

# *Motorcycle*

# Operator Licensing System



**Guidelines for Motor Vehicle Administrators**

Produced in cooperation with the  
**Motorcycle Safety Foundation**

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## Foreword

For over 20 years, the Motorcycle Operator Licensing System has been the guide for improved operational licensing systems in the United States, Canada, and several foreign countries. The original manual was published in 1974 and subsequently revised in 1981 and again in 1989.

This 1997 edition updates and revises the 1989 publication, incorporating the latest research findings into a state-of-the-art motorcycle operator licensing system. It describes all elements of the system in detail. Some administrators may not wish to or may not be able to incorporate every detailed recommendation into their program. It is hoped, however, that all will adopt the general principles and operational framework outlined in this system.

This update reflects contributions and findings from practitioners and researchers actively involved with motorcyclist licensing who attended a one-day workshop in Orlando, Florida. The workshop was organized and convened by the Motorcycle Safety Foundation (MSF) and the Traffic Injury Research Foundation in cooperation with the American Association of Motor Vehicle Administrators (AAMVA) and with sponsorship from the National Highway Traffic Safety Administration (NHTSA). Participants at the workshop included:

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Ms. Juanita Hensley	Alaska Division of Motor Vehicles
Mr. Melvin Holmes	Maryland Motor Vehicle Administration
Ms. Vona Lasater	Tennessee Department of Safety
Mr. Paul Levine	Ontario Ministry of Transportation
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Mr. Carl Spurgeon directed all activities to make this publication available.

The Motorcycle Safety Foundation's purpose is improving the safety of motorcyclists on the nation's streets and highways. To seek reduction of motorcycle accidents and injuries, the Foundation has programs in rider education, licensing improvement, public information and statistics. These programs address both motorcyclists and motorists. A national, nonprofit organization, the Motorcycle Safety Foundation (MSF) is sponsored by the U.S. distributors of Honda, Yamaha, Kawasaki, Suzuki and BMW motorcycles.

## Introduction

Since 1978, with the publishing of "A Model State Classified Licensing Program," AAMVA and NHTSA have cooperated in the development of over twenty publications in the "Guidelines for Motor Vehicle Administrators" series. Implementation by the AAMVA membership of the practices provided in these guidelines has gone a long way towards meeting the established federal and state/provincial goal of more uniform and effective driver licensing laws and programs. A classified driver license is a license indicating that the holder has been examined and is qualified to drive the vehicles of the classification(s) for which they applied. What is critical is whether the individual is qualified to operate the vehicle they are driving, not the purpose of the driving.

This manual has been written for motor vehicle administrators who wish to improve the effectiveness of their state's motorcycle operator licensing program. It presents an optimal model for system design and administration. The model synthesizes both scientific research and empirical evidence, balancing the most recent theories of what should work with 25 years of experience in what does work.

The system presented here is actually a fourth generation model. The first model, *The Motorcycle Operator Licensing Plan*, was created with the assistance of a panel of experts in 1974. That plan proposed a general policy framework for licensing motorcyclists and identified the types of tests that should be developed.

In 1981, another panel of experts was assembled from the fields of operator licensing and motorcycle safety to develop a second generation model. Much had occurred in the area of motorcycle safety since 1974, including the introduction of new testing procedures and materials and the completion of major research projects. Using the new information, the panel developed a much more detailed model, presented as *The Motorcycle Operator Licensing System*.

In April 1989, MSF again convened a panel of noted experts from the fields of operator licensing and motorcycle safety. Additional research had been completed since 1981 and new issues had emerged.

The panel reviewed current issues (e.g. state funded education and unlicensed operators) and reflected on administrative lessons learned over the last two decades of experience in motorcyclist licensing. The panel then incorporated the sum of what was then current knowledge and experience into a third generation model for an optimal state motorcycle operator license system.

Developments since 1989 prompted a re-examination of this model system. Foremost among these developments has been growing interest in a new system of licensing called graduated licensing. Long promoted as a potentially effective means for reducing the risks encountered by novice drivers, graduated licensing systems impose a set of restrictions on the beginner — e.g., night curfew, zero BAC, limits on the age of passengers — which are gradually and systematically lifted, so the novice enters driving in a step-by-step progressive manner. Upon graduation from the system, the driver is granted unrestricted driving privileges.

The adoption of graduated licensing systems for novice drivers in a few jurisdictions in North America and elsewhere, has raised interest in the application of this licensing approach to novice motorcyclists. And, in this context, NHTSA and AAMVA have published guidelines on an improved graduated driver licensing system to assist states in licensing novice drivers as well as motorcycle operators. In addition, NHTSA, in a 1994 report to Congress recommended the development of a cost-effective two-stage driver education program that is an integral part of a graduated licensing system.

Such actions precipitated MSF, in March 1996, to convene a panel of licensing experts and administrators to discuss these recent developments and recommend revisions to the "Motorcycle Operator Licensing

System.” At the workshop, formal presentations on current motorcycle licensing practices in the United States and recent developments in graduated licensing in the United States and elsewhere were followed by general discussion on revisions to the model system. After the workshop, the recommended revisions were incorporated into the manual, which was reviewed by workshop participants and then taken to this final version.

## **Motorcycle Safety Problem**

In 1995, 2,221 motorcyclists died in 2,230 fatal crashes in the United States. This compares to a figure of 3,244 deaths in 1990 — a 32% reduction in the number of motorcyclist deaths. Despite this positive decline, motorcyclists continue to be over-represented in crashes — e.g., motorcycles account for only 2 percent of the nation’s registered vehicles but 6 percent of all traffic fatalities and 7 percent of occupant fatalities. Motorcyclists also face a greater risk of injury from crash involvement than the overall driver population and they are involved in 1 percent of all police-reported traffic crashes.

Since motorcycling is often a seasonal and recreational activity, annual mileage is typically far below that of other vehicle types. Even so, compared to automobile drivers, motorcyclists face many times the fatality risk per mile traveled.

Such risks present a special concern and unique challenge to motor vehicle administrators. The need for effective accident countermeasures and efficient delivery programs is urgent.

As early as 1968, researchers identified motorcyclist testing and licensing as the most promising means of achieving long-term, cost-effective crash reduction. This remains the case today.

## **Purpose of Licensing**

The ultimate goal of a motorcycle operator licensing system is to reduce crashes, injuries and fatalities. Operator licensing can help reach this goal by achieving the following objectives:

- motivate people who wish to operate motorcycles to develop the skills and acquire the knowledge necessary to ride safely,
- control the learning process to ensure that the beginning rider gains experience in a low-risk environment,
- assure that new riders attain an appropriate level of skill and knowledge before being granted full riding privileges, and
- assure that experienced riders maintain an acceptable level of safety, knowledge and skill throughout their riding careers.

In addition to enhancing public safety, motorcycle operator licensing also provides a means for motor vehicle administrators to:

- collect data regarding motorcycle rider demographics,
- exercise legal control over motorcyclists, and
- generate revenue to support other motorcycle safety programs.

## **Challenges of Motorcycle Operator Licensing**

Motor vehicle administrators face a number of challenges in designing and implementing a motorcycle operator licensing system. To ensure long-term viability, the system must be practical to administer without sacrificing its ability to achieve its goal of crash reduction, while also being acceptable to the motorcycle community.

Challenges to the effectiveness of a licensing system include:

- failure of motorcycle operators to participate in the program,
- inability to discriminate between adequate and inadequate levels of skill and knowledge, and
- failure of applicants to advance appropriately through the licensing system.

## **Operator Participation**

Lack of motorcyclist participation in a licensing program can drastically reduce the system's overall effectiveness. The system cannot assure that riders possess adequate knowledge and skills if riders are allowed to operate outside the licensing program.

Studies indicate that approximately 20 percent of the national motorcycle population are unlicensed or improperly licensed and that more than 40 percent of the riders involved in fatal motorcycle crashes are not properly licensed. This suggests that unlicensed riders are over-represented in fatal crashes.

These same studies show that, in some states, as many as 80 percent of fatally injured motorcyclists were operating on improper licenses or permits, or without a license at all.

Reaching the motorcyclist population must be a priority concern for licensing administrators. Accordingly, the system is designed to evoke respect from the motorcycling public. Care has been taken to avoid a program design which could appear arbitrary or capricious.

Another important element of ensuring compliance with motor vehicle administration statutes is effective enforcement. At present, improperly licensed motorcyclists appear to see little need to comply with license requirements. They perceive the risk of non-compliance to be quite low. A later section of this manual discusses recommendations for inter-agency cooperation, including relations with traffic law enforcement and judicial authorities.

## **Test Effectiveness**

The ability of a licensing program to discriminate between adequate and inadequate levels of skill and

knowledge determines its effectiveness in screening out unsafe riders. The model addresses this challenge by recommending that only proven, validated tests be used in a licensing system.

High quality knowledge and skill tests are available to fit most testing situations and environments. Details of available testing materials are included in the "Program Support" section of this manual.

Assistance in implementing the tests described in this manual are available from MSF and members of the AAMVA Driver Licensing Committee. The expertise and technology are available to implement a comprehensive, fair and effective test program.

### **Circumventing Requirements**

Failure of applicants to advance appropriately through a licensing program may be another serious challenge for administrators. An applicant who becomes a "perpetual permit holder" thwarts the program intent by avoiding the operator license test.

Safe motorcycle operation requires the rider to develop the skills and knowledge necessary to pass the operator's license test within a reasonable period of time.

The model system proposed here provides motivation and incentive for beginning riders to pass through the learning stages to become fully privileged motorcycle operators.

### **Administrative Practicality**

In addition to the above challenges, an effective motorcycle operator licensing system must meet the test of administrative practicality. In this regard, a system must:

- be cost effective,
- recognize real-world limits of time, authority, funds and personnel, and
- base program requirements on motivational, safety or legal mandates.

## **Purpose of this Manual**

The model system presented in this manual is intended to be used by motor vehicle administrators as a guideline for developing or revising their own program. The authors recognize that program needs and administrative environments vary from jurisdiction to jurisdiction. The model describes an optimal set of program strategies which can be adjusted or modified to work in any motor vehicle administration. The following criteria were used in selecting the strategies:

### ***Safety:***

A primary consideration was the potential for motorcycle crash reduction. Each element of the model contributes to the overall goal of enhancing safety either by assuring that motorcyclists possess adequate riding skill and knowledge or by controlling their exposure to traffic risk.

### ***Administrative Practicality:***

All recommended strategies are considered feasible and practical in most administrative environments. The following administrative factors were considered:

- Program Cost - Many programs are currently under-budgeted and the rest are barely adequately funded to meet the current demands. Graduated licensing with a mandatory training requirement for motorcyclists will necessitate significant budget increases to handle the additional training requirements.
- Personnel Requirements - The program does not stress labor supply or require excessive training. Examiner Certification requirements should comply with AAMVA criteria and recommendations.
- Records Processing - The program does not create excessive documentation or need lengthy document processing time.
- Administrative Authority - The program does not require a motor vehicle administration to operate beyond its legal authority.

## System Overview

### ***Public Acceptance:***

The program strategies have been selected to enhance public respect for the motor vehicle administration. The apparent task-relevancy of each system element was considered to maximize program acceptance and cooperation among motorcyclists.

### ***Motivation:***

The model was designed to motivate beginning riders to acquire riding skills and experienced riders to maintain (or improve) theirs. Program strategies were selected to encourage the novice to learn quickly. Experienced riders are encouraged to retain a dedication to safe riding.

Licensing agencies are uniquely positioned to reach — repeatedly and systematically — all people who desire or possess motorcycle riding privileges. The system presented here is designed to assure that the agency responds to the traffic safety needs of each person at each point of contact.

The structure of the system may be defined by the category of operator affected. It divides operators into two categories:

### ***General Applicant:***

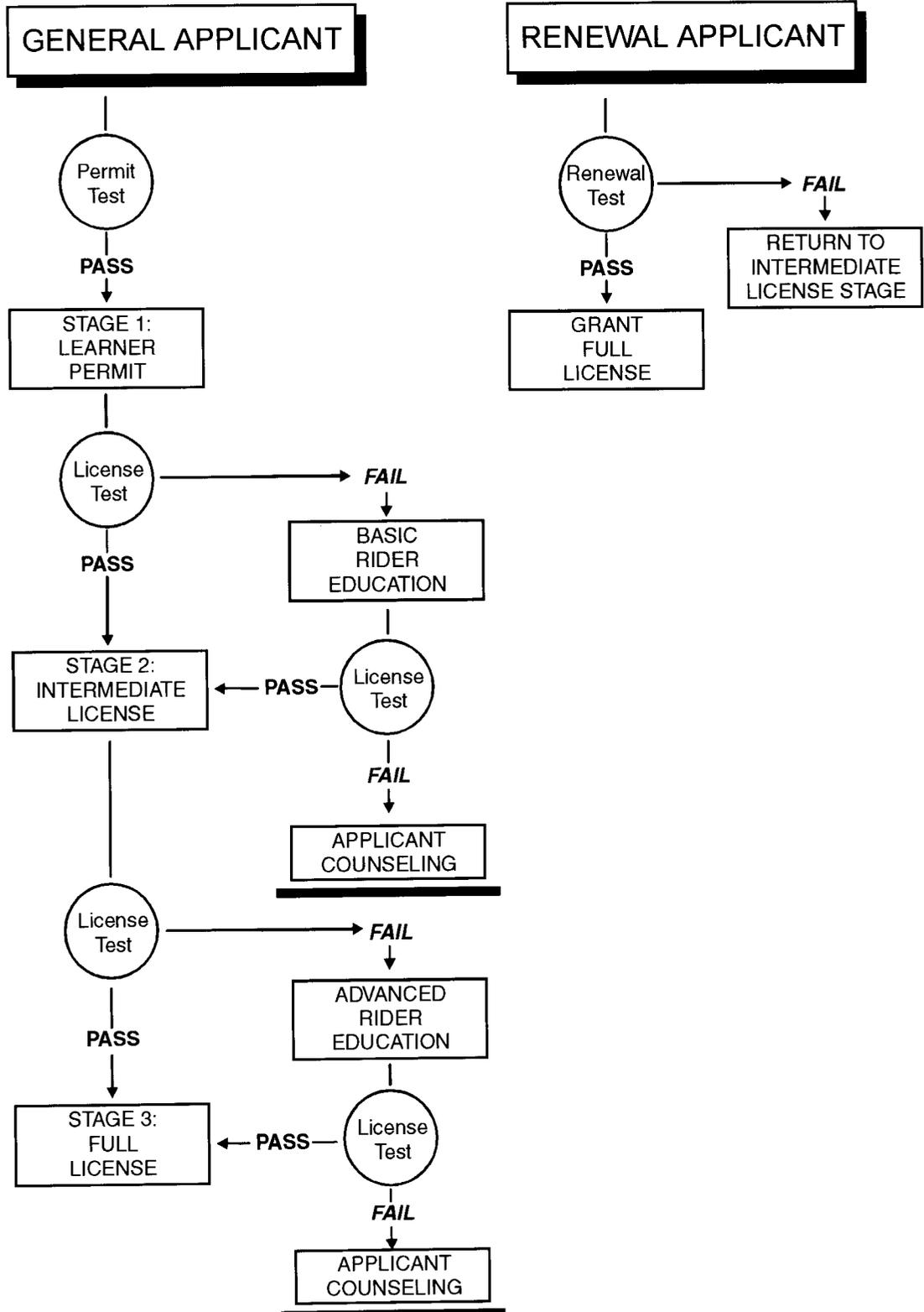
Anyone who, at the time of application for a motorcycle license, meets minimum age requirements and other prerequisites and does not hold a valid, in-state motorcycle operator's license.

### ***Renewal Applicant:***

Anyone who possesses a valid in-state motorcycle operator's license at the time of application for a license.

A diagram of the proposed system appears on the opposite page and a general description is provided on the following page. Details are provided in the next section, "System Operation."

# System Operation Chart



## General Applicant

The model graduated licensing system for general applicants encompasses three licensing stages:

- Stage 1 Learner's permit.
- Stage 2 Intermediate, provisional or restricted license.
- Stage 3 Full or unrestricted license.

A brief description of the major elements of each stage follows.

### ***Learner's Permit:***

General applicants who satisfy application prerequisites are screened for vision and tested on rules-of-the-road and subjects specific to motorcycling. Upon successful completion of the tests, applicants are granted a learner's permit authorizing restricted, on-street riding privileges.

### ***Intermediate License:***

General applicants who have satisfied application requirements are given a motorcyclist knowledge and performance test. Applicants may take the test as many as three times. Where required, proof of rider education must be presented before taking the test a second time. Upon successful completion of the tests, applicants are granted an intermediate license.

### ***Full License:***

General applicants who successfully complete the intermediate license stage, meet any minimum age (and/or time) requirements are given a second-level knowledge and on-road driving skills test. Upon successful completion of the test, applicants are granted a full unrestricted license. If it is not feasible to have second-level knowledge and on-road driving skill tests because of the costs, jurisdictions should require a clean driving record as a condition for obtaining a full unrestricted license.

## Renewal Applicant

Renewal applicants must undergo the same type of renewal testing required for people seeking to renew an automobile's driver license. Where knowledge

testing is required for automobile drivers, motorcyclists must pass a test concerning rules-of-the-road and subjects specific to motorcycling. Renewal applicants who fail the knowledge tests before their license expires can receive a new motorcycle endorsement by re-entering the system as general applicants (or intermediate license applicants), if this same requirement applies in the graduated licensing system for automobile drivers.

## **System Application**

The model system presented here is designed for use within a classified licensing system. The purpose is to assure that people are authorized to drive only those types of vehicles they are qualified to operate.

For licensing purposes, a motorcycle is commonly defined as any vehicle having a seat or saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground, excluding farm tractors.

The manual does not address the licensing of limited speed, motor-driven cycle operators. Such light-weight vehicles have a limited capability to mix with traffic and should be addressed with an appropriate program.

## **System Operation**

This section describes the administration and procedures involved in implementing the three licensing stages for general applicants, and the renewal of a license. It also describes rider improvement actions that can be applied to violators.

### **General Applicants**

#### **Learner's Permit**

A learner's permit is required for on-street operation by any rider not holding a valid motorcycle operator license or endorsement.

#### **Applicant Eligibility**

Applicants must present proof of identity and age

(i.e., certified birth certificate or other documentation acceptable to the department). On the basis of the documentation provided, it is recommended that all applicants, age 16 or older, be allowed to complete an application form.

Licensing personnel will review the completed applications for:

- all prior applications for motorcyclist permits and license,
- current status of any licenses held, and
- any medical conditions recognized as significant by the department.

On the basis of this information, and in keeping with department policy, licensing personnel will:

- decline to process applicants who report their automobile license as currently being under suspension or revocation in any state or province.
- advise applicants reporting a significant medical condition that their application will be processed when they return with a medical certificate or present their case to the state's Medical Review Board. Further information concerning medical impairments and licensing can be found in the NHTSA/AAMVA Guidebook: Functional Aspects of Driver Impairment, A Guide for State Medical Advisory Boards.

Where on-line computers are available, licensing personnel should check centralized record systems to verify the applicant's information. If it does not agree with the records, advise the applicant of the information on record and tell them when they may reapply. Those protesting the records information will be told how to rectify the situation. Those presenting false information or documents will be dealt with under authority granted the department.

All who have submitted satisfactory applications will next undergo vision screening. The department's established visual testing procedures should be followed. Applicants who pass the vision test will be considered eligible candidates for the learner's permit.

## Testing Requirements

All eligible applicants will be given a motorcycle-specific knowledge test. Those who do not hold a valid automobile driver's license must also take the core knowledge test required to obtain an automobile operator's permit.

### ***Knowledge Test:***

The motorcycle-specific knowledge test is administered to determine if an applicant knows enough about safe motorcycling to be given access to public highways. The knowledge test also serves as an incentive for applicants to acquire safe-riding information provided by the agency and other organizations.

Naturally, if the department is to require applicants to demonstrate an acceptable level of knowledge before it will issue a permit, it must also give them a means of acquiring the necessary information. Accordingly, the licensing authority must make available to every motorcycle applicant a motorcycle operator's manual containing all of the information for which applicants will be held responsible.

The major considerations in the design of the knowledge test should be:

- the safety criticality of test content,
- the legal basis for questions,
- the validity of the test items, and
- the reliability of the test.

Each question should address an area closely associated with accident risk reduction and the entire body of questions should sample from the full range of knowledge critical to motorcycle operations.

The multiple-choice format offers the most practical method of dealing with applicants. All questions should have at least two incorrect answers.

Given the range of knowledge to be assessed, the test should pose a minimum of 20 questions dealing with the specifics of safe and legal motorcycle operation; 80% of the questions must be answered cor-

rectly. Alternate test forms of equal difficulty should be available for repeat examinees. It lessens the likelihood that applicants will remember and inform others of specific questions.

Tests are meant to assess motorcyclists' knowledge, rather than their basic intelligence or literacy. Accordingly, the test items should be written at a low (fifth/sixth grade) reading level. Given the highly visual nature of motorcycle operation, pictures, drawings or diagrams would help present test situations clearly.

## **Permit Restrictions**

Since the permit is intended to encourage beginning riders to develop riding skills under low-risk conditions, a number of restrictions are applied.

### ***Permit Period:***

The learner's permit is issued for a minimum period of 90 days to provide each applicant opportunity to practice riding under controlled conditions prior to applying for an intermediate license. The 90-day minimum also allows the department time to process permit records.

The permit also expires after 90 days and may not be automatically renewed. Rather, to regain riding privileges, they must apply for an intermediate license and complete all required testing. If the applicant passes the licensing test, they are granted the intermediate license. However, an applicant who fails the licensing test — either during or after the permit period — must reapply for a learner's permit.

Procedures and restrictions for issuing a first or subsequent permit are similar. However, jurisdictions should consider requiring rider education for all first permit holders or at least for motorcyclists under age 21. At a minimum, the second permit should require that applicants complete a state-approved motorcycle rider education course before taking the license test a second time.

### ***Permit Riding Restrictions:***

To limit the beginning rider's exposure to traffic and risk of injury, it is recommended that at least the

following restrictions be applied to the learner's permit:

***Supervision:***

A requirement for constant supervision by either a fully-licensed rider on another motorcycle or a mature automobile driver at least 5 years older than the young rider could help the learning process and add a further incentive to learn quickly and obtain a full license. However, consideration must be given to the possibility that guidance provided by an automobile driver who has no motorcycling experience may be appropriate for automobile operation but incorrect for motorcycle operation.

***Parent Participation:***

To ensure that learners gain riding experience, require parent participation in the riding process (e.g., certifying that riders under the age of 18 had a minimum number of hours of practice).

***Passenger Restriction:***

Because of the additional rider skill required for controlling a motorcycle when carrying a passenger, permit holders should be required to ride solo.

***Mandatory Helmet Use:***

Even in states where helmet use is not compulsory, permit holders should be required to wear approved helmets that meet the FMVSS No. 218 standard and eye protection.

***.02 BAC/Drug:***

All riders under age 21 should be subject to zero tolerance (i.e., 0.02 blood alcohol concentration or less). All learners should be prohibited from having any amount of drugs in their systems. This will allow the administration to cancel the permit if the learner is convicted of any alcohol- or drug-related offense.

In addition to these minimum restrictions, the following conditions might well be appropriate:

***High Visibility Clothing:***

A requirement that riders wear protective clothing with high-visibility or reflective surfaces could significantly increase the rider's visibility and reduce the risk of accident involvement.

### ***No Interstate Riding:***

Although interstate riding is typically less hazardous than other types of riding, the higher speeds pose an additional challenge to a beginner rider. An interstate restriction would also add to the incentive to move through the permit process and become fully licensed.

## **Rider Education**

Rider education can be effective in rapidly increasing the skill level and reducing the risk level of beginning motorcyclists. Jurisdictions with training programs that are available statewide are progressing towards mandatory rider education prior to licensing. Mandatory rider education for all permit holders should be considered with caution, due to the administrative and financial burden it can place on the rider education programs. However, mandatory training for motorcyclists under age 21 has proven feasible in many states.

To take advantage of the effectiveness of rider education without placing an excessive burden on the department, it is suggested that all applicants who fail the test for an intermediate license be required to complete an approved rider education course. (See Rider Education Materials for recommended courses.)

## **Intermediate License**

An intermediate license is required for on-street operation by any rider not holding a valid learner's permit or full motorcycle operator license or endorsement.

### **Applicant Eligibility**

The applicant should have successfully completed the learner's permit stage.

Eligibility requirements for the intermediate license should closely follow those for the learner's permit.

The applicant should be required to complete a license application, be checked through a centralized records system, and be given a vision screening test even though he or she has held a learner's permit.

The applicant must successfully complete basic rider education if it was required for the learner's permit.

## Testing Requirements

The System Operation Chart on page 9 illustrates that the riding skill test may be taken as many as three times. Thus, to be eligible, the applicant must not have more than two previous failures. Recommendations for dealing with repeat failures are discussed under "Counseling and Violator Training."

All eligible license applicants will be given a motorcycle-specific riding test.

### ***Riding Test:***

To qualify for an intermediate license, applicants should take an off-street test. The department may elect to waive the test on proof of completion of an approved rider education course. The test should be administered in a quality, uniform and comprehensive manner. (See "Program Support" section for test design resources and applicant self-study materials.)

Riding tests should always be preceded by a vehicle inspection performed by the examiner and a demonstration of vehicle familiarity by the applicant. The vehicle inspection will ensure that the vehicle is safe to ride during the test. The demonstration of familiarity will indicate the basic competency of the applicant.

### ***Off-street Test:***

Off-street tests are best suited to provide an accurate measure of the applicant's vehicle handling skills. The test maneuvers need not physically resemble activities performed in normal highway operation. They must, however, faithfully reproduce the skills required to handle real-world operating conditions.

Handling skills should be assessed by determining the applicant's ability to control the vehicle while changing speed, turning, and stopping in a variety of situations (e.g., on straight-a-ways, curves).

A major advantage of off-street testing is that it occurs in a controlled environment — one that is conducive to objective measurement. Measures such as speed, stopping distance and specific events (e.g., tire crossing a boundary line) should be used. Subjective measures (e.g., examiner's judgment of rider

smoothness) should not be used because they are often unreliable and likely to result in inconsistent scoring of applicants (e.g., What is “smooth” to one examiner may be “rough” to another).

Scoring based on objective measurement is less frequently contested by applicants and more easily defended by examiners. Finally, objective measures are inherently suited to safe performance testing. The intent is to assure that applicants are, for example, able to make a quick stop safely. If they stop quickly, under control, they have performed safely. Whether or not they “looked good” is irrelevant.

To assure accuracy in measurement, signaling and timing devices may be used in administering the test. Additionally, the test site should be large enough to accommodate rider speeds of at least 10 mph — the minimum stable speed for larger motorcycles.

## **License Restrictions**

The intermediate operator license is restricted in two basic manners: by designating the licensing period, and by imposing a set of conditions.

### ***License Period:***

It is recommended that the intermediate license be issued for 12 months, during which time the rider must remain crash- and conviction-free to be eligible to move to a full license. Completion of a nationally recognized rider training program in conjunction with an at-fault crash-free and conviction-free driving record will shorten the length of the intermediate license from 12 months to 6 months.

### ***License Conditions:***

Special restrictions are imposed on intermediate license riders. These include:

- Restricted hours of riding (e.g., no riding from 10:00 p.m. - 5 a.m.).
- Carry no passengers.
- Must wear a helmet that meets FMVSS No. 218 and protective clothing.
- All riders under age 21 subject to zero tolerance, 0.02 BAC or less.
- License revocation for any alcohol-related offense.

- Parent participation in riding process (e.g., certifying that rider under the age of 18 had a minimum number of hours of practice).
- The rider could be subject to limitations on speed or road types that they are allowed on (e.g., no roads with posted speed limits that exceed 55 m.p.h.; no freeway driving).
- Early intervention for violations or at-fault crashes.

The early intervention provision is administered in much the same manner as the point system. Traffic violation records of intermediate licensees are monitored. When the licensee passes a predetermined threshold of violation convictions, an appropriate licensing sanction is imposed.

The same record-keeping system used to monitor other types of licensees should be used. However, the intervention thresholds should be set at lower levels for intermediate license holders. The department may consider intervention through suspension, training or several other measures after the first violation by the intermediate license holder.

## **Rider Education**

All intermediate license holders should receive advanced rider education that emphasizes safe riding skills, such as managing risk, increasing visibility, optimizing lane position, managing traction, controlling rear-wheel skids, stopping quickly, cornering and swerving. If this is not feasible for all applicants, an advanced course should be required for motorcyclists under age 21 and/or all applicants who fail the test for a full license (see Rider Education Materials for recommended course). The tests should cover the knowledge and skills taught in the advanced training course.

## **Full License**

A full license or endorsement is required for on-street operation by any rider not holding a valid learner's permit or intermediate license.

## **Applicant Eligibility**

For the novice rider to be eligible for a full license, the following components should be considered:

## Testing Requirements

- successfully complete the intermediate license stage,
- meet any minimum age requirement,
- successfully complete advanced rider education, and
- pass an on-road skills test.

All eligible applicants will be given a motorcycle-specific knowledge and riding test.

### ***Knowledge Test:***

The motorcycle-specific knowledge test is administered to determine if an applicant knows enough about safe and legal operation of the motorcycle to be granted full unrestricted riding privileges. The knowledge test for license applicants should cover advanced safe riding skills not covered in the basic knowledge test for obtaining a learner's permit.

### ***Riding Test:***

To qualify for a full license, applicants should take an on-street test. The department may elect to waive the test on proof of completion of an approved advanced education course.

### ***On-street Test:***

On-street tests give examiners a chance to assess applicant's traffic sense and their ability to put safe riding principles and procedures into practice on the road.

On-street riding practices must be measured objectively for the same reasons discussed in the off-street test. Thus, specific standards must be established for each measured practice. For instance, when applicants change lanes, they should be scored according to exactly how long the signal was given (i.e., two seconds) before lane changing was initiated.

This eliminates subjective judgments as to whether "adequate" warning was given. Similarly a rider should be scored for intersection observation habits on the basis of whether the rider turned their head both left and right — not on whether the examiner felt that the applicant looked hard enough.

As on-street performances are measured by direct observation, it is necessary to give examiners a way to keep in touch with applicants — both visually and verbally. Thus, the department must provide on-street examiners with (1) a means for following riders and (2) communication equipment (usually radios) that allows them to give applicants instructions en route.

### **License Period**

It is recommended that the full license be issued for the same period as the state's automobile driver's license. This is usually a four-year cycle. Requiring periodic renewal enables the motor vehicle administration to verify that the experienced riders have maintained their knowledge of safe motorcycling.

## **Counseling and Violator Training**

Special considerations are required in the licensing process for applicants or licensees who do not perform to minimum standards.

### **Counseling Riders Who Fail**

The System Operation Chart on page 9 indicates that, after repeatedly failing the licensing test at the intermediate or full license stage, an applicant will be directed to counseling. The motor vehicle administration needs to prepare policy and procedures for dealing with repeat failures.

Motorcycle operator licensing differs from automobile driver licensing in that denying a motorcycle license will rarely create an undue hardship for the applicant. As motorcycles are often recreational vehicles, applicants typically have transportation alternatives. For this reason, and because motorcycles tend to require a higher level of skill and coordination to operate than do other vehicles, it is recommended that repeat failures be advised against the pursuit of motorcycling. If an applicant fails the license tests after having held two learner's permits and completed rider education, they should be prohibited from additional permits for a period of one year.

## **Violator Training**

A training program is needed to coach riders on special problems such as repeat violations for speeding or careless riding. The violator course should be motorcycle-specific and required for riders who have accrued repeat violations while riding motorcycles. A motorcycle operator license holder who accrues repeat traffic violations while driving an automobile should be subject to whatever programs are administered to automobile drivers.

The violator course should be designed and taught by qualified personnel. The MSF can provide technical assistance in development of such courses.

## **Renewal of License**

The motorcycle operator license renewal system should be consistent with that used for automobile drivers — usually four years. In the months preceding the license expiration date, the licensee should be sent a renewal application and notified of the need for a vision and knowledge test, if considered appropriate by the department.

Vision testing is recommended for all renewal applicants. The licensing knowledge test may be repeated for all applicants or only those with violations on record, depending on departmental policy.

Applicants who have let their licenses expire or fail the tests should be required to begin the license process at the intermediate license stage.

## **Program Support**

To function effectively and efficiently, the Motorcycle Operator Licensing System requires supporting materials, records and evaluation, personnel training and interagency relations. Efficiency and effectiveness could be enhanced if motorcycle rider education and licensing functions were integrated.

## **Support Materials**

Materials needed to support licensing activities include: tests for applicants, examiner training, test

administration materials, self-study and rider improvement materials. All of these are available from the MSF or the NHTSA.

### **Off-street Testing Materials**

The *Alternate Motorcycle Operator Skill Test (Alternate MOST)* requires an area 125 feet by 30 feet. The test consists of 7 exercises that evaluate a rider's ability to turn, swerve, and stop a motorcycle. The manual provides all necessary information to implement and administer the test.

Another test, *Motorcyclist Licensing Skill Test (MLST)*, allows examiners to objectively measure rider performance in three critical riding tasks: turning, swerving and braking. This test uses specialized test equipment and requires a test area 125 feet by 50 feet. The manual provides all necessary information for implementation and administration.

### **On-street Testing Materials**

The *Motorcyclist In-Traffic Test* measures applicant performance in a variety of actual on-street situations. Performance is assessed according to the riders' application of safety principles and execution of safe practices. The test package includes all materials necessary for test administration.

### **Self-study Materials**

A motorcycle operator manual is needed to provide information on safe operation principles and to prepare applicants for taking the licensing knowledge test. At a minimum, a comprehensive manual should cover the following safe riding principles:

- Preparing for Operation - how an operator can be sure that he or she is properly protected and that the motorcycle is in good operating condition prior to operation.
- Visibility - how to maximize rider and motorcycle visibility to other road users.
- Observation - how to observe roadway situations.
- Surface Conditions - how to identify and respond to potentially unsafe roadway surface conditions.

- Night Operation - how to compensate for reduced vision and visibility at night.
- Distance Separation - how to keep adequate space between the motorcycle and other road users.
- Emergencies - how to react to sudden emergencies caused by roadway conditions, traffic and vehicle malfunctions.
- Passenger and Cargo - how to carry passengers and cargo safely.
- Group Riding - how to operate safely with other motorcyclists.
- Operator Factors - how to stay in condition to operate safely. Content should include the effects of alcohol and drugs on rider performance.
- Motorcycle Factors - how to keep a motorcycle in safe operating condition.

The *Motorcycle Operator Manual (MOM)* meets all of these requirements and is recommended for this purpose. It can be obtained from the MSF.

### **Violator (Rider Improvement) Materials**

Materials should be developed to accompany any motorcycle rider improvement training program. The content should reflect the nature of the program. The MSF Program Services Department may be consulted for program and material development.

### **Rider Education Materials**

Instructor and participant materials are necessary to support the rider education program.

- The MSF offers two complete rider education course packages: *The Motorcycle RiderCourse: Riding and Street Skills (MRC:RSS)* is a training program for beginning riders and is appropriate for use as the approved rider education course suggested for those who fail the intermediate licensing test.

- *The Experienced RiderCourse (ERC)* is designed to sharpen and improve the skills of experienced motorcyclists and could be used as an advanced course for those applicants who fail the full licensing test.

Both course packages include detailed instructor and participant materials.

## **Motorist Awareness Materials**

Studies show that collisions between motorcyclists and other vehicles often result because the driver fails to notice the motorcyclist. Materials are needed to raise the level of awareness and understanding of motorcycles among other vehicle drivers. The MSF offers motorist awareness materials which may be used as part of a dedicated campaign or be incorporated in the state driver's license manual.

## **Records and Evaluation**

To support system operations and evaluate system effectiveness, the motor vehicle administration should be prepared to collect and maintain traffic records of motorcycle permit and license holders. Violation records should indicate vehicle type, so that an individual's motorcycle operation history may be separated from his or her automobile driving history.

The permit and intermediate license stages require early intervention of licensing sanctions based on the individual's motorcycle-specific traffic records. Motorcycle-specific traffic records may also be used to evaluate the effectiveness of system components or to compare one state's system with those of other states.

## **Personnel Training**

The licensing skill tests developed by the MSF and NHTSA are designed to be conducted by personnel with no motorcycling background. However, it is recommended that experienced motorcyclists be selected as examiners whenever possible. A license

examiner with motorcycling experience can have a greater appreciation for the skill test and will relate more easily to the applicants than will a non-motorcyclist.

All license examiners should be required to undergo initial and in-service training according to AAMVA standards. In addition, periodic refresher training (e.g., every two years) should be provided to maintain examiner proficiency.

Motorcycle licensing examiners should be certified according to the AAMVA Examiner Certification Program. Additional information on examiner training may be obtained from the AAMVA's Director of Driver Licensing and Control or from the MSF's Director of Program Services.

## **Inter-agency Relations**

To operate an effective, efficient motorcycle licensing system, the motor vehicle administration must communicate and cooperate with other state and local agencies. By communicating the importance and impact of highway safety in all areas of government, the department can gain outside support and establish mutually beneficial relationships. Cooperative relationships should be established with the following state entities:

- State Department of Education - The Department may help implement rider education or rider improvement courses. It can provide additional outreach and may be able to identify available training sites throughout the state.
- Law Enforcement Agency - A relationship with law enforcement agencies such as the Department of Public Safety, County Sheriff, and City Police is necessary to ensure public compliance with motor vehicle administration requirements. The enforcement agencies should be given frequent, thorough briefings or seminars on the details of license requirements and the importance of enforcing them.

- State Judicial System - This system—including judges, magistrates and counselors—has a critical role in ensuring that violators of motor vehicle administration requirements are dealt with appropriately. Those responsible for adjudicating license violators should be informed, through briefings or written correspondence, of the criticality of licensing compliance. Motorcyclists must perceive a serious threat of apprehension and conviction if they violate license requirements, and the consequences of conviction must be harsh enough to encourage compliance.
- State Motorcycle Safety Coordinator - Many states now have a designated motorcycle safety coordinator who oversees rider education and other motorcycle safety activities. The coordinator may be located in any of several state departments: education, public safety or motor vehicles. A relationship with the coordinator is vital to ensure that education requirements can be accommodated and that all state motorcycle safety activities are well coordinated. In addition to education services, the motorcycle safety coordinator can provide motor vehicle administrators with data on the number of riders trained, the failure or drop-out rate and any special training problems.

## **Integrating Motorcycle Rider Education and Licensing**

In many states, rider education and licensing have been integrated to reduce operational costs and improve operational efficiency. However, the degree of coordination ranges from jurisdictions in which the licensing authority simply waives some licensing requirements for riders who have successfully completed a training program, to jurisdictions where a complete synthesis of all training and licensing functions have been vested in a single agency that carries out the responsibilities under the authority of the government body that has the mandate for licensing.

It is recommended that jurisdictions consider integration of education and licensing. However, if rider education programs are going to be required to conduct licensing activities, funding must be increased to cover the additional financial burden. A model system for doing so can be obtained from MSF and NHTSA.

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