Promising Practices in Motorcycle Rider

Education and Licensing

EXECUTIVE SUMMARY

Motorcycle rider education provides an opportunity for novice riders to learn the basic skills necessary to operate a motorcycle safely and for experienced riders to refresh and refine their techniques. Although 47 States have State-legislated motorcycle rider education and all States and the District of Columbia require operators to obtain a motorcycle license or endorsement, standards and practices for rider education and licensing vary widely across the country. The purpose of this report is to develop a research-based model of promising practices in rider education and licensing and to use the model to identify States that have implemented high-quality rider training and comprehensive licensing. In addition, drawing on detailed data collected from State motorcycle rider education administrators, instructors, and students, the report describes specific actions that programs in five highlighted promising-practices States (Delaware, Idaho, Maryland, Nevada, and Oregon) have taken that promote the effective training and licensing of motorcycle operators. The promising-practices model and the specific recommendations can serve as a guide for other States interested in improving their rider training and licensing programs.

Promising Practices in Rider Education and Licensing

The model of promising practices in rider education and licensing was developed on the basis of a review of current research and position papers published by the National Highway Traffic Safety Administration (NHTSA). Thirteen practices were identified and organized within three broad areas: program administration, rider education, and licensing. Program administration refers to the structure and organization of a jurisdiction's rider education and licensing activities. Practices related to rider education concern the details of delivering training efficiently and effectively to motorcycle operators. Finally, licensing practices require operators to ride legally and prescribe procedures for ensuring that only skilled riders are licensed to operate motorcycles.

Data and Measures

All 47 States with legislated motorcycle rider education programs were ranked along the various dimensions of the promising-practices model on the basis of data collected as part of an earlier NHTSA-funded study summarized in *Motorcycle Rider Education and Licensing: A*

Review of Programs and Practices (NHTSA, 2005). This data provided information on each State's practices as they related to the three areas of program administration, rider education, and licensing.

Identifying Promising-Practices States

Overall promising-practices scores were assigned to each State through summated scales for the three areas of program administration, rider education, and licensing. States were classified as "low," "medium," or "high" promising practices on the basis of scores for all 47 State-legislated programs.

Data Collection Instruments for Site Visits

Five States, Delaware, Idaho, Maryland, Nevada, and Oregon, were selected for site visits because of their overall high promising-practices scores for rider education and licensing. The purpose of the site visits was to gather detailed information from motorcycle rider education program administrators, instructors, and students about the features of programs that deliver high-quality and effective training. Information was collected through interviews with administrators and focus groups with instructors and students.

Results From Site Visits

During the site visits to the five promising-practices States, administrators, instructors, and students were asked to consider and comment on features of the program related to program administration, rider education, and licensing. Through the focus groups and interviews, the respondents identified specific policies and actions the programs had implemented that helped promote high-quality training and effective licensing. These actions are summarized in a "Highlights" section that corresponds to each of the 13 promising practices.

Recommendations

Review and analysis of the data collected during the site visits resulted in a set of recommendations aimed at providing guidelines for States interested in improving their rider training programs, focusing on the critical components of program administration, rider education, and licensing:

- organize the rider education program and the licensing program under the same administrative agency;
- explore alternative sources of funding to support rider training activities;
- centralize registration and increase the flexibility of course schedules;
- offer classes targeted toward experienced operators who are riding without a license; and
- implement ongoing training, monitoring, and mentoring of instructors.

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I. INTRODUCTION

Despite significant progress since the enactment of Federal motor vehicle and highway safety legislation in 1966, the annual toll of traffic crashes remains high on U.S. roadways. In 2001, traffic crashes accounted for 95 percent of all transportation fatalities and 99 percent of injuries (NHTSA, 2003). In 2002 motor vehicle traffic crashes were the leading cause of death for people age 3 through 33 (NHTSA, 2005).

Recent data indicates that deaths and injuries related to motorcycle crashes are becoming a larger portion of this public health problem. After a steady decrease to a historic low in 1997, motorcycle-crash-related fatalities have been increasing since 1997 and injuries have been increasing since 1999. In 2003, 3,661 motorcyclists were killed—an increase of over 70 percent from 1997.

Although causes of the sudden increase in motorcycle fatalities remain unclear, over the years researchers have identified several factors that are instrumental in reducing fatal motorcycle crashes and motorcycle-related injuries. Factors aimed at crash prevention offer a potential safety benefit for motorcyclists because they occur before a crash takes place. Injury mitigation and emergency response are also important factors in reducing motorcycle fatalities and injuries.

Among crash prevention measures, research points to the key role of motorcycle rider education and licensing. Although evidence of the effectiveness of rider education on crash reduction is mixed, several studies have shown that trained riders tend to have fewer crashes, less severe crashes, and overall lower cost of damage resulting from crashes (Billheimer, 1998; McDavid, Lohrmann, and Lohrmann, 1989; Mortimer, 1982). Similarly, properly licensed motorcycle riders are less likely to be involved in fatal crashes than their unlicensed counterparts (Billheimer, 1998).

Despite this emphasis on rider education and licensing, to this day little attention has been paid to what constitutes effective rider training and licensing. Although in 2003 there were 47 State-legislated rider education programs in the United States, each State-sponsored rider education program was administered differently. In addition, all 50 States and the District of Columbia require a license to operate a motorcycle on the highway. However, the degree of

coordination between rider education programs and licensing agencies varies widely across States (NHTSA 2005). The result of this fractured situation is that little systematic information is available in terms of potentially effective practices used by States in implementing motorcycle rider education and licensing.

The purpose of this report is to develop a model of promising practices in motorcycle rider education and licensing on the basis of current research and position papers published by NHTSA and to use detailed rider education and licensing data collected from all 47 States that offer State-legislated motorcycle rider education programs to identify the States that most closely adhere to this promising-practices model in terms of efficient and effective program components. **This report, however, is not a formal evaluation of the practices in each State, nor does it evaluate the effectiveness of motorcycle rider training programs.**

In addition, this report will present in-depth qualitative data (i.e., interviews and focus groups) collected among five of the promising-practices States to gain additional insights into the most effective practices. Identifying States with cost-effective and efficient policies and practices that can be offered as models to be adopted by other States where possible is important in this era of competing financial resources and will allow State rider education and training programs to maximize limited funding while continuing to meet increasing demand.

ORGANIZATION OF THE REPORT

This report is divided into seven chapters. Following this introduction, the next four chapters review the literature on which the promising-practices model is based and discuss the various components of the model, the sources of the data, and the methodology used to classify and identify the promising-practices States. Chapter 6 presents data collected through site visits to five of the promising-practices States and gathered through interviews with rider education administrators, along with focus groups of instructors and program participants. The purpose of this chapter is to provide additional, contextual, and in-depth data on the specific features of promising-practices States that appear to be most successful in the eyes of program administrators and participants. The report concludes with a set of recommendations on promising practices that States can use in efforts to improve their motorcycle rider education and licensing programs.

II. PROMISING PRACTICES IN RIDER EDUCATION AND LICENSING

Research examining the effectiveness of motorcycle rider education on crashes and injuries goes back to the 1970s (Raymond and Tatum, 1977; Lawlor and Swain, 1978; Osga and Ellingstad, 1978) and continues to this day (Billheimer, 1996). These studies are typically designed to answer the question, Are riders who receive training less likely to be involved in crashes than their counterparts who do not? The evidence has been less than decisive, with most studies finding positive effects of rider education, but other studies finding no effects, or even negative effects (Raymond and Tatum, 1977; Mortimer, 1982).

In retrospect these findings are far from surprising. None of these studies actually measured program effectiveness. The authors simply assumed that rider instruction is effective. Yet, it is more plausible that some programs do a good job at educating riders and others do not. Hence, findings of no impact or negative impact of rider education on subsequent crashes may merely reflect poor instructional practices on the part of that program.

This last point highlights the crucial importance of effectiveness of rider education practices in trying to understand the impact of rider education. What states do and how they do it to (a) encourage riders to take state-sponsored motorcycle training, (b) teach them basic riding skills, and (c) encourage riders to become fully and properly licensed are critical to a program's ability to affect rider behavior.

The promising-practices model introduced in this report addresses a gap in the research on motorcycle safety. Documents and studies highlighting what states should do in terms of rider education and licensing are scant. To date, no integrated model of promising practices in rider education and licensing has been developed. There have, however, been two concerted attempts at addressing suggested licensing practices, on the one hand, and suggested rider education practices, on the other (NHTSA, 1993, 2000). Although neither of these documents is comprehensive, both provide a basic blueprint from which to build an integrated model of promising practices in motorcycle rider education and licensing. In the following section we present what we consider to be a comprehensive model of promising practices in rider education

and licensing, using these two documents as a starting point. This comprehensive model is used to examine the practices of all 47 States that offer state-legislated motorcycle rider education.

THE PROMISING-PRACTICES MODEL

The promising-practices framework used to examine State motorcycle rider education and licensing programs was drawn from NHTSA recommendations about the key features of high-quality training (NHTSA, 1993, 2000). High-quality training refers not only to the delivery of course content to students but also to a carefully designed administrative structure and a comprehensive licensing system. According to NHTSA guidelines, promising practices should encompass three elements:

- Program Administration
- Rider Education
- Licensing

These three areas form the core of the promising-practices model developed in this report. Program administration refers to the structure and organization of a jurisdiction's rider education and licensing activities. The second area of promising practices, rider education, focuses on the details of delivering training efficiently and effectively to motorcycle operators. Finally, licensing practices encourage operators to ride legally and prescribe procedures for ensuring that only skilled riders are licensed to operate motorcycles.

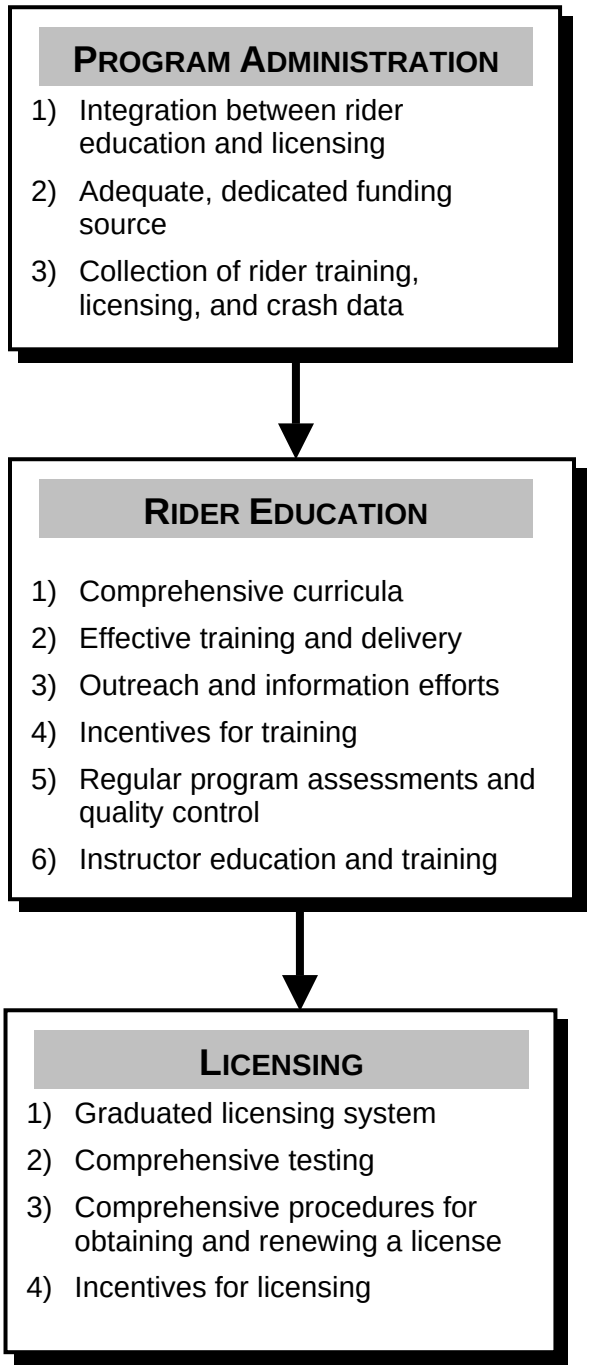
The promising-practices model for rider education and licensing is presented in Figure 1. Each of the three main areas in the model comprises a series of different practices, all of which are essential for providing quality training and ensuring effective licensing of riders. The key components of the model are described in greater detail below.

Program Administration

Within the area of program administration, three practices are important for promoting effective training and licensing of riders:

- integration between rider education and licensing;
- adequate, dedicated funding source; and
- collection of rider training, licensing, and crash data.

Figure 1. Overview of Promising-Practices Model of Motorcycle Rider Education and Licensing



The synthesis of rider education and licensing is a recurrent theme in the research literature because it may encourage riders seeking licensing to also seek training. When motorcycle rider licensing is separate from training, novice riders applying for licenses may miss opportunities to improve their skills through rider classes. Integration also reduces redundancies across administration, education, and licensing and streamlines the processes for opening roadways to qualified and safe riders.

Although specific funding amounts will differ across States, an adequate and dedicated funding source ensures that training opportunities will be available from year to year and that students will be able to receive appropriate training from a State-certified provider. Across the country, rider training programs are largely financed through a percentage of the revenue from State motorcycle registrations. Finally, the collection of rider training, licensing, and crash data allows States to carefully monitor the impact of program activities by centralizing all information in a single database.

Rider Education

Practices related to program administration center on the organization of State agencies responsible for rider training and licensing. The second area of promising practices, rider education, focuses on the details of delivering training efficiently and effectively to motorcycle operators. The following key practices are related to rider education:

- comprehensive curriculum;
- effective training and delivery;
- outreach and information efforts;
- incentives for training;
- regular program assessments and quality control; and
- instructor education and training.

Across the country, the most recognized curriculum for rider education programs are the courses created by the Motorcycle Safety Foundation (MSF). MSF courses are the product of careful planning and consideration and, as of 2001, had been adopted by all States with administrative agencies responsible for the oversight and administration of motorcycle rider

education and safety programs.[1] The second feature of rider education, effective training and delivery, reflects a program's ability to adequately supply training classes to meet demand. To satisfy demand, programs should provide training at sites accessible by riders throughout the State and offer classes frequently and with little delay to interested riders.

Outreach and information efforts about rider training and safety are important not only for encouraging operators to enroll in classes but also for educating the nonriding public about motorcycles on roadways. Even with outreach and information efforts, not all riders will be inspired to enroll in classes. To encourage reluctant operators to seek training, incentives are key. Keeping costs for training low, or even better, free, is one effective practice. Additionally, to reduce the burden on operators seeking licensing, States can implement a "one-stop shop," in which riders receive their motorcycle license with successful completion of a training course. Finally, programs can offer reductions of points on licenses for riders who successfully complete a training course. Point reductions are a particularly strong incentive because they are applied to violations that occur in all motor vehicles, not just motorcycles.

By implementing regular program assessments and quality control, States can monitor their operations and identify areas in need of refinement and improvement. Because rider training courses are typically held at multiple locations throughout a State, it is imperative that States institute quality-control procedures to ensure that all riders receive adequate training and supervision.

The final set of promising practices related to rider education concern instructor education and training. Quality training depends in large part on a staff of qualified and competent instructors. States should monitor their instructional staffs through certification requirements and also provide opportunities for experienced riders to teach classes. New instructors can be recruited through preparation courses and through offering certification reciprocity for instructors trained in other States.

[1]Oregon introduced a non-MSF novice curriculum developed by Team Oregon, the State motorcycle training and safety contractor, in 2004. This curriculum, called the Basic Rider Training (BRT) course, is approved for use by the Oregon Department of Transportation.

Licensing

All States and the District of Columbia require that motorcycle operators who use public roadways must possess a valid motorcycle license or endorsement and that to receive a license, operators must pass a written knowledge test. Beyond these stipulations, States vary in their procedures for licensing riders and for encouraging unlicensed operators to ride legally. According to the Motorcycle Operating Licensing System (NHTSA, 1997), a promising-practices model for licensing should include the following:

- graduated licensing system;
- comprehensive testing;
- comprehensive procedures for obtaining and renewing a license; and
- incentives for licensing.

NHTSA strongly supports the enactment of graduated licensing by States because it compels novice operators to successfully demonstrate proficiency at several intermediate steps before being granted full riding privileges. Model graduated licensing programs typically require that riders obtain learner's permits with a limited validation period and without automatic renewals. To carefully measure a rider's proficiency, licensing agencies should implement comprehensive testing practices that require applicants to pass both a written knowledge test and a skills test. Similar to its role with rider education curricula, the Motorcycle Safety Foundation (MSF) is the primary provider of motorcycle-related test material to licensing agencies.

In addition to providing comprehensive testing, jurisdictions should also institute comprehensive procedures for riders to obtain and renew motorcycle licenses. Key practices include providing riders with an operator's manual to prepare for testing and mandating that riders under the age of 21 complete a rider education course before receiving a license. If possible, licensing agencies should also employ examiners trained in riding motorcycles to administer skills tests (NHTSA, 2000).

Finally, licensing agencies should offer riders incentives for seeking licensing. The simplest incentive that jurisdictions can offer is a reciprocal license waiver for riders who were licensed in another State or the District of Columbia. Upon presenting a valid out-of-State operator's license to the licensing agency, the rider exchanges that license for a license valid in the new jurisdiction. In addition to reciprocal license waivers, States should also recognize

reciprocity for rider education completed in another State. Under this incentive, when operators present their certificate of completion for an out-of-State rider education program, the knowledge and skills tests necessary to obtain a license are waived. Many States currently offer testing waivers for riders who have completed a rider education course within the State; reciprocity in rider education simply allows this incentive to be recognized across jurisdictions.

III. DATA AND MEASURES

DATA

The data used to assess the program administration, rider education, and licensing practices implemented in the 47 States with rider education programs was collected from multiple sources, including published documents, the Internet, postal and e-mail correspondence, and telephone interviews. This data collection was conducted by the American Institutes for Research under a contract with NHTSA and is described in further detail in the publication *Motorcycle Rider Education and Licensing: A Review of Programs and Practices* (NHTSA, 2005). All data reflects rider education programs and licensing practices in calendar year 2001, the most recent year for which published data was available. Data collection began with an Internet search to compile a list of State rider education and licensing Web sites. The Web sites were carefully reviewed, and relevant data was classified into promising-practices areas organized within the larger three categories of program administration, rider education, and operator licensing.

Following the Internet search, project staff examined published documents containing information about State motorcycle programs and licensing procedures. This effort focused primarily on a review of material from the Motorcycle Safety Foundation (MSF) and the National Association of State Motorcycle Safety Administrators (SMSA), and from annual reports from State motorcycle rider education programs. All data collected from Internet searches and from the review of published documents was entered into a database. Using this database, project staff created draft State profiles that were sent to State program coordinators for review. The database was updated on the basis of changes made to the profiles by the coordinators and through additional correspondence aimed at resolving data contradictions and gathering missing data.

MEASURES

Table 1 presents the variables and scoring rubrics used to measure the promising-practices model. The variables and scoring rubrics are organized by the three core dimensions of the model: program administration, rider education, and licensing. Of the 33 measures in the

model, 30 were scored as dichotomous, with 1 indicating the presence of a practice consistent with the promising-practices model and 0 indicating the absence of a practice. The remaining three measures were scored on a 3-point scale, with 0 indicating no features consistent with the model, 1 indicating some features, and 2 indicating all features in place.

Table 1. Variables and Scoring Rubrics for Promising-Practices Model

Program Administration

Variables	Value Levels	Score Point*
Licensing agency same as rider education agency	No Yes	0 1
Ratio of State budget to number of operators	Values in the highest quartile coded as 1, all others as 0	0 1
Data available in electronic format	No data available Some data available Licensing data only Rider education data only All data available	0 1 2
Link between crash data and rider training and licensing data	No Crash data linked to licensing data only Crash data linked to rider education data only Crash data linked to both licensing and rider education data	0 1 2
Total possible score for program administration scale: 6.0		

*For further explanation of scoring, see discussion on pp. 16-17.

Table 1. Variables and Scoring Rubrics for Promising-Practices Model (Continued)

Rider Education

Variables	Value Levels	Score Point*
State offers novice MSF curricula	No Yes	0 1
State offers experienced MSF curricula	No Yes	0 1
Average waiting period to take course	None Less than 1 month 1 to 3 months	1
	Greater than 3 months Variable	0
Total number of students on waiting list in 2001	Reverse Coded: Values in the highest quintile coded as 0, all others as 1	0 1
Courses per licensed operators	Values in the highest quintile coded as 1, all others as 0	0 1
Sites per 10,000 licensed operators	Values in the highest quintile coded as 1, all others as 0	0 1
Annual budget for public information and education	$0	0
	$1 – $4,999 $5,000 – $19,999 > $20,000	1
Point reductions on license for rider education graduates	No Yes	0 1
No cost for rider education courses to student	No Yes	0 1
Reciprocity for rider education completed in another State	No Yes	0 1
Skills test waiver for successful completion of State rider education course	No Yes	0 1
Knowledge test waiver for successful completion of State rider education course	No Yes	0 1
Adult student cost for novice course	Reverse Coded: Values in the highest quintile coded as 0, all others as 1.	0 1
Rider licensed upon successful completion of rider education program	No Yes	0 1
Program conducts regular, scheduled evaluations	No Yes	0 1

*For further explanation of scoring, see discussion on pp. 16-17.

Table 1. Variables and Scoring Rubrics for Promising-Practices Model (Continued)

Rider Education (Continued)

Variables	Value Levels	Score Point*
Type of evaluation/evaluation process	Review of student/instructor evaluations Annual report Some other formalized evaluation	1
	None	0
State has formal quality control procedures	No Yes	0 1
Frequency of quality control implementation	Multiple times per year Annually	1
	Some other set schedule Intermittently, no set schedule	0
Instructors are State-certified	No Yes	0 1
State offers Instructor Preparation Course (IPC)	No Yes	0 1
Instructors complete internship/probationary period	No Yes	0 1
State has reciprocity for instructors trained in other States	No Yes	0 1
Total possible score for rider education scale: 22.0		

Licensing

Variables	Value Levels	Score Point*
Graduated licensing	No Yes	0 1
Primary knowledge test	Modified MSF Local None	0
	MSF	1

*For further explanation of scoring, see discussion on pp. 16-17.

Table 1. Variables and Scoring Rubrics for Promising-Practices Model (Continued)

Licensing (Continued)

Variables	Value Levels	Score Point*
Primary skills test	None	0
	Alternate MOST[1] MLST[2] Local off-street	1
	Local on-street M/C in traffic[3]	2
Primary operator's manual used	Modified MOM[4] Local	0
	MOM[5]	1
Agency responsible for training examiners	DOT/DMV DOE Law enforcement Other State agency Private contractor	0
	Rider Ed./ Safety Program	1
Riders under certain age must complete rider education course for license	No Yes	0 1
Reciprocal license waivers	No Yes	0 1
Total possible score for licensing scale: 8.0		

Total Possible Score for Overall Promising-practices Scale: 36.0

[1]Alternate Motorcycle Operator Skill Test
[2]Motorcyclist Licensing Skill Test
[3]Motorcycle in traffic
[4]Modified Motorcyclist Operator's Manual
[5]Motorcyclist Operator's Manual

*For further explanation of scoring, see discussion on pp. 16-17.

Below we provide additional discussion of the variables used to measure the various components of a State's practices along the areas of program administration, rider education, and licensing.

Program Administration

State program administration practices were assessed through four variables. Program integration was measured by a single dichotomous variable, and the adequacy of a State's funding source was measured through the ratio of a State's budget to the number of motorcycle operators. The last two measures under program administration represented a State's capacity for collecting rider training and licensing data. The availability of data in an electronic format and links between crash data and rider training and licensing data were scored on a 3-point scale, with the highest scores assigned to States that maintained extensive data archives.

Rider Education

Twenty-two variables were used to measure a State's rider education practices. Because all State programs used MSF curricula in their classes, States were assessed on the basis of whether they offered both novice and experienced courses. Effective training delivery was measured through four variables, two of which captured the speed at which students were able to enroll in classes. Waiting times for classes and the total number of students on a waiting list in 2001 were both recoded to dichotomous variables, with a 1 assigned to States that demonstrated some speed in meeting the demand for training. Two continuous variables, the ratio of courses to licensed operators and the ratio of sites to operators, were also rescored dichotomously. Positive scores on these variables indicate that a State was in the upper tier of the distribution across all States for offering courses and training sites.

The third feature of rider education promising practices, outreach, and information efforts, was measured by a dichotomous variable indicating whether the State program expended any funds to advertise its courses. Incentives encouraging operators to enroll in classes were assessed through six dichotomous variables: reductions in points for successful completion of a rider training course, no cost for courses, reciprocity for rider education completed in another State, skills test waivers and knowledge test waivers for successful completion of rider training, and the implementation of a "one-stop shop." A seventh measure, adult student cost for a novice course, was recoded to a dichotomous indicator on the basis of the distribution of novice course fees across States.

Four variables were used to measure the implementation of regular program assessments and quality control efforts. States were assessed on the basis of whether they conducted regular, scheduled evaluations and, if so, the type of evaluation process they employed. Both variables were scored dichotomously. Quality control was assessed through two similar dichotomous measures, one for the implementation of a quality control program and the other for the frequency with which it was administered. The final feature of rider education practices, instructor education and certification, was measured through four dichotomous variables capturing State certification of instructors, the availability of training opportunities for new instructors, internship or probationary requirements, and reciprocity for instructors trained in other States.

Licensing

Features of licensing programs were assessed through six variables, beginning with a dichotomous indicator for whether the State had implemented a graduated licensing system for motorcyclists. Comprehensive testing was assessed through two dichotomous variables capturing the types of knowledge and skills tests used by a State. Because the content of the MSF examination is widely accepted and adopted, 1 point was awarded to States that used the MSF test over a local or modified MSF version. Regarding the skills test, NHTSA recommendations specify that the examination should be administered on-street so that riders can be evaluated in real-world conditions (NHTSA, 1997). Scores for promising practices in the administration of skills tests followed this guideline, awarding 2 points to jurisdictions that required on-street tests, 1 point for off-street tests, and no points for the absence of any skills test.

Practices related to obtaining and renewing a license were assessed through three variables. The adoption of the MSF's Motorcyclist Operator's Manual (MOM) is consistent with the NHTSA promising-practices model and was awarded credit over the use of any other type of operator's manual. Examiners trained by a State rider education program should have familiarity with motorcycles, so States meeting this criterion were awarded 1 point. The final two variables under the licensing area, rider education requirements for minors seeking licensing and reciprocal license waivers, capture incentives for licensing and were measured with dichotomous variables.

IV. IDENTIFYING PROMISING-PRACTICES STATES

Overall promising-practices scores were assigned to each of the 47 States with legislated motorcycle rider education programs by summing the total points awarded within the program administration, rider education, and licensing areas. A total of 36 points were possible for the promising-practices scale. To identify clusters of States with similar practices, the States were classified as "low," "medium," and "high" on the basis of the distribution of their overall scores. Scores one standard deviation above the mean were classified as "high" and those one standard deviation below the mean as "low." All other scores were assigned to the "medium" category. Clusters of States for the overall promising-practices score are displayed in Table 2, along with the mean and standard deviation for the scale. Overall, 10 States were classified as "high" promising-practice States: Oregon, Delaware, Idaho, Nevada, New Mexico, Maryland, Ohio, Hawaii, Washington, and Minnesota. These States satisfy most of the key promising practices identified by our model to some extent. Eight States were classified as "low" promising-practices scores: Kansas, Arizona, Kentucky, New Jersey, West Virginia, Wyoming, Rhode Island, and South Carolina. These States engage in very few of the promising practices identified by our model. The remaining 29 States fall somewhere in the middle in terms of promising-practices engagement.

In addition to calculating overall promising-practices scores, subscale scores for the three areas of program administration, rider education, and licensing were also computed. Subscale scores reveal greater detail about the features of a State's rider education and licensing activities and are especially valuable for comparing across the three dimensions of the promising-practices model. Subscale scores for each State are presented in Table 3. For the program administration scale, scores ranged from a low of 0 (12 States) to a high of 5 (Maryland and Oregon) out of a possible 6 points. The rider education scale comprised more variables and was scored out of 22 possible points. Idaho had the highest score for this scale (16) and South Carolina the lowest (1). Finally, the licensing promising-practices subscale ranged from 1 (New Jersey) to 6 (Delaware and South Dakota) out of a possible 8 points.

Table 2. Classification of States by Promising-Practices Score

Low promising-practices score States		Medium promising-practices score States		High promising-practices score States	
State	Score	State	Score	State	Score
KS	9	ND	18	OR	24
AZ	9	FL	18	DE	23
KY	8	PA	18	ID	23
NJ	8	TN	18	NV	21
WV	7	SD	17	NM	21
WY	7	NE	17	MD	20
RI	4	TX	17	OH	19
SC	3	WI	17	HI	19
		VT	17	WA	19
		VA	16	MN	19
		IN	16		
		NY	16		
		IA	15		
		MO	15		
		CA	15		
		NC	15		
		NH	14		
		MT	13		
		UT	13		
		IL	13		
		AL	13		
		CT	12		
		GA	12		
		LA	12		
		MA	12		
		MI	11		
		OK	11		
		CO	11		
		ME	11		

Mean = 14.6; Standard Deviation = 4.9

Table 3. Promising-Practices Subscale Scores, by State

State	Program Administration	Rider Education	Licensing
AL	1	10	2
AZ	0	6	3
CA	2	9	4
CO	1	7	3
CT	1	7	4
DE	4	13	6
FL	4	9	5
GA	1	7	4
HI	3	11	5
IA	1	9	5
ID	4	16	3
IL	2	8	3
IN	0	12	4
KS	0	4	5
KY	0	6	2
LA	0	9	3
MA	1	9	2
MD	5	12	3
ME	1	7	3
MI	0	6	5
MN	3	13	3
MO	1	10	4
MT	1	7	5
NC	0	12	3
ND	1	12	5
NE	1	11	5
NH	1	10	3
NJ	0	7	1
NM	3	13	5
NV	1	15	5
NY	3	9	4
OH	1	13	5
OK	1	5	5
OR	5	14	5
PA	1	13	4
RI	0	2	2
SC	0	1	2
SD	0	11	6
TN	1	13	4
TX	1	11	5
UT	1	9	3
VA	2	9	5
VT	1	12	4
WA	3	11	5
WI	1	11	5
WV	0	3	4
WY	1	2	4
	Mean = 1.4 S.D. = 1.4	Mean = 9.3 S.D. = 3.5	Mean = 3.9 S.D. = 1.2

Oregon and Delaware scored consistently high across the three subscales. Idaho was boosted by its rider education subscale score (16), but scored lower in licensing (3). Nevada and New Mexico also reported strong features of their rider education programs (15 and 13, respectively) but scored lower on program administration (1 and 3, respectively). Apparently, the delivery of rider training in Nevada was not negatively affected by the organization of the program. South Dakota was the only State that scored the highest on one of the subscales (tying with Delaware at 6.0 for licensing practices) but was not in the highest tier for overall promising practices. At the other end of the distribution, South Carolina and Rhode Island scored equally low on all three subscales. Overall, these results suggest a fair amount of consistency across the three subscales in the way States meet various promising practices. States are likely either to engage highly in all three areas of promising practices or to engage little in all three.

V. DATA COLLECTION INSTRUMENTS FOR SITE VISITS

Five States, Delaware, Idaho, Maryland, Nevada, and Oregon, were selected for site visits because of their overall high promising-practices scores for rider education and licensing (see table 2).[2] The purpose of the site visits was to gather detailed information from administrators, instructors, and students about the features of programs that deliver high-quality and effective training. Because extensive data about characteristics of rider education and licensing programs had previously been collected in phase 1, the site visits focused on gathering information about specific processes and policies implemented across the five promising-practices States that result in a quality rider training program and rigorous licensing procedures.

Data collection instruments were developed for each of the three groups of respondents (State motorcycle rider education administrators, instructors, and students). The instruments were written to capture information about the key features of motorcycle rider education and licensing identified in the promising-practices model. The model comprises 13 features that encompass program administration, rider education, and licensing (see figure 1). The first step in creating the instruments was to identify the appropriate group of respondents (administrators, instructors, or students) who could provide insight into these features. The goal of collecting detailed information had to be balanced against the burden placed on respondents to answer questions. State administrators, for example, have a broad range of knowledge that spans all the key promising-practices features. Yet a data collection instrument that addressed all 13 features would reach a point of diminishing returns because of the time necessary to conduct the interview and the corresponding onset of exhaustion on the part of the respondent.

Table 4 links the key promising-practices features to the three groups of respondents. As indicated in the table, 5 of the 13 features were assigned to two or more groups of respondents. This strategy allowed not only the collection of more extensive data about particular features but also comparisons to be drawn across respondents with different views and experiences.

[2]Although New Mexico scored higher than Maryland, this score is based on 2001 data. At the time of the site visits (2004), New Mexico had completely reorganized its motorcycle rider education program, awarding a contract to the Motorcycle Safety Foundation for day-to-day administration. For these reasons, we did not include it in our analyses.

Administrators were linked to the greatest number of promising-practices features (10), followed by instructors (6) and students (5).

Table 4. Type of Data Collected by Respondent Type

Feature	State Administrator	Instructor	Student
1. Integration between rider education and licensing	✓		
2. An adequate, dedicated funding source	✓		
3. Collection of rider training, licensing, and crash data	✓		
4. Comprehensive curricula		✓	
5. Effective training and delivery		✓	✓
6. Outreach and information efforts	✓	✓	✓
7. Incentives for training	✓	✓	✓
8. Regular program assessments and quality control	✓	✓	
9. Instructor education and training	✓	✓	✓
10. Graduated licensing	✓		
11. Comprehensive testing	✓		
12. Comprehensive procedures for obtaining and renewing a license	✓		
13. Incentives for licensing			✓

Once the features were linked to the respondents, the data collection instruments were created. To capture the greatest diversity of perspectives, focus groups were used to collect information from instructors and students. Two unique focus group moderator's guides were devised, one for instructors and the other for students. The moderator's guides were written with open-ended questions designed to spark discussion and to encourage participants to reflect on their experiences with their State's rider training program. The goal of the focus groups was to capture information about what specific steps the promising programs take to deliver training to students and how these steps result in effective rider education across the features of the promising-practices model. Each focus group lasted approximately one hour.

Data from program administrators were collected through a one-on-one interview conducted with a detailed interview protocol. Similar to the focus group moderator's guide, the interview protocol comprised questions linked to the corresponding features of the promising-practices model. Questions posed to administrators centered on the structure of the State program, from coordination with licensing agencies to the strategies employed to meet the demand for training and recruiting new instructors. The administrator interviews lasted approximately 30 to 45 minutes.

VI. RESULTS FROM SITE VISITS

Integration Between Rider Education and Licensing

All of the State programs identified for the promising-practices study maintain a close working relationship with the licensing agency in their States. For three States, Delaware, Maryland, and Nevada, the collaboration is facilitated by the fact that the rider education and licensing programs are housed within the same administrative agency. Though not located within the same office as the licensing agency, the administrative staffs for Idaho and Oregon work just as closely with the licensing departments in their respective States.

The tight linkages between the rider education and licensing programs are manifested in several ways. First, all five of the programs advise the licensing agencies on licensing standards and train the licensing examiners. Several administrators mentioned that the training of licensing examiners was particularly important because many of the examiners have no familiarity with motorcycles prior to the training. The programs are also called on to write or revise the licensing manual for motorcyclists. In Oregon, where Team Oregon contracts with the State Department of Motor Vehicles to review licensing issues, Team Oregon staff offers guidance about the qualifications of riders licensed in other States.

Because all the States but one offer skills and knowledge tests waivers following the successful completion of a course (Idaho is the only State that does not offer both), coordination between the training and licensing agencies is critical so that the licensing agency has the confidence that course graduates have the same skills as individuals who go directly to the licensing agency. The integration between the programs helps foster this confidence, as well as the fact that across the States, the requirements for passing a novice rider education course are viewed as more stringent than the licensing agency's requirements.

In addition to benefiting the licensing agency, the close working relationship may also help the rider education program. As the administrator of one program explained:

> *"Right now we're using DMV property all over the State to do our training because they have the biggest parking lots. And, we train their examiners on how to give the skills test…. We do that for free."*

In Maryland, where the licensing agency and the rider education program are housed in the same department, the two organizations have collaborated to introduce a "one-stop shop" for licensing, where graduates of the Maryland Motorcycle Safety Program will immediately receive a motorcycle endorsement when they successfully complete a State-sponsored course. The two programs also work together to encourage unlicensed riders to ride legally by operating five "after-hours" testing centers across the State. Instructors in the Maryland Motorcycle Safety Program administer skills tests to riders from 6 p.m. to 8 p.m. at Maryland Motor Vehicle Administration licensing sites. Not only can students take their tests after hours, they are also allowed to use motorcycles owned by the Maryland Motorcycle Safety Program. Maryland's administrators hope that the program will offer a solution to two of the main reasons that riders do not get a license: the inconvenience of normal testing hours and the difficulty of passing a skills test on a large motorcycle.

HIGHLIGHTS

- Rider education programs and licensing agencies work together closely in all five promising-practices States.
- Rider education programs train examiners, provide guidance on licensing standards, and write or review the State motorcycle operator's manual.
- Maryland Motorcycle Safety Program works with State licensing agency to offer skills tests to unlicensed riders "after hours." Instructors from the rider training program administer the tests, and students are allowed to take the skills tests using motorcycles owned by the program.

Adequate, Dedicated Funding Source

The five promising-practices programs all have stable sources of State funding, though the administrators recognize that this funding is always at the discretion of lawmakers. Simply because money should be allocated to a program does not necessarily mean it will be delivered. As one administrator summarized, "Whether I actually get the money to spend is another story." Across the programs, the three main sources of program support are (1) motorcycle registration fees, (2) motorcycle endorsement and driver's license fees, and (3) rider training course tuition. In Delaware, where funds from all three sources support rider training, the total amount of

funding currently meets the program's needs. Other promising-practices States have had to stretch their funding and devise novel financing strategies to keep up with the demand for training.

In Idaho, the STAR (Skills Training Advantage for Riders) program has been growing by 28 percent a year, but support from the State lags behind at 5–7 percent a year. In an attempt to broaden its revenue stream, the program worked with the State Department of Licensing to introduce a specialty Idaho STAR license plate for cars and trucks. A percentage of the funds collected by the State through the sale of the license plates will go directly to Idaho STAR. The program promotes the license plate in its classes and among its network of dealers and other rider education advocates.

Team Oregon is a self-sustaining program and is seeking a means of ensuring its financial solvency. The program recently began selling advertising space in the back of the workbook used for the novice rider course to dealers and other businesses and hopes to generate up to $20,000 a year, which will go toward paying for the printing costs of the workbooks as well as for outreach and information efforts. Federal grants are another source of funds for safety and awareness campaigns. The administrator in one State explained how he has become adept at targeting Federal money:

> *"I work in the traffic safety office, so we get all the Federal 402 and [other grant applications].... I do motorcycle awareness campaigns on grants. I can fund the program, but when you throw in something like this massive May campaign, I don't have the money. We get $50,000 to $70,000 in grants each year for billboards and TV PSAs [Public Service Announcements] and such."*

The Maryland Motorcycle Safety Program recently introduced a tuition increase to cover the costs of providing training. Additionally, the State also began contracting with community colleges in the State to provide classes and allows the colleges to set their own tuition, which may be higher than at State-sponsored sites. The State administrators hope that the freedom the colleges have to set their own fees will help the rider education program recover many of its expenses.

HIGHLIGHTS

- Main sources of program funds are motorcycle registration fees, motorcycle endorsement and driver's license fees, and rider training course tuition.
- Idaho STAR recently introduced a license plate that will help supplement program funds.
- Team Oregon sells advertising space in the student workbook to help support the program.
- Nevada Rider Motorcycle Safety Program uses federal grants to fund motorcycle awareness and safety campaigns.

Collection of Rider Training, Licensing, and Crash Data

All of the five programs collect extensive data on rider training. This data is used for a variety of purposes, including assessing the demand for courses, allocating instructors to sites, monitoring quality of training, making projections about program growth, demonstrating need for program funding, and informing public awareness campaigns. The process through which the programs collect data varies, depending on their organizational structures and their relationships with training sites. In the Nevada Rider Motorcycle Safety Program, for instance, where most training is delivered through community colleges, student demographic data is collected when students register for courses through the community college registration system. This eases the burden on the State to collect some data, though the program is also bound by the community colleges' restriction that forbids collecting data about student gender.

Following completion of a course, data about maintenance issues, student performance (passes, fails, withdrawals), and student evaluations of instructors is submitted either to the site training center manager or directly to the State administrator. Across the five States, student evaluations of the programs are overwhelmingly positive. In an attempt to understand *why* students find a course valuable, Team Oregon asks students to assess their level of knowledge prior to the course compared with after the course. This information is compared with instructor evaluations of student performance in the class, allowing Team Oregon staff to compare both the student and instructor perspectives on the effectiveness of training.

In addition to gathering data about students and instructors, Team Oregon also closely tracks the fleet of motorcycles owned by the program and used for training. Each motorcycle has a bar code that is linked to a database that contains a record of when Team Oregon purchased the motorcycle, how much it cost, its repair history, and the cost of the repairs. By scanning the motorcycle with the bar code, Team Oregon staff can quickly update the database and can use the information to track the condition of motorcycles across the State. To maximize the efficiency with which instructors are assigned to sites, the program maintains another database that "shows us who's teaching and who's available." Technology can also be employed to compensate for a small administrative staff, as one administrator explained:

> *"I designed a multifaceted implementation program when I first got here. We have…[a] database [that ties together information about] instructors, dealers, bikes, updates, training…all these things that are around us…. [W]e can keep our fingers on the pulse of everything. We can do the work of five or six people with the two of us."*

Of the five promising-practices States, Maryland has taken the greatest strides toward linking rider training, licensing, and crash data. The Maryland Motorcycle Safety Program formed a partnership with the shock trauma center in the State, which allows the program to study the relationship among licensing, completion of a State rider training course, and crashes. A State administrator described the benefits of the partnership:

> *"We now know when you're licensed, we know when you get a motorcycle, we know when you have crashes, and we know when you have convictions.... Now through coding we know when you've taken the Basic Rider Course, the Experienced Rider Course, the [Experienced Rider II Course].... We can track the whole package as you go through the process."*

Maryland's data collection effort is part of a study coordinated by the Maryland Motor Vehicle Administration, the Maryland Highway Safety Office, and NHTSA to understand how rider education, licensing, and public awareness influence motorcycle crashes.

HIGHLIGHTS

- States collect data to assess demand, staff sites with instructors, monitor the quality of training, make projections about course demand, demonstrate the need for funding, and inform public awareness campaigns.
- In the Nevada Rider Motorcycle Safety Program, data about student characteristics are collected directly by the community colleges that provide training.
- Team Oregon tracks all equipment with bar codes and monitors its condition in a centralized database.
- Maryland Motorcycle Safety Program links licensing, training, and crash data to study the factors that contribute to motorcycle accidents and injuries.

Comprehensive Curricula

With the exception of Idaho, all the promising-practices States recently introduced new rider training curricula. Delaware, Maryland, and Nevada now use the MSF's Basic Rider Course (BRC) and Experienced Rider Course, and Team Oregon developed its own set of classes for novice, intermediate, and advanced riders. In Maryland, Nevada, and Oregon, the rider education programs submitted the new curricula to the supervisory offices in their States for approval.[3] In Maryland and Nevada, the close working relationship with the supervisory agencies facilitated the switch to the new curricula. In Maryland, for example, a State administrator reported:

> *"The State relies on [the Maryland Motorcycle Safety Program administrators]. The only thing we had to do was put in our justification and submit it to the [supervisory] administrator. They rely on our expertise because of our history."*

Team Oregon also enjoys a good working relationship with its supervisory agency, the Oregon Department of Transportation (ODOT), but followed a different path in evaluating and implementing a new set of rider education classes. When MSF announced the introduction of the BRC, Team Oregon convened a task force to assess the new course against its predecessor,

[3]Information about the curriculum approval process in Delaware could not be collected because the State administrator took office after approval for the new courses had been granted.

the Motorcycle RiderCourse: Riding and Street Skills (MRC:RSS) curriculum. As one Team Oregon administrator explained:

> *"[We] got a group of instructors from around the State together in a task force [with] all levels of instructor experience (1–2-year or 15-year veterans). As a group we decided that the only way we knew if [the BRC] would work was if we field-tested it. The task force laid the groundwork…and created the map we followed to conduct the field test. [We] trained a small group of instructors in both RSS and BRC and had them rate it on a scale of 1 to 10 on various aspects."*

At the conclusion of the field test, Team Oregon submitted a report to ODOT, summarizing the study. On the basis of the recommendation of Team Oregon, ODOT elected not to adopt the BRC and to instead allow Team Oregon to develop a new novice rider training course called the Basic Rider Training (BRT) class

Following approval by the State, administrators from Delaware, Maryland, and Nevada attended special MSF seminars to prepare for the transition to the BRC. Including Oregon, all four States held extensive training sessions for their instructors. These sessions focused on both the classroom and range components and allowed the instructors to practice both the new teaching methods and range exercises. The transition to a different curriculum posed a budget challenge the four States had to address. Nevada, for instance, wrote a grant to cover the cost of purchasing BRC material for instructors and students.

In addition to implementing curricula to train novice riders (i.e., the Basic Rider Course or the Basic Rider Training course), Delaware, Maryland, Nevada, and Oregon have also introduced other courses targeted at more experienced riders, especially those who ride without a proper endorsement. Under MSF's ERC Suite, for instance, experienced riders in Delaware, Maryland, and Nevada can complete a one-day training course and waive their licensing skills and knowledge tests. Team Oregon offers a similar eight-hour class called Intermediate Rider Training. The four States have adopted these programs to free spaces in novice class for inexperienced riders and to encourage unlicensed operators to ride legally.

For Maryland and Oregon, the responsibilities for rider training extend beyond State-sponsored courses. Both State programs also monitor training provided by Harley-Davidson

dealers through the Rider's Edge Program. In both States, Rider's Edge courses must use the State-approved curriculum. As one Maryland administrator explained:

> *"It's a pretty simple relationship. Regardless of what they call it, [Rider's Edge] has to use the Maryland-approved curriculum. If [we] say don't do exercise X, they don't do X. They don't take away from what we say they need to do—if they want to do extra stuff, that's fine."*

HIGHLIGHTS

- Four of five promising practices States recently introduced new curricula.
- Approval of the new curriculum is required by the State prior to implementation.
- Team Oregon developed new novice curriculum.
- Extensive training of administrators and instructors followed the adoption of new curricula.
- Rider education programs offer courses for experienced riders to free space in novice classes and target unlicensed riders.

Effective Training and Delivery

Meeting demand for training while still maintaining high quality is one of the key challenges faced by the five promising-practices programs. The first step in meeting demand is registering students for classes. In Delaware and Idaho, registration is centralized through the State rider education offices. When students want to register for a class, they do so directly with the State program. The Idaho STAR online registration system allows prospective students to see exactly how many spots are still open in each course throughout the training season. Moreover, students can register for any courses offered across the State directly through the Web site. The administrator for the Delaware Motorcycle Safety Program manually updates course enrollment on a daily basis but hopes to move to a more interactive and automated system in the near future.

In Maryland, Nevada, and Oregon, most students register for courses through the training site (usually a community college) where the class will be held. Shifting registration responsibility to the training sites reduces administrative burden placed on the rider training program, but it can result in complications for students. In Nevada and Oregon and at some training sites in Maryland, when registration is managed by community colleges, students must first enroll as students in the college and then register for the training course. The intermediary step of registering in the college surprised some students who expected to be able to simply enroll directly in a training class. Several students expressed frustration that they had to wait for the community college to process their application before they could enroll in a training course. The delay was especially aggravating because the courses fill so quickly. The rider training programs in Maryland, Nevada, and Oregon were aware of these difficulties and are seeking ways to centralize registration across the training sites.

Demand for training is high across the five promising-practices States, and the programs have taken a series of steps aimed at reaching interested students. All the programs encourage students unable to register for a particular course to visit the first day of training in case registered students do not show up. Some students noted that they did not pursue the walk-in option because it requires a significant time commitment without the guarantee of a place in the course. As one student explained, “Scheduling is important for me—I can’t just stop in on the first day and wait.”

The Maryland Motorcycle Safety Program has also tried to maximize the flexibility of its course schedules and availability of instructors to provide additional training opportunities for students. In the words of one administrator:

> *"We allow training centers to have some flexibility in what happens.... We work with standby [students] and keep some instructors on call. There're lots of examples of creative scheduling that we give to the sites, and some sites come up with their own. Our theory is, if we have the equipment out in the training centers, let's try to use it seven days a week. Let's maximize that use and look at how we can schedule. What also comes into play is when we can use it. [Licensing] branch offices we can use after 5:30. At some community colleges in the summer, we can do daytime [classes]."*

Some training sites in Maryland and Oregon also increase enrollment in the classroom component and then divide the class in half for range exercises. Through creative scheduling, one community college in Maryland is able to train 72 students in a weekend on three ranges. The college loads 24 students into three classes and staggers their schedules so six groups of 12 students have access to the range at different times. The Maryland Motorcycle Safety Program also targets particular months of the training season for addition classes. As an administrator explained:

> *"We call April through June our 'Front Row.'...We realize that everyone wants to [be trained] first thing in the year. Last year through creative [and] aggressive scheduling, we were able to maximize the number of spots in classes in the Front Row. Last year we increased our capacity over 20 percent."*

Administrators in Maryland and Oregon also mentioned a goal of obtaining portable lights or a lighted site to provide evening training options.

In Nevada and Oregon, mobile training units provide classes to students outside the major metropolitan areas. The Nevada Rider Motorcycle Safety Program recently obtained a classroom trailer with a whiteboard, tables and chairs, and the capacity to transport all the motorcycles and equipment needed for classes. With the trailer, the program will be able to ensure that all State residents can receive training within a two-hour drive. Team Oregon has three mobile units that service 11 sites across the State, with a goal of providing training every 45 days in each community. Students in both States register for mobile classes directly through the State rider education program.

Student focus groups in each promising-practices State revealed that the demeanor and attitude of instructors were essential components of effective training. Students commented that they felt more engaged in the class and had more fun because instructors encouraged participation and maintained a relaxed atmosphere. One student in Nevada remarked, "We're allowed to have some humor too. It's a very close class—the instructors get into it the same as we do. They joke with us and they're real friendly; easy to get along with." Students particularly enjoyed when instructors used personal testimonies to illustrate points made in the course material.

In Delaware and Maryland, the rider training programs believe that they are meeting or almost meeting demand, though both States continue to look for ways to increase their efficiencies and expand course availabilities. Administrators in Idaho, Nevada, and Oregon expressed concern about rising demand for training in their States and pointed to one clear factor that limits their ability to offer classes: lack of range and classroom space. Potential sites must have a specified size of clear asphalt that is clear of obstructions. Sites also need to be available on Sunday, which often excludes church parking lots. "We could fill up more classes if we had the locations," one administrator commented.

HIGHLIGHTS

- Students in Delaware and Idaho register directly with the State program for training courses.
- Students in Maryland, Nevada, and Oregon register through the training sites. Although the administrative burden is reduced for the program, students expressed frustration with decentralized registration.
- Programs in Maryland and Oregon attempt to maximize the flexibility of training by increasing the number of students in the classroom and dividing the class for range exercises. Maryland also increases the number of classes it offers early in the training season.
- Nevada and Oregon use mobile training sites to provide training to students in rural areas.
- Students appreciated a relaxed, informal training environment and instructors who illustrated course material with personal experiences.
- Administrators in Idaho, Nevada, and Oregon identified the lack of range and classroom space as the biggest problem to overcome to meet demand.

Outreach and Information Efforts

Across the five promising-practices States, administrators, instructors, and students all agreed that informal, personal communication was most effective means of spreading information about rider training courses. Students typically learned about rider education through friends, family, riding clubs, motorcycle dealers, and State licensing agencies. Once potential students were made aware of rider training opportunities, they turned to several different sources to learn about the availability and schedule of classes. All five State programs maintain Web sites where students can obtain information about classes. In Idaho, students can register for any Idaho STAR course offered in the State. To increase the visibility and accessibility of their Web sites, the Idaho and Nevada programs acquired Internet domain names easily remembered by interested riders (www.idahostar.com and www.nevadarider.com).

In Maryland, Nevada, and Oregon, where registration for most classes is administered through community colleges, class bulletins distributed by the colleges to residents provide a free source of advertising about rider training. The programs also take a variety of steps to foster informal communication. Instructors are an especially valuable resource for spreading information about rider education. Team Oregon, for example, encourages each instructor to do 12 public presentations a year; instructors "visit clubs, dealers, organize rides, go to schools, and do diversion and court-ordered classes." These efforts appear to generate results; as one instructor in Nevada stated, "I've gotten calls from people I don't know at home because they got my number from the dealership or someone else that knows me."

Forging relationships directly with dealers and licensing agencies is another effective means of promoting the program. Dealers in several of the promising-practices States distribute rider training brochures produced by the State program and also dangle informational hangtags from the handlebars of motorcycles on the showroom floor. Brochures are also left with licensing agencies, and some licensing officials encourage riders seeking a license (or failing to pass the tests) to enroll in a rider training course. Riding clubs are other conduits for reaching potential students, as one Idaho STAR instructor explained:

> *"All the clubs get together and they do an all-club ride calendar [a calendar that summarizes rides sponsored by clubs for a particular month]. And they've been putting the STAR program two or three places*

prominently on that. [It's] distributed to all the dealers, so the dealers have it and give it out. It helps get the word out."

In addition to general outreach programs about rider education, Team Oregon is also beginning to market one course in particular, the Intermediate Rider Training (IRT) class. By promoting the IRT, Team Oregon hopes to funnel more experienced riders simply seeking a license away from the popular novice course, the Basic Rider Training class.

Because informal communication is the most powerful form of recruitment in all five of the promising-practices States, several States have directed their outreach efforts toward motorcycle awareness and safety rather than advertise the availability of classes. The Maryland Motorcycle Safety Program, for instance, focuses its informational campaigns in three areas: (1) using "Share the Road" promotions designed to educate both motorcycle riders and drivers, (2) encouraging riders to get licensed, and (3) encouraging riders to wear proper safety gear. Maryland also produces safety "tip cards" that summarize key facts for riders and drivers. A State administrator described the purpose of the tip cards:

"The most successful thing [we] did was a little 'tip card.' It's a pocket-sized thing, about the size of your average football or baseball schedule. We developed it by editing and modifying a NHTSA brochure, which was called 'Tips for the Rider and Tips for the Driver.' People have requested thousands of [them]. They hand them out at rider courses, safety groups, ABATE [A Brotherhood Against Totalitarian Enactments] events, dealerships.... I've had cops come in and ask to distribute them to their sources.... [C]ommunity safety groups have asked for them."

Other common promotional items used across the promising-practices States are bumper stickers, posters, reflective decals, and key chains.

HIGHLIGHTS

- Students and instructors report that informal, personal communication is the most effective means of communicating information about rider training.
- Programs in Idaho and Nevada have Web sites with easily remembered domain names.
- Instructors in Oregon are encouraged to give one public presentation a month about rider education and safety.
- Dealers in several States distribute promotional material about rider training opportunities.
- Maryland Motorcycle Safety Program produces a "tip card" distributed to riders, activists, safety groups, dealers, and law enforcement.

Incentives for Training

Students in all five of the promising-practices States reported that the biggest incentive for enrolling in rider training were the licensing waivers offered by the State after successful completion of the course. With the exception of Idaho, which waives only the skills test, students in the remaining four States receive a course completion card that can be presented to the licensing agency and that will waive the skills and knowledge tests. Students also commented that obtaining a license through the rider training course was in some ways easier and less stressful than going directly to the licensing agency. As one student explained:

> *"Here you get to practice on a bike, where if you go to [the licensing agency], you have to take your own bike and they tell you what to do. There's no practicing there—you have to do it cold. [The rider training course] is the only place you can ride a bike without a license, and nobody else is driving around you."*

Although four of the five promising-practices States provide full licensing waivers for successful students, Maryland has recently refined its program and introduced a one-stop shop where students will be licensed immediately after completing a course. A Maryland State administrator described how the program works:

> *"The day they complete the course, they can hop on their motorcycle[s] and ride legally. We'll put a sticker on their license[s] that says "M." The training center manager will send back a data file to our data services*

division. They will automatically update the driving record[s]. So, if you took the course this Sunday and you successfully completed the course, on Sunday you have a license to operate. You don't have to come back until you renew…. We just try to make things a little more customer friendly so people don't have to come back."

Although licensing waivers were the most powerful incentives offered by States, students also mentioned insurance discounts and tuition reimbursements by manufacturers as other considerations. One student, for example, was repeating a novice course she had passed a few months earlier because she had learned that the manufacturer of her motorcycle would pay for the course every two years. Additionally, several students explained that completing a rider training course would make it easier to get licensed in other States. In Idaho, the STAR program encourages students to enroll by offering course graduates a substantial subscription discount to *Motorcycle Consumer News* and by selling gift certificates for classes.

Even though students emphasized the importance of incentives in encouraging them to enroll, most added that the safety and educational benefits of the course were just as important. Through informal communication, students in all five programs had heard about the quality and strong reputation of the training. Evidence of the value placed on safety and training was provided by students who reported that they had taken State classes multiple times and would continue to do so in the future to improve and refresh their riding skills. As one student reported, "It's easy to become complacent over time, so I [retake the course] as a refresher." Reflecting on what motivates students to enroll, one Team Oregon instructor commented:

"I think we'd be just as busy, because it's word of mouth. It's, "You have got to take this course." Even with people who have been riding for years, a friend takes it, and all of a sudden you start seeing a succession of…friend[s] coming in because one of them took it. I think the money and stuff is nice, but I think we'd see as many people. So many people say they just want to be safer."

HIGHLIGHTS

- Students reported that knowledge and skills test licensing waivers were key incentives for enrolling in training.
- Students also mentioned insurance discounts and tuition reimbursements offered by manufacturers as incentives.
- Maryland offers a "one-stop shop" where students are licensed immediately following completion of a rider training course.

Regular Program Assessments and Quality Control

Quality control evaluations in the five promising-practices States focus on two primary areas: (1) monitoring equipment and training locations and (2) monitoring instruction delivered to students. Assessment procedures vary across the five States depending on the organization of the rider education programs. In States such as Maryland and Nevada, for instance, where responsibility for day-to-day training operations is assigned primarily to contractors, site managers at the contracted locations monitor equipment and review instructor performance. Information collected from the site administrators is then forwarded to the State rider education offices.

Additionally, State programs in Maryland and Nevada review performance of sites throughout the training season. In Nevada, three chief instructors schedule visits with each training site twice a year. During these visits, sites must provide an inventory of State property and proof of insurance, and demonstrate the range meets legal requirements. The chief instructors also observe classroom sessions. The Maryland Motorcycle Safety Program employs four quality assurance supervisors, who randomly check training sites in the region to which they are assigned. As in Nevada, the goals of the visits are to evaluate both the condition of the equipment and ranges and to monitor instruction. A Maryland administrator summarized the goals of the quality assurance system:

> *"Our goal [is] that if you [take] the first part of the course at our center at Allegheny College, and finish it all the way down in Salisbury [over 200 miles away], other than a little change in humidity, there shouldn't be that much of a difference in what you're getting."*

Team Oregon staff also closely monitors State training sites once a year through Site Compliance Audits (SCA), a 109-point checklist that encompasses equipment review and evaluation of instruction techniques. In addition to the SCA, Team Oregon also maintains a detailed database with information about the history, condition, and repair records of its fleet of motorcycles.

All five States use student evaluations of instructors as another means of assessing training quality. In Delaware and Idaho, where the staff of instructors is smaller than in the other promising-practices States, each instructor is evaluated during the training season by a

representative from the State rider training program. An Idaho STAR instructor commented on the Technical Assistance Reviews (TARs), which are designed in part to make certain that instructors closely follow the specified curriculum over the course of the training season:

> *"A Chief Instructor monitors you on the classroom and the range. We're 'TARed' once a year. They watch you, they make sure you're covering the material and meeting the standards and at the end of the weekend you get your review 'out-brief.' It fixes instructor drift—there are reasons behind each step of the process."*

Instructors in the promising-practices States remarked that they appreciated the reviews of their performances in the classroom and on the range. Even instructors who had been teaching for many years recognized their techniques could use refreshment and refinement. Further, several instructors commented they felt comfortable bringing up questions and issues with the State administrator. One instructor explained:

> *"I like to know how I'm doing. We each give feedback to each other—informal self-critiquing. [The State administrator] encourages us to correct each other. If you have a question about something we're doing, he'll always explain. He'll never brush it off or make you feel dumb."*

In addition to maintaining good relationships with administrators from the rider education program, several instructors mentioned that colleagues were another source for monitoring quality of training. This may occur informally, through instructor social networks where instructors talk about how to handle situations that arise in the classroom or on the range. Additionally, Maryland and Oregon have implemented mentoring programs for instructors. On the basis of the recommendation of another instructor or through a quality control visit, an instructor may be assigned a mentor. The mentor shadows the instructor, providing input about how skills could be enhanced. Instructors in Maryland and Oregon had positive reactions to mentorship programs. One instructor remarked, "If we do have instructors that are outside the parameters, they get put with mentors that are pretty direct and able to guide them back on track.... The real focus is the students."

HIGHLIGHTS

- Quality control evaluations focus on monitoring equipment and training locations and on monitoring the instruction delivered to students.
- States use student evaluations of instructors to assess training quality. In Delaware and Idaho, representatives from the rider training programs evaluate each instructor at least once during the training season.
- Programs in Maryland and Oregon use instructor mentoring programs

Instructor Education and Training

Administrators and instructors in the five promising-practices States identified three key components to developing a core of quality instructors: recruitment, training, and retention. Most States solicit potential instructors from the pool of students enrolled in rider training courses. In Idaho, Nevada, and Oregon, for instance, instructors approach students they feel may have potential as instructors and ask the students whether they would like to learn more about the opportunity. If a student agrees, the instructor marks a checkbox for "Instructor Candidate" next to the student's name on the course evaluation form submitted to the State administrator's office. In addition to recruiting through classes, announcements through riding clubs, program Web sites, and newspaper ads are other means of soliciting potential instructors.

Following initial recruitment, the five State programs adopt different approaches for screening instructor candidates. In Idaho, for instance, the State administrator invites interested individuals to visit a range during a training session to observe the class and to help out the instructors. Team Oregon has recently implemented a detailed screening process designed to filter out some instructor recruits before they commit to an instructor preparation course. Prior to interviewing for an instructor position, recruits must audit two classes and pass a skills test.

People who pass the screening process are trained in an instructor preparation (IP) course. Across the five States, administrators and instructors described the IP as grueling and intense for the instructor candidates; one administrator said it was similar to "trying to drink from a fire hose." Instructors must master a variety of aspects of instruction, from presenting classroom material to riding flawless demonstrations on the range. The length of the IP varies across the

five States, though the training the potential instructors receive is similar. In Maryland, for example, the IP is spread over six to eight weeks. One administrator offered the following rationale for the schedule:

> *"It's very tough on the individual to work 40 hours a week at work and then do [the IP] afterwards. We try to do a couple evenings a week and a day on the weekend. That allows them time to still ride their motorcycles, allows them to get stuff done at home that they need to do, and it doesn't kill them for the next day at work. It takes a little longer to get people through."*

In contrast, the Idaho STAR program prefers to immerse its instructor candidates in a 10-day program that concludes with student teaching. Although the length of Team Oregon's IP is shorter compared with that of the other States (less than 4 days), instructor candidates also complete a thorough screening process and detailed post-IP training. Following an IP class, Team Oregon instructor candidates must complete separate apprenticeships for classroom and range components. Successful instructor candidates who complete Maryland's IP receive a one-year probationary certificate. During their probationary years, instructors work with more experienced colleagues and are monitored by program staff.

Training for instructors does not end at the conclusion of an IP course, however. All five of the promising-practices States also hold yearly updates for instructors. The updates are an opportunity to refresh instructors' skills in the classroom and on the range and also to address any special issues. One Oregon instructor summarized some of the activities included in the updates:

> *"Every year, for normal instructor updates, we look at any issues we've had throughout the year—exercises that have been a problem for instructors, areas where delivery has been irregular or has not met our standard, instructor drift, [or if someone] found a new [or] better way of doing something.... Sometimes we'll go out and ride exercises, practice demos, practice coaching."*

When four of the five States transitioned from the MSF's Motorcycle RiderCourse: Riding and Street Skills course to the Basic Rider Course, the programs used the updates to help instructors adapt and prepare for the more student-centered classroom style advocated by the BRC. Updates have also focused on techniques for dealing with frustrated or agitated students and approaches for delivering material to students intimidated by the class.

Because the promising-practices programs invest substantial resources in training instructors, retention of staff is vital to maintain consistency in instruction and to help meet student demand for courses. Several of the States make concerted efforts to foster a sense of camaraderie and ownership in the rider training program among their instructors. One program makes certain that instructors have plenty of clothes emblazoned with the program's emblem and that they have quality gear when they teach. As the State administrator explained:

> *"I think it means a lot to somebody to know that we care enough to give them clothing and such. We give them leather pouches to keep their range cards in....We could give them the nylon ones, but it's pride."*

The same administrator keeps an anonymous comment box for instructors and has implemented some of their suggestions.

Annual updates provide one opportunity for instructors to meet and reconnect with one another and share ideas for teaching. Team Oregon has taken another step toward improving instructor satisfaction and retention through its Leadership Council (LC). A Team Oregon administrator summarized the purpose and goals of the Leadership Council:

> *"The Leadership Council) serves as a liaison between the instructor corps and the staff. [The] LC is not staff—we do hold a position of authority, but not a position of discipline or enforcement. [The LC] serves as an advocate for instructors if they have a request, concern, or issue with a policy regarding what we're doing, how we're doing it…, or a problem with the teaching materials. The instructor brings the problem to a member of the LC, it comes to the council, [and] we will discuss it and see if it's a big enough issue…[and] maybe do a formal survey to find out what's going on. Then, if necessary, the LC sends a report to the staff."*

Through the Leadership Council, Team Oregon has organized a series of fun activities for instructors including an annual campout, Instructor Olympics, an events committee, and an annual banquet.

HIGHLIGHTS

- States recruit instructor candidates primarily through the pool of students who enroll in courses.
- Training does not conclude with the Instructor Preparation course but continues through student teaching and other forms of monitoring.
- Programs use annual instructor updates to refresh instructor staff and address key issues that arise during the training season.
- The goal of Team Oregon's Leadership Council is to serve as an advocate for instructors and to enhance instructor satisfaction and retention.

Graduated Licensing System

None of the promising-practices States has implemented a full graduated licensing program consistent with the recommendations outlined by NHTSA (NHTSA, 1993). NHTSA guidelines call for a three-stage process of obtaining a motorcycle endorsement in which riders begin with a learner's permit, then receive an intermediate license, and finally receive a full motorcycle endorsement. All five promising-practices States have a permit system for motorcyclists, though the State administrators interviewed did not consider it a component of a graduated licensing system. Administrators in one State explained that they thought a full graduated licensing system was too expensive and impractical to implement.

Although Maryland and Oregon may not have a graduated licensing program dedicated to motorcyclists, these States require that riders under 18 abide by the graduated licensing provisions for automobile drivers. In Maryland, this means that young riders must take a driver's education course, follow restrictions on driving times and passengers, and maintain a clean driving record for 18 months. Riders under 18 in Oregon must meet similar requirements.

HIGHLIGHTS

- None of the promising-practices States have implemented full graduated licensing for motorcyclists.
- Maryland and Oregon require riders under 18 to abide by the graduated licensing provisions for automobile drivers.

Comprehensive Testing

All five rider education programs in the promising-practices States maintain a close working relationship with the licensing agency in their respective States, which helps promote comprehensive testing of motorcyclists. As detailed earlier in this report ("Integration Between Rider Education and Licensing"), all the programs advise and train the licensing examiners in their States. A Team Oregon administrator explained how the rider education and licensing offices collaborate to implement rigorous testing standards:

> *"The licensing agency and my office are both part of the Oregon DOT. They're just different divisions. We help the licensing program with training their licensing examiners, and we help them with their MOM. It's generally been an MSF blueprint, but then we go in and redefine some of the State specific things. We work with OSU [Oregon State University] and ODOT and DMV to make sure that we show DMV that our program has a huge set of checks and balances and monitoring and standards and policies and everything so that if they receive a completion card from our student, they know that they have actually met a better standard than their own testing program."*

As noted by the Team Oregon administrator, the standards for passing a Team Oregon class are higher than the testing standards maintained for motorcyclists by the licensing agency.

HIGHLIGHTS

- Rider education and licensing programs work together to establish comprehensive testing.

Comprehensive Procedures for Obtaining and Renewing a License

The promising-practices States have taken several steps to improve the efficiency of obtaining and renewing a motorcycle endorsement while still emphasizing safety and proper training. In Idaho and Oregon, rider education is mandatory for people under 21 seeking a license. Delaware and Maryland also require rider training, though for operators under 18. Moreover, with the exception of Idaho, all the promising-practices States offer skills and knowledge test waivers for riders who successfully complete a rider training course. Maryland has recently streamlined its system for licensing course graduates, introducing a one-stop shop where riders will receive their endorsement at the training site. Idaho currently offers a skills test

waiver for riders who complete rider training, and Idaho STAR is working with the State legislature to add a knowledge test waiver. Though Nevada waives the skills and knowledge tests for rider course graduates, the State does not require that riders under a certain age successfully complete training before obtaining a license.

Most promising-practices States have introduced classes targeted at riders with experience but without endorsements. The Intermediate Rider Training course in Oregon and the Experienced Rider Course Suite in Delaware, Maryland, and Nevada are designed to encourage operators to ride legally. These classes make it easy for experienced riders to obtain a proper license endorsement over the course of a weekend class.

HIGHLIGHTS

- Rider education is mandatory for young riders in Delaware, Idaho, Maryland, and Oregon.
- With the exception of Idaho, the promising-practices States offer experienced rider training courses aimed at operators who ride illegally but want to obtain a license endorsement.

Incentives for Licensing

Across the five promising-practices States, administrators, instructors, and students made little distinction between incentives for training and incentives for licensing. The majority of students interviewed mentioned licensing waivers as strong incentives for encouraging them to enroll. For these students, rider training was the easiest means of getting a license. Moreover, the students interviewed did not evaluate specific incentives for obtaining a license; they had already made a decision to ride legally and enrolled in a rider training program to expedite this goal and to gain the confidence to ride in traffic.

HIGHLIGHTS

- Administrators, instructors, and students make little distinction between incentives for training and incentives for licensing.
- Students mentioned licensing waivers and an interest in education and safety as their primary concerns.

VII. RECOMMENDATIONS

On the basis of the review and analysis of five promising-practices States in motorcycle rider education and licensing, general recommendations are provided below. These recommendations are aimed at providing guidelines for States interested in improving their rider education program, focusing on critical components of administration, rider education, and licensing.

1. Organize the rider education program and the licensing program under the same administrative agency.

One of the key reasons the five promising-practices programs are able to provide high-quality training to riders is the close working relationship they maintain with the licensing programs in their respective States. By working together, the programs are able to implement policies and agreements beneficial to both offices, including offering incentives to riders to enroll in training, collecting extensive data about motorcycle operators, and training motorcycle license examiners. Organizing the two programs under the same administrative agency is not necessary to promote integration (the programs in Idaho and Oregon are under different agencies), but it is one means of promoting effective communication and coordination between the two offices.

One of the most important ways in which the rider training and licensing offices can work together is to establish knowledge and skills waivers for operators who successfully complete a rider education course. The most seamless linkage between rider training and licensing is the one-stop shop, where riders are licensed immediately upon successful completion of a rider training course (NHTSA, 2000). In Maryland, for example, operators receive their endorsement sticker at the training site following the conclusion of the class. The program functions effectively in large part because the rider education and licensing program in Maryland are both housed in the Maryland Motor Vehicle Administration. On the first business day following the conclusion of the class, the training site sends the names of students receiving an endorsement to the licensing agency so that these students can be immediately entered into the State licensing records. The two programs also work together to link data about motorcycle

operator licensing, completion of rider training courses, and crashes to learn more about the factors that contribute to rider safety.

Rider training programs also benefit when they can use space at licensing agencies to hold classes. One of the greatest challenges identified by administrators in several States is a lack of range and classroom availability to hold courses. Licensing programs, which often have large parking lots used for conducting tests, can be used on the weekends and after business hours to conduct training classes. Licensing programs also benefit from a close working relationship with the rider training agency. Across the promising-practices States, the rider education programs train the motorcycle licensing examiners in the State. In addition, in Maryland, instructors from the Maryland Motorcycle Safety Program provide after-hours testing for operators seeking licenses.

2. Explore alternative sources of funding to support rider training activities.

The promising-practices programs, as well as rider training programs across the country, are primarily funded through two sources: legislative appropriations (e.g., money collected from licenses and endorsements) and course tuition. When States face budget crises, programs across the State, including rider education, may be targeted for budget reductions. One way to supplement legislative appropriations is to raise tuition. Yet if tuition costs go too high, students may be discouraged from seeking training. Moreover, many States have legislated tuition caps for rider training that limit the amount that programs can charge students for enrollment. Given these constraints, States may elect to seek creative sources of funding, including establishing marketing agreements and seeking federal grants.

Idaho STAR and Team Oregon have both taken steps to market their programs to customers beyond the rider training courses they offer. The Idaho STAR program, for example, worked with the State to introduce a specialty Idaho STAR license plate. A portion of sales of the plate, which bears the Idaho STAR logo, goes toward the rider training program. Idaho STAR is promoting the plates in its classes as well as through dealers and other motorcycle enthusiasts who support the program. Team Oregon has also devised an alternative source of revenue, through selling advertising space in the back of the workbooks used for rider training courses. The program is working toward cultivating ties with dealers and other motorcycle

vendors that may be interested in reaching riders. Advertising revenue is projected to help pay for printing the workbooks and ideally will also go toward supporting other program activities.

The Nevada Rider Motorcycle Safety Program has turned to Federal grants to support many of its education and outreach activities. Without these funds, the program would be unable to finance any public awareness campaigns. When Nevada transitioned from the MSF Motorcycle RiderCourse: Riding and Street Skills curriculum to the Basic Rider Course, the State administrator again relied on grants to pay for the new course material associated with the BRC. Purchasing this material without the grant money would have been extremely difficult because the costs of the transition were not covered in the State budget.

3. Centralize registration and increase the flexibility of course schedules.

Although students across the five promising-practices States reported they were very satisfied with the training they received, students in States where registration was administered directly through the training site (Maryland, Nevada, and Oregon) expressed some frustration with the enrollment process and wait times. In contrast, in Delaware and Idaho, students register directly through the rider training programs. The Idaho STAR program is the most accessible to students, allowing them to register and pay for any class offered in the State through the program Web site. Centralizing registration through one agency makes it easy for students to enroll and to track course availability. The Web sites for both Delaware and Idaho list the number of spaces available in each class, so students can quickly select a course with an opening. In contrast, when students register through a community college, they often must wait for the college to process their enrollments and then attempt to register by telephone or in person for a class that may have already filled.

While the logistics of establishing and maintaining a centralized registration system might be more complex in States with large populations, such systems could still be implemented effectively. States have already shifted many services to the Internet and current technologies have increased the efficiency and speed with which States can deliver services to users while minimizing costs. States could also divide registration into regions, which would be linked to the centralized system.

In addition to centralizing the registration process, programs can aid students by maximizing the flexibility of rider training schedules. Most States offer courses over the weekend, but Maryland also schedules some classes during the week. Sensitive to the fact that demand for training peaks in the spring and early summer months, the Maryland Motorcycle Safety Program also increases the number of classes available early in the training season to accommodate students. Another strategy used by Maryland and Team Oregon is to double the number of students enrolled in the classroom portion and to stagger the class schedules over a training session. For range activities, the students are segmented into two groups of 12, with each group receiving separate instruction on the range.

4. Offer classes targeted toward experienced operators who are riding without a license.

Though the promising-practices States offer training courses that range from beginning to advanced, novice classes are in greatest demand. The licensing incentives offered by the States for course graduates (knowledge and skills test waivers) contribute to this demand. Licensing incentives attract not only true novices seeking to learn how to operate a motorcycle but also experienced riders who want to obtain a proper endorsement. Although experienced riders can register for a novice class, they then eliminate class spaces for true beginners. Moreover, experienced riders may find the pace of novice courses exceedingly slow and tedious.

Instead of directing experienced but unlicensed riders toward novice courses, four of the five promising-practices States have begun to offer special classes through which riders can receive their endorsement over a weekend. Delaware, Maryland, and Nevada all offer the MSF's Experienced Rider Course Suite; Team Oregon offers a class titled Intermediate Rider Training. In both the ERC Suite and the IRT, students complete an eight-hour training program designed for operators familiar with motorcycles. At the conclusion of the course, successful graduates receive a course completion card that waives the State knowledge and skills tests (in Maryland, they can receive their endorsement at the training site).

5. Implement ongoing training, monitoring, and mentoring of instructors.

Through the instructor preparation courses, instructor candidates across the five promising-practices States learn the skills and techniques required to teach the classroom and

range components of rider education courses. Yet instructor training in the five programs does not conclude on graduation from the IP. All the programs provide yearly updates for instructors before the training season. These updates cover a variety of topics, including changes to curriculum, refreshers on the range exercises (and an opportunity to perform the range exercises before classes begin), and pedagogical skills that can be used in the classroom (e.g., dealing with confrontational students). Moreover, the updates also allow instructors to share teaching experiences and tips and to reconnect with other instructors with whom they will teach throughout the year.

The five promising-practices programs also monitor the training delivered by instructors, either through the training sites or through representatives from the rider education office. In Idaho, for example, the State administrator evaluates each instructor over the course of the training season. The Maryland Motorcycle Safety Program employs four quality assurance supervisors who randomly monitor instructors. When necessary, Maryland assigns mentors to instructors to ensure that they deliver safe and effective training. To smooth the transition between the IP course and real teaching, Team Oregon requires that newly graduated instructors must complete apprenticeships in the classroom and on the range before they become full instructors.

Continual training, monitoring, and mentoring of instructors is essential not only for evaluating training but also for retaining instructors. The rider training programs invest significant time and resources in IP classes. Providing instructors with support and guidance after the IP is one effective means of maintaining instructor satisfaction. Programs can promote instructor satisfaction by making certain that instructors have a forum to raise issues of concern with the rider training administrators. For example, Team Oregon's Leadership Council, which serves as an intermediary between the instructors and Team Oregon administrators, allows instructors to speak as a group about program policies, curriculum, and training.

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Appendix: Contact Information for Promising-Practices States

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DOT HS 809 852
July 2005

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