers of program enhancements.
- Enhancement of the existing consumer information program to encourage improved compatibility between child safety seats and passenger vehicles.
- Provide ratings on at least 54 percent of the model year 2019 vehicle fleet, which includes the fleet coverage that will be supported by the following fiscal year funding.

Justification for Additional Full-Time Positions (FTP)

Our FY 2017 budget includes our request for five (5) additional full-time positions (FTP) to support the future New Car Assessment Program described above. To enable the critical resource focus to develop, deliver and maintain, among other things, (1) the revolutionary transition to the modern

THOR and WorldSID crash test dummies (2) a unique test for severe oblique crashes (3) rear seat test, (4) a pedestrian safety rating system for vehicles, and (5) the shift from the merely listing of three advanced technologies, to providing consumer ratings for ten advanced technologies. These new FTEs are essential to develop, deliver and maintain the modernization of NCAP and perpetuate the relevance of this consumer information program. This program incentivizes vehicle manufacturers to voluntarily make safety improvements that benefit of the American public.

What Benefits Will Be Provided to the American Public Through This Request?

Since its inception, NCAP has proven to be highly effective. The success of the program can not only be measured by the number of injuries prevented and lives saved, but it can also be measured by consumers' use of NCAP star ratings to influence their vehicle purchasing decisions. It is their interest that incentivizes vehicle manufacturers to respond to program changes by making safety improvements to new vehicles.

In recent years, it is clear that vehicle manufacturers are responding quickly to program enhancements by making additional safety improvements to their vehicles in order to earn top NCAP performance ratings and recommendations. Although it took nearly three decades for most vehicles to achieve the program's highest star rating of 5-stars for the original crash test, it has taken only a few years for manufacturers to achieve similar levels of safety performance for more recently added tests. The agency believes that today, more than ever before, consumers consider safety to be an influential factor when making vehicle purchasing decisions, and are demanding ever-increasing levels of safety.

The program's influence on the new vehicle market is particularly important as the agency continues forward on its mission to save lives. In 2014, the last year for which data is available, 32,675 people died on U.S. roads and over 2.3 million were injured. This is equivalent to 90 deaths every day and more than 260 injuries every hour. The requested resources will enable the agency to implement these revolutionary advances that will yield far greater advances in saving lives and improving highway safety than the current NCAP program.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Fuel Economy (CAFE)	\$7,900,000	\$7,650,000	\$7,650,000	\$0
Salary and Benefits	\$1,036,455	\$1,102,892	\$1,131,795	\$28,903
Total	\$8,936,455	\$8,752,892	\$8,781,795	\$28,903

What Is This Program and Why Is It Necessary?

The Department of Transportation has been setting Corporate Average Fuel Economy (CAFÉ) standards since the late 1970s under the guidance of the Energy Policy and Conservation Act of 1975 (EPCA), which mandated the doubling of fuel economy of light duty vehicles in 10 years. CAFÉ standards are intended to reduce energy consumption by increasing the fuel economy of cars and light trucks. In 2007, Congress enacted the Energy Independence and Security Act (EISA), which amended EPCA. The Act reformed the CAFÉ structure by mandating an attribute-based structure as well as ratable and substantial increases in fuel economy. The overall light duty fleet must reach 35 mpg by 2020 and continue improving thereafter. In addition, the Act authorized and directed the Department to issue standards for medium and heavy duty vehicles for the first time. To ensure that consumers are better educated about fuel economy and to encourage the purchase of more fuel efficient vehicles, Congress also mandated improved labeling to provide information regarding how different vehicles perform with respect to fuel economy and greenhouse gas emissions. The CAFÉ program directly supports the Department's Environmental Sustainability goals.

The CAFÉ program plays a key role in addressing the intertwined and critically important challenges of dependence on oil, energy security and climate change that our country faces. DOT is working jointly with the Environmental Protection Agency (EPA) to establish standards that improve fuel economy of vehicles and reduce greenhouse gas emissions. By establishing coordinated standards, the automotive industry can build a single national fleet that meets the requirements of both EISA and the Clean Air Act. In addition, it will provide consumers with savings at the pump.

Why Do We Want/Need To Fund The Program At the Requested Level?

In FY 2017 we request \$8.8 million of which \$7.6 million is specifically for the Fuel Economy program, which is the same as the FY 2016 enacted funding level. The \$8.8 million funding will be used to provide support for future rulemaking programs, including the passenger car and light-duty truck CAFÉ program for 2022-2025, and to conduct analyses under the National Environmental Policy

Act. In 2012, NHTSA issued final CAFÉ standards for 2017-2025. However, because EISA requires NHTSA to establish CAFÉ standards for no more than five years at a time, standards for 2022-2025 were augural. NHTSA will conduct *de novo* rulemaking to establish 2022-2025 CAFÉ standards. The agency will continue to improve the fuel economy programs, conducting respective analyses and looking at potential refinements and enhanced analytical approaches. The budget request also supports the CAFÉ Management Suite, which allows for a standardized method to receive data from EPA and manufacturers. The Management Suite makes the data easily accessible to the Fuel Economy and Vehicle Safety Compliance programs and allows for robust reporting.

The FY 2017 budget request will support work in the following areas of fuel economy regulation required by EISA:

- Conduct analytical work to support the development of model years 2022-2025 standards, including the development of Draft and Final Environmental Impact Statements.
- Initiate work by the National Academy of Sciences to develop a report evaluating medium-duty and heavy-duty truck fuel efficiency standards.
- Initiate work by the National Academy of Sciences to develop a report evaluating passenger car, light-duty truck and medium-duty passenger vehicle fuel economy standards.
- Continue operations and maintenance of the CAFÉ Management Suite including hosting, software and contract labor costs.

What Benefits Will Be Provided to the American Public Through This Request?

The previously issued 2012 to 2016 CAFÉ regulations are projected to save 1.8 billion barrels of oil over the lifetime of model year (MY) 2012 to 2016 light-duty vehicles. The average MY 2016 vehicle is expected to have net lifetime savings of more than \$3,000 for the vehicle owner. The 2017-2025 CAFÉ regulations are projected to save 4 billion barrels of oil and reduce CO₂ emissions by 8 billion metric tons over the lifetime of MY 2017 to 2025 light-duty vehicles. The average MY 2025 vehicle is expected to have net lifetime savings for the vehicle owner of \$400-\$5,700 based on 7 percent and 3 percent discount rates, respectively. The 2014-2018 Medium- and Heavy-Duty Vehicle regulations are projected to save 530 million barrels of oil, reduce CO₂ emissions by 270 million metric tons, and provide \$49 billion in net benefits over the lifetime of MY 2014 to 2018 vehicles.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Climate Control	\$10,000	\$10,000	\$10,000	\$0
Salary and Benefits	\$0	\$0	\$0	\$0
Total	\$10,000	\$10,000	\$10,000	\$0

What Is This Program and Why Is It Necessary?

The Center for Climate Change and Environmental Forecasting is an initiative of the U.S. Department of Transportation, dedicated to fostering awareness of the potential links between transportation and global climate change, and to formulating policy options to deal with the challenges posed by these links. NHTSA collaborates with other Departmental modes to fund these activities.

Within the United States, transportation is the largest source of greenhouse gas (GHG) emissions after electricity generation. With scientific recognition that GHG emissions are contributing to a long-term warming trend of the earth, there is an increasing realization that transportation, as a significant contributor of GHGs, plays an important role in climate change policy and program decisions. This initiative directly supports the Department's Environmental Sustainability goals.

Why Do We Want/Need To Fund The Program At the Requested Level?

In FY 2017 we request \$10,000 for the Transportation/Climate Change Center program, which is the same as the FY 2016 enacted funding level. We request \$10,000 to continue support of the Department's Climate Change Center as part of our commitment to Environmental Sustainability.

What Benefits Will Be Provided to the American Public Through This Request?

The Center-funded research publications, and documents, are published and distributed annually. They are also posted on the Center's website, <http://climate.dot.gov/>.

Detailed Justification for Enforcement Programs

What Is the Request and What Funds Are Currently Spent on the Program?

FY 2017 – ENFORCEMENT - BUDGET REQUEST

*Updated to include Direct Salaries & Benefits as of FY17

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	Change FY 2017 - 2016
Vehicle Safety Compliance	\$13,433,885	\$13,931,792	\$13,578,863	(\$352,929)
Safety Defects Investigation	\$18,583,900	\$23,393,706	\$47,516,691	\$24,122,985
Odometer Fraud	\$1,028,390	\$1,099,336	\$1,124,110	\$24,774
Total	\$33,046,175	\$38,424,834	\$62,219,664	\$23,794,830

What Is This Program and Why Is It Necessary?

In FY 2017 we are requesting \$62.2 million of which \$38.4 million is for Enforcement programs, which is \$23.8 million more than the FY 2016 enacted requested funding level. Funding at this level will allow us to continue to improve the effectiveness of our safety defects investigation program, continue our expansion of compliance activities in response to new safety and fuel economy activities, enhance our ability to address odometer fraud as well as maintain our core vehicle safety enforcement programs. With this funding, NHTSA would be able to:

- Continue our expansion of the capabilities of the Corporate Information Factory (CIF) in the areas of analysis, reporting, data management, workflow, and records management.
- Provide contract support for the CIF enhancements, safety defects investigation web site and mobile apps.
- Conduct a second consumer campaign to increase the number and quality of safety defect complaints, as well as increase awareness and responsiveness to recalls that will build upon our FY 2016 campaign that began in Jan 2016.
- Create a dedicated source of training for ODI investigators and data analysts to stay abreast of new technologies to better identify potential defects.
- Provide contract support for additional field investigations.

- Continue to expand import and Corporate Average Fuel Economy (CAFÉ) enforcement activities.
- Continue to explore compliance testing related to new safety risks such as those associated with electronic systems.
- Significantly expand testing and field inspection capabilities to identify potential defects sooner and evaluate proposed remedies for especially high-risk recalls and those involving new technologies.

ENFORCEMENT

Vehicle Safety Compliance

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Vehicle Safety Compliance	\$9,140,000	\$8,890,000	\$8,890,000	\$0
Salary and Benefits	\$4,293,885	\$5,041,792	\$4,688,863	(\$352,929)
Total	\$13,433,885	\$13,931,792	\$13,578,863	(\$352,929)

What Is This Program and Why Is It Necessary?

The Office of Vehicle Safety Compliance (OVSC) conducts activities that contribute to the Department's goal of reducing highway fatalities. Failure of motor vehicles and items of motor vehicle equipment (tires, child safety restraints, etc.) to comply with Federal motor vehicle safety standards (FMVSS) can lead to fatalities, injuries and property damage. The program works closely with Rulemaking on the development of new and amended FMVSS and develops objective and repeatable test procedures that NHTSA uses to determine compliance with the standards. The program also conducts testing, inspection, analysis, and investigations to identify motor vehicles, motor vehicle equipment, and imported vehicles that do not meet applicable FMVSS and other regulations. When a noncompliance is confirmed, NHTSA must ensure that the manufacturer or importer recalls the vehicle or equipment and provides a remedy for the noncompliance. Finally, the program enforces the Corporate Average Fuel Economy (CAFÉ) regulations by ensuring proper vehicle classification, collecting civil penalties, tracking available credits and monitoring the transfer and trading of credits.

This program is essential to enforce compliance with FMVSS, which prevent fatalities, injuries, and property damage. In the absence of an active enforcement program, compliance would essentially be voluntary. This situation would likely lead to the markets being flooded with noncompliant vehicles and equipment, creating enormous safety risks for consumers.

Why Do We Want/Need To Fund The Program At the Requested Level?

In FY 2017 we request \$13.6 million, of which \$8.9 million is specifically for the Vehicle Safety Compliance program, which is the same as the FY 2016 enacted funding level. Funding at this level will allow us to complete critical testing of new vehicles for compliance with crashworthiness and crash avoidance standards, to complete critical equipment compliance testing, and to continue enforcement of CAFÉ regulations for passenger vehicles and light trucks. The funding will also support agency efforts to continue to develop expertise in vehicle electronics and alternative fuel

systems and to deter the importation of unsafe motor vehicles and equipment, and to implement CAFÉ regulations.

Some new technologies, such as electronic controls, require OVSC to continue developing its electronics expertise to assist in the development and implementation of potential safety standards for electronic systems performance and electronic control system security. In addition, OVSC continues to address the safety of alternative fuel systems, such as hybrid electric, electric, fuel cell, compressed natural gas (CNG), and other non-fossil fuel systems, including developing detailed test procedures, conducting compliance demonstrations, and testing the reliability of these alternative fuel systems.

This funding in FY 2017 will enable OVSC to continue to work with U.S. Customs and Border Protection (CBP) to help prevent noncompliant and/or defective vehicles and equipment from entering the country as part of the statutory requirements of MAP-21 and continued in the FAST Act. This funding will support implementation of a risk management strategy that addresses the safety problems associated with the significant increase of imported motor vehicle and motor vehicle equipment in concert with intervention by U.S. CBP personnel at the ports of entry. By doing so, OVSC will be able to devote its limited resources to those potential safety problems that pose the highest risk to the public and make use of other enforcement resources to carry out its safety mission. Funds also are needed to analyze exports of motor vehicles and equipment to the U.S. at their source, to collect and analyze data on the flow of those exports to the U.S., to address appeals to commodity seizures and for compliance tests conducted on imported vehicles and equipment.

OVSC will continue to support the expanding CAFÉ program, including the 2017-2025 light duty vehicle regulations and the 2014-2018 commercial medium and heavy duty vehicle regulations, and the increased enforcement responsibilities resulting from credit trading and expanded test procedures for CAFÉ attribute measurements. Additionally, the funding supports the Vehicle Safety Compliance web portal and databases and the Motor Vehicle Importation Information (MVII) system. Vehicle Safety Compliance provides manufacturer, modifier and testing databases to the public through the NHTSA web site. The MVII is a tracking system that provides the ability to record and report on basic identifying information related to imports such as registered importers, petitions, compliance periods, official correspondence and applicable fees.

The requested funding will enable NHTSA to accomplish these objectives in FY 2017:

- Complete critical vehicle crashworthiness and crash avoidance compliance testing, including developing new test procedures and testing for compliance with new safety regulations issued in response to MAP-21 and continued in the FAST Act.
- Complete critical equipment compliance testing, such as child seats, seat belts and brake hoses.
- Continue outreach to foreign vehicle and equipment manufacturers and focused enforcement of imported motor vehicle equipment.

- Continue to monitor and test new entrants into motor vehicle and equipment manufacturing both inside and outside the U.S. for compliance with the FMVSS.
- Continue enforcement of existing CAFÉ standards and regulations, including the system for trading of compliance credits.
- Continue to increase our electronic reliability enforcement capability.
- Continue to monitor and test emerging alternative fuel systems, such as hybrid electric, electric, fuel cell and CNG.
- Maintain NHTSA's existing tire safety facility to include repairs and improvements to buildings, grounds and test track areas.
- Continue operations and maintenance of the Vehicle Safety Compliance web portal and databases and the MVII system including hosting, software and contract labor costs.

What Benefits Will Be Provided to the American Public Through This Request?

The Vehicle Safety Compliance program develops and implements the performance tests to help ensure the auto industry's compliance with the FMVSS, thus saving thousands of lives in recent years through crash protection and crash avoidance. Consumers have benefited greatly from the industry's generally successful attempts to comply with the FMVSS, which are influenced by OVSC's compliance tests and investigations. These tests and investigations helped protect millions of consumers from the risks posed by noncompliant vehicles and items of equipment. In addition, since model year 2000, OVSC has assisted in promoting better fuel economy in the American fleet by collecting an average of about \$25 million each year in fines for CAFÉ violations. These enforcement fines incentivize auto manufacturers to design and build more fuel efficient vehicles and reduce reliance on petroleum products.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Safety Defects Investigations	\$9,700,000	\$9,450,000	\$29,306,000	\$19,856,000
Salary and Benefits	\$8,883,900	\$13,943,706	\$18,210,691	\$4,266,985
Total	\$18,583,900	\$23,393,706	\$47,516,691	\$24,122,985

What Is This Program and Why Is It Necessary?

NHTSA's Office of Defects Investigation (ODI) investigates possible defect trends, and where appropriate, seeks recalls of vehicles and vehicle equipment that pose an unreasonable safety risk. In the past ten years, ODI has influenced, on average, the recall of nearly 9 million vehicles annually as well as the recall of millions of child seats, tires and other items of equipment for safety-related defects. In 2014 alone, ODI influenced the recall of over 19 million vehicles and over 7 million child seats. NHTSA developed and maintains a comprehensive and sophisticated data warehouse/system, Advanced Retrieval Tire, Equipment, Motor Vehicle Information System (ARTEMIS), to securely store and manage a voluminous amount of Early Warning Reporting (EWR) data submitted by manufacturers pursuant to the requirements of the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act as well as complaints from vehicle owners regarding recalls and investigations. The Safety Defects Investigation program analyzes the EWR data to determine whether anomalies or trends exist that potentially indicate the presence of a safety-related problem. NHTSA is using this information to supplement its complaint database and assist in deciding whether to open a defect investigation and to determine the adequacy of recalls.

This program enhances safety on our Nation's highways by allowing NHTSA to investigate motor vehicles and items of motor vehicle equipment for possible defect trends, and where appropriate, seek recalls of vehicles and vehicle equipment that pose an unreasonable safety risk. When recalls are issued, this program monitors manufacturers and ensures that the manufacturer sufficiently and quickly correct the identified vehicle safety issues.

Why Do We Want/Need To Fund The Program At the Requested Level?

In FY 2017 we request \$47.5 million, of which \$29.3 million is specifically for the Safety Defects Investigation program, which is \$19.8 million more than the FY 2016 enacted funding level. This

requested level will enable ODI to continue to improve its effectiveness and meet growing challenges to identify safety defects quickly, ensure remedies are implemented promptly, and inform the public of critical information in an effective manner.

More specifically, the requested funding for FY 2017 will support continuation of the following activities:

- Continue screening consumer reports of safety-related problems with motor vehicles or motor vehicle equipment including child safety seats and tires.
- Conduct investigations into allegations of safety-related problems, as well as recalls where the remedy or the scope of the vehicles included was allegedly inadequate.
- Review all manufacturer technical service bulletins to ensure that consumers receive appropriate notification of safety-related problems.

Increased funding request will fund the following NEW activities:

- Enhance accessibility to data and expand consumer awareness of the program.
- Expand stakeholder outreach to encourage the reporting of safety-related problems in motor vehicles and motor vehicle equipment.
- Resolve petitions requesting NHTSA to open investigations into alleged safety problems.
- Review all manufacturer input to the EWR system.
- Significantly improve it data analysis capabilities including more verification and analysis of Early Warning data.

Beyond the core duties described above, NHTSA also will continue to build upon the improvements began in FY 2015 and proposed in FY 2016. These efforts include operations and maintenance support for the Electronic Document and Records Management System (EDRMS) – Corporate Information Factory (CIF), further CIF customization and training, a second consumer awareness campaign, and additional contract support including field investigators who can quickly travel to the site of a crash or incident.

NHTSA will continue implementation of the enhanced and expanded advanced data mining and analytical capabilities accomplished through the CIF in the areas of analysis, reporting, data management, workflow, and records management. The CIF allows Safety Defects Investigations to continue to provide more transparency for its data and reduce time for identifying new defect trends that may occur with the development and implementation of new technology. The tool's business intelligence capability enables faster, more reliable results from data. In addition to supporting CIF operations and maintenance, funding requested for FY 2017 will be used to customize the capabilities of the CIF and provide specialized training to enhance usability by defect screeners and investigators.

In FY 2017 the Safety Defects Investigation program will undertake a second consumer awareness and outreach campaign that will build upon our planned FY 2016 campaign as well as continue to improve its public interfaces. A very large portion of the data that the program receives about defects in vehicles comes from the people who are driving the very cars that have those defects. In fact, consumer complaints are a rich data source for identifying potential safety defects warranting further investigation and possibly recall. However, NHTSA has learned from focus groups that most consumers are not aware of their option to file a complaint with the agency, nor do they understand that their information may be critical to getting a safety recall and removing unsafe vehicles from American's highways. The Safety Defects Investigation program will continue to improve its public messaging through a second consumer awareness campaign not unlike some of NHTSA's better-known safety campaigns addressing seat belts and drunk driving so that this important source of safety data, consumer input, can be used more effectively. Since this program will build upon the campaign proposed for FY 2016, NHTSA anticipates a cost saving over the previous year since some of the materials will already be prepared. At the same time, the Safety Defect Investigation program will continue to make progress in improving the look, feel and utility of the consumer website, which is part of the NHTSA web systems. The FY 2017 request also will enable NHTSA's defects investigation program to further improve consumer access to safety information.

Additionally, NHTSA will improve the quality of the screening and investigation processes, seek to increase the vehicle recall completion rate, continue to monitor recalls for adequacy of scope and remedy, and continue to respond to Congressional and consumer inquiries and ensure that all public information related to investigations, recalls, and complaints is current. This activity will be facilitated through additional contract staff. The requested funding will support field investigators standing ready to travel on a moment's notice to begin an investigation as close in time to the crash or incident as possible. It also supports investigation coordinators who would assist other NHTSA offices by providing information, documents, and data to respond to congressional, media and legal inquiries that come to NHTSA from outside sources.

What Benefits Will Be Provided to the American Public Through This Request?

Absent ODI's aggressive screening for defect trends and investigation of possible defects, millions of consumers each year would be subjected to unreasonable safety risks when operating their vehicles or using motor vehicle equipment. While the majority of manufacturer recalls are uninfluenced by NHTSA, those recalls that *are* influenced by NHTSA affect a significantly greater number of vehicles. This demonstrates the value of NHTSA's investigative process without which millions of vehicles would likely go uncorrected, thus putting consumers at risk. The ODI public website receives on average 50,000 visitors per day who are using the Vehicle Identification Number or VIN look-up tool to see whether their vehicles have open recalls, to search for recalls and investigations, to file complaints or to conduct research before purchasing vehicles or for other purposes. Furthermore, the

collection of EWR data has forced manufacturers to take a closer look at their fleet performance and, in some instances, has led to identification of defects and recalls much earlier in a vehicle's lifecycle.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Odometer Fraud Investigations	\$140,000	\$154,000	\$154,000	\$0
Salary and Benefits	\$888,390	\$945,336	\$970,110	\$24,774
Total	\$1,028,390	\$1,099,336	\$1,124,110	\$24,774

What Is This Program and Why Is It Necessary?

Odometer tampering has evolved into a cyber-security issue and continues to be a serious crime and consumer fraud issue. Odometer fraud often masks the actual condition of used vehicles, which increases the safety risks associated with their use and could hide the need for necessary safety maintenance and repairs. Strong enforcement of the Federal and State odometer laws through prosecutions with stiff sentences appears to be the most effective way to address the problem. NHTSA's criminal investigators conduct investigations of large-scale odometer fraud schemes and work closely with Department of Justice's Office of Consumer Litigation prosecutors to ensure that worthy cases are effectively prosecuted. NHTSA also works under cooperative agreements with several State agencies to provide notification to owners of vehicles identified during investigations and advise them of the mileage discrepancies and their rights and remedies under the Federal odometer law. NHTSA encourages all State agencies to provide this notification and assists them when necessary.

Why Do We Want/Need To Fund The Program At the Requested Level?

In FY 2017, NHTSA is requesting \$1.1 million, of which \$154 thousand is specifically for the Odometer Fraud Investigation program, which is the same as the FY 2016 enacted funding level. The FY 2017 funding will enable a continuation of cooperative agreements with multiple States as well as supplement efforts to research the rate of odometer fraud occurrence in older vehicles, electronic odometer security, and e-odometer statements. Cooperative agreements with multiple State enforcement agencies assist our efforts to encourage States to start new odometer fraud activities or enhance existing programs to reduce the occurrence of odometer fraud in those States. Through these cooperative agreements, we help deter future odometer law violations, saving consumers millions of dollars in maintenance and repair costs and better enabling purchasers of used vehicles to keep their vehicles safe and roadworthy. The increased funding will also allow the Office of Odometer Fraud to

maintain and improve its electronic case management system and address specialized criminal law enforcement needs to ensure officer safety and efficient investigative practices.

Because vehicles now last longer than in years past, Federal and State odometer enforcement personnel are dealing with an increase in odometer fraud related to older vehicles that are currently exempt from required odometer statements. In addition, odometer tampering devices are being imported (mostly from China), sold on the Internet, and used to tamper with certain types and generations of digital odometers with almost no way for detection and no conclusion about the extent of damage they may cause to other data recorders on a vehicle. These handheld programming devices could be capable of “hacking” into a vehicle’s controller area network and manipulating software code related to odometer setting. This type of manipulation could result in not only deceiving consumers but also other vehicle systems that use mileage data in their algorithms, potentially masking safety problems with the vehicle. Finally the funding supports the System for Planning And Research in Towns And Cities for Urban Sustainability (SPARTACUS), which is a case management software solution that is capable of supporting the types of investigations conducted by the Odometer Fraud program.

This funding level for FY 2017 supports the following activities:

- Investigate odometer fraud for criminal prosecution.
- Seek injunctions against violators.
- Seek recovery of damages for defrauded consumers.
- Continue to fund cooperative agreements with multiple State enforcement agencies
- Analyze available data and continue to seek new data regarding the frequency of odometer fraud in older vehicles for which odometer statements are not required at sale or change of ownership.
- Continue to support enforcement efforts against vendors of odometer tampering devices, as well as vehicle sellers who use the devices to defraud their customers and place potentially unsafe vehicles on the road.
- Continue to explore secure protocols for the use of e-odometer statement.
- Continue operations and maintenance of SPARTACUS including hosting, software and contract labor costs.

What Benefits Will Be Provided to the American Public Through This Request?

Since 1984, odometer fraud investigations have resulted in more than 273 criminal convictions in 36 States with prison sentences ranging from one month to ten years, criminal fines totaling more than \$3 million, and court ordered restitution totaling more than \$16 million.

Detailed Justification for Vehicle Safety Research and Analysis Programs

What Is the Request and What Funds Are Currently Spent on the Program?

FY 2017 – VEHICLE SAFETY

RESEARCH AND ANALYSIS - BUDGET REQUEST

***Updated to include Direct Salaries & Benefits as of FY17**

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	Change FY 2017 - 2016
Safety Systems	\$8,880,650	\$8,975,560	\$9,016,849	\$41,289
Biomechanics	\$11,528,715	\$11,211,894	\$11,178,534	(\$33,360)
Heavy Vehicles	\$2,344,195	\$2,451,446	\$2,385,055	(\$66,391)
Crash Avoidance	\$9,324,845	\$12,605,784	\$12,501,904	(\$103,880)
Alternative Fuels Vehicle Safety	\$1,844,195	\$1,951,446	\$1,885,055	(\$66,391)
Vehicle Electronics and Emerging Technology	\$0	\$3,600,000	\$55,600,000	\$52,000,000
Vehicle Research and Test Facility	\$500,000	\$500,000	\$500,000	\$0
Fatality Analysis Reporting System (FAST FARS)*	\$0	\$0	\$0	\$0
National Automotive Sampling System (NASS)*	\$0	\$0	\$0	\$0
Total	\$34,422,600	\$41,296,130	\$93,067,397	\$51,771,267

In FY 2017, we are requesting \$93.1 million of which \$86.4 million is for the Vehicle Safety Research and Analysis programs, which is \$51.7 million more than the FY 2016 enacted funding level. The requested increase will provide additional funds to conduct critical research into vehicle electronics and emerging technologies. The Vehicle Electronics and Emerging Technologies program is aimed at conducting research to support agency decisions in the areas of electronics reliability, cybersecurity, vehicle control systems and emerging technologies that utilize sensors to achieve higher levels of automation. The increase requested in FY 2017 allows NHTSA to build upon research planned for FY 2016 and to initiate new projects to close identified gaps in support of agency decisions on electronics reliability and cybersecurity. These activities aim to enhance the safety and security of automotive electronic control systems while supporting the safe adoption of vehicle automation technologies. Without this funding, the Vehicle Safety Research and Analysis programs will have to deemphasize other programs so that these emerging safety issues can be better addressed.

The requested funding also allows NHTSA to execute critical research projects for emerging safety areas associated with safety systems and alternative fuel vehicles, for addressing new technologies in the areas of crash avoidance and heavy vehicles, and improving our ability to evaluate vehicles at our facilities for research purposes and for potential defects. By funding these projects, the agency will be able to reach agency decisions in the area of alternative fuel safety before potential safety issues are realized while also moving forward with agency actions in the area of vehicle-to-vehicle communications, heavy vehicle crash avoidance systems, new occupant protection standards for adults and children, and the completion of several congressional mandates.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Safety Systems	\$7,400,000	\$7,400,000	\$7,400,000	\$0
Salary and Benefits	\$1,480,650	\$1,575,560	\$1,616,849	\$41,289
Total	\$8,880,650	\$8,975,560	\$9,016,849	\$41,289

What Is This Program and Why Is It Necessary?

Safety Systems conducts research to support agency actions that reduce the number of fatal and serious injuries to occupants in motor vehicles that occur in the United States each year from crashes. This research program is responsible for developing and upgrading test procedures for child safety, adult occupant protection, and our crash test standards. Safety systems research examines existing designs, new and improved vehicle designs, safety countermeasures and equipment to enhance safety for all occupants in the event of a crash.

In the past five years, new standards have been implemented and existing standards improved as a result of research conducted by this program resulting in real world improvements in crash safety. Despite these successes, additional research is needed to further improve crash safety. For example, frontal crashes continue to account for the largest number of fatalities to belted occupants. As such, this program studies advanced seat belt and air bag technologies, new crash modes, and innovative developments for vehicle design that can further enhance protection for occupants of all ages. Activities in NHTSA's Safety Systems program support the agency's regulatory agenda and specifically address the Department's highway safety fatality goals.

Why Do We Want/Need To Fund The Program At the Requested Level?

In FY 2017 we are requesting \$9 million, of which \$7.4 million is specifically for Safety Systems research, which is the same as the FY 2016 enacted funding level. This funding level will enable us to continue research toward advanced occupant protection systems, unattended child warning systems, and non-intrusive seat belt interlock systems. NHTSA will continue to look at how to enhance vehicle safety for the elderly population and small children, particularly in the rear seat, including the use of advanced crash test dummies. The funding also supports the Vehicle Safety Crash Test database that annually provides over 3.5 million test data downloads to support vehicle safety research.

Specifically, the requested funding will allow us to pursue the following activities:

- Continue computer modeling and simulation programs designed to leverage private/public partnerships to assess the effects of light-weighted vehicles as a result of increased fuel economy requirements. Provide testing and computer modeling to understand the implications for occupant safety of new fuel efficient vehicle designs.
- Complete support for agency regulatory action on child restraint performance in frontal impacts.
- Complete research to support possible regulatory actions on frontal oblique crashes.
- Continue testing and analysis of occupant restraint countermeasures, including rear seat occupants.
- Conduct research to evaluate rear seat restraint performance using advanced small female, 10 year old, and 6 year old dummies.
- Continue research to reduce injuries from occupant contact with seat backs and other surfaces in the rear seat compartment.
- Continue research toward reducing ejections through roof openings.
- Complete the evaluation of seat belt interlock system designs and their potential implications for vehicle occupant safety.
- Purchase of advanced crash test dummies including advanced 5th percentile female, 10 year old, and potentially rear impact dummies.
- Continue operations and maintenance of the Vehicle Safety Crash Test database including hosting, software and contract labor costs.

What Benefits Will Be Provided to the American Public Through This Request?

Research in vehicle crashworthiness has shown substantial benefits in several recent rules. Improved roof strength (FMVSS 216) and ejection mitigation technologies (FMVSS 226) have been shown to save several hundred lives per year after full implementation. Current proposed rulemaking for side impact testing and improved ease-of-use of child restraint systems were developed through safety systems research. The proposed efforts for 2017 will help support agency decisions in fuel economy, frontal and side crash safety, occupant containment, and advanced occupant restraint performance.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Biomechanics	\$9,900,000	\$9,400,000	\$9,400,000	\$0
Salary and Benefits	\$1,628,715	\$1,811,894	\$1,778,534	(\$33,360)
Total	\$11,528,715	\$11,211,894	\$11,178,534	(\$33,360)

What Is This Program and Why Is It Necessary?

The Biomechanics program conducts real-world data collection and experimental research to support agency actions that reduce the number of fatalities and serious injuries associated with motor vehicle crashes in the United States. In particular, the biomechanics program completes detailed crash and medical investigations of real-world crashes that improves the agency's knowledge of injuries and their causes. Our investigations of these detailed crash cases and analysis of other NHTSA data sources suggest that despite recent new or improved safety standards, many preventable fatalities and serious injuries still occur and are projected to continue occurring. Our efforts aim to describe the factors associated with the serious head/brain, thorax, spine, abdomen, and lower extremity injuries that still frequently occur as a result of motor vehicle crashes. This program develops the required knowledge of those injuries (causation scenarios, mechanisms, tolerance, human response) and applies that knowledge in the development of advanced test devices (human-like crash test dummies), detailed mathematical models of humans, and other new tools and criteria that can be used to predict and mitigate against injuries and fatalities that result from motor vehicle crashes. The products of this research are directly used in NHTSA's safety standards and New Car Assessment Program (NCAP) and specifically address the Department's highway safety fatality goals.

Why Do We Want/Need To Fund The Program At the Requested Level?

In FY 2017 we are requesting \$11.2 million, of which \$9.4 million is specifically for the Biomechanics research program, which is the same as the FY 2016 enacted level. The biomechanics research program provides NHTSA with state-of-the art test devices, tools and injury criteria for use in safety standards or NCAP. Funding at the requested level is required to continue the development, evaluation, and standardization of new adult frontal and side impact dummies, new frontal child dummies, and a rear impact dummy. Funding is also necessary to support the development of advanced head/brain, thorax, spine, abdominal, and lower extremity injury response/tolerance data and criteria for use with the new dummies and associated vehicle

test programs. Additionally, funding is required to support continued vulnerable occupant (children, older occupants, obese) injury research and associated needs for test dummies, mathematical human models and injury criteria.

Specifically, the requested funding will allow us to pursue the following activities:

- Support potential rulemaking efforts for the THOR 50th percentile male and 5th percentile female adult frontal dummies and the WorldSID 50th male and 5th female adult side impact dummies.
- Support potential implementation of a new brain injury criterion as well as other new injury criteria (multi-point chest; lower leg; pelvis; abdomen) that will potentially be applied on new/advanced dummies.
- Support potential rulemaking efforts for advanced 6 year old and 10 year old dummies.
- Support potential rulemaking efforts for pedestrian head-forms and lower leg-forms.
- Continue field data collection of serious injury cases with emphasis on newer vehicles as part of the Crash Injury Research and Engineering Network (CIREN). Efforts include a comprehensive engineering and medical review of cases, publishing of completed cases into public datasets, and case reconstructions using mathematical models to further our understanding of factors associated with serious injuries.
- Research on injury mechanisms/tolerance and anthropometry of vulnerable occupants (e.g., older, obese) through experimental and mathematical studies aimed at developing unique injury criteria, concepts for mathematical human body models and physical dummies.
- Computational modeling efforts to include evaluation of new and existing dummy and human body models; evaluation and application of new human (5th female and 50th and 95th male adult occupants including models representing older occupants and occupants of varying BMI) and dummy (e.g., THOR 50th and 5th) models; analysis of real-world injury conditions via crash reconstruction of CIREN crash cases; the development and application of new injury assessment tools and injury criteria (e.g. BrIC); and the demonstrated application of advanced mathematical models in crashworthiness research.
- Continue operations and maintenance of the Biomechanical Test database including hosting, software and contract labor costs and continued efforts to modernize and improve usability of the database.

What Benefits Will Be Provided to the American Public Through This Request?

The Biomechanics research program has made significant contributions to NHTSA rulemaking efforts and has developed publicly available data, tools, techniques, and procedures that NHTSA and industry have and will continue to use to further vehicle safety. Below are some recent accomplishments.

- Injury criteria, such as the new brain injury criterion (BrIC) and associated risk functions for use with current and future dummies in NHTSA regulations and/or New Car Assessment Program (NCAP);
- Public release of CIREN dataset of detailed injury and medical data associated with seriously injured motor vehicle crash occupants. By the end of FY 2016, 3,000 cases will have been published and made available to the public. Roughly 300 cases are added to the public dataset each fiscal year.
- Test tools for research or incorporation into NCAP or regulation such as the Q3s, THOR and WorldSID dummies.
- Development of mathematical models such as detailed human body models, a brain injury model, and dummy-based models such as the THOR 50th percentile male.
- NHTSA's Biomechanics Test Database, which includes over 8000 NHTSA-funded or acquired tests, is used by NHTSA, academia, and industry for injury assessment and criteria development.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Heavy Vehicles	\$1,900,000	\$1,900,000	\$1,900,000	\$0
Salary and Benefits	\$444,195	\$551,446	\$485,055	(\$66,391)
Total	\$2,344,195	\$2,451,446	\$2,385,055	(\$66,391)

What Is This Program and Why Is It Necessary?

In order to meet population growth, the efficient transport of goods across the United States also includes growing the fleet of heavy trucks. In addition, travel by motorcoach has increased significantly over the last few years. The number of traffic fatalities involving heavy vehicles (defined here as vehicle with a gross vehicle weight rating above 10,000 pounds) is relatively low compared to light vehicles, and these crashes account for more than 10 percent of all fatalities. However, heavy truck crashes tend to be particularly deadly because of the mass involved and more severe in terms of property damage when crashes occur. Crashes involving heavy vehicles often completely destroy roadway infrastructure, close freeways, lead to subsequent multi-collision events, result in the death of other occupants, and cost millions of dollars in lost revenue to the economy.

The Heavy Vehicles Crash Avoidance research program is focused on assessing technologies that offer the promise of making these vehicles less prone to crashes through improvements in braking and handling characteristics, and through leading edge driver assistance and automatic vehicle control systems for tractor semi-trailer, single unit trucks, motorcoaches and many other types of buses. Research is needed to investigate the possibility of extending stability control technology to single unit trucks and other types of heavy vehicles. Research is also progressing on Automatic Emergency Braking (AEB) systems for heavy vehicles, which first warn the driver, and then if necessary, automatically intervene with emergency braking in the event of potential rear-end crashes involving heavy vehicles. This technology shows promise for significantly reducing the incidence and severity of these types of crashes. In addition to AEB, NHTSA also continues to evaluate lane departure warning systems for heavy vehicles as a means of preventing unintended lane change related crashes. The research completed in the heavy vehicle crash avoidance research program results in the development of objective test procedures, benefits analyses, and customer acceptance assessments in order to support agency regulatory decisions. The Heavy Vehicles Crash Avoidance research program directly supports the Department's large truck and bus fatality goals.

Heavy vehicles continue to be a significant factor in vehicle crashes. The transport of goods across the United States is dependent on this growing fleet of heavy trucks. Also, motorcoaches are becoming an increasingly attractive travel mode for Americans. Research must be done to enhance driver awareness and vehicle performance of these vehicles in pre-crash conditions so as to avoid or mitigate the crash threat. This research supports NHTSA's future efforts in tractor semi-trailer, single unit truck, motorcoach and other buses.

Why Do We Want/Need To Fund The Program At the Requested Level?

In FY 2017 we are requesting \$2.4 million, of which \$1.9 million is specifically for the Heavy Vehicles research program, which is the same as the FY 2016 enacted funding level. The requested funding will support research related to stability control systems for single unit heavy vehicles, as well as the continued evaluation of other crash avoidance technologies including AEB and lane departure warning. NHTSA has committed to an aggressive set of agency initiatives on heavy vehicle crash avoidance systems and technologies including completing research to support agency decisions related to existing and emerging crash avoidance technology. Additional research on crash warning systems will be performed to evaluate driver-vehicle interface issues and the integration of multiple safety systems for the purpose of optimizing overall effectiveness while minimizing distraction. The research to be completed in FY 2017 will result in the following:

- Building on prior years' work, will further develop objective test procedures and performance metrics for Automatic Enhanced Braking (AEB) systems for both single unit trucks as well as tractor trailers.
- Continuing research on objective test procedures, performance metrics, and effectiveness estimates for stability control systems for single unit trucks.
- Continuing research to better understand real-world performance, customer satisfaction and system reliability for forward collision avoidance and mitigation systems through field operational testing.
- Utilization of hardware-in-the-loop apparatus and modeling techniques (refined in prior years' work) to enhance the efficiency and safety of NHTSA's evaluation of crash avoidance technologies
- Completion of test procedures for lane departure warning systems.
- Enhanced understanding of crash avoidance driver interface requirements for commercial truck and bus drivers.

What Benefits Will Be Provided to the American Public Through This Request?

The Heavy Vehicle Crash Avoidance program has made significant contributions to NHTSA's rulemaking efforts such as the development of a new standard for stability control that is estimated to prevent a significant number of rollover crashes involving tractor trailers and motorcoaches. In addition, stability control systems provide a technology foundation for forward collision avoidance and mitigation (FCAM) systems that hold the promise for substantial reductions in rear-end crashes involving heavy vehicles. Research provided under this program will enable the agency to make a regulatory decision on this very promising technology.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Crash Avoidance	\$7,400,000	\$10,400,000	\$10,400,000	\$0
Salary and Benefits	\$1,924,845	\$2,205,784	\$2,101,904	(\$103,880)
Total	\$9,324,845	\$12,605,784	\$12,501,904	(\$103,880)

What Is This Program and Why Is It Necessary?

NHTSA has identified the need for an increased emphasis on crash avoidance technologies with significant potential to reduce fatalities and injuries by preventing the crash from occurring, or significantly reducing the severity of crashes by providing timely warnings to the driver, or automatic braking or steering interventions. The rapid advance of crash avoidance safety systems will radically change the design and performance of automobiles over the next 10 years. Further, these systems are precursors, and necessary building blocks, for automated vehicles which are beginning to appear in vehicle manufacturers' product development plans—and are even emerging in the marketplace today in early forms. These crash avoidance technologies present a unique research challenge. Evaluation of driver assistance technologies, performance standards, and consumer education materials are needed to ensure that the maximum safety benefits are derived from these technologies, while producing a minimum distraction burden for the driver.

Research areas include human factors and intelligent vehicle technologies for crash avoidance with an emphasis on passenger vehicles. Within the human factors program, a continuing focus will be on driver distraction and inattention, crash warning characteristics, impaired drivers (e.g. alcohol), seat belt technology (e.g., interlocks and reminders), advanced controls and displays as well as issues associated with the interaction between the driver and the vehicle. For intelligent vehicle technologies, research areas include advanced technologies that help the driver, and the vehicle, react to imminent crash situations involving other vehicles and pedestrians. Countermeasures include crash avoidance warning systems, advanced vehicle control systems, and driver monitoring technologies. Research tools include modeling and simulation, hardware-in-the-loop bench-top test fixtures, the National Advanced Driving Simulator (NADS), test tracks and instrumented vehicles. Further, this research directly supports Agency Decisions regarding whether such technologies are appropriate to include in the New Car Assessment Program (NCAP) safety ratings, as well as development of the test procedures for evaluating minimum performance requirements associated with NCAP eligibility.

Also for 2017 NHTSA anticipates using a portion of the funding provided under the Crash Avoidance area to support its work in advancing vehicle to vehicle (V2V) communications and safety application test procedure development. In August of 2015, NHTSA signaled its intention to move forward with a regulatory proposal that would require V2V technology on all new light duty motor vehicles. While the foundational research related to vehicle to vehicle safety communications has been funded by USDOT's Joint Program Office for Intelligent Transportation Systems (JPO-ITS), research related to application testing and regulatory proposal refinement will be funded through NHTSA's Crash Avoidance program.

Why Do We Want/Need To Fund The Program At the Requested Level?

In FY 2017 we are requesting \$12.5 million, of which \$10.4 million is specifically for the Crash Avoidance research program, which is the same as the FY 2016 enacted funding level. This funding reflects the agency's increased emphasis on understanding the safety potential of these new technologies, developing objective means for assessing performance, and addressing important human factors issues related to driver inattention, warning the driver, and driver-vehicle interface issues. The research will support the following key program areas:

- Crash Avoidance Technologies: The agency has committed to an aggressive set of agency decisions on several crash avoidance systems and technologies over the next several years. These include collision avoidance and mitigation technologies that react to vehicles and pedestrians. In addition, human factors research is fundamental to understanding how drivers interact with all of these systems and informing driver-vehicle interface approaches to optimize the effectiveness of these safety systems. Research in FY 2017 will include an emphasis on automatic intervention technologies, pedestrian detection and avoidance, and driver monitoring systems.
- Vehicle to Vehicle (V2V) Communications: For FY 2017 NHTSA anticipates funding V2V research in the areas of applications testing and refinement as well as refinements to objective testing procedures for the on-board equipment enabling such safety communications.
- Inattentive Driving: NHTSA is continuing its research to support the development of auditory-vocal interface distraction guidelines and continue research to identify appropriate test procedures and acceptance thresholds for auditory-vocal interfaces. In addition, we will continue to analyze observational and naturalistic driving data to improve the agency's understanding of distracted driving. The agency will also evaluate new vehicle systems relative to agency distracted driving guidelines to ensure that these new systems do not create an unsafe level of distraction for the driver. NHTSA will investigate the effectiveness of drowsy driving countermeasure concepts as well.
- New Vehicle Technologies: NHTSA will continue its research efforts to evaluate new advancements in vehicle technology such as electronic mirrors, seat belt interlocks and

new driver-vehicle interface approaches such as voice interface systems, gesture interfaces, heads-up displays, augmented reality displays and electronic touch screens.

What Benefits Will Be Provided to the American Public Through This Request?

This research program directly supports several critical areas of agency rulemaking and policy development related to passenger vehicle crash avoidance. For example, past successful research was completed on Electronic Stability Control (ESC), which supported the agency's rulemaking effort of development and promulgation of the recent safety standard requiring passenger vehicle ESC. These ESC systems are estimated to save as many as 10,000 lives annually. The light vehicle crash avoidance program has completed a large body of research on driver assistance technologies that present safety warnings to drivers, technologies to modify unsafe driving behaviors such as distraction and alcohol impairment, and technologies to enhance the safety of vulnerable and at-risk populations such as teen drivers, older drivers and visually-impaired pedestrians. Most recently, the research conducted within the Crash Avoidance area is used to support decision making related to the potential inclusion of specific technologies in NHTSA's New Car Assessment Program program—thus advancing the deployment of such life-saving technologies within the marketplace.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Alternative Fuel Vehicle Safety	\$1,400,000	\$1,400,000	\$1,400,000	\$0
Salary and Benefits	\$444,195	\$551,446	\$485,055	(\$66,391)
Total	\$1,844,195	\$1,951,446	\$1,885,055	(\$66,391)

What Is This Program and Why Is It Necessary?

Recently introduced vehicle engine technologies including hydrogen and advanced lithium ion battery vehicles are evolving at a fast rate. Additionally, the recent increase in Compressed Natural Gas (CNG) fueled heavy trucks has fueled concerns regarding the safety of these vehicle systems. NHTSA intends to continue the introduction new requirements to address the unique safety considerations for these evolving vehicle types. Federal safety regulations have not kept pace with the introduction of the more established lithium ion battery and CNG fueled vehicles. These technologies present new safety considerations not previously addressed in the Federal motor vehicle safety standards. The Alternative Fuels Vehicle Safety program supports the Department's Environmental Sustainability goals.

NHTSA is developing objective safety performance tests to support the development of a global technical requirement for electric vehicles. NHTSA completed preliminary test procedure development for lithium-ion electric vehicles in FY 2015 and plans additional test refinement for FY 2016 and FY 2017. Once objective tests are developed, the agency must conduct fleet testing to assess the safety implications and to establish baseline safety performance. Additionally, Compressed Natural Gas (CNG) vehicles have cost advantages over gasoline, especially for fleet operations. NHTSA research is required to update our existing standards to ensure the highest levels of safety for future CNG vehicles. These research and rulemaking efforts will also be applied to hydrogen vehicles which use similar storage containers and have similar potential risks. NHTSA must be at the forefront of research to assess the safety of these alternative fuel vehicles, and to develop safety performance requirements to support potential future rulemaking.

Why Do We Want/Need To Fund The Program At the Requested Level?

In FY 2017 we are requesting a total of \$1.9 million, of which \$1.4 million is specifically for the Alternative Fuels Vehicle Safety research program, which is the same as the FY 2016 enacted funding level. Specifically, the requested funding will allow us to pursue the following activities:

- Continue fleet safety validation testing and data acquisition for analysis of high voltage traction battery systems in support of harmonized requirements.
 - Thermal Propagation testing at full vehicle level to gather data for establishment of pass/fail criteria in regulation.
 - Battery Management System performance
 - Environmental exposure testing of Li-ion Battery Systems based on the NaCl immersion procedure developed in FY 2016.
- Continue the development of the “Integrated Impedance Based Systems Diagnostics Technology” scaling up to pack level architecture.
- Complete development of post-crash battery Stranded Energy assessment and stabilization procedures.
- Continue battery crash performance modeling program to support assessment of functional safety requirements for battery physical environment and management systems
- Complete test requirements for the electric vehicle charging safety
- Finalize updated safety performance test procedures for compressed natural gas and hydrogen gas containers. Support development of new safety standards for hydrogen fuel cell vehicles and assist in the upgrade of the existing standards for compressed natural gas vehicles.
- Continue Liquid Propane Gas (LPG) vehicle system level safety performance research.

What Benefits Will Be Provided to the American Public Through This Request?

NHTSA is gathering information from all sources regarding the battery, stored gas and fuel cell technologies that are emerging. This advanced knowledge is helping to focus the research projects, refine safety assessments, and develop performance tests. NHTSA will be developing appropriate safety requirements for these alternative fuel vehicles.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Vehicle Electronics and Emerging Technology	\$0	\$3,600,000	\$54,850,000	\$51,250,000
Salary and Benefits	\$0	\$0	\$750,000	\$750,000
Total	\$0	\$3,600,000	\$55,600,000	\$52,000,000

What Is This Program and Why Is It Necessary?

Two rapidly emerging and related vehicle safety topics – highly automated vehicles and vehicle cybersecurity are quickly becoming two of the most important vehicle safety research topics. To keep pace with these rapidly changing and dynamic areas NHTSA will need a significant increase in research funding to enable safe deployment of life-saving technologies with proven safety benefits and address emerging challenges associated with their safety and security assurance. The Vehicle Electronics and Emerging Technologies program is aimed at meeting this need. The program will conduct research to support agency decisions and safety requirements in the areas of highly automated vehicles and other emerging technologies, as well as electronics systems safety, including vehicle cybersecurity. These areas were outlined as high priorities for research in NHTSA’s recent report to Congress on this topic titled “Electronic Systems Performance in Passenger Motor Vehicles.” In addition, cybersecurity has been identified by members of the Congress as well as other leaders as a critical area to address as vehicles become more and more reliant on advanced electronic systems.

In FY 2017, the Vehicle Electronics and Emerging Technologies program will build upon research completed in FY 2016 and initiate new projects to close identified gaps in support of agency decisions on automated vehicles, as well as electronics reliability and cybersecurity. These activities aim to enhance the safety and security of automotive electronic control systems. Electronics reliability research comprise methods and standards within and outside the automotive industry for assessing, identifying and mitigating potential and new hazards that may arise from the increasing use of electronics and electronic control systems in the design of modern automobiles. Cybersecurity within the context of road vehicles is the protection of vehicular electronic systems, communication networks, control algorithms, software, users and underlying data from malicious attacks, damage, unauthorized access or manipulation. This Division also conducts research on emerging technologies that provide higher levels of vehicle automation such as where both steering and longitudinal motion controls are simultaneously automated. This Division’s work encompasses all fundamental control systems (steering, braking, throttle, motive power), as well as other safety critical systems such as battery control systems used in alternative fuel vehicles and safety restraint system controls. This program will

continue to carry out needed research in coordination with other offices and organizations and will also be closely coordinated with advanced crash avoidance and human factors research programs.

Today's vehicles are heavily reliant on the use of complex electronic control systems and traditional system design and evaluation methods may no longer be sufficient to properly evaluate the increased complexity of modern vehicles. NHTSA, as well as other Governmental entities such as White House Office of Science and Technology Policy (OSTP), Department of Homeland Security (DHS), National Institute of Standards and Technology (NIST), Department of Defense (DOD), and the National Science Foundation (NSF) have identified the need to study cybersecurity of vehicles due to the proliferation of control systems described above. Based on the unintended acceleration work completed with the National Aeronautics and Space Administration (NASA) and the study completed by the National Academy of Sciences (NAS), we have identified the clear need to conduct and initiate research into the reliability and security of safety-critical electronic control systems.

This program advances NHTSA's expertise in vehicle electronics and engineering to address safety and security of emerging electronics and software technologies and their implications to the safety of the motorists and other vehicle occupants. We will continue to conduct research on challenges related to the technical, human factors, safety assurance, testing and validation of higher levels of road vehicle automation in addition to support agency decisions on safety and cybersecurity requirements for vehicle control systems.

Why Do We Want/Need To Fund The Program At the Requested Level?

In FY 2017 we are requesting a total of \$55.6 million of which \$54.9 million is specifically for programs in the Vehicle Electronics and Emerging Technologies research program, which is \$51.3 million more than the FY 2016 enacted level. In addition, we are requesting twenty (20) additional staff to effectively administer a much larger scoped research program. Currently, NHTSA has only 5 staff dedicated to electronic systems safety research including highly automated vehicles, cybersecurity, and electronics reliability. Thus, it is critical that funds for additional staff accompany increases in research funding.

Specifically, the enacted FY 2016 funding level of \$3.6 million will allow us to pursue the following activities:

- Completing functional safety (fail safe) requirements research on safety-critical control systems (braking, steering, and throttle control).
- Continuing development and enhancement of capabilities to facilitate in depth testing of vehicle electronic hardware and software systems.

- Continuing agency's close coordination with other stakeholders including: automotive manufacturers, DHS, DOD, NSF, and NIST on the cyber protection of vehicles and expanding ongoing projects to encompass the development of cybersecurity best practices for road vehicles.
- Continuing research with key stakeholders, including the auto industry, standards organizations, and government agencies to refine safety principles for highly automated vehicles and develop of test procedures and performance criteria for these systems.
- Completing human factors research on how a driver can safely transition between automated and manual (driver) operation of the vehicle.
- Building on previously completed electronics safety research on steering, throttle and braking control systems, initiate research on additional crash safety systems such as air bags and seatbelts.

In FY 2017 additional funding of \$51.2 million above the FY 2016 enacted level allows this program to address critical additional research activities by:

Automation and Emerging Technologies:

- Continued and expanded research supportive of safety performance requirements for highly automated vehicles
- New research to develop novel simulation methods, tools, and testbeds needed to test and evaluate highly automated vehicle systems
- New research to assess artificial intelligence (AI) capability needs for varying levels and concepts of automation.
- New field operational tests to assess user acceptance, new driver training needs, system performance, and safety benefits of highly automated vehicles.
- Support the development of test procedures for new crash avoidance technologies that support automation
- Continued and expanded research to increase the resiliency and functional safety of automotive electronics systems used in automated vehicles, including software
- Research to support human factors requirements for automated vehicles to ensure safe driver transitioning between manual and automated driving modes
- New research to develop data capture needs for technologies that support vehicle automation
- Support for establishing and running a new Federal Advisory Committee (FACA) on automated vehicles.
- Support collaborative research with international stakeholders and governments to leverage research data from the international community to establish stronger basis for global standards and methods
- Proactively participate in the G7 working group on automated and connected driving representing the interests and viewpoints of the US
- Initiate new research of heavy vehicle (HV) automation technologies.

- Initiate research to assess and develop test procedures for non-traditional vehicles.
- Support the development and refinement of safety applications that use vehicle-to-vehicle communications (V2V) applications and provide support, as needed, for agency regulatory activities.

Cybersecurity:

- Continue research to evaluate the effectiveness of cybersecurity countermeasures and methods to harden vehicles against malicious attacks. This would include (but may not be limited to): secure boot, hardware security modules, intrusion detection systems, advanced firewalls and gateways as well as securing over the air updates.
- Develop and evaluate “red team” test procedures that can be used by the agency and others to evaluate vehicle cybersecurity.
- Support research and testing at NHTSA’s Vehicle Research and Test Center including developing and refining the agencies capability to perform vehicle penetration testing to assist in validating the robustness of industry cybersecurity systems.
- Provide support to perform collaborative research with other government agencies (e.g. NIST) to evaluate the robustness of industry guidelines
- Initiating research into extended data logging needs to capture electronic system data to support investigation and analysis of incidents and events to differentiate between malfunctions, system faults, hacking attempts, and user errors
- Research the feasibility and challenges of using formal methods (mathematical proofs) intended to eliminate intentional (or unintentional) software coding errors or modifications.
- Fund a new National Academies review of NHTSA’s cybersecurity efforts
- Support additional research for any remaining regulatory issues related to the cybersecurity of V2V communication interfaces
- Expand research of heavy-vehicle (HV) cybersecurity to address unique HV issues

Given the rapid, accelerated pace of vehicle technology advancement and the related issues that result such as cybersecurity, NHTSA believes the critical research activities described above are necessary to maximize the safe deployment of highly automated vehicles and ensure that key electronics issues such as cybersecurity are addressed.

What Benefits Will Be Provided to the American Public Through This Request?

The focus of this effort will be to develop research findings and data to support and facilitate the safe operation and deployment of highly automated vehicles, address cybersecurity issues resulting from increased connectivity of advanced technology vehicles, and identify new hazards that may arise in emerging vehicle electronics before they are in production. Through advanced,

proactive and collaborative research, these challenges will be addressed in a timely manner such that transformative automated vehicle technologies with proven safety benefits can be introduced sooner. Funding for this program area may also be used to investigate potential defects in electronics and software, and assist in recall or other consumer complaint issues. Thus, NHTSA expects to apply results from this program to meet critical agency near-term goals. Agency data gathering and strategic planning efforts as well as incoming research results will continue to guide agency research in this area.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Vehicle Test Center - Ohio	\$500,000	\$500,000	\$500,000	\$0

What Is This Program and Why Is It Necessary?

The Vehicle Research and Test Center (VRTC) is NHTSA's in-house research, development, test and evaluation facility located in East Liberty, Ohio. Activities conducted at VRTC support agency programs including safety defect investigations, updates to Federal Motor Vehicle Safety Standards, test procedure development for new regulatory actions and agency consumer information programs, test dummy development, injury criteria development, advanced research into cutting edge technologies, and safety issues that require quick reaction. The full range of testing and research capabilities available to NHTSA at VRTC allows the agency to address emerging technologies and safety issues and access to world class testing facilities similar to those used by automotive suppliers and manufacturers.

Modern vehicles have evolved greatly over the last 35 years, and the advent of modern electronic controls, alternative fuels, and electric powertrains will drive that evolution even farther in the very near future. As such, NHTSA has recognized the need to enhance the capabilities at VRTC for testing and analyzing emergent advanced technologies and other vehicle electronic systems. While enhancement of research capability in several areas has been identified, the most near term critical are in cyber security, electronics reliability, and automated driving that span all of the agency's vehicle safety programs. Enhancement of capabilities for material composition and failure analysis, particularly of electronic components, is also critical. With this FY 2017 funding, NHTSA will work with the General Services Administration (GSA) to finalize a long-term lease that may include additional testing and vehicle preparation space. Funding will cover expenses associated with GSA's development of the lease, any architectural drawings, and etc. Equipment needed to conduct research and analysis of advanced emergent technologies, electronics, cyber security and reliability assessments for establishment of performance requirements and defect investigations will also be procured. In addition, with alternative fuel systems of varying types and new sophisticated electronic control systems emerging in the market, NHTSA needs to maintain a well-equipped and dedicated center to test, monitor and investigate these and other new technologies.

Why Do We Want/Need To Fund The Program At the Requested Level?

In FY 2017 we are requesting \$1.5 million, of which \$500 thousand is Vehicle Research and Test Center program funding (identified above) and \$1 million is administrative funds for

operating the VRTC facility, which is the same as the FY 2016 enacted funding level. High priority research programs that will be conducted at VRTC in FY 2017 include supporting a final rule for updating the frontal impact child safety requirements, test procedure development for advanced technology and control systems (such as vehicle-to-vehicle communications), automated vehicles, cyber security, and defect investigations. Necessary procurements include equipment for defect investigations, safety assessment and procedures development of automated vehicles, cyber-security, and new sophisticated electronic control systems emerging in the market. Considerations for upgrading testing capabilities include instrumentation, hardware, software and equipment for the following:

- Material and component composition/failure analysis,
- Advanced technology and controls,
- Automated vehicles,
- Cyber security, and
- Electronics reliability.

What Benefits Will Be Provided to the American Public Through This Request?

The expertise and technical capability of NHTSA's Vehicle Research and Test Center has been well demonstrated during the past 38 years. Numerous high profile programs have been successfully completed by the Center in an expeditious and thorough manner. However, providing the capability of advanced testing of emergent technologies is necessary to maintain pace with the rapid appearance of new electronics and advanced technologies. This request will provide the equipment and state-of-the-art facilities necessary to assess and investigate the rapid emergence of advanced automotive electronics technologies to assure the highest level of automotive safety for the American public.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Crash Data Collection (Includes FARS, NASS, SDS, SCI)	\$499,834	\$500,000	\$500,000	\$0
Salary and Benefits	\$592,260	\$866,558	\$646,740	(\$219,818)
Total	\$1,092,094	\$1,366,558	\$1,146,740	-\$219,818

**Crash Data Collection is partially funded from the Vehicle Safety account, but the majority of the funding is provided for under the Highway Safety Research & Development Account.*

NHTSA's crash data collection efforts are funded from both Vehicle Safety and Highway Safety. In FY 2017 \$500,000 of the total \$35.7 million requested for crash data collection is funded from Vehicle Safety. The requested amount will enable the continuation of implementation of the data modernization project and support for the National Center for Statistics and Analysis' crash data collection efforts. The justification for this program is provided in the Highway Safety Research and Development section of this budget.

Vehicle Safety	Administrative Expenses
Vehicle Safety Administrative Expenses:	\$81,977,500

The FY 2017 Vehicle Safety budget request includes a total budget of \$250 million and 452 FTE. Of this amount, \$81.9 million is for administrative expenses which increase by 6.3 million above FY 2016. The majority of this requested increase is directly attributed to a requested increase of 81 new FTE.

NHTSA continues to distribute administrative expenses using a methodology based primarily on the Direct FTE allocation for many of category areas such as: Salaries and Benefits, and Rent, Communications, and Utilities and Other Services. Salaries and Benefits increase by \$6 million primarily to fund 28.5 new FTE enacted in FY 2016, an additional 52 new FTE (104 FTP requested in FY 2017, the 1.3 percent proposed pay raise in FY 2016 and 2017.

This category reflects NHTSA's salaries and administrative expenses associated with carrying out the agency's Vehicle Safety programs. Included are the costs associated with the salaries and benefits for NHTSA employees who directly work on and indirectly provide support to these programs together with other normal business expenses such as transportation, rent, communications, utilities, printing, supplies and equipment. This amount includes a realignment of FTEs and administrative expenses based primarily on the direct FTE allocation. Additional agency administrative expenses are included within the descriptions of the Highway Safety Research and Development (HSRD) and Highway Safety Grant (HSG) programs.

NHTSA
FY 2017 VEHICLE SAFETY ADMINISTRATIVE EXPENSES

Program Activity	FY 2015	FY 2016	FY 2017	FY 2017 vs FY 2016 Change
	ACTUAL	ENACTED	REQUEST	
Salaries and Benefits	50,495,124	58,216,000	\$64,497,500	\$6,281,500
Travel	537,513	538,000	538,000	\$0
Transportation of Things	70,184	70,000	70,000	\$0
Rent, Communications & Utilities	4,508,496	5,009,000	5,009,000	\$0
Printing	356,927	357,000	357,000	\$0
Other Services	5,016,797	7,470,000	7,470,000	\$0
Supplies	-	3,011,000	3,011,000	-
Equipment	1,025,125	1,025,000	1,025,000	\$0
Unallocated	-	-	-	\$0
Total Administrative Expenses	\$62,010,166	\$75,696,000	\$81,977,500	\$6,281,500
FTE (includes indirect FTE)	341	370	436	66

Note: In FY 2017, under the Administration's Policy Proposal for Reauthorization, Vehicle Safety will be funded through the Transportation Trust Fund.

Highway Safety Program and Financing Schedule

**OPERATIONS AND RESEARCH
HIGHWAY SAFETY RESEARCH AND DEVELOPMENT & VEHICLE SAFETY (in FY 2016)
PROGRAM AND FINANCING SCHEDULE**

Description	FY 2015 Actual	FY 2016 Enacted	FY 2017 Request
Obligations by Program Activity			
Vehicle Safety Program (VS)	-	-	
Rulemaking (VS)	-	-	43,510,000
Enforcement (VS)	-	-	40,150,000
Research and Analysis (VS)	-	-	87,100,000
Vehicle Safety Administrative Expenses (VS)	-	-	79,040,000
Highway Safety Programs	41,188,984	38,000,000	56,143,000
Research and Analysis	31,098,092	42,000,000	39,093,000
National Driver Register	4,926,576	5,100,000	5,200,000
Highway Safety Administrative Expenses	59,192,718	57,800,000	45,464,000
Direct program activities, subtotal	136,406,370	142,900,000	395,700,000
Reimbursable Program	24,796,583	30,000,000	30,000,000
Total new obligations	161,202,953	172,900,000	425,700,000
Budgetary Resources Available for Obligation			
Unobligated balance available, start of year	45,965,235	27,000,000	27,000,000
Adjustment of unobligated balance brought forward, Oct 1	(5,065,420)	-	-
Recoveries of prior year unpaid obligations	7,306,770	-	-
Unobligated balance (total)	48,206,585	27,000,000	27,000,000
Contract authority	118,500,000	142,900,000	395,700,000
Unobligated balance of contract authority permanently reduced	-	-	-
Contract authority - mandatory (total)	118,500,000	142,900,000	395,700,000
Collected	21,422,891	30,000,000	30,000,000
Change in uncollected payments, Federal sources	340,784	-	-
Spending authority from offsetting collections, mandatory total	21,763,675	30,000,000	30,000,000
Total Budgetary Resources Available	188,470,260	199,900,000	452,700,000
Change in Unpaid Obligations			
Unpaid obligations, brought forward, October 1	107,893,137	132,599,663	141,577,363
Obligations incurred, unexpired accounts	161,478,372	172,900,000	425,700,000
Outlays (gross) (-)	(129,465,076)	(163,922,300)	(322,500,000)
Recoveries of unpaid prior year obligations, unexpired accounts (-)	(7,306,770)	-	-
Unpaid obligations, end of year (gross)	132,599,663	141,577,363	244,777,363
Outlays (gross), detail			
Outlays from new discretionary authority	68,186,403	99,730,000	209,380,000
Outlays from discretionary balances	61,278,673	64,461,752	47,623,773
Total outlays (gross)	129,465,076	164,191,752	257,003,773
Offsets - Against Gross Budget Authority and Outlays			
Offsetting collections (cash) from: Federal sources	(21,420,875)	(30,000,000)	(30,000,000)
Offsetting collections (cash) from: Non-Federal sources	(22,016)		
Net Budget Authority and Outlays			
Budget authority (net)	118,500,000	142,900,000	395,700,000
Outlays (net)	108,022,185	134,191,752	293,000,000

OPERATIONS AND RESEARCH
HIGHWAY SAFETY RESEARCH AND DEVELOPMENT & VEHICLE SAFETY (in FY 2016)
OBJECT CLASS SCHEDULE

Description	FY 2015 Actual	FY 2016 Enacted	FY 2017 Request
Direct Obligations			
Personnel Compensation			
Full-time permanent	18,000,000	20,000,000	78,000,000
Other personnel compensation	1,000,000	1,000,000	2,000,000
Total personnel compensation	19,000,000	21,000,000	80,000,000
Civilian personnel benefits	5,611,644	7,000,000	26,000,000
Travel and Transportation of Persons	969,914	1,000,000	1,000,000
Rental payments to GSA	5,935,025	6,000,000	8,000,000
Communications, utilities, and miscellaneous charges	9,713,065	10,000,000	12,000,000
Advisory and assistance services			20,000,000
Other services from non-federal sources	47,375,384	41,900,000	174,700,000
Other goods and services from Federal sources			7,000,000
Research and development contracts	21,470,402	30,000,000	30,000,000
Operation and maintenance of equipment			1,000,000
Supplies and materials	1,137,631	1,000,000	4,000,000
Equipment	1,052,883	1,000,000	5,000,000
Grants and subsidies	24,217,620	24,000,000	27,000,000
Subtotal, Direct Obligations	136,483,568	142,900,000	395,700,000
Reimbursable Obligations			
Other services from non-federal sources	24,863,200	30,000,000	30,000,000
Total new obligations	161,346,768	172,900,000	425,700,000

EXHIBIT III-1

**NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
OPERATIONS AND RESEARCH
HIGHWAY SAFETY RESEARCH & DEVELOPMENT**

Summary by Program Activity

**Appropriations, Obligation Limitations, Contract Authority, and Exempt Obligations
(\$000)**

	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	FY 2017 - FY 2016 CHANGE
Highway Safety Programs	\$ 46,659	\$ 52,443	\$ 60,043	\$ 7,600
Research and Analysis - NCSA	33,645	39,093	39,093	-
Unallocated	-	-	-	-
Administrative Expenses	58,196	51,364	46,764	\$ (4,600)
TOTAL, HIGHWAY SAFETY RESEARCH & DEV. (TF)	\$ 138,500	\$ 142,900	\$ 145,900	\$ 3,000

FTE's:

Direct Funded	178	178	184	6
Reimbursable, allocated, other*	2	-	-	-

Note: Funds for the Highway Safety Research & Development Program are from the Transportation Trust Fund.

*Reimbursed to NHTSA by OST to support Intelligent Transportation Systems work.

EXHIBIT III - 1a

**NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
SUMMARY ANALYSIS OF CHANGE FROM FY 2016 TO FY 2017
Appropriations, Obligation Limitations, Contract Authority, and Exempt Obligations
OPERATIONS AND RESEARCH**

**HIGHWAY SAFETY RESEARCH & DEVELOPMENT
(\$000)**

ITEM	Change from FY 2016 to FY 2017	Change from FY 2016 to FY 2017 FTEs by Program
Highway Safety Base	142,900	178
Adjustments to Base		
FY 2017 #FTE Per Program Change	178	6
Annualization of FY 2016 Pay Raise	94	
Annualization of FY 2016 FTE	1,251	
FY 2017 Pay Raise	282	
GSA Rent	-	
WCF	-	
Inflation	-	
Program Increases/Decreases	(6,227)	
Other Services	-	
Unallocated	-	
Subtotal, Adjustment to Base	(4,600)	6
Program Increases/Decreases	7,600	-
Total Net Increases/Decreases	3,000	6
FY 2017 REQUEST	145,900	184

HIGHWAY SAFETY RESEARCH AND DEVELOPMENT

Program and Performance Statement

FY 2017 budget request includes \$145.9 million for research activities to reduce highway fatalities, prevent injuries, and significantly reduce the economic toll of motor vehicle crashes by data collection and analysis, research into highway safety issues, and the development of effective countermeasures. The data collection, data system development, and analytical work performed by the National Center for Statistics and Analysis supports the full range of vehicle, highway and behavioral research, and are extensively utilized by NHTSA and many other safety organizations worldwide. As such, the National Center for Statistics and Analysis is funded from both Highway Safety and Vehicle Safety. Behavioral program research and development covers a comprehensive range of issues affecting roadway users including vehicle occupants, pedestrians and bicyclists as well as emergency medical services.

FY 2017 – Highway Safety Research and Development

\$145,900,000

FY 2017 - HIGHWAY SAFETY RESEARCH AND DEVELOPMENT

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	Change FY 2017 -2016
Highway Safety Research and Development	\$46,659,000	\$52,443,000	\$60,043,000	\$7,600,000
National Center for Statistics and Analysis	\$33,645,063	\$39,093,000	\$39,093,000	\$0
HSRD Administrative Expenses	\$58,195,937	\$51,364,000	\$46,764,000	(\$4,600,000)
TOTAL	\$138,500,000	\$142,900,000	\$145,900,000	\$3,000,000

Note: FY 2014 enacted reflects a \$5 million one-time funding to support information technology improvements for NEMSIS Technical Assistance Center and technical equipment to enhance and expedite data collection.

Highway Safety Programs: **\$60,043,000**

NHTSA's highway safety programs support the Department's safety goals through behavioral research, demonstrations, technical assistance, and national leadership activities emphasizing alcohol and drug countermeasures, occupant protection, distraction, traffic law enforcement,

emergency medical and trauma care systems, licensing, State and community evaluations, motorcycle rider safety, pedestrian and bicyclist safety, pupil transportation, and young and older driver safety programs. NHTSA coordinates with numerous Federal partners, State and local governments, the private sector, universities, research units, and safety associations and organizations to leverage resources and enhance the reach of our safety programs and messages. Research and countermeasure development has a direct impact on the effectiveness of programs conducted through the Highway Traffic Safety Grant Program.

Research and Analysis - National Center for Statistics and Analysis (NCSA): \$39,093,000

Research and analysis program activities funded through the Highway Safety Research appropriation support the Department of Transportation's safety goals through the collection and analysis of crash data to identify safety problems and trends, development of alternative solutions, and the assessment of costs, benefits, and effectiveness. NHTSA's crash investigation data systems (Crash Investigation Sampling System, Special Crash Investigations and where appropriate the Crash Injury Research and Engineering Network), do and will continue to collect detailed information on applicable child restraint systems. Data collection and analytical work performed by the National Center for Statistics and Analysis support agency rulemaking activities, vehicle safety and behavioral research and countermeasure development, and are also the basis for evaluation of roadway safety and commercial vehicle safety analyses conducted by the Federal Highway Administration and Federal Motor Carrier Safety Administration. NCSA is also requesting 1.0 additional FTE funded through Highway Safety Research and Development for a crash investigator and a program analyst to support implementation and operation of the data modernization project including one crash investigator to support the new Crash Investigation Sampling System and one program analyst to support the new Crash Reporting Sampling System.

Highway Safety Research and Development Administrative Expenses: \$46,764,000

This category reflects NHTSA's salaries and administrative expenses associated with carrying out the agency's Highway Safety Research and Development programs. Included are the costs associated with the salaries and benefits of NHTSA employees, including 5 FTEs for a full year who directly and indirectly support these programs together with other related expenses, such as transportation, rent, communications, utilities, printing, supplies, and equipment. This funding level continues the alignment of FTEs and administrative expenses based primarily on the direct FTE allocation. Additional agency administrative expenses are included within the descriptions of Vehicle Safety and Highway Safety Grant programs.

FY 2017 – HIGHWAY SAFETY PROGRAMS

***Updated to include Direct Salaries & Benefits as of FY17**

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	Change FY 2017 -2016
Impaired Driving	\$12,182,710	\$11,982,415	\$12,000,900	\$18,485
Drug Impaired Driving	\$1,488,000	\$1,488,000	\$1,488,000	\$0
Safety Countermeasures	\$5,071,710	\$5,369,415	\$5,387,900	\$18,485
National Occupant Protection	\$11,154,052	\$10,819,598	\$10,841,781	\$22,183
Enforcement and Justice Services	\$3,727,710	\$3,303,415	\$10,821,900	\$7,518,485
Emergency Medical Services	\$3,452,078	\$3,836,547	\$3,869,821	\$33,274
Enhanced 9-1-1/ National 9-1-1 Office	\$2,750,000	\$2,750,000	\$2,750,000	\$0
National Emergency Medical Services Information System	\$1,500,000	\$1,500,000	\$1,500,000	\$0
Driver Licensing	\$1,002,000	\$993,700	\$993,700	\$0
Highway Safety Research	\$5,091,000	\$12,683,023	\$12,314,300	(\$368,723)
Behavioral International Program	\$100,000	\$100,000	\$100,000	\$0
National Driver Register	\$4,808,078	\$5,100,000	\$5,200,000	\$100,000
Total	\$52,327,338	\$59,926,113	\$67,268,303	\$7,342,190

In FY 2017, NHTSA is requesting \$67.8 million of which \$59.8 million is for Highway Safety Programs, which is \$7.3 million above the FY 2016 enacted funding level. Funding at this level will allow us to maintain our core programs and continue several key initiatives. These include:

Impaired Driving

- Provide technical assistance to States to promote enhanced ignition interlock programs.
- Develop and promote advanced training on impaired driving programs for State and community highway safety specialists on topics such as drug-impaired driving, enforcement techniques, ignition interlocks and no-refusal programs.

Safety Countermeasures

- Continue the three existing and establish two new demonstration projects in FHWA designated Pedestrian/Bicyclist Focus Cities and States supporting implementation of education and enforcement activities.
- Conduct a demonstration project to enhance State driver licensing medical review processes and policies.
- Expand partnerships with organizations for delivery of continuing education to medical providers for counseling patients on driving fitness.
- Continue support for operation of a Driver Licensing and Medical Fitness to Drive on-line training and technical assistance resource for State driver's license administrations and highway safety offices.
- Continue a demonstration project to increase motorcycle helmet use in one State without a mandatory motorcycle helmet use law for all riders.
- Continue a demonstration program to prevent and reduce impaired operation of motorcycles in one State.
- Continue support for operation of a web based pedestrian and bicyclist safety resource to assist states and communities with planning, implementing and evaluating data driven and effective pedestrian and bicyclist safety programs.

Occupant Protection:

- Continue to promote the annual *Click It or Ticket* campaign and develop strategies for law enforcement to address fatalities in States with secondary seat belt laws, States with primary enforcement laws and low belt use rates, and in suburban and rural areas where a significant portion of motor vehicle fatalities are not restrained.
- Develop strategies to promote sustained enforcement of seat belt laws throughout the year.
- Engage the public health and medical communities in developing messages and programs to increase the use of occupant protection, especially among hard-to-reach populations and resistant communities.

Enforcement and Justice Services

- Continue to build capacity in States for implementing Data-Driven Approaches to Crime and Traffic Safety (DDACTS) and the nationwide network of law enforcement liaisons (LELs).
- Implement the objectives outlined in the Departmental Speed Program Plan.
- Manage the implementation of the racial profiling grant program as authorized under the FAST Act.

Emergency Medical Services (EMS)

- Continue to revise the *EMS Agenda for the Future*.
- Disseminate lessons learned from NHTSA ambulance crash investigations to increase safety of patients, providers and general public.
- Continue revision of the *National Guidelines for the Field Triage of Trauma Patients* to help ensure the right trauma patients are taken to the right medical facility in the right amount of time.
- Continue implementation of the EMS Culture of Safety Strategy, National EMS Workforce Agenda for the Future, and EMS Education Agenda for the Future.
- Support the transition of military EMS personnel and veterans into civilian EMS employment.

National 911 Program

- Expand the EMS Compass Performance Measurement Project to increase assistance to states for meeting performance benchmarks and reporting requirements, specifically those to help capture the number of serious injuries in traffic crashes.
- Continue operation of a national 911 Resource Center services to collect and create resources for State and local 911 agencies for their conversation to Next Generation 911.
- Maintain and improve www.911.gov as the single portal for accessing Federal 911 activities.
- Support and promote minimum training for 911 call-takers and strategies for nationwide implementation.
- Administer a grant program for the benefit of 911 Public Safety Answering Points (with proceeds from the FCC spectrum auction)
- Complete a report analyzing and determining detailed costs for specific NG911 service requirements and specifications.
- Maintain operation of the 911 Profile Database and activities that enable submission of state 911 data to measure national progress toward implementation of NG911.
- Initiate a project to implement recommendations made by the FCC Task Force on Optimal PSAP Architecture, convened in 2015.

- Initiate a project to provide resources to state and 911 authorities to implement NG911, based on content of the cost study completed in FY 17.

National EMS Information System (NEMSIS)

- Complete migration of the National EMS Database from the NEMSIS Technical Assistance Center to one that is maintained by NHTSA.
- Increase to 52 the number of states and territories that contribute data to the National EMS Database.
- Provide technical assistance to state and local EMS agencies in their transition to NEMSIS Version 3.2 which will provide better, more robust data at local, state and national levels.
- Increase to 25 the number of states that are providing NEMSIS Versions 3.2 data to the National EMS Database.
- Continue efforts to integrate local NEMSIS-compliant electronic patient care reports with electronic health records and with health information exchanges to provide for better patient care and better linkage with patient outcomes.

Highway Safety Research

- Complete a study to enhance the predictive validity of drug evaluation and classification (DEC) tests and assist NIDA in analyzing data from a study, using the National Advanced Driving Simulator (NADS), to determine the extent to which inhaled cannabis, alone or in combination with low levels of alcohol, has an impact on driving skills.
- Continue a study to determine the feasibility of using data from the SHRP-2 Naturalistic Driving Data to better understand a number of questions related to speed-related behavior, seat belt use and driver inattention.
- Support continued research on in-vehicle alcohol detection systems.
- Increase research into behavioral issues regarding driver distractions and inattention (including evaluation of one or more statewide high visibility enforcement and related public information demonstration programs and conducting a third national survey of the driving public's attitudes and awareness regarding distracted driving issues).
- Complete a nationally representative survey on pedestrian and bicycle safety attitudes and behavior, and continue a study to determine the extent to which the use of electronic devices and other distractions contribute to pedestrian crashes.
- Complete a study that examines factors that may contribute toward higher motorcycle helmet use rates in States without universal helmet laws.
- Continue research seeking solutions to common vehicle and behavioral safety issues such as evaluating the efficacy of lights and sirens by EMS personnel in responding to the emergency scene and in transporting the patient a medical facility, emergency vehicle

driver training, worker fatigue, safety belt use, driver distraction, and other frequent risks to the public safety community and general public.

- Conduct a series of critical research investigations to determine the prevalence of drug-impaired driving in a selection of States, the effects of drug-impaired driving on serious crash risk, and a study on the different State policies related to marijuana control and driving safety.
- Investigate the potential use of an imputation model for assessing the scale of fatigued driving and its effects on safety, using available data resources to identify factors highly associated with fatigue-related crashes. Countermeasures will also be developed for high risk populations that include public safety personnel and other drivers exposed to shiftwork, and strategies for reaching high-risk populations will be developed.
- Longitudinal research on the development and use of reliable, accurate, and repeatable measures of pedestrian and bicyclist exposure will be conducted so that NHTSA and others can appropriately evaluate the effectiveness of traffic safety program initiatives.

Cooperative Research and Evaluation Program

- Identify and address new and emerging State safety issues and programs through this cooperative research and evaluation program with the States, using Sec. 402 drawdown, as noted in MAP-21, and re-authorized in the FAST Act.

Behavioral International Program

- Implement a new intergovernmental agreement with the Government of India to provide technical assistance for the development of a lead Federal highway safety agency, including facilitating integration of a new alcohol breath test device certification laboratory in national programs and policy, and establishing a new speed measurement device certification laboratory.
- Expand global road safety leadership utilizing existing forums including the United Nations Road Safety Collaboration and the United Nations Economic Commission of Europe Working Party 1 on Road Safety.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Impaired Driving	\$11,456,000	\$11,208,000	\$11,208,000	\$0
Salary and Benefits	\$726,710	\$774,415	\$792,900	\$18,485
Total	\$12,182,710	\$11,982,415	\$12,000,900	\$18,485

What Is The Program and Why Is It Necessary?

The Impaired Driving Program directly supports the Department and agency goals of reducing traffic crashes, fatalities and injuries by developing and demonstrating effective countermeasures to reduce the incidence of impaired driving, which accounts for a significant portion of the death, injury and property damage costs resulting from traffic crashes. Impaired driving is a complex issue, and NHTSA addresses it by developing a range of countermeasures that:

- Prevent impaired driving among potential offenders.
- Deter recidivism among offenders.
- Closely monitor high risk (e.g., repeat and high Blood Alcohol Concentration (BAC) offenders).

The program also provides training, education and technical assistance to States in the development of comprehensive impaired driving programs, as well as to criminal justice and other professionals who play a critical role in preventing impaired driving, reducing recidivism of offenders, and monitoring high risk offenders. This information, as well as research studies, National Impaired Driving Enforcement Crackdown planners, and resource guides are available at: <http://www.nhtsa.gov/Impaired>

Nearly one-third of traffic fatalities each year occur in crashes that involve an impaired driver (in which a driver or motorcycle rider had a BAC, of .08 or greater). Approximately one-third of impaired driving offenders are subsequently re-arrested for impaired driving. Therefore, appropriate sentencing and supervision are critically important to reducing impaired driving incidents. However, according to Fatality Analysis Reporting System (FARS) data, the majority of impaired drivers involved in fatal crashes had not previously been convicted of impaired driving (during the last three years). Therefore, in addition to addressing recidivism, effective prevention and intervention strategies also are necessary. Since impaired driving systems are complex and involve many inter-related elements, States must consider a comprehensive and strategic approach to their countermeasure development and implementation.

Why Do We Want/Need To Fund The Program At The Requested Level?

In FY 2017 we are requesting a total of \$12 million, of which \$11.2 million is specifically for the Impaired Driving program activities, which is same as the FY 2016 enacted funding level. In 2013, 10,076 people died in alcohol-impaired driving crashes, a 2.5 percent decrease from 2012. Although the general trend of impaired driving fatalities has been declining along with the general trend in overall fatalities over the past decade, the percentage of traffic fatalities that involved an impaired driver has remained relatively constant. The development and demonstration of new approaches is necessary to make further progress in reducing the deaths and injuries that are caused by this crime.

In FY 2017, the Impaired Driving Program will develop and demonstrate further countermeasures to reduce the incidence of impaired driving. These efforts will include activities to:

- Continue the demonstration project measuring the effectiveness of applying the problem orientated policing model to reduce impaired driving crashes. This will assist law enforcement agencies in moving towards a sustained enforcement model.
- Assist States in strengthening their ignition interlock programs through implementation of recommendations contained in the Model Guidelines for State Ignition Interlock Programs.
- Develop topic-focused impaired driving technical assistance teams to assist states in strengthening impaired driving programs.
- Develop and release public information materials about the risks associated with driving while impaired by drugs (illegal, prescription and other the counter).
- Release and promote advanced training on impaired driving programs for State and community highway safety specialists on topics related to drug-impaired driving, enforcement techniques, ignition interlocks and prosecution and adjudication of impaired driving offenders.
- Work closely with NHTSA's Vehicle Safety Research activities on the development of in-vehicle technologies capable of passively detecting alcohol-impaired drivers and preventing vehicle operation. Increase the driving public's knowledge of such technologies. Such technologies could be very effective in reducing alcohol-impaired driving deaths when offered on a voluntary, market-driven basis.
- Provide technical assistance to States to increase the number of offenders using ignition interlocks.
- Expand a campaign to prevent young drivers from driving while impaired.
- Continue training for the medical community on the importance of and techniques for counseling patients on the risks associated with alcohol and other drugs and driving.
- Support Law Enforcement Liaisons, Traffic Safety Resource Prosecutors, and Judicial Outreach Liaisons to actively promote the use of high visibility enforcement, ignition

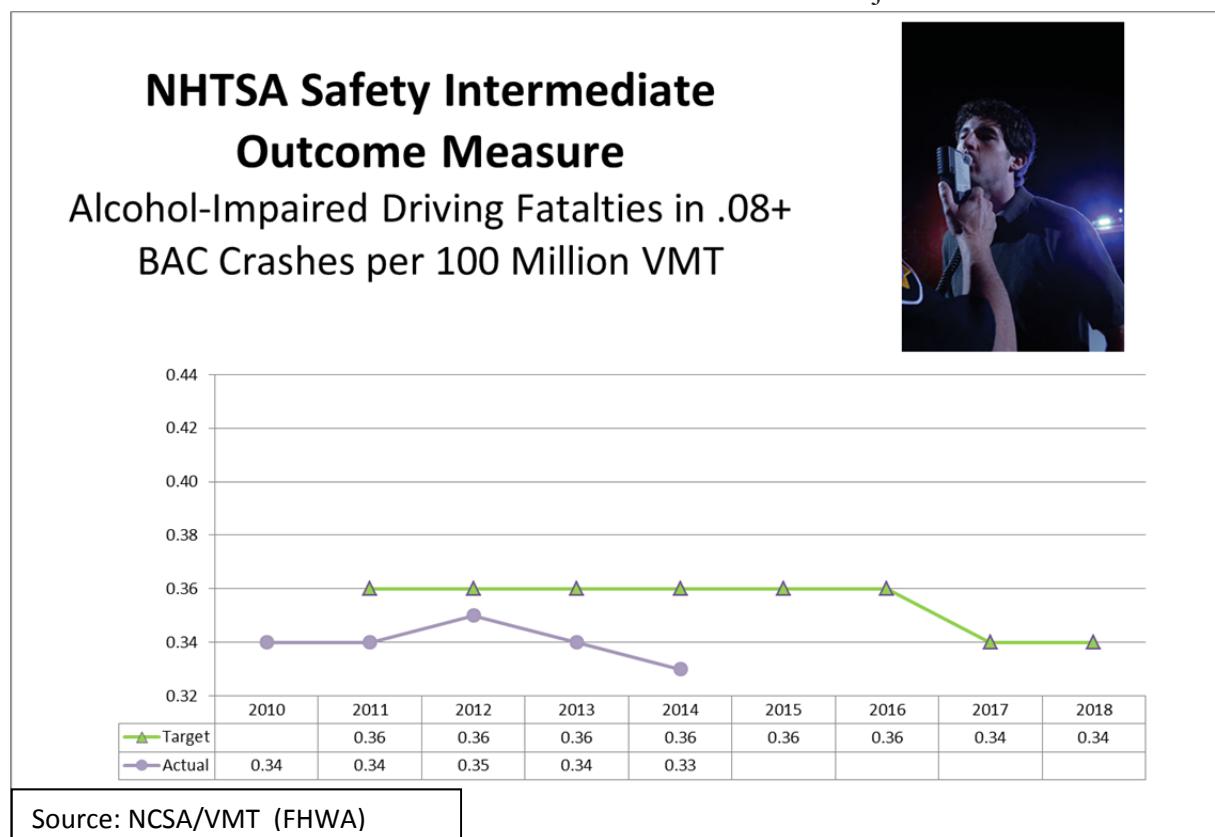
interlocks, DWI courts, and proven sentencing and supervision practices, as part of a comprehensive approach to reducing impaired driving.

- Begin a special study of 18 to 24 year old drivers involved in impaired driving crashes to learn of the circumstances surrounding the crashes to better enable the agency to develop effective programs to address the safety of this high risk group.

What Benefits Will Be Provided To The American Public Through This Request?

Over the past 40 years, a large body of evidence has demonstrated the effectiveness of impaired driving programs in reducing associated crashes, injuries, fatalities and/or recidivism. For example, high visibility enforcement of impaired driving laws has been shown to reduce alcohol-related crashes by as much as 20 percent. Use of ignition interlocks and referral of offenders to Driving While Intoxicated (DWI) courts have been shown to reduce recidivism.

A significant reduction in fatalities associated with alcohol-impaired driving crashes has occurred in the past 30 years. However, the 10,076 people killed in alcohol-impaired-driving crashes in 2013 reflect the critical need to continue and strengthen the Department's impaired driving program. The benefit the American public receives through the impaired driving program is a reduction in motor vehicle crashes and associated deaths and injuries.



HIGHWAY SAFETY PROGRAMS

Drug Impaired Driving

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Drug Impaired Driving	\$1,488,000	\$1,488,000	\$1,488,000	\$0
Salary and Benefits	\$0	\$0	\$0	\$0
Total	\$1,488,000	\$1,488,000	\$1,488,000	\$0

What Is This Program And Why Is It Necessary?

The Drug Impaired Driving Program directly supports the Departmental and agency goals of reducing traffic crashes, fatalities and injuries through research, development and demonstration of effective countermeasures for reducing the incidence of drug impaired driving. The agency focuses on understanding the relationship between drug use and crash risk and on countermeasures such as stronger laws, training for law enforcement, prosecutors, judges and other criminal justice professionals, and public education. NHTSA will continue to maintain and operate a National Sobriety Testing Resource Center/DRE Data System to support the dissemination of impaired driving enforcement information, and provide a platform for the collection of Drug Evaluation and Classification program evaluation and toxicology data.

In 2015, as part of the Drug Impaired Driving Program, NHTSA published the second National Roadside Survey of Alcohol and Drug use by Drivers. The study indicated that on weekend nights, as many as 15.2 percent of drivers test positive for illegal drugs 7.3 percent test positive for prescription or over-the-counter drugs that could impair driving. The Office of National Drug Control Policy (ONDCP) National Drug Control Strategy currently recommends, among other initiatives, that NHTSA take the lead in expanding training on drugged driving for law enforcement and criminal justice professionals. The Strategy further recommends that NHTSA work with ONDCP and other agencies on public education, data collection and developing improved testing processes.

Why Do We Want/Need To Fund The Program At the Requested Level?

In FY 2017 we are requesting a total of \$1.5 million specifically for the Drug Impaired Driving program, which is the same as FY 2016 enacted funding level. National surveys show a dramatic increase in the number of drivers who have drugs in their systems. This presents a new challenge for the entire criminal justice community – from the officers who detect impairment, to the toxicologists who confirm the presence of drugs, to the prosecutors and judges handle these cases in court. The NHTSA Drug Recognition Expert (DRE) program remains an important resource.

The Drug Impaired Driving Program will continue to research, develop and demonstrate countermeasures to reduce the incidence of drug impaired driving. These efforts will include:

- Delivering training and education materials designed for law enforcement, other criminal justice professionals, community and other stakeholders on drugs and medications that can contribute to impaired driving.
- Delivering updated training to law enforcement in Standardized Field Sobriety Training (SFST), Drug Recognition Expert (DRE) and Advanced Roadside Impaired Driving Enforcement (ARIDE).
- Increasing the number of Law Enforcement Liaisons (LELs).
- Maintaining and improving a national data base on evaluations of drug use by drivers performed by Drug Recognition Experts for evaluating the extent of drugged driving and changes over time.
- Determining the best communication techniques to use to heighten public awareness of the risks associated with medicinal and illicit drugs and driving , and the risks of driving while impaired by a combination of drugs (alcohol, illicit, prescription, and over-the-counter).

What Benefits Will Be Provided To The American Public Through This Request?

While specific interventions to reduce the incidence of drugged driving have yet to be thoroughly evaluated, NHTSA has extensive experience in developing and implementing programs to reduce alcohol impairment. The Drug Impaired Driving program utilizes this experience to shape the Drug Impaired Driving Program while collecting data, conducting field studies and evaluating specific drugged driving initiatives. Key sources of specific evidence include the case control study of the role of drug impairment in crashes and analysis of data collected from drug evaluations conducted by law enforcement officers trained by the Drug Evaluation and Classification (DEC) and Advanced Roadside Impaired Driving Enforcement (ARIDE) programs. Current drug impaired driving research information is available on our website at: www.nhtsa.gov/Driving+Safety/Research+In+Progress:+Drug-Impaired+Driving.

HIGHWAY SAFETY PROGRAMS**Safety Countermeasures**

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Safety Counter Measures	\$4,345,000	\$4,595,000	\$4,595,000	\$0
Salary and Benefits	\$726,710	\$774,415	\$792,900	\$18,485
Total	\$5,071,710	\$5,369,415	\$5,387,900	\$18,485

What is this Program and Why is it Necessary?

The Safety Countermeasures Program addresses a range of behavioral risks associated with pedestrians, bicyclists, motorcyclists, pupil transport, and older driver safety. Together, these populations comprise over 40 percent of traffic fatalities. Given the disparate nature of the populations and safety problems, the program employs a wide range of countermeasures. The agency develops and provides research, program materials and guidelines, State law information and many other resources to assist State and local community coordinators in the following areas:

- Pedestrians: www.nhtsa.gov/Pedestrians
- Bicycles: www.nhtsa.gov/Bicycles
- Motorcycles: www.nhtsa.gov/Safety/Motorcycles
- Pupil Transportation (including school buses): www.nhtsa.gov/School-Buses
- Older drivers: www.nhtsa.gov/Driving+Safety/Older+Drivers
- [Community Traffic Safety](http://www.nhtsa.gov/Driving+Safety/Community+Traffic+Safety): <http://www.nhtsa.gov/Driving+Safety/Community+Traffic+Safety>

Motor vehicle crashes with pedestrians, accounted for 15 percent of the total fatalities in 2014, and had been gradually increasing since a record 30 year low of 4,109 in 2009 to 4,884 in 2014. In addition, motor vehicle crashes with bicyclists accounted for an additional 2.2 percent of the total traffic related deaths in 2014, and have been gradually increasing from a record 30 year low of 623 in 2010 to 726 deaths in 2014. Pedestrian and bicyclist fatalities can be reduced through behavioral initiatives including education and law enforcement. In FY 2014, NHTSA led a U.S. DOT effort to coordinate pedestrian and bicyclist safety efforts between FHWA, FTA and NHTSA. This effort provided the foundation for U.S. Department of Transportation Anthony Foxx's "Safer People, Safer Streets" initiative launched in September 2014. More about this initiative may be found at www.dot.gov/policy-initiatives/ped-bike-safety/safer-people-safer-streets-pedestrian-and-bicycle-safety.

Motorcyclist fatalities (rider/operator and passenger) accounted for 14 percent of traffic fatalities in 2014, and could be substantially reduced by improving critical safety behaviors such as

reducing speeding and impaired riding, and increasing DOT-compliant motorcycle helmet use. Motorcyclist fatalities have increased in 10 of the past 14 years, from 3,197 in 2001 to 4,586 in 2014. Motorcycle riders had the highest percentage of alcohol impairment ($BAC \geq 0.08$) of any motor vehicle operator involved in fatal crashes in 2014 (29 percent for riders, 22 percent for car drivers, 22 percent for light truck drivers and 2 percent for large truck drivers). In 2014, 33 percent of all motorcycle riders involved in fatal crashes were speeding, compared to 20 percent for passenger car drivers, 17 percent of light-truck drivers, and 7 percent for large-truck drivers. In 2014, 5,716 people 65 and older were killed in motor vehicle traffic crashes, 17 percent of all traffic fatalities. In 2014, 14.5 percent of the total U.S. population was 65 and older. Older drivers have multiple vulnerabilities affecting safe driving that are amenable to improvement through counseling, family interventions and licensing controls.

Between 2005 through 2014, an average of 133 fatalities occurs in school transportation related crashes annually. Most of these fatalities (71 percent) were occupants of other vehicles involved in the crash. Non-occupants (pedestrians, bicyclists, etc.) accounted for 21 percent of these fatalities and 8 percent were occupants of a school transportation vehicle. School buses continue to be the safest mode of transportation for getting children back and forth to school.

Why Do We Want/Need To Fund The Program At the Requested Level?

In FY 2017 we are requesting a total of \$5.4 million, of which \$4.6 million is specifically for the Safety Countermeasures program, which is same as the FY 2016 enacted funding level. Strong evidence exists confirming the effectiveness of key interventions such as pedestrian safety law enforcement, pedestrian safety zones and motorcycle helmet use. Driver license screening and programs that encourage referrals of potentially unsafe older drivers for re-examination by physicians and law enforcement have proven effective in reducing older driver risks. Specific evaluations of our Safety Countermeasures Program can be found on the next page:

Program	Title	Link
Pedestrians & Bicyclists	<i>Pedestrian Safety Enforcement Operations: A How-To Guide</i>	http://www.nhtsa.gov/staticfiles/nti/pdf/812059_PedestrianSafetyEnforceOperaHowToGuide.pdf
	<i>Demonstration and Evaluation of the Heed the Speed Program</i>	http://www.nhtsa.gov/staticfiles/nti/pdf/811515.pdf
	<i>Review of Studies on Pedestrian and Bicyclist Safety, 1991 – 2007</i>	http://www.nhtsa.gov/staticfiles/nti/pdf/811614.pdf
	<i>High-Visibility Enforcement on Driver Compliance With Pedestrian Right of Way Laws</i>	http://www.nhtsa.gov/staticfiles/nti/pdf/811786.pdf
	<i>Literature Review on Vehicle Travel Speeds and Pedestrian Injuries</i>	http://www.nhtsa.gov/people/injury/research/pub/HS809012.html
Motorcycles	<i>The Effect of Sight Distance Training on the Visual Scanning of Motorcycle Riders: A Preliminary Look</i>	http://www.nhtsa.gov/staticfiles/nti/pdf/811689.pdf
	<i>Costs of Injuries Resulting from Motorcycle Crashes: A Literature Review</i>	http://www.nhtsa.gov/people/injury/pedbimot/motorcycle/Motorcycle_HTML/index.html
	<i>Fatal Single Vehicle Motorcycle Crashes An Examination of Washington State's Vehicle Impoundment Law for Motorcycle Endorsements</i>	http://www-nrd.nhtsa.dot.gov/Pubs/809-360.pdf http://www.nhtsa.gov/staticfiles/nti/pdf/811696.pdf

Program	Title	Link
Older Drivers	<i>Process and Outcomes Evaluation of Older Driver Screening Programs: The Assessment of Driving-Related Skills (ADReS) Older-Driver Screening Tool</i>	http://www.nhtsa.gov/DOT/NHTSA/Traffic%20Injury%20Control/Articles/Associated%20Files/811113.pdf
	<i>A Compendium of Law Enforcement Older Driver Programs</i>	http://www.nhtsa.gov/people/injury/olddrive/LawEnforcementOlderDriver03/introduction.htm
	<i>Driver Fitness Medical Guidelines</i>	http://www.nhtsa.gov/DOT/NHTSA/Traffic%20Injury%20Control/Articles/Associated%20Files/811210.pdf
	<i>Older Driver Program Five-Year Strategic Plan 2012-2017</i>	http://www.nhtsa.gov/staticfiles/nti/pdf/811432.pdf

In FY 2017, the Safety Countermeasures Program will continue existing safety efforts and reduce traffic fatalities among pedestrians, bicyclists, motorcyclists, and older people. Specific efforts will include:

- Continuing to expand outreach and engage the medical community with on-line training programs on Older Driver Safety, targeting medical residents and other medical professionals to assist in counseling patients on driving fitness.
- Conducting a new demonstration project to further identify cost effective methods to enhance State driver licensing medical review processes and policies.
- Completing a demonstration project to promote motorcycle helmet use among adults and increase observed helmet use in States without all-rider motorcycle helmet use laws.
- Completing a demonstration project to develop basic guidelines for deployment of effective High Visibility Enforcement of impaired motorcycle operation.
- Continuing promotion and adoption of an updated Motorcycle Operator Licensing Manual and updated motorcycle operator licensing knowledge test by State driver's license administrations.
- Facilitating State motorcycle safety program technical assessments.
- Facilitating State pedestrian and bicycle safety program technical assessments.
- Conducting a demonstration project to develop a community based assessment of bicycle and pedestrian safe mobility for use by State Highway Safety Offices and Departments of Transportation.
- Conducting additional demonstration projects in coordination with FHWA involving FHWA-identified Focus Cities and States for bicyclist and pedestrian safety by supporting implementation of education and law enforcement components of a community's pedestrian safety action plan.

- Developing and updating consumer information for internet access to address safety issues such as: distracted pedestrians and alcohol impaired pedestrians.
- Broadening educational offerings and resources on older driver safety issues to audiences of interest, including nurses, physicians, pharmacists, social service agencies, law enforcement, driver licensing and Area Agencies on Aging.
- Supporting operation and expansion of a Driver Licensing and Medical Fitness to Drive on-line training and resource for State driver's license administrations and highway safety offices.

What benefits will be provided to the American Public through this request?

Continued investment in highway safety programs are proven to reduce motor vehicle crashes and resulting injuries. Reduced crashes and injuries contribute to lives saved and economic vitality by preventing unexpected costs associated with property damage and medical services. Quality of life is also enhanced. Increases in safe non-motorized transportation also contribute to improvement in the environment and individual health.

MOTORCYCLISTS

DOT Strategic Goal: Safety

Motorcyclist Fatalities per 100,000
Motorcycle Registrations

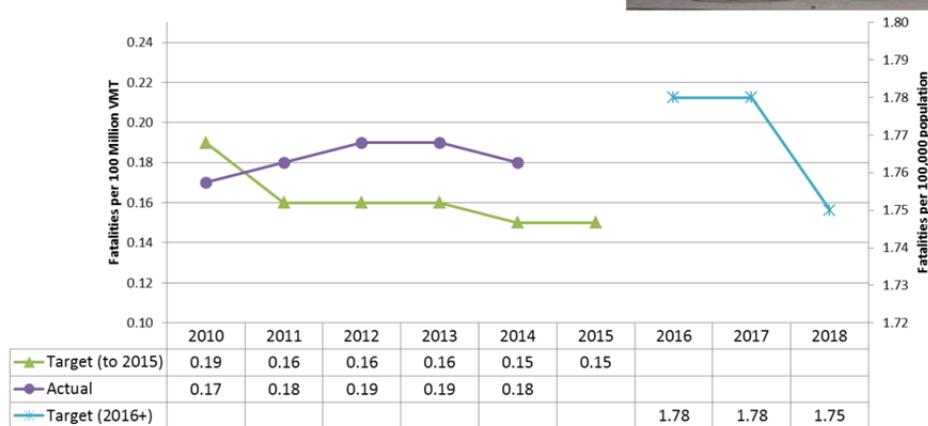


Source: NCSA/Registration (FHWA)

Non-Occupants (Pedestrians & Bicyclists)

DOT Strategic Goal: Safety

Non-Occupant Fatalities
per 100 Million VMT (through 2015)
per 100,000 population as of 2016



Source: NCSA/VMT (FHWA)

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
National Occupant Protection	\$10,282,000	\$9,890,300	\$9,890,300	\$0
Salary and Benefits	\$872,052	\$929,298	\$951,481	\$22,183
Total	\$11,154,052	\$10,819,598	\$10,841,781	\$22,183

What is this Program and Why is it Necessary?

The Occupant Protection Program directly supports NHTSA's overall safety goal of reducing highway fatalities by increasing use of age-appropriate occupant restraint devices. The agency conducts a range of activities including: supporting the enactment of primary seat belt laws, increasing support for high-visibility enforcement, conducting demonstration projects that test strategies to increase seat belt use among high-risk populations, increasing education and awareness of correct restraint use for children, and testing the impact on behavior from potential enhanced vehicle technologies to increase seat belt use. The agency provides occupant protection research, program guidelines, National *Click It or Ticket* mobilization planners, and other resources to help State and local communities increase seat belt, child safety seat and booster seat use at www.nhtsa.gov/Driving+Safety/Occupant+Protection.

Wearing a seat belt is the single most effective means of saving lives and reducing injuries in crashes. Occupant restraint use has risen gradually for the past several years; however, belt use in serious crashes remains relatively low. In 2013, of those passenger vehicle occupants killed in crashes, 9,580 were known to be unrestrained. Considering only occupants where restraint use was known, 49 percent were unrestrained at the time of the fatal crash. Seat belts saved 12,584 lives in 2013. An additional 2,800 lives would have been saved in 2013 if all unrestrained passenger vehicle occupants five and older involved in fatal crashes had worn their seat belts.

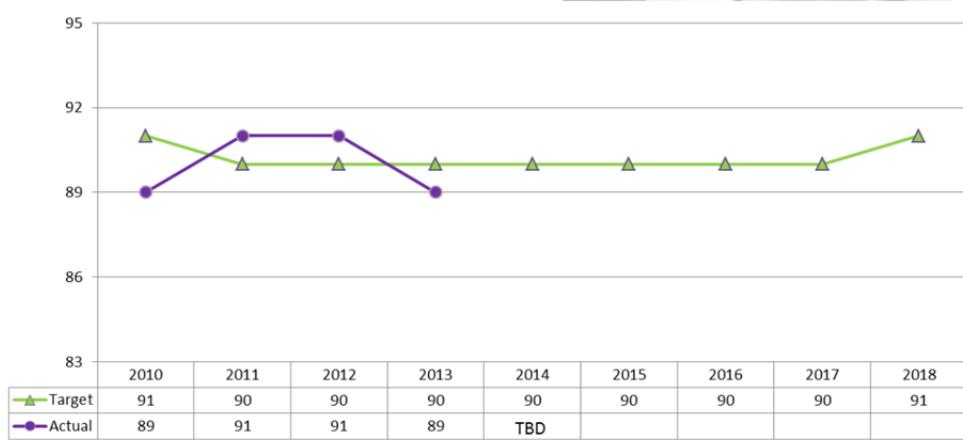
The Occupant Protection program also supports new initiatives to build upon the work accomplished in FY16 to address drowsy driving.

Why Do We Want/Need to Fund the Program at the Requested Level?

In FY 2017 we are requesting a total of \$10.8 million, of which \$9.9 million is specifically for Occupant Protection program activities, which is the same as the FY 2016 enacted funding level. Objective evaluations have shown that education, laws and law enforcement programs have contributed to a steady increase in the national seat belt use rate, reaching 87 percent in 2014. These methods have also been effective in improving child restraint use. In 2014, nineteen

States, the District of Columbia, and the U.S. territories of Guam and Northern Mariana Islands had seat belt use rates at 90 percent or higher. The annual *Click It or Ticket* campaign has been evaluated repeatedly for over a decade and determined to be a critical factor behind annual increases in seat belt use across the country. Additionally, jurisdictions with stronger seat belt laws continue to exhibit higher use rates than those with weaker laws. A review of many scientifically rigorous studies by the Centers for Disease Control and Prevention documented the value of primary seat belt laws, and empirical evidence continues to confirm the benefit. Increased seat belt use is a significant contributor to reductions in overall traffic deaths and to lower fatality rates per vehicle mile travelled.

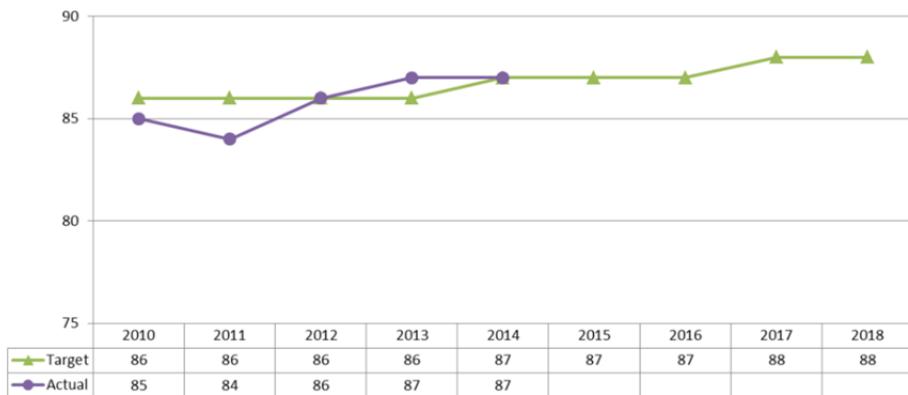
**NHTSA Safety Intermediate
Outcome Measure**
**Percent of Child Restraint Use
0- through 7-Year Old**



Source: NCSA

NHTSA Safety Intermediate Outcome Measure

Percentage of Front Seat Occupants Using Shoulder Harness Seat Belts



Source: NCSA

The Occupant Protection Program focuses on achieving further increases in overall seat belt and child restraint use and reducing unrestrained fatalities by supporting the enactment of primary seat belt laws, facilitating further adoption of high-visibility enforcement mobilizations, increasing and maintaining proper restraint use for children, and testing the potential of enhanced vehicle technologies to increase seat belt use.

Specifically, we request funds to:

- Continue the annual *Click It or Ticket* (CIOT) campaign emphasizing media and enforcement.
- Promote sustained seat belt and child safety seat enforcement throughout the year and utilize the CIOT campaign to support sustained enforcement efforts.
- Promote the safety benefits of conducting nighttime seat belt enforcement and further integrate nighttime seatbelt enforcement in the national CIOT campaign.
- Continue a test of using problem and community oriented policing models to increase community acceptance of seat belt enforcement and increase seat belt use.
- Continue a test of new and innovative strategies (both enforcement and non-enforcement) for reaching seat belt non-users.
- Work with partners in the public health, medical and law enforcement communities to identify strategies to persuade residents of low seat belt use states to use seat belts by appealing to common attitudes, experiences and values, especially about the importance of personal responsibility.

- Identify States and locations with high rates of unrestrained fatalities and low seat belt use to develop strategies for improving performance. Continue testing technical assistance strategies to improve performance and document strategies for use by other locations.
- Develop a comprehensive strategy to address rural areas with respect to seat belt use.
- Initiate a study of law enforcement challenges and priorities to understand better how to make traffic enforcement, especially sustained seat belt enforcement, a law enforcement priority.
- Address low seat belt use in secondary law States by working collaboratively with law enforcement to identify strategies to enable enforcement of existing seat belt use laws complemented by a targeted initiative to reinforce the need to use seat belts.
- Continue to work with NHTSA’s Vehicle Safety Research office on the development and testing of occupant protection technologies such as seat belt reminder and interlock systems. Such technologies have the potential to be effective in increasing the use of seat belts among non-users and situational users.
- Support data collection and analysis efforts to provide more in-depth understanding of factors associated with seat belt non-use and situational use, and inform approaches to increase use.
- Analyze existing data and identify strategies to address disparities in adult and child passenger safety in minority communities and build capacity and infrastructure to support adult and child passenger safety efforts for economically disadvantaged populations.
- Continue efforts to educate parents and caregivers about the correct choice of car restraints for children, correct use of car seats and booster seats, and the importance of registering car seats and booster seats.
- Establish a joint traffic safety-public health committee dedicated to making occupant protection a public health issue and creating customized programs and approaches to improve occupant protection, especially in hard-to-reach populations and resistant communities.
- Disseminate lessons learned from two recently completed teen seat belt projects.

What benefits will be provided to the American Public through this request?

Wearing a seat belt is the single most effective means of saving lives and reducing injuries in vehicle crashes. Seat belt use prevents untold tragedy to American families and saves billions of dollars in medical expenses and lost productivity costs annually. The simple act of fastening a seat belt can improve an occupant’s chance of surviving a potentially fatal crash by 44 to 73 percent, depending on the vehicle type and seating position. Lap/shoulder belts reduce the risk of fatal injury to front-seat passenger vehicle occupants by 45 percent and the risk of moderate-

to-critical injury by 50 percent. For light-truck occupants, seat belts reduce the risk of fatal injury by 60 percent and moderate-to-critical injury by 65 percent.

From 1975 through 2013, seat belts have saved the lives of over 315,000 passenger vehicle occupants age 5 and older. Over this same time period, an estimated 10,421 lives were saved by child restraints. And these numbers do not reflect the injuries that have also been prevented or mitigated by the use of seat belts. Given the number of lives saved; injuries averted and mitigated; cost savings in terms of medical expenses and lost productivity; and pain, suffering, and other emotional savings, seat belt programs provide, and will continue to provide, a major benefit to the American public.

HIGHWAY SAFETY PROGRAMS**Enforcement and Justice Services**

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Enforcement and Justice Service	\$3,001,000	\$2,529,000	\$10,029,000	\$7,500,000
Salary and Benefits	\$726,710	\$774,415	\$792,900	\$18,485
Total	\$3,727,710	\$3,303,415	\$10,821,900	\$7,518,485

What is The Program and Why Is It Necessary?

The Enforcement and Justice Services (EJS) Program reduces crashes, injuries and fatalities by enhancing the effectiveness of the criminal justice system in the detection, apprehension and punishment of violators of traffic safety laws and regulations. NHTSA collaborates with the Department of Justice and other law enforcement partners to employ a comprehensive approach to improving traffic safety, which includes such key initiatives as speed management, Data-Driven Approaches to Crime *and* Traffic Safety (DDACTS) and training and technical assistance to law enforcement, prosecutors and judges. Working jointly with the States, the agency has established a national network of Law Enforcement Liaisons (LELs) to further highway safety initiatives with law enforcement agencies nationwide. NHTSA provides a multitude of resources to improve the effectiveness of traffic safety laws at:

www.nhtsa.gov/Driving+Safety/Enforcement++&+Justice+Services.

Active participation of criminal justice professionals is crucial to the success of the agency's key programs, including occupant protection, alcohol and drug impaired driving, distracted driving and speeding initiatives. Traffic enforcement and adjudication are critical components of a community public health and safety program. Strategies such as high visibility enforcement (HVE) have been repeatedly evaluated and determined to be effective in modifying driver behavior and improving safety performance.

Why Do We Want/Need To Fund The Program At The Requested Level?

In FY 2017 we are requesting a total of \$10.8 million of which \$10 million is for Enforcement and Justice Services program activities, which is \$7.5 million above the FY 2016 enacted funding level. The increase provides the necessary funding to comply with the FAST Act authorized mandate for a continuation of the Section 1906 grant program under SAFETEA-LU to cover State costs for the collection, maintenance and evaluation of racial data in traffic stops. Funding at the requested level is also necessary to sustain and support effective participation of law enforcement, prosecutors and judges in priority agency behavioral programs. Educating criminal justice professionals requires consistent effort due to emerging traffic safety issues and turnover among criminal justice personnel. This funding will mobilize a network of

Law Enforcement Liaisons (LELs) to promote NHTSA priority programs and provide ongoing technical assistance at the community level. Included will be a range of new tools designed to facilitate the adoption of best practices by law enforcement and criminal justice professionals, and information sharing systems to efficiently and effectively deliver these tools. Specific examples of Law enforcement training tools to be revised include: the Standardized Field Sobriety Testing (SFST), Advanced Roadside Impaired Driving Enforcement (ARIDE), and the Drug Recognition Expert (DRE) courses.

The DDACTS program will be enhanced by expanding the current network of subject matter experts (SMEs) at the State and local level and adding on-line training for LELs. Additionally, a refocused emphasis on speed will require updated tools, such as new analytic methods for identifying locations where speeding occurs, and materials for communicating the hazards associated with speed. New materials and approaches will be necessary to provide States and local jurisdictions with the most effective communication strategies and tools possible.

What Benefits Will Be Provided To The American Public Through This Request?

Research has consistently demonstrated that high visibility enforcement, and integration of traffic enforcement into routine operations, results in reductions of crashes, fatalities and serious injuries. A high visibility enforcement effort, coordinated through the LEL network, provides effective and efficient delivery of traffic safety countermeasures. Place-based and data-driven enforcement operations (DDACTS) further enhances law enforcement's ability to focus limited resources where they can have the greatest impact for improving safety outcomes. These enforcement strategies combined with prosecutorial and judicial training, and DWI courts result in improved safety and a reduction in social harm for the community.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Emergency Medical Services	\$2,144,000	\$2,442,600	\$2,442,600	\$0
Salary and Benefits	\$1,308,078	\$1,393,947	\$1,427,221	\$33,274
Total	\$3,452,078	\$3,836,547	\$3,869,821	\$33,274

What is The Program and Why Is It Necessary?

The Office of Emergency Medical Services (Office of EMS) improves the safety of the Nation by assisting States and local areas to develop data-driven and evidence-based emergency medical services (EMS) which improve health outcomes from motor vehicle crashes and other health emergencies. After crashes occur, EMS remains the primary opportunity to **reduce motor vehicle mortality and morbidity.**



The vision of the Office of EMS is accessible and effective community-based emergency health systems that produce optimal outcomes from motor vehicles crashes and other health emergencies. We advance emergency medical services by collecting and analyzing critical data about State and local EMS systems, and by fostering collaboration among National, State, and local agencies engaged in guiding, improving, and standardizing EMS nationwide.

The Office of EMS, comprised of EMS and highway safety experts, convenes stakeholders to establish best practices with the ultimate goal of unifying the EMS community to improve patient care. We also foster consensus around strategies to promote more effective and efficient EMS systems and lead projects of national significance to accelerate improvements in our Nation's EMS systems.

We manage the statutorily-created [National EMS Advisory Council \(NEMSAC\)](#) which provides advice to the Department of Transportation and to the [Federal Interagency Committee on Emergency Medical Services](#) (FICEMS). FICEMS is required by law to coordinate Federal



EMS activities and NHTSA is mandated to provide administrative support to both FICEMS and NEMSAC. We also provide a variety of resources for

Federal, State, and local EMS organizations at www.EMS.gov.

To ensure that our programs meaningfully impact local EMS systems through the nation, the Office of EMS works closely with the NEMSAC, multiple national EMS organizations and our Federal partners to identify strategic initiatives of national significance that will improve the consistency and quality of emergency medical services. The Office of EMS collaboratively develops and implements these strategies in partnership with the Nation's many EMS stakeholders.



A well-performing EMS health system is essential to highway traffic safety and to the health of the Nation; it provides the last opportunity to reduce fatalities and the medical consequences of injuries from motor vehicle crashes. This community-based emergency health system also responds to other traumatic and medical emergencies. Effective systems of emergency trauma care can improve survival from severe injuries by as much as 25 percent. Counties with coordinated systems for trauma care have been shown to have crash fatality rates as much as 50 percent lower than counties without trauma systems.

Through NHTSA's leadership in developing and implementing the [National EMS Education Agenda for the Future: A Systems Approach](#), there has been [considerable progress](#) in moving the Nation toward more uniform EMS education, National EMS Certification and accreditation of paramedic education programs which helps to ensure a more consistent level of emergency medical care is available throughout the nation including to persons injured in motor vehicle crashes.

The Office of EMS leverages its investment by pursuing strategic national initiatives that are recommended by the NEMSAC and supported by national EMS organizations. These investments, combined with the enthusiastic implementation of a dedicated national EMS community help ensure success in generating sustainable national EMS system improvements.

Expected FY 2017 Accomplishments:

- Develop, through pertinent national EMS organizations, additional model legislation and regulations to assist State EMS offices in improving their EMS systems and to assist national EMS organizations in developing best practices to unify the EMS community to improve patient care.
- Convene a national stakeholder meeting to coalesce national EMS and safety organizations around the implementation of the National EMS Culture of Safety Strategy. This will address EMS patient, personnel and community priorities to help ensure the health, safety and well-being of the EMS and 911 workforce and EMS patients that are based on NEMSAC recommendations.

- Conclude the State-wide implementation of evidence based guidelines study.
- Begin the revision of the *National EMS Scope of Practice Model* which will incorporate new research and data-driven information. This will promote more national consistency and up-to-date EMS practice by providing guidance for States to modify their scope of practice regulations/laws and drive national EMS education standards updates.
- Support the transition of military EMS personnel and veterans into civilian EMS employment in cooperation with the National Association of State EMS Officials by implementing their model procedures to promote more uniform licensing requirements.
- Strengthen the resilience of EMS and 911 systems at the local, State and Federal levels by pilot-testing a mass casualty triage addendum to the Instructional Guidelines of the National EMS Education Standards.
- Continue development and dissemination of a curriculum to educate medical directors of EMS and 911 call centers about Advanced Automatic Collision Notification and promote use of telematics data to improve EMS response to motor vehicle crashes.
- Update the National EMS Clinical Care Protocols as new information becomes available. Implement, in coordination with Federal partners on the statutory Federal Interagency Committee on EMS (FICEMS), ten (10) of the thirty objectives of the [FICEMS strategic plan](#).
- Produce and publish at least three (3) NEMSAC reports with recommendations to DOT and FICEMS on key national EMS policy areas.
- Begin revision of the *EMS Agenda for the Future* in coordination with Federal partners and national EMS organizations.
- Continue revision of *National Guidelines for the Field Triage of Trauma Patients* which helps to ensure that the right trauma patients are taken to the right medical facility in the right amount of time.
- Establish a national vision for the gathering and utilization of EMS data.
- Disseminate lessons learned from NHTSA ambulance crash investigations to increase the safety of patients, providers and the general public.
- Provide additional staff and operational support for the FICEMS and the NEMSAC as required by statute.

Why Do We Want/Need To Fund The Program At The Requested Level?

In FY 2017 we are requesting a total of \$3.9 million, of which \$2.4 million is specifically for Emergency Medical Services program activities, which is same as the FY 2016 enacted funding level. This increase will build upon the FY 2016 EMS Compass Performance Measurement Project and expand technical assistance to states for meeting performance benchmarks consistent with MAP-21 safety performance measures - *specifically the number of serious injuries in traffic crashes*. Serious injuries are difficult to measure and report consistently, but have great potential for improving understanding of risks and assessing progress in traffic safety. Compass is a NHTSA-funded national initiative to set comprehensive state and local EMS system performance measures, largely based on data from the National EMS Information System (NEMSIS).

The Office of EMS will continue activities to reduce death and disability from motor vehicle crashes and other health emergencies by providing national leadership and coordination to help implement data-driven and evidence-based emergency medical services and 911 systems. In FY 2017, the Office of EMS will do this by:

- Continuing to implement and revise, as necessary, the national EMS Clinical Care Protocols.
- Developing model EMS and 911 dispatch guidelines that uses telematic data from Advanced Automatic Crash Notification to help ensure optimal emergency responses to motor vehicle crashes.
- Continuing the revision of the *EMS Agenda for the Future*
- Continuing to disseminate lessons learned from NHTSA ambulance crash investigations to increase the safety of patients, providers and the general public
- Continuing revision of the ***National Guidelines for the Field Triage of Trauma Patients*** which helps to ensure that the right trauma patients are taken to the right medical facility in the right amount of time
- Providing technical assistance and support to State offices of emergency medical services in more uniform approaches to the development and regulation of EMS
- Assisting national EMS organizations to developing best practices to unify the EMS community to improve patient care.
- Continuing to support the implementation of the National EMS Culture of Safety Strategy, the National EMS Workforce Agenda for the Future and the EMS Education Agenda for the Future including revision of the National EMS Scope of Practice Model—consistent with the recommendations of NEMSAC
- Continuing to support the transition of military EMS personnel and veterans into civilian EMS employment in cooperation with the National Association of State EMS Officials by implementing their model procedures to promote more uniform licensing requirements.

- Providing staff and operational support for the FICEMS and the NEMSAC
- Continuing coordination with Federal and national preparedness partners to strengthen the resilience of EMS and 911 systems at the local, State and Federal levels and supporting related efforts of the National Security Council staff.
- Providing limited support for the implementation of [EMS Compass](#) to facilitate the measurement and improvement of EMS patient care through standardized data and performance measurement.

What benefits will be provided to the American Public through this request?

EMS systems improve outcomes for people injured in motor vehicle crashes by providing prompt and effective medical care when other safety countermeasures have failed. In addition to improving crash survival rates, early administration of medical treatment has been shown to reduce long-term disability and to reduce health care costs. Providing improved training for our EMS personnel and equipping them with evidence-based treatment protocols will help ensure that Americans living in rural and urban areas all receive high-quality emergency medical care. Finally, community-based EMS systems are integral to building our Nation's resilience by expanding our capacity to respond to emergencies from traffic crashes to natural and man-made disasters.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Enhanced 9-1-1/National 9-1-1 Office	\$2,750,000	\$2,750,000	\$2,750,000	\$0
Salary and Benefits	\$0	\$0	\$0	\$0
Total	\$2,750,000	\$2,750,000	\$2,750,000	\$0

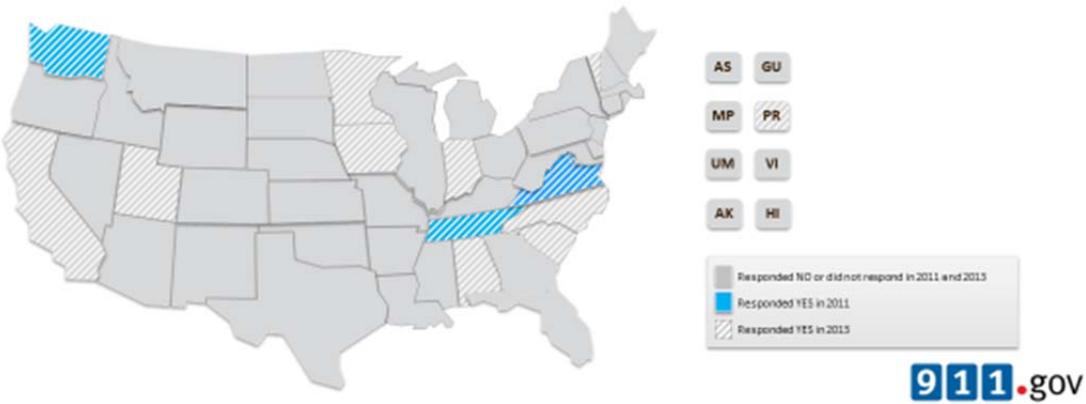
What is this Program and Why is it Necessary?

The National 911 Program provides national leadership and coordination of comprehensive, data-driven and evidence-based Next Generation (NG) 911 systems to reduce fatalities and minimize injuries from motor vehicle crashes and other injuries. The program was created as a Federal point of coordination for activities among 911 stakeholders and to provide information that can be used by State and local 911 authorities to improve the 911 system. We work toward achieving these goals through collaboration with Federal agencies, national organizations, and 911 authorities at the State and local levels involved in 911 emergency communications. We develop a variety of resources with their active involvement, including tools that can be used to plan and implement Next Generation (NG) 911. We are also responsible for administering a grant program specifically for the benefit if 911 Public Safety Answering Points (PSAPs) authorized by Section 6501 of the Jobs Act of 2012 (P.L. 112-96).

The current 911 system is outdated and undergoing major transition. Its changing infrastructure will transform over 6,000 independently operated 911 Public Safety Answering Points (PSAPs) into one, interconnected system of over 6,000 components. Without national coordination, the Nation's 911 system is likely to remain fragmented, and in many communities, unable to provide 911 service to citizens using advanced forms of personal communication. While States play a major role in deploying updated 911 technologies, national coordination is essential in achieving a fully integrated 911 system nationwide.

States That Can Process 911 Calls using NG911 Infrastructure

- ▶ Difference between the percentage of the planned NG911 systems that are operational for NG911 call-taking from 2011 to 2013



1

Expected FY 2017 Accomplishments:

We collect and create resources that have been identified by the 911 community as necessary and of utility in updating and operating local and State 911 systems. We actively involve 911 stakeholders in their development and distribution.

- Examples of resources include:
 - An online 911 legislation tracking database [An Online 911 Legislation Tracking Database](#),
 - A bimonthly webinar [Bimonthly Webinar](#) to provide information on Federal 911 activities and to share the experiences of early adopters of NG911 technology
 - A compendium of NG911 standards [Compendium of NG911 Standards](#) updated annually
 - An online data collection system, to collect data from states and territories related to their demographic status and progress in deploying NG911

We are responsible for the development of regulations and infrastructure to support the 911 Grant program authorized by the Jobs Act of 2012 (P.L. 112-96)

We will coordinate efforts to undertake a project that will analyze and determine detailed costs for specific NG911 service requirements and specifications.

Why Do We Want/Need To Fund The Program At The Requested Level?

In FY 2017 we are requesting a total of \$2.8 million for the National 9-1-1 program, which is same as the FY 2016 enacted funding level. Americans rely on 911 as the single point of entry to call for emergency services. Congress established 911 as the National Emergency Number. It is estimated that there are over 240 million 911 calls each year with an increasing number made by cellular and Voice over Internet Protocol (VoIP) telephones as well as text messages.

In one study, after 911 service was implemented, call takers accurately identified twice as many victims of cardiac arrest compared to the time frame previous to 911 deployment. For many emergencies, the chance of survival depends on rapid response, treatment and transport – and citizen access to 911. Citizens also depend on the 911 system to maintain highway safety (e.g., reporting impaired drivers to law enforcement).

During FY 2017, the National 911 Program will support continued improvement of the 911 system to improve emergency response by:

- Continuing operation of a national 911 Resource Center (<http://www.911.gov/resources.html>) to collect and create resources for State and local 911 agencies for their conversion to Next Generation 911 and comprehensive 911 system implementation.
- Maintaining and improving www.911.gov as the single portal for accessing information on Federal 911 activities.
- Maintaining operation of the National 911 Profile Database and activities that enable submission of State 911 data to measure national progress towards full implementation of NG911.
- Administering a grant program specifically for the benefit of 911 Public Safety Answering Points
- Coordinating efforts to complete a report analyzing and determining detailed costs for specific NG911 service requirements and specifications.
- Initiate a project to implement recommendations made by the Federal Communications Commission's Task Force on Optimal PSAP Architecture, convened in 2015.
- Initiating a project to provide comprehensive resources to state and local 911 Authorities in implementing NG911, based on the content of a cost study that will analyze and determine detailed costs for specific NG911 service requirements and specifications.

What Benefits Will be Provided to the American Public Through this Request?

For almost 50 years, the 911 system has provided efficient, effective public access to emergency help for all types of emergencies (i.e., crime, fire, medical emergencies, traffic crashes, natural disasters, acts of terrorism). Every incident, large or small, starts with a call to the 911 system for help. Citizens also depend on the 911 system to maintain highway safety (e.g., reporting impaired drivers to law enforcement). While the 911 system has been a success, its infrastructure is outdated, and an update to its technologies and operation is necessary if the public is to access 911 using current methods of personal communication.

An updated 911 infrastructure will allow citizens to send text messages, video, photographs and other data to 911, and allow 911 to send this information to emergency responders – something that isn’t possible now. The integration of 911 and emergency responder communication systems is essential to achieve seamless information transmission, and for the successful deployment of the National Public Safety Broadband Network.

An updated 911 infrastructure will also allow 911 PSAPs to transfer 911 calls to other PSAPs – important in cases of call overload or when a natural disaster damages 911 PSAPs – neither of which can be done today.

National coordination will facilitate consistency and uniformity among State and local 911 systems. Without this coordination the nation’s 911 system is likely to remain fragmented and full implementation of a national NG911 system significantly delayed. In addition, people will not be able to use advanced personal communication devices to call 911 in many communities.

By fostering coordination and collaboration among Federal, State and local 911 stakeholders, cost sharing and cost saving is much more likely to occur.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
National EMS Info System (NEMSIS)	\$1,500,000	\$1,500,000	\$1,500,000	\$0
Salary and Benefits				\$0
Total	\$1,500,000	\$1,500,000	\$1,500,000	\$0

What is this Program and Why is it Necessary?

The National Emergency Medical Services Information System (NEMSIS) provides a comprehensive, standardized approach to collecting and using Emergency Medical Services (EMS) patient care data at the local level and reporting portions of that data to the State and national levels. NEMSIS collects standardized pre-hospital patient care data that can be fully integrated with electronic health records and with traffic records systems to evaluate and document achievements and challenges related to the Department's top priority - improving safety.

NHTSA funds the [NEMSIS Technical Assistance Center](#) to provide assistance to States for submission of data to the National EMS Database and for initial data analysis to assess EMS response and patient care. The NEMSIS Technical Assistance Center helps to ensure that additional States provide data to the National EMS Database, currently maintains the National EMS Database and revises the NEMSIS Data Dictionary.

NEMSIS is the critical link in providing a data-driven; evidence based emergency medical services system that provides information that is valuable in obtaining patient outcomes from traffic injuries. It provides uniform information for EMS medical directors and administrators to improve the provision of emergency medical care to patients. NEMSIS also provides valuable prehospital information that will assist in the development of performance improvement tools and benchmarks for emergency medical services that will be developed in concert with the many national EMS organizations. NEMSIS enhances research that is essential to support comprehensive, data-driven and evidence-based EMS and 911 systems. In the absence of NEMSIS, there would be no uniform method for collecting and analyzing EMS data to improve patient care, to improve system performance and to enhance research.

NEMSIS is a joint Federal, State, local and private venture. NHTSA provides the overall coordination, standards and technical assistance. Local EMS agencies, both private and governmental, purchase the software and collect the patient-side data. State EMS offices manage

State EMS data systems including the aggregation of data from local EMS agencies within their jurisdiction, and report a subset of that data to the National EMS database. Information submitted to the National EMS Database is de-identified.

Expected FY 2017 Accomplishments:

- Migrate the National EMS Database from the NEMSIS Technical Assistance Center to one that is maintained by NHTSA;
- The NEMSIS Technical Assistance Center contractor will increase to 50 the number of States and territories that contribute data to the National EMS Database and will generate at least (4) national reports that provide a descriptive analysis of the national EMS system;
- Publish a NEMSIS annual report providing descriptive national data for providers, policymakers, and the National EMS Advisory Council (NEMSAC);
- The NEMSIS Technical Assistance Center will achieve and maintain Federal Information Security Management Act (FISMA) compliance until the National Database is transferred to NHTSA;
- Increase to 15 the number of States and territories that contribute NEMSIS Version 3.2 data to the National EMS Database to further support system improvement by more robust data and enhance availability of motor vehicle crash-specific information.

Why Do We Want/Need to Fund the Program at the Requested Level?

In FY 2017 we are requesting a total of \$1.5 million for the National Emergency Medical Services Information System (NEMSIS) program, which is same as the FY 2016 enacted funding level. During FY 2017, with the base funding level, we will continue to build on the accomplishments of FY 2016 through the following:

- complete the migration of the National EMS Database from the NEMSIS Technical Assistance Center to one that is maintained by NHTSA
- continue to support and expand the National EMS Database
- continue the operation of a NEMSIS Technical Assistance Center to provide technical assistance and support to states and the national EMS community and to assist with the expansion and operation of the NHTSA [National EMS Database](#),
- increase to 50 the number of States and territories that contribute NEMSIS data to the [National EMS Database](#)
- continue to increase the percent of each State's EMS "runs" that are reported to the [National EMS Database](#)
- continue to integrate local NEMSIS-compliant electronic patient care reports with electronic health records and with health information exchanges to provide for better patient care and better linkage with patient outcome.

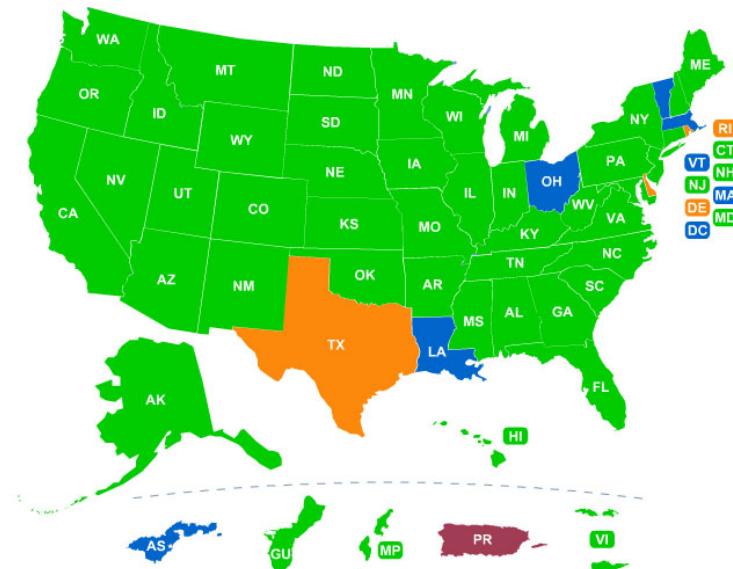
- provide technical assistance and support to State and local EMS agencies in their transition to NEMSIS Version 3.2 which will provide better, more robust data at local, State and national levels.
- increase to 15 the number of States that contribute NEMSIS Version 3.2 data to the National EMS database

NHTSA will contract with a NEMSIS Technical Assistance Center to help facilitate the national coordination and implementation of the National EMS Information System. NEMSIS provides information on a local, State and national level that is essential to the improvement of the care of pre-hospital emergency patients including those injured in motor vehicles crashes.

Although NEMSIS is not mandatory, every State and territory has signed a Memorandum of Understanding acknowledging their support for NEMSIS. Researchers are using the national data on EMS responses and patient outcomes to support EMS system development and publishing articles in the peer-reviewed literature. Several States are linking NEMSIS data with State crash records, trauma registries and other in-hospital databases to improve systems of patient care. The NEMSIS continues to provide the underpinning of a data-driven and evidence based emergency medical services system.

States are voluntarily complying with NEMSIS and submitting data to the National EMS Database as shown in this map:

State & Territory Version 2 Information



What benefits will be provided to the American Public through this request?

The American Public will benefit from the implementation of a National EMS Information System because the information may be used:

- by the local medical director and EMS providers to help evaluate and improve the care provided to patients including those injured in motor vehicle crashes;
- by researchers to help improve the protocols that EMS providers use to guide the care provided to their patients including those injured in motor vehicle crashes;
- to help define performance measures and benchmarks that will help local and State officials improve EMS system performance including those for response to motor vehicle crashes;
- to guide new educational opportunities for EMS providers that will improve the care they provide to patients to include persons injured in motor vehicle crashes;
- to improve EMS systems preparation for disasters and major events and to enhance their resiliency.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Driver Licensing	\$1,002,000	\$993,700	\$993,700	\$0
Salary and Benefits	\$0	\$0	\$0	\$0
Total	\$1,002,000	\$993,700	\$993,700	\$0

What Is This Program and Why Is It Necessary?

The Driver Licensing and Driver Education Programs improve highway safety performance by providing national leadership and assistance to States in ensuring that drivers are properly trained, periodically evaluated, and have a single valid license and driving. As part of this comprehensive program, NHTSA assists States in developing licensing systems for novice drivers that include driver education meeting minimum national standards and Graduated Drivers Licensing (GDL) laws that lead young novice drivers through a 3-stage process for full licensure. Our resources can be found at www.nhtsa.gov/Driving+Safety/Teen+Drivers.

Problem and novice drivers are overrepresented in fatal crashes. Model driver improvement methods and well-enforced GDL laws show promise in reducing risk among these groups. In addition, driver education as a part of a comprehensive GDL program, may improve novice driver safety. States need assistance in weighing alternatives, as well as designing and implementing effective driver programs for high risk populations.

Further, as research is being conducted on Automated Vehicle Technology, NHTSA will provide legislative, program, and administrative guidance to assist States in accommodating automated vehicle operation with regard to driver licensing, driver testing, and vehicle registration.

Why Do We Want/Need To Fund The Program At The Requested Level?

In FY 2017 we are requesting a total of \$1 million for the Driver Licensing program, which is the same as the FY 2016 enacted funding level. In FY 2017, the Driver Education and Teen Safety Program will focus resources on several key issues, including:

- Working with key stakeholders in the development of standards for on-line and overall delivery of driver education.
- Implementing the strategic plan for the future of driver education.

- Assessing State compliance with national standards for driver education program designed to increase alignment within the States' administrative oversight of driver education.
- Conducting driver education program assessments as requested by the States, and monitoring follow-up actions taken.
- Continuing demonstration projects to develop promising methods to enforce licensing restrictions of GDL and suspended drivers.
- Providing States with guidelines or recommendations to facilitate their accommodation of automated vehicle operation specifically with regard to driver licensing, driver testing, and vehicle registration.

What Benefits Will Be Provided To The American Public Through This Request?

Key components of State driver licensing and driver education programs have proven effective, with a number of scientific evaluations showing GDL laws, in particular, to be effective in reducing young driver crashes. Further benefits will be realized by facilitating consistent State-to-State adoption of best practices for driver training and education and by determining the optimal approach for integrating driver education in an overall teen driver safety program.

By the States' adopting model laws and administrative procedures to address new vehicle technology, the motoring public will be assured a safe and efficient accommodation of new automated vehicle systems.

HIGHWAY SAFETY PROGRAMS**Highway Safety Research**

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Highway Safety Research (Includes Section 2013 and ACTS Alcohol Interlock Initiative)	\$5,091,000	\$11,521,400	\$11,521,400	\$0
Salary and Benefits	\$0	\$1,161,623	\$792,900	(\$368,723)
Total	\$5,091,000	\$12,683,023	\$12,314,300	(\$368,723)

*Excludes \$4,967,000 in funding from Grant Administrative Expenses.

What is this Program and Why is it Necessary?

Highway Safety Research directly supports the Department and agency goals of reducing traffic crashes, fatalities and injuries by providing the scientific basis for the development of effective behavioral countermeasures to reduce the occurrence of traffic crashes. Behavioral Safety Research focuses on unsafe driving behaviors that contribute significantly to death and injury from crashes on our highways. Evaluation research documents the relative effectiveness of programs to reduce fatalities and injuries on our highways, and is critical to achieving further progress toward meeting national goals and performance targets. Research, analysis and demonstration program results assess existing and emerging highway safety problems and are disseminated to the States to use to identify effective traffic safety countermeasures for implementation through the highway safety formula grant (Section 402) funds. Our highway safety research studies can be found at:

www.nhtsa.gov/Driving+Safety/Research+&+Evaluation.

Why Do We Want/Need To Fund The Program At The Requested Level?

In FY 2017 we are requesting a total of \$12.3 million, of which \$11.5 million is specifically for Highway Safety Research activities, which is the same as the FY 2016 enacted funding level. Behavioral safety research has contributed significantly to the widespread adoption of numerous programs proven to reduce crashes. Examples include the national *Click It or Ticket (CIOT)* program, the adoption of Standardized Field Sobriety Tests (SFST) by law enforcement officers investigating potential impaired driving cases, passage of primary safety belt and distracted driving laws, the national 0.08 Blood Alcohol Concentration limit, advancement of Graduated Driver Licensing laws, greater understanding of older driver issues, and development and testing of effective pedestrian and bicycle safety programs.

Improved traffic behaviors by drivers and other roadway users are critical to achieving further reductions in motor vehicle fatalities. Behavioral research provides an evidence-based foundation for State and community traffic safety programs. Research is needed to identify more effective and efficient countermeasures for existing traffic risks such as alcohol-

impaired driving, drugged driving, speeding and non-use of seat belts, and to develop new solutions for emerging and resurgent problems such as pedestrian and bicyclist safety, motorcycle safety, driver fatigue and distracted driving.

During FY 2017, with the base funding level, the Highway Safety Research Program will continue to build on the accomplishments of FY 2016. Below are examples of research activities planned for FY 2017:

Impaired Driving

- Complete a study to examine the effect of different intensities of high visibility enforcement programs on driver attitudes and awareness of the risks of apprehension for impaired driving and the effects on drinking and driving behavior.
- Continue support for the in-vehicle alcohol detection systems.
- Complete documentation of the implementation and operation of ignition interlock programs for all offenders and continue to examine the utilization of ignition interlock data for offender monitoring and offender rehabilitation.
- Complete a study to identify promising underage drinking and driving countermeasures based on available information.
- Complete an evaluation of a demonstration of the “Community Oriented Policing” model as applied to alcohol-impaired driving enforcement.

Drug Impaired Driving

- Continue a study to develop a field test to detect drivers impaired by cannabis.
- Continue a large scale study of the role of drugs and alcohol in serious injury crashes.
- Complete a series of critical research investigations to determine the effects of different policies related to marijuana and the prevalence of drug-impaired driving in a selection of States, the effects of drug-impaired driving on serious crash risk, and a study on the different State policies related to marijuana control and driving safety.
- Initiate a study of the role of marijuana use by drivers involved in crashes in which failures of executive function, cognition and reaction time appeared to a role.

Occupant Protection

- Complete research to demonstrate less resource intensive programs designed to maintain high usage rates.
- Complete a study of part-time or occasional seat belt use using naturalistic driving data that will examine a variety of factors in determining when and where occasional use wear their seat belts.
- Develop and test new strategies to increase seat belt use in rural areas and other locations with low seat belt use.

- Continue to develop and test ways of institutionalizing educational techniques for informing the annual cohort of new parents on the appropriate selection and proper use of age/size appropriate restraint system for their children.
- Complete an evaluation of a demonstration of the “Community Oriented Policing” model as applied to occupant protection enforcement.

Pedestrian and Bicycle Safety

- Complete a study on the involvement of distraction in pedestrian crashes, develop a pedestrian and bicyclist countermeasure primer for highway safety professionals and conduct a follow-up study of the long-term impacts of high visibility enforcement on driver compliance with pedestrian right-of-way laws.
- Continue research on the development and use of reliable, accurate, and repeatable measures of pedestrian and bicyclist exposure that will allow NHTSA and others to appropriately evaluate the effectiveness of traffic safety program initiatives to reduce pedestrian and bicycle crashes.

Motorcycle Safety

- Complete a study that examines factors that may contribute to higher motorcycle helmet use rates in some States without universal helmet laws
- Release initial results of a naturalistic riding study designed to better understand motorcycle riding behavior, risk taking, and willingness to engage in unsafe riding behaviors
- Complete and release a State of the Knowledge report regarding motorcycle safety for use by State highway safety offices.

Speeding

- Complete a study to using data from the SHRP-2 Naturalistic Driving Data to better understand a number of questions related to speed-related behavior, including the relationship between speeding and crashes and near crashes.
- Complete and release a new National Traffic Speeds Survey and look at the trends in driving speeds across the country by roadway type and location
- Continue a naturalistic study that involves the instrumentation of roadways to identify real-world speed-related problems.

Older Drivers

- Complete a naturalistic study of changes in older drivers’ driving habits after the State imposes restriction on their driver licenses.
- Initiate a study of older drivers’ self-regulation and driving exposure. This study will focus on the extent to which older drivers change their driving habits as their functional skills (vision, cognition, reaction time, and other aspects of driving performance decline

with aging). Instruments will be installed in their vehicles to collect data on where and when they drive in order to determine whether they tend to drive under conditions that their scores on functional measures indicate they should avoid.

- Complete a study of how older adults are able to use modern in-vehicle telematics (like navigation devices) to determine whether these devices provide older adults assistance in driving more safely or pose an unnecessary distraction.

Young and Novice Drivers

- Complete a study of monitoring and alerting technologies designed to assist novice drivers in improving their driving performance.
- Complete a field test of hazard perception training to determine whether it reduces subsequent crashes for novice drivers.

Distracted Driving

- Complete and release a new national survey of attitudes and behavior toward distracted driving by the public.
- Continue research on how to convince drivers of the risks of multitasking while driving.
- Continue research on ways to measure and mitigate the lack of attention to the driving task (e.g., mind wandering).

Driver Fatigue

- Continue research to develop and test an algorithm for estimating the scale of fatigued and drowsy driving and its effects on safety, using available data resources to identify factors highly associated with fatigue and drowsy-related crashes.
- Evaluate strategies for utilizing fatigued or drowsy driving policies or laws as agents of change to affect attitudes and behaviors.
- Countermeasures will also be developed for high risk populations that include public safety personnel and other drivers exposed to shiftwork, and strategies for reaching high-risk populations will be developed.

EMS Research

- Continue research to monitor and evaluate the adoption of evidence based guidelines currently under development that are designed to provide EMS systems with scientifically validated and more effective pre-hospital care to the American public.
- Continue research into the scope and nature of the fatigue problem in delivery of EMS services, along with evidenced based guidelines on how to reduce the incidence of ambulance crashes and patient treatment errors in which fatigue played a role.

What Benefits will be provided to the American Public through this request?

Highway safety research provides the basis for designing, testing and implementing data-driven programs that have been demonstrated to reduce crashes, deaths and injuries and that save society millions of dollars that would otherwise be lost to the preventable costs of traffic crashes in America.

HIGHWAY SAFETY PROGRAMS**Behavioral International Program**

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Behavioral International Program	\$100,000	\$100,000	\$100,000	\$0
Salary and Benefits	\$0	\$0	\$0	\$0
Total	\$100,000	\$100,000	\$100,000	\$0

What is the Program and Why is it Necessary?

The Behavioral International Program contributes to the overall Departmental and agency fatality reduction goals by exchanging information with other nations concerning emerging traffic problems, countermeasure strategies, and program evaluations. The program also extends the Department's international leadership on key issues such as pedestrian and bicyclist safety and driver distraction and provides critical technical assistance for developing nations to prevent escalating vehicle related fatalities as a result of increasing mobility.

The Behavioral International Program establishes cooperative relationships with the agency's traffic safety counterparts from other nations, providing the Department with opportunities to learn from the experience and research of those who address similar issues. With the increasing globalization of markets, emerging problems such as driver distraction and drugged driving have global effects. Through international connections, the Department is able to collect information about the nature of the traffic safety issues and the effectiveness of countermeasures deployed in other nations in order to utilize these insights in planning U.S. strategies. The Behavioral International Program also provides opportunities for international outreach and leadership.

Results from the Behavioral International Program are seen both in examples of international leadership and in tangible global safety progress. Technical assistance being delivered to road safety leaders in India is facilitating the development of a testing and certification laboratory to support the adoption of breath alcohol measurement devices. Top-level officials from the India Ministry of Road Transport and Highways visited NHTSA in 2014 to begin bi-lateral discussions that will assist in the establishment of a lead Federal highway safety agency in India. This groundwork resulted in high-level meeting between Federal officials and Secretary Foxx during his 2015 trip to India. The program's leadership was also demonstrated in the support of an international roundtable on two wheeler safety in developing nations conducted under the auspices of the United Nations Economic Commission for Europe (UNECE) Working Party1 (WP.1) (UNECE WP 1) and in the development of a white paper on two-wheeler safety in Southeast Asia. Examples of institutional achievement include a redirection of UNECE WP.1, to include increased focus on coordinating global traffic safety behavior approaches and

increased emphasis on assisting emerging nations. In association with the Second Ministerial Conference in Brasilia in 2015, NHTSA and UNECE convened a workshop to promote two-wheeler safety in emerging nations. Critical future activities include the alignment of international driver licensing requirements related to autonomous vehicles to ensure continued reciprocity.

In FY 2017, expected accomplishments of the Behavioral International Program will include:

- Implementing a bi-lateral agreement with the Government of India on transportation issues, with a special working group on road safety.
- Completing new curriculum and support materials for a course on data system development and utilization.
- Continuing to work with the World Health Organization to collect data on initiatives to implement the Decade of Action for Road Safety.
- Continuing development of training modules to support the good practice manuals (e.g., impaired driving, occupant protection, speeding, helmet use) made available to mature and emerging nations.
- Engaging in partnerships to steer the objectives and activities of UNECE (WP.1) on Road Traffic Safety.
- Collaborating with the United National Road Safety Collaboration, and the World Health Organization in stimulating progress on the Decade of Action for Road Safety.
- Collaborating with the U.S. Department of State in furthering global exchange of data, research findings and best practices to reduce U.S. and worldwide traffic injuries and fatalities.

Why Do We Want/Need To Fund The Program At The Requested Level?

In FY 2017 we are requesting a total of \$100 thousand for the Behavior International program, which is the same as the FY 2016 enacted funding level. During FY 2017, with the base funding level; the Behavioral International Program will continue to build on the accomplishments of FY 2016 through the following:

- Expand focused technical assistance and collaboration with India, including establishment of a new traffic speed measurement device certification laboratory, further integration of the new alcohol breath test device certification laboratory and development of a traffic crash data collection training program for local police agencies.
- Implement a new intergovernmental agreement with the Government of India to provide technical assistance for the development of a lead Federal highway safety agency.
- Expand global road safety leadership by utilizing existing forums including the United Nations Road Safety Collaboration and the United Nations Economic Commission of Europe Working Party 1 on Road Safety.

- Build on efforts to develop strategies for addressing the high number of two-wheel motor vehicle crashes in developing nations – and particularly in South East Asia.
- Focus collaboration and technical assistance on global road safety opportunities with high potential, such as the Government of India, which have measureable safety concerns, are receptive to assistance, and have the ability to affect the safety of large numbers of road users.

How Does This Program Benefit the American Public?

International leadership in road safety benefits the American public in several ways. Sharing U.S. experience and technical expertise with developing nations is first a humanitarian effort that can improve the quality of life of individuals around the globe, addressing the cause of more than 1.2 million deaths each year and the leading cause of death for young people worldwide. Global road safety leadership is also an effective means for international diplomacy and enhancing global community. In addition, U.S. efforts to improve global road safety can contribute to the adoption of common vehicle safety standards, driver licensing processes, and traffic codes, thereby facilitating international trade, travel, and international development. Further, this provides NHTSA with opportunities to learn about low-cost, effective programs that could be modified and adopted in local communities in the U.S.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
National Driver Register - TF (Program funds only)	\$3,500,000	\$3,425,000	\$3,525,000	\$100,000
Salary and Benefits	\$1,308,078	\$1,675,000	\$1,675,000	\$0
Total	\$4,808,078	\$5,100,000	\$5,200,000	\$100,000

NOTE: These amounts do not reflect the NDR administrative expenses (\$1.775M requested in FY 2017), which are included under HS administrative expenses.

What Is This Program and Why Is It Necessary?

The National Driver Register (NDR) is a nationwide clearinghouse of problem drivers whose privilege to drive has been revoked, suspended, cancelled or denied, for cause, or who have been convicted of a serious driving violation, such as driving under the influence of alcohol or other drugs. Every individual who applies for a license or a license renewal is vetted through the NDR's system of State pointer records to determine if they are currently under revocation or suspension actions in another State. The NDR assists Federal agencies and other transportation sectors in the hiring and certification process. The States and transportation related entities use the information in the NDR to ensure that commercial drivers, locomotive engineers, merchant mariners and airline pilots meet all necessary qualifications for operator license certification.

The National Driver Register assists States and Federal agencies in keeping problem drivers from obtaining driver licenses and operator certifications. The NDR is the only "one stop" central repository of information identifying problem drivers and is used on a daily basis by all 50 States and the District of Columbia. Other authorized users access the NDR to determine if a driver license applicant, locomotive engineer, merchant marine, airline pilot, or commercial driver should be issued an operator's license.

The NDR works to support other NHTSA countermeasure programs such as impaired driving and the driver licensing programs. When an arrest and conviction is made for driving under the influence of drugs or alcohol, the court sends the conviction to the motor vehicle administration resulting in a record being added to the NDR. If the driver attempts to obtain a license in another State or renew their current license, a search of the NDR will result in a "hit" and denial of the applicant's license.

Continued operation of the NDR enables States to comply with the provisions of the Motor Carrier Safety Improvement Act (MCSIA) which requires States to check the NDR on all driver

license renewals. Additionally, the Commercial Motor Vehicle Safety Act (CMVSA) requires an NDR file check on all commercial driver applicants. These and other Federal legislative mandates have resulted in dramatic increases in NDR system usage over the past decade.

Why Do We Want/Need to Fund the Program At the Requested Level?

In FY 2017 we are requesting a total of \$5.2 million, of which \$3.5 million is specifically for the National Driver Register program, which is \$100 thousand above the FY 2016 enacted funding level. With the requested level of funding, NDR will:

- Maintain reliable operations in the hybrid cloud environment.
- Begin to develop changes to PDPS based on the recommendations from the NDR Working Group
- Respond to an increasing number of Federal agencies requesting access to the NDR database (i.e.: DOD, Marine Corps, Department of the Army, Department of the Navy, Architect of the Capital).
- Provide timely response to electronic inquiries from State driver licensing agencies.
- Provide timely response to inquiries from Federal agencies that certify aircraft pilots, Coast Guardsmen, merchant mariners, and locomotive engineers.
- Provide timely response to inquiries from employers of motor vehicle operators, including Federal agencies.
- Maintain disaster recovery capability and perform periodic testing.
- Perform continuous monitoring of system security risk by evaluating one-third of the NIST 800-53 controls each year.
- Keep current with technological advances in system architecture and design and meet system security requirements.
- Begin designing, system enhancements that improve the quality of information provided to States and other users.
- Engage States to identify additional functional upgrades and system enhancements that will further increase the value of the system.
- Develop plans to recertify State compliance with system requirements and procedures.

What Benefits Will Be Provided to the American Public Through This Request?

The NDR process an average of 100 million transactions from State and Federal users in a year and identifies between 9 and 10 million probable problem drivers, many of who were convicted of driving under the influence of drugs or alcohol. From 2002 to 2014, State and Federal use of the NDR increased 104 percent for inquiry transactions to the NDR system. In the past five years the NDR processed 460,000,000 transactions for State and Federal customers. Continued efficient processing of transactions in the State Division of Motor Vehicles (DMV) offices often

result in decreased wait times for driver license customers. The NDR is a mission critical system in NHTSA and currently contains 53 million pointer records in the system.

Detailed Justification for National Center for Statistics and Analysis (NCSA) Programs

What Is the Request and What Funds Are Currently Spend on the Program?

FY 2017 - NCSA - BUDGET REQUEST

*Updated to include Direct Salaries & Benefits as of FY17

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	Change FY 2017 -2016
Traffic Records	\$2,231,368	\$2,537,532	\$2,552,320	\$14,788
Crash Data Collection*	\$30,912,799	\$36,409,547	\$36,442,821	\$33,274
Data Analysis	\$3,555,446	\$3,664,179	\$3,712,241	\$48,062
Regulatory Analysis and Evaluation	579,000	\$508,700	\$508,700	\$0
Total	\$37,857,613	\$43,119,958	\$43,216,082	\$675,124

In FY 2017, we are requesting \$43.2 million of which \$39.1 million in Highway Safety Research funds is for NCSA programs, which is the same as the FY 2016 enacted funding level. This amount does not include the \$500,000 in Vehicle Safety Research funds to supplement Crash Data Collection. Funding at this level will allow us to maintain our core programs and continue implementation of the new modernized data collection systems. Key initiatives include:

Traffic Records

- Continue to provide additional technical resources for traffic records systems improvements through “Go-Teams” to provide an in-depth analysis of a particular system chosen by the State.
- Continue update of the *Traffic Records 101* on-line training course for State traffic records professionals and develop training for State executive policy-makers on how best to collect, manage, and use traffic records data.

Crash Data Collection

Fatality Analysis Reporting System (FARS)/FastFARS

- Provide the FastFARS data to publish quarterly and annual projections of motor vehicle traffic fatalities.

- Maintain the ability to provide for a census of data on motor vehicle traffic crash fatalities.

Crash Report Sampling System (CRSS)

- Maintain the ability to collect a nationally representative sample of police crash report data.
- Create a file for analysis and make the data available to the public.

State Data Systems (SDS)

- Continue collecting and processing data annually from 34 State data crash files.
- Continue gathering available information about non-traffic crashes and non-crash motor vehicle incidents.

Crash Investigation Sampling System (CISS)

- Continue to maintain and operate CISS sample sites that provide nationally representative_in-depth data on crashes resulting in at least one towed, passenger vehicle.
- Establish new sample sites for CISS, including gaining cooperation of local officials, establishing crash notification procedures, pilot training new collection procedures for implementation, and hiring and training the new crash technicians.
- Create a file for analysis and make the data available to the public.

Special Crash Investigations (SCI)

- Conduct on-site and remote crash investigations to identify unintended consequences of vehicle-related crashes or incidences, support potential recalls and other agency enforcement efforts and conduct countermeasures research.

Data Modernization

- Increase the use of Electronic Data Transfer (EDT) to improve data timeliness and quality.
- Incorporate data from other sources in NHTSA databases to provide better authoritative sources for vehicle identification.

Data Analysis

- Produce quarterly estimates of fatalities for Calendar Years 2015 and 2016, the Annual Assessment of Motor Vehicle Traffic Crashes, Traffic Safety Facts Annual Report and 16 Traffic Safety Fact Sheets
- Provide metrics used to track performance of NHTSA safety programs and DOT's safety goal, including estimating lives saved by belts, air bags, minimum drinking age law, child safety seats and motorcycle helmets.

- Support NHTSA's data modernization efforts by enhancing NCSA's data analysis service for all of NHTSA and the general public.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Traffic Records	\$1,650,000	\$1,918,000	\$1,918,000	\$0
Salary and Benefits	\$581,368	\$619,532	\$634,320	\$14,788
Total	\$2,231,368	\$2,537,532	\$2,552,320	\$14,788

What Is This Program and Why Is It Necessary?

NHTSA's Traffic Records program provides the States with technical assistance for improving the six State traffic safety information systems: crash, driver, vehicle, roadway, citation/adjudication, and injury surveillance. State traffic records data is essential to the implementation and evaluation of State highway safety policies and programs and feeds the modernized data systems NHTSA relies on to administer its programs as a data driven agency. Additional information on our Traffic Records program can be found at <http://www.nhtsa.gov/Data/Traffic+Records>.

Data from State traffic safety information systems are used by the States to develop their highway safety plans, assess performance, and quantify improvements from highway safety countermeasure programs. The quality of State traffic safety information systems is quite varied and efforts to improve are often hampered by lack of technical and financial resources. The Traffic Records program works to fill this gap by deploying traffic records program assessments, on-demand technical assistance and training via the GO Team program, deep analysis of State crash system data quality via the Crash Data Improvement Program (CDIP), baseline traffic safety data information via Traffic Records 101, and a variety of targeted research and noteworthy practices. In addition, the program supports the §405(c) data improvement grant program, spearheads the Model Minimum Uniform Crash Criteria (MMUCC) mapping effort, coordinates the Electronic Data Transfer (EDT) pilot project team, and runs the Department's intermodal Traffic Records Coordinating Committee (DOT-TRCC).

Why Do We Want/Need To Fund The Program At the Requested Level?

In FY 2017 we are requesting a total of \$2.6 million, of which \$2 million is specifically for the Traffic Records program, which is the same as the FY 2016 enacted funding level. This funding is requested to continue the success of the State traffic records assessment program, the State technical assistance GO Teams, CDIP, and redevelop the Traffic Records 101 curriculum. This money will enable NCSA to help up to eight more States improve their traffic records data

systems—increasing data quality at the State level and at the national level with information provided to NHTSA’s modernized data systems.

Funding at this level will enable the Traffic Records program to accomplish the following:

- Deliver 15 State traffic records data system assessments that benchmark the status of State traffic safety information systems, provide States with recommendations on ways to improve each of the six core systems, and enable States to qualify for §405(c) State traffic safety information systems grants.
- Continue a gap analysis of completed traffic records assessments to identify and report on trends in State traffic records systems.
- Deliver timely, useful technical assistance to State traffic records personnel seeking to improve their data systems by deploying technical assistance GO Teams to five States.
- Continue the redevelopment and deployment of the Crash Data Improvement Program (CDIP) that assists States improve their crash data quality and align their crash data with MMUCC.
- Assist States evaluate the consistency of their crash data by developing a methodology for States to map their crash data to the data elements and attributes in the MMUCC Guideline. This will standardize how States’ crash data aligns with MMUCC, identify changes to improve uniformity of crash data, and improve the quality of data States submit to the Fatality Analysis Reporting System (FARS).
- Provide logistical coordination and planning for the NHTSA EDT pilot project and associated programs that encourage States to submit crash data electronically to NHTSA and identify innovative uses for the crash data that States have transmitted.
- Support the Department’s efforts to stand up a National Information Exchange Model (NIEM) Surface Transportation Subdomain by continuing to develop NHTSA-based Information Exchange Package Documentations (IEPDs) and participating in the nascent community of interest.
- Update the Traffic Records 101 online training course to provide baseline technical training to State traffic records professionals.
- Deliver technical training for State executive policy-makers on how best to collect, manage and use traffic records data.
- Support the Association of Traffic Records Information Professional’s (ATSIP) annual International Forum on Traffic Records and Highway Safety Information Systems, and host workshops and technical transfer sessions for State participants.

What Benefits Will Be Provided to the American Public Through This Request?

The Traffic Records program delivers on its mission of improving State data collection, management, and analysis as evidenced by the progress tracked by the §405(c) State Traffic Safety Information Systems Grants program. States must quantify improvements in one or more of their traffic records systems to qualify for funding. Currently, every State that has applied for

a grant has qualified with measurable progress. A technical program assessment is conducted every five years as a requirement of §405(c). As a recently published General Accountability Office (GAO) report states, “Despite varying State traffic safety data system performance, data collected by NHTSA show that States are making some progress towards improving system quality.” The report further notes that all States visited had implemented data improvement projects such as switching to electronic reporting and adopting national guidelines such as MMUCC.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Crash Data Collection (Includes FARS, NASS, SDS, SCI)	\$29,750,063	\$35,210,600	\$35,210,600	\$0
Salary and Benefits	\$1,162,736	\$1,393,947	\$1,427,221	\$33,274
Total	\$30,912,799	\$36,604,547	\$36,637,821	\$33,274

Note: In FY's 2015 & 2016, \$0.5M of the Crash Data Collection is funded from the Vehicle Safety account.

**Crash Data Collection is partially funded from the Vehicle Safety account, but the majority of the funding is provided for under the Highway Safety Research & Development Account.*

What Is This Program and Why Is It Necessary?

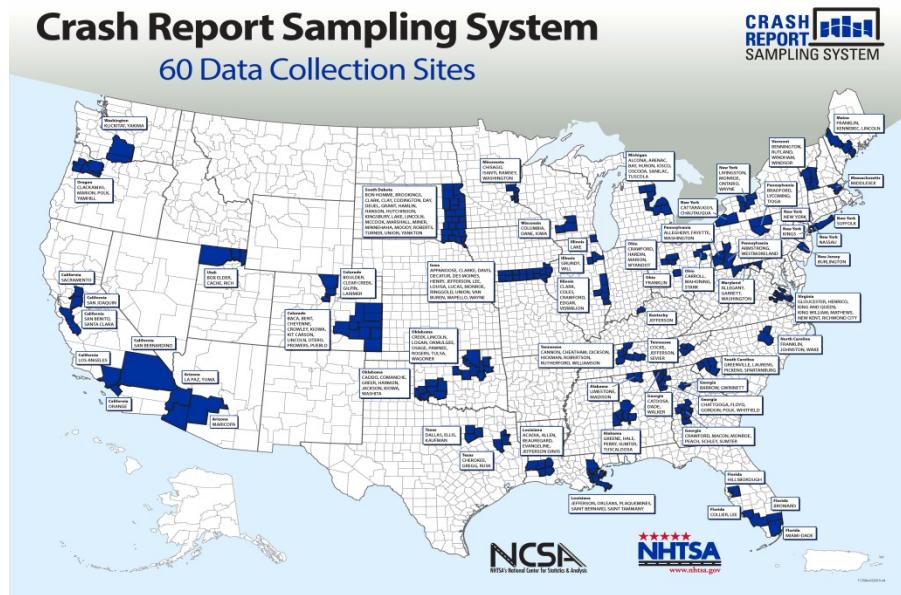
Safety is the Department of Transportation's top priority. For NHTSA, this priority means reducing the human and economic cost of motor vehicle traffic crashes and other incidents involving motor vehicles. To accomplish this goal, sound science must be combined with quality data. Quality data are the backbone of everything NHTSA does, by providing the empirical information necessary for saving lives and reducing economic costs. Data are essential for both our behavioral and vehicle safety efforts. The Crash Data Collection program includes both State crash report-based systems (Fatality Analysis Reporting System, Crash Report Sampling System, and State Data Systems) and crash investigation-based systems (Crash Investigation Sampling System and Special Crash Investigations).

NHTSA's data collection systems are the preeminent source of traffic safety information at the Federal, State and local levels. Accurate, accessible, timely, and standardized data allow decision makers to identify the primary factors related to the source of crashes and their outcomes, develop and evaluate effective safety countermeasures, support traffic safety operations, measure progress in reducing crashes and their severity, design effective vehicle safety regulations, and target safety funding. These systems combine police-reported motor vehicle crash data reports collected by or reported to States and direct investigation of crashes that are representative of all traffic crashes. Police-reported crashes from State record-based systems are recoded into a uniform format to provide counts and trends. Crash investigations provide the detailed data required for countermeasure development and evaluation. A sample based approach provides nationally representative data at a small fraction of the cost it would take to investigate or to collect and manually recode the millions of police-reported crashes into a uniform format. Each data collection system is briefly described below:

Fatality Analysis Reporting System (FARS)/FastFARS

The Fatality Analysis Reporting System is the sole source for standardized, State-documented, information on a national census of police-reported traffic crashes with at least one fatality. The FARS is the most referenced motor vehicle crash data system in the world. FastFARS is a data collection and reporting program built into the FARS infrastructure that provides near real-time counts of the number of fatalities resulting from motor vehicle crashes. FARS is the principal source of nationwide data on motor vehicle fatalities that supports the development of policies and programs to reduce fatalities on the Nation's highways. FARS data is vital not only for NHTSA, but also for the States, Congress, other Federal agencies, national and international researchers and the general public. FARS data are utilized to identify vehicle crash avoidance technology needs, research countermeasures, inform defects investigations, evaluate State grant programs, assess the effectiveness of regulations and measure the Department's Government Performance and Results Act (GPRA) goals.

Crash Report Sampling System (CRSS)



The Crash Report Sampling System (CRSS) is the sole source for standardized information on a national sample of police-reported traffic crashes of all severities involving all types of motor vehicles. CRSS was launched in 2016 and replaced the National Automotive Sampling System General Estimates System as part of the Data Modernization project. The CRSS annual file contains uniformly coded crash report information that can be weighted to create national estimates of crashes. CRSS data are used to assess the overall state of highway safety, identify existing and emerging trends, estimate the number of people injured in motor vehicle traffic crashes and assess the effectiveness of highway safety programs.

State Data Systems

The State Data Systems includes the State Data Crash file program and the Non Traffic Surveillance program. The State Data Crash files program consists of data files collected from 34 individual State data systems and processed into standard formats to complement the crash data collected in our other systems. These files are used in regulatory analyses and research because they often contain data that other NHTSA crash data files do not have. The Non Traffic Surveillance program collects non-traffic data in response to provisions in SAFETEA-LU and the Cameron Gulbransen Kids Transportation Safety Act of 2007 (KT) Safety Act. This program provides data critical to understanding deaths and injuries in motor vehicle non-impact incidents and crashes that occur on non-public roads, driveways, parking lots, and other private areas.

Crash Investigation Sampling System (CISS)

The Crash Investigation Sampling System (CISS) is the sole source for nationally representative in-depth data on crashes resulting in at least one towed, passenger vehicle. The CISS replaced the National Automotive Sampling System Crashworthiness Data System that ended with the 2015 data collection year. CISS uses highly trained technicians to perform detailed crash investigations that include comprehensive documentation of scene evidence, vehicle damage, crash avoidance technologies and thorough coding of all crash-related injuries from medical records. NHTSA and stakeholders, such as the automotive industry and safety researchers, use the CISS data to quantify the relationship between occupants and vehicles in the real-world crash environment as well as the effect of crash avoidance technologies. These data provide the foundation for a comprehensive understanding of the relationship between vehicle crash severity and occupant injury, which are then utilized to initiate, develop, and evaluate effective countermeasures.

Special Crash Investigations

The Special Crash Investigations (SCI) program employs highly trained crash reconstructionists to perform in-depth investigations on specific motor vehicle crashes. The program is flexible so that the focus of these investigations can change from year to year due to keep current on emerging issues. In addition, SCI remains the rapid response team for crashes that the Office of Defects Investigation requires for immediate research supporting potential recalls and other agency enforcement efforts.

The SCI program serves as an early warning system and provides details on crashes of special interest to the agency. These real-world crash investigations enable NHTSA to examine and assess the safety performance of new technology in occupant protection systems and provide early detection of alleged or potential vehicle defects. No other data collection effort provides this detail on very specific crashes of interest.

Data Modernization

NHTSA's data collection, through the National Center for Statistics and Analysis is funded under Highway Safety Research and Development, as well as Vehicle Safety. In FY 2012, a one-time allocation of \$25 million was provided under Highway Safety Grants to support the Data Modernization Project. The goal of Data Modernization was to ensure that NHTSA's data collection systems continued to be the preeminent source of traffic safety data by collecting quality data to keep pace with emerging technology and policy needs. Data Modernization resulted in an improved information technology infrastructure for both NASS and FARS and two new, independent crash sampling systems, CISS and CRSS. Although the Data Modernization money was expended by the end of FY 2016, improvements to NCSA's data collection programs are made on a continuous basis. These continuous improvements are considered the next phase of Data Modernization. Several modernization efforts will continue into FY 2017 and beyond including increasing the use of Electronic Data Transfer (EDT) to improve data timeliness and quality, incorporating data from other sources in NHTSA databases to provide better authoritative sources for vehicle identification, and adding data collection sites for CISS to improve the coverage and usefulness of the system.

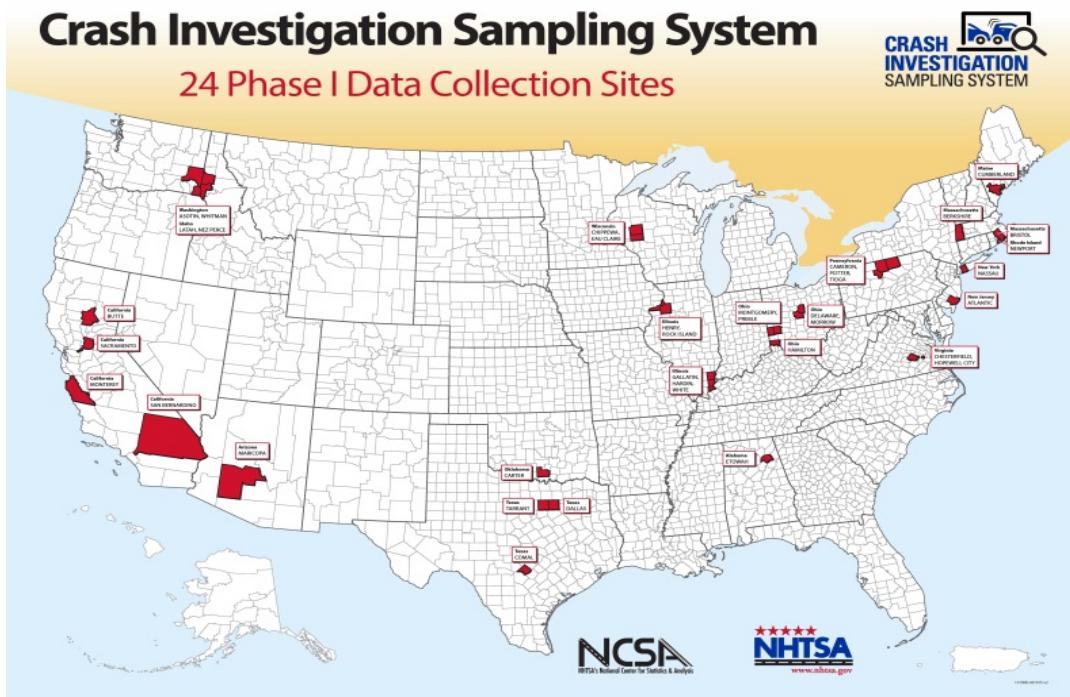


Why Do We Want/Need To Fund The Program At the Requested Level?

In FY 2017, NHTSA is requesting a total of \$36.6 million for crash data collection (\$35.2 million from the Highway Safety program and \$.5 million from the Vehicle Safety program). This request is the same as the FY 2016 enacted funding level. The budget request reflects our need to sustain and improve our crash data collection efforts. The increase directly supports NHTSA's effort to continue to phase in additional sites for the Crash Investigation Sampling System and to continue to expand our Electronic Data Transfer program.

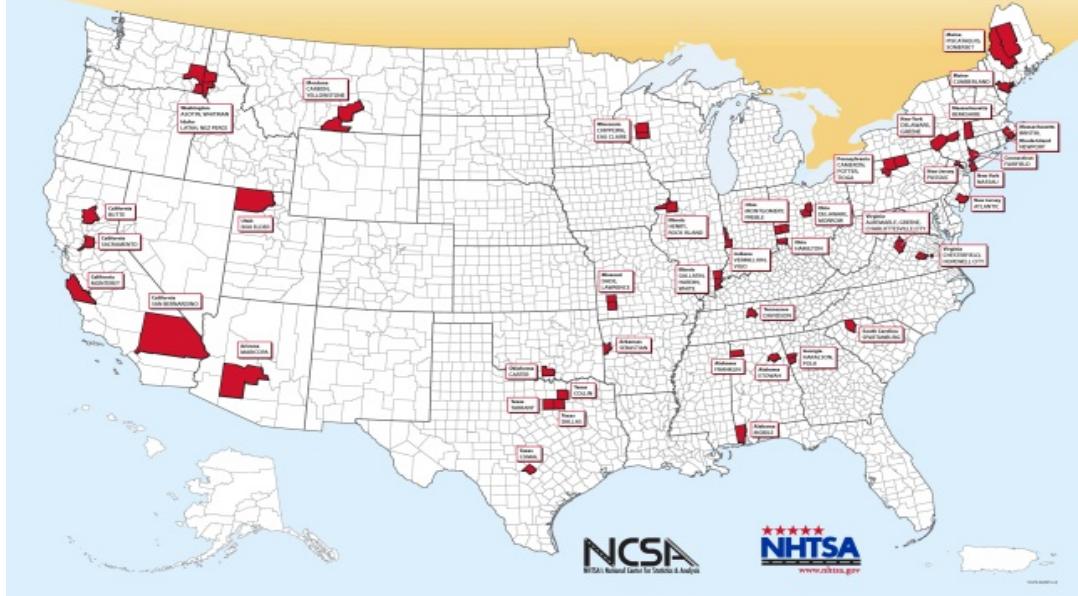
In FY 2015, NCSA began phasing in the first 24 CISS data collection sites. However, as we described in our March 2015 NASS Modernization Report to Congress (<http://www-nrd.nhtsa.dot.gov/Pubs/812128.pdf>), more CISS data collection sites are necessary to more accurately quantify safety problems in passenger vehicle crashes, identify emerging safety issues

and meet the data needs of the highway safety community. In FY 2016 we implemented the Phase I CISS sites, but the optimal system would consist of 73 CISS data collection sites. The FY 2017 budget request will enable us to implement the remaining Phase II CISS data collection sites for a total of 40 sites and begin phasing in 5 to 8 additional Phase III sites. Additional sites are the only way to improve national coverage and to increase the precision for key estimates—something NHTSA and outside data users requested during the data modernization project. The maps below depict the Phase I, Phase II and Phase III CISS data collection sites:



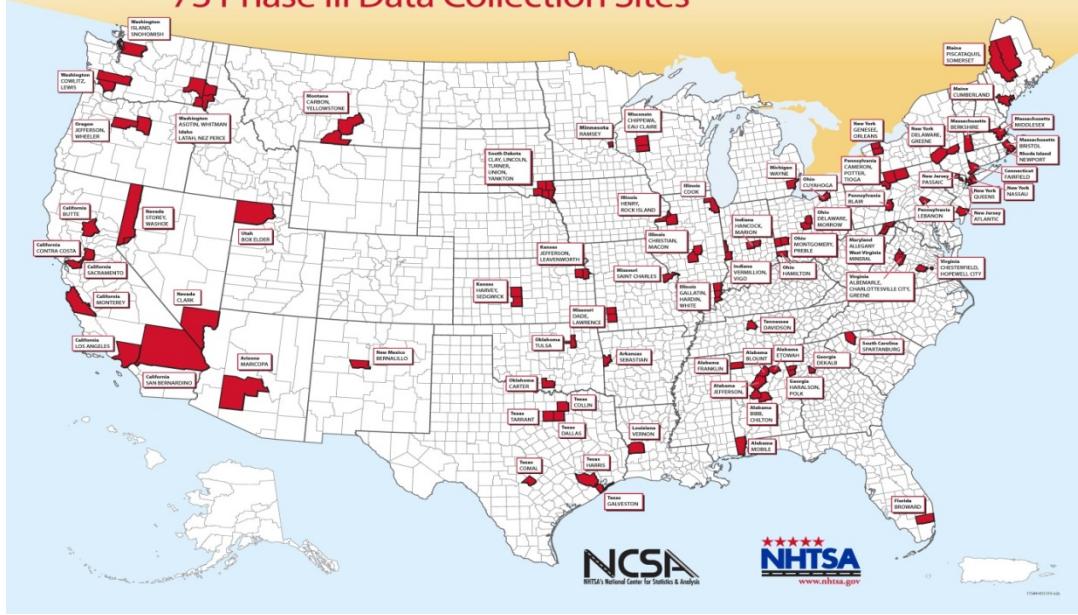
Crash Investigation Sampling System

40 Phase II Data Collection Sites



Crash Investigation Sampling System

73 Phase III Data Collection Sites



In FY 2017, the budget request will sustain the FARS/FastFARS program to:

- Perform a census of all fatal motor vehicle traffic crashes occurring in the 50 States, the District of Columbia, and Puerto Rico.
 - Create a 2015 final file and a 2016 preliminary file.

- Provide the FastFARS data for quarterly and annual projections of motor vehicle traffic fatalities.
- Continue to improve data collection methods, data quality and timeliness for dissemination to decision-makers.

In FY 2017, the budget request for CRSS will enable NHTSA to:

- Collect data in the 60 nationally representative sites, and
- Create a file for analysis and make the data in the 2016 annual file available to the public.

In FY 2017, the State Data System program will:

- Continue collecting and processing data annually from 34 State data crash files.
- Continue gathering available information about non-traffic crashes and non-crash motor vehicle incidents.

In FY 2017, the budget will support CISS to:

- Create a file for analysis and make the data in the 2016 annual file available to the public,
- Continue to maintain and operate CISS sample sites and establish new sample sites for CISS, including gaining cooperation of local officials, establishing crash notification procedures, pilot training new collection procedures for implementation, and hiring and training the new crash technicians to operate up to 48 sites in calendar year 2017,
- Continue to support vehicle defect investigations.

In FY 2017, the budget will allow the SCI program to:

- Perform in-depth investigations on approximately 100 cases across the country through three investigation teams,
- Continue to support to the Office of Defects Investigation's early detection of alleged or potential vehicle defects, and
- Continue to support to review new and rapidly changing technologies in crash avoidance technologies and other high profile crash areas.

What Benefits Will Be Provided to the American Public Through This Request?

With relevant and timely data, NHTSA can make informed policy, program and regulatory decisions that will lead to improved motor vehicle safety. With quality data in usable formats, resources will not be wasted compiling information that may identify emerging trends and serious safety problems. With good data, the effectiveness of programs and standards and progress in meeting safety targets could be accurately measured. Better data leads to safer roads and safer vehicles.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Data Analysis Program	\$1,666,000	\$1,650,700	\$1,650,700	\$0
Salary and Benefits	\$1,889,446	\$2,013,479	\$2,061,541	\$48,062
Total	\$3,555,446	\$3,664,179	\$3,712,241	\$48,062

What Is This Program and Why Is It Necessary?

The Data Analysis program is the foundation that provides critical information and analytical and statistical services to all our program areas and to the overall traffic safety community. With the new modernized data systems being deployed this year, analysis must keep pace with the changing data environment. Additionally, this program disseminates traffic safety data to the public through a broad spectrum of media. The program's published reports are used by government agencies (Federal, State, local and international), research institutions, motor vehicle manufacturers, safety groups, international highway safety advocates and the general public to improve traffic safety. The program provides data and analysis in the development of DOT's and NHTSA's strategic plans and promotes cross-modal data-driven approaches to resolving roadway safety issues. The program provides much needed expertise to all the data users by sharing their in-depth technical knowledge. Data and analytical support are also provided to the States in tracking their highway safety performance targets as well as for the States to apply for the grant programs.

We rely on data to build, develop, and improve our vehicle and behavioral safety programs and to measure their performance. The Data Analysis program produces critical annual traffic safety publications, conducts research on specific highway safety topics and reports on those investigations, and provides data and statistical analysis to external customers and our own programs. The Data Analysis program also provides the analytical support in the agency for its strategic planning, rulemaking and defects investigation efforts and will expand its supporting activities in vehicle electronics analysis. The program provides data to the public by making it available, accessible and transparent in support of the administration's open government initiative through NHTSA's website and www.safety.data.gov and www.data.gov.

Why Do We Want/Need To Fund The Program At the Requested Level?

In FY 2017 we are requesting a total of \$3.7 million, of which \$1.7 million is specifically for the Data Analysis program, which is the same as the FY 2016 enacted funding level.

The requested funding will enable the program to accomplish the following:

- Provide quarterly estimates of fatalities for CY 2015 and CY 2016.
- Continue to provide analytical and data support in the Department's distracted driving initiative and in the Department's new Pedestrian and bicyclist safety initiative.
- Produce the Annual Assessment of Motor Vehicle Traffic Crashes including the Traffic Safety Facts Annual Report and the 16 annual Traffic Safety Fact Sheets that focus on high-interest program areas.
- Provide the metrics that are used to track performance of NHTSA's activities and contribution to Departmental goals.
- Provide data and analytical support in DOT and NHTSA strategic plans.
- Provide expert statistical analysis to internal and external customers in a broad range of statistical and traffic safety areas, such as alcohol-impaired driving occupant protection drug driving, motorcycle safety and other areas of interest.
- Conduct statistical and data analysis to support the agency's vehicle and behavioral safety programs, defects investigation (ODI) and emerging issues.
- Enhance data dissemination procedures to improve the distribution of timely traffic safety information for program reviews and State grants by NHTSA and FHWA.
- Provide estimates of benefits in terms of lives saved by belts, air bags, minimum drinking age law, child safety seats and motorcycle helmets.
- Provide statistical and survey data expertise towards NHTSA's Data Modernization effort and other data collection initiatives.
- Conduct sample designs for special studies to expand the new modernized Crash Data systems.
- Update and maintain the State and Traffic Safety Information (STSI) portal.
- Conduct Geo-spatial analysis to support Advanced Automatic Collision Notification (AACN) Research project and other location based analyses.
- Evaluate and prototype innovative web-based reporting technologies and methods to provide timely and easier access to NCSA's vast crash resources.
- Support NHTSA's data modernization efforts by enhancing NCSA's data analysis service for all of NHTSA and the general public: Develop and deploy new analytics and data dissemination technologies and methods to provide timely access to NHTSA's vast crash data resources especially to accommodate increased data needs during certain situations (safety recalls, consumer advisories, etc.).
- Acquire resources to design and deploy data dissemination protocols to enhance the quality and timeliness of data and analytic products, especially data from the modernized data collection system in an easier way to customers.
- Support and respond to increasing number of internal and external requests for data and analysis based on specific areas of interest.

What Benefits Will Be Provided to the American Public Through This Request?

Vehicle and behavioral safety programs are evaluated for effectiveness using crash data. The annual safety data release and publications provide the foundation to the mission-critical work on highway safety. The Data Analysis program provides the annual performance targets for DOT and NHTSA based on historical data analysis. Data and analytical expertise required for the States towards their new performance targets are also provided. With the Data Analysis program, NHTSA, DOT, States and the larger highway safety community would be able to effectively carry out their current programs or modify their programs based on data analysis. The expertise and support from the Data Analysis program enables the States to make inroads in highway safety to continue to see declines in fatalities, injuries and the economic toll from motor vehicle crashes.

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Regulatory Analysis and Evaluation	\$579,000	\$508,700	\$508,700	\$0
Salary and Benefits	\$0	\$0	\$0	\$0
Total	\$579,000	\$508,700	\$508,700	\$0

This FY 2017 budget request for other services also includes \$509 thousand for Regulatory Analysis and Evaluation, which supports Executive Orders 12866 and 13563. This request is the same as the FY 2016 enacted funding level. Executive Order 12866 requires Federal agencies to evaluate the costs and benefits of proposed and final rules in Regulatory Impact Analyses. Executive Order 13563 requires the agency to periodically review its existing significant regulations to determine whether any such regulations should be modified, streamlined, expanded, or repealed. These funds provide cost estimates for many of our new rules, provide support for evaluations of established rules, and keep our standards current with ever changing technology.

HIGHWAY SAFETY RESEARCH AND DEVELOPMENT**ADMINISTRATIVE EXPENSES**

The FY 2017 budget request includes a total budget of \$145.9 million and 184 FTE. Of this amount \$47 million is for administrative expenses, which is a decrease of \$4.5 million below the FY 2016 enacted funding level.

NHTSA continues to distribute administrative expenses for many of category areas by using a methodology based primarily on the Direct FTE allocation. This may generate an increase or decrease in some line items from year to year.

**NHTSA
FY 2017 HIGHWAY SAFETY ADMINISTRATIVE EXPENSES**

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	FY 2017 vs FY 2016 Change
Salaries and Benefits	25,870,917	27,531,000	\$29,431,000	\$1,900,000
Travel	505,515	506,000	506,000	\$0
Transportation of Things	-	-	-	-
Rent, Communications & Utilities	7,305,476	13,806,000	7,306,000	(\$6,500,000)
Printing	-	-	-	-
Other Services	10,133,654	7,441,000	7,441,000	\$0
Supplies	14,380,375	2,080,000	2,080,000	\$0
Equipment	-	-	-	-
Unallocated	-	-	-	\$0
Total Administrative Expenses	\$58,195,937	\$51,364,000	\$46,764,000	(\$4,600,000)
FTE (includes indirect FTE)	178	178	184	6
Reimbursable FTE*	0	0	0	-

*Reimbursed to NHTSA in by RITA to support Intelligent Transportation Systems work.

This Page Left Intentionally Blank

**HIGHWAY TRAFFIC SAFETY GRANTS
PROGRAM AND FINANCING SCHEDULE**

Description	FY 2015 Actual	FY 2016 Enacted	FY 2017 Request
Obligations by Program Activity			
Section 402 Formula Grants	246,130,629	243,500,000	252,300,000
Section 406 Safety Belt Performance (2-year limitation)	-	-	-
Section 406 Safety Belt Performance NASS Modernization (no-year)	10,018,484	-	-
Section 406 Safety Belt Performance (2-year limitation) 2011/2012	-	-	-
Section 408 State Traffic Info. System Improvements	-	-	-
Section 410 Impaired Driving Countermeasures	-	-	-
Section 2009 High Visibility Enforcement Program	29,000,000	29,300,000	29,500,000
Section 2010 Motorcyclist Safety	-	-	-
Section 2011 Child Safety and Booster Seat Grants	-	-	-
Section 405b Occupant Protection Grants	1,000,000	43,952,000	36,075,000
Section 405c State Traffic Safety Information Systems Grants	55,283,199	39,831,500	40,237,500
Section 405d Impaired Driving Countermeasures Grants	45,902,695	144,217,500	145,687,500
Section 405e Distracted Driving Grants	141,800,000	23,349,500	23,587,500
Section 405f Motorcyclist Safety Grants	7,312,000	4,120,500	4,162,500
Section 405g State Graduated Driver Licensing Laws	4,080,000	13,735,000	13,875,000
Section 403h In-Vehicle Alcohol Detection Device Research	5,440,000	5,494,000	-
Section 405i National Priority Safety Program - Non-Motorized Safety Ped/Bikes			13,875,000
Administrative Expenses - Chapter 4 of Title 23	25,002,589	25,832,000	26,072,000
NHTSA Sec 154/164 Penalties to 402 Program - Flex Transfers	82,580,688		
Total Direct Obligations	653,550,284	573,332,000	585,372,000
Reimbursable Program	-	-	-
Total New Obligations	653,550,284	573,332,000	585,372,000
Budgetary Resources			
Unobligated balance available, start of year	187,715,420	153,121,682	153,821,682
<i>Adjustments to unobligated bal</i>			
Adjustments to unobligated balance, October 1	(25,664,320)		
Recoveries of prior year unpaid obligations	720,582	-	-
Anticipated Recoveries of prior-year unpaid obligations (unobligated balances) (+ or -)	-	1,000,000	1,000,000
Unobligated balance available (total)	162,771,682	154,121,682	154,821,682
Budget Authority			
Appropriations (disc):			
Appropriation (trust fund)(disc.)	561,500,000	573,332,000	585,372,000
<i>Adjustments to appropriations (disc.)</i>			
<i>Transferred from other accounts (appropriations (+))</i>	82,580,688		
Portion applied to liquidate contract authority (-)	(644,080,688)	(573,332,000)	(585,372,000)
Appropriation (disc.) (total)			
Contract Authority (mand.)			
Contract Authority (mand.)	561,500,000	573,332,000	585,372,000
Transferred to other accounts	-	-	-
Transferred from other accounts	82,580,688	-	-
Unobligated balances permanently reduced		-	-
Collected (disc) (cash) (unexpired only)		-	-
Contract authority (mand.) total	644,080,688	573,332,000	585,372,000
Total budgetary resources available	806,852,370	727,453,682	740,193,682
Change in Obligated Balance			
Obligated balance, brought forward, Oct 1: (gross)	914,008,698	912,929,260	736,132,465
Adjustment to unpaid obligations, brought forward Oct 1	664,320		
Obligations incurred, unexpired accounts	653,550,284	573,332,000	585,372,000
Outlays (gross)	(654,573,459)	(749,128,795)	(720,121,020)
Recoveries of prior year unpaid obligations, unexpired	(720,582)	(1,000,000)	(1,000,000)
Unpaid obligated balance, end of year (gross)	912,929,261	736,132,465	600,383,446
Outlays (gross), detail			
Outlays from new discretionary authority	134,400,073	235,066,120	240,002,520
Outlays from discretionary balances	518,833,425	514,062,675	479,578,500
Federal sources			
Total outlays (gross)	653,233,498	749,128,795	719,581,020

HIGHWAY TRAFFIC SAFETY GRANTS
OBJECT CLASS SCHEDULE

Description	FY 2015 Actual	FY 2016 Enacted	FY 2017 Request
Direct Obligations			
Personnel Compensation			
Full-time permanent	8,231,597	10,475,782	11,508,496
Other than full-time permanent	106,472	139,897	74,899
Other personnel compensation	162,020	249,252	199,513
Total personnel compensation	8,500,089	10,864,931	11,782,908
Civilian personnel benefits	2,593,440	2,683,638	2,884,251
Travel and Transportation of Persons	263,589	376,875	376,875
Transportation of things	-	-	-
Rental payments to GSA	309,348	427,544	427,544
Communications, utilities, and miscellaneous charges	413,227	12,000,000	12,000,000
Printing and reproduction	-	-	-
Other services	23,554,784	50,469,012	50,049,422
Research and development contracts	-	-	-
Supplies and materials	35,000	-	-
Equipment	186,106	-	-
Grants and subsidies	617,694,701	496,500,000	507,851,000
Total new obligations	653,550,284	573,322,000	585,372,000

EXHIBIT III-1

**NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
HIGHWAY TRAFFIC SAFETY GRANTS**
Summary by Program Activity
Appropriations, Obligation Limitations, Contract Authority, and Exempt Obligations
(**\$000**)

	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	FY 2017 - FY 2016 CHANGE
Section 402 Formula Grant Program	\$ 235,000	\$ 243,500	\$ 252,300	\$ 8,800
Section 2009 High Visibility Enforcement	29,000	29,300	29,500	\$ 200
Section 405 National Priority Safety Programs*	272,000	274,700	277,500	277,500
<i>Section 405 Occupant Protection Grants</i>	43,520	43,952	36,075	(7,877)
<i>Section 405 State Traffic Safety Information System Grants</i>	39,440	39,832	40,238	406
<i>Section 405 Impaired Driving Countermeasures Grants</i>	142,800	144,218	145,688	1,470
<i>Section 405 Distracted Driving Grants</i>	23,120	23,350	23,588	238
<i>Section 405 Motorcyclist Safety Grants</i>	4,080	4,121	4,163	42
<i>Section 405 State Graduated Driver Licensing Laws</i>	13,600	13,735	13,875	140
<i>Sec 405- Non-Motorized Safety Ped/Bikes</i>	-	-	13,875	13,875
<i>Section 403h In-Vehicle Alcohol Detection Device Research*</i>	5,440	5,494	-	(5,494)
Grant Administrative Expenses	25,500	25,832	26,072	240
TOTAL HIGHWAY TRAFFIC SAFETY GRANTS (TF)	\$ 561,500	\$ 573,332	\$ 585,372	\$ 12,040

FTE's:

Direct Funded	91	91	95	4
Reimbursable, allocated, other	-	-	-	-

Note: Totals may not add due to rounding.

Note: Funds for Grant Programs are from the Transportation Trust Fund.

*The Administration may use up to 2 percent of Section 405 for In-Vehicle Alcohol Detection Device Research.

EXHIBIT III - 1a

**NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
SUMMARY ANALYSIS OF CHANGE FROM FY 2016 TO FY 2017
Appropriations, Obligation Limitations, Contract Authority, and Exempt Obligations**

**HIGHWAY TRAFFIC SAFETY GRANTS
(\$000)**

ITEM	Change from FY 2016 to FY 2017 FTEs by Program	Change from FY 2016 to FY 2017 FTEs by Program
Highway Safety Grants Base	573,332	91
Adjustments to Base		
FY 2017 #FTE Per Program Change	91	4
Annualization of FY 2016 Pay Raise	47	
Annualization of FY 2016 FTE	311	-
FY 2017 Pay Raise	140	
GSA Rent	-	
WCF	-	
Inflation	-	
Program Increases/Decreases	(258)	
Other Services	-	
Unallocated	-	
Subtotal, Adjustment to Base	240	4
Program Increases/Decreases	11,800	-
Total Net Increases/Decreases	12,040	4
FY 2017 REQUEST	585,372	95

HIGHWAY TRAFFIC SAFETY GRANTS

Program and Performance Statement

The NHTSA Highway Safety Grant programs are the foundation for NHTSAs national priority safety programs implemented in the States. Using performance measurement methodology, States identify emerging highway safety program problems and direct programs and resources to the most promising countermeasures to save lives and prevent injuries. With the signing of the FAST Act, several of the grant programs have been restructured to provide States with resources to improve highway traffic safety for all road users. As of 2012, pedestrian fatalities have increased for the last three consecutive years, while bicycle fatalities increased for two years. To address these trends, the Secretary and NHTSA proposed to expand efforts on pedestrian and bicycle safety, including financial support for related State efforts on education, training, and enforcement. This proposal was included in the FAST Act by adding an additional grant program targeting nonmotorized road users. NHTSA will increase efforts to improve older driver safety, teen safety, motorcycle cycle and lifesaving response to crashes through the Emergency Management Services. NHTSA has seen examples of more lives lost when grant resources dedicated to occupant protection and other priority safety programs have been decreased in States such as one State where a reduction in occupant protection enforcement campaigns resulted in more fatalities. It is imperative that NHTSA continue to fund cornerstone safety programs such as, occupant protection and impaired driving, while also having the flexibility of funding new and emerging highway safety problems. Any funds available before the last day of any fiscal year may be reallocated from Sec. 405 subsections to Sec. 402. A total of \$595,911,000 is proposed for NHTSA's Highway Traffic Safety Grants in FY 2017.

FY 2017 – Highway Traffic Safety Grants \$585,372,000

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Program Activity	536,000,000	547,500,000	559,300,000	11,800,000
Administrative Expenses	13,448,296	12,674,370	12,674,370	-
Salaries & Benefits	12,051,704	13,157,630	13,397,630	240,000
Total	\$561,500,000	\$573,332,000	\$585,372,000	12,040,000

Section 402 State and Community Formula Grants:	\$252,300,000
--------------------------------------------------------	----------------------

The State and Community Highway Safety formula grant program is the backbone of State highway safety programs. These grants directly support the Department's safety goals by providing flexibility to States to address highway safety problems. States can use these grants for the following activities: alcohol and other impaired driving countermeasures; police traffic services; occupant protection, including child passenger safety; traffic records; emergency medical services; motorcycle safety; pedestrian and bicycle safety; speed management; driver distraction; drowsy driving; and other safety countermeasures to address problems documented in States' highway safety plan.

Section 405 National Priority Safety Programs:	\$277,500,000 TOTAL
-------------------------------------------------------	----------------------------

Section 405, National Priority Safety Programs includes mission-critical traffic safety grants, as outlined in the subsections below. NHTSA is requesting an additional \$8,361,000 to assist States as they implement new strategies to address high-risk groups including those who still do not buckle up and/or drink and drive. These funds will also fund costly state traffic safety information system improvements that support NHTSA's data modernization program.

Section 405 Occupant Protection Grants:	\$36,075,000 (13%)
------------------------------------------------	---------------------------

The Occupant Protection grant program includes a number of eligibility criteria, including encouraging development of comprehensive Statewide occupant protection strategic plans and of countermeasures focusing on rural and nighttime belt use, two particularly significant occupant protection issues. The program maintains the criteria of enacting and enforcing a primary seat belt law. Also, the performance based program provides States that have achieved high belt use rates significant flexibility on how to expend grant funds. With observed national seat belt usage now at 87 percent, States are turning to countermeasures focused on high-risk populations. In FY 2017, States will continue focusing on those most at risk of being killed or injured in a crash due to non-belt use and will continue to participate in the national *Click It or Ticket* high visibility enforcement campaign.

Section 405 State Traffic Safety Information System Grants:	\$40,237,500 (14.5%)
--------------------------------------------------------------------	-----------------------------

The State Traffic Safety Information System Grant program provides funds to States to improve the timeliness, accuracy, completeness, uniformity, integration, and accessibility of State data to identify priorities for State and local highway safety programs. States are required to establish new reporting standards and establish a State Traffic Record Coordinating Committee (TRCC). This program directly supports efforts to improve highway safety data through needed traffic records systems improvements. NHTSA, other

DOT modes, States, and safety organizations rely on NHTSA data to support our shared mission to save lives and prevent injuries in the United States.

Sec 405 Impaired Driving Countermeasures Grants:	\$145,687,500 (52.5%)
---------------------------------------------------------	------------------------------

The Impaired Driving Countermeasures Grant program provides incentives to States to enact laws and implement programs to reduce impaired driving related fatalities and injuries, which represent approximately one-third of all traffic deaths in the United States each year. The amended grant program builds on the success of the existing program, establishes qualifying criteria for States based on their performance on certain benchmarks, and provides dedicated funding for adoption of an ignition interlock or 24/7 law. All States are eligible for grants, but the conditions that would be applied to the administration and expenditure of these grants would differ for each State based on its safety performance. The grant program establishes three State categories: 1) Low Range States; 2) Mid-Range States; and 3) High Range States, based on their impaired driving fatality rates. In addition, the program provides additional incentive funds to States that adopt a mandatory ignition interlock or 24/7 law for all offenders. In FY 2017, States will continue to increase the deployment of ignition interlock and 24/7 programs, establish DWI courts, expand the use of Traffic Safety Resource Prosecutors, and expand Advanced Roadside Interdiction and Detection training and DRE training for the law enforcement community.

Section 405 Distracted Driving Grants:	\$23,587,500 (8.5%)
-----------------------------------------------	----------------------------

This Distracted Driving Grant program provides incentives to States to enact and enforce complying laws to prevent distracted driving. The FAST Act amends program criteria and includes a separate grant for FY 17 and 18 to give States additional flexibility and incentives for meeting requirements, enacting and enforcing more rigorous laws, and increased flexibility to spend funds on education and awareness. States would be able to expend grant funds on activities related to enforcement of these laws or other behavioral highway safety activities. NHTSA will use up to \$5 million to develop and place broadcast and print media to support the enforcement of State laws. Media message will focus on reaching those segments of the population most likely to engage in distracted driving behavior.

Sec 405 Motorcyclist Safety Grants:	\$4,162,500 (1.5%)
--------------------------------------------	---------------------------

The Motorcycle Safety Grant program encourages the 50 States, District of Columbia and Puerto Rico to adopt effective motorcyclist safety programs, providing States additional flexibility to address motorcycle safety problems. This program emphasizes State programs that include promoting rider education, motorist awareness, increasing efforts to reduce impaired riding, and reducing the number of improperly licensed motorcyclists.

Sec 405 State Graduated Driver Licensing Laws:	\$13,875,000 (5%)
-------------------------------------------------------	--------------------------

This State Graduated Driver Licensing Laws program promotes State adoption and implementation of effective graduated driver licensing laws. The program requires that novice drivers under the age of 21 comply with a 2-stage licensing process and outlines minimum standards a State graduated licensing program must implement in order to receive grant funds. The FAST Act adjusts age and learner's permit criteris, and allows for more flexible use of funds to those States receving GDL funds.

Sec 405 Nonmotorized Safety:	\$13,875,000 (5%)
-------------------------------------	--------------------------

The FAST Act adds a new grant program to reduce pedestrian and bicyclist injuries and fatalities. States with an annual combined pedestrian and bicycle fatality totaling more than 15% are eligible to receive funding. Funds can be used to train law enforcement, conduct campaigns on enforcement mobilizations and on public education programs.

Sec 4011 Data Collection

The FAST Act revives and revises the racial profilieng grant program. The revised program eases the data requirement placed on States by eliminating the need to collect data on vehicle passengers. The revised program also eliminates the requirement for States to have enacted and enforced a related law. Funds not used under this program will be reprogrammed to S. 403.

Sec 2009 High Visibility Enforcement:	\$29,500,000
----------------------------------------------	---------------------

The Section 2009 High Visibility Enforcement (HVE) program will provide funding for NHTSA media campaigns. The HVE funds are used to pay for broadcast and online media to support State law enforcement efforts. Paid media will include advertisements in both English and Spanish-language and will continue to focus on those most at risk (18 - 34 year old males) of a traffic fatality as indicated by analysis conducted by the agency's National Center for Statistics and Analysis. Funding in FY 2017 will support continued national and State efforts to increase safety belt use through media buys for the *Click It or Ticket* campaign and the impaired driving crackdowns for Labor Day and December.

Highway Safety Grant Administrative Expenses:	\$26,072,000
------------------------------------------------------	---------------------

This category reflects NHTSA's salaries and administrative expenses associated with carrying out the agency's Highway Safety Grant programs. This mission critical system provides

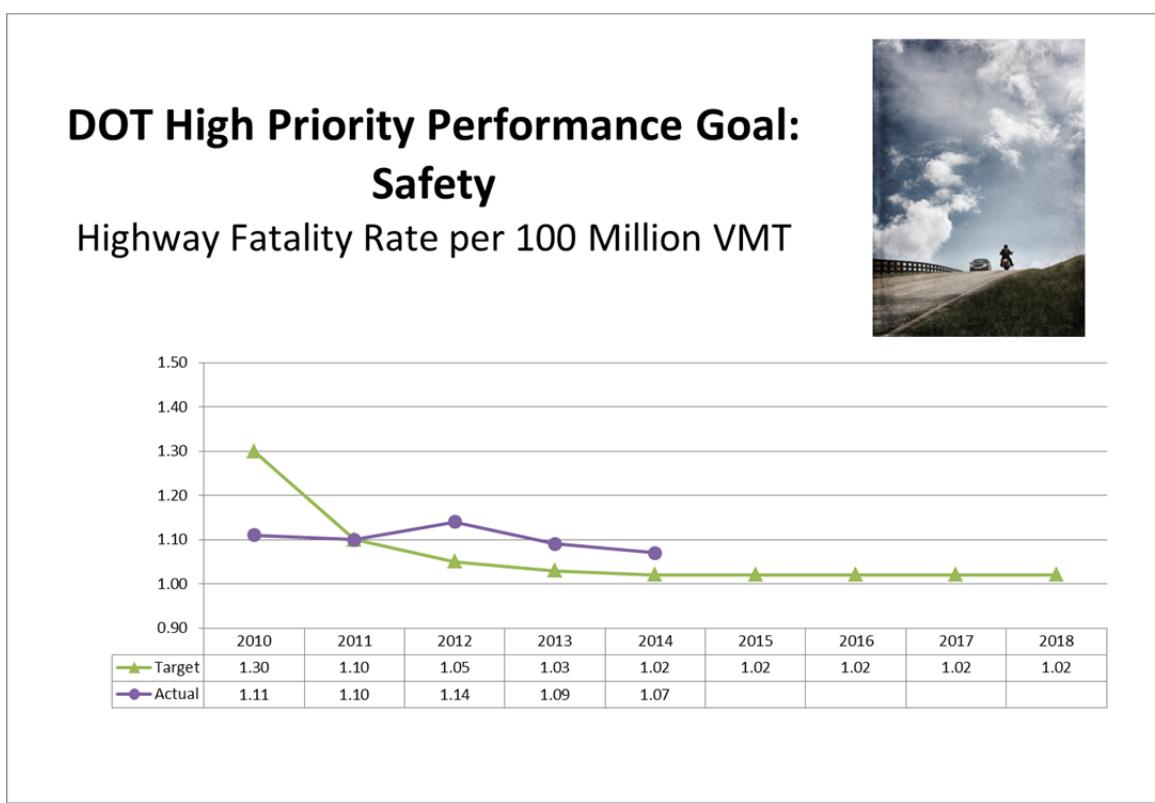
NHTSA the mechanism(s) to achieve implementation of the FAST Act requirements for State highway safety grant program oversight as well as for electronic submission of highway safety plans and S. 405 grant applications. The Highway Safety Grant program supports the Department's safety goals by providing flexibility to States to address highway safety problems. States can use these grants for the following activities: alcohol and other impaired driving countermeasures; police traffic services; occupant protection, including child passenger safety; traffic records; emergency medical services; motorcycle safety; pedestrian and bicycle safety; speed management; distracted driving; and other safety countermeasures to address problems documented in States' highway safety plans.

Detailed Justification for Highway Traffic Safety Grant Programs

What Do I Need To Know Before Reading This Justification?

NHTSA's FY 2017 budget request highlights:

- Programs that address the Nation's major behavioral highway safety issues: high risk impaired drivers, unbelted motor vehicle occupants, distracted drivers and motorcycle fatalities. These grants will provide States and local communities a means of maintaining and expanding traffic enforcement to reduce crashes, injuries and fatalities and improve quality of life.
- Maximum flexibility for States, including use of a single application process for all the grant programs with one annual deadline and making grant eligibility criteria more performance-based and more objective for easier compliance and administration.
- Full accountability using problem identification and analysis to allocate resources and measuring outcomes using jointly established performance measures.
- Focus on building highway safety program partnerships and program capacity.



Source: NCSA/VMT (FHWA)

What Is The Request And What Will We Get For The Funds?

FY 2017 – HIGHWAY TRAFFIC SAFETY GRANTS

\$559,300,000

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Section 402 State and Community Formula Grants*	235,000,000	\$243,500,000	\$252,300,000	\$8,800,000
Section 2009 High Visibility Enforcement	29,000,000	\$29,300,000	\$29,500,000	\$200,000
Section 405 - National Priority Safety Programs	\$272,000,000	\$274,700,000	\$277,500,000	\$2,800,000
<i>Sec 405 - Occupant Protection Grants</i>	43,520,000	\$43,952,000	\$36,075,000	(\$7,877,000)
<i>Sec 405 - State Traffic Safety Information System Grants</i>	39,440,000	\$39,831,500	\$40,237,500	\$406,000
<i>Sec 405 - Impaired Driving Countermeasures Grants</i>	142,800,000	\$144,217,500	\$145,687,500	\$1,470,000
<i>Sec 405 - Distracted Driving Grants</i>	23,120,000	\$23,349,500	\$23,587,500	\$238,000
<i>Sec 405 - Motorcyclist Safety Grants</i>	4,080,000	\$4,120,500	\$4,162,500	\$42,000
<i>Sec 405 - State Graduated Driver Licensing Laws</i>	13,600,000	\$13,735,000	\$13,875,000	\$140,000
<i>Sec 405- Non-Motorized Safety Ped/Bikes</i>	-	\$0	\$13,875,000	\$13,875,000
<i>Sec 403h - In-Vehicle Alcohol Detection Device Research</i>	5,440,000	\$5,494,000	\$0	(\$5,494,000)
Total	\$536,000,000	\$547,500,000	\$559,300,000	\$11,800,000

*Cooperative Research and Evaluation (\$2,500,000) is a draw-down from the Section 402 Grant, as authorized in MAP-21.

HIGHWAY TRAFFIC SAFETY GRANTS**Section 402 State and Community
Formula Grants**

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Sec.402 Formula Grants	\$235,000,000	\$243,500,000	\$252,300,000	\$8,800,000

The State and Community Highway Safety formula grant program is the backbone of State highway safety programs. These grants directly support the Department's safety goals by providing flexibility to States to address highway safety problems. States can use these grants for the following activities: alcohol and other impaired driving countermeasures; police traffic services; occupant protection, including child passenger safety; traffic records; emergency medical services; motorcycle safety; pedestrian and bicycle safety; speed management; driver distraction; and other safety countermeasures to address problems documented in States' highway safety plans. In addition, this program provides funding for a comprehensive State traffic safety enforcement program critical to maintaining and improving on State traffic safety improvements.

Why Is This Program Necessary?

In 2013, the Nation lost 32,719 people to motor vehicle crashes in highway crashes. In addition to the human suffering caused by the tragedy of highway crashes, NHTSA estimates that in 2010, the total economic cost of motor vehicle crashes in the U.S. was \$242 billion. This grant program provides the foundation for State efforts to address and reduce crashes. The FAST Act maintains key components of the existing law including:

- All States, Territories, the District of Columbia, Puerto Rico, and the Bureau of Indian Affairs, that submit approved highway safety plans would receive grant funding based on the current formula.
- States will have the option of providing supplemental funding for NHTSA research and demonstration programs in the States that receive funds from the Research and Demonstration program (formally Section 403). Allowing States flexibility would result in more efficient use of States funds and could advance the completion of research projects of interest to the States.
- States will be able to implement a comprehensive, State-wide traffic safety enforcement program that provides resources to ensure minimum levels of traffic enforcement in each jurisdiction.
- This grant program will also allow States to pool money to fund regional programs that cut across State lines (e.g. combined alcohol or speed enforcement efforts along State borders).

- A portion of these grant funds will support a cooperative research and evaluation program of highway safety countermeasures to be jointly managed by NHTSA and the States.



Source: NCSA/ VMT (FHWA)

How Do You Know The Program Works?

The State and Community Formula Grant program has supported traffic safety efforts since the passage of the initial Highway Safety Act in 1966. This would be the lowest fatality rates on record, although the number remains unacceptably high.

States collect and analyze data to determine critical highway safety problems and use proven effective countermeasures to address those problems. These proven countermeasures were developed through NHTSA's research and demonstration program and documented in *Countermeasures That Work*, a highway safety countermeasure guide for State highway safety offices, updated every year by NHTSA.

Why Do We Want/Need To Fund The Program At the Requested Level?

The Department is requesting \$252.3 million in FY 2017, an increase of \$8.8 million above FY 2016 Budget enacted funding level. The Section 402 grant program is critical to allow individual States and territories to address their specific highway safety problems that may not be addressed

through national efforts and/or are best addressed at the State level. In addition to funding critical highway safety initiatives in the States, the request will support the implementation of a comprehensive State-wide traffic safety enforcement program to ensure continued traffic enforcement in resource challenged States and communities, pool funding across jurisdictions for joint highway safety programs, and a planned drawdown to fund the cooperative research and evaluation program of highway safety countermeasures to be jointly managed by NHTSA and the States (See Highway Safety Programs for more information).

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Sec.405A National Priority Safety Program - Occupant Protection	\$43,520,000	\$43,952,000	\$36,075,000	(\$7,877,000)

The Occupant Protection Grants provide resources to States in support of enactment of occupant protection laws, enforcement, education, and communication programs, promoting proper adult and child occupant protection restraint usage and focusing on the States' high risk populations. The program includes a number of eligibility criteria, including encouraging development of comprehensive Statewide occupant protection strategic plans and countermeasures focusing on rural and nighttime belt use, two particularly significant occupant protection issues. The program maintains the criteria of enacting and enforcing a primary seat belt law. Also, the performance based program provides States, that have achieved high belt use rates, significant flexibility on how to expend grant funds. Grant funds could be used for a variety of occupant protection programs and activities, including support for high visibility enforcement campaigns, training, education, and equipment, information systems, and child passenger safety programs.

States could qualify for funding in two ways. First, they could participate in the nationwide *Click It or Ticket* campaign and have a seat belt use rate of 90 percent or above. Alternately, States with seat belt use rates of less than 90 percent would have to participate in the national *Click It or Ticket* mobilization and meet 3 of 6 criteria.

Why Is This Program Necessary?

When used properly, occupant protection devices including seat belts and child passenger safety seats can be 45 to 60 percent effective in reducing the risk of fatal injury in a crash. We estimate that among vehicle occupants age 5 and older in 2014, seat belts saved an estimated 12,802 lives. If all unrestrained passenger vehicle occupants age 5 and older had worn seat belts in 2014, an estimated 2,814 additional lives could have been saved. Efforts to increase seat belt and child safety seats save lives and avoid injuries.

How Do You Know The Program Works?

In NHTSA's *Countermeasures That Work* document, studies indicate that correctly using a child restraint for a young child or wearing a seat belt by older children and adults is the single most effective way to save lives and reduce injuries in crashes. Since 1999 when it was first authorized, the Occupant Protection Grants program has worked effectively to help States establish Statewide occupant protection programs for adults and children. States have also strengthened their occupant protection laws by providing for stronger enforcement going from

secondary to primary enforcement of their seat belt laws as well as requiring that children ride properly secured in an age appropriate child restraint or booster seat until they reach a certain weight and height limit. Increased enforcement of the States' occupant protection laws has been supported by these grant funds.

Seat belt use is 87 percent, up from less than 60 percent in 1993, when the first *Click It or Ticket* enforcement campaign was held. Thirty-three States, DC, Puerto Rico and the 4 Territories all have primary seat belt laws; and all 50 States have child restraint laws.

Why Do We Want/Need To Fund The Program At the Requested Level?

The Department is requesting \$36.1 million in FY 2017, an decrease of \$7.9 million below the FY 2016 enacted Budget . Since research shows that proper occupant protection of adults and children is the single most effective way to save lives and reduce injuries in crashes, additional funding is needed to increase usage. With observed national seat belt usage now at 87 percent, States are working to use countermeasures focused on high risk populations like nighttime drivers, young drivers and passengers, pickup truck drivers and passengers, and minority populations.

HIGHWAY TRAFFIC SAFETY GRANTS**Section 405 State Traffic Safety
Information System Improvement Grants**

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Sec.405B National Priority Safety Program - State Traffic Safety Information Systems Grants	\$39,440,000	\$39,831,500	\$40,237,500	\$406,000

The State Traffic Safety Information System Grants provide funds to States to improve the timeliness, accuracy, completeness, uniformity, integration, and accessibility of State data to identify priorities for State and local highway safety programs. Without accurate, timely data, State governments cannot properly identify safety trends, or emerging safety problems. States also sometimes struggle to accurately assess whether their countermeasure programs are effective in achieving stated project goals.

Why Is This Program Necessary?

The State Traffic Safety Information System Grants program supports improvements in highway and traffic safety records information systems, allowing States to identify, document and evaluate their most pressing safety problems. The program brings together different stakeholders – such as law enforcement, emergency medical personnel, courts, etc. – to ‘communicate’ and link files in their data systems. These areas can include any of the following components: crash, driver licensing, vehicle registration, injury surveillance, emergency medical services, citation, adjudication and roadway issues. Improved data is critical to allow States to determine crash trends and correctly identify traffic safety problems, then determine which traffic safety program activities are the most effective in reducing crashes. In addition, improved State data will enhance NHTSA’s ability to observe and analyze national trends in crash occurrences, rates, outcomes and circumstances.

How Do You Know The Program Works?

Since the program began in FY 2005, the States have implemented improvements in such areas as moving from paper reports to electronic reports allowing broader, timelier dissemination and analysis of data. The reports are more accurate, timely, uniform, and complete. The program has also provided better accessibility to those in need of the reports. The end result is the States are able to examine what countermeasures should be developed to improve safety on the Nation’s highways and make more efficient use of resources.

Why Do We Want/Need To Fund The Program At the Requested Level?

The Department is requesting \$40.2 million in FY 2017, an increase of \$.5 million above FY 2016 enacted Budget . Highway safety grant programs are data-driven, requiring States to document safety problems to be addressed using Federal and State funds. Without accurate, timely data, State and Federal governments cannot properly identify safety trends, or emerging safety problems.

HIGHWAY TRAFFIC SAFETY GRANTS**Section 405 Impaired Driving Countermeasures Grants**

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Sec.405C National Priority Safety Program - Impaired Driving Countermeasures	\$142,800,000	\$144,217,500	\$145,687,500	\$1,470,000

The Impaired Driving Countermeasures Grants program provides financial incentives to States to enact laws and implement programs to reduce impaired driving related fatalities and injuries. The amended grant program builds on the success of the existing program while establishing qualifying criteria for States based on their performance on certain benchmarks such as alcohol-impaired fatality rate, and also provides dedicated funding for adoption of an ignition interlock law. All States will be eligible for grants, but the conditions that would be applied to the administration and expenditure of these grants would differ for each State based on its safety performance. The grant program establishes three State categories: 1) Low Range States; 2) Mid-Range States; and 3) High Range States, based on their impaired driving fatality rates. In addition, the program provides additional incentive funds to States that adopt a mandatory ignition interlock or 24/7 law for all offenders.

- This grant program provides States with funding to address driving under the influence of alcohol, drugs, or the combination of the two.
- The program focuses on State performance in addressing impaired driving.
- All grant recipients are required to participate in the national impaired driving crackdowns and comply with enforcement reporting requirements.
- Grant funds may be used to support a wide range of impaired driving countermeasures.

Why Is This Program Necessary?

In 2014, there were 9,967 deaths in alcohol-impaired driving motor vehicle traffic crashes. Additionally, according to the latest National Roadside Survey, 11 percent of daytime drivers and 15 percent of nighttime drivers test positive for drugs. Enforcement of strong impaired driving laws has proven to reduce impaired driving and the resultant fatalities and injuries caused by impaired driving crashes.

How Do You Know The Program Works?

Strategies the States are encouraged to promote with Sec. 405 funds, such as checkpoints, Driving While Intoxicated (DWI) courts, Administrative License Revocation (ALR) legislation, use of interlocks, and others were researched and have been proven to decrease recidivism and

keep drunk drivers off the road. Evaluation results can be found in *Countermeasures That Work* and other NHTSA publications. The percent of alcohol-impaired driving fatalities has declined from 48 percent in 1982 to 31 percent in 2014.

Why Do We Want/Need To Fund The Program At the Requested Level?

The Department is requesting \$145.7 million in FY 2017, an increase of \$1.5 million above FY 2016 enacted Budget . Funding will allow States to increase the deployment of ignition interlocks, establish DWI courts, expand the use of Traffic Safety Resource Prosecutors (TSRPs), and expand Advanced Roadside Interdiction and Detection (ARIDE) training and DRE training for law enforcement. In recent years, more than 30 percent of drivers killed in fatal crashes have a Blood Alcohol Concentration level of 0.08 or higher and 9,967 people were killed in these crashes in 2014. Progress in addressing impaired driving crashes has been mixed. Some States and communities have demonstrated a commitment to address impaired driving issues and have achieved considerable success, and others have achieved more limited success. Additional incentive to work on life-saving countermeasures in all States is needed.

HIGHWAY TRAFFIC SAFETY GRANTS**Section 405 Distracted Driving
Prevention Grant**

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Sec. 405D National Priority Safety Program - Distracted Driving Grants	\$23,120,000	\$23,349,500	\$23,587,500	\$238,000

The Distracted Driving Prevention Grant program provides incentives to States to enact and enforce complying laws to prevent distracted driving. The Grow America Act amends program criteria and includes separate grants to give States additional flexibility and incentives for meeting requirements, enacting and enforcing more rigorous laws, and increased flexibility to spend funds on education and awareness. States would be able to expend grant funds on activities related to the enforcement of these laws or other behavioral highway safety activities. NHTSA will use up to \$5 million to develop and place broadcast and print media to support the enforcement of State laws. Media messages will focus on reaching those segments of the population most likely to engage in distracted driving behavior.

**Why Is This Program Necessary?**

In 2014, 3,179 people died in crashes involving a distracted driver. Surveys indicate that most drivers are aware of the dangers of driving while talking on a cell phone or while texting. However, one survey found that two thirds of drivers admitted to talking on their cell phone while driving last year, and 21 percent indicated that they had sent or read a text message while driving. The youngest Americans are most at risk, but they are not alone. At any given moment during the daylight hours, approximately 588,000 vehicles are being driven by someone using a hand-held cell phone. People of all ages are using a variety of hand-held devices, such as cell phones, mp3 players, personal digital assistants, and navigation devices, when they are behind the wheel. This request is intended to spur States to enact laws to prevent distraction, and provide them the resources to enforce these laws.

How Do You Know The Program Works?

NHTSA's experience in trying to increase use of seat belts has demonstrated the effectiveness of strong laws coupled with highly visible enforcement. NHTSA recently completed a demonstration project with New York and Connecticut that showed a decline in both handheld cell phone use and texting while driving as the result of high visibility enforcement of laws banning handheld cell phone use and texting while driving. According to *Countermeasures That Work*, an evaluation of the DC law banning handheld cell phone use while driving showed a 50 percent reduction in handheld use after one year; this was largely attributed to strong enforcement of the law. Currently, NHTSA is working with Delaware and California to demonstrate the effectiveness of high visibility enforcement of Statewide laws banning handheld cell phone use and texting while driving.

Why Do We Want/Need To Fund The Program At the Requested Level?

The Department is requesting funding of this program at \$23.6 million in FY 2017, an increase of \$238 thousand above FY 2016 enacted Budget . Ownership and use of cell phones, personal digital assistants, geographic information systems and other potentially distracting devices in motor vehicles has increased dramatically the last few years, and is expected to continue to grow. Unless the Nation acts soon to discourage use of these devices while driving, more people will be killed or injured by distracted drivers. This funding level should provide adequate incentive to encourage States to pass and enforce laws to prevent distracted driving.

HIGHWAY TRAFFIC SAFETY GRANTS**Section 405 Motorcyclist Safety Grants**

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Sec.405E National Priority Safety Program - Motorcyclist Safety Grants	\$4,080,000	\$4,120,500	\$4,162,500	\$42,000

The Motorcyclist Safety Grants encourage States to adopt effective motorcyclist safety programs. The grant program would allow States to expend funds on a comprehensive motorcycle safety strategy, with an emphasis on activities which would increase the use of motorcycle helmets (the most effective means of reducing motorcycle crash fatalities and serious injuries). To date, the grant program has focused on use of funds to deliver rider training and motorist awareness programs. While these are important issues, the lifesaving strategy of increasing the use of motorcycle helmets has not been addressed, even though research has shown that State's that have passed motorcycle helmet laws have reduced their fatalities and injuries. This Motorcycle Safety Grant program would increase the funds going to the States and expand the uses of these funds to include promoting the use of DOT compliant motorcycle helmets, increasing efforts to reduce impaired riding, and reducing the number of improperly licensed motorcyclists, thus providing States additional flexibility to address motorcycle safety problems.

Why Is This Program Necessary?

Motorcyclist fatalities increased by 132 percent in the ten year period from 1998 to 2008. In 2009, motorcyclist fatalities dropped for the first time in over ten years – a decrease of 16 percent from 2008 to 2009. There was a minimal rise of 1 percent between 2009 and 2010, a 2.5 percent increase between 2010 and 2011 and a 7.7 percent increase between 2011 and 2012. However, there was a decrease of 5.9 percent from 2012 to 2013 and 2.3 percent between 2013 and 2014. The number of motorcycle registrations also rose by 117 percent between 1998 and 2013. The increase in fatalities has occurred among all age groups and in all regions of the country and has offset safety improvements in other areas, such as passenger vehicle occupant safety.

How Do You Know The Program Works?

Motorcycle helmets are highly effective in protecting motorcycle riders' heads in a crash and are effective in reducing rider fatalities: 37 percent for riders and 41 percent for passengers, and brain injuries by 41 to 69 percent. Motorcyclist safety training and public awareness and outreach programs targeting motorists are countermeasures that are prominently featured in most State motorcyclist safety programs. This program will provide States more flexibility in expending grant funding. Funds could be spent on a variety of activities, with an emphasis on

enforcement and the promotion of helmet use laws, rather than solely motorcycle awareness and training.

Why Do We Want/Need To Fund The Program At the Requested Level?

NHTSA is requesting \$4.2 million in FY 2016, an increase of \$42 thousand above FY 2016 enacted Budget. Motorcyclist fatalities have increased by 103 percent from 1998 to 2012 while registrations have risen 117 percent during the same time period. Funds allow States to continue and expand efforts to reduce motorcycle crashes and increase State flexibility for using funds to improve motorcycle safety.

HIGHWAY TRAFFIC SAFETY GRANTS**Section 405 State Graduated
Driver Licensing Laws**

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Sec.405F National Priority Safety Program - State Graduated Driver Licensing Laws	\$13,600,000	\$13,735,000	\$13,875,000	\$140,000
Salary and Benefits	\$0	\$0	\$0	\$0
Total	\$13,600,000	\$13,735,000	\$13,875,000	\$140,000

The State Graduated Driver Licensing Laws program encourages States to adopt and implement effective graduated driver licensing laws. The program establishes minimum standards for novice teen driver licensing programs including a 2-stage licensing process with a learner's permit stage and an intermediate stage. The grant program would allow States to expend funds on the enforcement of a 2-stage licensing program, training of law enforcement personnel, administrative activities, and the development of educational materials. Seventy-five percent of funds may also be used for any eligible project or activity under the Section 402 State and Community Formula Grant Program. The GROW AMERICA Act proposes a new grant using a portion of the GDL grant funds to incentivize the adoption by States of Novice Teen Driver Education and Training Administrative Standards.

Why Is This Program Necessary?

Motor vehicles crashes are the leading cause of death for those age 15 to 20 years-old. In 2014, 1,717 novice teen drivers died in the motor vehicle crashes.

How Do You Know The Program Works?

In NHTSA's *Countermeasures That Work* document, studies indicate that a 2-stage driver licensing program decreases novice teen driver death and injury. The number of young drivers involved in fatal crashes has decreased by 48 percent from 2005 to 2014. This dedicated funding will promote State adoption and implementation of standardized graduated driver licensing programs.

Why Do We Want/Need To Fund The Program At the Requested Level?

NHTSA is requesting \$13.9 million in FY 2017, an increase of \$140 thousand above FY 2016 enacted Budget. Novice driver licensing programs vary across States. This program will promote States to adopt and expand their efforts to reduce young driver deaths through the implementation of standardized and comprehensive multi-stage driver licensing programs.

HIGHWAY TRAFFIC SAFETY GRANTS Section 405(I) Non-Motorized Safety Grants

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Sec.405I National Priority Safety Program - Non-Motorized Safety Ped/Bikes	\$0	\$0	\$13,875,000	\$13,875,000
Salary and Benefits	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$13,875,000	\$13,875,000

The Non-Motorized Safety Grants encourage States to implement programs to address pedestrian and bicyclist safety. The grant program would allow States to expend funds to train law enforcement, carryout effective law enforcement activities, and educate the public on applicable State traffic safety laws.

Why Is This Program Necessary?

More people are walking and biking. Consequently, more pedestrians and bicyclists are killed in motor vehicle crashes. NHTSA conducted the National Survey of Bicyclist and Pedestrian Attitudes and Behaviors in 2002 and again in 2012 to understand attitudes and self-reported behavior of bicyclists and pedestrians. In 2002, fewer than 30 percent of participants reported cycling more often than they had a year earlier, and in 2012 nearly 40 percent of respondents reported cycling more often than they had a year earlier. By 2012, there was a 14 percent increase among respondents who said they had walked in the past 30 days, and who had walked more often than they had a year earlier. Local bicyclist and pedestrian counts corroborate this finding of recent increases in bicycling and walking.

In a period in which there were decreases in motor vehicle fatalities, bicyclist and pedestrian injuries and fatalities have steadily increased. The 5-year trend for bicyclist fatalities rose to a high 749 fatalities in 2013—the highest in 5 years declining slightly to 726 in 2014. The 5-year trend for pedestrian fatalities rose to a high 4,884 in 2014. Additionally, 65,000 pedestrians and 50,000 bicyclists were injured in 2014. As a percentage of the total motor vehicle-related deaths in 2014, pedestrian fatalities represented 15 percent and bicyclist fatalities represented 2.2 percent, for a total of 12.2 percent of the total.

Why Do We Want/Need To Fund The Program At the Requested Level?

In FY 2017 NHTSA is requesting \$13.9 million for the Non-Motorized Safety Grants. This will support States with significant annual combined pedestrian and bicyclist fatalities, exceeding 15 percent of their total annual crash fatalities in the State, to sufficiently carryout enforcement and education countermeasures.

How Do You Know The Program Works?

Comprehensive programs using enforcement and educational strategies have been effective in addressing many traffic safety issues; including reducing impaired driving and increasing seat belt use. In a course of a year, Gainesville, Florida conducted high-visibility enforcement of pedestrian yield right-of-way laws complimented with an educational awareness effort. Their program led to an increase in their percent of drivers yielding right-of-way to pedestrians.

HIGHWAY TRAFFIC SAFETY GRANTS**Section 2009 High Visibility Enforcement**

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Sec.2009 High Visibility Enforcement	\$29,000,000	\$29,300,000	\$29,500,000	\$200,000

This request will provide funding for NHTSA media campaigns. The National Occupant Protection campaign (*Click It or Ticket*) occurs during the Memorial Day period and consist of two weeks of high-visibility enforcement to increase the use of seat belts supported by two weeks of paid national media and earned media activities. The same model is followed in the impaired driving campaigns to reduce alcohol-impaired operation of motor vehicles, which take place around Labor Day and during the December holiday season. Using the “Drive Sober, or Get Pulled Over” message, the HVE funds are used to pay for broadcast and online media to support State law enforcement efforts.

Paid media will include advertisements in both English and Spanish language and will continue to focus on those most at risk (18 - 34 year old males) of a traffic fatality as indicated by analysis conducted by the agency’s National Center for Statistical Analysis. Paid media will focus on media venues that deliver programming particularly suited to this audience for both impaired driving (21 - 34 year old males) and occupant protection (18 – 34 year old males), including late night, sports programming and alternative media consumed by the target audiences. The impaired driving advertising will also include focus on impaired motorcyclists, as motorcyclists have continued to be overrepresented in alcohol-related crashes; and on newly-arrived Hispanics, using Spanish-language media venues.

**Why Is This Program Necessary?**

- The funds will provide for the production of advertisements and purchase of appropriate media in support of High Visibility Enforcement (HVE) seat belt mobilizations and impaired driving crackdowns.
- This communications funding works in conjunction with law enforcement activities on the ground to modify community behavior by presenting the risks of both serious injury and/or a citation for violating laws governing occupant protection and impaired driving.

How Do You Know The Program Works?

Research has shown that high visibility enforcement, combined with media, reduces fatalities and injuries on our highways. For example, the *Click It or Ticket*, high visibility enforcement campaign aimed at promoting seat belt use, was first implemented nationally in 2003. Since then, the annual national total of unrestrained passenger vehicle occupant fatalities has decreased. Annual evaluations of the national *Click It or Ticket* mobilization, the *Drive Sober or Get Pulled Over* crackdown, and other high visibility enforcement and paid media campaigns have consistently shown the effectiveness of these programs in producing behavioral change (increased seat belt use and reduced alcohol impaired driving). The observed behavioral change has been reflected in reduced unbelted and alcohol-impaired fatalities.

Why Do We Want/Need To Fund The Program At the Requested Level?

The Department is requesting \$29.5 million in FY 2017, \$200 thousand higher than what was in the FY 2016 enacted Budget. The funding in this area will support continued national and State efforts to increase safety belt use through media buys for CIOT. The FY 2015 budget requests funding for three media buys; one occupant protection mobilization for Memorial Day and two impaired driving crackdowns - Labor Day and December.

HIGHWAY TRAFFIC SAFETY GRANTS		Section 4011 Grant Program to Prohibit Racial Profiling			
Program Activity		FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Racial Profiling		\$0	\$0	\$7,500,000	\$7,500,000
Salary and Benefits		\$0	\$0	\$0	\$0
Total		\$0	\$0	\$7,500,000	\$7,500,000

The grant program to prohibit racial profiling established under section 1906 of SAFETEA-LU is re-established in the FAST Act, and includes revisions to increase eligibility for States to receive funds. The program seeks to encourage States to enact and enforce laws that prohibit the use of racial profiling in highway law enforcement, to collect data about traffic stops and to maintain and allow public inspection of statistical information about traffic stops on Federal aid highways regarding the race and ethnicity of the drivers. States will use this funding to collect and maintain data on traffic stops, evaluate results, and develop and implement programs to reduce the occurrence of racial profiling.

What Is This Program and Why Is It Necessary?

"Racial profiling" at its core concerns the invidious use of race or ethnicity as a criterion in conducting stops, searches and other law enforcement investigative procedures. It is premised on the erroneous assumption that any particular individual of one race or ethnicity is more likely to engage in misconduct than any particular individual of another race or ethnicity.¹ This program seeks to prevent the use of racial profiling by law enforcement officers when making traffic law enforcement decisions.

Why Do We Want/Need To Fund The Program At the Requested Level?

One of the ways that law enforcement agencies are addressing concerns and allegations regarding discriminatory policing is through data collection. By collecting information on the nature, character, and demographics of police enforcement practices, the ability to assess the appropriate application of the authority and broad discretion entrusted to law enforcement is enhanced.²

¹ Guidance Regarding The Use Of Race By Federal Law Enforcement, Agencies, US-DOJ, 2003, http://www.justice.gov/sites/default/files/crt/legacy/2010/12/15/guidance_on_race.pdf

² A Resource Guide on Racial Profiling Data Collection Systems Promising Practices and Lessons Learned, US-DOJ, November 2000, <https://www.ncjrs.gov/pdffiles1/bja/184768.pdf>

What Benefits Will Be Provided to the American Public Through This Request?

This program will provide funding to States to enact and enforce laws that prohibit State or local law enforcement officers from using the race or ethnicity of a driver to any degree in making routine or spontaneous law enforcement decisions and to collect, maintain and allowing public inspection of statistical information on the race and ethnicity of drivers of motor vehicle stops made by law enforcement officers. The funding will bring benefit to the American public by helping to reduce the incidence of racial profiling.

HIGHWAY TRAFFIC SAFETY GRANTS**ADMINISTRATIVE EXPENSES**

The FY 2017 budget request includes a total budget of \$585.4 million and 95 FTE. Of this amount \$26.1 million is for administrative expenses, which is an increase of \$240 thousand above FY 2016.

The increase supports the salary and benefits of 4 FTE bringing the total FTE level for Regional Operations to 95. This investment supports the Regional workload and staffing analysis conducted in FY 2006. NHTSA is seeking an increase in its grants administrative budget to support needed enhancements to the automated Grant Tracking System. Significant upgrades to this system will allow for improved and more transparent vouchering of grant allocations to the States; more effective oversight over highway safety fund distributions; and improved capabilities to evaluate the 12 – 14 thousand highway safety projects at the State , local and territorial level being considered for grant funding.

NHTSA continues to distribute its administrative expenses using a methodology based primarily on the Direct FTE allocation for many of its category areas such as: Salaries and Benefits; Rent, Communications and Utilities; and Other Services.

NHTSA FY 2017 SAFETY GRANTS ADMINISTRATIVE EXPENSES

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	FY 2017 vs FY 2016 Change
Salaries and Benefits	12,051,704	13,157,630	\$13,397,630	\$240,000
Travel	376,875	377,000	377,000	\$0
Transportation of Things	-	-	-	-
Rent, Communications & Utilities	427,544	428,000	428,000	\$0
Printing	-	-	-	-
Other Services	12,643,877	11,869,370	11,869,370	\$0
Supplies	-	-	-	-
Equipment	-	-	-	-
Unallocated	-	-	-	\$0
Total Administrative Expenses	\$25,500,000	\$25,832,000	\$26,072,000	\$240,000
FTE (includes indirect FTE)	91	91	95	4

The FY 2017 request for administrative expenses also includes \$4,967,000 for Safety Research and \$1,656,000 for the National Occupant Protection Use Surveys (NOPUS). Specifically, the requested funding for NOPUS will allow us to pursue the following activities:

- Support distraction initiative by reporting driver use rates of cell phone and other electronic devices.
- Conduct 2017 NOPUS survey and report overall seat belt use and motorcycle helmet use.
- Report on the results of child restraint use and belt use among rear-seat occupants from the 2016 NOPUS.

This Page Left Intentionally Blank

21st Century Clean Transportation Plan Investments

Autonomous Vehicle Research

Program Activity	FY 2015 ACTUAL	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY 2017 - 2016
Autonomous Vehicle Research	\$0	\$0	\$200,000,000	\$200,000,000
Salary and Benefits	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$200,000,000	\$200,000,000

What Is This Program and Why Is It Necessary?

The 21st Century Clean Transportation Plan Investments build on the FAST Act, taking the next steps to reform funding streams and encourage better planning and projects at the State and regional levels through increased investment in various areas and in a series of new, multimodal programs that increasingly cut across traditional siloes, in support of more comprehensive regional strategies that connect communities and support climate and greenhouse gas reduction goals.

The Autonomous Vehicle Development Program requests \$200 million in FY 2017 and \$3.9 billion over 10 years. This pilot will deploy safe and climate smart autonomous vehicles to create better, faster, cleaner urban and corridor transportation networks. To accelerate the development and adoption of autonomous vehicles, this program would fund large-scale deployment pilots to test connected vehicle systems in designated corridors throughout the country; and work with industry to ensure a common multi-state interoperability framework for connected and autonomous vehicles.

Why Do We Want/Need To Fund The Program At the Requested Level?

The FY 2017 we are requesting \$200 million. Today's transportation sector is undergoing a revolutionary transformation. New vehicles are being developed with technologies that are fundamentally changing energy consumption, improving safety, and helping reduce congestion. Whether it is driverless cars, electric trains, traffic demand management, or technologies that help travelers plan their trips, we are living through an unprecedented period of development. To that end, this request, funded through NHTSA, will support a range of

innovative activities in collaboration with other entities across USDOT, such as the Intelligent Transportation Systems, Joint Program Office (ITS-JPO).

Over the multi-year period of this program, specific activities will focus on:

- **Development of national policy for safe deployment of automated vehicles:** The FY 2017 funding will build on a range of current efforts in FY 2016, including work within NHTSA to support the real world testing for connected and autonomous vehicles, the development of a national policy on licensing, testing, and information sharing among States and the Federal government. This will build consumer confidence in highly automated vehicle features through the proposed large scale deployment tests with connected and highly automated vehicles. For example, NHTSA will work with state partners and auto groups to develop "model policy" for states, which will lay the groundwork for a consistent national policy on driverless cars. This policy would support interoperability of connected and automated vehicles through digital maps, traffic data, road zone data, infrastructure databases and their communications to automated vehicles, which may involve various vendors, states, local jurisdictions. NHTSA would also complete research into other regulatory agencies that allows NHTSA to develop the new tools necessary for regulations and enforcement for highly automated vehicles. New authorities may be needed when they are necessary to ensure that fully autonomous vehicles, including those designed without a human driver in mind, are deployable in large numbers when demonstrated to provide an equivalent or higher level of safety than is now available.
- **Conducting research in support of safety performance measurement:** Funding will also support the development of tools necessary to measure safety performance of highly automated vehicles including the performance of vehicles electronics. This will include: establishing roadworthiness testing specifications to support highly automated vehicles; establishing new test methods and tools that may involve simulations and that measure safety performance of highly automated vehicles including the performance of vehicles electronics; and, supporting interoperability of connected and automated vehicles; expanding in-house testing capabilities to enable automated vehicle scenario testing involving complex encounters; establishing a catalog of scenarios that automated systems would be

expected to handle, which may grow over time; developing capabilities to perform electronic system failure testing.

- **Pilot Deployments:** NHTSA will work with the ITS-JPO to lead multiple pilot deployments of Level 4 automated light duty and heavy duty vehicles researching different approaches to automation in different places. Examples include heavy duty vehicle platooning, integration with other technologies, automated parking structures, last-mile solutions connected to public transportation, high-speed automated lanes as an alternative to dedicated rail lines, automated campuses or retirement communities, automated port operations, an automated city center, mobility-on-demand solutions that co-exist with other traffic. These may require infrastructure changes such as building a parking garage on the edge of a city center before restricting the interior to automated vehicles or providing separation between pedestrians and automated transportation for safety and efficiency. Funds to assist with making these changes to infrastructure, acquiring the necessary automated vehicles or developing new public-private partnership models for deployment will get automated vehicles in operation. These diverse deployments will generate data and experience about how to effectively encourage, regulate and legislate around this technology.

- **Making Automation Safe From Hacking Through Research on Cybersecurity:** NHTSA will lead a multidisciplinary research effort. Cybersecurity represents a growing concern for conventional vehicles that are increasingly networked and computerized, but takes on a new level of importance with automated vehicles, where software systems govern many or all aspects of vehicle control systems. Cybersecurity, therefore, is a vital consideration within DOT's goal of ensuring the safety of automated vehicles. This will include development of a central mechanism for capturing reports of suspected hacking attempts and associated datasets from individual vehicles.

- **Research Grants to Universities To Discover Human-Centered Mobility Solutions:** NHTSA will work with OST-R on a grant program that will address many questions about how automated vehicles should interact with other road users and how they will impact society and urban design. This is an opportunity to have Universities work together on some of these broader challenges. Automation can be used to create transportation systems that serve all citizens but this is unlikely to happen without broad thinking about solutions from a range of disciplines.

- **Development of Open Data Sets for Understanding Traffic Situations:** NHTSA will collaborate with and provide funding support for an FHWA-led effort to develop data sets on real world driving situations. Most of that data is in the hands of technology, suppliers and automobile companies. This development could use data from the deployments. Data sets that can be used to benchmark solutions are extremely helpful. High quality data will lead to quality research and quality policy decisions. While there is a huge role for the private sector to play in acquiring and making use of this data, unless this data is generally available, DOT should generate and maintain public access to certain automation data.
- **Conducting and Funding Advanced Research on Automation Technologies:** Funding through this initiative, which may be executed through VOLPE, will yield the development of an advanced research plan for the purpose of keeping the United States in the lead of the development of artificial intelligence and automation technologies. This will include exploration of a number of topics, including artificial intelligence (AI) methods that could be used in automating the motions of vehicles and their potential impacts on federal policies, testing for compliance and post-mortem investigation.
- **Connected vehicle technology demonstration:** Additional NHTSA research would focus on demonstrating and quantifying the added value of connected vehicle technology. This study would look at safety and other impacts to a range of road users, including pedestrians, bicyclists, other conventional vehicles' drivers, enforcement personnel operating around automated vehicles. Funding would also address technology needs to equip key high volume intersections with the ability to simulate and broadcast non-connected vehicles' BSM to all other vehicles within the vicinity. Efforts would also focus on expanding consumer confidence, by exposing consumers to the benefits of highly automated vehicles at clinics around the country.

What Benefits Will Be Provided to the American Public Through This Request?

Automation technologies have enormous potential to save lives, save time and save fuel. These technologies need to be incorporated quickly and safely into our transportation networks by developing interoperable standards that keep all users safe, staying ahead of cybersecurity threats, and ensuring safety standards can adjust to the speed of innovation.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

APPROPRIATIONS HISTORY

OPERATIONS AND RESEARCH VEHICLE SAFETY RESEARCH GENERAL FUND - APPROPRIATIONS

<u>Fiscal Year</u>	<u>Request</u>	<u>Fiscal Year</u>	<u>Enacted</u>
2008*	\$0	2008	\$126,572,000
2009*	\$0	2009	\$127,000,000
2010	\$129,774,000	2010	\$140,427,000
2011	\$132,837,000	2011	\$140,146,146
2012	\$170,708,723	2012	\$140,146,000
2013***	\$0	2013***	\$140,146,000
2014	\$148,343,000	2014	\$134,000,000
2015****	\$0	2015****	\$130,000,000
2016*****	\$0	2016*****	\$152,800,000
2017*****	\$0	2017*****	\$0

* Requested as contract authority from the Trust Fund.

** In FY 2013, the Administration proposed to move a number of current General Fund programs into the Transportation Trust Fund. Vehicle Safety Research was to be funded from the Trust Fund in 2013 and re-based from the General Fund in 2011 and 2012.

*** FY 2013 Levels were reduced to reflect a .02% A-T-B rescission to all funds. In addition, Vehicle Safety General Fund were reduced by an additional .05% for sequestration.

**** In FY 2015, the Administration proposed to move a number of current General Fund programs into the Transportation Trust Fund. Vehicle Safety Research was to be funded from the Trust Fund in 2015 and re-based from the General Fund in 2013 and 2014.

*****In FY 2016, the Administration proposed to move a number of current General Fund programs into the Transportation Trust Fund. Vehicle Safety Research was to be funded from the Trust Fund in 2016 and re-based from the General Fund in 2014 and 2015.

*****In FY 2017, the Administration proposed to move a number of current General Fund programs into the Transportation Trust Fund. Vehicle Safety Research was to be funded from the Trust Fund in 2017 and re-based from the General Fund in 2015 and 2016.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

APPROPRIATIONS HISTORY

OPERATIONS AND RESEARCH VEHICLE SAFETY RESEARCH TRUST FUND - CONTRACT AUTHORITY

<u>Fiscal Year</u>	<u>Request</u>	<u>Fiscal Year</u>	<u>Enacted</u>
2008	\$122,000,000	2008*	\$0
2009	\$127,000,000	2009*	\$0
2010	\$0	2010	\$0
2011	\$0	2011	\$0
2012	\$0	2012	\$0
2013**	\$188,000,000	2013	\$0
2014	\$0	2014	\$0
2015***	\$152,000,000	2015	\$0
2016****	\$179,000,000	2016	\$0
2017*****	\$249,800,000	2017	\$0

Liquidation of Contract Authorization

<u>Fiscal Year</u>	<u>Request</u>	<u>Fiscal Year</u>	<u>Enacted</u>
2008	\$122,000,000	2008*	\$0
2009	\$127,000,000	2009*	\$0
2010	\$0	2010	\$0
2011	\$0	2011	\$0
2012	\$0	2012	\$0
2013**	\$188,000,000	2013	\$0
2014	\$0	2014	\$0
2015***	\$152,000,000	2015	\$0
2016****	\$179,000,000	2016	\$0
2017*****	\$249,800,000	2017	\$0

*For FY 2008 and 2009, enacted as direct appropriation from General Fund.

** In FY 2013, the Administration proposed to move a number of current General Fund programs into the Transportation Trust Fund. Vehicle Safety Research was to be funded from the Trust Fund in 2013 and re-based from the General Fund in 2011 and 2012.

***In FY 2015, the Administration proposed to move a number of current General Fund programs into the Transportation Trust Fund. Vehicle Safety Research was to be funded from the Trust Fund in 2011 and re-based from the General Fund in 2013 and 2014.

****In FY 2016, the Administration proposed to move a number of current General Fund programs into the Transportation Trust Fund. Vehicle Safety Research was to be funded from the Trust Fund in 2016 and re-based from the General Fund in 2014 and 2015.

*****In FY 2017, the Administration proposed to move a number of current General Fund programs into the Transportation Trust Fund. Vehicle Safety Research was to be funded from the Trust Fund in 2016 and re-based from the General Fund in 2015 and 2016.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

APPROPRIATIONS HISTORY

**OPERATIONS AND RESEARCH
HIGHWAY SAFETY RESEARCH AND DEVELOPMENT
TRUST FUND - CONTRACT AUTHORITY**

Limitation on Obligations			
<u>Fiscal Year</u>	<u>Request</u>	<u>Fiscal Year</u>	<u>Enacted</u>
2008	\$107,750,000	2008	\$107,750,000
2009	\$105,500,000	2009	\$105,500,000
2010	\$107,329,000	2010	\$105,500,000
2011	\$117,376,000	2011	\$105,500,000
2012*	\$133,191,276	2012*	\$109,500,000
2013*	\$150,000,000	2013**	\$115,500,000
2014*	\$118,500,000	2014*	\$123,500,000
2015*	\$122,000,000	2015*	\$138,500,000
2016*	\$152,000,000	2016*	\$142,900,000
2017*	\$145,900,000	2017*	\$0

Liquidation of Contract Authorization			
<u>Fiscal Year</u>	<u>Request</u>	<u>Fiscal Year</u>	<u>Enacted</u>
2008	\$107,750,000	2008	\$107,750,000
2009	\$105,500,000	2009	\$105,500,000
2010	\$107,329,000	2010	\$105,500,000
2011	\$117,376,000	2011	\$105,500,000
2012*	\$133,191,276	2012*	\$109,500,000
2013*	\$150,000,000	2013**	\$115,500,000
2014*	\$118,500,000	2014*	\$123,500,000
2015*	\$122,000,000	2015*	\$138,500,000
2016*	\$152,000,000	2016*	\$142,900,000
2017*	\$145,900,000	2017*	\$0

* For FY's 2012-2017, National Driver Register is eliminated as a separate account and combined with the Highway Safety Research and Development fund.

**FY 2013 Levels were reduced to reflect a .02% A-T-B rescission to all funds. In addition, Vehicle Safety General Fund were reduced by an additional .05% for sequestration.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

APPROPRIATIONS HISTORY

NATIONAL DRIVER REGISTER TRUST FUND - CONTRACT AUTHORITY

Limitation on Obligations			
<u>Fiscal Year</u>	<u>Request</u>	<u>Fiscal Year</u>	<u>Enacted</u>
2008	\$4,000,000	2008	\$4,000,000
2009	\$4,000,000	2009	\$4,000,000
2010	\$4,078,000	2010	\$4,000,000
2011	\$4,170,000	2011	\$4,000,000
2012*	\$0	2012*	\$0
2013*	\$0	2013*	\$0
2014*	\$0	2014*	\$0
2015*	\$0	2015*	\$0
2016*	\$0	2016*	\$0
2017*	\$0	2017*	\$0

Liquidation of Contract Authorization			
<u>Fiscal Year</u>	<u>Request</u>	<u>Fiscal Year</u>	<u>Enacted</u>
2008	\$4,000,000	2008	\$4,000,000
2009	\$4,000,000	2009	\$4,000,000
2010	\$4,078,000	2010	\$4,000,000
2011	\$4,170,000	2011	\$4,000,000
2012*	\$0	2012*	\$0
2013*	\$0	2013*	\$0
2014*	\$0	2014*	\$0
2015*	\$0	2015*	\$0
2016*	\$0	2016*	\$0
2017*	\$0	2017*	\$0

* For FY's 2012-2017, National Driver Register is eliminated as a separate account and combined with the Highway Safety Research and Development fund.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

APPROPRIATIONS HISTORY MODERNIZATION INITIATIVE NATIONAL DRIVER REGISTER

GENERAL FUND - APPROPRIATIONS

<u>Fiscal Year</u>	<u>Request</u>	<u>Fiscal Year</u>	<u>Enacted</u>
2008	\$0	2008	\$0
2009	\$0	2009	\$0
2010	\$0	2010	\$3,350,000
2011	\$2,530,000	2011	\$3,350,000
2012	\$0	2012	\$0
2013	\$0	2013	\$0
2014	\$0	2014	\$0
2015	\$0	2015	\$0
2016	\$0	2016	\$0
2017	\$0	2017	\$0

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

APPROPRIATIONS HISTORY

HIGHWAY TRAFFIC SAFETY GRANTS TRUST FUND - CONTRACT AUTHORITY

Limitation on Obligations			
<u>Fiscal Year</u>	<u>Request</u>	<u>Fiscal Year</u>	<u>Enacted</u>
2008	\$599,250,000	2008	\$599,250,000
2009	\$619,500,000	2009	\$619,500,000
2010	\$626,047,000	2010	\$619,500,000
2011	\$620,697,000	2011	\$619,500,000
2012	\$556,100,000	2012	\$550,328,000
2013	\$643,000,000	2013*	\$554,500,000
2014	\$561,500,000	2014	\$561,500,000
2015	\$577,000,000	2015	\$561,500,000
2016	\$577,000,000	2016	\$573,332,000
2017	\$585,372,000	2017	\$0

Liquidation of Contract Authorization			
<u>Fiscal Year</u>	<u>Request</u>	<u>Fiscal Year</u>	<u>Enacted</u>
2008	\$599,250,000	2008	\$599,250,000
2009	\$619,500,000	2009	\$619,500,000
2010	\$626,047,000	2009	\$619,500,000
2011	\$620,697,000	2011	\$619,500,000
2012	\$556,100,000	2012	\$550,328,000
2013	\$643,000,000	2013*	\$554,500,000
2014	\$561,500,000	2014	\$561,500,000
2015	\$577,000,000	2015	\$561,500,000
2016	\$577,000,000	2016	\$573,332,000
2017	\$585,372,000	2017	\$0

*FY 2013 Levels were reduced to reflect a .02% A-T-B rescission to all funds. In addition, Vehicle Safety General Fund were reduced by an additional .05% for sequestration.

RESEARCH, DEVELOPMENT & TECHNOLOGY
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
BUDGET AUTHORITY
(In thousands of dollars)

		FY 2015 Actual	FY 2016 Enacted	FY 2017 Request	FY 2016 Applied
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION					
A. Research and Analysis		60,995	72,276	123,526	-
Vehicle Safety (VS)		28,500	34,600	85,850	-
Data Collection (T)		32,495	37,676	37,676	-
1. Crashworthiness		17,300	16,800	16,800	-
VS a. Safety Systems		7,400	7,400	7,400	-
VS b. Biomechanics		9,900	9,400	9,400	-
VS 2. Crash Avoidance		9,300	12,300	12,300	-
VS a. Crash Avoidance		7,400	10,400	10,400	-
VS b. Heavy Vehicles		1,900	1,900	1,900	-
3. Data Collections & Analyses (T)		32,495	37,676	37,676	-
VS a1. Crash Data Collection (T)*		500	500	500	
HS a2. Crash Data Collection (T)*		29,750	35,016	35,016	
VS b1. Fatality Analysis Reporting System (T)		-	-	-	
HS b2. Fatality Analysis Reporting System (T)		-	-	-	N/A
VS c1. National Automotive Sampling System (NASS)(T)		-	-	-	N/A
HS c2. National Automotive Sampling System (NASS)(T)		-	-	-	N/A
HS d. State Data Systems (T)		-	-	-	N/A
HS e. Special Crash Investigations (T)		-	-	-	N/A
HS f. Data Analysis Program (T)		1,666	1,651	1,651	N/A
HS g. Regulatory Analysis/Program Evaluation**		579	509	509	N/A
VS 4. Alternative Fuels Vehicle Safety		1,400	1,400	1,400	-
VS 5. Vehicle Electronics and Emerging Technology		-	3,600	54,850	-
VS 6. Vehicle Test Center - Ohio		500	500	500	-
B. Highway Safety Research		5,091	11,521	11,521	-
C. Autonomous Vehicle Development				200,000	
Subtotal		66,086	83,797	135,047	-
D. Administrative Expenses **		54,521	62,947	66,081	-
Vehicle Safety (VS)		25,993	33,968	41,886	-
Highway Safety (HS)		3,689	6,485	5,452	
Data Collection Technology		24,838	22,494	18,743	-
Total R&D = VS+HS Research and Analysis, VS+ HS Admin		63,274	86,574	344,709	-
Subtotal, Technology Investment (T)		57,333	60,170	56,419	-
Total NHTSA		120,607	146,744	401,127	-
Memo: Percentage Administrative to Total		45.2%	42.9%	16.5%	0.0%

Note: Totals may not add due to rounding.

*FARS/FastFARS, NASS, State Data Systems, Special Crash Investigation are realigned to the Crash Data Collection. In FY 2015 - 2017, NHTSA requests \$3.5M to be paid from the Vehicle Safety fund, and \$45.3M from the Highway Safety fund.

**Pro-rated share based on percentage of R&D program amounts shown above to Administrative Expenses for Vehicle Research and Behavioral Research.

This Exhibit IV-1, "Research, Development and Technology", and any related summary, fulfills the requirements of 23 USC 508 (b) – Annual Report, in effect on December 3, 2015. The Department of Transportation recognizes the changes to this requirement effected by the passage of the Fixing America's Surface Transportation (FAST) Act (P.L. 114-94; Dec. 4, 2015; 129 Stat. 1312), creating Chapter 65 – Research Planning in Subtitle III of title 49, United States Code. The Department will implement the new requirements with the FY 2018 Budget Estimates

This Page Left Intentionally Blank

SUPPLEMENTAL ATTACHMENT

**NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
FY 2017 REQUEST- NHTSA HIRING PRIORITIES
ANNUALIZED FY16 FTE**

	Annualized Office FY 2016 FTEs	New FY 2017 FTEs	New FY 2017 FTPs	Positions
Rulemaking (VS)				
Safety Standards Support	0			0 Engineers
New Car Assessment Program	0	2.5	5	Engineers
	0	2.5	5	
Enforcement (VS)				
Vehicle Safety Compliance	0			0 Engineers
	0			0 Importation Program Specialists
	0			0 Fuel Economy Program Specialist
	0	0	0	
Defects Investigation	11	7	14	Engineer
	0.5	1	2	Mathematical Statistician
	2	1	2	Data Analyst
	1	1.5	3	Investigation Coordinator
	2.5	2	4	Field Investigator
	0.5	0.5	1	Tire Specialist
	0.5	0.5	1	Child Passenger Safety Specialist
	4	2	4	Safety Defects Specialist
	3	2	4	Program analyst
	1.5	1.5	3	Writers
	0.5	0.5	1	Technical Editor
	1	0	0	Statistician
	0	2	4	Administrative Staff
	0	1	2	Record Managers
	0.5	1	2	Certified Project Manager
	28.5	23.5	47	
Research & Analysis (VS)				
Safety System	0			0
Biomechanics	0			0 Engineer
Heavy Vehicles	0			0 Engineer
Crash Avoidance	0			0 Engineer
Alternative Fuel Vehicle Safety	0			0 Engineer
Vehicle Electronics & Emerging Technology	0	10	20	Engineer
Vehicle Research and Test Facility	0			0 Engineer
	0	10	20	
NCSA				
Crash Data Collection (VS)	0			0 Crash Investigator
Crash Data Collection (HS)	0			0 Crash Investigator
Crash Data Collection (HS)				0 Program analyst
	0	0	0	
Highway Safety R&D (HS)				
Highway Safety Research	0			0 Research Psychologists
	0	0	0	
Highway Safety Grants	0			0 Highway Safety Specialists (regional program managers)
Total 2017 FTEs	28.5	36	72	

Congressional Reporting/Follow-Up to Action Plans

Task	Date Due
Highway Safety Plans	
<p>1 The Secretary shall require each State, as a condition of the approval of the State's highway safety program for that fiscal year, to develop and submit to the Secretary for approval a highway safety plan.</p> <p>2 Not later than 60 days after the date on which a State's highway safety plan is received by the Secretary, the Secretary shall review and approve or disapprove the plan.</p>	10/2015 and Beyond 10/2015 and Beyond
Cooperative Research and Evaluation	
<p>1 If the Administrator conducts the research authorized under paragraph (1), the Administrator shall submit an annual report to the Committee on Commerce, Science, and Transportation of the Senate, the Committee on Transportation and Infrastructure of the House of Representatives, and Committee on Science, Space, and Technology of the House of Representatives that - "(A) describes the progress made in carrying out the collaborative research effort; and "(B) includes an accounting for the use of Federal funds obligated or expended in carrying out the effort.</p>	Annual Requirement
Distracted Driving Study	
<p>1 Not later than 1 year after the date of enactment of the Motor Vehicle and Highway Safety Improvement Act of 2012, the Secretary shall submit a report containing the results of the study conducted.</p>	Completed
Emergency Medical Services	
<p>1 The Administrator of the National Highway Traffic Safety Administration shall provide administrative support to the Advisory Council, including scheduling meetings, setting agendas, keeping minutes and records, and producing reports.</p> <p>2 The Advisory Council shall prepare an annual report to the Secretary of Transportation regarding the Advisory Council's actions and recommendations.</p>	On-going Annual Requirement
Promotion of Vehicle Defect Reporting	
<p>1 RULEMAKING REQUIRED.—Not later than 1 year after the date of enactment of the Motor Vehicle and Highway Safety Improvement Act of 2012, the Secretary shall prescribe regulations that require passenger motor vehicle manufacturers (A) to affix information about how to submit a safety-related motor vehicle defect complaint, (B) prominently print the information within the owner's manual, and (C) to not place such information on the label required under section 3 of 15 USC 1232.</p>	9/2015

Study of Crash Data Collection	
<p>1 The Secretary shall submit a report to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives regarding the quality of data collected through the National Automotive Sampling System, including the Special Crash Investigations Program.</p> <p>2 The Administrator of the National Highway Traffic Safety Administration (referred to in this section as the “Administration”) shall conduct a comprehensive review of the data elements collected from each crash to determine if additional data should be collected. The review under this subsection shall include input from interested parties, including suppliers, automakers, safety advocates, the medical community, and research organizations.</p>	Completed Completed
National Highway Traffic Safety Administration Electronics, Software, and Engineering Expertise	
The Secretary shall establish, within the National Highway Traffic Safety Administration, a Council for Vehicle Electronics, Vehicle Software, and Emerging Technologies to build, integrate, and aggregate the Administration’s expertise in passenger motor vehicle electronics and other new and emerging technologies.	Completed
Honors Recruitment Program	
The Secretary shall establish, within the National Highway Traffic Safety Administration, an honors program for engineering students, computer science students, and other students interested in vehicle safety that will enable such students to train with engineers and other safety officials for careers in vehicle safety.	Completed
Electronic Systems Performance	
<p>Not later than 2 years after the date of enactment of this Act, the Secretary shall complete an examination of the need for safety standards with regard to electronic systems in passenger motor vehicles.</p> <p>(b) REPORT.—Upon completion of the examination under sub-section (a), the Secretary shall submit a report on the highest priority areas for safety with regard to the electronic systems to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives.</p>	Completed

Child Restraint Anchorage Systems	
<p>1 If the Secretary determines that an amendment to FMVSS Number 225 does not meet the requirements and considerations set forth in subsections (a) and (b) of section 30111 of title 49, United States Code, the Secretary shall submit a report describing the reasons for not prescribing such a standard to (A) the Committee on Commerce, Science, and Transportation of the Senate; and (B) the Committee on Energy and Commerce of the House of Representatives.</p>	3/2016
Rear Seat Belt Reminders	
<p>1 Not later than 2 years after the date of enactment of this Act, the Secretary shall initiate a rulemaking proceeding to amend Federal Motor Vehicle Safety Standard Number 208 (relating to occupant crash protection) to provide a safety belt use warning system for designated seating positions in the rear seat.</p>	Completed
<p>2 If the Secretary determines that an amendment to the standard referred to in subsection (a) does not meet the requirements and considerations set forth in subsections (a) and (b) of section 30111 of title 49, United States Code, the Secretary shall submit a report describing the reasons for not prescribing such a standard to (A) the Committee on Commerce, Science, and Transportation of the Senate; and (B) the Committee on Energy and Commerce of the House of Representatives.</p>	Undetermined
Unattended Passenger Reminders	
<p>1 Public awareness campaigns to educate drivers on the risks of leaving a child or unattended passenger in a vehicle after the vehicle motor is disengaged.</p>	FY 2014 and Beyond

CONTACT INFORMATION:

Stephen Kunze, Chief Financial Officer
1200 New Jersey Avenue, S.E., Washington, DC 20590
(202)809-3055366-3564
Stephen.Kunze@dot.gov