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# Evaluation of State Motorcycle Safety Programs

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## EXECUTIVE SUMMARY

The rise in motorcyclist injuries and fatalities over the past decade has placed greater emphasis on the role State motorcycle safety programs may play in making roadways safer for riders. From programs targeted at motorcyclists to comprehensive training for law enforcement and court personnel, State programs are tasked with implementing and monitoring a range of safety policies and procedures. This report describes the current efforts States are undertaking to promote motorcycle safety, drawing on a survey received from State Highway Safety Offices (SHSOs) and State motorcycle safety administrators (SMSAs) in 45 States.<sup>1</sup> The results presented in this report provide a picture of recent accomplishments made by States related to motorcycle safety. The data presented is based on State-level, self-reported information.

The strategies employed by States to promote motorcycle safety are classified using the following seven main topic areas:

- Program management;
- Law enforcement programs;
- Information and education campaigns;
- Personal protective equipment and conspicuity;
- Motorcycle rider licensing;
- Motorcycle rider education and training; and
- SAFETEA-LU Section 2010 grant program funds.

The seven substantive sections of this report review the policies and procedures implemented by States in each of these topic areas.

### Summary of Key Findings

Review and analysis of the survey data collected from the States revealed the following key findings about motorcycle safety in each of the seven main topic areas:

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<sup>1</sup> Results are based on 45 States that responded to the survey. The survey was sent to all 50 States and the District of Columbia.

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### ***Program Management***

- Most States collect a variety of data related to motorcycle riders (operators)<sup>2</sup> and motorcycles, including licensing, registration, training, injuries, fatalities, and crashes.
- Most States analyze crash data as well as licensing data.
- Fewer States analyze training data and approximately one-third of States analyze helmet use data. Helmet use data is analyzed only by some of the States with universal helmet laws.

### ***Law Enforcement Programs***

- States offer law enforcement personnel a mix of training, with most States providing information on identifying impaired motorcycle riders. Few States, however, train law enforcement officers on investigating motorcycle riders wearing noncompliant helmets.

### ***Information/Education Campaigns***

- Most States implement public information and education campaigns targeted at motorcyclists, especially related to the dangers of impaired riding.
- Few States provide motorcycle-specific crash investigation training and no States offer court personnel training on alternative sentencing for motorcyclists.

### ***Personal Protective Equipment and Conspicuity***

- Most States promote helmet use and approximately half promote the use of eye and face protection. For example, some States promote the use of helmets and eye and face protection through published literature. One State supports law enforcement overtime hours for helmet enforcement.
- Most States cover different topics as part of their awareness training programs, including recommending ways that motorists can increase their awareness of motorcyclists and promoting the use of brightly colored garments by riders.

### ***Motorcycle Rider Licensing***

- All but one State levy penalties against riders who violate motorcycle licensing requirements, though the type and severity of penalties vary by State.
- Most States require special training for motorcycle rider license examiners, usually on the administration of the Alternative Motorcycle Operator Skill Test (ALT MOST).

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<sup>2</sup> Henceforth referred to as motorcycle riders.

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### ***Motorcycle Rider Education and Training***

- The average State budget for motorcycle rider training and education was \$836,830, with a low of \$100,000 and a high of \$4,000,000.
- Almost all States provide training for beginning and experienced motorcycle riders and 60 percent are able to accommodate all riders interested in training within a calendar year.
- Most States conduct quality control assurances of their training sites, though evaluations of “RiderCoaches” and instructors are less frequent.
- Less than half of the States require first aid or CPR training for instructors and less than one-third require a probationary period for new instructors.

### ***SAFETEA-LU Section 2010 Grant Program Funds***

- All but one State surveyed have applied for and received funds from the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) to support their efforts promoting motorcycle safety. For FY 2009, all States applied for and received Section 2010 grant money.
- Most States have applied their funds toward public awareness and outreach activities; many have also targeted funds toward improving training.
- States estimate that an average of 585 additional students will be trained each year because of SAFETEA-LU funds and that an additional 500 motorcycle riders will be licensed each year.

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# TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>iii</b>
SUMMARY OF KEY FINDINGS .....	iii
<b>SECTION 1: INTRODUCTION .....</b>	<b>1</b>
<b>SECTION 2: METHODOLOGY .....</b>	<b>2</b>
SURVEY DEVELOPMENT .....	2
SURVEY ADMINISTRATION.....	3
ANALYSIS OF SURVEY DATA.....	3
<b>SECTION 3: PROGRAM MANAGEMENT .....</b>	<b>4</b>
RESPONSIBILITY FOR MOTORCYCLE SAFETY .....	4
MOTORCYCLE SAFETY DATA .....	4
MOTORCYCLE RIDER LICENSING AND REGISTRATION DATA .....	5
HIGHLIGHTS .....	6
<b>SECTION 4: LAW ENFORCEMENT PROGRAMS .....</b>	<b>8</b>
LAW ENFORCEMENT PROGRAMS.....	8
HIGHLIGHTS .....	8
<b>SECTION 5: INFORMATION/EDUCATION CAMPAIGNS .....</b>	<b>10</b>
INFORMATION AND EDUCATION CAMPAIGNS.....	10
HIGHLIGHTS .....	11
<b>SECTION 6: PERSONAL PROTECTIVE EQUIPMENT AND CONSPICUITY .....</b>	<b>12</b>
PROMOTION OF HELMETS AND EYE/FACE PROTECTION .....	12
MOTORCYCLIST CONSPICUITY .....	12
HIGHLIGHTS .....	13
<b>SECTION 7: MOTORCYCLE RIDER LICENSING.....</b>	<b>14</b>
PENALTIES FOR VIOLATING LICENSING/LEARNERS PERMIT REQUIREMENTS .....	14
SPECIAL TRAINING REQUIRED FOR MOTORCYCLE LICENSE EXAMINERS .....	14
AUTOMATIC RENEWAL OF MOTORCYCLE LICENSES .....	14
REQUIREMENTS FOR MOTORCYCLE RIDERS WHO LET LICENSE/PERMIT LAPSE .....	15
HIGHLIGHTS .....	15
<b>SECTION 8: MOTORCYCLE RIDER EDUCATION AND TRAINING.....</b>	<b>17</b>
BUDGET FOR MOTORCYCLE RIDER EDUCATION PROGRAMS .....	17
FEATURES OF MOTORCYCLE RIDER EDUCATION AND TRAINING PROGRAMS .....	17
EVALUATION PROCEDURES FOR MOTORCYCLE RIDER EDUCATION AND TRAINING.....	18
INSTRUCTOR CERTIFICATION .....	19
HIGHLIGHTS .....	20

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<b>SECTION 9: SAFETEA-LU SECTION 2010 GRANT PROGRAM FUNDS .....</b>	<b>21</b>
RECEIPT AND TARGETS OF SAFETEA-LU FUNDS .....	21
APPLICATION OF SAFETEA-LU FUNDS .....	22
STATE USE OF SAFETEA-LU FUNDS FOR MOTORCYCLE SAFETY .....	22
HIGHLIGHTS .....	22
<b>REFERENCES.....</b>	<b>23</b>

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## LIST OF TABLES

TABLE 1.	AGENCY RESPONSIBLE FOR MOTORCYCLE SAFETY.....	4
TABLE 2.	COLLECTION OF MOTORCYCLE SAFETY DATA.....	5
TABLE 3.	COLLECTION OF MOTORCYCLE LICENSING AND REGISTRATION DATA ..	6
TABLE 4.	ANALYSES OF MOTORCYCLE DATA .....	6
TABLE 5.	MOTORCYCLE SAFETY LAW ENFORCEMENT PROGRAMS .....	8
TABLE 6.	MOTORCYCLE SAFETY INFORMATION AND EDUCATION CAMPAIGNS ....	11
TABLE 7.	PROMOTION OF PERSONAL PROTECTIVE EQUIPMENT .....	12
TABLE 8.	MOTORCYCLE SAFETY CONSPICUITY PROGRAMS .....	13
TABLE 9.	MOTORCYCLE RIDER LICENSING AND EXAMINER TRAINING.....	15
TABLE 10.	REQUIRED TRAINING/RETESTING FOR MOTORCYCLE RIDERS WITH LAPSED LICENSE .....	15
TABLE 11.	DELIVERY AND TARGETS OF MOTORCYCLE RIDER EDUCATION AND TRAINING PROGRAMS .....	18
TABLE 12.	EVALUATION OF MOTORCYCLE RIDER EDUCATION AND TRAINING PROGRAMS .....	19
TABLE 13.	TRAINING AND CERTIFICATION OF MOTORCYCLE INSTRUCTORS .....	20
TABLE 14.	USE OF SAFETEA-LU FUNDS.....	21

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## SECTION 1: INTRODUCTION

Between 1998 and 2007, more than 36,000 motorcyclists perished on the Nation's roadways in fatal crashes (NHTSA, 2008). In 2007, motorcycle rider fatalities accounted for 13 percent of all traffic fatalities, and had risen 123 percent over the past decade. Given the rise in motorcyclist injuries and fatalities, the role that State motorcycle safety programs play in helping reverse the trends has been elevated. Motorcyclist fatalities result from a variety of factors, including the characteristics and skill level of the riders, the characteristics of other drivers involved in crashes, and weather and road conditions. It falls to State motorcycle safety programs to consider the range of factors related to operating a motorcycle and to design and implement programs that promote safe riding and driving by both motorcyclists and motorists alike.

This report summarizes the results from a survey of motorcycle safety sent out to administrators in all 50 States and the District of Columbia. A total of 45 States participated in the study. State administrators responded to a series of questions about the features of their State motorcycle safety programs, from program administration to the receipt and use of Federal grants to support traffic safety. The results presented in this report may be used as a tool for gauging the current status of motorcycle safety programs within the United States and for identifying the directions for increasing motorcyclist safety in the future. Information presented in this report reflects the responses received from the surveys, as reported by each State.

This report has nine sections. Following this Introduction, Section 2 discusses the design, administration, and analysis of the survey. Sections 3 through 9 present results from the survey organized by the following seven main topic areas:

- Program management;
- Law enforcement programs;
- Information and education campaigns;
- Personal protective equipment and conspicuity;
- Motorcycle rider licensing;
- Motorcycle rider education and training; and
- SAFETEA-LU Section 2010 grant program funds.

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A short discussion at the conclusion of each section highlights key results.

## **SECTION 2: METHODOLOGY**

Under contract to the National Highway Traffic Safety Administration, the American Institutes for Research (AIR) developed and administered a survey to State Highway Safety Offices (SHSOs) and State motorcycle safety administrators (SMSAs) across the country between July and September 2008. The survey captured self-reported information about State policies and practices aimed at promoting motorcycle safety. Both SHSO and SMSA<sup>3</sup> representatives were contacted in order to construct a complete picture of the motorcycle safety structure within States. Because the delegation of responsibilities differs across States, it was important to gather information from all officials tasked with the various aspects of motorcycle safety within a State.

### **Survey Development**

As noted above, the substantive sections of this report capture information about seven topic areas related to motorcycle safety. This information was collected by means of a survey developed by AIR and distributed to SHSO and SMSA representatives in all 50 States and the District of Columbia. The first step in crafting the survey was identifying topics and subtopics within each of the seven main areas. Although the goal of the survey was to collect comprehensive data about State programs and policies, the desire for breadth within a category area had to be balanced against the burden placed on respondents completing the survey. In addition to the closed-ended questions often found in surveys, open-ended questions were included to allow respondents to elaborate on the various features of their motorcycle safety programs.

The draft versions of the survey were reviewed by NHTSA and by State safety administrators in two States. The coordinators refined the wording of certain questions to make them more applicable to the States and provided feedback on how questions could be revised to measure the constructs of interest. Following the implementation of the revisions and final

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<sup>3</sup> SMSA, as used in this report, refers to particular individuals and does not reflect the views of the SMSA organization, which is called the National Association of State Motorcycle Safety Administrators.

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approval from NHTSA, the survey was submitted to the Office of Management and Budget for approval.

## **Survey Administration**

The first step in administering the survey was identifying the survey respondents. NHTSA supplied a list of SHSO and SMSA contacts for each of the 50 States and the District of Columbia. Depending on the structure of the motorcycle safety program within States and the delegation of responsibilities, NHTSA identified one or more respondents per State. Next, staff at the NHTSA headquarters office in Washington, DC, contacted the NHTSA Regional Offices to alert them about the evaluation. The NHTSA Regional Offices served key roles as intermediaries between NHTSA headquarters and the SHSO and SMSA contacts in each State.

Following notification of the NHTSA Regions, the SHSO and SMSA contacts were mailed printed copies of the survey. After completing the surveys, respondents were requested to return them using preprinted, postage-paid return envelopes. A letter accompanying the survey described its purpose, gave brief instructions on how to complete it, and provided contact information for the survey administrator at AIR in case the respondent had questions or preferred an electronic copy. The surveys were sent in late July and early August 2008, and respondents were requested to return their surveys within 2 weeks, by August 15, 2008. Following consultation with NHTSA, the timeframe for data collection was eventually extended until September 30, 2008, at which time respondents from 45 of the 50 States and the District of Columbia had returned their surveys (an 88% response rate).

## **Analysis of Survey Data**

Data returned from the States was coded and entered into a database for analysis. Responses from multiple respondents within the same State (e.g., from an SHSO representative and an SMSA representative) were evaluated and consolidated into a single response for the State. All analyses presented in the following sections are based on data returned from the 45 States that responded to the survey. For measures in which data was missing from States, the number of States that provided valid data is reported.

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## SECTION 3: PROGRAM MANAGEMENT

Program management captures characteristics of the administrative organization of a State's motorcycle safety program and the means by which activities and program initiatives are implemented. Of particular interest are the structure and delegation of responsibilities within State motorcycle safety programs, as well as the collection and use of various types of data about riders and motorcycles.

### Responsibility for Motorcycle Safety<sup>4</sup>

In nearly half of all States (45%), the Office of Highway Safety of that State has sole responsibility for coordinating motorcycle safety programs (Table 1). Approximately 40 percent of all States delegate responsibility among multiple agencies. An agency other than the Office of Highway Safety, such as the Department of Education or the Department of Motor Vehicles, has the responsibility for motorcycle safety in 14 percent of all States. Mississippi is the only State that reported it lacks an agency tasked with supervising motorcycle safety efforts.

**Table 1. Agency Responsible for Motorcycle Safety**

Agency	Percent
Office of Highway Safety	45
Multiple agencies	39
Other agency	14
No agency	2

Results based on data reported from 45 States. That survey data was supplemented with data from the Governor's Highway Safety Association (2008).

### Motorcycle Safety Data

States reported that they collect a variety of motorcycle safety data (Table 2). Nearly all States collect data on the number of crashes involving motorcycles (98%), the number of motorcyclist fatalities (98%), and the number of injuries to motorcyclists (96%). Most States

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<sup>4</sup> To gather complete information on all States and the District of Columbia on program responsibility, the survey data was supplemented with data collected from the Governor's Highway Safety Association (2008).

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also collect information about the number of motorcyclists over age 40 (75%) and enrollment in and completion of motorcycle training courses (89% and 86%, respectively).

**Table 2. Collection of Motorcycle Safety Data**

Type of safety data	Percentage Collecting Data	Percentage Collecting Data Electronically
Number of crashes involving motorcycles	98	68
Number of motorcyclist fatalities	98	73
Number of injuries to motorcyclists	96	66
Number of motorcyclists over age 40	75	50
Number of students enrolling in motorcycle rider education courses	89	50
Number of students completing motorcycle rider education courses	86	50
Number of students not completing motorcycle rider education courses, dropping courses, or failing to meet standards	77	48

NOTE: Results based on data reported from 44 States.

Although most States collect motorcyclist crash, fatality, and injury data, less than three-quarters collect this data in electronic format. Approximately half of States gather data related to motorcycle rider training (number of students enrolled, number of students completing courses, and number of students not completing courses) electronically.

## **Motorcycle Rider Licensing and Registration Data**

Similar to motorcycle safety data, most States collect data on motorcycle rider licensing and motorcycle registration (Table 3). Over 90 percent of States collect data on the number of licensed motorcycle riders (95%) and the number of registered motorcycles (93%). Slightly fewer States gather data on the number of new motorcycle licenses issued each year to motorcycle riders (81%) and the number of new motorcycles registered each year (72%).

The percentage of States collecting licensing and registration data electronically ranges from a low of 44 percent for the number of new motorcycles registered each year to a high of 58 percent for the number of licensed motorcycle riders and the number of registered motorcycles.

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**Table 3. Collection of Motorcycle Licensing and Registration Data**

Type of licensing data	Percentage Collecting Data	Percentage Collecting Data Electronically
Number of licensed motorcycle riders	95	58
Number of registered motorcycles	93	58
Number of new motorcycle licenses issued each year	81	51
Number of new motorcycles registered each year	72	44

NOTE: Results based on data reported from 43 States.

Approximately one-quarter (26%) of States reported that they have merged motorcycle rider licensing data with motorcycle registration data (data not shown). Almost all States (98%) analyze the crash data they collect (Table 4). Fewer States analyze either licensing or registration data (76%) and just over half analyze motorcycle training and education data (56%). Helmet use data is analyzed the least frequently of all data collected by States (33%).

**Table 4. Analyses of Motorcycle Data**

Type of analysis conducted	Percent
Crash data*	98
License and registration data*	76
Training and education data*	56
Helmet use data †	33

\* Results based on data reported from 41 States.

† Results based on data reported from 39 States.

## Highlights

The extent to which States collect motorcycle safety, licensing, and registration data is encouraging. States have made great strides in gathering this data and, in many cases, have the data available in an electronic format. The availability of data electronically is important because the data can be more easily analyzed. In addition, electronic data is less likely to deteriorate and is easier to store than printed data, making it better for long-term record keeping.

It is a concern, however, that so few States examine data related to the use of helmets by motorcyclists. Moreover, few States have taken the steps necessary to merge motorcycle rider

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licensing data with motorcycle registration data. Although merging disparate data sets may entail some logistical complications, analyses of the relationship between the number of licensed motorcycle riders and the number of registered motorcycles would aid States in targeting riders who are operating motorcycles without proper endorsement.

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## SECTION 4: LAW ENFORCEMENT PROGRAMS

States have two primary mechanisms at their disposal for encouraging the safe operation of motorcycles and motorist awareness of motorcyclists: information and education campaigns and enforcement of traffic laws. Law enforcement programs used by States reinforce the messages from public information and education campaigns through sanctions and penalties levied at motorists and motorcycle riders who violate State traffic laws.

### Law Enforcement Programs

As shown in Table 5, States were asked about the types of programs that are conducted by law enforcement personnel that focus on motorcycle riders. At least 70 percent of States reported having law enforcement programs that focuses on spotting impaired motorcycle riders and/or on enforcing laws related to operating a motorcycle while impaired (74%), and on promoting motorcycle training and education (70%). About half the States have programs focusing on enforcing regulations related to unendorsed motorcycle riders (47%). Fewer States reported having law enforcement programs focusing on spotting noncompliant helmet use and enforcing compliance (37%), although it should be noted that such programs are only possible in States with universal helmet laws.

**Table 5. Motorcycle Safety Law Enforcement Programs**

Features of law enforcement programs	Percentage
Spotting impaired motorcycle riders and enforcing relevant laws	74
Promoting motorcycle training and education	70
Enforcing laws related to unendorsed motorcycle riders	47
Spotting noncompliant helmet use and enforcing compliance	37

NOTE: Results based on data reported from 43 States.

### Highlights

The implementation of law enforcement programs aimed at motorcycle riders is mixed. Many States have programs that help law enforcement spot impaired riders and that promote rider training. Yet less than half of States have law enforcement programs that focus on

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unendorsed motorcycle riders and only a third target noncompliant helmet use. Given the rise in novelty helmets and their inability to protect wearers from injury, it may be in the interest of States with universal helmet use laws to elevate the detection of noncompliant helmets as a priority (NHTSA, 2007).

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## SECTION 5: INFORMATION/EDUCATION CAMPAIGNS

Information and education campaigns span numerous topics and audiences, from programs targeted at impaired motorcycle riders, who ride while under the influence of alcohol or drugs, to “Share the Road” messages encouraging motorists to be more aware of motorcycles on roadways. Law enforcement and court personnel may be educated about motorcyclist issues relevant to their jobs, such as crash investigation techniques and alternative sentencing options for motorcycle riders who violate traffic laws.

### Information and Education Campaigns

States indicated that they implement a diverse set of media campaigns aimed at educating motorcycle riders about the dangers of operating a motorcycle while impaired by alcohol or drugs. In addition to general programs reminding motorcycle riders about the effects of alcohol and drugs on motor skills (e.g., Massachusetts instituted a “Think Before You Drink” campaign), States are relying on targeted campaigns to reach certain audiences. For example, one State attempts to educate attendees at major motorcycle rides and motorcycle races. State patrol officers perform a riding demonstration during the event and then focus on enforcement following the event. Another State displays posters about impaired riding in the restrooms of bars and taverns in an attempt to reach motorcycle riders before they operate their motorcycles.

In addition to impaired riding campaigns, most States reported that they have implemented conspicuity and/or motorist awareness campaigns (96%), and one-half indicated that they have programs at schools to educate students about motorcycle safety (Table 6). Although most States have *public* information and education campaigns, fewer States offer training for law enforcement and court personnel. Approximately one-third of States provide motorcycle-specific crash investigation training. No States offer judges and prosecutors training on alternative sentencing options for motorcycle riders convicted of violating traffic laws.

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**Table 6. Motorcycle Safety Information and Education Campaigns**

Type of information/education campaign	Percentage
Conspicuity and/or motorist awareness	96
Programs at schools to educate students about motorcycle safety	50
Motorcycle-specific crash investigation training	34
Judge/prosecutor training (alternative sentencing)	—

— No States reported judge/prosecutor training.  
NOTE: Results based on data reported from 44 States.

## Highlights

The efforts made by States to educate motorcyclists about the effects of impaired riding and to educate all motorists about motorcycle conspicuity are encouraging. States are also employing creative techniques beyond posters and printed advertisements to reach their targeted audiences.

Although States are making great strides in *public* information and education activities, the lack of attention given to educating law enforcement and court personnel warrants attention. Few States provide motorcycle-specific crash training, and no State offers judges and prosecutors training on alternative sentencing options for motorcycle riders.

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## SECTION 6: PERSONAL PROTECTIVE EQUIPMENT AND CONSPICUITY

Motorcyclists can protect themselves from injury by using proper riding equipment and by making themselves visible to other motorists. States were asked to describe the steps they are taking to encourage the use of personal protective equipment by motorcyclists and their efforts to emphasize the importance of motorcyclist conspicuity.

### Promotion of Helmets and Eye and Face Protection

As shown in Table 7, States reported actively promoting the use of motorcycle helmets and eye and face protection. Over 75 percent of States promote using motorcycle helmets (77%). Approximately one-half of States (54%) emphasize using eye and face protection (in addition to/separate from general helmet use) beyond what is covered in the motorcycle rider education curriculum.

**Table 7. Promotion of Personal Protective Equipment**

Type of protective equipment	Percentage
Helmets	77
Eye and face protection	54

NOTE: Results based on data reported from 43 States.

States with and without mandatory helmet laws have taken steps to promote the use of helmets. For example, one State reported that it has used television and radio spots to air public service campaigns aimed at encouraging motorcyclists to wear helmets. Other States make certain to include images of motorcyclists wearing helmets in all promotional material. Many States mandate the use of helmets for minors.

### Motorcyclist Conspicuity

States were asked about the topics they include in their motorcycle conspicuity or motorist awareness programs (Table 8). The majority of States include ways other motorists can increase their awareness of motorcyclists (82%). Three-fourths of States incorporate

recommendations for motorcyclists to wear brightly colored clothing and reflective materials (including helmets with high conspicuity). Fewer States discuss reasons motorists do not “see” motorcyclists (68%) and lane positioning for motorcycles to increase visibility (64%). Slightly more than one-half of States reported that their conspicuity programs include daytime use of motorcycle headlights (57%).

**Table 8. Motorcycle Safety Conspicuity Programs**

<b>Features of conspicuity programs</b>	<b>Percentage</b>
Recommendations of ways motorists can increase their awareness of motorcyclists	82
Recommendations for motorcyclists to wear brightly colored clothing and reflective materials (including helmets with high conspicuity)	75
Reasons motorists do not “see” motorcyclists	68
Recommendations for lane positioning for motorcycle riders to increase their visibility	64
Daytime use of motorcycle headlights	57

NOTE: Results based on data reported from 44 States.

## **Highlights**

States are taking a variety of steps to increase motorcyclist conspicuity, including educating other motorists and encouraging motorcycle riders to wear brightly colored clothing. Although the majority of States promote helmet use, just over half emphasize the use of eye and face protection.

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## **SECTION 7: MOTORCYCLE RIDER LICENSING**

States were asked to describe the features of their licensing programs for motorcycle riders. Key aspects of licensing include penalties for violations of licensing requirements, the training provided to motorcycle license examiners, the renewal process for motorcycle endorsements, and requirements for motorcycle riders who allow their license/permit to lapse.

### **Penalties for Violating Licensing/Learners Permit Requirements**

All but one State (Hawaii) levy penalties against motorcycle riders who violate licensing and/or learners permit requirements (Table 9). Types of penalties include fines and/or court fees, suspension of licenses, the possibility of imprisonment (ranging from 15 to 180 days), points added to licenses, and mandatory attendance in a motorcycle training course. Fines are imposed most frequently by States and vary from a low of \$10 to a high of \$1,000.

### **Special Training Required for Motorcycle License Examiners**

The American Association of Motor Vehicle Administrators (AAMVA) has established the Certified Motorcycle Examiner (CME) program to ensure that license examiners have the knowledge necessary to properly assess the skills of motorcycle riders seeking licensing.

Approximately 70 percent of States require some formal or informal training for motorcycle license examiners (Table 9). No States reported mandating that their examiners complete the CME program. Many States noted that they require examiners to complete training on the administration of the Alternate Motorcycle Operator Skill Test (ALT MOST), which is often used as a skills test for riders seeking licensing. Few States have requirements beyond ALT MOST training, though one State does mandate that all licensing examiners complete the Basic Rider Course within two years of certification.

### **Automatic Renewal of Motorcycle Licenses**

In approximately half of the States (57%), motorcycle riders must apply for renewal of their motorcycle licenses (Table 9). In the remaining States, motorcycle riders either have large grace periods during which they can easily renew their licenses or have licenses that do not expire.

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**Table 9. Motorcycle Rider Licensing and Examiner Training**

Features of State motorcycle licensing programs	Percentage
Penalties for licensing violations*	98
Special training required for motorcycle examiners†	67
Application required for renewal of lapsed motorcycle licenses‡	57

\* Results based on data reported from 40 States.

† Results based on data reported from 38 States.

‡ Results based on data reported from 44 States.

## Requirements for Motorcycle Riders Who Let License/Permit Lapse

States may take several approaches with motorcycle riders who have allowed their motorcycle licenses or permits to lapse, including the requirement that motorcycle riders retake all required licensing and training courses. Approximately 40 percent of States indicated that motorcycle riders who let their licenses or permits lapse past a specified time are treated as new applicants (Table 10). That is, in these States, riders must repeat all licensing and training requirements regardless of whether the rider completed the requirements previously. About one-third of States allow a grace period, then mandate retesting (34%). Three States (7%) have no requirements for retesting or enrollment in an additional training course for motorcycle or non-motorcycle licenses.

**Table 10. Required Training/Retesting for Motorcycle Riders With Lapsed License**

Requirement	Percentage
Treated as new applicants immediately	39
Grace period then retesting	34
No requirements	7
Not applicable	20

NOTE: Results based on data reported from 44 States.

## Highlights

Almost all States penalize motorcycle riders who violate motorcycle licensing laws and the majority of States implement some kind of training or certification for motorcycle licensing examiners. Most States also require motorcycle riders who allow their licenses to lapse to

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complete training or retesting, either immediately following the expiration of their licenses or after grace periods. The penalties for violating motorcycle licensing laws vary across States, with some adopting relatively weak penalties (e.g., \$10 fines) and others instituting more severe punishments (e.g., jail time, higher fines). Given the weak sanctions used by some States, it may be useful for additional research to examine whether these punishments serve as effective deterrents to improper licensing by motorcycle riders.

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## **SECTION 8: MOTORCYCLE RIDER EDUCATION AND TRAINING**

Motorcycle rider education and training courses provide students with the basic knowledge and skills necessary to safely operate a motorcycle. These courses are designed to offer entry-level training and prepare students to begin street riding. Motorcycle rider education can be large undertakings for States, who must secure funds for training, advertise the programs, maintain quality control, and find qualified instructors. Given the increase in motorcyclists over the past decade, States offering training must also make certain that their instruction keeps pace with demand. Motorcycle training courses are one of the most frequently implemented motorcycle safety programs, and oftentimes the only motorcycle safety program implemented within a given State. This is partly due to the low cost of providing such courses (motorcycle rider course fees can pay for the production of the course).

### **Budget for Motorcycle Rider Education Programs**

States were asked to report their annual budgets for motorcycle rider education and training in 2007, excluding tuition. Thus, the budget reflects the amount of funds that are allocated by a State for motorcycle rider education and training. The average State budget was \$836,830, with a standard deviation \$906,766 (data not shown). As the standard deviation reflects, there was great variability among States with respect to their budgets. The minimum State budget was \$100,000 and the maximum budget was \$4,000,000.

### **Features of Motorcycle Rider Education and Training Programs**

Table 11 summarizes key features of State motorcycle rider education and training programs. Over half (60%) of States indicated that they are able to provide training to all interested motorcycle riders within a calendar year. Approximately one-third (30%) of States maintain waiting lists of riders interested in enrolling in motorcycle rider education courses.

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**Table 11. Delivery and Targets of Motorcycle Rider Education and Training Programs**

<b>Features of delivery and training</b>	<b>Percentage</b>
<b>Delivery of training</b>	
State provides training to all interested students within calendar year	60
State maintains waiting list for interested motorcycle riders	30
<b>Target of motorcycle rider education program</b>	
Beginning motorcycle riders	96
Experienced motorcycle riders	96
Younger motorcycle riders (21 and under)	59
Returning motorcycle riders (those who have not ridden in 5 or more years)	59
Off-road motorcycle riding	14

NOTE: Results based on data reported from 44 States.

Most States offer training to both beginning (96%) and experienced (96%) motorcycle riders. More than half of States target younger riders (21 and under; 59%) and returning riders (those who have not ridden in five or more years; 59%). While States do offer training for returning and experienced motorcycle riders, the majority of training conducted is at entry level. Few States offer off-road motorcycle riding training (14%).

### **Evaluation Procedures for Motorcycle Rider Education and Training**

As shown in Table 12, States were asked about the evaluation procedures they use to assess the quality and effectiveness of their motorcycle rider education and training programs. States reported employing a variety of evaluation procedures. More than 85 percent of States require an on-site evaluation of range activities (89%) or an on-site evaluation of classroom activities (87%). Eighty percent of States use standardized forms or procedures that can be quantified program-wide (80%) and 77 percent review course completion records. Many States also require quality control evaluations of all training sites at least once a year (71%).

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**Table 12. Evaluation of Motorcycle Rider Education and Training Programs**

Type of evaluation procedure	Percentage
On-site evaluation of range activities	89
On-site evaluation of classroom activities	87
Standardized forms or procedures that can be quantified programwide	80
Review of course completion records based on individual “RiderCoach,” instructor, or site	77
Evaluations required at all sites a minimum of once per year	71
“RiderCoach” trainer or chief instructor certification required to conduct evaluations	59
Special training other than “RiderCoach” trainer or chief instructor required to conduct evaluations	43
Evaluations required of all “RiderCoaches” or instructors a minimum of once per year	46

NOTE: Results based on data reported from 44 States.

In over half of States (59%), evaluations are conducted by “RiderCoaches” or chief instructors; over 40 percent of States mandate that evaluations are conducted by staff with special training beyond a RiderCoach or chief instructor certification (43%). Nearly half of all States require evaluations of all RiderCoaches or chief instructors a minimum of once per year (46%).

### **Instructor Certification**

States were asked to indicate the types of certification required of instructors beyond the certification offered by the Motorcycle Safety Foundation (MSF). Overall, no more than half of all States have implemented any one of the six additional types of certification requirements (Table 13). Approximately 50 percent of States require an apprenticeship with an approved mentor (51%), and just over 40 percent require first aid training (42%) for instructors. About one-third of States require CPR training (35%), and less than 30 percent require a probation period prior to full State recognition (28%) or teaching requirements above those required by MSF (28%). Slightly less than one-fourth of States require instructors to complete sexual harassment training (23%). One State requires all six types of instructor certification/training listed in Table 13, 3 States require five types of certification, and another 3 States require four types. The majority of States have implemented three or less types of training requirements (11

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States require three types, 8 States require two types, 6 States require one type, and 11 States do not require any certification requirements for their motorcycle instructors).

**Table 13. Training and Certification of Motorcycle Instructors**

Type of instructor certification/training	Percentage
Apprenticeship with an approved mentor	51
First aid training	42
CPR training	35
Probation period prior to full State recognition	28
Teaching requirements above those required by MSF or your State	28
Sexual harassment training	23

NOTE: Results based on data reported from 43 States.

## Highlights

The average State budget for motorcycle rider education and training in 2007 was under \$1,000,000, though there was a great deal of variability among States. Although the majority of States are able to train all interested motorcycle riders within a calendar year, the fact that 40 percent are *unable* to meet demand underscores the need for some States to increase their training capacity. States indicated that they employ a series of steps to monitor their motorcycle rider education and training programs and that these evaluations are, for the most part, conducted frequently (at least once a year).

Although States appear to have good oversight of their programs, the requirements for instructor certification are less stringent. Less than half of all States require CPR or first aid training for instructors and most do not require instructors to complete a probationary period.

## SECTION 9: SAFETEA-LU SECTION 2010 GRANT PROGRAM FUNDS

Enacted in 2005, SAFETEA-LU supports a broad range of efforts aimed at increasing the safety and efficiency of the nation’s surface transportation system. SAFETEA-LU funds may be used by States to support a variety of transportation initiatives, including programs designed to enhance motorcycle safety, however Section 2010 funds may only be used for rider training and motorist awareness activities. States were asked whether they had applied for 2010 SAFETEA-LU funds and, if so, how the funds had been used.

### Receipt and Targets of SAFETEA-LU Funds

All but one State reported receiving SAFETEA-LU funds (data not shown). Of the States with section 2010 grant program funding, almost all (93%) indicated that they have applied the money toward public awareness, public service announcements, and outreach activities aimed at enhancing motorist awareness of motorcycles (Table 14). Over 60 percent of States have invested in improving motorcycle training in both urban and rural areas (e.g., procurement or repair of practice motorcycles, instructional material, mobile training units, leasing or purchasing facilities for closed-course motorcycle skill training; 64%).

**Table 14. Use of SAFETEA-LU Funds**

Application and target of SAFETEA-LU funds	Percentage
<b>Target of funds</b>	
Public awareness, public service announcements, and other outreach programs to enhance driver awareness of motorcyclists	93
Improving motorcycle training in both urban and rural areas (e.g., procurement or repair of practice motorcycles, instructional material, mobile training units, leasing or purchasing facilities for closed-course motorcycle skill training)	64
Increasing recruitment and/or retention of motorcyclist safety training instructors	33
Improving motorcycle rider safety training curricula	24
<b>Application of funds</b>	
Both current and new safety initiatives	55
Current safety initiative	24
New safety initiative	21

NOTE: Results based on data reported from 42 States.

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About one-third of States use the funds for increasing recruitment and/or retention of motorcycle safety training instructors (33%) and one-quarter of States have applied SAFETEA-LU funds toward improving the State motorcycle rider safety training curricula (24%).

### **Application of SAFETEA-LU Funds**

States that have received SAFETEA-LU funds were asked whether they applied the monies to a new motorcycle safety initiative, to a current initiative, or to both new and current initiatives (Table 14). More than half reported using SAFETEA-LU funds for both current and new initiatives (55%). Approximately one-fourth have applied funds only to current initiatives (24%) and 21 percent of States have used the funds exclusively for new initiatives.

### **State Use of SAFETEA-LU Funds for Motorcycle Safety**

Seventeen States reported that additional students will be trained because of the SAFETEA-LU money, with an average increase of 585 students per year attributable to the grant program (data not shown). The estimated number of students to be trained ranges from a low of 24 to a high of 3,000. Sixteen States indicated that the number of licensed motorcycle riders will increase because of the SAFETEA-LU funds, with an average of 500 motorcycle riders per year. The range was the same for the number of students who will receive training, with a low of 24 motorcycle riders and a high of 3,000 motorcycle riders.

### **Highlights**

All but one State surveyed reported that they had applied for and received SAFETEA-LU funds. Most States have used their SAFETEA-LU funds to support public awareness and outreach activities, and many have also targeted the funds for improving training in urban and rural areas, including the procurement and repair of equipment.

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## REFERENCES

Governors Highway Safety Association. 2008. *Survey of the States: Motorcycle Safety Programs*. Washington, DC: Governors Highway Safety Association.

NHTSA. 2007, April. *Summary of Novelty Helmet Performance Testing*. Traffic Safety Facts Research Note. Office of Behavioral Safety Research. DOT HS 810 752. Washington, DC: National Highway Traffic Safety Administration.

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