

# **BUDGET ESTIMATES**

**FISCAL YEAR 2018** 

# NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

SUBMITTED TO THE COMMITTEES ON APPROPRIATIONS

### This Page Left Intentionally Blank

## **Table of Contents**

<b>a</b>		
Section	1: (	verview

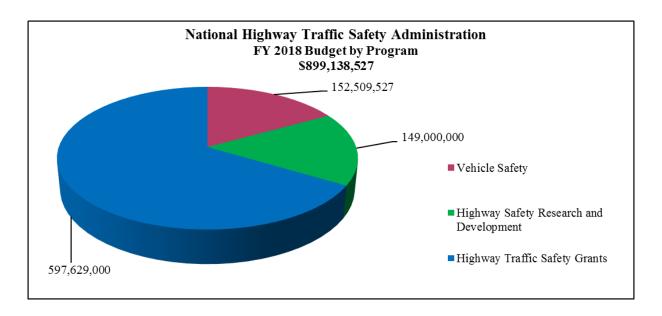
	Overview	1
	FY 2017 FTE Estimate	7
	FY 2018 FTE Estimate	8
Section	II: Budget Summary Tables	
	Comparative Statement of New Budget Authority (Exhibit II-1)	9
	Budgetary Resources by Appropriation (Exhibit II-2)	10
	Budget Authority (Exhibit II-4)	11
	Budget Outlays (Exhibit II-5)	12
	Analysis of Change Table (Appropriations, Obligation Limitation, and Exempt	
	Obligations (Exhibit II-6)	13
	Working Capital Fund (Exhibit II-7)	17
	Full-time Equivalent Employment (FTE) (Exhibit II-8)	.18
	Full-time Permanent Position (FTP) (Exhibit II-9)	19
Section	III: Budget Request by Account	
	Appropriation Language – Vehicle Safety	21
	Appropriation Language – Highway Safety	22
	Appropriation Language – Grants	23
	Administrative Provisions	24
	Vehicle Safety – Summary by Program Activity (Exhibit III-1 and 1a)	25
	Vehicle Safety Program and Performance Statement	. 27
	Vehicle Safety Detailed Justification by Program Activity	30
	Vehicle Safety Program and Financing Schedule	69
	Vehicle Safety Object Class Schedule	. 70

	Vehicle Safety Administrative Expenses Summary	. 71
	Highway Safety – Summary by Program Activity (Exhibit III-1 and 1a)	. 73
	Highway Safety Program and Performance Statement	. 75
	Highway Safety Detailed Justification by Program Activity	. 77
	Highway Safety Program and Financing Schedule	136
	Highway Safety Object Class Schedule	137
	Highway Safety Administrative Expenses Summary	138
	Highway Traffic Safety Grants – Summary by Program Activity (Exhibit III-1 and 1a)	139
	Highway Traffic Safety Grants Program and Performance Statement	141
	Highway Traffic Safety Grants Detailed Justification by Program Activity	145
	Highway Traffic Safety Grants Program and Financing Schedule	162
	Highway Traffic Safety Grants Object Class Schedule	163
	Highway Traffic Safety Grants Administrative Expenses Summary	164
	Ten-Year Appropriation History	167
Section	IV: Research, Development and Technology	
	RD&T Request (Summary) (Exhibit IV-I)	177

#### **National Highway Traffic Safety Administration**

#### **FY 2018 Budget Request**

#### Overview



The National Highway Traffic Safety Administration's (NHTSA) mission is to save lives, prevent injuries and reduce economic costs due to road traffic crashes, through education, research, safety standards and enforcement activity. NHTSA's Fiscal Year 2018 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 NHTSA remains dedicated to making them safer every day to include identifying and removing unsafe vehicles from the road. Continuing advances in automotive technology and vehicle innovation areas have created new possibilities and offer enormous safety potential.

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

- 50 percent of passenger vehicle occupants killed in crashes are unbelted;
- 30 percent of highway fatalities involve an impaired driver; and
- 94 percent of serious crashes are due to human error.

In 2015 the Nation lost 35,092 people in crashes on roadways. Additionally, the preliminary information for the first nine months in 2016 reflects an increasing trend in fatalities. In the midst of this data, NHTSA is continuing to see a prolific increase of technology and work towards ensuring these technologies add to the safety of the public. At the same time, the automotive industry is undergoing a technological revolution, one that promises to greatly improve safety and expand mobility for millions of Americans. NHTSA must maintain its leadership role in ensuring that these advanced technologies are tested and deployed safely. Finally, in the past few years, NHTSA witnessed the largest vehicle recalls in the agency's history. Rising fatalities,

advances in technologies, and several high-profile enforcement activities have raised public awareness of the importance of NHTSA's safety mission. NHTSA's \$899 million request for FY 2018 will position it to effectively pursue its mission to save lives, prevent injuries, and reduce vehicle-related crashes.

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

NHTSA's FY 2018 budget request includes \$152.5 million for Vehicle Safety, \$149 million for Highway Safety Research and Development, and \$597.6 million for Highway Traffic Safety Grants. This budget is a critical step in pursuit of NHTSA's goals that are designed to increase safety for all users of our roadways, keep our economy moving forward, and enhance our efforts to ensure automakers quickly find and fix safety defects. NHTSA can never put a price on a life lost, but NHTSA estimates that motor vehicle crashes imposed \$836 billion in economic cost and societal harm on our Nation and citizens in 2010 alone. This budget requests seeks to address these costs.

The FY 2018 budget request will allow NHTSA to advance strategies that influence the behaviors of drivers in order to reduce injuries and fatalities on our roadways, continue its efforts in rulemaking, enforcement, and vehicle research, as well as to develop and implement data-driven, workable, and self-sustaining highway safety programs. This budget request will support NHTSA's efforts and enable it to work with its partners to achieve the greatest reduction in roadway crashes, injuries, and fatalities in the most effective way possible.

#### **Priority Areas**

**OPERATIONS AND RESEARCH:** The FY 2018 Budget requests \$301.5 million in Operations and Research activities. Specific initiatives include:

#### **Vehicle Safety**

In FY 2018, NHTSA expects to build on the efforts initiated over the past few years. Safe vehicles are a vital component of preventing roadway fatalities, and NHTSA has a long history of ensuring that the vehicles on the 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 activities.

The 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 continuing the agency's other cross-cutting initiatives.

NHTSA expects to strengthen its research and evaluation on vehicle automation. The agency's top vehicle automation priority is to ensure these vehicles and their occupants are safe. Automation 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.

With alternative fuel systems of varying types and new sophisticated electronic control systems emerging in the market, NHTSA plans to expand its 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 the capability to test human interactions with these systems is also imperative.

NHTSA will support ongoing rulemakings under the Corporate Average Fuel Economy (CAFE) program. The FY 2018 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.
- Fully fund work by the National Academy of Sciences to develop a report evaluating passenger car, light-duty truck, and medium-duty passenger vehicle fuel efficiency standards.
- Continue operations and maintenance of the CAFE Management Suite including hosting, software, and contract labor costs.

#### **Highway Safety**

NHTSA will continue its focus on impaired driving and occupant protection in FY 2018. The agency will prioritize educating roadway users and community leaders to adopt safe behaviors, in conjunction with strong laws and effective law enforcement. These strategies helped to reduce fatalities to the lowest levels in reported history.

With the requested funds, NHTSA will continue to engage with 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. NHTSA will also support the Data-Driven Approaches to Crime and Traffic Safety (DDACTS) program conducted in partnership with the Department of Justice. Within the funding 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.

Also, with the requested funds, NHTSA 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, NHTSA is requesting funding for the annual *Click It or Ticket* (CIOT) mobilization in an effort to increase seatbelt use, and for the Labor Day and December anti-impaired driving campaign. The agency plans to continue program and research initiatives in the areas of drug-impaired driving and driver fatigue.

Drug-Impaired Driving – NHTSA is developing a public information and education program to inform the public about the dangers of driving after drug use that will address illegal drugs as well as medications that can impair driving. In FY 2018 NHTSA will continue to determine the appropriate information channels and target audiences in preparation for implementing the public information and education campaign. The agency will also continue to deliver improved law enforcement training to detect drug impaired drivers that was developed in FY 2016 and implemented in FY 2017, and NHTSA will continue efforts to promote and facilitate adoption of the Advanced Roadside Impaired Driving Enforcement (ARIDE) curriculum as an intermediate level of training to enhance law enforcement officers' ability to identify potentially drugimpaired drivers.

Driver Fatigue – NHTSA will continue research efforts to quantify drowsy driving by exploring methods such as those used in alcohol data imputation to better understand the magnitude of the problem and develop behavioral countermeasures. The agency will also continue research to understand the current state of drowsiness detection and alerting systems to determine which alerts are most effective. 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.

In FY 2018 NHTSA requests \$39.9 million for the National Center for Statistics and Analysis (NCSA). This amount includes the \$500,000 requested in Vehicle Safety Research funds to supplement Crash Data Collection. Funding at this level will allow NHTSA to maintain its core programs and continue implementation of the new modernized data collection systems. Key ongoing initiatives include: providing additional technical resources for traffic records systems improvements through "Go-Teams" to conduct 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 FY 2018 Budget requests \$597.6 million for Highway Traffic Safety Grants. Authorized under the Fixing America's Surface Transportation (FAST) Act, the Highway Traffic Safety Grants account continues the grant programs established under MAP-21 (P.L. 112-141). These programs include the Section 402 State and Community Highway Safety Program and the 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 under Section 405, Non-motorized Safety, to reduce pedestrian and bicycle fatalities and injuries. Additionally, the Section 2009 High Visibility Enforcement program will continue to provide funding for NHTSA's annual media campaigns.

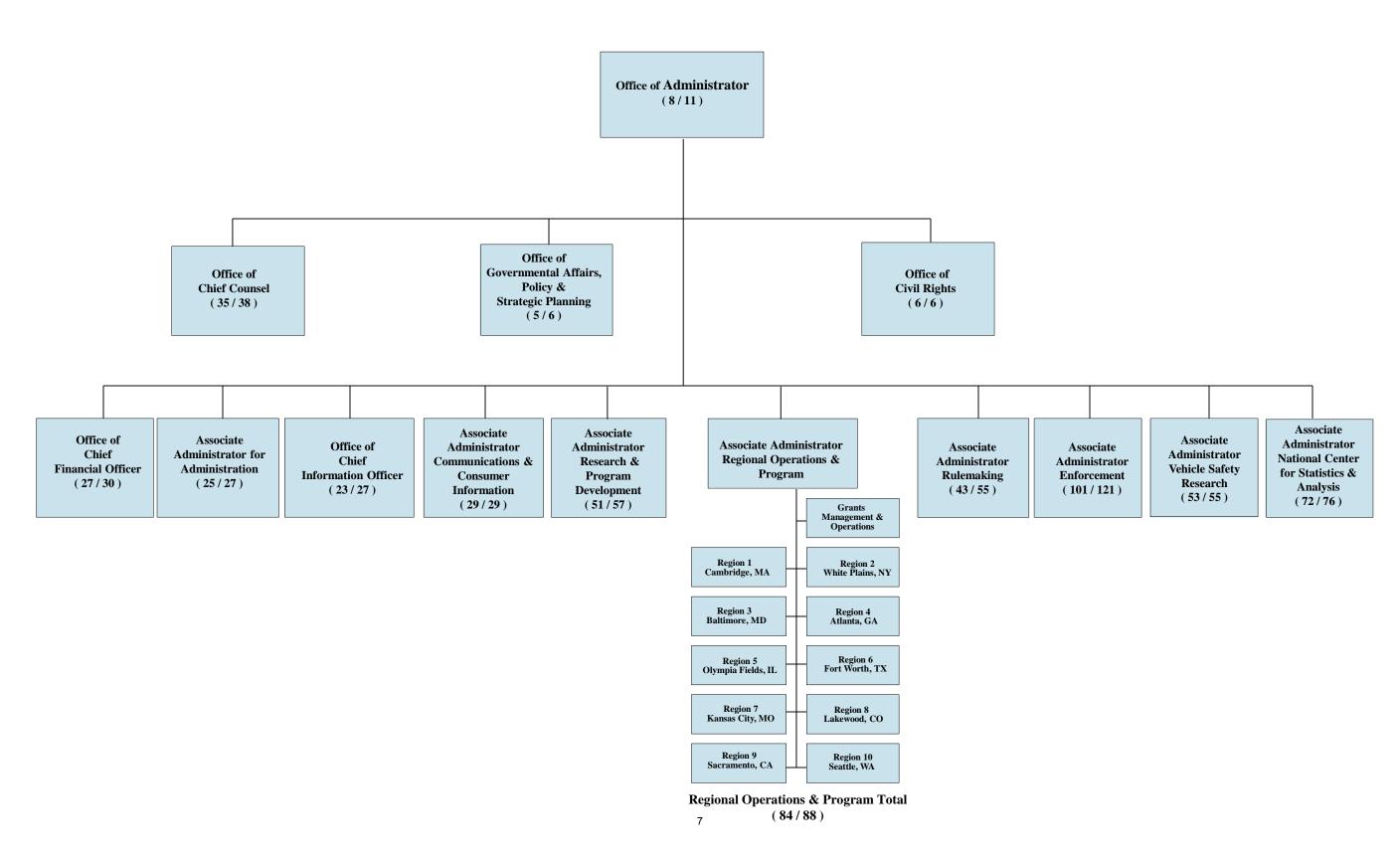
- State and Community Highway Safety Grants (Section 402): \$261.2 million is requested for the State and Community Highway Safety grants program that is the backbone of NHTSA's State highway safety initiatives. These formula grants directly support the Department's safety goals by providing flexibility 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): \$280.2 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**: \$29.9 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 Drive Sober or Get Pulled Over anti-impaired driving initiative.

#### **CONCLUSION**

NHTSA's FY 2018 budget request of \$899 million will continue to support the agency's safety programs and activities, while ensuring that the agency keeps pace with emerging roadway

safety trends, such as driver distraction and vehicle electronics. Funding at the requested level will allow NHTSA to continue helping Americans drive, ride, and walk safely.

# FY 2017 FTE Estimate National Highway Traffic Safety Administration (Total 562 FTE/626 FTP)



# FY 2018 FTE Estimate National Highway Traffic Safety Administration (Total 626 FTE/626 FTP)

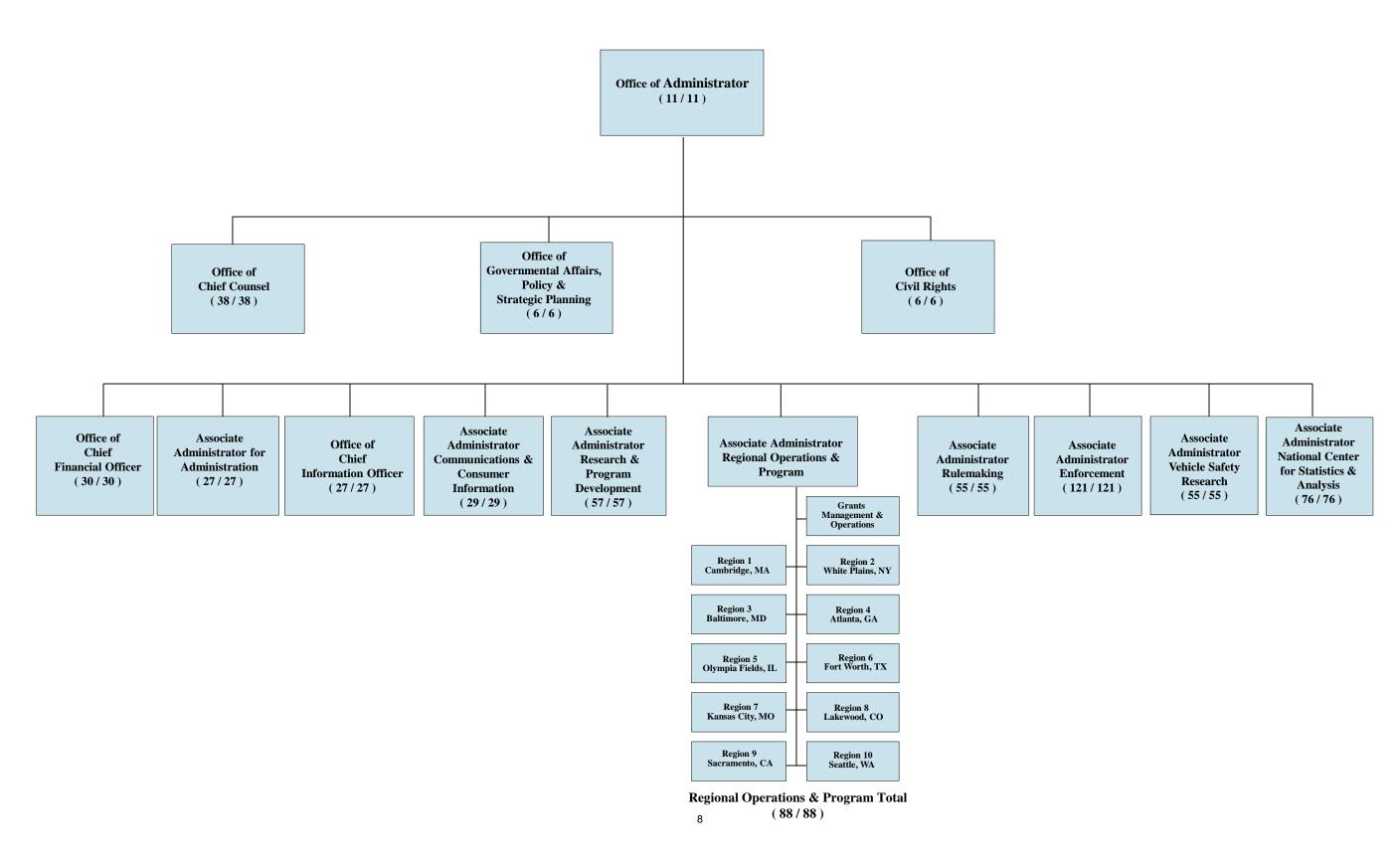


EXHIBIT II - 1

FY 2018 COMPARATIVE STATEMENT OF NEW BUDGET AUTHORITY
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
(\$000)

ACCOUNT NAME	FY 2016 ACTUAL		FY 2017 JALIZED CR	Y 2017 NACTED	FY 2018 REQUEST	
Operations and Research	\$ 29		\$ 295,138	\$ 325,975	\$	301,510
Vehicle Safety Research (GF) Rescission		152,800	152,510	180,075		152,510
Highway Safety Research & Development (TF) Rescission		142,900	 142,628	 145,900		149,000
Highway Traffic Safety Grants (TF)		664,373	 572,242	 585,372		597,629
Highway Traffic Safety Grants (TF)		573,332	572,242	585,372		597,629
Transfer from FHWA 1		91,041	-	-		-
Rescission		-	 	 -		-
TOTAL	\$	960,073	\$ 867,380	\$ 911,347	\$	899,139

1/NHTSA anticipates transfers from FHWA in FY 2017 and FY 2018 in amounts to be determined based on State penalty information. Note: Totals may not add due to rounding.

#### EXHIBIT II-2 FY 2018 TOTAL BUDGETARY RESOURCES BY APPROPRIATION ACCOUNT NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Appropriations, Obligation Limitations, and Exempt Obligations

(\$000)

ACCOUNT NAME	FY 2016 CTUAL	_	FY 2017 JALIZED CR	_	FY 2017 NACTED	FY 2018 EQUEST
Operations and Research	\$ 295,700	\$	295,138	\$	325,975	\$ 301,510
Vehicle Safety Research (GF)	152,800		152,510		180,075	152,510
Highway Safety Research and Development (TF)	142,900		142,628		145,900	149,000
Highway Traffic Safety Grants (TF)	\$ 664,373	\$	572,242	\$	585,372	\$ 597,629
Highway Traffic Safety Grants	573,332		572,242		585,372	597,629
Transfer from FHWA <sup>1</sup>	91,041		-		-	-
TOTAL	\$ 960,073	\$	867,380	\$	911,347	\$ 899,139

<sup>1/</sup>NHTSA anticipates transfers from FHWA in FY 2017 and FY 2018 in amounts to be determined based on State penalty information. Note: Totals may not add due to rounding.

#### EXHIBIT II-4 FY 2018 BUDGET AUTHORITY NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

(\$000)

ACCOUNT NAME	Mandatory/ Discretionary	Y 2016 CTUAL	FY 2017 ANNUALIZED CR		FY 2017 ENACTED		FY 2018 EQUEST
Vehicle Safety Research (GF)	D	\$ 152,800	\$	152,510	\$	180,075	\$ 152,510
Vehicle Safety Research (GF)		152,800		152,510		180,075	152,510
Highway Safety Research & Develop. (TF)	M	\$ 142,900	\$	145,900	\$	145,900	\$ 149,000
Highway Safety Research & Develop. (TF)		142,900		145,900		145,900	149,000
Highway Traffic Safety Grants (TF)	M	\$ 664,373	\$	585,372	\$	585,372	\$ 597,629
Highway Traffic Safety Grants (TF)		573,332		585,372		585,372	597,629
Transfer from FHWA <sup>1</sup>		 91,041					
TOTAL:		\$ 960,073	\$	883,782	\$	911,347	\$ 899,139
[Mandatory]		807,273		731,272		731,272	746,629
[Discretionary]		152,800		152,510		180,075	152,510

 $<sup>1/\,</sup>NHTSA\ anticipates\ transfers\ from\ FHWA\ in\ FY\ 2017\ and\ FY\ 2018\ in\ amounts\ to\ be\ determined\ based\ on\ State\ penalty\ information.$ 

# FY 2018 OUTLAYS NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION (\$000)

	M/D	FY 2016 ACTUAL	FY 2017 ANNUALIZED CR	FY 2018 REQUEST
Vehicle Safety Research (GF)	D	134,000	151,000	152,000
Highway Safety Research & Development (TF)	D	127,000	150,000	159,000
Highway Traffic Safety Grants (TF)	D	689,000	720,000	720,000
TOTAL OUTLAYS		950,000	1,021,000	1,031,000
Mandatory Outlays (M)		\$ -	\$ -	\$ -
Discretionary Outlays (D)		\$ 950,000	\$ 1,021,000	\$1,031,000

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

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

#### SUMMARY TABLE

#### Baseline Changes

Program Category	FY 2017 ANNUALIZED CR	Annualization of 2017 Pay Raises	Annualization of 2017 FTE	FY 2018 Pay Raise	Compensable Days (260)	GSA Rent	WCF Increase / Decrease	Inflation / Deflation	FY 2018 Baseline Estimate	Program Increases / Decreases	FY 2018 REQUEST
PERSONNEL RESOURCES (FTE)											
Direct Program FTE	562	_	_	-	-	_	_	-	562	64	626
Reimbursable FTE	-	-	-	-	-	-	-	-	-	-	-
Total Direct and Indirect FTE	562	-	-		=			=	562	64	626
Salaries and Benefits (11 & 12)*	90,325	437	=	1,311	-	-	-	-	92,073	10,416	102,489
Travel (21)	1,418	-	-	-	-	-	-	-	1,418	3	1,421
Transportation of Things (22)	70	=	-	-	=	-	-	-	70	-	70
GSA Rent (23)	8,166	=	-	-	=	1,129	-	-	9,295	-	9,295
Rent, Communications & Utilities (23)	11,031	=	-	-	=	-	6	-	11,037	(6,480)	4,557
Printing (24)	356	=	-	=	=	-	1	=	357	=	357
Other Services (25)	35,219	=	=	-	-	-	759	-	35,978	(8,290)	27,688
Supplies (26)	5,080	=	-	-	=	-	-	-	5,080	11	5,091
Equipment (31)	1,022	=	=	=	=	-	-	-	1,022	3	1,025
Subtotal, Administrative	152,687	437	-	1,311		1,129	766		156,330	(4,337)	151,993
VEHICLE SAFETY AND HIGHWAY SAFETY PROGRAMS	168,234	-	-	-	-	-			168,234	7,612	175,846
VS - Rulemaking	23,454	-	-	-	-	-	-	-	23,454	(934)	22,520
VS - Enforcement	18,450	-	-	-	-	-	-	-	18,450	(734)	17,716
VS - Research and Analysis	35,013	-	-	-	-	-	-	-	35,013	(1,391)	33,622
HS - Highway Safety Programs	52,317	-	-	-	-	-	-	-	52,317	9,730	62,047
HS - Research and Analysis	39,000	-	-	-	<del>_</del>	-	-	-	39,000	941	39,941
HIGHWAY TRAFFIC SAFETY GRANTS	546,459				_	_			546,459	24,841	571,300
Sec. 402 Formula Grants	243,037	_	-	=		-	_	_	243,037	18,163	261,200
Sec. 2009 High Visibility Enforcement	29,244								29,244	656	29,900
Section 405 National Priority Safety Programs	274,178		-	-	-	-		-	274,178	6,022	280,200
Section 405 Occupant Protection Grants	37,216		-	-	-	-		-	37,216	(790)	36,426
Section 405 State Traffic Safety Information System Grants	39,756	=	=	-	-	-	-	-	39,756	873	40,629
Section 405 Impaired Driving Countermeasures Grants	143,943	-	-	_	-	-	-	-	143,943	3,162	147,105
Section 405 Distracted Driving Grants	23,305	=	-	-	-	-	-	-	23,305	512	23,817
Section 405 Motorcyclist Safety Grants	4,113	=	-	-	-	-	-	-	4,113	90	4,203
Section 405 State Graduated Driver Licensing Laws	13,709	=	-	-	=	=	-	-	13,709	301	14,010
Sec 405- Non-Motorized Safety Ped/Bikes	12,136	=	-	-	=	=	-	-	12,136	1,874	14,010
Section 403h In-Vehicle Alcohol Detection Device Research	-	-	-	_	_	-	-	-	-	_	-
Subtotal, Programs	714,693		-						714,693	32,453	747,146
GRAND TOTAL	867,380	437		1,311		1,129	766		871.022	28.116	899,138

<sup>\*</sup>The payraise for Salaries and Benefits is 2.1 percent for FY 2017 and 1.9 percent for FY 2018.

# 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	FY 2017 ANNUALIZED CR	Annualization of 2017 Pay Raises	Annualization of 2017 FTE	FY 2018 Pay Raise	Compensable Days (260)	GSA Rent	WCF Increase / Decrease	Inflation / Deflation	FY 2018 Baseline Estimate	Program Increases / Decreases	FY 2018 REQUEST
PERSONNEL RESOURCES (FTE)											
Direct Program FTE	312	-	-	-	-	-	-	-	312	51	363
Reimbursable FTE	-	-	-	-	-	-	-	-	-	-	-
Total Direct and Indirect FTE	312	-	-	-	-	-	-	-	312	51	363
Salaries and Benefits (11 & 12)*	50,305	243	-	729	_	-	_	_	51,277	8,302	59,579
Travel (21)	537	-	-	-	-	-	-	-	537	1	538
Transportation of Things (22)	70	-	-	-	-	-	-	-	70	-	70
GSA Rent (23)	1,518	-	-	-	-	1,113	-	-	2,631	-	2,631
Rent, Communications & Utilities (23)	3,478	-	-	-	-	-	6	-	3,484	3	3,487
Printing (24)	356	-	-	-	-	-	1	-	357	-	357
Other Services (25)	15,303	-	-	-	-	-	500	-	15,803	(7,849)	7,954
Supplies (26)	3,004	-	-	-	-	-	-	-	3,004	7	3,011
Equipment (31)	1,022	-	-	-	-	-	-	-	1,022	3	1,025
Subtotal, Administrative	75,593	243	-	729	-	1,113	507		78,185	467	78,652
PROGRAMS											
Rulemaking	23,454	-	-	-	-	-	-	-	23,454	(934)	22,520
Enforcement	18,450	-	-	-	-	-	-	-	18,450	(734)	17,716
Research and Analysis	35,013	-	-	-	-	-	-	-	35,013	(1,391)	33,622
Subtotal, Programs	76,917	-	-	-	-	-	-	-	76,917	(3,059)	73,858
TOTAL, VEHICLE SAFETY RESEARCH	152,510	243	-	729	-	1,113	507	-	155,102	(2,592)	152,510

<sup>\*</sup>The payraise for Salaries and Benefits is 2.1 percent for FY 2017 and 1.9 percent for FY 2018.

## 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

#### **Baseline Changes**

	FY 2017						WCF			Program	
Program Category	ANNUALIZED CR	Annualization of 2017 Pay Raises	Annualization of 2017 FTE	FY 2018 Pay Raise	Compensable Days (260)	GSA Rent	Increase / Decrease	Inflation / Deflation	FY 2018 Baseline Estimate	Increases / Decreases	FY 2018 REQUEST
PERSONNEL RESOURCES (FTE)											
Direct Program FTE	166	-	-	-	-	-	_	-	166	9	175
Reimbursable FTE	-	-	-	-	-			-	-	-	-
Total Direct and Indirect FTE	166	-	-	-	-	-	-	-	166	9	175
Salaries and Benefits (11 & 12)*	27,649	134	-	401	-	_	-	_	28,184	1,514	29,698
Travel (21)	505	-	-	-	-	-	-	-	505	1	506
Transportation of Things (22)	-	-	-	-	-	-	-	-	-	-	-
GSA Rent (23)	6,221	-	-	-	-	15	-	-	6,236	-	6,236
Rent, Communications & Utilities (23)	7,553	-	-	-	-	-	-	-	7,553	(6,483)	1,070
Printing (24)		-	-	-	-	-	-	-	-	-	-
Other Services (25)	7,307	-	-	-	-	-	259	-	7,566	(144)	7,422
Supplies (26)	2,076	-	-	-	-	-	-	-	2,076	4	2,080
Equipment (31)	-	-	-	-	-	-	-	-	-	-	-
Subtotal, Administrative	51,311	134	-	401	-	15	259	-	52,120	(5,108)	47,012
PROGRAMS											
Highway Safety Programs	52,317	-	-	-	-	-	-	-	52,317	9,730	62,047
Research and Analysis - NCSA	39,000	-	-	-	-	-	-	-	39,000	941	39,941
Subtotal, Programs	91,317	-	-		-	-	-	-	91,317	10,671	101,988
TOTAL, HIGHWAY SAFETY RESEARCH & DEVELOPMENT	142,628	134	_	401	_	15	259	_	143,437	5,563	149,000

<sup>\*</sup>The payraise for Salaries and Benefits is 2.1 percent for FY 2017 and 1.9 percent for FY 2018.

## 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 2017 ANNUALIZED CR	Annualization of 2017 Pay Raises	Annualization of 2017 FTE	FY 2018 Pay Raise	Compensable Days (260)	GSA Rent	WCF Increase / Decrease	Inflation / Deflation	FY 2018 Baseline Estimate	Program Increases / Decreases	FY 2018 REQUEST
PERSONNEL RESOURCES (FTE)											
Direct Program FTE	84	_	_	-	_	_	-	-	84	4	88
Reimbursable FTE		-	-	-	-	-	-	-	-	-	-
Total Direct and Indirect FTE	84	-	-	-	-	-	-	-	84	4	88
Salaries and Benefits (11 & 12)*	12,371	60	-	181	-	_	-	-	12,612	600	13,212
Travel (21)	376	-	-	-	-	-	-	-	376	1	377
Transportation of Things (22)		-	-	-	-	-	-	-	-	-	-
GSA Rent (23)	427	-	-	-	-	1	-	-	428	-	428
Rent, Communications & Utilities (23)	-	-	-	-	-	-	-	-	-	-	-
Printing (24)		-	-	-	-	-	-	-	-	-	-
Other Services (25)	12,609	-	-	-	-	-	-	-	12,609	(297)	12,312
Supplies (26)	-	-	-	-	-	-	-	-	-	-	-
Equipment (31)	-	-	-	-	-	-	-	-	-	-	-
Subtotal, Administrative	25,783	60	-	181	-	1			26,025	304	26,329
PROGRAMS											
Sec. 402 Formula Grants	243,037	-	-	_	-	_	-	_	243,037	18,163	261,200
Sec. 2009 High Visibility Enforcement	29,244	-	-	-	-	-	-	-	29,244	656	29,900
Section 405 National Priority Safety Programs	274,178	-	-	-	_		-		274,178	6,022	280,200
Section 405 Occupant Protection Grants	37,216	-	-	-	-	-	-	-	37,216	(790)	36,426
Section 405 State Traffic Safety Information System Grants	39,756	-	-	-	-	-	-	-	39,756	873	40,629
Section 405 Impaired Driving Countermeasures Grants	143,943	-	-	-	-	-	-	-	143,943	3,162	147,105
Section 405 Distracted Driving Grants	23,305	-	-	-	-	-	-	-	23,305	512	23,817
Section 405 Motorcyclist Safety Grants	4,113	-	-	-	-	-	-	-	4,113	90	4,203
Section 405 State Graduated Driver Licensing Laws	13,709	-	-	-	-	-	-	-	13,709	301	14,010
Sec 405- Non-Motorized Safety Ped/Bikes	12,136	-	-	-	-	-	-	-	12,136	1,874	14,010
Section 403h In-Vehicle Alcohol Detection Device Research		-	-	-	-	-	-	-	-	-	-
Subtotal, Programs	546,459	-	-	-		-	-		546,459	24,841	571,300
TOTAL, HIGHWAY TRAFFIC SAFETY GRANTS	572,242	60		181	_	1			572,484	25,145	597,629

<sup>\*</sup>The payraise for Salaries and Benefits is 2.1 percent for FY 2017 and 1.9 percent for FY 2018.

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

	Y 2016 CTUAL	Y 2017 ALIZED CR	FY 2018 REQUEST			
DIRECT:	\$ 13,041	\$ 13,013	\$	14,003		
SUBTOTAL	 13,041	 13,013		14,003		
TOTAL	\$ 13,041	\$ 13,013	\$	14,003		

#### NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION PERSONNEL RESOURCE - SUMMARY TOTAL FULL-TIME EQUIVALENT EMPLOYEES

	FY 2016 ACTUAL	FY 2017 ANNUALIZED CR	FY 2018 REQUEST
DIRECT FUNDED BY APPROPRIATION			
Operations and Research	459	478	538
Vehicle Safety Research (GF)	294	312	363
Highway Safety Research and Development (TF)	165	166	175
Highway Traffic Safety Grants (TF)	79	84	88
SUBTOTAL, DIRECT FUNDED	538	562	626
TOTAL FTEs	538	562	626

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

	FY 2016 ACTUAL	FY 2017 ANNUALIZED CR	FY 2018 REQUEST
Operations and Research	463	538	538
Vehicle Safety Research (GF) Highway Safety Research and Development (TF)	300 163	363 175	363 175
Highway Traffic Safety Grants (TF)	81	88	88
SUBTOTAL, DIRECT FUNDED	544	626	626
TOTAL POSITIONS	544	626	626

## This Page Left Intentionally Blank

# NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION OPERATIONS AND RESEARCH

For expenses necessary 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 title 49, United States Code, \$152,509,527, of which \$20,000,000 shall remain available through September 30, 2019.

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

For payment of obligations incurred in carrying out the provisions of 23 U.S.C. 403, section 4011 of the Fixing America's Surface Transportation (FAST) Act, and chapter 303 of title 49, United States Code, \$149,000,000, to be derived from the Highway 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 2018, are in excess of \$149,000,000, of which \$143,700,000 shall be for programs authorized under 23 U.S.C. 403 and section 4011 of the FAST Act and \$5,300,000 shall be for the National Driver Register authorized under chapter 303 of title 49, United States Code: *Provided further*, That within the \$149,000,000 obligation limitation for operations and research, \$20,000,000 shall remain available until September 30, 2019, and shall be in addition to the amount of any limitation imposed on obligations for future years.

# HIGHWAY TRAFFIC SAFETY GRANTS (LIQUIDATION OF CONTRACT AUTHORIZATION) (LIMITATION ON OBLIGATIONS) (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, \$597,629,000, to be derived from the Highway 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 2018, are in excess of \$597,629,000 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 \$261,200,000 shall be for "Highway Safety Programs" under 23 U.S.C. 402; \$280,200,000 shall be for "National Priority Safety Programs" under 23 U.S.C. 405; \$29,900,000 shall be for "High Visibility Enforcement Program" under 23 U.S.C. 404; \$26,329,000 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)(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)(8) within five days.

# 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.

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.

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.

#### NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION OPERATIONS AND RESEARCH VEHICLE SAFETY RESEARCH

Summary by Program Activity
Appropriations, Obligation Limitations, and Exempt Obligations
(\$000)

	_	EY 2016 CTUAL	_	FY 2017 JALIZED CR	_	FY 2018 EQUEST	_	HANGE 17 - FY 2018
Rulemaking	\$	23,510	\$	23,454	\$	22,520	\$	(934)
Enforcement		18,494		18,450		17,716		(734)
Research and Analysis		35,100		35,013		33,622		(1,391)
Administrative Expenses		75,696		75,593		78,652		3,059
TOTAL, VEHICLE SAFETY (GF)	\$	152,800	\$	152,510	\$	152,510	\$	
FTE's:								
Direct Funded		294		312		363		51
Reimbursable, allocated, other		_		-		-		-

#### **EXHIBIT III - 1a**

### NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION SUMMARY ANALYSIS OF CHANGE FROM FY 2017 TO FY 2018 Appropriations, Obligation Limitations, and Exempt Obligations

### OPERATIONS AND RESEARCH VEHICLE SAFETY RESEARCH (\$000)

	Change from FY 2017 to FY 2018	Change from FY 2017 to FY 2018
ITEM	\$000	FTE
Vehicle Safety Base	152,510	312
Adjustments to Base		
FY 2018 #FTE Per Program Change		51
Annualization of FY 2017 Pay Raise	243	
Annualization of FY 2017 FTE	-	
FY 2018 Pay Raise	729	
GSA Rent	1,113	
WCF	507	
Inflation	-	
Program Increases/Decreases	467	
Other Services	-	
Subtotal, Adjustment to Base	3,059	51
Program Increases/Decreases	(3,059)	-
Total Net Increases/Decreases	0	51
FY 2018 REQUEST	152,510	363

#### **VEHICLE SAFETY**

#### **Program and Performance Statement**

The FY 2018 budget request includes \$152.51 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.

FY 2018 – Vehicle Safety \$152,509,527

Program Activity	FY 2017 ANNUALIZED CR	FY 2018 REQUEST	Change FY 2017 - 2018
Rulemaking	\$23,454,000	\$22,520,400	(\$933,600)
Enforcement	\$18,450,000	\$17,715,900	(\$734,100)
Vehicle Safety Research and Analysis National Ctr. For Statistics and	\$34,515,000	\$33,121,600	(\$1,393,400)
Analysis	\$498,000	\$500,000	\$2,000
Vehicle Safety Administrative	\$75 500 507	¢70 (51 (07	¢2 050 100
Expenses Total	\$75,592,527 <b>\$152,509,527</b>	\$78,651,627 <b>\$152,509,527</b>	\$3,059,100 <b>\$0</b>

#### **Rulemaking Programs:**

\$22,520,400

The activities funded through the Rulemaking programs will support the Department's efforts to promote safety and innovation through the issuance of Federal Motor Vehicle Safety Standards (FMVSS) that govern newly-manufactured vehicles and related safety equipment. In FY 2018, Rulemaking programs will enhance safety by addressing potential safety issues related to advanced crash avoidance technologies, vehicle electronics, alternative fuel and electric vehicles, motor coaches, pedestrians, and child passengers. 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 allow NHTSA to continue its efforts in revolutionizing the NCAP program by incorporating new, world-leading, human-like crash test dummies; new, more stringent injury criteria; new tests; and an update of the current overall 5-star rating system to include crashworthiness, crash avoidance, and pedestrian protection ratings. Additionally, the Rulemaking program issues automotive fuel economy and efficiency standards and 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:**

\$17,715,900

The activities in NHTSA's Enforcement programs support the Department's emphasis on safety 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 ensuring that manufacturers conduct recalls to remove unsafe motor vehicles and equipment from the highways. The Enforcement program is working to enhance NHTSA's current system for notification of open recalls to include text messaging and promoting greater awareness of recalls and the defect identification process through an annual outreach campaign. The 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. The agency 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.

Requested funding will also 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; expand CAFE-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. Lastly, the requested funding level 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 effectively inform the public of critical information.

#### **Vehicle Safety Research and Analysis:**

\$33,121,600

The Vehicle Safety Research and Analysis programs support the Department's efforts to improve motor vehicle safety through research and development in areas including automation; 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 levels will also support NHTSA's efforts 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. The FY 2018 request includes \$500 thousand in Vehicle Safety funding to supplement the \$35.86 million provided in Highway Safety funding for crash data collection. This funding will allow NHTSA to continue its data modernization project and support NCSA's crash data collection efforts.

#### **Detailed Justification for Rulemaking Programs**

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

#### FY 2018 – RULEMAKING - BUDGET REQUEST

Program Activity	FY 2017 ANNUALIZED CR	FY 2018 REQUEST	Change FY 2017 - 2018
	<b>#2.007.000</b>	<b>**</b> • • • • • • • • • • • • • • • • • •	<b>\$74.000</b>
Safety Standards Support	\$2,095,000	\$2,041,000	-\$54,000
New Car Assessment Program	\$13,717,000	\$13,034,400	-\$682,600
Fuel Economy Program	\$7,642,000	\$7,445,000	-\$197,000
Total	\$23,454,000	\$22,520,400	(\$933,600)

The Rulemaking programs support the Departments efforts to improve safety 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 2018, NHTSA requests \$22.52 million for the Rulemaking program. The funding level requested is for three main programs: safety standards support, new car assessment, and fuel economy. Funding will support the Department's safety priority through regulatory reviews and deregulation activities involving the safety standards support program. It also supports maintaining the 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. Additionally, this funding will also enhance the New Car Assessment Program, including crash avoidance safety and pedestrian safety for consumers, and continually incentivize vehicle safety improvements through market forces, ultimately preventing injuries and saving lives. Finally, these funding levels allow NHTSA to conduct new rulemakings to establish 2022-2025 CAFE standards and to support related compliance activities.

The funds request will also enable NHTSA to maintain its core programs and advance key safety initiatives including:

- Reviewing the regulatory portfolio and identifying opportunities to reduce regulation and control regulatory costs.
- Enabling and supporting the safe development of automated driving systems, including self-driving vehicles.
- Expanding capabilities for advances in safety technology to reduce fatalities and injuries due to pedestrian impacts.
- Expanding NHTSA's 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.
- Continuing progress on mandated regulations, such as those to enhance motor coach and child passenger safety in MAP-21 and tire safety in the FAST Act.
- Continuing to conduct analytical work to support light vehicle fuel economy rulemaking for model years 2022-2025.

RULEMAKING	Safety Sta	ndards Support
	·	
	 	GTT 1 1 1 GTT

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Safety Standards Support	\$2,095,000	\$2,041,000	(\$54,000)

#### What Is This Program and Why Is It Necessary?

The activities funded through the Safety Standards Support program will support the Department's safety priority through regulatory reviews and deregulation involving Federal Motor Vehicle Safety Standards (FMVSSs) and other regulations to identify opportunities for reducing regulation and controlling regulatory costs in alignment with the President's Executive This includes funding to conduct cost-teardown studies of motor vehicle Orders. countermeasures or equipment, and conduct research to inform regulatory decisions. Other funds may be required for conducting additional testing in response to public comments on proposed rules or to address petitions for reconsideration.

NHTSA's Safety Standards Support program provides the technical support to develop FMVSSs and other regulations in the key areas of crash avoidance, crashworthiness and consumer information. This support includes test method development to modernize existing standards or promulgate new ones, determination of injury reduction benefits and product testing to establish baseline performance. This program also promotes adoption of United States Federal motor safety standards internationally, and will continue to support Congressional mandates associated with MAP-21 and the FAST Act.

#### What does this funding level support?

In FY 2018, NHTSA requests \$2.04 million for the Safety Standards Support program. Motor vehicle technology is becoming increasingly complex and more knowledge and expertise are needed to inform policy decisions. As the ability of motor vehicles to sense and respond to the driving environment increases, there is a greater need to modernize standards that keep pace with technology. As the technology becomes more complex, the rulemaking activities must be more sophisticated and informed in order to support this technology. It is imperative NHTSA maintain its resources to meet these challenges because the traditional issues associated with crash avoidance (e.g. tires), and crashworthiness (e.g. air bags), still require focus and attention to ensure consumers purchase safe vehicles and that safety standards do not limit the innovation and development of safety technologies.

Funding at this level will support NHTSA's continued efforts on mandated regulations, such as those to enhance motor coach and child passenger safety authorized by MAP-21, as well as to continue development of life-saving rulemakings, such as creating a pathway for the safe implementation of automated vehicle systems. For FY 2018, these activities include:

- Considering the following areas for deregulatory actions:
  - o Rear visibility requirements for light vehicles
  - o Electronic stability control for heavy vehicles
  - Airbag on/off switches
  - Minimum sound levels for vehicles
  - Seat belt anchorage testing apparatus
  - o Exemptions for small manufactures to produce replica vehicles
- 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. NHTSA will also work to harmonize FMVSSs with the United Nations Global Technical Regulation (GTR) No. 13 on hydrogen and fuel cell vehicles. Additionally, the agency will 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, continue working toward improving motor coach and heavy truck vehicle safety.
- NHTSA will consider whether regulatory activity is needed on advanced crash avoidance technologies, such as automated vehicle systems.
- NHTSA will also consider advancing child safety rulemakings to upgrade the frontal
  impact sled test, add child restraint side impact protection and improve the usability of
  child restraint anchorage systems.
- NHTSA will continue to support consumer information standards including theft prevention.
- NHTSA will consider modernizing portions of our lighting standard to permit innovation in the area of adaptive driving-beam headlights.

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

With 35,092 fatalities due to motor vehicle crashes in 2015, there is much work to be done improving vehicle safety. By contrast, motor vehicle safety has improved over the years due to improved vehicle designs, many of which were a result of FMVSSs developed through domestic rulemaking, and international engagement to promote and harmonization with the FMVSS. The public will be served by having vehicles that meet or exceed a minimum level of safety performance, as evidenced by people avoiding injuries and surviving crashes which may have been un-survivable in the past. The funding is requested to keep our safety standards on pace with the rapid changes and complexities in crash avoidance and automated vehicle technology.

New C	ar Asses	sment Pro	gram (1	NCAI	2)
-------	----------	-----------	---------	------	----

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
New Car Assessment	\$13,717,000	\$13,034,400	(\$682,600)

The New Car Assessment Program (NCAP) informs consumers of the safety performance of new vehicles so that they can make informed purchasing decisions. Through market forces driven by consumer interest in vehicle safety, NCAP encourages vehicle manufacturers to voluntarily improve the safety of their vehicles above the minimum Federal safety standards to achieve NCAP's coveted 5-star ratings. By providing safety ratings, based on a series of NHTSA-performed crash tests and advanced crash avoidance technology performance evaluations on new vehicles, NCAP improves vehicle safety and saves lives. The program is one of the most effective tools that NHTSA has to carry out its mission of saving lives and preventing injuries. Since its introduction in 1978 in response to Title II – Motor Vehicle Information and Cost Savings Act of 1972, NCAP has a proven legacy of driving vehicle safety improvements rapidly and effectively.

To maintain the relevance and effectiveness of NCAP over the years, NHTSA periodically updates 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 that are equipped in new vehicles are additionally recommended to consumers (not part of the 5-star safety rating system) if they are certified to pass 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 are provided on our website, www.nhtsa.gov. Vehicle safety ratings are also provided at the point of sale on the window sticker that is applied to new vehicles.

Each fiscal year, NHTSA uses appropriated funds to support program operations to include collecting new vehicle information; crash testing of new vehicles; performance testing of advanced crash avoidance technology systems on new vehicles; reviewing test data; disseminating safety rating information to the public; and educating consumers about adult and child occupant protection related to vehicle safety.

A key performance measures for NHTSA is the percent of new vehicles rated by NCAP for a given new model year vehicle fleet. For FY 2017, NHTSA is on track to rate approximately 90 percent of the model year 2017 vehicle fleet (based on projected sales volume) by NCAP. NHTSA projects similar performance by NCAP on new model year fleet in FY 2018.

#### What does this funding level support?

In FY 2018, NHTSA requests \$13.03 million for the NCAP program. Requested funding will support vehicle procurement, testing, oversight, and execution of the numerous operations of NCAP as well as the dissemination of safety information to the American public. More specifically, the requested funding will support the following activities:

- Crash testing of new vehicles to provide safety ratings information as part of the 5-star safety rating system on approximately 90 percent of the new vehicle fleet.
- Performance testing of new vehicles equipped with certain advanced crash avoidance technology systems and give credit to those that meet NCAP's performance testing criteria.
- Ease of Use assessments for child safety seats, with ratings posted on www.nhtsa.gov and in NHTSA's publications.
- 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.
- Outreach and education campaigns to continually promote the program's 5-star safety rating system and increase consumer awareness of vehicle safety.
- NCAP infrastructure operations and maintenance, including software and contract labor costs.

On December 16, 2015, the agency published a "Request for comment" (RFC) notice announcing NHTSA's plan to significantly enhance the tools and techniques that will be used by NCAP when implemented to better evaluate the safety of vehicles, generate new 5-star safety ratings system and stimulate the development of even safer vehicles for the American consumers. Enhancements that will revolutionize the NCAP program include: (1) incorporating new, world-leading, human-like crash test dummies and new, more stringent injury criteria; (2) adding a unique test for severe frontal oblique crashes; (3) adding rear seat occupant protection 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 the program's current overall 5-star safety ratings system to include crashworthiness, crash avoidance, and pedestrian protection ratings. The December 2015 announcement was also a response, in part, to Congressional urging for a more stringent vehicle

safety testing and ratings program due to a large percentage of vehicles sold in the U.S. currently achieving top safety ratings. Over the years, NCAP has been very effective in driving vehicle safety improvements through market forces as evidenced by how manufacturers responded quickly to the last major program upgrade in 2010. More than 80 percent of new vehicles tested achieved 4- or 5-star ratings after 3 years of implementation.

NHTSA is considering issuing a second notice to the December 2015 RFC notice that seeks comment on new information for completing the technical basis of the planned changes in the December 2015 RFC.

The FY 2018 request will also be used for the above mentioned changes to NCAP by conducting additional testing needed on the following planned areas:

- Frontal oblique offset crash testing using Test Device for Human Occupant Restraint (THOR), the most advanced human-like crash test dummy in the world, which will have the potential to save more lives and prevent more injuries in this type of crash.
- Full-frontal barrier crash testing using the 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 WorldSID, to drive improved safety protection in side impact crashes.
- Testing that replicates 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 5,376 pedestrian deaths and estimated 70,000 injuries that occurred in 2015.
- Testing of six additional life-saving crash avoidance technologies including: rear automatic braking, lower beam head light performance, semi-automatic headlamp beam switching, amber rear turn signal lamps, blind spot detection, and pedestrian automatic emergency braking.

# 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 is not only measured by the number of injuries prevented and lives saved, but also by the consumers' use of NCAP star ratings (also known as the 5-star safety ratings) to influence their vehicle purchasing decisions. It is their interest that incentivizes vehicle manufacturers to respond to program changes by making continuing 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 NHTSA continues to push forward its mission to save lives and reduce injuries. In 2015, the last year which data is available, 35,092 people died on U.S. roads and over 2.44 million were injured. This is equivalent to 96 deaths every day and more than 279 injuries every hour. The requested funding amount in FY 2018 will enable NHTSA to fulfill its mission to save lives, reduce injuries, and prevent vehicle-related crashes.

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Fuel Economy (CAFE)	\$7,642,000	\$7,445,000	(\$197,000)

The Department of Transportation has been setting Corporate Average Fuel Economy (CAFE) 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. CAFE 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 CAFE structure by mandating vehicle attribute-based standards as well as ratable and substantial increases in fuel economy. The overall light duty fleet must reach 35 mpg by 2020 and be set at maximum feasible levels. In addition, the Act authorizes and directs the Department to issue standards for medium and heavy duty vehicles.

The CAFE program plays a key role in the nation's energy policy and addresses energy independence and energy security. In addition, the program provides consumers with savings at the pump.

#### What does this funding level support?

In FY 2018, NHTSA requests \$7.45 million for the Fuel Economy program. The requested funding will be used to provide support for future rulemaking programs, including the passenger car and light-duty truck CAFE standards for 2022-2025. In 2012, NHTSA issued final passenger car and light-duty truck CAFE standards for 2017-2025. However, because EISA requires NHTSA to establish CAFE standards for no more than five years at a time, standards for 2022-2025 were augural. NHTSA will conduct new rulemaking to establish 2022-2025 passenger and light-duty truck CAFE standards. The agency will continue to improve the fuel economy programs, conducting new assessments of technology effectiveness and cost and the capability of industry to implement new technologies, and assessments of the factors considered and approaches used to estimate feasibility and impacts of potential standards. Requested funding will be used to cover part of the publication cost for rulemaking documents. The budget request also supports the CAFE Management Suite, which allows for a standardized method to receive compliance data from the Environmental Protection Agency (EPA) and manufacturers. The

Management Suite makes the data easily accessible to NHTSA's fuel economy rulemaking and compliance programs and certain data available on a web page to the public.

The FY 2018 budget request will support work in the following areas of fuel economy regulation required by EISA:

- Conduct analytical work and document drafting support for the development of model years 2022-2025 standards.
- Fully fund 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 development and maintenance of the CAFE Management Suite including hosting, software and contract labor costs.

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

The CAFE program plays a key role in the nation's energy policy and addresses energy independence and energy security. The CAFE program also has significant economic impacts. The funding will provide NHTSA with resources to ensure that the CAFE analysis for model years 2022-2025 standards will be based on sound science and empirical evidence.

## **Detailed Justification for Enforcement Programs**

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

## FY 2018 - ENFORCEMENT - BUDGET REQUEST

Program Activity	FY 2017 ANNUALIZED CR	FY 2018 REQUEST	Change FY 2017 - 2018
Vehicle Safety Compliance	\$8,869,000	\$8,454,900	(\$414,100)
venice salety complance	ψ0,002,000	ψο,τυτ,σου	(ψ+1+,100)
Safety Defects Investigation	\$9,428,000	\$9,112,000	(\$316,000)
Odometer Fraud	\$153,000	\$149,000	(\$4,000)
Total	\$18,450,000	\$17,715,900	(\$734,100)

# What Is This Program and Why Is It Necessary?

In FY 2018, NHTSA requests \$17.72 million for Enforcement programs. Activities in NHTSA's Enforcement programs support DOT safety priorities 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 law; and by ensuring that manufacturers conduct recalls to remove unsafe motor vehicles and equipment from the nation's highways. With this funding, NHTSA would be able to:

- 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 compliance testing of regulated equipment, including items such as child seats, motorcycle helmets, tires, seat belts, and brake hoses.
- Continue outreach to foreign vehicle and equipment manufacturers and focused enforcement of imported motor vehicle equipment.
- Identify defective products and get them quickly recalled and remedied.
- Continue the agency's expansion of the capabilities of the Active Case Management System (ACMS), and the Corporate Information Factory (CIF) to streamline

- workflow and data/records management as well as support new processes in analysis of incoming early warning and complaint data.
- Provide contract support for the ACMS/CIF enhancements and safety defects investigations.
- Maintain a dedicated source of training for the Office of Defects Investigations (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 support import and Corporate Average Fuel Economy (CAFE) enforcement activities.
- Continue to target odometer fraud that often masks the actual condition of used vehicles, thereby increasing safety risks associated with their use and could hide the need for necessary safety maintenance and repairs.

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Vehicle Safety Compliance	\$8,869,000	\$8,454,900	(\$414,100)

The Office of Vehicle Safety Compliance (OVSC) conducts activities that contribute directly to NHTSA's mission to save lives, prevent injuries, and reduce economic costs due to road traffic crashes. Failure of motor vehicles and items of motor vehicle equipment (tires, child safety restraints, motorcycle helmets, etc.) to comply with Federal Motor Vehicle Safety Standards (FMVSSs) can lead to fatalities, injuries and property damage. The program conducts investigations through testing, inspection, analysis, and cooperation with other Government entities, namely U.S. Customs and Border Protection (CBP)<sup>1</sup>, to identify motor vehicles and motor vehicle equipment that do not meet applicable FMVSS and other regulations and cannot be lawfully imported or sold in the U.S. The program develops objective and repeatable test procedures and maintains contracts with test facilities to perform testing of regulated motor vehicles and equipment. When a noncompliance is confirmed, this program helps ensure that the manufacturer or importer recalls the vehicle or equipment and provides a remedy for the noncompliance.

The program also helps fulfill NTHSA's responsibilities to administer various regulations. The import and certification division registers importers of nonconforming vehicles and reviews conformity data those importers submit on the vehicles they import. In 2016, OVSC processed 93 applications for new or renewed registered importers, and the division processed and issued DOT bond release letters for 294,500 conformity packages. The division also processes import eligibility petitions submitted by registered importers and requests for permission to temporarily import nonconforming vehicles for research or demonstration purposes. Additionally, in 2016 OVSC processed and granted 378 temporary importation applications for vehicles imported under Box 7 on the HS-7 Declaration form. The division operates and maintains a tire test facility in San Angelo, California, which is utilized both by NHTSA and commercial entities to collect data necessary to publish consumer information related to tires. This program processed approximately 180 plant code applications in 2016. Finally, the program enforces the Corporate Average Fuel Economy (CAFE) regulations by ensuring proper vehicle classification, collecting civil penalties, tracking available credits and monitoring the transfer and trading of credits.

In 2015, 35,092 people died on U.S. roads and over 2.44 million people were injured in motor vehicle related accidents. Based on a recent study that examined motor vehicle crashes in 2010, the annual economic costs of these crashes totals \$242 billion, including costs associated with lost productivity, medical costs, legal and court costs, emergency service costs (EMS), insurance administration costs, congestion costs, property damage, and workplace losses. Public revenues

\_

<sup>&</sup>lt;sup>1</sup> In 2016, NHTSA responded to approximately 750 port inquiries

paid for roughly 7 percent of all motor vehicle crash costs, costing tax payers \$18 billion in 2010, the equivalent of over \$156 in added taxes for every household in the United States. These costs continue today.<sup>2</sup>

The work OVSC performs is essential to enforce compliance with minimum safety standards for motor vehicles and motor vehicle equipment which prevent fatalities, injuries, and property damage. NHTSA estimates that 613,501 lives have been saved from 1960 through 2012 as a result of vehicle safety technologies associated with FMVSS.<sup>3</sup> 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 and increased costs to every U.S. household.

## **What Does This Funding Level Support?**

In FY 2018, NHTSA requests \$8.45 million for the Vehicle Safety Compliance program. Funding at this level will allow NHTSA to complete critical testing of new vehicles for compliance with crashworthiness and crash avoidance standards; to complete critical testing of regulated motor vehicle equipment; processing applications related to the importation of Canadian and grey market vehicles; and to continue enforcement of CAFE regulations for passenger vehicles and light trucks.

As previously noted, the costs to society resulting from motor vehicle crashes is substantial. The evidence that this program works is two-fold. Over the past three years, approximately 475 compliance recalls affecting over 6.8 million motor vehicles or motor vehicle equipment were submitted to NHTSA. OVSC's compliance programs influence manufacturers to submit recalls directly and indirectly. Without the compliance programs in place, the number of noncompliance products used by the public would be substantially greater, and the ability of vehicles and motor vehicle equipment to reduce injuries and fatalities would be diminished.

The FY 2018 funding level will enable OVSC to continue to work with CBP to help prevent noncompliant and/or defective vehicles and equipment from entering the United States as part of the statutory requirements of MAP-21 and the FAST Act. Full implementation of CBP's new Automated Commercial Environment/International Trade Data System will allow OVSC to more effectively address the safety problems associated with the significant increase of imported motor vehicles and motor vehicle equipment. CBP's electronic "Single Portal" system uses agency-defined business rules to identify potentially noncompliant products when entries are made and before the products are released into U.S. commerce. Funding will be used to further develop agency procedures to more effectively identify and prevent the release of noncompliant

\_

<sup>&</sup>lt;sup>2</sup> Blincoe, L. J., Miller, T. R., Zaloshnja, E., & Lawrence, B. A. (2015, May). *The economic and societal impact of motor vehicle crashes*, 2010. (*Revised*) (Report No. DOT HS 812 013). Washington, DC: National Highway Traffic Safety Administration.

<sup>&</sup>lt;sup>3</sup> Kahane, C.J. (2015, January). Lives saved by vehicle safety technologies and associated Federal Motor Vehicle Safety Standards, 1960 to 2012 – Passenger cars and LTVs – With reviews of 26 FMVSS and the effectiveness of their associated safety technologies in reducing fatalities, injuries, and crashes. (Report No. DOT HS 812 069). Washington, DC: National highway Traffic Safety Administration.

or defective products and to more efficiently investigate importers that violate agency regulations.

OVSC will continue to support the CAFE 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 CAFE 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 the following objectives in FY 2018:

- 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 compliance testing of regulated equipment, including items such as child seats, motorcycle helmets, tires, seat belts, and brake hoses.
- Continue outreach to foreign vehicle and equipment manufacturers and focused enforcement of imported motor vehicle equipment.
- Continue to monitor new entrants into motor vehicle and equipment manufacturing both inside and outside the U.S. for compliance with the FMVSS.
- Continue enforcement of existing CAFE standards and regulations, including the system for trading of compliance credits.
- 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 motor vehicle and motor vehicle equipment 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.

ENFORCEMENT	<b>Defects Investigation</b>

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Safety Defects Investigations	\$9,428,000	\$9,112,000	(\$316,000)

NHTSA's Office of Defects Investigation (ODI) investigates potential vehicle defects through analysis of trends in data received by ODI, and where appropriate, seeks recalls of vehicles and vehicle equipment that pose an unreasonable safety risk. Vehicle and equipment recalls have risen sharply in the past three years due to increased ODI oversight and actions taken with manufacturers. In 2016 alone, ODI processed over 1,000 vehicle and equipment recalls and influenced the recall of over 79 million vehicles. 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 the voluminous amount of Early Warning Reporting (EWR) data submitted by manufacturers each quarter pursuant to the requirements of the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act. Also, ODI investigators screen on average more than 75,000 complaints annually from vehicle owners regarding recalls and investigations. The Defects Investigation program analyzes the data it receives to determine whether anomalies or trends exist that potentially indicate the presence of a safety-related problem. ODI then applies a riskbased approach to determine whether to open a defect investigation.

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.

#### What does this funding level support?

In FY 2018, NHTSA requests \$9.11 million for the Defects Investigation program. 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 2018 will support continuation of the following activities:

- Screening consumer complaints of potential safety-related defects with motor vehicles or motor vehicle equipment including child safety seats and tires.
- Conduct investigations into allegations of safety-related defects, including 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.
- Support stakeholder outreach efforts 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.
- Expeditiously review all manufacturer input to the Early Warning System to help determine trends and inform investigations.

Beyond the core duties described above, NHTSA will continue to build upon the enhancements and restructuring of ODI. 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 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 ODI 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 2018 will be used to customize the capabilities of the CIF and provide specialized training to enhance usability by defect screeners and investigators.

Additionally, NHTSA will improve the quality of the screening and investigation processes, seek to increase the vehicle recall completion rates, 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 both Federal staff and contracted resources. 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 external sources.

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

ODI's aggressive screening for defect trends and investigation of possible defects, mitigates millions of consumers each year being subjected to unreasonable safety risks when operating their vehicles or using motor vehicle equipment. Without NHTSA's investigative process, 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.			

**ENFORCEMENT** Odometer Fraud

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Odometer Fraud Investigations	\$153,000	\$149,000	(\$4,000)

## 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.

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, 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.

## What does this funding level support?

In FY 2018, NHTSA is requesting \$149 thousand on for the Odometer Fraud program. The FY 2018 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 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. 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 2018 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 277 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 2018 – VEHICLE SAFETY RESEARCH AND ANALYSIS - BUDGET REQUEST

Program Activity	FY 2017 ANNUALIZED CR	FY 2018 REQUEST	Change FY 2017 - 2018
Safety Systems	\$7,382,000	\$7,131,000	(\$251,000)
Biomechanics	\$9,378,000	\$8,947,800	(\$430,200)
Heavy Vehicles	\$1,895,000	\$1,831,000	(\$64,000)
Crash Avoidance	\$10,375,000	\$9,911,800	(\$463,200)
Alternative Fuels Vehicle Safety	\$1,396,000	\$1,349,000	(\$47,000)
Vehicle Electronics and Emerging Technology	\$3,591,000	\$3,469,000	(\$122,000)
Vehicle Research and Test Facility  Total	\$498,000 <b>\$34,515,000</b>	\$482,000 <b>\$33,121,600</b>	(\$16,000) ( <b>\$1,393,400</b> )

In FY 2018, NHTSA requests \$33.12 million for Vehicle Safety Research and Analysis activities. The request will allow NHTSA to build upon research implemented in FY 2017 and continue those projects in support of agency decisions. These activities aim to enhance the safety and security of automotive electronic control systems while supporting the safe adoption of vehicle automation technologies. This funding level will enable the Vehicle Safety Research and Analysis programs to keep pace with modern technologies and any potential safety issues they may pose.

The requested funding also allows NHTSA to continue research projects for emerging safety areas associated with safety systems that protect vehicle occupants in the event of a crash and alternative fuel vehicles, for addressing new technologies in the areas of crash avoidance and

heavy vehicles, and improving NHTSA's ability to evaluate vehicles at its facilities for research purposes and for potential defects. By continuing to support current projects, the agency will be able to accelerate the safe deployment of technologies, and support agency decisions in a number of areas including heavy vehicle crash avoidance systems, new occupant protection standards for adults and children, and the completion of several Congressional mandates.

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Safety Systems	\$7,382,000	\$7,131,000	(\$251,000)

The Safety Systems division 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 evaluating new crash safety concepts as well as developing and upgrading test procedures. 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 and sizes. Activities in NHTSA's Safety Systems program provides information to support agency decision making and specifically address the Department's highway safety fatality goals.

#### What does this funding level support?

In FY 2018, NHTSA requests \$7.13 million for Safety Systems research. This funding level will enable NHTSA to continue research on advanced restraint systems for older and obese occupants. The agency has also completed a roadmap for evaluating occupant safety in automated vehicles. NHTSA will utilize this roadmap to develop predictive engineering tools to evaluate safety systems for alternative occupant seating positions. Research conducted during FY 2018 will emphasize rear seat occupants, optimized restraint design, and 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 NHTSA to pursue the following activities in FY 2018:

- Begin computer modeling, simulation studies, and provide testing, to leverage private/public partnerships in order to understand the safety implications for occupants of new light-weighted, fuel efficient vehicle designs.
- Continue the evaluation of restraint concepts for occupants of automated vehicles that may not be in a standard automotive seating posture. Refine the Global Human Body Models as necessary to support accurate simulation for nontraditional seating positions.
- Complete research to support test procedure refinement and fleet assessment for frontal oblique crashes.
- Conduct preliminary testing with the THOR 5<sup>th</sup> percentile female dummy in full frontal and frontal oblique test conditions. Evaluate the dummy's response in driver, right front passenger, and rear seating positions.
- Continue testing and analysis of occupant restraint countermeasures for obese and older occupants.
- Evaluate the safety potential for using vehicle to vehicle communications and active safety sensor systems to integrate and optimize the performance of crash safety countermeasures.
- Conduct preliminary testing of an advanced 10-year-old child dummy.
- Continue research to reduce injuries from occupant contact with seat backs and other surfaces in the rear seat compartment.
- Continue research to develop test procedures and demonstrate countermeasures to reduce occupant ejections through roof openings.
- Continue testing of the WorldSID 5<sup>th</sup> percentile female dummy in side pole and side Moving Deformable Barrier (MDB) test conditions.
- Initiate rear impact testing with the BioRID dummy.
- Purchase advanced crash test dummies including advanced 5<sup>th</sup> percentile female, 10-year-old, and 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?

Safety Systems research has partnered with industry to demonstrate the crash safety of lightweight carbon fiber B-pillars and demonstrated the safety potential of rear seat air bags and adaptive restraint systems. New test procedures have been developed for improving occupant safety in frontal oblique crashes and child restraints in side impact crashes. The automotive industry is already utilizing these test procedures to enhance the safety performance of new vehicle systems. Research conducted in FY 2018 will support public safety in the areas of vehicle automation, frontal, side, and rear crash safety, occupant containment, and occupant restraint designs for diverse occupants.

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Biomechanics	\$9,378,000	\$8,947,800	(\$430,200)

The Biomechanics program conducts real-world data collection, experimental- and computer modelling-based 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. The Biomechanics 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 to support agency priority programs (e.g. NCAP) and specifically address the Department's efforts to improve safety and achieve reductions in the number of roadway fatalities.

#### What does this funding level support?

In FY 2018, NHTSA requests \$8.95 million for the Biomechanics research program. Biomechanics research program is a highly complex area of research requiring a high level of expertise that provides state-of-the art test devices, tools and injury criteria that can be used to improve vehicle safety and reduce injuries and fatalities resulting from car crashes. Funding at the requested level is necessary to continue the development, evaluation, documentation, and public release of new adult frontal and side impact dummies, new frontal child dummies, and a rear impact dummy. Funding is also required 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 safety programs. Additionally, funding is needed to support continued vulnerable occupant (e.g. children, older occupants, obese) injury research and associated needs for test dummies, mathematical human models, and Finally, funding is required to support the development, evaluation, and iniury criteria. application of human body models for use in virtual studies of the latest advances in vehicle crashworthiness and restraint system technologies with an emphasis on the study of automated vehicles.

Specifically, the requested funding will allow NHTSA to pursue the following activities that provide tools and data that can directly support vehicle safety improvements in the field:

- Development, evaluation, documentation and public release of the THOR 50<sup>th</sup> percentile male and 5<sup>th</sup> percentile female adult frontal dummies and the WorldSID 50<sup>th</sup> percentile male and 5<sup>th</sup> percentile female adult side impact dummies.
- Complete computational modeling efforts to include evaluation of new and existing dummy and human body models; evaluation and application of new human (5<sup>th</sup> percentile female and 50<sup>th</sup> percentile and 95<sup>th</sup> percentile male adult occupants including models representing older occupants and occupants of varying body mass index (BMI)) and dummy (e.g., THOR 50<sup>th</sup> percentile and 5<sup>th</sup> percentile) models; analysis of real-world injury conditions via crash reconstruction of Crash Injury Research and Engineering Network (CIREN) crash cases; and the demonstrated application of advanced mathematical models in crashworthiness research.
- Complete computational modeling efforts (human, vehicle, restraint/vehicle systems) to support assessment of human/injury response associated with vehicle configurations and operational modes being considered for automated vehicles and associated studies to investigate new/unique injury causation scenarios and injury mitigation strategies.
- Development, evaluation, documentation, and public release of advanced 6-year old and 10-year old dummies.
- Evaluation, documentation, and public release of pedestrian head-forms, upper leg-forms, and lower leg-forms.
- Evaluation, documentation, and public release of an advanced rear impact dummy and associated whiplash injury criteria.
- Continue field data collection of serious injury cases with emphasis on newer vehicles as
  part of the 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 the understanding of factors associated with serious
  injuries.
- Continue research on injury mechanisms/tolerance and anthropometry of vulnerable occupants through experimental and mathematical studies aimed at developing unique injury criteria, concepts for mathematical human body models, and physical dummies.
- 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. The Biomechanics Test Database has over 12,000 tests worth of data that is widely used by academia, industry, and government.

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

The Biomechanics research program has made significant contributions to safety by developing publicly available data, tools, techniques, and procedures that NHTSA and industry have and will continue to use to understand how occupants are injured in crashes and what systems are protecting them. Below are some recent accomplishments:

- Developed injury criteria, such as the new brain injury criterion (BrIC) and associated risk functions, for use with current dummies so that the agency and vehicle manufacturers can better understand brain injury in crashes.
- Public release of CIREN dataset of detailed injury and medical data associated with seriously injured motor vehicle crash occupants. Roughly 300 cases are added to the public dataset each fiscal year and provide an early insight into the types and causes of injuries that continue to occur in new vehicles as a result of car crashes.
- Test tools for incorporation into NCAP or regulation such as the Q3s side impact test dummy in FMVSS no. 213 and implementation of THOR 50th and WorldSID 50th male dummies in NCAP.
- Development, demonstrated application, and public release of mathematical models such as detailed human body models, a brain injury model, and dummy-based models such as the THOR 50<sup>th</sup> percentile male.
- NHTSA's Biomechanics Test Database, which includes over 12,000 NHTSA-funded or acquired tests, is used by the agency, academia, and industry for injury assessment and criteria development.

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Heavy Vehicles	\$1,895,000	\$1,831,000	(\$64,000)

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 motor coach has increased significantly over the last decade and such growth is forecasted to continue. According to the American Trucking Association (ATA) and IHS Global Insight, overall freight tonnage will grow 23.5 percent from 2013 to 2025. The number of traffic fatalities involving heavy vehicles (defined here as vehicle with a gross vehicle weight rating above 10,000 pounds) account for more than 10 percent of all fatalities, and unfortunately the number is growing as a percent of all traffic fatalities. Over the past decade, there have been an average of 3,800 fatalities and over 400,000 police-reported crashes involving heavy vehicles each year. 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 damage 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 Vehicle 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, motor coaches, and many other types of buses. Research will continue 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 frequency and severity of these types of crashes.

In addition to their importance as stand-alone safety systems, these heavy vehicle technologies form some of the basic building blocks of highly automated vehicles, thus by researching them, NHTSA will be able to leverage this knowledge and apply it to automated vehicles as well.

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 decisions.

Heavy vehicles continue to be a significant factor in vehicle crashes. The transport of goods across the United States is dependent on the growing fleet of heavy trucks. Also, motor coaches 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, motor coach, and other buses.

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

In FY 2018, NHTSA requests \$1.83 million for the Heavy Vehicles research program. 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 forward collision warning (FCW), and automatic emergency braking (AEB). NHTSA projects safety improvement opportunities with heavy vehicle crash avoidance systems and is pursuing research to support future agency decisions related to existing and emerging crash avoidance technologies on heavy vehicle platforms.

Additional research on crash warning systems will be performed to evaluate driver-vehicle interface challenges and the integration of multiple safety systems for the purpose of optimizing overall effectiveness while minimizing distraction.

The research to be performed in FY 2018 will result in the following:

- Completing research to develop draft objective test procedures and performance metrics for Automatic Enhanced Braking (AEB) systems for both single unit trucks as well as tractor trailers.
- Completing 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
- Enhanced understanding of crash avoidance driver interface requirements for commercial truck and bus drivers.
- Follow on research into unique cybersecurity challenges associated with heavy vehicles.

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

The Heavy Vehicle Crash Avoidance program has made important contributions to NHTSA's agency decisions 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 motor coaches. 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 future decisions on this very promising technology.

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Crash Avoidance	\$10,375,000	\$9,911,800	(\$463,200)

The automotive industry has made significant progress in the development of advanced technologies intended to prevent and/or mitigate crashes. In NHTSA's programs, the agency uses the term "crash avoidance" or "advanced driver assistance" systems to mean lower levels of automation, where the human driver is still performing the driving task but automation assists them in terms of warnings or temporary interventions to provide safety benefits if and when needed. In the Society of Automotive Engineers (SAE) International's taxonomy (SAE J3016), these systems correspond to SAE Levels 0 and 1.

Today's crash avoidance systems rely on sensors such as radar, LIDAR, camera, ultrasonic, and other systems to detect potential collisions with other vehicles, pedestrians, or objects and then warn the driver to take appropriate action. Advanced systems may also automatically apply brakes or provide steering inputs to avoid or mitigate the crash if the driver's actions (in response to an alert) are delayed or insufficient. Crash avoidance systems address several common crash scenarios including: forward collisions; collisions during backing-up; lane and roadway departures; and head-on collisions. Such systems can also be leveraged to enhance safety and convenience during "normal" driving conditions through features such as lane centering and traffic-jam (or low-speed) assist.

NHTSA has identified the need for increased emphasis on crash avoidance technologies with significant potential to reduce fatalities and injuries by preventing the crash from occurring; significantly reducing the severity of crashes through automatic braking or steering interventions; or by providing timely warnings to the driver. The rapid advance of crash avoidance safety systems will radically change the design and performance of automobiles over the next decade. Further, these systems are precursors, and necessary building blocks, for highly automated vehicles, in which automation goes beyond "assisting the driver" to "performing the driving task for the driver." Through this program, NHTSA research topics related to higher levels of automation primarily under the "Vehicle Electronics and Emerging Technologies" program area.

These crash avoidance and advanced driver assistance systems present unique research challenges. 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 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), surrogate strikeable vehicle testing, test tracks, and instrumented vehicles.

A major emphasis of the NHTSA Crash Avoidance Research program is to better understand both the near- and long-term impacts of advanced technology safety systems. NHTSA's crash avoidance research is focused in the following areas:

- Through market research and industry outreach, identify leading-edge safety technologies that may help drivers avoid a crash or reduce crash severity.
- Evaluate customer acceptance, system reliability, possible driver adaption over time, and overall performance of crash avoidance technologies using field trials, controlled closed-course testing, driving simulators, and other means.
- Conduct analyses using real-world crash data to estimate safety performance of production vehicles equipped with crash avoidance technologies versus those without such equipment.
- Develop objective, repeatable, and efficient test procedures for evaluating the performance of crash avoidance technologies.
- Evaluate the effectiveness of driver-vehicle interface (DVI) systems for alerting the driver to potential collision threats and soliciting an appropriate driver response.
- Estimate the overall safety benefits of crash avoidance technologies using a combination of
  information sources and analyses techniques including; real-world crash data; test track
  performance results; field test evaluations; driver simulator results; and computer
  modeling.

#### What does this funding level support?

In FY 2018, NHTSA requests \$9.91 million for the Crash Avoidance research program. 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 encompass the following key projects:

- Continue research in assessing modern crash avoidance systems that include collision avoidance and mitigation technologies that react to vehicles and pedestrians.
- Complete field operational tests into researching the real-world experiences with available crash avoidance technologies through leveraging partnerships with OEMs that offer telematics connectivity to field units.
- Continue retrospective safety benefits assessment of modern day crash avoidance technologies via innovative data analytics approaches.

- Building upon past knowledge to initiate new human factors research into drivers' interaction with emerging driver assistance systems and evolving driver-vehicle interface approaches in relation to their impact on the real-world safety effectiveness of these systems.
- Continue research into the use of observational and naturalistic driving data to improve agency's understanding in factors that impact distracted driving. The agency will also evaluate new vehicle systems relative to the distracted driving guidelines to ensure that these new technologies do not introduce new distractions for the driver that could present new safety concerns.
- Complete research into seat belt interlock systems and initiate new research in new advancements in modern vehicle technologies such as electronic mirrors.
- Initiate research into 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 policy decisions related to passenger vehicle crash avoidance. The light vehicle crash avoidance program is engaged in a large body of research on driver assistance technologies that present safety warnings to drivers; can take control of the vehicle in crash imminent situations; 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 pedestrians. In the coming year, NHTSA's research in crash avoidance technology will continue to focus on identifying emerging safety technologies, partnering with industry to develop more efficient and comprehensive testing methods, and enhancing our understanding of vehicle-driver interface issues; and longterm safety impacts of these advanced technologies. Through planned research in FY 2018, NHTSA will be leveraging advanced evaluation methods involving hardware-in-the-loop systems, driving simulators, computer modeling, and increasingly automated testing methods all with a focus of improving the efficiency, thoroughness and accuracy of our crash avoidance evaluation programs. The output of this work will help automotive manufacturers and suppliers with improving their products through more accurate and efficient product evaluations, and provide insights for developing programs to promote adoption of crash avoidance systems.

#### **RESEARCH AND ANALYSIS**

#### **Alternative Fuels Vehicle Safety**

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Alternative Fuel Vehicle Safety	\$1,396,000	\$1,349,000	(\$47,000)

# 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 of new test procedures to evaluate the unique safety considerations for these evolving vehicle types. Vehicle safety evaluations 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 considered.

NHTSA is continuing the development of objective safety performance tests to support a global technical requirement for electric vehicles. NHTSA completed preliminary test procedure development for lithium-ion electric vehicles and is currently updating these test procedures based on international feedback. The agency will be conducting fleet testing using these test procedures to evaluate their impact on vehicle design and safety performance. NHTSA research is evaluating enhanced performance tests to ensure the highest levels of safety for future CNG and hydrogen vehicles. NHTSA must be at the forefront of research to assess the safety of these alternative fuel vehicles, and to develop safety performance requirements.

#### What does this funding level support?

In FY 2018, NHTSA requests \$1.35 million for the Alternative Fuels Vehicle Safety research program. Specifically, the requested funding will allow the agency to pursue the following activities:

- Continue fleet safety validation testing of high voltage traction battery systems in support of harmonized requirements.
- Thermal Propagation testing at the pack and full vehicle level to assess test procedure suitability and evaluate performance criteria.
- Battery Management System functionality including all levels of charging.
- Continue the development of lithium ion battery diagnostics that can detect damage prior to battery fire initiation.
- Update the market trend and standards gap analysis report from 2013.
- Finalize updated safety performance test procedures for CNG and hydrogen gas containers.
- Initiate small fleet testing program for CNG containers.

# 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 is partnering with industry and other federal agencies to develop appropriate safety levels for these alternative fuel vehicles.

RESEARCH AND ANALYSIS	Vehicle Electronics and Emerging	Technologies
-----------------------	----------------------------------	--------------

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Vehicle Electronics and Emerging Technology	\$3,591,000	\$3,469,000	(\$122,000)

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. On the full automation spectrum, highly automated vehicles refer to automated driving systems that perform the full dynamic driving task on behalf of the driver. To keep pace with these rapidly changing and dynamic areas, NHTSA will need to continue researching fundamental topics to facilitate industry's 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 conducts research to support agency decisions and advance the safe deployment of highly In addition, this program performs research in emerging vehicle automated vehicles. technologies with respect to electronics systems safety and vehicle cybersecurity. These areas were outlined as high priorities for research in NHTSA's 2016 report to Congress titled "Electronic Systems Performance in Passenger Motor Vehicles." In addition, cybersecurity has been identified by members of Congress as well as other leaders as a critical area to address as vehicles become increasingly reliant on advanced electronic systems, software and connectivity.

In FY 2018, the Vehicle Electronics and Emerging Technologies program will build upon research completed in FY 2017 and initiate new projects to close identified gaps in support of agency decisions on automated vehicles, vehicle electronics reliability, safety-critical system software assessment, 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 researching, identifying and mitigating potential and new hazards that may arise from the increased 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 which transfer increasing levels of the dynamic driving task from the human drivers to the automated driving system. This division's work encompasses all fundamental control systems (e.g. 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, software, and artificial intelligence. 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 including 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.

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. NHTSA will continue to conduct research on challenges related to the technical, human factors, safety assurance, testing and validation of higher levels of road vehicle automated driving systems to support future agency decisions on safety and cybersecurity considerations for vehicle control systems.

#### What does this funding level support?

In FY 2018, NHTSA requests \$3.47 million for the Vehicle Electronics and Emerging Technologies program. Funding provided in FY 2018 will allow NHTSA to pursue the following activities:

- Continue the development and enhancement of capabilities to facilitate in depth testing of vehicle electronic hardware and software systems.
- Continue the 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.
- Continue research with key stakeholders, including the automotive industry, standards setting organizations, and government agencies to refine safety principles for highly automated vehicles and develop of test procedures and performance criteria for these systems.
- Complete initial human factors research on how a driver can safely transition between automated and manual (driver) operation of the vehicle.
- Build 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.
- Support the development of test procedures for new crash avoidance technologies that support automation.
- Initiate preliminary research to assess and develop test procedures for non-traditional vehicles.

#### 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 industry's safe testing and deployment of highly automated vehicles, address cybersecurity issues resulting from increased connectivity of modern vehicles, and identify new risks that may

arise in emerging vehicle electronics before they are in production. Through advanced, proactive and collaborative research, these challenges can 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. Agency data gathering and strategic planning efforts as well as incoming research results will continue to guide agency research priorities in this area.

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Vehicle Test Center - Ohio	\$498,000	\$482,000	(\$16,000)

The Vehicle Research and Test Center (VRTC) is NHTSA's in-house research, development, test and evaluation facility located in East Liberty, Ohio. Research and testing activities conducted at the VRTC support agency decisions and actions with respect to new vehicle systems and technologies; agency consumer information programs; test dummy development; injury criteria development; advanced research into cutting edge technologies; and safety issues that require quick reaction, including defect investigations. 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 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. In FY 2018, NHTSA will procure equipment needed to conduct research and analysis of advanced emergent technologies, electronics, cyber security, and reliability assessments to support agency decisions and actions in these areas and support defect investigations. 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.

#### What does this funding level support?

In FY 2018, NHTSA requests \$482 thousand for the Vehicle Research and Test Center program. High priority research programs that will be conducted at VRTC in FY 2018 include research supporting the critical area of automated vehicles, including research into new test approaches and methods that can be applied to evaluate the safety of highly automated vehicles. High priority research also includes research to support improvements in frontal impact child safety, test procedure development for advanced technology and control systems, cyber security, defect investigations, and new sophisticated electronic control systems emerging in the market. VRTC will also use FY 2018 funding to procure equipment necessary to support these critical

automotive safety areas. 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 over the past 40 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. The 2018 request will enable the VRTC to maintain and update 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.

# OPERATIONS AND RESEARCH VEHICLE SAFETY PROGRAM AND FINANCING SCHEDULE

	FY 2016	FY 2017	FY 2018
Description	Actual	Annualized CR	Request
Obligations by Program Activity			
Rulemaking	23,743,702	23,454,000	22,520,400
Enforcement	18,718,239	18,450,000	17,715,900
Research and Analysis	35,476,672	35,013,000	33,621,600
Administrative Expenses	72,240,581	75,592,527	78,651,627
Total Direct Obligations	150,179,194	152,509,527	152,509,527
Reimbursable Program	-	-	-
Total new obligations	150,179,194	152,509,527	152,509,527
Budgetary Resources			
Unobligated balance brought forward, Oct 1	5,355,395	9,144,284	9,144,284
Resources available from recoveries	-	-	-
Anticip Recov prior year unpaid obligations unexpired	-	-	-
Unobligated balance brought forward, Oct 1 - Expired			
Unobligated balance available (total)	5,355,395	9,144,284	9,144,284
Budget Authority			
Appropriation (disc.)	152,800,000	152,509,527	152,509,527
Appropriations transferred from other accts (disc)	132,000,000	-	-
Appropriations permanently reduced (disc.)	_	_	_
Appropriation (total)	152,800,000	152,509,527	152,509,527
- · · · · · · · · · · · · · · · · · · ·	, ,	, ,	, , ,
Spending authority from offsetting collections (disc.)			
Collected		-	-
Expired Collections	-	-	
Spending authority from offsetting collections (disc.) (total)	-	-	-
<u>-</u>			
Total budgetary resources (disc and mand)	158,155,395	161,653,811	161,653,811
Change in Obligated Balance			
Unpaid obligations, brought forward, October 1 (gross)	72,878,300	90,605,774	92,612,536
Obligations incurred (gross) - Unexpired accounts	152,800,000	152,509,527	152,509,527
Obs Bal: Obligations Incurred: Expired Accounts	-	-	-
Obligations incurred (gross) - Outlays (gross)	(135,072,526)	(150,502,765)	(149,235,300)
Recoveries of prior year unpaid obligations, unexpired accts (-)		-	-
Recoveries of prior year unpaid obligations, expired accts (-)	-	-	
Unpaid obligated balance, end of year (gross)	90,605,774	92,612,536	95,886,763
Outlays (disc) (gross)			
Outlays from new discretionary authority	85,765,300	88,703,210	89,450,000
Outlays from discretionary balances	49,307,226	61,799,555	59,785,300
Total outlays (gross)	135,072,526	150,502,765	149,235,300

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

Description	FY 2016 Actual	FY 2017 Annualized CR	FY 2018 Request
Direct Obligations			
Personnel Compensation			
Full-time permanent	35,019,260	41,124,000	48,800,000
Other than full-time permanent	-	-	-
Other personnel compensation	1,341,391	1,430,000	1,400,000
Total personnel compensation	36,360,651	42,554,000	50,200,000
Civilian personnel benefits	10,864,130	7,750,000	9,400,000
Travel and Transportation of Persons	437,257	500,000	500,000
Transportation of things	-	-	-
Rental payments to GSA	2,226,791	2,000,000	2,000,000
Communications, utilities, and miscellaneous charges	1,101,767	1,000,000	1,000,000
Advisory and assitance services	17,322,986	14,000,000	13,000,000
Other services from non-Federal sources	63,613,840	68,705,027	60,409,527
Other goods and services from Federal sources	7,342,718	6,000,000	6,000,000
Operation and maintenance of equipment	730,606	1,000,000	1,000,000
Supplies and materials	1,741,131	2,000,000	2,000,000
Equipment	4,446,353	4,000,000	4,000,000
Grants and subsidies	3,990,964	3,000,000	3,000,000
Total new obligations	150,179,194	152,509,027	152,509,527

NHTSA
FY 2018 VEHICLE SAFETY ADMINISTRATIVE EXPENSES

	FY 2017	FY 2018	Change
<b>Program Activity</b>	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Salaries and Benefits	\$50,304,466	\$59,578,838	\$9,274,372
Travel	537,000	538,000	\$1,000
Transportation of Things	70,000	70,000	-
Rent, Communications & Utilities	4,996,000	6,117,689	\$1,121,689
Printing	356,000	357,000	\$1,000
Other Services	15,303,061	7,954,100	(\$7,348,961)
Supplies	3,004,000	3,011,000	7,000
Equipment	1,022,000	1,025,000	\$3,000
Unallocated	-	-	-
<b>Total Administrative Expenses</b>	\$75,592,527	\$78,651,627	\$3,059,100
FTE (includes indirect FTE)	312	363	51

#### **Administrative Expenses**

In FY 2018, NHTSA's Vehicle Safety request includes \$78.65 million for the administrative expenses category. Costs associated with this category include the salaries and benefits for NHTSA employees who directly work on or indirectly provide support to the Vehicle Safety programs together with other normal business expenses such as personnel operations, facilities management, parking management, printing and graphics, mail operation and dockets management operations, building security, utilities and building maintenance, voice, cable and wireless communications, Disability Resource Center, substance abuse awareness and testing, and procurement and acquisition services.

The FY 2018 budget request includes baseline changes from FY 2017 for the following: (1) 1.9 percent pay raise for 2018; (2) adjustments to GSA rent; and (3) an increase for an estimated one percent inflation to administrative expenses. NHTSA will continue to distribute administrative expenses using a methodology based primarily on direct FTE allocation for the following categories: salaries and benefits; travel; transportation of things, rent, printing, supplies, equipment; and other services.

Additionally, NHTSA payments for centralized administrative and support services for DOT's Working Capital Fund will total \$14 million in FY 2018. The Vehicle Safety share of this total is \$7.13 million.

### This Page Left Intentionally Blank

#### 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 2016 ACTUAL	_	TY 2017 UALIZED CR	_	FY 2018 EQUEST	FY	HANGE 2017 - FY 2018
Highway Safety Programs	\$	52,443	\$	52,317	\$	62,047	\$	9,730
Research and Analysis - NCSA		39,093		39,000		39,941	\$	941
Administrative Expenses		51,364		51,311		47,012	\$	(4,299)
TOTAL, HIGHWAY SAFETY								
RESEARCH & DEV. (TF)	\$	142,900	\$	142,628	\$	149,000	\$	6,372
FTE's:								
Direct Funded		165		166		175		9
Reimbursable, allocated, other*		-		-		-		-

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

#### **EXHIBIT III - 1a**

# NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION SUMMARY ANALYSIS OF CHANGE FROM FY 2017 TO FY 2018 Appropriations, Obligation Limitations, Contract Authority, and Exempt Obligations OPERATIONS AND RESEARCH

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

ITEM	Change from FY 2017 to FY 2018 \$000	Change from FY 2017 to FY 2018 FTE
Highway Safety Base	142,628	166
Adjustments to Base		
FY 2018 #FTE Per Program Change		9
Annualization of FY 2017 Pay Raise	134	
Annualization of FY 2017 FTE	_	
FY 2018 Pay Raise	401	
GSA Rent	15	
WCF	259	
Inflation	-	
Program Increases/Decreases	(5,240)	
Other Services	-	
Subtotal, Adjustment to Base	(4,431)	9
Program Increases/Decreases	10,803	-
Total Net Increases/Decreases	6,372	9
FY 2018 REQUEST	149,000	175

#### HIGHWAY SAFETY RESEARCH AND DEVELOPMENT

#### **Program and Performance Statement**

FY 2018 budget request includes \$149 million for research activities to reduce highway fatalities, prevent injuries, and significantly reduce the economic toll of motor vehicle crashes. Requested funding supports 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 2018 – Highway Safety Research and Development \$149,000,000

Program Activity	FY 2017 ANNUALIZED CR	FY 2018 REQUEST	Change FY 2017 -2018
Highway Safety Research and Development	\$52,317,000	\$62,047,300	\$9,730,300
National Center for Statistics and Analysis	\$39,000,000	\$39,940,700	\$940,700
HSRD Administrative Expenses	51,311,347	47,012,000	(\$4,299,347)
Total	\$142,628,347	\$149,000,000	\$6,371,653

NHTSA's highway safety programs support the Department's safety efforts 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.

#### **National Center for Statistics and Analysis (NCSA)**

\$39,940,700

Research and analysis program activities funded through the Highway Safety Research account support the Department of Transportation's safety efforts 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), collect detailed information on 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.

#### **Detailed Justification for Highway Safety Programs**

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

#### FY 2018 - HIGHWAY SAFETY PROGRAMS

Program Activity	FY 2017 ANNUALIZED CR	FY 2018 REQUEST	Change FY 2017 -2018
Impaired Driving	\$11,181,000	\$11,609,000	\$428,000
Drug Impaired Driving	\$1,485,000	\$1,521,000	\$36,000
Safety Countermeasures	\$4,584,000	\$4,697,000	\$113,000
National Occupant Protection	\$9,867,000	\$10,350,000	\$483,000
Enforcement and Justice Services	\$2,523,000	\$10,541,000	\$8,018,000
Emergency Medical Services	\$2,436,000	\$2,621,000	\$185,000
Enhanced 9-1-1/ National 9-1-1 Office National Emperorary Madical Samines	\$2,744,000	\$2,811,000	\$67,000
National Emergency Medical Services Information System	\$1,496,000	\$1,533,000	\$37,000
Driver Licensing	\$991,000	\$1,021,000	\$30,000
Highway Safety Research	\$11,494,000	\$11,748,400	\$254,400
Behavioral International Program	\$99,000	\$102,000	\$3,000
National Driver Register  Total	\$3,417,000 <b>\$52,317,000</b>	\$3,492,900 <b>\$62,047,300</b>	\$75,900 <b>\$9,730,300</b>

In FY 2018 NHTSA requests \$62.18 million for Highway Safety Programs. Funding at this level will allow the agency to maintain its core programs and continue several key initiatives including:

#### **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 five existing 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, and other elements recommended in Highway Safety Program Guideline No. 13 Older Driver Safety.
- 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 online 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 center in collaboration with FHWA 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.
- Identify populations and communities at increased risk for unrestrained fatalities and injuries and develop strategies for addressing these populations and communities.

#### **Enforcement and Justice Services**

- Engage the law enforcement community to promote traffic law enforcement as a core value in planning, programing, and deploying resources.
- Support law enforcement efforts to remove drug impaired drivers from the road in an environment of legalized recreational use of marijuana and the Nation's opioid epidemic.

- 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)**

- Complete development of EMS Agenda 2050.
- Continue administrative support for the Federal Interagency Committee on EMS (FICEMS) and the National EMS Advisory Council (NEMSAC).
- Prioritize and implement high priority recommendations from NEMSAC.
- Establish competitive mini-grant program for trauma system outcomes improvement.
- Implement the 2018 Scope of Practice Model.
- Expand and implement EMS Compass Performance Measures in partnership with an alliance of EMS stakeholders.
- Analyze NHTSA ambulance crash investigations information to increase safety of patients, providers, and the 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.

#### **National 911 Program**

- Continue operation of a national 911 Resource Center to collect and create resources for State and local 911 agencies for their conversation to Next Generation 911.
- Maintain and improve <u>www.911.gov</u> 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).
- Maintain operation of the 911 Profile Database and activities that enable submission of state 911 data to measure national progress toward implementation of Next Generation (NG) 911.
- Continue to implement recommendations made by the FCC Task Force on Optimal Public Safety Answering Points (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 2017.

#### **National EMS Information System (NEMSIS)**

- 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 30 the number of States and territories that contribute Version 3 data to the National EMS Database and

- will generate at least four national reports that provide a descriptive analysis of the national EMS system.
- Publish at least two public information dashboards, updated weekly, visualizing the EMS response to traffic crashes and related data quality.
- 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.

#### **Highway Safety Research**

- Complete a study to enhance the predictive validity of drug evaluation and classification (DEC) tests and assist the National Institute on Drug Abuse (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 Strategic Highway Research Program 2 (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 at least one 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 drugimpaired 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.

#### HIGHWAY SAFETY PROGRAMS

**Impaired Driving** 

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Impaired Driving	\$11,181,000	\$11,609,000	\$428,000

#### What Is The Program and Why Is It Necessary?

The Impaired Driving Program directly supports the Department's efforts to reduce 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 individuals (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: <a href="http://www.nhtsa.gov/Impaired">http://www.nhtsa.gov/Impaired</a>.

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.

#### What Does This Funding Level Support?

In FY 2018 NHTSA requests \$11.61 million for the Impaired Driving program. In 2015, 10,265 people died in alcohol-impaired driving crashes, a 3.2 percent increase from 2014. Although alcohol-impaired driving fatalities increased in 2015, the general trend of impaired driving fatalities had been declining over the past decade, while 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 2018 the Impaired Driving Program will develop and demonstrate further countermeasures to reduce the incidence of impaired driving. These efforts will include activities to:

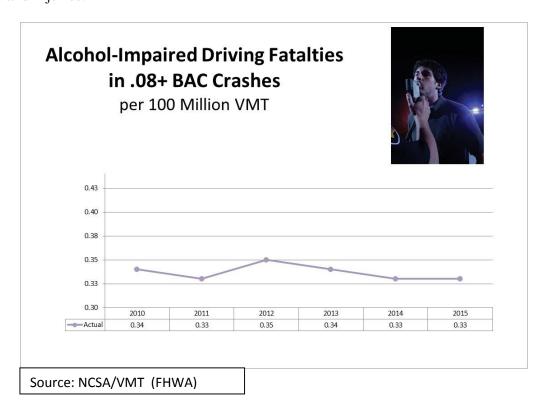
- Continue the demonstration project measuring the effectiveness of applying the problem orientated policing model to reduce impaired driving crashes. This will assist law enforcement agencies in moving towards a sustained enforcement model.
- Assist States in strengthening their ignition interlock programs 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 including illegal, prescription and those available over 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.

#### 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 10,265 people killed in alcohol-impaired-driving crashes in 2015 was a 3.2 percent increase from 2014 and 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 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Drug Impaired Driving	\$1,485,000	\$1,521,000	\$36,000

#### What Is This Program and Why Is It Necessary?

The Drug Impaired Driving Program directly supports the Department's efforts to reduce 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/Drug Recognition Expert (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, and 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.

#### What does this funding level support?

In FY 2018 NHTSA requests \$1.52 million 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. The legalization of marijuana for recreational use in some States and the opioid epidemic are contributing to increased numbers of drug impaired drivers. These issues present new challenges 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 who handle these cases in court. The agency's 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 educational 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), DRE, and Advanced Roadside Impaired Driving Enforcement (ARIDE) training.
- Increasing the number of Law Enforcement Liaisons (LELs).
- Maintaining and improving a national database 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-thecounter).

#### 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. This experience helps shape and inform 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.

**Safety Countermeasures** 

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Safety Counter Measures	\$4,584,000	\$4,697,000	\$113,000

#### 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: <a href="https://one.nhtsa.gov/Driving-Safety/Pedestrians">https://one.nhtsa.gov/Driving-Safety/Pedestrians</a>
- Bicycles: https://one.nhtsa.gov/Driving-Safety/Bicycles
- Motorcycles: <a href="https://one.nhtsa.gov/Driving-Safety/Motorcycles">https://one.nhtsa.gov/Driving-Safety/Motorcycles</a>
- Pupil Transportation (including school buses): <a href="https://one.nhtsa.gov/Driving-Safety/School-Buses">https://one.nhtsa.gov/Driving-Safety/School-Buses</a>
- Older drivers: https://one.nhtsa.gov/Driving-Safety/Older-Drivers

Motor vehicle crashes with pedestrians, accounted for 15 percent of the total fatalities in 2015, and pedestrian fatalities have been gradually increasing since a record low of 4,109 in 2009 to 5,376 in 2015. In addition, motor vehicle crashes with bicyclists accounted for an additional 2.3 percent of the total traffic related deaths in 2015, and bicyclist fatalities have been gradually increasing from a record low of 623 in 2010 to 818 deaths in 2015. Pedestrian and bicyclist fatalities can be reduced through behavioral initiatives including education and law enforcement. In FY 2014, NHTSA led a U.S. Department of Transportation effort to coordinate pedestrian and bicyclist safety efforts between FHWA, FTA and NHTSA. This effort provided the foundation for the Department's "Safer People, Safer Streets" initiative launched in September 2014. More about this initiative may be found at <a href="https://www.dot.gov/policy-initiatives/ped-bike-safety/safer-people-safer-streets-pedestrian-and-bicycle-safety">www.dot.gov/policy-initiatives/ped-bike-safety/safer-people-safer-streets-pedestrian-and-bicycle-safety</a>.

Motorcyclist fatalities (rider/operator and passenger) accounted for 14 percent of traffic fatalities in 2015, 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 from a record low of 2,116 in 1997 to 4,976 in 2015. Motorcycle riders had the highest percentage of alcohol impairment (BAC  $\geq$  0.08) of any motor vehicle operator involved in fatal crashes in 2015 (27 percent for riders, 21 percent for passenger car drivers, 20 percent for light truck drivers and 2 percent for large truck drivers). In 2015, 33 percent of all motorcycle riders involved in fatal crashes were speeding, compared to 19 percent for passenger car drivers, 15 percent of light-truck drivers, and 7 percent for large-truck drivers.

In 2015, 6,165 people 65 and older were killed in motor vehicle traffic crashes, 18 percent of all traffic fatalities. In 2015, about 15 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 2006 through 2015, an average of 131 fatalities occurred in school transportation related crashes annually. Most of these fatalities (72 percent) were occupants of other vehicles involved in the crash. Non-occupants (pedestrians, bicyclists, etc.) accounted for 20 percent of these fatalities and 9 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.

#### What does this funding level support?

In FY 2018 NHTSA requests \$4.70 million for the Safety Countermeasures program. 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	Pedestrian Safety Enforcement Operations: A How-To Guide	www.nhtsa.gov/staticfiles/nti/pdf/812 059- PedestrianSafetyEnforceOperaHowTo Guide.pdf
	Demonstration and Evaluation of the Heed the Speed Program	www.nhtsa.gov/staticfiles/nti/pdf/8 11515.pdf
	Review of Studies on Pedestrian and Bicyclist Safety, 1991 – 2007	www.nhtsa.gov/staticfiles/nti/pdf/8 11614.pdf
	High-Visibility Enforcement on Driver Compliance With Pedestrian Right of Way Laws	www.nhtsa.gov/staticfiles/nti/pdf/8 11786.pdf
	Literature Review on Vehicle Travel Speeds and Pedestrian Injuries	www.nhtsa.gov/people/injury/resea rch/pub/HS809012.html
Motorcycles	The Effect of Sight Distance Training on the Visual Scanning of Motorcycle Riders: A Preliminary Look	www.nhtsa.gov/staticfiles/nti/pdf/8 11689.pdf
	Costs of Injuries Resulting from Motorcycle Crashes: A Literature Review	www.nhtsa.gov/people/injury/pedbi mot/motorcycle/Motorcycle_HTM L/index.html
	Fatal Single Vehicle Motorcycle Crashes An Examination of Washington State's Vehicle Impoundment Law for Motorcycle Endorsements	one.nhtsa.gov/people/injury/pedbim ot/motorcycle/motorcycle_html/ove rview.html www.nhtsa.gov/staticfiles/nti/pdf/8 11696.pdf

Program	Title	Link
Older Drivers	Process and Outcomes Evaluation of Older Driver Screening Programs: The Assessment of Driving-Related Skills (ADReS) Older-Driver Screening Tool	www.nhtsa.gov/DOT/NHTSA/Traf fic%20Injury%20Control/Articles/ Associated%20Files/811113.pdf
	A Compendium of Law Enforcement Older Driver Programs Driver Fitness Medical Guidelines	www.nhtsa.gov/people/injury/olddr ive/LawEnforcementOlderDriver03 /introduction.htm www.nhtsa.gov/DOT/NHTSA/Traf fic%20Injury%20Control/Articles/ Associated%20Files/811210.pdf
	Older Driver Program Five-Year Strategic Plan 2012-2017	www.nhtsa.gov/staticfiles/nti/pdf/8 11432.pdf

In FY 2018 the Safety Countermeasures Program will continue existing safety efforts and reduce traffic fatalities among pedestrians, bicyclists, motorcyclists, and older people. Specific efforts will include:

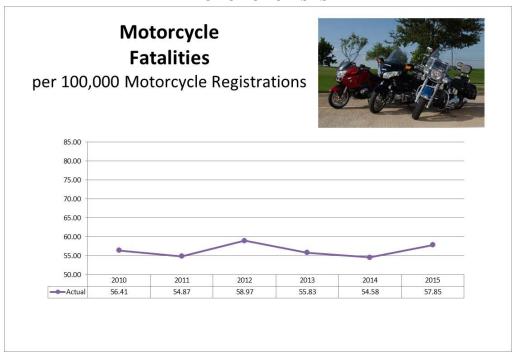
- Continuing to expand outreach and engage the medical community with on-line training programs on Older Driver Safety, targeting medical residents and other medical professionals to assist in counseling patients on driving fitness.
- Conducting a new demonstration project to further identify cost effective methods to enhance State driver licensing medical review processes and policies, and other elements recommended in Highway Safety Program Guideline No. 13 Older Driver Safety.
- 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.
- 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 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, in coordination with FHWA and Road Safety
  Foundation through the Clearinghouse for Older Road User Safety (ChORUS).

- Supporting operation and expansion of a Driver Licensing and Medical Fitness to Drive online training and resource for State driver's license administrations and highway safety offices.
- Conduct a demographic analysis of alcohol impaired pedestrians killed in motor vehicle crashes to assist in developing appropriate countermeasures.
- Conduct an analysis of motorcycle types involved in fatal motorcyclist crashes to augment current information on motorcycle engine displacement and crash involvement.
- Develop, in collaboration with state highway safety offices, technical assistance for states and cities on strategies to provide effective training to law enforcement on pedestrian and bicycle safety enforcement, and the design and deployment of effective pedestrian and bicycle safety education.
- Support research on state and local factors influencing decisions to implement or not implement requirements for seat belt use on school buses, and impacts resulting from seat belt use on school buses.
- Conduct analysis of state crash data involving school transportation-related vehicles to obtain more detailed information on school bus crashes, and review current state requirements on reporting of crashes involving a school bus.
- Develop, in coordination with school transportation safety organizations, educational material and related information to support state and local efforts to prevent motor vehicles illegally passing stopped school buses loading and unloading students.
- Conduct an expert panel review and update of the NHTSA School Bus Driver In-Service Safety Series.

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

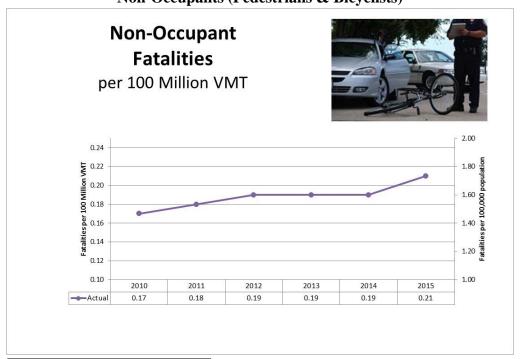
Continued investment in highway safety programs are proven to reduce motor vehicle crashes and resulting injuries. Reduced crashes and injuries contribute to lives saved and economic vitality by preventing unexpected costs associated with property damage and medical services. Quality of life is also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

#### **MOTORCYCLISTS**



Source: NCSA/Registration (FHWA)

**Non-Occupants (Pedestrians & Bicyclists)** 



Source: NCSA/VMT (FHWA)

HIGHWAY	<b>SAFETY</b>	<b>PROGRAMS</b>
---------	---------------	-----------------

**Occupant Protection** 

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
National Occupant Protection	\$9,867,000	\$10,350,000	\$483,000

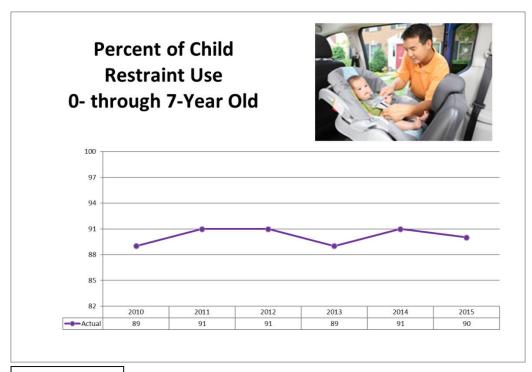
#### What is this Program and Why is it Necessary?

The Occupant Protection Program directly supports NHTSA's efforts to reduce 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 <a href="https://one.nhtsa.gov/Driving-Safety/Occupant-Protection">https://one.nhtsa.gov/Driving-Safety/Occupant-Protection</a>.

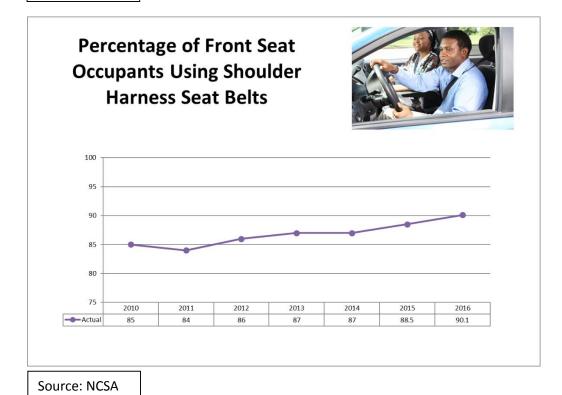
Wearing a seat belt is the single most effective means of saving lives and reducing injuries in crashes. Occupant restraint use has risen gradually for the past several years; however, belt use in serious crashes remains relatively low. In 2015, of those passenger vehicle occupants killed in crashes, 9,874 were known to be unrestrained. Considering only occupants where restraint use was known, 48 percent were unrestrained at the time of the fatal crash. Seat belts saved 13,941 lives in 2015. An additional 2,804 lives would have been saved in 2015 if all unrestrained passenger vehicle occupants five and older involved in fatal crashes had worn their seat belts.

#### What does this funding level support?

In FY 2018 NHTSA requests \$10.35 million for the Occupant Protection program. Objective evaluations have shown that education, laws, and law enforcement programs have contributed to a steady increase in the national daytime seat belt use rate, reaching 90.1 percent in 2016. These methods have also been effective in improving child restraint use. In 2016, 19 States, the District of Columbia, Puerto Rico 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.



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 the use of sustained enforcement throughout the year, as well as 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, NHTSA requests 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.
- Complete a test of new and innovative enforcement strategies for reaching seat belt nonusers.
- 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.
- Initiate a demonstration project to test strategies to increase seat belt use and reduce associated injuries in rural areas. Convene a law enforcement working group to identify the challenges and suggest approaches for making 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.
- Initiate a pilot project to provide technical assistance to lower performing States to improve their occupant protection program and implement recommendations from the occupant protection program assessments.
- 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 among these groups.

- 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 seats and booster seats for children, correct use of car seats and booster seats, and the importance of registering car seats and booster seats.
- Continue 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.
- Update occupant protection training curricula for program management and law enforcement; identify new training needs and initiate training development as needed.
- Initiate a pilot project to increase seat belt use among middle school aged children, who have poor compliance rates and high proportions of unrestrained fatalities.

#### 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 2015, seat belts have saved the lives of over 344,000 passenger vehicle occupants age 5 and older. Over this same time period, an estimated 10,940 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 and child restraints. The non-use of seat belts cost the Nation \$10.4 billion in 2010. However, about \$1.2 trillion in economic costs (2010 dollars) have been saved since 1975 due to seat belt use. 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	<b>SAFETY</b>	<b>PROGRAMS</b>
---------	---------------	-----------------

#### **Enforcement and Justice Services**

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Enforcement and Justice Service	\$2,523,000	\$10,541,000	\$8,018,000

#### 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:

https://one.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.

#### What does this funding level support?

In FY 2018 NHTSA requests \$10.54 million for the Enforcement and Justice Services program. Funding at the requested level is 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 educate law enforcement on the advantages of strong traffic law enforcement programs and the need to include traffic enforcement as a core value in planning and deploying resources. This effort includes the mobilization of 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); the Drug Recognition Expert (DRE) courses); as well as speed measuring device (Radar/Lidar) operator courses.

The DDACTS program will be enhanced by expanding the current network of subject matter experts at the State and local level. 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.

The request also provides the necessary funding to comply with the FAST Act authorized mandate for a continuation of the Section 1906 grant program previously authorized under SAFETEA-LU. This program covers State costs for the collection, maintenance, and evaluation of racial data in traffic stops. Section 4011 of the FAST Act revised the Section 1906 grant program, and States now may qualify for the Section 1906 grant by: (1) maintaining and allowing public inspection of statistical information on the race and ethnicity of the driver for each motor vehicle stop made by a law enforcement officer on a Federal-aid highway, or (2) undertaking relevant data collection and analysis activities during the fiscal year of the grant. Funding will allow NHTSA's partners to seek the prevention and use of racial profiling by law enforcement officers when making traffic law enforcement decisions. It also allows States to maintain and provide public access to statistical information on the race and ethnicity of drivers stopped by law enforcement officers on Federal-aid highways.

#### 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 as a core value in law enforcement 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.

Funding made available for the Section 1906 grant program to prevent racial profiling will encourage States to collect, maintain and allow 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.

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Emergency Medical Services	\$2,436,000	\$2,621,000	\$185,000

#### 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 helping States and local areas develop data-driven and evidence-based emergency medical services (EMS), which improve health outcomes from motor vehicle crashes and other health emergencies. According to the Fatality Analysis Reporting System, 42 percent of all motor vehicle crash fatalities in 2015 occurred after the victim arrived at the hospital. After crashes occur, EMS remains the primary



opportunity to reduce deaths and serious injuries from motor vehicle crashes.

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, staffed by EMS and highway safety experts, convenes stakeholders to establish best practices with the ultimate goal of unifying the EMS community to improve patient care. The division also fosters 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.

NHTSA manages the statutorily-created <u>National EMS Advisory Council (NEMSAC)</u> which provides advice to the Department of Transportation and to the <u>Federal Interagency Committee</u> on <u>Emergency Medical Services</u> (FICEMS). FICEMS is required by law to coordinate Federal



EMS activities, and NHTSA is mandated to provide administrative support to both FICEMS and NEMSAC. NHTSA also provides a variety of resources for Federal, State, and local EMS

organizations at www.EMS.gov.

To ensure that Office of EMS programs meaningfully impact local EMS systems through the nation, the division 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.

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.

Through NHTSA's leadership in developing and implementing the <u>National EMS Education</u> <u>Agenda for the Future: A Systems Approach</u>, there has been <u>considerable progress</u> 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.

#### Expected FY 2018 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.
- Complete development of EMS Agenda 2050.
- 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 implementation of the *National EMS Scope of Practice Model* 2018 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.
- Improve EMS responses to motor vehicle crashes by promoting education of EMS and 911 medical directors in the use of telematics data from Advanced Automatic Collision Notification data.
- 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), 10 of the 30 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.
- Prioritize and implement high priority recommendations from NEMSAC.
- 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.
- Analyze NHTSA ambulance crash investigations information to increase safety of patients, providers, and the general public
- Provide additional staff and operational support for the FICEMS and the NEMSAC as required by statute.

#### What does this funding level support?

In FY 2018 NHTSA requests \$2.62 million for Emergency Medical Services program activities. 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 2018, the Office of EMS will accomplish this by:

- Continuing to implement and revise, as necessary, the national EMS Clinical Care Protocols.
- Providing competitive min-grants to the States to improve outcomes for people traumatically injured in motor vehicle crashes.
- 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.
- Analyze NHTSA ambulance crash investigations information to increase safety of patients, providers and 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.
- Support the transition of military EMS personnel and veterans into civilian EMS employment in cooperation with the National Association of State EMS Officials by continued implementation of 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.
- Promoting the role of EMS as an essential component of systems of trauma care and improving the linkages between EMS and trauma data, as recommended by the National Academies of Science, Engineering, and Medicine.

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

EMS systems saves lives of 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.

<b>HIGHWAY</b>	<b>SAFETY</b>	PROGRAM	IS
----------------	---------------	---------	----

**National 911 Program** 

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Enhanced 9-1-1/National 9-1-1 Office	\$2,744,000	\$2,811,000	\$67,000

#### 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 by administering the National 911 Program Office. 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. The division works 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. The program develops a variety of resources through active involvement with partner organizations, and the products include tools that can be used to plan and implement Next Generation (NG) 911. The National 911 program is 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



#### Expected FY 2018 Accomplishments:

NHTSA collects and creates resources that have been identified by the 911 community as necessary and of utility in updating and operating local and State 911 systems. The agency actively involves 911 stakeholders in their development and distribution.

- Examples of resources include:
  - o An Online 911 Legislation Tracking Database.
  - o A <u>Bimonthly Webinar</u> to provide information on Federal 911 activities and to share the experiences of early adopters of NG911 technology.
  - o A Compendium of NG911 Standards updated annually.
  - o An online data collection system, to collect data from states and territories related to their demographic status and progress in deploying NG911.

The National 911 program is 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).

#### What does this funding level support?

In FY 2018 NHTSA requests \$2.81 million for the National 911 program. 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 2018 the National 911 program will support continued advancement of the 911 system to improve emergency response by:

- Continuing operation of a national 911 Resource Center (<a href="http://www.911.gov/resources.html">http://www.911.gov/resources.html</a>) 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 <u>www.911.gov</u> 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 respond to the report analyzing and determining detailed costs for specific NG911 service requirements and specifications.
- Initiating 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 the cost study that determined and analyzed 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. 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 (NG911) 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 will be 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 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
National EMS Info System (NEMSIS)	\$1,496,000	\$1,533,000	\$37,000

#### What is this Program and Why is it Necessary?

The National EMS Information System (NEMSIS) improves care for motor vehicle crash victims and other patients through the standardization, aggregation, and utilization of point-of-care EMS data at a local, State, and national level. The goal is for every Emergency Medical Technician (EMT) and paramedic to collect the same data on every patient encounter and for that record to be compiled with others to analyze and improve quality, conduct research, and describe the nation's EMS systems.

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 improving safety.

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. NHTSA manages the repository of EMS records that is voluntarily collected by 49 states and territories and includes more than 30 million de-identified EMS records per year or more than 75% of all EMS activations in the nation.

NHTSA funds the <u>NEMSIS Technical Assistance Center</u> 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. NHTSA has begun to transition the collection and hosting of that data to NHTSA servers in order to increase use internally and ensure continuity of operations.

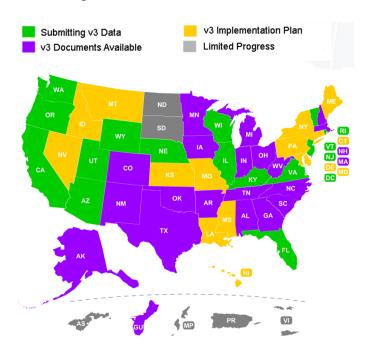
Researchers currently publish approximately one peer-reviewed paper per month based on data from the National EMS Database. The National EMS Database differs from other NHTSA datasets because it is *person-based* instead of *crash-based* and includes medical information about the response to the crash, patient assessment and demographics, care provided on scene and transportation to a hospital. This information is critical for highway safety professionals to understand the interventions, public policies, and regulatory decisions that are most effective in reducing death and disability on roadways.

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, improve system performance, and enhance research.

Finally, NHTSA is leading a transition in 2017 and 2018 from Version 2 of the NEMSIS data collection standard to Version 3, which will expand the breadth and quality of national data collected by the database. NHTSA supports NEMSIS implementation and upgrades in States through Section 405 traffic records grant dollars and State Offices of EMS often participate in traffic record coordinating committees.

States are voluntarily complying with NEMSIS Version 3 and submitting data to the National EMS Database as shown in this map:



#### Expected FY 2018 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 30 the number of States and territories that contribute Version 3 data to the National EMS Database and will generate at least four (4) national reports that provide a descriptive analysis of the national EMS system.
- Publish at least two public information dashboards, updated weekly, visualizing the EMS response to traffic crashes and related data quality.

- 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.

#### What does this funding level support?

In FY 2018 NHTSA requests \$1.53 million for the National Emergency Medical Services Information System (NEMSIS) program. With this level funding, NHTSA will continue to build on the accomplishments of FY 2017 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 <a href="National EMS Database">National EMS Database</a>.
- Increase to 30 the number of States and territories that contribute NEMSIS Version 3 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 health information exchanges to provide for better patient care and better linkage with patient outcome.

NHTSA will also assess the capacity of States to implement NEMSIS Version 3 data repositories. States must upgrade their EMS repositories in order to accept Version 3 records, which are more complex and provide more information on time-sensitive conditions like trauma. Seventeen States have already upgraded their repositories; however, several other States have cited cost as a barrier to implementation.

NHTSA will contract with a NEMSIS Technical Improvement 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 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:



#### 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 will 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.

#### **HIGHWAY SAFETY PROGRAMS**

**Driver Licensing** 

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Driver Licensing	\$991,000	\$1,021,000	\$30,000

#### 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. 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. The resources can be found at <a href="https://www.nhtsa.gov/road-safety/teen-driving">https://www.nhtsa.gov/road-safety/teen-driving</a>.

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.

#### What does this funding level support?

In FY 2018 NHTSA requests \$1.02 million for the Driver Licensing program. The 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.
- 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.

Through the adoption of 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.

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Highway Safety Research (Includes Section 2013 and ACTS Alcohol Interlock Initiative)	\$11,494,000	\$11,748,400	\$254,400

#### What is this Program and Why is it Necessary?

Highway Safety Research directly supports the Department's efforts to reduce 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 it 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 program (Section 402). NHTSA's highway safety research studies can be found at: <a href="https://www.nhtsa.gov/behavioral-research">https://www.nhtsa.gov/behavioral-research</a>.

#### What does this funding level support?

In FY 2018, NHTSA requests \$11.75 million for the Highway Safety Research program. Behavioral safety research has contributed significantly to the widespread adoption of numerous programs proven to reduce crashes, fatalities, and injuries. Examples include the national *Click It or Ticket* (CIOT) program, Standardized Field Sobriety Tests (SFST) used by law enforcement officers investigating potential impaired driving cases, State primary seat belt and distracted driving laws, the national 0.08 Blood Alcohol Concentration (BAC) limit, Graduated Driver Licensing (GDL) laws for teen drivers, greater understanding of older driver issues, and effective pedestrian and bicycle safety programs.

Improved 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 2018, the Highway Safety Research Program will continue to build on the accomplishments of FY 2017. Below are examples of new and underway research activities that will be advanced during FY 2018:

#### **Impaired Driving**

- The Driver Alcohol Detection System for Safety (DADSS) research program will continue development and optimization of the next generation of breath-based and touch-based sensors. The program will also continue the pilot field operational trial initiated in 2017 for both sensors.
- Complete studies documenting the State of Practice regarding the implementation and operation of ignition interlock programs and continue to examine strategies to increase use of ignition interlock devices for all DWI offenders.
- Initiate an evaluation of DWI Courts to identify evidence-based and promising practices, under the Ten Guiding Principles.
- Complete an evaluation of a demonstration of the "Community Oriented Policing" model as applied to alcohol-impaired driving enforcement.
- Continue a National Survey on Attitudes and Behavior regarding Drinking, Drug Use, and Driving.

#### **Drug Impaired Driving**

- Continue a study to develop a field test to detect drivers impaired by cannabis.
- Continue a large scale study of the effects of drugs and alcohol on crash risk in serious injury and fatal crashes.
- Conduct a series of studies to examine the feasibility of using new technology to detect marijuana or other drugs at roadside examinations, which may use breath samples, oral fluid, or other means for detection.
- 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 play a role.

#### **Occupant Protection**

- 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 users wear their seat belts.
- Continue to study the conditions surrounding correct and incorrect child restraint system use to develop responsive interventions to inform the annual cohort of new parents on the appropriate selection and proper use of restraints for their children.
- Complete an evaluation of a demonstration of the "Community Oriented Policing" model as applied to occupant protection enforcement.
- Continue research to help maintain seat belt use gains and inform effective occupant protection program resource allocation.
- Continue research to refine occupant protection programs by identifying psychological constructs and psychosocial factors related to seat belt use behavior.
- Conduct research on the awareness and availability of child passenger safety information resources to define and overcome barriers to use among child caregivers.
- Complete an evaluation of a demonstration of an integrated and sustainable seat belt enforcement program.

#### Pedestrian and Bicycle Safety

• Complete a study on the involvement of distraction in pedestrian crashes, complete a follow-up study of the long-term impacts of high visibility enforcement on driver

- compliance with pedestrian right-of-way laws and continue a study of the impacts of high visibility enforcement on driver compliance with bicycle right-of-way laws.
- Continue an effort to produce a report on the State of the Knowledge regarding Pedestrian and Bicycle Safety Research for use by State highway safety offices and other interested stakeholders.

#### 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 and other interested stakeholders.

#### Safe Speeds

- Complete a study 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 or 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.
- Continue a study of older drivers' self-regulation and driving exposure focusing on the extent to which older drivers change their driving habits as their functional skills decline with aging.
- Continue studies of how older adults interact with in-vehicle technologies (such as navigation devices and rearview cameras) to determine whether these devices provide 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.
- Continue analysis to identify factors associated with teen crashes to support driver education.

#### Distracted Driving

- 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., cognitive inattention).
- Continue analysis of the challenges enforcing distracted driving laws by identifying factors associated with law enforceability and defining practical enforcement strategies.

#### Driver Fatigue

- Continue research to quantify drowsy driving by exploring methods such as those used in alcohol data imputation to generate sound estimates of the magnitude of the problem.
- Complete a national survey of drowsy driving knowledge, attitudes, and behaviors to inform the development of education and other countermeasures for reducing the incidence of drowsy driving.
- Continue research to understand the current state of drowsiness detection and alerting systems as well as guide the future of such systems by determining what types of alerts are most effective.

#### EMS Research

- 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.
- Continue research to assess the status of emergency vehicle operator training throughout the United States and improve NHTSA's understanding of the role operator training plays in reducing crashes involving ambulances.

#### 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.

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Behavioral International Program	\$99,000	\$102,000	\$3,000

#### What is the Program and Why is it Necessary?

The Behavioral International Program contributes to the Department's overall safety effort through the exchange of 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, NHTSA 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. 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. 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 2018, 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 WP1 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.

#### What does this funding level support?

In FY 2018 NHTSA requests \$102 thousand for the Behavior International program. During FY 2018 the Behavioral International Program will:

- Continue to provide technical assistance to and collaborate with India.
- 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.
- Continue 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 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
National Driver Register - TF (Program funds only)	\$3,417,000	\$3,492,900	\$75,900

#### 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. Every individual who applies for a license or a license renewal is vetted through the NDR's Problem Driver Pointer System (PDPS) 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 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 as well as new license issuance. 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.

#### What does this funding level support?

In FY 2018 NHTSA requests a total of \$5.30 million for the National Driver Register program, including \$3.49 million for program activities and \$1.81 million for administrative expenses including salaries and benefits. 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, and 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, U.S. Marine Corps 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 quarterly testing.
- Perform continuous monitoring of cyber 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 processes an average of 114 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 2015, State and Federal use of the NDR increased 117 percent for inquiry transactions to the NDR system. In the past five years the NDR processed 461,000,000 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 PDPS is a mission critical system in NHTSA and currently contains 55 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 2018 - NCSA - BUDGET REQUEST

Program Activity	FY 2017 ANNUALIZED CR	FY 2018 REQUEST	Change FY 2017 -2018
Traffic Records	\$1,913,000	\$1,918,000	\$5,000
Crash Data Collection	\$34,932,000	\$35,862,700	\$930,700
Data Analysis	\$1,647,000	\$1,651,000	\$4,000
Regulatory Analysis and Evaluation  Total	\$508,000 <b>\$39,000,000</b>	\$509,000 <b>\$39,940,700</b>	\$1,000 <b>\$940,700</b>

In FY 2018 NHTSA requests \$39.94 million for NCSA programs. This amount does not include the \$500,000 in Vehicle Safety Research funds to supplement Crash Data Collection. Funding at this level will allow NHTSA to maintain its core programs and continue implementation of the new modernized data collection systems. Key initiatives include:

#### **Traffic Records**

- Continue to provide in depth, uniform assessments of State traffic safety data systems (crash, driver, vehicle roadway, citation & adjudication, and injury surveillance) that help States identify and prioritize safety data improvement efforts.
- Continue to provide additional technical assistance for traffic records system improvements through "Go-Teams" and the Crash Data Improvement Program (CDIP) that provide an in-depth technical expertise and analysis in support of a particular issue area determined by the State.
- Continue efforts to harmonize data collection and management standards via promotion of the recently updated Model Minimum Uniform Crash Criteria, 5<sup>th</sup> Edition.

#### **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 2017 and 2018, 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.
- Enhance NCSA's data analysis service for all of NHTSA and the general public.

NCSA Traffic Records

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Traffic Records	\$1,913,000	\$1,918,000	\$5,000

#### What Is This Program and Why Is It Necessary?

NHTSA's Traffic Records Program delivers a variety of evaluation and analysis products that help States improve the six core State traffic safety data 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 supports 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 <a href="https://www.nhtsa.gov/research-data/traffic-records">https://www.nhtsa.gov/research-data/traffic-records</a>.

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), and a variety of targeted research and noteworthy practices. In addition, the program supports the section 405(c) data improvement grant program, spearheads the Model Minimum Uniform Crash Criteria (MMUCC) mapping effort, and runs the Department's intermodal Traffic Records Coordinating Committee (DOT-TRCC).

#### What does this funding level support?

In FY 2018 NHTSA requests \$1.92 million for the Traffic Records program. This funding will allow NHTSA to continue successes of the State traffic records assessment program, the State technical assistance GO Teams, CDIP, and to coordinate with federal and State partners on additional safety data improvement efforts. This funding will enable NCSA to help 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:

- Initiate new five-year cycle of 57 traffic records 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 section 405(c) State traffic safety information systems grants.
- Initiate analysis of the completed cycle of traffic records assessments to identify and report on trends in State traffic records systems.

- Respond to data requests and inquiries from NHTSA, DOT administrations, other Federal agencies, States, and research institutions.
- Coordinate the work of the DOT Traffic Records Coordinating Committee (DOT|TRCC), an intermodal traffic safety group that produces original research, coordinates State outreach, and encourages departmental collaboration on safety data improvement efforts.
- Deliver timely, useful technical assistance to State traffic records personnel seeking to improve their data systems by deploying technical assistance GO Teams.
- Continue the deployment of the Crash Data Improvement Program (CDIP) that assists States with improving their crash data quality and aligning their crash data with MMUCC.
- Rollout MMUCC 5<sup>th</sup> Edition in coordination with FMCSA and FHWA. This includes ongoing public engagement regarding the new dynamic data element for automated vehicle data collection.
- Help States evaluate the consistency of their crash data by providing standard guidance on mapping their crash data to the data elements and attributes in the MMUCC Guideline.
- Support the Department's custodianship of the National Information Exchange Model (NIEM) Surface Transportation Subdomain by participating domain governance efforts and developing additional NHTSA-based Information Exchange Package Documentations (IEPDs).
- Underwrite the public-private partnership tasked with updating the ANSI D.16 *Manual* on Classification of Motor Vehicle Traffic Crashes and harmonizing it more closely with the MMUCC 5<sup>th</sup> Edition.
- Assist the Safety Countermeasures Program (NPD-210) develop a Ped/Bike assessment utilizing the traffic records assessment methodology and STRAP system for online data collection and verification.
- Provide support, technical guidance, and content to the Association of Traffic Records Information Professional's (ATSIP) annual International Forum on Traffic Records and Highway Safety Information Systems. The "Forum" remains the keystone of critical outreach efforts on Federal data systems and programs.

#### 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 section 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. This technical program assessment is conducted every five years as a requirement of section 405(c). As a recently published Government 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 2017 ANNUALIZED CR	FY 2018 CHANGE REQUEST FY 2017 - 20	
Crash Data Collection (Includes FARS, NASS, SDS, SCI)	\$34,932,000	\$35,862,700	\$930,700

Note: 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?

NHTSA's mission is to save lives, prevent injuries, and reduce vehicle-related crashes. In order to accomplish this mission, the agency strives to reduce the human and economic cost of motor vehicle traffic crashes and other incidents involving motor vehicles through sound and 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:



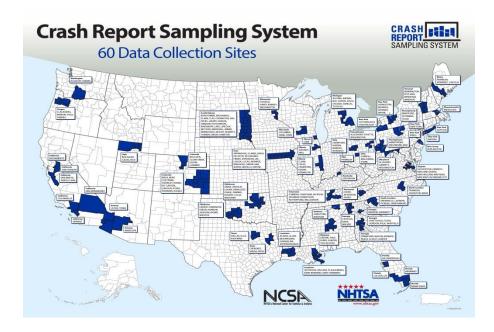
#### Fatality Analysis Reporting System (FARS)

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 performance against identified goals.



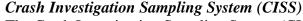


### Crash Report Sampling System (CRSS)

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 NHTSA's 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.





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 as needed to provide the most up-to-date data on current and emerging issues of special interest to the agency. These real-world crash investigations

enable NHTSA to examine and assess the safety performance of new technology such as automated vehicles (AV) systems and provide early detection of alleged or potential vehicle issues. No other NHTSA 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 the Vehicle Safety account. 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 the National Automotive Sampling System (NASS) and FARS and two new, independent crash sampling systems, CISS and CRSS. Although NHTSA anticipates expending all Data Modernization funds by the end of FY 2017, 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 2018 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 collecting additional cases in CISS.

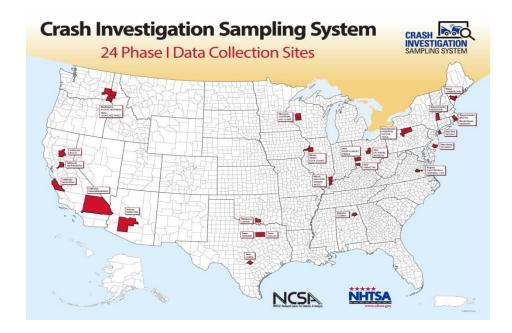


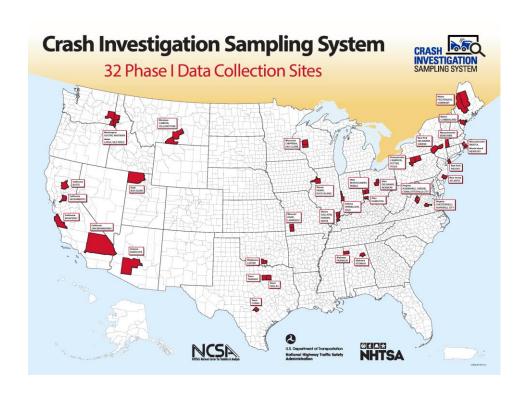
#### What does this funding level support?

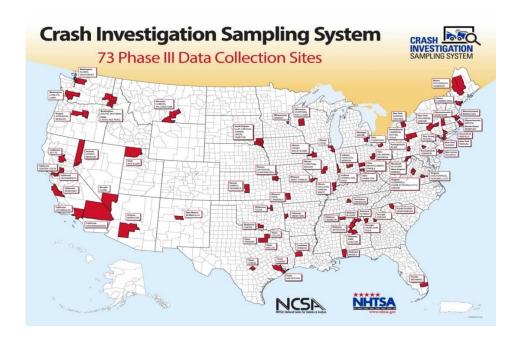
In FY 2018 NHTSA requests \$35.86 million for crash data collection from Highway Safety Research and Development (and an additional \$500 thousand from the Vehicle Safety program). The budget request reflects NHTSA's need to sustain its crash data collection efforts.

In FY 2015, NCSA began phasing in the first 24 CISS data collection sites. However, as described in the March 2015 NASS Modernization Report to Congress (https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812128), 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 NHTSA continued the implementation the first of 24 Phase I CISS sites, and in FY 2017 the agency added eight (8) additional sites for a total of 32. However, the optimal system would consist of 73 CISS data collection sites. The FY 2018 budget request will enable us to maintain the 32 Phase I CISS data collection 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 initial 24 Phase I collection sites, Phase II and Phase III CISS data collection sites.







In FY 2018, the budget request will sustain the FARS program and allow NHTSA 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 2016 final file and a 2017 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 2018, the budget request for CRSS will enable NHTSA to:

- Collect data in the 60 nationally representative sites.
- Create a file for analysis and make the data in the 2017 annual file available to the public.

#### In FY 2018, the State Data System program will:

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

#### In FY 2018, the budget will support CISS to:

- Create a weighted file for analysis and make the data in the 2017 annual file available to the public.
- Continue to maintain and operate 32 CISS sample sites including maintaining cooperation with local officials, updating as necessary crash notification procedures, pilot training new collection procedures for implementation, and training the new crash technicians as needed.

#### In FY 2018, 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.
- 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.

NCSA Data Analysis

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Data Analysis Program	\$1,647,000	\$1,651,000	\$4,000

#### 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 NHTSA program areas and to the overall traffic safety community. With the new modernized data systems being deployed in 2016, 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.

NHTSA relies on data to build, develop, and improve its 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. The division provides data and statistical analysis to external customers and internal 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 through NHTSA's website and www.safety.data.gov and www.data.gov.

#### What does this funding level support?

In FY 2018 NHTSA requests \$1.65 million for the Data Analysis program. The requested funding will enable the program to accomplish the following:

- Provide quarterly estimates of fatalities for calendar year (CY) 2017 and CY 2018.
- Continue to provide analytical and data support in the Department's distracted driving pedestrian and bicyclist safety initiatives.
- 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 safety targets.
- 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 expend 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 internal and external customers.
- 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 an increasing number of internal and external requests for data and analysis based on specific interest areas.

#### 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. Through the Data Analysis program, NHTSA, DOT, States, and the larger highway safety community are able to effectively carry out their current programs and/or modify their programs based on data analysis. The expertise and support from the Data Analysis program enables the States to make progress in their highway safety programs, which helps to achieve declines in fatalities, injuries, and the economic toll from motor vehicle crashes.

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Regulatory Analysis and Evaluation	\$508,000	\$509,000	\$1,000

#### What Is This Program and Why Is It Necessary?

The Regulatory Analysis and Evaluation program supports Executive Orders 12866 and 13563. 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 agencies to periodically review its existing significant regulations to determine whether any such regulations should be modified, streamlined, expanded, or repealed. The Office of Regulatory Analysis and Evaluation supports these orders by conducting cost-benefit analyses, effectiveness evaluations, and related efforts.

#### What does this funding level support?

In FY 2018 NHTSA requests \$509 thousand million for the Regulatory Analysis and Evaluation program. Funding provided in FY 2018 will allow the division to conduct:

- Cost and weight analyses (based on physical "tear-down") of regulated, proposed, or emerging vehicle technology (current examples: Vehicle-to-vehicle technology, blind spot detection systems, heavy-duty vehicle automatic emergency braking systems).
- Engineering assessments in review of existing regulations (current examples: FMVSS No. 138, tire pressure monitoring systems; FMVSS 213, child restraint systems; FMVSS 108, lamps, reflective devices, and associated equipment).
- Special data collections in support of rulemaking and evaluations.
- Analytical support in cost studies and regulatory evaluations.

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

These funds provide cost estimates for many of NHTSA's new rules, provide support for evaluations of established rules, and help keep its standards current with ever-changing technology. Such functions benefit the American Public by ensuring that NHTSA safety regulations are cost-efficient and effective.

#### OPERATIONS AND RESEARCH HIGHWAY SAFETY RESEARCH AND DEVELOPMENT PROGRAM AND FINANCING SCHEDULE

Description	FY 2016 Actual	FY 2017 Annualized CR	FY 2018 Request
Obligations by Program Activity	Actual	Amidanzeu CK	Kequest
Highway Safety Programs	42,510,360	48,900,000	58,554,400
Research and Analysis	41,420,848	39,000,000	39,940,700
National Driver Register	4,971,068	5,088,000	5,300,000
Highway Safety Administrative Expenses	53,084,585	49,640,347	45,204,900
Direct program activities, subtotal	141,986,861	142,628,347	149,000,000
Reimbursable Program	12,036,269	30,000,000	30,000,000
Total new obligations	154,023,130	172,628,347	179,000,000
Budgetary Resources Available for Obligation			
Unobligated balance available, start of year	27,173,308	36,198,534	36,209,111
Adjustment of unobligated balance brought forward, Oct 1	.,,.	, ,	-
Recoveries of prior year unpaid obligations	2,149,587	10,577	-
Unobligated balance (total)	29,322,895	36,209,111	36,209,111
Contract authority	142,900,000	145,900,000	149,000,000
Unobligated balance of contract authority permanently reduced	142 000 000	145 000 000	140,000,000
Contract authority - mandatory (total)	142,900,000	145,900,000	149,000,000
Collected	17,009,346	30,000,000	30,000,000
Change in uncollected payments, Federal sources	17,002,340	-	50,000,000
Spending authority from offsetting collections, mandatory total	17,009,346	30,000,000	30,000,000
Total Pudgatawi Dagaywag Availabla	100 222 241	212 100 111	215 200 111
Total Budgetary Resources Available	189,232,241	212,109,111	215,209,111
Change in Unpaid Obligations			
Unpaid obligations, brought forward, October 1	132,299,663	139,804,606	132,432,953
Obligations incurred, unexpired accounts	154,023,130	172,628,347	179,000,000
Outlays (gross) (-)	(144,378,901)		(189,000,000)
Recoveries of unpaid prior year obligations, unexpired accounts (-)	(2,139,286)		-
Unpaid obligations, end of year (gross)	139,804,606	132,432,953	122,432,953
Outlays (gross), detail			
Outlays from new discretionary authority	60,850,231	100,000,000	103,000,000
Outlays from discretionary balances	83,528,670	80,000,000	86,000,000
Total outlays (gross)	144,378,901	180,000,000	189,000,000
Offsets - Against Gross Budget Authority and Outlays			
Offsetting collections (cash) from: Federal sources	(17,009,346)	(30,000,000)	(30,000,000)
Offsetting collections (cash) from: Non-Federal sources	(10,302)		
Net Budget Authority and Outlays			
Budget authority (net)	142,900,000	145,900,000	149,000,000
Outlays (net)	127,359,253	150,000,000	159,000,000

#### OPERATIONS AND RESEARCH HIGHWAY SAFETY RESEARCH AND DEVELOPMENT OBJECT CLASS SCHEDULE

Description	FY 2016 Actual	FY 2017 Annualized CR	FY 2018 Request
Direct Obligations			
Personnel Compensation			
Full-time permanent	17,955,099	21,322,000	24,008,000
Other personnel compensation	897,755	1,016,000	1,092,000
Total personnel compensation	18,852,854	22,338,000	25,100,000
Civilian personnel benefits	5,568,185	5,311,000	4,598,000
Travel and Transportation of Persons	425,333	500,000	500,000
Rental payments to GSA	6,174,337	6,000,000	6,000,000
Communications, utilities, and miscellaneous charges	10,104,715	10,000,000	10,000,000
Other services from non-federal sources	50,468,651	40,679,000	42,000,000
Research and development contracts	22,336,132	28,800,374	30,802,000
Supplies and materials	1,183,503	1,000,000	1,000,000
Equipment	1,095,337	1,000,000	1,000,000
Grants and subsidies	25,777,814	27,000,000	28,900,000
Subtotal, Direct Obligations	141,986,861	142,628,374	149,900,000
Reimbursable Obligations			
Other services from non-federal sources	12,036,269	30,000,000	30,000,000
Total new obligations	154,023,130	172,628,374	179,900,000

# NHTSA FY 2018 HIGHWAY SAFETY ADMINISTRATIVE EXPENSES

Program Activity	FY 2017 ANNUALIZED CR	FY 2018 REQUEST	Change FY 2017 - 2018
Salaries and Benefits	\$27,648,973	\$29,697,720	\$2,048,747
Travel	505,000	506,000	\$1,000
Transportation of Things	-	-	-
Rent, Communications & Utilities	13,774,000	7,306,000	(\$6,468,000)
Printing	-	-	-
Other Services	7,307,374	7,422,280	\$114,906
Supplies	2,076,000	2,080,000	\$4,000
Equipment	-	-	-
Unallocated	-	-	\$0
<b>Total Administrative Expenses</b>	\$51,311,347	\$47,012,000	(\$4,299,347)
FTE (includes indirect FTE)	166	175	9

#### **Administrative Expenses**

In FY 2018, NHTSA's Highway Safety Research and Development request includes \$47.01 million for the administrative expenses category. Costs associated with this category include the salaries and benefits for NHTSA employees who directly work on or indirectly provide support to the Highway Safety Research and Development programs together with other normal business expenses such as personnel operations, facilities management, parking management, printing and graphics, mail operation and dockets management operations, building security, utilities and building maintenance, voice, cable and wireless communications, Disability Resource Center, substance abuse awareness and testing, and procurement and acquisition services.

The FY 2018 budget request includes baseline changes from FY 2017 for the following: (1) 1.9 percent pay raise for 2018; (2) adjustments to GSA rent; and (3) an increase for an estimated one percent inflation to administrative expenses. NHTSA will continue to distribute administrative expenses using a methodology based primarily on direct FTE allocation for the following categories: salaries and benefits; travel; transportation of things, rent, printing, supplies, equipment; and other services.

Additionally, NHTSA payments for centralized administrative and support services for DOT's Working Capital Fund will total \$14 million in FY 2018. The Highway Safety Research and Development share of this total is \$3.53 million.

#### 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 2016 ACTUAL	FY 2017 JALIZED CR	FY 2018 EQUEST	_	HANGE 17 - FY 2018
Section 402 Formula Grant Program	\$ 243,500	\$ 243,037	\$ 261,200	\$	18,163
Section 2009 High Visibility Enforcement	29,300	29,244	29,900	\$	656
Section 405 National Priority Safety Programs*	274,700	274,178	280,200		6,022
Section 405 Occupant Protection Grants	43,952	37,216	36,426		(790)
Section 405 State Traffic Safety Information System Grants	39,832	39,756	40,629		873
Section 405 Impaired Driving Countermeasures Grants	144,218	143,943	147,105		3,162
Section 405 Distracted Driving Grants	23,350	23,305	23,817		512
Section 405 Motorcyclist Safety Grants	4,121	4,113	4,203		90
Section 405 State Graduated Driver Licensing Laws	13,735	13,709	14,010		301
Sec 405- Non-Motorized Safety Ped/Bikes	-	12,136	14,010		1,874
Section 403h In-Vehicle Alcohol Detection Device Research*	5,494	-	-		-
Grant Administrative Expenses	25,832	25,783	26,329		546
TOTAL HIGHWAY TRAFFIC SAFETY GRANTS (TF)	\$ 573,332	\$ 572,242	\$ 597,629	\$	25,387
FTE's:					
Direct Funded	79	84	88		4
Reimbursable, allocated, other	-	-	-		-
Note: Totals may not add due to rounding					

Note: Totals may not add due to rounding.

#### **EXHIBIT III - 1a**

# NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION SUMMARY ANALYSIS OF CHANGE FROM FY 2017 TO FY 2018 Appropriations, Obligation Limitations, Contract Authority, and Exempt Obligations

# HIGHWAY TRAFFIC SAFETY GRANTS (\$000)

	Change from FY 2017 to FY 2018	Change from FY 2017 to FY 2018
ITEM	\$000	FTE 84
Highway Safety Grants Base	572,242	84
Adjustments to Base		
FY 2018 #FTE Per Program Change		4
Annualization of FY 2017 Pay Raise	60	
Annualization of FY 2017 FTE	-	-
FY 2018 Pay Raise	181	
GSA Rent	1	
WCF	-	
Inflation	-	
Program Increases/Decreases	304	
Other Services	-	
Subtotal, Adjustment to Base	546	4
Program Increases/Decreases	24,841	-
Total Net Increases/Decreases	25,387	4
FY 2018 REQUEST	597,629	88

#### HIGHWAY TRAFFIC SAFETY GRANTS

# **Program and Performance Statement**

The NHTSA Highway Safety Grant programs are the foundation for NHTSA's national priority safety programs implemented in the States. Using performance measurement methodology, States identify highway safety 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 2015, pedestrian fatalities have increased for the last two consecutive years, while bicyclist fatalities increased from the previous year. To address these trends, the FAST Act includes an additional grant program targeting non-motorized road users. 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 issues. Any funds available before the last day of any fiscal year may be reallocated from Section 405 subsections to Section 402. A total of \$571,300,000 is proposed for NHTSA's Highway Traffic Safety Grant programs in FY 2018.

FY 2018 – Highway Traffic Safety Grants \$597,629,000

Program Activity	FY 2017 ANNUALIZED CR	FY 2018 REQUEST	CHANGE FY 2017 - 2018
Program Activity	546,459,203	571,300,000	24,840,797
Grants Administrative Expenses	25,782,893	26,329,000	546,107
Total	\$572,242,096	\$597,629,000	25,386,904

The State and Community Highway Safety formula grant program is the backbone of NHTSA's highway safety programs. These grants directly support the Department's efforts to promote safety by providing flexibility to States to address specific highway safety problems. States can use these grants for the following activities: alcohol and other impaired (drugged, distracted and drowsy) driving countermeasures; police traffic services; occupant protection (including child passenger safety and the dangers of heatstroke); traffic records; emergency medical services; motorcycle safety; pedestrian and bicyclist safety; speed management; and other safety countermeasures to address emerging issues on America's roads.

## **Section 405 National Priority Safety Programs**

\$280,200,000 TOTAL

The Section 405 National Priority Safety Programs include mission critical traffic safety grants, as outlined in the subsections below. NHTSA requests funding to assist States in the implementation of new strategies to address high-risk groups including those who still do not buckle up and/or drink and drive. These grants will also fund vital state traffic safety information system improvements that enable states to pinpoint their unique problems and support NHTSA's data modernization program.

## **Section 405 Occupant Protection Grants**

\$36,426,000 (13%)

The Occupant Protection grant program is based on a number of eligibility criteria, including development of comprehensive Statewide occupant protection strategic plans and countermeasures focusing on rural and nighttime belt use, both being persistent occupant protection risks. The program supports enactment and enforcement of primary enforcement seat belt laws. Seat belt use continues to be higher in States where vehicle occupants can be pulled over solely for not using seat belt as compared with States with weaker or absent enforcement laws. These performance-based programs provide States that have achieved high belt use rates with 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 2018, States will continue focusing on those most at risk of being killed or injured in a crash due to non-belt use, as well as participation in the national *Click It or Ticket* high-visibility enforcement campaign.

# Section 405 State Traffic Safety Information System Grants

\$40,629,000 (14.5%)

The State Traffic Safety Information System Grant program provides vital funds to States to improve the timeliness, accuracy, completeness, uniformity, integration and accessibility of State highway safety data to identify priorities for State and local highway safety programs.

This program directly supports efforts to improve highway safety data through needed traffic record systems improvements, including mission critical data system such as Fatality Analysis Reporting System.

# Sec 405 Impaired Driving Countermeasures Grants

\$147,105,000 (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 continue to account for 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 and 24/7 sobriety program law for all offenders. 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 FY 2018, States will continue to increase the deployment of ignition interlock and 24/7 programs, establish DWI courts, expand the use of Traffic Safety Resource Prosecutor networks, and expand Advanced Roadside Interdiction and Detection (ARIDE) training and Drug Recognition Expert (DRE) training for the law enforcement community.

# **Section 405 Distracted Driving Grants**

\$23,817,000 (8.5%)

The 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 2017 and FY 2018 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 can expend grant funds on activities for enforcement of these laws and 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 messaging will focus on reaching those population groups most likely to engage in distracted driving behavior.

# **Section 405 Motorcyclist Safety Grants**

\$4,203,000 (1.5%)

The Motorcyclist Safety Grant program encourages the 50 States, District of Columbia and Commonwealth of Puerto Rico to adopt effective motorcyclist safety programs, providing States additional flexibility to address emerging motorcycle safety issues. This program emphasizes State programs that include promoting rider education, motorist awareness,

initiatives to reduce impaired riding, and reduction of the number of improperly licensed motorcyclists.

# **Section 405 State Graduated Driver Licensing Laws**

\$14,010,000 (5%)

This State Graduated Driver Licensing (GDL) laws program promotes State adoption and implementation of effective graduated driver licensing laws. The program requires that novice drivers under the age of 21 years comply with a 2-stage licensing process, and outlines minimum standards a State graduated licensing program must implement. The FAST Act adjusts age and learner permit criteria and allows for more flexible use of funds for States receiving GDL funds.

## **Section 405 Non-motorized Safety**

\$14,010,000 (5%)

The FAST Act adds a new grant program to reduce pedestrian and bicyclist injuries and fatalities. States with annual combined pedestrian and bicyclist fatalities totaling more than 15 percent are eligible to receive funding. Funds can be used for law enforcement training, enforcement mobilization campaigns, and public education programs.

# **Section 2009 High Visibility Enforcement**

\$29,900,000

The Section 2009 High Visibility Enforcement (HVE) program provides funding for NHTSA media campaigns to increase seat belt use (*Click It or Ticket*) and decrease impaired driving (*Drive Sober or Get Pulled Over*). These HVE funds are used to pay for broadcast and digital media to support State and local law enforcement efforts. Paid media will include advertisements in both English and Spanish, and will target those most at risk (18 - 34 year-old males) for traffic fatalities. Funding in FY 2018 will support the *Click it or Ticket* campaign in May and the *Drive Sober or Get Pulled Over* campaigns in August and December.

# **Highway Safety Grant Administrative Expenses**

\$26,329,000

This category reflects NHTSA's salaries and administrative expenses associated with implementation of the Highway Safety Grant programs. Administrative funds also support the development of NHTSA's new mission critical information system, which provides 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 State highway safety plans and safety grant applications. The modernization of NHTSA's grant management system will also include new financial and programming reporting capabilities, including State performance management and measurement.

# Detailed Justification for Highway Traffic Safety Grants What Is the Request and What Funds Are Currently Spent on the Program?

# FY 2018 – HIGHWAY TRAFFIC SAFETY GRANTS \$597,629,000

Program Activity	FY 2017 ANNUALIZED CR	FY 2018 REQUEST	CHANGE FY 2017 - 2018
Section 402 State and Community Formula Grants*	\$243,037,107	\$261,200,000	\$18,162,893
Section 2009 High Visibility Enforcement	\$29,244,301	\$29,900,000	\$655,699
Section 405 - National Priority Safety Programs	\$274,177,795	\$280,200,000	\$6,022,205
Sec 405 - Occupant Protection Grants	\$37,215,897	\$36,426,000	(\$789,897)
Sec 405 - State Traffic Safety Information System Grants	\$39,755,780	\$40,629,000	\$873,220
Sec 405 - Impaired Driving Countermeasures Grants	\$143,943,342	\$147,105,000	\$3,161,658
Sec 405 - Distracted Driving Grants	\$23,305,112	\$23,817,000	\$511,888
Sec 405 - Motorcyclist Safety Grants	\$4,112,667	\$4,203,000	\$90,333
Sec 405 - State Graduated Driver Licensing Laws	\$13,708,890	\$14,010,000	\$301,110
Sec 405- Non-Motorized Safety Ped/Bikes	\$12,136,107	\$14,010,000	\$1,873,893
Sec 403h - In-Vehicle Alcohol Detection Device Research	\$0	\$0	\$0
Total	\$546,459,203	\$571,300,000	\$24,840,797

In FY 2018 NHTSA requests \$597.63 million for the Highway Traffic Safety Grants program. Funding at the requested level will allow NHTSA and its partners to effectively implement programs aimed at increasing safety and reducing roadway fatalities. The FY 2018 budget request highlights:

 Areas that address the Nation's major behavioral highway safety issues including impaired drivers, unbelted motor vehicle occupants, distracted drivers, and unhelmeted motorcycle fatalities. Sections 402 and 405 grants will provide States and local

- communities a means of maintaining and expanding traffic enforcement and implementation of data-driven countermeasures to reduce crashes, injuries, and fatalities, and reduce the economic burden caused by motor vehicle crashes.
- Reduced application burden, including use of a single application process for all the grant programs with one annual deadline, coupled with the development of an enhanced IT system for application submission, administration, and reconciliation. This IT modernization effort will support state performance measurement activities and significantly streamline State and Federal processes.
- Maximum flexibility by allowing States to meet additional performance-based requirements for occupant protection, distracted driving, Graduated Driver's Licensing and motorcycle safety can use some Section 405 funds for any project or activity eligible for funding under Section 402.
- Grant eligibility criteria are more performance-based and more objective for easier compliance and administration.
- Full accountability through problem identification and analysis to allocate resources and measure outcomes using performance measures.
- New Emphasis is placed on building highway safety program partnerships and program capacity.
- States having a high seat belt use rate may elect to use up to 100 percent of their occupant protection funds awarded for any eligible project or activity under Section 402.
- States qualifying for the Comprehensive Distracted Driving grants may use up to 50 percent of awarded funds for any Section 402 eligible project.
- States conforming to Model Minimum Uniform Crash Criteria (MMUCC) requirements may use up to 75 percent for any Section 402 eligible project requirement if distracted driving data conform to the MMUCC requirements.
- States may use up to 75 percent of Graduated Driving grant award funds for any eligible Section 402 project or activity.
- Low fatality States, as determined by NHTSA, may elect to use up to 100 percent of grant funds awarded for any eligible Section 402 project. A low fatality State is one that is in the lowest 25 percent of all States for the number of drivers under 18 involved in fatal crashes in the State as a percentage of the total number of drivers under 18 in the State.
- Non-motorized grant funds may be used only for training of law enforcement on State laws applicable to pedestrians and bicyclist safety; enforcement campaigns for State traffic laws applicable to pedestrians and bicyclist safety; and public education and awareness programs on their State's pedestrian and bicyclist safety laws.

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Sec.402 Formula Grants	\$243,037,107	\$261,200,000	\$18,162,893

# What is this Program and Why is it Necessary?

The State and Community Highway Safety formula grant program is the backbone of NHTSA's highway safety programs. These grants directly support the Department's safety efforts by providing flexibility to States to address highway safety problems. States can use these grants for the following activities: alcohol and other impaired (drugged, distracted, and drowsy) driving countermeasures; police traffic services; occupant protection (including child passenger safety, and the dangers of heatstroke); traffic records; emergency medical services; motorcycle safety; pedestrian and bicyclist safety; speed management; and other safety countermeasures to address emerging issues on America's roads. In 2015, our Nation lost 35,092 people to motor vehicle crashes in highway crashes. In addition to the human suffering and injuries caused by the tragedy of highway crashes, the total economic cost of motor vehicle crashes in the U.S. is estimated to be \$242 billion annually.

The FAST Act maintains key components of the existing law, including:

- All States, Territories, the District of Columbia, the Commonwealth of Puerto Rico, and the Bureau of Indian Affairs, that submit approved highway safety plans would receive grant funding based on the current formula which factors in road miles and population.
- States have the option of receiving supplemental funds for NHTSA research and demonstration programs in the States that receive funds from the Research and Demonstration program (formally Section 403).
- States are afforded flexibility that will result in more efficient use of State funds and could advance the completion of research projects of interest to the States.
- States are given resources to implement a comprehensive, statewide traffic safety enforcement program that provides resources to ensure minimum levels of traffic enforcement in each jurisdiction.
- This core safety grant program will also allow States to pool money to fund regional programs and activities that span across State lines (e.g., combine alcohol or speed enforcement initiatives between bordering States).
- 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.

# What Does This Funding Level Support?

In FY 2018 NHTSA requests \$261.20 million for Section 402 State and Community Formula Grants. Funding at this level will allow NHTSA's partners to use proven and effective countermeasures to identify and address critical highway safety problems. The 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 that is updated periodically by NHTSA. Of importance, NHTSA is implementing a new modernized information system that will significantly advance safety performance measurement and reporting by States. The grant program directly supports the Department's safety efforts by providing flexibility to States to address highway safety problems.

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

The Section 402 grant program is critical for States and Territories to address specific State and local highway safety problems that may be better solved through regional and local strategies. This program has become even more critical as highway-related fatalities continue to rise as do the economic costs associated with those crashes. States are an integral part of the solution but their role is extremely limited without the Federal funds. In addition to funding critical highway safety initiatives in the States, the request will support the implementation of a comprehensive statewide 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 fund the cooperative research and evaluation program of highway safety countermeasures (to be jointly managed by NHTSA and the States). See the Highway Safety Programs section for more information.

#### HIGHWAY TRAFFIC SAFETY GRANTS

**Section 405 Occupant Protection Grants** 

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Sec.405B National Priority Safety Program - Occupant Protection Grants	\$37,215,897	\$36,426,000	(\$789,897)

# What is this Program and Why is it Necessary?

The Occupant Protection grant program is based on a number of eligibility criteria, including development of comprehensive Statewide occupant protection strategic plans and countermeasures focusing on rural and nighttime belt use, both of which are persistent occupant protection risks. Eligible States can qualify for grant funds as either a high seat belt use rate State or as a lower seat belt use rate State. All States participate in the nationwide *Click It or Ticket* campaign, have an active network of child restraint inspection stations, and have a plan to recruit, train, and maintain a sufficient number of child passenger safety technicians. States with lower seat belt use rates must meet three of six additional criteria to qualify for an occupant protection grant.

When used properly, occupant protection devices, including seat belts and child safety seats, can be 45 to 60 percent effective in reducing the risk of fatal injury in a crash. NHTSA estimates that among vehicle occupants age 5 years and older in 2015, seat belts saved an estimated 13,941 lives. If all unrestrained passenger vehicle occupants age 5 years and older had worn seat belts in 2015, an estimated 2,804 additional lives could have been saved.

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, the Occupant Protection Grants program has worked effectively to help States establish Statewide occupant protection programs for children and adults. States have strengthened their occupant protection laws by providing stronger enforcement (from secondary to primary enforcement), and requiring that children ride properly secured in an age appropriate child restraint or booster seat (until they reach a certain weight and height limit).

# What Does This Funding Level Support?

In FY 2018, NHTSA requests \$36.43 million for Occupant Protection Grants. Funding at this level will allow NHTSA's partners to support enactment and enforcement of primary enforcement seat belt laws. Belt use continues to be higher in States where vehicle occupants can be stopped solely for not using seat belt as compared with States with weaker or absent enforcement laws. These performance-based programs provide States that have achieved high belt use rates with flexibility on how to expend grant funds. With observed national seat belt usage now at 90.1 percent, States are turning to countermeasures focused on high-risk populations.

In FY 2018 States will continue focusing on those most at risk of being killed or injured in a crash due to non-belt use and participation in the national *Click It or Ticket* high-visibility enforcement campaign. Grant funds could be used for a variety of occupant protection programs and activities, including support for high visibility enforcement campaigns, training, education, safety equipment, information systems, and child passenger safety programs.

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

Increased enforcement of the State occupant protection laws has been supported by these grant funds. States are working to use countermeasures focused on high risk populations such as nighttime drivers, young drivers, pickup truck drivers, and minority and hard-to-reach population groups. National seat belt use is at 90.1 percent, up from 60 percent in 1995, when the first *Click It or Ticket* enforcement campaign was held. Thirty-four States, DC, Puerto Rico, and four Territories have primary seat belt laws; and all 50 States have child restraint laws. Increasing seat belt and child safety seat usage saves lives and mitigates injuries.

# **HIGHWAY TRAFFIC SAFETY GRANTS**

# **Section 405 State Traffic Safety Information System Improvement Grants**

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Sec.405C National Priority Safety Program - State Traffic Safety Information System Improvements	\$39,755,780	\$40,629,000	\$873,220

# What is this Program and Why is it 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 the most pressing safety problems. The program brings together different stakeholders – such as law enforcement, injury surveillance personnel, courts, etc. – to 'communicate' and link files in disparate data systems. Key areas can include data such as crash, driver licensing, vehicle registration, emergency medical services, citation, adjudication, and roadway issues. Improved data are critical for States to determine crash trends that include serious injury trends, identification of traffic safety issues, and determination of effectiveness of traffic safety programs. In addition, improved State data will enhance NHTSA's ability to observe and analyze national trends such as crash occurrences, rates of injury, contributing casual factors, and emerging safety issues.

# What Does This Funding Level Support?

In FY 2018 NHTSA requests \$40.63 million for State Traffic Safety Information System Improvements. Funding at this level will allow NHTSA's partners to improve the timeliness, accuracy, completeness, uniformity, integration and accessibility of State traffic records for identifying priorities for State and local highway safety programs. States require data to accurately assess whether their countermeasure programs are effective in achieving stated project goals. Since the program began in FY 2005, the States have implemented improvements in such areas as transition from paper police crash reports to electronic reports, allowing timelier dissemination and analyses of data. The reports are more accurate, timely, uniform, and complete.

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

The program has provided better accessibility to diverse stakeholders in need of safety data. The end result is the States are able to examine what countermeasures should be developed to improve safety on the Nation's highways, while improving efficiency and effectiveness of data systems. Without accurate and timely data, State and Federal governments cannot properly identify safety trends and emerging safety problems.

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Sec.405D National Priority Safety Program - Impaired Driving Countermeasures	\$143,943,342	\$147,105,000	\$3,161,658

# What is this Program and Why is it Necessary?

The Impaired Driving Countermeasures Grants program provides financial incentives to States to enact laws and implement programs to reduce alcohol and drug 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. 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. These categories are based on their impaired driving fatality rates. In addition, the program provides additional incentive funds to States that adopt a mandatory ignition interlock and/or 24/7 program for offenders.

# What Does This Funding Level Support?

In FY 2018 NHTSA requests \$147.11 million for Impaired Driving Countermeasure Grants. Funding at this level will allow NHTSA's partners to support programs that address driving under the influence of alcohol, drugs, or the combination of the two, as well as focus on State performance in addressing impaired driving. Grant funds may be used to support a wide range of impaired driving countermeasures. All grant recipients are required to participate in the national impaired driving crackdowns and comply with enforcement reporting requirements.

In 2015, there were 10,265 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.

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

Funding will allow States to increase the deployment of ignition interlocks, establish Driving While Intoxicated (DWI) courts, expand the use of Traffic Safety Resource Prosecutors (TSRPs), and expand Advanced Roadside Interdiction and Detection (ARIDE) training and Drug Recognition Expert (DRE) training programs for law enforcement. In recent years, nearly 30 percent of fatal crashes involved an alcohol-impaired driver (BAC of .08 or higher), and 10,265 people were killed in these crashes during 2015. 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, while others have achieved limited success or made no progress. Additional incentives to work on life-saving countermeasures in all States is needed. Strategies the States are encouraged to promote with Section 405(d) funds may include checkpoints, DWI courts, Administrative License Revocation (ALR) legislation, and use of interlocks 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 29 percent in 2015.

# HIGHWAY TRAFFIC SAFETY GRANTS Section 405 Distracted Driving Prevention Grant

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Sec.405E National Priority Safety Program - Distracted Driving	\$23,305,112	\$23,817,000	\$511,888

# What is this Program and Why is it Necessary?

The Distracted Driving Prevention Grant program provides incentives to States to enact and enforce complying laws to prevent distracted driving. The FAST Act eased certain requirements for the Comprehensive Distracted Driving grant, affords States flexibilities on how grant funds may be spent, and provides for Special Distracted Driving Grants in FY 2017 and 2018 for States that do not qualify for the Comprehensive grant. States must have a basic text messaging law for all drivers, primary enforcement, fines for violations, and prohibition on the use of personal wireless communications devices for drivers under age 18 years in order to qualify for the Special Distracted Driving grant in FY 2018. The basis for the Comprehensive grant is a requirement that the State tests for distracted driving issues on the driver's license exam and that the State have a conforming law with a minimum fine. States would be able to expend grant funds on activities related to the enforcement of these laws or other behavioral highway safety activities. NHTSA funds up to \$5 million to develop and place broadcast, digital and other media to support the state and local high visibility enforcement activity during National Distracted Driving month in April. Media strategies will focus on reaching those segments of the population most likely to engage in distracted driving behavior.

# What Does This Funding Level Support?

In FY 2018 NHTSA requests \$23.82 million for Distracted Driving Prevention Grant program. Funding at this level will allow NHTSA and the States to work toward reducing crashes, injuries, and fatalities related to distracted driving. NHTSA will work with States to encourage law enforcement agencies nationwide to enforce current distracted driving laws through high visibility enforcement. These activities will be supported by appropriate broadcast, digital, and social media messaging, and the funding will support development of policies and activities that further strengthen efforts to end distracted driving.

States would be able to expend grant funds on activities related to the requirements of the Comprehensive or Special Distracted Driving grants. In 2015, 3,477 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 542,000 vehicles are being driven by someone using a hand-held cellular phone. People of all ages are using a variety of hand-held devices when they are behind the wheel, such as cell phones, mp3 players, personal digital assistants, and navigation devices. This request is

intended to spur States to enact laws to prevent distraction and provide funds for enforcement of these laws.

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

Ownership and use of cell phones, 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 our Nation acts soon to strongly discourage use of these devices while driving, more people will be killed or injured by distracted drivers. This funding level should provide adequate incentives to encourage States to pass and enforce laws to prevent distracted driving.

NHTSA's experience in programs to increase seat belt usage has demonstrated the effectiveness of strong laws coupled with high visibility enforcement. NHTSA 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 cellular phone use and texting while driving. According to *Countermeasures That Work*, an evaluation of one District of Columbia law banning handheld cell phone use while driving showed a 50 percent reduction in handheld use after one year; largely attributed to strong enforcement. More recently, NHTSA partnered with Delaware and California to demonstrate the effectiveness of high visibility enforcement of Statewide laws banning handheld cell phone use and texting while driving.

#### HIGHWAY TRAFFIC SAFETY GRANTS

**Section 405 Motorcyclist Safety Grants** 

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Sec.405F National Priority Safety Program -Motorcyclist Safety	\$4,112,667	\$4,203,000	\$90,333

# What is this Program and Why is it Necessary?

The Motorcyclist Safety Grants encourage States to adopt effective motorcyclist safety programs. The grant program would allow States to expend funds on a comprehensive motorcyclist safety strategy, with an emphasis on activities that would increase the use of motorcycle helmets (the most effective means of reducing motorcyclist crash fatalities and serious injuries). This Motorcyclist Safety Grant program would promote use of DOT compliant motorcycle helmets, increasing efforts to reduce impaired riding and reducing the number of improperly licensed motorcyclists.

# What Does This Funding Level Support?

In FY 2018 NHTSA requests \$4.20 million for Motorcyclist Safety Grants. Funding at this level will allow NHTSA's partners to continue and expand efforts to reduce motorcycle crashes and address emerging safety issues at the State and local levels. Motorcyclist fatalities increased by 132 percent in the 10-year period from 1998 to 2008. In 2009 motorcyclist fatalities dropped for the first time in over 10 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 were declines during 2013 and 2014. The number of motorcyclist fatalities rose again by 8.3 percent from 2014 to 2015. The number of motorcycle registrations also rose by 117 percent between 1998 and 2013. In 2015, there were 4,976 motorcyclists killed in motor vehicle traffic crashes and an estimated 88,000 motorcyclists injured. Motorcyclists accounted for 14 percent of all traffic fatalities. 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 motor vehicle occupant safety. Funds would allow States to continue and expand efforts to reduce motorcycle crashes and address emerging safety issues at the State and local levels.

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

NHTSA estimates that helmets saved the lives of 1,772 motorcyclists in 2015. If all motorcyclists had worn helmets, an additional 740 lives could have been saved. Helmets are estimated to be 37 percent effective in preventing fatal injuries to motorcycle riders and 41 percent for motorcycle passengers. In other words, for every 100 motorcycle riders killed in crashes while not wearing helmets, 37 of them could have been saved had all 100 worn helmets. Motorcyclist safety training and public awareness and outreach programs targeting both motorcyclists and motorists are countermeasures that are prominently featured in most State motorcyclist safety programs. This program will provide States more flexibility in using grant

funds. Funds could be spent on a variety of activities, with an emphasis on enforcement and the promotion of helmet use laws, rather than solely motorcyclist awareness and training.

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Sec.405G National Priority Safety Program - State Graduated Driver Licensing Laws	\$13,708,890	\$14,010,000	\$301,110

# What is This Program and Why is it Necessary?

The State Graduated Driver Licensing Laws program encourages States to adopt and implement effective graduated driver licensing (GDL) 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. In NHTSA's *Countermeasures That Work* document, studies indicate that a 2-stage driver licensing program decreases novice teen driver death and injury. Motor vehicles crashes are the leading cause of death for those age 15 to 20 years-old. In 2015, there were 1,886 young drivers 15 to 20 years old who died in motor vehicle crashes.

## What Does This Funding Level Support?

In FY 2018 NHTSA requests \$14.01 million for State Graduated Driver Licensing Laws. Funding at this level will allow NHTSA's partners 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. Generally, 75 percent of funds may also be used for any traffic safety eligible project or activity under the Section 402 State and Community Formula Grant Program. The number of young drivers involved in fatal crashes has decreased by 43 percent from 2006 to 2015.

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

Novice driver licensing programs vary across States. This program will fund States to adopt and expand their efforts to reduce young driver deaths through the implementation of standardized and comprehensive multi-stage driver licensing programs. This dedicated funding will promote State adoption and implementation of standardized GDL programs.

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Sec.405H National Priority Safety Program - Non- Motorized Safety	\$12,136,107	\$14,010,000	\$1,873,893

# What is this Program and Why is it Necessary?

The newly established Non-Motorized Safety Grants encourage States to implement programs to address pedestrian and bicyclist safety. More Americans are walking and biking, and 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 data corroborate this finding of recent increases in bicycling and walking.

# What Does This Funding Level Support?

In FY 2018 NHTSA requests \$14.01 million for Non-Motorized Safety Grants. Funding at this level will allow NHTSA's partners to expend funds to provide law enforcement training, implement effective law enforcement initiatives, and educate the public on State traffic safety laws. The 5-year trend for bicyclist fatalities rose to a high 818 fatalities in 2015, an increase of more than 12 percent from 2014. The 5-year trend for pedestrian fatalities rose to a high 5,376 in 2015, an increase of 9.5 percent from 2014. Additionally, 70,000 pedestrians and 45,000 bicyclists were injured in 2015. As a percentage of the total motor vehicle-related deaths in 2015, pedestrian fatalities represented 15.3 percent and bicyclist fatalities represented 2.3 percent, for a total of 18 percent of total fatalities. With increasing fatalities, it is imperative to enforce, implement, and address pedestrian and bicyclist safety.

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

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 conduct enforcement and education countermeasures to address their unique problems with pedestrian and bicyclist safety.

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

Program Activity	FY 2017	FY 2018	CHANGE
	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Sec.2009 High Visibility Enforcement	\$29,244,301	\$29,900,000	\$655,699

# What is this Program and Why is it Necessary?

This request will provide funding for NHTSA high visibility media campaigns. The National Occupant Protection campaign (*Click It or Ticket*) occurs during the Memorial Day period and consists of two weeks of high visibility enforcement (HVE) 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, that occur during the Labor Day and December holiday seasons. Using the "*Drive Sober or Get Pulled Over*" message, the HVE funds are used to pay for broadcast, digital, and other media to support State and local law enforcement efforts.

Paid media will include advertisements in both English and Spanish languages and will continue to focus on at risk 18 - 34-year-old males. 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 TV, sports programming and alternative media consumed by the target audiences. The impaired driving advertising effort in August will also include impaired motorcyclists, as motorcyclists continue to be overrepresented in alcohol-related crashes. Additionally, NHTSA will include other at risk populations overrepresented in alcohol-related crashes, such as newly-arrived Hispanics.





- 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 initiatives 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 occupant protection and impaired driving
  laws.

# What does the funding level support?

In FY 2018 NHTSA requests \$29.90 million for the Section 2009 High Visibility Enforcement program. Funding at this level will provide NHTSA the resources necessary to develop and conduct a media campaign that will support law enforcement efforts to deter impaired driving. By providing national media coverage the states can leverage their resources to place advertising buys in very specific markets and concentrate their efforts on engaging law enforcement. Funding will allow NHTSA to purchase media with very targeted messages on enforcement activities and increase the driving public's awareness of zero tolerance for drunk and unbuckled drivers.

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

The request will support continued national and State efforts to increase safety belt use and decrease drunk driving through media buys. The FY 2018 budget requests funding for three media buys; one occupant protection mobilization for Memorial Day and two impaired driving crackdowns during the Labor Day and December holiday seasons. These activities have proven effective in reducing fatalities and injuries on our highways.

# HIGHWAY TRAFFIC SAFETY GRANTS PROGRAM AND FINANCING SCHEDULE

	TTT 204 6	TT1 404 T	TTV 0040
Description	FY 2016 Actual	FY 2017 Annualized CR	FY 2018
The state of the s	Actual	Amidanzeu CK	Request
Obligations by Program Activity	272 202 224	242.027.107	261 200 000
Section 402 Formula Grants Section 406 Sofety Bott Parformance NASS Medamization (no. 1907)	273,303,324	243,037,107	261,200,000
Section 406 Safety Belt Performance NASS Modernization (no-year)	4,664,437	20 244 201	20,000,000
Section 2009 High Visibility Enforcement Program	29,300,000	29,244,301	29,900,000
Section 405b Occupant Protection Grants	43,952,000	37,215,897	36,426,000
Section 405c State Traffic Safety Information Systems Grants	39,831,500	39,755,780	40,629,000
Section 405d Impaired Driving Countermeasures Grants	143,717,500	143,943,342	147,105,000
Section 405e Distracted Driving Grants	7,334,950	23,305,112	23,817,000
Section 405f Motorcylist Safety Grants	4,120,500	4,112,667	4,203,000
Section 405g State Graduated Driver Licensing Laws Section 403h In-Vehicle Alchohol Detection Device Research	- 5 402 006	13,708,890	14,010,000
	5,493,906	12 126 107	14.010.000
Section 405h National Priority Safety Program - Non-Motorized Safety Ped/Bikes	25 450 516	12,136,107	14,010,000
Administrative Expenses - Chapter 4 of Title 23	25,458,516	25,782,893	26,329,000
NHTSA Sec 154/164 Penalties to 402 Program - Flex Transfers	91,040,591		
Total Direct Obligations	668,217,224	572,242,096	597,629,000
Reimbursable Program	_	<u>-</u>	_
Total New Obligations	668,217,224	572,242,096	597,629,000
Budgetary Resources			
Unobligated balance available, start of year	151,452,097	142,498,628	149,090,016
Adjustments to unobligated bal			
Adjustments to unobligated balance, October 1			
Recoveries of prior year unpaid obligations	2,205,483	6,591,388	-
Anticipated Recoveries of prior-year unpaid obligations (unobligated balances) (+ or -)		-	-
Unobligated balance available (total)	153,657,580	149,090,016	149,090,016
Budget Authority			
Appropriations (disc):			
Appropriation (trust fund)(disc.)	573,332,000	572,242,096	597,629,000
Adjustments to appropriations (disc.)			
Transferred from other accounts (appropriations (+)	91,040,591		
Portion applied to liquidate contract authority (-)	(664,372,591)	(572,242,096)	(597,629,000)
Appropriation (disc.) (total)	-	-	-
Contract Authority (mand.)			
Contract Authority (mand.)	573,332,000	585,372,000	597,629,000
Transferred to other accounts	-	-	-
Transferred from other accounts	91,040,591	-	-
Unobligated balances permanently reduced	-	=	-
Collected (disc) (cash) (unexpired only)			
Contract authority (mand.) total	664,372,591	585,372,000	597,629,000
Total budgetary resources available	818,030,171	734,462,016	746,719,016
Change in Obligated Balance			
Obligated balance, brought forward, Oct 1: (gross)	912,929,260	897,361,490	741,901,039
Adjustment to unpaid obligations, brought forward Oct 1			
Obligations incurred, unexpired accounts	675,531,544	572,242,069	597,629,000
Outlays (gross)	(688,897,598)	(720,002,520)	(720,121,020)
Recoveries of prior year unpaid obligations, unexpired	(2,201,716)	(7,700,000)	(1,000,000)
Unpaid obligated balance, end of year (gross)	897,361,490	741,901,039	618,409,019
Outlays (gross), detail			
	125 002 744	225 002 520	245 002 220
Outlays from new discretionary authority	135,003,744	235,002,520	245,003,220
Outlays from discretionary balances Federal sources	553,893,854	485,000,000	475,346,300
Total outlays (gross)	688,897,598	720,002,520	720,349,520
	000,071,390	140,004,340	140,347,340

# HIGHWAY TRAFFIC SAFETY GRANTS OBJECT CLASS SCHEDULE

Description  Direct Obligations	FY 2016 Actual	FY 2017 Annualized CR	FY 2018 Request
Personnel Compensation			
Full-time permanent	8,416,331	9,681,000	10,339,000
Other than full-time permanent	0,110,331	2,001,000	10,557,000
Other personnel compensation	274,517	309,000	330,000
Total personnel compensation	8,690,848	9,990,000	10,669,000
Civilian personnel benefits	2,309,076	2,381,000	2,543,000
Travel and Transportation of Persons	269,504	379,000	400,000
Transportation of things	-	-	-
Rental payments to GSA	316,290	500,000	500,000
Communications, utilities, and miscellaneous charges	12,237,996	12,000,000	12,688,000
Printing and reproduction	-	-	-
Other services	24,083,400	20,000,000	22,000,000
Research and development contracts	-	-	-
Supplies and materials	-	-	-
Equipment	-	-	-
Grants and subsidies	620,310,110	526,992,096	548,829,000
Total new obligations	668,217,224	572,242,096	597,629,000

NHTSA FY 2018 SAFETY GRANTS ADMINISTRATIVE EXPENSES

	FY 2017	FY 2018	Change
Program Activity	ANNUALIZED CR	REQUEST	FY 2017 - 2018
Salaries and Benefits	\$12,370,870	\$13,211,787	\$840,917
Travel	376,000	377,000	\$1,000
Transportation of Things	-	-	-
Rent, Communications & Utilities	427,000	428,000	\$1,000
Printing	-	-	-
Other Services	12,609,023	12,312,213	(\$296,810)
Supplies	-	-	-
Equipment	-	-	-
Unallocated	-	-	\$0
<b>Total Administrative Expenses</b>	\$25,782,893	\$26,329,000	\$546,107
FTE (includes indirect FTE)	84	88	4

# **Administrative Expenses**

In FY 2018, NHTSA's Highway Traffic Safety Grants request includes \$26.33 million for the administrative expenses category. Costs associated with this category include the salaries and benefits for employees in NHTSA's headquarters Office of Grants Management Operations and regional staff who directly support and provide guidance to NHTSA State partners. Administrative funding also supports other business expenses such as personnel operations, facilities management, parking management, printing and graphics, mail operation and dockets management operations, building security, utilities and building maintenance, voice, cable and wireless communications, Disability Resource Center, substance abuse awareness and testing, and procurement and acquisition services.

The FY 2018 budget request includes baseline changes from FY 2017 for the following: (1) 1.9 percent pay raise for 2018; (2) adjustments to GSA rent; and (3) an increase for an estimated one percent inflation to administrative expenses. NHTSA will continue to distribute administrative expenses using a methodology based primarily on direct FTE allocation for the following categories: salaries and benefits; travel; transportation of things, rent, printing, supplies, equipment; and other services.

Additionally, NHTSA payments for centralized administrative and support services for DOT's Working Capital Fund will total \$14 million in FY 2018. The Highway Safety Research and Development share of this total is \$3.34 million.

Funding also supports enhancements to the grants management system that 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 thousands of highway safety projects at the State, local, and territorial level being considered for grant funding. System improvements will include mission critical safety performance measurement and reporting capabilities to improved tracking of grant activities.

Included within the FY 2018 request is \$1.66 million for the National Occupant Protection Use Surveys (NOPUS). This funding supports the distraction initiative by reporting driver use rates of cell phone and other electronic devices. It will also allow the agency to conduct a 2018 NOPUS survey and report overall seat belt use and motorcycle helmet use, and all NHTSA to report on the results of child restraint use and belt use among rear-seat occupants from the 2017 NOPUS.

# This Page Left Intentionally Blank

#### **APPROPRIATIONS HISTORY**

### OPERATIONS AND RESEARCH VEHICLE SAFETY RESEARCH GENERAL FUND - APPROPRIATIONS

Fiscal Year	Request	<u>Fiscal Year</u>	<u>Enacted</u>
2009 <sup>1/</sup>	\$0	2009	\$127,000,000
2010	\$129,774,000	2010	\$140,427,000
2011	\$132,837,000	2011	\$140,146,146
2012	¢170 709 722	2012	\$140,146,000
2012	\$170,708,723	2012	\$140,146,000
2013 <sup>2/</sup>	\$0	2013 3/	\$140,146,000
2010	Ψ	2010	ψ140,140,000
2014	\$148,343,000	2014	\$134,000,000
2015 4/	\$0	2015	\$130,000,000
2016 <sup>5/</sup>	\$0	2016	\$152,800,000
2017 <sup>6/</sup>	\$0	2017 7/	\$152,509,527
2018	\$152,509,527	2018	-

<sup>&</sup>lt;sup>1/</sup> Requested as contract authority from the Trust Fund.

<sup>&</sup>lt;sup>2/</sup> In FY 2013, the Budget 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.

<sup>&</sup>lt;sup>3/</sup> 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.

<sup>&</sup>lt;sup>4/</sup> In FY 2015, the Budget 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.

<sup>&</sup>lt;sup>5/</sup> In FY 2016, the Budget 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.

<sup>&</sup>lt;sup>6/</sup> In FY 2017, the Budget 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.

<sup>&</sup>lt;sup>7/</sup> The FY 2017 funding level reflects the annualized CR rate in all funds.

#### **APPROPRIATIONS HISTORY**

## OPERATIONS AND RESEARCH VEHICLE SAFETY RESEARCH TRUST FUND - CONTRACT AUTHORITY

	Fiscal Year	<u>Request</u>	<u>Fiscal Year</u>	<u>Enacted</u>
	2009	\$127,000,000	2009 <sup>1</sup>	\$0
	2010	\$0	2010	\$0
				•
	2011	\$0	2011	\$0
	2012	\$0	2042	<b>C</b> O
	2012	Φ0	2012	\$0
•	2013 <sup>2</sup>	\$188,000,000	2013	\$0
	2013	\$100,000,000	2013	ΨΟ
	2014	\$0	2014	\$0
		•		
•	2015 <sup>3</sup>	\$152,000,000	2015	\$0
•	2016 <sup>4</sup>	\$179,000,000	2016	\$0
	2017 <sup>5</sup>	\$249,800,000	2017	\$0
	2018	\$0	2018	-

<sup>&</sup>lt;sup>1/</sup> For FY 2009, enacted as direct appropriation from General Fund.

<sup>&</sup>lt;sup>2/</sup> In FY 2013, the Budget 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.

<sup>&</sup>lt;sup>3/</sup> In FY 2015, the Budget 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 201 and re-based from the General Fund in 2013 and 2014.

<sup>&</sup>lt;sup>4/</sup> In FY 2016, the Budget 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.

<sup>&</sup>lt;sup>5/</sup> In FY 2017, the Budge tproposed 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.

#### **APPROPRIATIONS HISTORY**

# OPERATIONS AND RESEARCH VEHICLE SAFETY RESEARCH TRUST FUND - CONTRACT AUTHORITY

**Liquidation of Contract Authorization** 

Fiscal Year	<u>Request</u>	<u>Fiscal Year</u>	<u>Enacted</u>
2009	\$127,000,000	2009 <sup>1/</sup>	\$0
2010	\$0	2010	\$0
2011	\$0	2011	\$0
	•		
2012	\$0	2012	\$0
20 10 2/	0.000.000	2010	
2013 <sup>2/</sup>	\$188,000,000	2013	\$0
2014	<b>#</b> 0	2014	<b>\$</b> 0
2014	\$0	2014	\$0
2015 <sup>3/</sup>	\$152,000,000	2015	\$0
2013	\$132,000,000	2013	ΨΟ
2016 <sup>4/</sup>	\$179,000,000	2016	\$0
2010	ψ170,000,000	2010	ΨΟ
2017 5/	\$249,800,000	2017	\$0
	<del>+=</del> 15,550,660		43
2018	\$0	2018	-

<sup>\*\*</sup> For FY 2005, enacted as transfer from FHWA (parent/child)

<sup>\*\*\*</sup>For FY 2006 and 2007, enacted as direct appropriation from Trust Fund.

<sup>&</sup>lt;sup>1/</sup> For FY 2009, enacted as direct appropriation from General Fund.

<sup>&</sup>lt;sup>2/</sup> In FY 2013, the Budget 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.

<sup>&</sup>lt;sup>3/</sup> In FY 2015, the Budget 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 201 and re-based from the General Fund in 2013 and 2014.

<sup>&</sup>lt;sup>4/</sup> In FY 2016, the Budget 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.

<sup>&</sup>lt;sup>5/</sup> In FY 2017, the Budge tproposed 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.

#### **APPROPRIATIONS HISTORY**

# OPERATIONS AND RESEARCH HIGHWAY SAFETY RESEARCH AND DEVELOPMENT TRUST FUND - CONTRACT AUTHORITY

**Limitation on Obligations** 

<u>Fiscal Year</u>	Request	<u>Fiscal Year</u>	Enacted
2009	\$105,500,000	2009	\$105,500,000
2010	\$107,329,000	2010	\$105,500,000
2211	<b>*</b> 44 <b>= *=*</b>		0.00
2011	\$117,376,000	2011	\$105,500,000
0040 1/	\$400.404.070	0040 1/	<b>#400 500 000</b>
2012 1/	\$133,191,276	2012 1/	\$109,500,000
2013 1/	<b>#450,000,000</b>	2013 <sup>2/</sup>	\$445 500 000
2013	\$150,000,000	2013	\$115,500,000
2014 1/	\$118 500 000	2014 1/	\$123,500,000
2014	\$118,500,000	2014	\$123,300,000
2015 1/	\$122,000,000	2015 1/	\$138,500,000
2013	Ψ122,000,000	2010	Ψ130,300,000
2016 <sup>1/</sup>	\$152,000,000	2016 <sup>1/</sup>	\$142,900,000
	<b>4</b> . <b>32</b> , 333, 333		Ţ · · <b>-</b> ,000,000
2017 1/	\$145,900,000	2017 1/ 3/	\$142,628,347
	* -,,		,, -
2018 1/	\$149,000,000	2018 <sup>1/</sup>	-

<sup>&</sup>lt;sup>1/</sup> For FY's 2012-2018, National Driver Register is eliminated as a separate account and combined with the Highway Safety Research and Development fund.

<sup>&</sup>lt;sup>2/</sup> 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.

<sup>&</sup>lt;sup>3/</sup> The FY 2017 funding level reflects the annualized CR rate in all funds.

#### **APPROPRIATIONS HISTORY**

# **OPERATIONS AND RESEARCH** HIGHWAY SAFETY RESEARCH AND DEVELOPMENT TRUST FUND - CONTRACT AUTHORITY

**Liquidation of Contract Authorization** 

Fiscal Year	Request	Fiscal Year	<u>Enacted</u>
2009	\$105,500,000	2009	\$105,500,000
2010	\$107,329,000	2010	\$105,500,000
2011	\$117,376,000	2011	\$105,500,000
4/		4/	
2012 <sup>1/</sup>	\$133,191,276	2012 1/	\$109,500,000
4/		2/	
2013 1/	\$150,000,000	2013 <sup>2/</sup>	\$115,500,000
4/		4/	
2014 1/	\$118,500,000	2014 1/	\$123,500,000
1/	•	1/	•
2015 <sup>1/</sup>	\$122,000,000	2015 1/	\$138,500,000
1/	•	1/	
2016 <sup>1/</sup>	\$152,000,000	2016 1/	\$142,900,000
1/	•	1/2/	• • • • • • • • • • • • • • • • • • • •
2017 1/	\$145,900,000	2017 1/ 3/	\$142,628,347
1/	•	1/	
2018 <sup>1/</sup>	\$149,000,000	2018 1/	<del>-</del>

<sup>&</sup>lt;sup>1/</sup> For FY's 2012-2018, National Driver Register is eliminated as a separate account and combined with the Highway Safety Research and Development fund.

<sup>&</sup>lt;sup>2/</sup> 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.

3/ The FY 2017 funding level reflects the annualized CR rate in all funds.

# **APPROPRIATIONS HISTORY**

# NATIONAL DRIVER REGISTER TRUST FUND - CONTRACT AUTHORITY

**Limitation on Obligations** 

	Lillitation of	1 Obligations	
Fiscal Year	<u>Request</u>	Fiscal Year	<u>Enacted</u>
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 <sup>1/</sup>	\$0	2012 <sup>1/</sup>	\$0
2013 <sup>1/</sup>	\$0	2013 <sup>1/</sup>	\$0
2014 <sup>1/</sup>	\$0	2014 <sup>1/</sup>	\$0
2015 1/	\$0	2015 <sup>1/</sup>	\$0
2016 1/	\$0	2016 <sup>1/</sup>	\$0
2017 1/	\$0	2017 <sup>1/</sup>	\$0
2018 1/	\$0	2018 1/	<u>-</u>

<sup>&</sup>lt;sup>1/</sup> For FY's 2012-2018, National Driver Register is eliminated as a separate account and combined with the Highway Safety Research and Development fund.

### **APPROPRIATIONS HISTORY**

# NATIONAL DRIVER REGISTER TRUST FUND - CONTRACT AUTHORITY Liquidation of Contract Authorization

Fiscal Year	<u>Request</u>	Fiscal Year	<u>Enacted</u>
2009	\$4,000,000	2009	\$4,000,000
2010	\$4,078,000	2010	\$4,000,000
2011	\$4,170,000	2011	\$4,000,000
		4/	
2012 1/	\$0	2012 1/	\$0
.,		**	
2013 1/	\$0	2013 <sup>1/</sup>	\$0
2014 1/	\$0	2014 1/	\$0
2015 1/	\$0	2015 <sup>1/</sup>	\$0
2016 <sup>1/</sup>	\$0	2016 <sup>1/</sup>	\$0
2017 1/	\$0	2017 <sup>1/</sup>	\$0
2018 1/	\$0	2018 <sup>1/</sup>	-

 $<sup>^{1/}</sup>$  For FY's 2012-2018, National Driver Register is eliminated as a separate account and combined with the Highway Safety Research and Development fund.

# APPROPRIATIONS HISTORY MODERNIZATION INITIATIVE NATIONAL DRIVER REGISTER

#### **GENERAL FUND - APPROPRIATIONS**

Fiscal Year	Request	Fiscal Year	<b>Enacted</b>
2009	\$0	2009	\$0
2010	\$0	2010	\$3,350,000
	• • • • • • • • • • • • • • • • • • • •		•
2011	\$2,530,000	2011	\$3,350,000
2040	Φ0	0040	Φ0
2012	\$0	2012	\$0
2013	\$0	2013	\$0
2013	φυ	2013	φυ
2014	\$0	2014	\$0
2011	Ψ.	2011	ψ <sup>o</sup>
2015	\$0	2015	\$0
2016	\$0	2016	\$0
2017	\$0	2017	\$0
	_		
2018	\$0	2018	-

### **APPROPRIATIONS HISTORY**

## **HIGHWAY TRAFFIC SAFETY GRANTS** TRUST FUND - CONTRACT AUTHORITY

**Limitation on Obligations** 

<u>Request</u>	<u>Fiscal Year</u>	<u>Enacted</u>
\$619,500,000	2009	\$619,500,000
\$626,047,000	2010	\$619,500,000
		•
\$620,697,000	2011	\$619,500,000
<b>^</b>		
\$556,100,000	2012	\$550,328,000
	4/	
\$643,000,000	2013 "	\$554,500,000
\$561,500,000	2014	\$561,500,000
<b>4===</b> 000 000	2015	<b>A</b> E04 E00 000
\$577,000,000	2015	\$561,500,000
ФЕ <b>77</b> 000 000	2040	<b>\$572,222,000</b>
\$577,000,000	2016	\$573,332,000
ФЕОЕ 070 000	2047 2/	ФЕ <b>7</b> 2 242 000
\$585,372,000	2017 -	\$572,242,096
\$507 620 000	2018	
ψυσι,υ2σ,000	2010	-
		\$619,500,000 2009 \$626,047,000 2010 \$620,697,000 2011 \$556,100,000 2012 \$643,000,000 2013 1/ \$561,500,000 2014 \$577,000,000 2015 \$577,000,000 2016 \$585,372,000 2017 2/

 $<sup>^{1/}</sup>$  FY 2013 Levels were reduced to reflect a .02% A-T-B rescission to all funds.  $^{2/}$  The FY 2017 funding level reflects the annualized CR rate in all funds.

### **APPROPRIATIONS HISTORY**

## **HIGHWAY TRAFFIC SAFETY GRANTS** TRUST FUND - CONTRACT AUTHORITY

**Liquidation of Contract Authorization** 

Fiscal Year	<u>Request</u>	<u>Fiscal Year</u>	<u>Enacted</u>
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 1/	\$554,500,000
2014	\$561,500,000	2014	\$561,500,000
2015	\$577,000,000	2015	\$561,500,000
2010	<b>#</b> 577 000 000	0040	<b>#570,000,000</b>
2016	\$577,000,000	2016	\$573,332,000
0047	<b>A</b> 505 070 000	201= 2/	<b>AFTO 040 000</b>
2017	\$585,372,000	2017 <sup>2/</sup>	\$572,242,096
0040	<b>#507.000.000</b>	0040	
2018	\$597,629,000	2018	-

 $<sup>^{1/}</sup>$  FY 2013 Levels were reduced to reflect a .02% A-T-B rescission to all funds.  $^{2/}$  The FY 2017 funding level reflects the annualized CR rate in all funds.

# RESEARCH, DEVELOPMENT & TECHNOLOGY NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION BUDGET AUTHORITY

(In thousands of dollars)

NAT	TIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION	FY 2016 ACTUAL	FY 2017 ANNUALIZED CR	FY 2018 REQUEST	FY 2018 Applied
	A. Research and Analysis	72,276	72,100	71,645	-
	Vehicle Safety (VS)	34,600	34,515	33,122	=
	Data Collection (T)	37,676	37,585	38,523	-
	1. Crashworthiness	16,800	16,760	16,079	-
VS	a. Safety Systems	7,400	7,382	7,131	-
VS	b. Biomechanics	9,400	9,378	8,948	-
VS	2. Crash Avoidance	12,300	12,270	11,743	-
VS	a. Crash Avoidance	10,400	10,375	9,912	-
VS	b. Heavy Vehicles	1,900	1,895	1,831	-
	3. Data Collections & Analyses (T)	37,676	37,585	38,523	-
VS	a1. Crash Data Collection (T)*	500	498	500	
HS	a2. Crash Data Collection (T)*	35,016	34,932	35,863	
VS	, and a second of the second o	-	-	-	
HS		-	-	-	N/A
VS	1 8 3	-	-	-	N/A
HS	1 8 - 7 - 1	-	-	-	N/A
HS	• • • • • • • • • • • • • • • • • • • •	-	-	-	N/A
HS	1 0 1	-	-	-	N/A
HS	, ,	1,651	1,647	1,651	N/A
HS	g. Regulatory Analysis/Program Evaluation**	509	508	509	N/A
VS	4. Alternative Fuels Vehicle Safety	1,400	1,396	1,349	-
VS	5. Vehicle Electronics and Emerging Technology	3,600	3,591	3,469	-
VS	6. Vehicle Test Center - Ohio	500	498	482	-
В.	Highway Safety Research	11,521	11,494	11,748	-
	Subtotal	83,797	83,594	83,393	-
D.	Administrative Expenses **	62,861	62,783	59,630	-
	Vehicle Safety (VS)	33,968	33,921	35,271	-
	Highway Safety (HS)	6,465	6,459	5,415	
	Data Collection Technology	22,427	22,404	18,943	-
	Total R&D = VS+HS Research and Analysis, VS+ HS Admin	86,554	86,388	85,557	-
	Subtotal, Technology Investment (T)	60,103	59,989	57,466	-
	Total NHTSA	146,657	146,377	143,023	-
	Memo: Percentage Administrative to Total	42.9%	42.9%	41.7%	0.0%

Note: Totals may not add due to rounding.

<sup>\*\*</sup>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

# **CONTACT INFORMATION:**

David Murray
Budget Officer
1200 New Jersey Avenue, S.E.
Washington, DC 20590
(202)366-5445
David.Murray@dot.gov