RESEARCH IN SUPPORT
OF A
MOTORCYCLE OPERATOR LICENSING CAMPAIGN

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ABSTRACT

RESEARCH IN SUPPORT OF A MOTORCYCLE OPERATOR LICENSING CAMPAIGN

Over a ten-year period ending in the early nineties, the National Highway Traffic Safety Administration’s (NHTSA’s) Fatality Analysis Reporting System (FARS) showed that 42% of the motorcyclists involved in fatal crashes in the U.S. were either unlicensed or improperly licensed. These unlicensed and improperly licensed motorcyclists fell into a number of categories:

1. Motorcyclists who do not have any type of operator’s licenses (17% of unlicensed fatalities).
2. Motorcyclists who have a license to operate another type of vehicle, but not a motorcycle (42% of unlicensed fatalities). These include:
   a. Experienced riders who have never bothered to get a license; and
   b. Rank novices who borrow a friend’s bike to see what it’s like to ride; and
3. Motorcyclists who have a revoked, canceled, suspended, or expired motorcycle endorsement (36% of unlicensed fatalities).

Unlicensed riders circumvent the skill and knowledge tests that are a major part of most states’ motorcycle safety programs. Not surprisingly, they are over-represented in fatality statistics, since their ranks include such crash-prone, high-risk riding groups as the under-aged, the under-experienced, and the under-suspicion. Riders under 18 are at least ten times more likely to be involved in a fatal crash than the typical rider, and riders whose licenses have been suspended are at least twenty times more likely to be involved than the average licensed rider.

In an effort to improve the licensing rate of motorcyclists, NHTSA engaged SYSTAN, Inc. and The Roanoke Company to study the licensing problem as a first step in developing materials for a nationwide motorcycle operator licensing campaign. The study entailed a review of unlicensed riding statistics, surveys of typical riders, and a series of focus group discussions with motorcyclists and police officers that were designed to probe the reasons for unlicensed riding and obtain first-hand reactions to potential public information approaches.

This paper details the results of the surveys and focus group discussions held throughout the country, documents the attitudes of both motorcyclists and police officers toward unlicensed riding, and shows how the findings of the discussion groups were translated into a successful nationwide campaign aimed at reducing the incidence of unlicensed riding.
1.0 EXECUTIVE SUMMARY

1.1 SCOPE OF THE PROBLEM

Over a ten-year period ending in the early nineties, the National Highway Traffic Safety Administration's (NHTSA's) Fatality Analysis Reporting System (FARS) showed that 42% of the motorcyclists involved in fatal crashes in the U.S. were either unlicensed or improperly licensed. These unlicensed and improperly licensed motorcyclists fell into a number of categories:

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Unlicensed riders circumvent the skill and knowledge tests that are a major part of most states' motorcycle safety programs. Not surprisingly, they are over-represented in fatality statistics, since their ranks include such crash-prone, high-risk riding groups as the under-aged, the under-experienced, and the under-suspension. Riders under 18 are at least ten times more likely to be involved in a fatal crash than the typical rider, and riders whose licenses have been suspended are at least twenty times more likely to be involved than the average licensed rider.

Unlicensed Demographics. The incidence of unlicensed riding drops steadily as riders' ages increase. While 67% of the under-18 riders involved in fatal crashes were unlicensed, only 28% of riders over 35 failed to have a proper license.

Impact of State Laws. In states requiring that proof of insurance be shown at the time of the licensing test, 52% of riders in fatal accidents were unlicensed, a significantly higher figure than the 35% recorded in states which do not require proof. In states making training mandatory for under-18 license seekers, the incidence of unlicensed fatalities among under-18 motorcyclists rose from 63% to 76% after training legislation went into effect. However, the overall fatality rate among under-18 riders dropped 36% below pre-legislation levels. Thus the drop in fatalities among better-trained licensed riders more than offsets any increases in unlicensed riding occasioned by the mandatory testing requirements.

Size of the Unlicensed Population. Surveys conducted in four states (California, Ohio, Texas, and Virginia) put the estimated size of the unlicensed riding population in the U.S. at 2 million riders in the early 1990s. This was less than 20% of the overall riding population, although it accounted for 42% of the nation's fatalities. The problem of unlicensed riding was particularly acute in California, where surveys showed that 26% of the riding population was unlicensed, 65%
of motorcyclists involved in fatal crashes were either unlicensed or improperly licensed, and 77% of the state's motorcyclists didn't know the penalty for riding without a license.

1.2  **FOCUS GROUP FINDINGS**

To probe the reasons for unlicensed riding and obtain first-hand reactions to the target population of young motorcyclists to proposed public information approaches, three focus group discussions were held in each of four locations: Los Angeles, California; Columbus, Ohio; San Antonio, Texas; and Springfield, Virginia. Two of the three focus groups in each area were composed of motorcycle riders, one-third of whom were unlicensed, while the third group involved law enforcement representatives.

1.2.1  **Perceptions of Motorcycle Riders**

**Awareness of Licensing Laws.** All unlicensed riders in the focus groups were aware that they needed a motorcycle license or Class M endorsement.

**Reasons for Not Getting a License.** The most common excuse for not getting a license was "it takes too much time." Unlicensed riders cited the inconvenience of Department of Motor Vehicle operating hours and the difficulty of scheduling a skill test as barriers to licensing. In Texas, the additional hassle of bringing an extra car and a friend to chauffeur the examiner during the on-street test was also cited as a deterrent.

In Texas and California, both states with a high incidence of unlicensed riding, the need to show proof of insurance at the time of the skill test was cited as a major barrier to licensing.

In California, Texas, and Virginia, licensed and unlicensed riders alike ridiculed the riding test administered by the State. One California rider noted that if you rode your bike to the test site you'd passed a much more stringent test than the one administered by the examiners.

**Awareness of Penalties.** Whereas all participants knew they needed a license to ride a motorcycle, they were less clear on the penalties for riding without a proper license. In every state, there were riders who thought unlicensed bikers would get off with a warning, or if they were cited, that any fines or penalties would be waived once they got their license. This attitude was reinforced by riders who reported that they had been stopped while riding without a license and let off with a warning. The possibility that their motorcycles might be impounded came as a surprise to several participants.

**Likelihood of Being Caught.** Riders in all focus groups generally viewed the chances of being caught without a license as "very low."

1.2.2  **Perceptions of Police Officers**

**Awareness of Licensing Laws.** Officers in all jurisdictions were unanimous in their view that the unlicensed motorcyclists that they stopped "...knew the law," and "...knew that they were breaking it."
Procedures and Penalties. Officers in all jurisdictions reported that they always cited improperly licensed riders. This report did not square with the statements of several unlicensed motorcyclists in the rider focus groups, who claimed that they had been let off with warnings.

Officers tended to split in their use of impoundment as a penalty for unlicensed riding. In Los Angeles and San Antonio, city police officers reported that they routinely impounded bikes, while State highway patrol representatives in these areas said that they rarely impounded. Officers in Ohio and Virginia said that they always impounded the bikes of unlicensed riders.

Average first-time fines for unlicensed riders in the jurisdictions sampled ranged from $50 plus court costs in Virginia to $100 in Ohio. Officers from all jurisdictions noted that judges were likely to reduce the fine or drop it altogether if riders showed up in court with a valid license.

1.3 POTENTIAL PUBLIC INFORMATION APPROACHES

1.3.1 Reactions of Focus Group Participants

In the course of the focus groups, patrol officers and motorcyclists were asked to react to fifteen different posters displaying a variety of messages regarding the need for motorcycle licensing.

Promising Themes. Focus group participants reacted most positively to messages which stressed the legal penalties for riding without a license, particularly impoundment and fines. The poster receiving the highest approval rating depicted an unlicensed rider in the act of receiving a ticket and having his bike towed. The sight of a bike on the hook of a tow truck made an indelible impression on motorcyclists, and jolted several unlicensed riders who hadn't realized that their bikes might be impounded if they were stopped by the police.

Neutral Approaches. Riders and police officers tended to be neutral toward posters which simply informed riders of the need to be licensed, as most riders were already aware of this obligation.

Unpromising Themes. Both licensed and unlicensed riders rejected poster themes which suggested that unlicensed riders were less skilled or had more accidents than licensed riders. They argued that passing a simple off-road test and getting an endorsement didn't have anything to do with one's riding skill. While most riders believed that formal training courses could help motorcyclists avoid accidents, they universally disapproved of posters which depicted accidents or linked licensing with safer riding. “The license isn't a shield” was a common comment.

1.3.2 Marketing Materials Development

Following the focus groups, the SYSTAN/Roanoke team developed a set of themes that stressed the legal penalties for unlicensed riding, particularly the threat of impoundment and were
subsequently incorporated in a variety of marketing materials designed to discourage unlicensed riding. The mix of materials included:

- A **Logo** uniting all materials under the title “Campaign to License America;”

![Campaign to License America!](image)

- **Brochures**;
- **Posters** featuring a bike dangling from a tow truck (see Exhibit 1.1);
- **Flyers**;
- **An Instruction Video** for law enforcement officers;
- A five minute **Video News Release**;
- **Audio News Release**;
- A sixty-second jingle, “**Tow Jam Blues**;”
- **Radio Public Service Announcements**;
- **Advertising Slicks**; and
- A **Television Public Service Announcement**.

Except for the TV PSA, which was limited to California, these materials received nationwide distribution over the three-year period between 1994 and 1997.

### 1.4 POSTSCRIPT

By the time the campaign was completed, the incidence of unlicensed fatalities had dropped significantly. In California, the incidence dropped from 65% in the 1980s to 41% in 1998. In the U.S. at large, the incidence fell from 42% in the 1980s to 18% in 1997. No attempt was made to document any causal impact the campaign might have had on the concurrent decline in the incidence of unlicensed fatalities. In California, for example, a law making the successful completion of the California Motorcyclist Safety Program’s basic rider course an acceptable substitute for the much-derided skill test imposed by the California DMV also reduced the incidence of unlicensed riding in the state. Nonetheless, the pronounced drop in unlicensed fatalities at the state and national levels over the period covered by the campaign would seem to indicate that the materials had a positive impact on motorcycle licensing.
Don't Get Towed.

If you are caught riding your motorcycle without a valid license, you could be in for quite a surprise: the law allows your motorcycle to be towed away!

Get Licensed.

CAMPAIGN TO LICENSE AMERICA!
2.0 SCOPE OF THE PROBLEM

2.1 OVERVIEW

Because motorcycle riding presents greater hazards and requires more coordination than
driving an auto, most states require that motorcyclists obtain a motorcycle operator endorsement.
Yet there is a general lack of compliance with these requirements nationwide. Over the ten-year
period between 1982 and 1991, an estimated 42% of the motorcyclists killed in crashes in the
U.S. were either unlicensed or improperly licensed. While the number of fatal motorcycle crashes
fell dramatically over this period (dropping from 4,490 fatal crashes in 1982 to 2,819 fatal crashes
in 1991), the incidence of unlicensed fatalities remained relatively steady, ranging from 38% to
45% of the overall total. This incidence varied from state to state, but was particularly severe in
California, where 65% of the motorcyclists involved in fatal crashes over the ten-year period were
not properly licensed.

As NHTSA points out, "Riders who operate motorcycles without valid licenses are, at a
minimum, circumventing the skill and knowledge tests that are a major segment of a State's
comprehensive motorcycle safety program." (NHTSA, 1988). It stands to reason, therefore, that
improving the licensing rate of motorcyclists will improve the general skill and knowledge levels of
the motorcycling population and, hopefully, lower the fatality rates.

2.2 THE UNLICENSED RIDER IN FATALITY STATISTICS

2.2.1 Breakdown by Category

Unlicensed motorcyclists fall into a number of categories:

1. Motorcyclists who do not have any type of operator's licenses.

2. Motorcyclists who have a license to operate another type of vehicle, but not a
   motorcycle. These include:
   a. Experienced riders who have never bothered to get a license; and
   b. Rank novices who borrow a friend's bike to see what it's like to ride; and

3. Motorcyclists who have a revoked, canceled, suspended, or expired motorcycle
   endorsement.

Exhibit 2.1 summarizes the various categories of license compliance for riders involved in
fatal accidents over the five-year period 1987-1991.

While the largest single segment of unlicensed motorcycle fatalities (42%) was composed
of riders who had a valid driver's license but no motorcycle endorsement, a significant proportion
of the fatalities (36%) was composed of riders who had previously lost their licenses, either through suspension, revocation, cancellation, or expiration.

**EXHIBIT 2.1**

**CATEGORIES OF INVALID LICENSE**

1987 – 1991

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>NUMBER</th>
<th>% OF TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO LICENSE</td>
<td>1,246</td>
<td>16.5%</td>
</tr>
<tr>
<td>LICENSE LIFTED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suspended</td>
<td>1,838</td>
<td>24.3%</td>
</tr>
<tr>
<td>Revoked</td>
<td>470</td>
<td>6.2%</td>
</tr>
<tr>
<td>Expired</td>
<td>397</td>
<td>5.3%</td>
</tr>
<tr>
<td>Canceled/Denied</td>
<td>48</td>
<td>0.6%</td>
</tr>
<tr>
<td>WRONG CLASS OF LICENSE</td>
<td>3,190</td>
<td>42.1%</td>
</tr>
<tr>
<td>Single Class</td>
<td>2,839</td>
<td>37.5%</td>
</tr>
<tr>
<td>Multi Class (Not Motorcycle)</td>
<td>351</td>
<td>4.6%</td>
</tr>
<tr>
<td>LEARNER’S PERMIT</td>
<td>69</td>
<td>0.9%</td>
</tr>
<tr>
<td>TEMPORARY LICENSE</td>
<td>12</td>
<td>0.2%</td>
</tr>
<tr>
<td>UNKNOWN</td>
<td>298</td>
<td>3.9%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>7,568</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: NHTSA Fatal Accident Reporting System

**2.2.2 Demographic Characteristics**

Exhibit 2.2 breaks the FARs data from the ten-year period down into several relevant categories: Demographic characteristics (Age and Gender); Riding Characteristics (Helmet Use and Blood Alcohol Content); and certain state laws (Mandatory Helmet Use or Proof of Insurance).

**Age.** Exhibit 2.2 shows clearly that younger riders are more likely to be unlicensed (and hence a target for the proposed public relations program) than older riders. While 67% of under-18 riders involved in fatal accidents were unlicensed, only 28% of riders over 35 failed to have a proper license. The incidence of unlicensed riding drops steadily as the riders’ ages increased.
## EXHIBIT 2.2

<table>
<thead>
<tr>
<th>LICENSE COMPLIANCE</th>
<th>Valid</th>
<th>Invalid</th>
<th>Unknown</th>
<th>Total</th>
<th>% Invalid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BY DEMOGRAPHICS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AGE CATEGORY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 18</td>
<td>935</td>
<td>1919</td>
<td>198</td>
<td>3052</td>
<td>67.2%</td>
</tr>
<tr>
<td>18-20</td>
<td>3214</td>
<td>3057</td>
<td>189</td>
<td>6460</td>
<td>48.7%</td>
</tr>
<tr>
<td>21-24</td>
<td>4687</td>
<td>3945</td>
<td>184</td>
<td>8816</td>
<td>45.7%</td>
</tr>
<tr>
<td>25-34</td>
<td>8127</td>
<td>5171</td>
<td>263</td>
<td>13561</td>
<td>38.9%</td>
</tr>
<tr>
<td>35 &amp; Up</td>
<td>5466</td>
<td>2074</td>
<td>110</td>
<td>7650</td>
<td>27.5%</td>
</tr>
<tr>
<td>Unknown</td>
<td>3</td>
<td>15</td>
<td>62</td>
<td>80</td>
<td>83.3%</td>
</tr>
<tr>
<td><strong>GENDER</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>22057</td>
<td>15810</td>
<td>960</td>
<td>38827</td>
<td>41.8%</td>
</tr>
<tr>
<td>Female</td>
<td>375</td>
<td>371</td>
<td>25</td>
<td>771</td>
<td>49.7%</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>0</td>
<td>21</td>
<td>21</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>BY RIDING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CHARACTERISTICS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HELMET USE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Used</td>
<td>10133</td>
<td>8520</td>
<td>404</td>
<td>19057</td>
<td>45.7%</td>
</tr>
<tr>
<td>Used</td>
<td>9776</td>
<td>4914</td>
<td>343</td>
<td>15013</td>
<td>33.5%</td>
</tr>
<tr>
<td>Unknown</td>
<td>2519</td>
<td>2747</td>
<td>278</td>
<td>5544</td>
<td>52.2%</td>
</tr>
<tr>
<td><strong>BLOOD ALCOHOL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAC &lt; .01</td>
<td>5841</td>
<td>4067</td>
<td>316</td>
<td>10224</td>
<td>41.0%</td>
</tr>
<tr>
<td>BAC .01-.09</td>
<td>2020</td>
<td>1622</td>
<td>85</td>
<td>3727</td>
<td>44.5%</td>
</tr>
<tr>
<td>BAC &gt;=.10</td>
<td>6104</td>
<td>4946</td>
<td>227</td>
<td>11277</td>
<td>44.8%</td>
</tr>
<tr>
<td>Unknown</td>
<td>8467</td>
<td>5546</td>
<td>378</td>
<td>14391</td>
<td>39.6%</td>
</tr>
<tr>
<td><strong>BY STATE LAWS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PROOF OF</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>INSURANCE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required for Test</td>
<td>7278</td>
<td>7851</td>
<td>587</td>
<td>15716</td>
<td>51.9%</td>
</tr>
<tr>
<td>Required for Registration</td>
<td>3911</td>
<td>2189</td>
<td>116</td>
<td>6216</td>
<td>35.9%</td>
</tr>
<tr>
<td>Not Required</td>
<td>11243</td>
<td>6141</td>
<td>303</td>
<td>17687</td>
<td>35.3%</td>
</tr>
<tr>
<td><strong>HELMET LAW</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mandatory for All</td>
<td>9164</td>
<td>5359</td>
<td>402</td>
<td>14925</td>
<td>36.9%</td>
</tr>
<tr>
<td>Not Mandatory for All</td>
<td>13268</td>
<td>10822</td>
<td>604</td>
<td>24694</td>
<td>44.9%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>22432</td>
<td>16181</td>
<td>1006</td>
<td>39619</td>
<td>41.9%</td>
</tr>
</tbody>
</table>

*Numbers from the "Unknown" category are not included in the calculation of the "invalid %."
Gender. Although far fewer females than males were involved in fatal motorcycle accidents, those females who were involved were more likely to be unlicensed than their male counterparts. Nearly 50% of the females involved in fatal motorcycle accidents were unlicensed, as compared with 42% of male riders.

2.2.3 Riding Characteristics

Helmet Use. Exhibit 2.2 suggests that riders with no helmets are more likely to be unlicensed than those wearing helmets. Among motorcyclists involved in fatal accidents over the last ten years, 45.7% of unhelmeted riders were unlicensed as well, while only 33.5% of those riders wearing helmets lacked a license.

Blood Alcohol Content. FARs data shows that riders who had been drinking were somewhat more likely to be unlicensed than riders with a blood alcohol content below .01. Exhibit 2.2 shows that 45% of riders with a blood alcohol content above the .01 level had no license while only 41% of riders with no trace of alcohol in their blood were unlicensed. While this difference is relatively small, it was found to be statistically significant (at the 0.5 level).

2.2.4 State-to-State Differences

The incidence of unlicensed riding varies widely from state to state. Over the ten-year study period, Massachusetts had the lowest incidence of unlicensed riders in the FARs data base. Only 17% of the riders involved in fatal accidents in Massachusetts were unlicensed. At the other end of the scale, California reported the highest incidence of unlicensed riders, with 65%.

Helmet Laws. In an effort to explore state-to-state differences, states were grouped by various characteristics which might affect motorcycle licensing. Exhibit 2.2 compares the incidence of unlicensed fatalities in states with and without a mandatory helmet law. In those states where helmet use was mandatory for all riders, only 37% of the riders involved in fatal crashes over the ten-year period were unlicensed. On the other hand, in states having no helmet law or a partial law applying only to younger riders, 45% of the riders appearing in the FARs data base were unlicensed. This difference was found to be statistically significant. However, the higher incidence of unlicensed riding in states with no helmet law was influenced heavily by the presence of California, which did not have a mandatory helmet law until 1992. If California was removed from the list of states with no helmet law, then there was no statistical difference in the incidence of unlicensed riding between states with and without helmet laws.

Proof of Insurance. Some states require proof of insurance when riders take their licensing tests. According to unlicensed riders interviewed in California and Texas, two states asking for proof of insurance (See Section 3.0), this requirement was a significant deterrent to licensing among young riders. A comparison of FARs data in states requiring proof of insurance at the licensing test with those which don't require proof appears in Exhibit 2.2. In states requiring proof of insurance at the time of the study, 52% of riders in fatal accidents over the ten-year study period were unlicensed. In states which did not require proof, or the other hand, only 35% of fatal
accidents involved unlicensed riders. This difference is statistically significant even if the heavy influence of California is discounted.

2.3 INTERVIEWS WITH UNLICENSED RIDERS

The high incidence of unlicensed riders among fatally injured riders naturally raises certain questions: What is the incidence of licensure among the general riding population? Are fatally injured riders less likely to be properly licensed than the typical motorcyclist?

As a basis for evaluating the California Motorcycle Safety Program (CMSP), SYSTAN Inc. interviewed more than 8,500 Southern California motorcyclists between October 1989 and 1993. The motorcyclists were asked to fill out a one-page questionnaire at dealerships, accessory shops, trade shows, and other places where riders congregate. The questionnaire provided information on each rider’s age, sex, riding history and riding habits so that the accident records of trained and untrained riders having similar profiles and riding histories could be tracked over time. One of the questions asked was “Do you have a motorcycle license or permit?” Because riders were also asked to provide their driver’s license number, the existence of a motorcycle endorsement could be verified. Similar surveys were conducted in Ohio, Texas, and Virginia during the winter of 1992 in an attempt to locate focus group participants (See Section 3.0).

2.3.1 Field Interview Findings – California

In reviewing field interviews from California, the responses of 1,077 motorcyclists interviewed in May and October 1991 were checked against DMV records. While 82% of the riders interviewed reported having a motorcycle license or permit, a check of DMV records showed that only 74% were validly licensed (roughly 12% of the riders who said they were licensed were not). To the extent that the 1,077 riders contacted randomly at the motorcycle dealerships, accessory shops, parking lots, trade shows, and other gathering places in the Los Angeles area represent a valid sample of the California riding population, this 74% figure represents a good estimate of the incidence of licensing among the general motorcycle population. Conversely then, the size of the unlicensed riding population could be estimated at 26% of all riders. This was considerably lower than the 65% figure completed from FARs data, indicating that unlicensed motorcyclists were over-represented in fatal accident statistics.

Estimating the Size of the Unlicensed Population in California. The estimate that 26% of California’s motorcyclists were unlicensed, coupled with a knowledge of the size of the population of licensed motorcyclists, provided a basis for estimating the number of unlicensed riders in the state. In mid-1991, the California DMV reported 847,207 licensed motorcycle operators. Coupling this figure with the estimate that 26% of all California’s motorcyclists are unlicensed, puts the size of the state’s unlicensed population at roughly 298,000 riders.

Incidence of Fatal Accidents. The table below compares the relative number of fatal crashes involving California riders in each licensing category over a five-year period.
FATALITIES BY LICENSE CATEGORY

<table>
<thead>
<tr>
<th>LICENSE CATEGORY</th>
<th>VALID</th>
<th>EXPIRED</th>
<th>REVOKED</th>
<th>SUSPENDED</th>
<th>NONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL APRIL '92</td>
<td>804,465</td>
<td>8,978</td>
<td>2,319</td>
<td>28,294</td>
<td>298,000**</td>
</tr>
<tr>
<td>FATALITIES/YEAR, 1987-1991*</td>
<td>210</td>
<td>21</td>
<td>15</td>
<td>133</td>
<td>225</td>
</tr>
<tr>
<td>FATALITIES/1000 RIDERS</td>
<td>0.26</td>
<td>2.33</td>
<td>6.46</td>
<td>4.70</td>
<td>0.76</td>
</tr>
</tbody>
</table>

*Source: NHTSA Fatality Analysis Reporting System
**Estimated from 1000 field surveys conducted in October and May 1991.

Between 1987 and 1991, an average of 210 validly licensed riders were killed each year on California highways. This amounted to 0.26 fatalities/year for every thousand licensed riders. During this same period, an average of 225 riders having no license or endorsement were killed each year. Although it is impossible to know the exact number of motorcyclists riding without a license, the estimate computed in the preceding paragraph suggests that at least 298,000 Californians riding were without a valid license at the time of the interviews. This results in a fatality rate of 0.76 fatalities per 1,000 riders, roughly triple that of licensed riders. Among riders with expired licenses, moreover, the fatality rate was 2.3 deaths per thousand riders, over nine times that experienced by validly licensed riders. And the rate for motorcyclists with revoked licenses was higher still, at 6.5 fatalities per thousand riders (over twenty times that experienced by validly licensed riders). The fatality rate for motorcyclists whose license has been suspended was 4.7 per thousand riders. This suggests that some form of education, warning, or remediation activity should accompany the act of suspending or revoking motorcycle licenses.

**Age Breakdowns.** Exhibit 2.3 below shows the percentage of unlicensed riders in different age categories for both the FARS data and the 1991 California field survey data.

### EXHIBIT 2.3
INCIDENCE OF UNLICENSED RIDING BY AGE GROUP
CALIFORNIA FIELD SURVEY DATA AND FARS DATA

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>(n = 1101)</td>
<td>(n = 7045)</td>
</tr>
<tr>
<td>Under 18</td>
<td>83.3%</td>
<td>87.6%</td>
</tr>
<tr>
<td>18-20</td>
<td>65.0%</td>
<td>75.3%</td>
</tr>
<tr>
<td>21-24</td>
<td>40.8%</td>
<td>69.1%</td>
</tr>
<tr>
<td>25-34</td>
<td>26.2%</td>
<td>62.8%</td>
</tr>
<tr>
<td>35 and Up</td>
<td>15.0%</td>
<td>48.7%</td>
</tr>
<tr>
<td>Total</td>
<td>25.7%</td>
<td>64.7%</td>
</tr>
</tbody>
</table>
Thus the incidence of unlicensed riders in the fatality statistics was greater for every age group than the incidence in the surveyed population. The breakdown also shows clearly that California’s unlicensed riders were much more likely to be found in the younger age group. This breakdown, coupled with the extremely high fatality rate for motorcyclists whose licenses have been suspended or revoked, helps to explain the disproportionate presence of unlicensed riders in California’s fatality statistics. The unlicensed population includes at least three high-risk riding groups: the under-aged, the under-experienced, and the under-suspension.

2.3.2 Field Interview Findings – Other States

Incidence of Unlicensed Riding. In locating focus group participants for the NHTSA study, field surveys similar to those conducted in California were carried out in Columbus, Ohio, Northern Virginia, and San Antonio, Texas, during the winter of 1992. Riders contacted at dealerships and other gathering places were asked to fill out a one page questionnaire listing their riding experience and stating whether or not they currently had a motorcycle license or endorsement. Riders’ answers to these questions are summarized in Exhibit 2.4 for each location.

EXHIBIT 2.4
PERCENTAGE UNLICENSED: FIELD SURVEY DATA AND FARS DATA

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Licensed</td>
<td>Unlicensed</td>
</tr>
<tr>
<td>OHIO</td>
<td>196</td>
<td>48</td>
</tr>
<tr>
<td>TEXAS</td>
<td>211</td>
<td>35</td>
</tr>
<tr>
<td>VIRGINIA</td>
<td>102</td>
<td>9</td>
</tr>
</tbody>
</table>

In every state, the percentage of unlicensed riders in the survey population was considerably lower than the percentage appearing in fatal accident statistics. The incidence of unlicensed riders in the survey data is likely to be under-represented for at least two reasons:

1. The license information is self-reported. (Experience in California showed that actual license data was 12% lower than self-reported data.)

2. Because of contractual obligations, the surveys in the three locations were conducted during December, and consequently resulted in contacts with a greater proportion of the hard-core, experienced riding population. These year-round riders were presumably more likely to be licensed than a sampling of riders contacted during the summer months. Even allowing for these caveats, it seems clear that
unlicensed riders are overrepresented in the fatal accident statistics of Ohio, Texas, and Virginia, just as they were in California.

**Estimating the Size of the Unlicensed Population in the U.S.** Roughly 16% of the riders interviewed in the three study states admitted to being unlicensed. If this figure is taken as representative of the unlicensed population outside California, it is possible to develop an estimate of the number of unlicensed riders at large in the United States. In mid-1991, there were 9.1 million licensed riders in those states outside of California. If 16% of the total riding population in these states is unlicensed (a conservative estimate), then there must have been at least 1.7 million unlicensed riders in the U.S. outside of California. Adding the estimated number of 298,000 unlicensed California riders to this total puts the estimated size of the unlicensed riding population in the U.S. at 2 million riders.
3.0 **FOCUS GROUP FINDINGS**

3.1 **OVERVIEW**

To probe the reasons for unlicensed riding and obtain first-hand reactions to the target population of young motorcyclists to proposed campaign approaches, three focus group discussions were held in each of four locations: Los Angeles, California; Columbus, Ohio; San Antonio, Texas; and Springfield, Virginia. Two of the three focus groups in each area were composed of motorcycle riders, while the third involved law enforcement representatives.

Motorcycle riders were recruited to participate in focus groups by sending interviewers to dealerships, accessory shops, trade shows, and other places where motorcyclists congregated in the selected locations. Motorcyclists were asked to fill out a one-page questionnaire indicating their age, gender, riding history, and self-reported license status. One focus group in each location was limited to riders under the age of 25, and half of all invitees were unlicensed.* To avoid scaring away unlicensed riders, the focus groups were advertised as general discussions of motorcycle safety issues. Participants were paid $40.00 to attend each discussion.

3.2 **LICENSING PERCEPTIONS OF MOTORCYCLE RIDERS**

Riders in all focus groups were asked to introduce themselves and say a little bit about their motorcycle riding experience. Following this, the moderator explored their knowledge of state law, their perceptions of motorcycle training courses, and their perceptions of licensing laws. Finally, riders were asked to react to fourteen different posters displaying different messages regarding the need for motorcycle licensing. Key rider observations regarding licensing are summarized below.

3.2.1 **Awareness of Licensing Laws**

All unlicensed riders in the focus groups were aware that they needed a motorcycle license or Class M endorsement. For various reasons (see below) they hadn’t bothered to get one.

3.2.2 **Reasons for Not Getting a License**

The most common excuse for not getting a license was “it takes too much time.” Unlicensed riders cited the inconvenience of Department of Motor Vehicle operating hours and the difficulty of scheduling a skill test as barriers to licensing. In Texas, the additional hassle of bringing an extra car and a friend to chauffeur the examiner during the on-street test was also cited as a deterrent.

* In Northern Virginia, which had a low incidence of unlicensed riding, the interviewers were unable to locate enough unlicensed riders to fill out half of the focus group invitation list.
In Texas and California, both states with a high incidence of unlicensed riding, the need to show proof of insurance at the time of the skill test was cited as a major barrier to licensing.

In California, Texas, and Virginia, licensed and unlicensed riders alike ridiculed the riding test administered by the State. (One California participant referred to the lollipop test used by the DMV as "sappy," while a Texas rider found their test "insulting," and a Virginia rider noted "...it's not much of a test – a straight line followed by a figure eight.") One California rider noted that if you rode your bike to the test site you'd passed a much more stringent test than the one administered by the examiners. Virginia riders complained that because the state didn't issue learning permits, you couldn't legally ride your bike to the test site. California and Ohio participants suggested that the test would be more meaningful if it were tied to their state's official training courses or at least administered by the same instructors who trained motorcyclists at those courses.

3.2.3 Awareness of Penalties

Whereas all participants knew they needed a license to ride a motorcycle, they were less clear on the penalties for riding without a proper license. In every state, there were riders who thought unlicensed bikers would get off with a warning, or if they were cited, that any fines or penalties would be waived once they got their license. The attitude was reinforced by riders who reported that they had been stopped while riding without a license and let off with a warning. One California motorcyclist said that he had been stopped at least ten times for minor infractions when he was an unlicensed beginner without ever being ticketed for lacking a license.

Impoundment was mentioned as a possible penalty in all focus groups, and the possibility came as a surprise to several participants. "I didn't know they could do that," was the reaction of one unlicensed California rider. Estimated first-time fines for unlicensed riding ranged from $35 to $300, with an average around $70. On hearing a fellow rider report that the penalty for unlicensed riding in Virginia was a "fine of $35 plus two points on your record," one unlicensed rider shrugged and said "that's not bad." As noted, many riders assumed any penalties would be waived once a license was obtained.

3.2.4 Likelihood of Being Caught

Riders in all focus groups generally viewed the chances of being caught without a license as "very low." Because apprehension depended on secondary enforcement, riders pointed out that it "depends on what you're riding and what you're wearing." A Virginia participant noted that "Day-Glo guys on crotch rockets are sure to be pulled over," and concluded that "If you don't fit that image, you aren't likely to be caught."

A few unlicensed motorcyclists claimed they rode more carefully because they didn't have licenses. Every state produced at least one rider who had been stopped (or had a friend who had
been stopped) without getting a ticket for being unlicensed. The all-time champion was the unlicensed California rider who claimed to have been stopped ten times without being cited.

3.3 LICENSING PERCEPTIONS OF POLICE OFFICERS

In each focus group location, police officers from state and local jurisdictions were invited to participate in discussions of the motorcycle licensing problem. Officers shared their perceptions regarding the problem, suggested potential solutions, and reviewed potential public-information materials. Key police observations regarding the licensing problem are summarized below.

3.3.1 Awareness of the Law

Officers from all jurisdictions were unanimous in their view that the unlicensed motorcyclists that they stopped "...knew the law" and "...knew that they were breaking it."

Typical excuses offered by unlicensed motorcyclists were "I just bought the bike" mentioned by Texas officers; "I'm on my way to the DMV" (Virginia); "I only ride part of the year" (Ohio); "I don't have the money for insurance" (Texas); and "I'm riding out my permit" (California – where permits are good for a year and are renewable).

3.3.2 Perceived Size of Problem

Officers in most jurisdictions guessed that roughly 25% of the riders they stopped were unlicensed. California officers estimated a range between 20% and 40% and were surprised to learn that 65% of the state’s fatally injured riders were unlicensed. The estimate of officers in Ohio and Virginia were fairly close to their state’s actual experience with unlicensed fatalities (26% and 30%, respectively). In both Texas and Ohio, officers observed that the incidence of unlicensed riding was likely to be higher in the urban areas than in the country. San Antonio police officers guessed that approximately 50% of the riders they stopped in the city itself were unlicensed, a figure which is close to Texas’ statewide experience with unlicensed fatalities (48% over the ten-year study period).

3.3.3 Procedures and Penalties

Officers in all jurisdictions reported that they always cited improperly licensed riders. This report did not square with the statements of several unlicensed motorcyclists in the rider focus groups, who claimed that they were let off with warnings.

Officers tended to split in their use of impoundment as a penalty for unlicensed riding. In Los Angeles and San Antonio, city police officers reported that they routinely impounded bikes. However, State highway patrol representatives in these areas said that they rarely impounded.
California Highway Patrol representatives, for example, reported that they seldom impounded bikes when riders were "out of class" but always impounded when a rider had a suspended or revoked license. Officers in Ohio and Virginia said that they always impounded the bikes of unlicensed riders, although the county sheriff's representative in Virginia noted that the would "let a few riders push their bikes home rather than tow them."

Average first-time fines for unlicensed riders in the jurisdictions sampled ranged from $50 plus court costs in Virginia to $100 in Ohio. Officers from all jurisdictions noted that judges were likely to reduce the fine or drop it altogether if riders showed up in court with a valid license.

3.3.4 Other Problems

Motor officers in California, Ohio and Virginia observed that the lack of a proper license could cause motorcyclists to run from patrol officers, and noted that a high percentage of the riders apprehended after high-speed pursuits lacked a valid license. This observation helps to explain the disproportionate incidence of unlicensed riders in accident statistics.

3.3.5 Potential Solutions

The officers interviewed suggested a number of potential solutions to the problem of unlicensed riding. All groups proposed tying registration to licensing, so that plates would only be issued to licensed riders. At a minimum, an Ohio officer suggested, plates issued to riders who were unable to show proof of licensing should be colored differently so that officers could recognize them. They also suggested arranging insurance rebates for licensed riders or riders who complete the basic MSF course. Officers in Virginia and California suggested waiving the riding test for bikers passing the MSF course.

In three of four jurisdictions, police officers advocated stiffer penalties (with mandatory impoundment of bikes); coupled with more consistent administration of penalties by the judicial branch. Officers also suggested that dealers should not be allowed to sell bikes to unlicensed riders. At a minimum, a Virginia officer suggested, dealers should be required to advise purchasers in writing of the need for a license.

Other solutions suggested by officers included:

- A media campaign (Texas);
- Introduction of material in driver's education classes (Ohio); and
- Education of parents as the responsible parties.
4.0 POTENTIAL PUBLIC INFORMATION APPROACHES

4.1 REACTIONS OF FOCUS GROUP PARTICIPANTS

In the course of the focus groups, patrol officers and motorcyclists were asked to react to fifteen different posters displaying a variety of messages regarding the need for motorcycle licensing. Their observations in response to these messages served to indicate promising and unpromising approaches to public information campaigns designed to increase the incidence of motorcycle licensing.

4.1.1 Promising Themes

Focus group participants reacted most positively to messages which stressed the legal penalties for riding without a license, particularly impoundment and fines. The poster receiving the highest approval rating, shown in Exhibit 4.1, depicts an unlicensed rider in the act of receiving a ticket and having his bike towed. Out of over 100 viewers, 98% approved of the poster, which was felt to be a realistic portrayal of the penalties faced by an unlicensed rider. The sight of a bike on the hook of a tow truck made an indelible impression on motorcyclists, and never failed to elicit horror stories of bikes damaged in the hands of callous tow truck operators. The poster jolted several unlicensed riders who hadn't realized that their bikes might be impounded if they were stopped by the police.

Other posters receiving high approval ratings were a picture of a wallet showing a motorcycle license and the money which would be lost if the wallet didn't contain the license (96% approval); a picture of an adult motorcyclist in all leathers riding a child's tricycle with the caption "The only cycle you can ride without a license" (87% approval); and David Letterman's Top Ten Reasons for getting a motorcycle license (86% approval). The top ten reasons were:

10. It's the LC (Legally Correct) thing to do
9. Your budget can't spare an extra $200 for a fine
8. It's nifty getting mail from the motor vehicles department
7. Watching your new bike being impounded makes you cry
6. You're nervous in front of judges
5. It's hard to wow babes on a bicycle
4. The organ donor bank is full up
3. Your girlfriend will get upset if Mom has to drive
2. You're allergic to road rash; and
1. Flashing red lights stress you out
EXHIBIT 4.1
MOST POPULAR POSTER

Don't Be Left Hanging...

Get Endorsed!
4.1.2 Neutral Approaches

Riders and police officers tended to be neutral toward posters which simply informed riders of the need to be licensed. (Only 45% reacted positively to a poster stressing that a motorcycle license was "not optional equipment," while 42% approved of a Road-Ready check list which included a motorcycle license.) Officers believed that most riders were already aware of this obligation, an opinion borne out by the licensed and unlicensed focus group participants. In any event, themes which stress the legal penalties for unlicensed riding implicitly incorporate the message that a license is needed.

4.1.3 Unpromising Themes

Both licensed and unlicensed riders rejected poster themes which suggested that unlicensed riders were less skilled or had more accidents than licensed riders. They argued that passing a simple off-road test and getting an endorsement didn't have anything to do with one's riding skill. While most riders believed that formal training courses could help motorcyclists avoid accidents, they universally disapproved of posters which depicted accidents or linked licensing with safer riding. They were also extremely sensitive to the image of motorcyclists presented in posters and captions.

A poster violating nearly every principle enunciated by the focus group participants appears in Exhibit 4.2. This poster, entitled the UNLICENSED and modeled after old B-movie advertisements, presents an unflattering image of motorcycle gangs and suggests that unlicensed riders are more likely to wind up "mangled messes of steel" with "boulevard rash." This proved to be the least popular of the posters shown to focus group participants – not one of the hundred-odd viewers rated it positively. Nonetheless, the spirited discussions of the poster and its contents provided invaluable guidance for professionals charged with the development of a successful public information campaign.
Never before on screen have you witnessed the blood-curdling terror wreaked by so many unlicensed motorcycle riders. Grip your seats and prepare yourself for the curse of...

THE UNLICENSED

Get Out of Their Way—If You Can

WINCE at the sight of the mangled bodies of the innocents

GASP at the humongous fines they pay

CRINGE at the damage they inflict on the innocent

RECOIL at the speed at which their bikes are impounded

PLAYING ON STREETS ACROSS THE NATION

SPONSORED BY THE UNITED STATES MOTORCYCLE LICENSING CAMPAIGN

NO ONE UNDER 18 ADMITTED

RATED CLASS M
4.2 MATERIALS DEVELOPMENT

Following the focus groups, the SYSTAN/Roanoke team developed a set of themes that stressed the legal penalties for unlicensed riding, particularly the threat of impoundment. These themes were incorporated in a variety of campaign materials designed to discourage unlicensed riding. The mix of campaign materials included:

- **Logo.** A logo was prepared uniting all materials under the title "Campaign to License America."

- **Posters.** Two posters were developed for dissemination through dealership, state licensing agencies, manufacturers, motorcycle and highway safety programs, insurance companies, and other organizations. The lead poster featured a picture of a motorcycle being ticketed while his bike dangles from a tow truck and his girlfriend looks on. (See Exhibit 4.3.) A second poster depicted a wallet containing a motorcycle license with the admonition put this (the license) in so you won't lose this (the wallet's money).

- **Brochure.** A foldout brochure was produced featuring the "hanging bike" artwork of Exhibit 4.3 and outlining the scope of the problem, the penalties and the risks run by the unlicensed rider.

- **Flyers.** Single-sided and two-sided flyers featuring the artwork were prepared for use by state licensing agencies.
Don't Get Towed.

If you are caught riding your motorcycle without a valid license, you could be in for quite a surprise: the law allows your motorcycle to be towed away!

Get Licensed.
• **Instructional Video.** A five-minute instructional video was prepared to educate law enforcement personnel regarding the seriousness of the problem; stress the need for strict enforcement; and suggest avenues for educating the public.

• **Video News Release.** A five-minute video news release was prepared addressing the problem of unlicensed riding and stressing the program themes. The news release was bounced by satellite throughout the U.S.

• **Audio News Release.** An audio news release was developed echoing the material in the video news release.

• **A thirty-second jingle.**

  A jingle, “Tow Jam Blues,” was developed for incorporation into public service announcements. The following words were delivered in a folksy narrative style, accompanied by acoustic guitar.

  TOW JAM BLUES

  "Well, I was rollin’ down the road
  Givin’ my chopper some air.

  A policeman comes up and says,
  "Pull over there."

  "May I see your license?"
  I said "Why sure."

  He says, "This aint’ the license
  I’m a lookin’ for."

  Well the tow truck rolled up
  And they put my bike on a sling

  And they hoisted it high
  And it started to swing

  And as the tow truck rolled off
  And went over the hill,

  I said, "I’m too tough to cry
  But I think I will."

  Don’t you get towed. Ride Licensed.
  A public service message from the U.S. Department of Transportation.
• **Radio Public Service Announcements.** 30-, 60-, and 90-second radio PSAs featuring the "Tow Jam Blues" were scripted, produced, and distributed to 1400 radio stations;

• **Television Public Service Announcement.** A TV PSA featuring the "Tow Jam Blues" was produced under a separate contract with the California DMV and distributed to TV stations throughout the state; and

• **Advertising Slicks.** One-quarter, one half, and full-page advertising slicks were developed from the posters, brochures, and other print materials used in the campaign.

### 4.3 POSTSCRIPT

#### 4.3.1 Materials Distribution

Distribution of the campaign materials took place over a three-year period from mid-1994 to mid-1997. The TV psa was distributed to California TV stations in May, 1994. Brochures, posters, and flyers were distributed by NHTSA through state motorcycle programs between 1994 and 1995. Radio public service announcements were mailed to 1400 stations throughout the U.S. in April 1997.

#### 4.3.2 Subsequent Unlicensed Fatality Levels

No attempt was made to assess the effectiveness of the campaign materials by tracking public awareness of specific messages or attempting to isolate the campaign's impact on unlicensed riding. However, it is instructive to track the incidence of unlicensed fatalities over the period before, during, and after campaign implementation.

**California Levels.** Exhibit 4.4 tracks the incidence of unlicensed motorcycle fatalities over the ten-year period between 1989 and 1998. After averaging 65% during the ten-year period preceding 1991, the percentage of unlicensed riders among California motorcycle fatalities dipped below 60% for the first time in 1993, hovered around 58% for three years, and dropped from 58% to 47% over the three-year span of the licensing campaign before registering its lowest level in the past two decades, 40.7%, during 1998.

In addition to the licensing campaign, another factor influencing unlicensed riding in California over the period in question was the passage of AB 229, which made successful completion of the basic rider course offered by the California Motorcyclist Safety Program (CMSP) an acceptable substitute for the skill test required for licensing by the California DMV.
### EXHIBIT 4.4

**INCIDENCE OF UNLICENSED MOTORCYCLE FATALITIES OVER TIME**
**CALIFORNIA, 1989 – 1998**

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<tr>
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<td><strong>%INVALID</strong></td>
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<td>58.9%</td>
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<td>46.9%</td>
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<table>
<thead>
<tr>
<th>TRAINING</th>
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<tr>
<td>MANDATORY HELMET LAW</td>
<td>PSAS, FLYERS, BROCHURES, POSTERS DISTRIBUTED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNDER 18 (1987)</td>
<td>&gt;&gt;&gt;&gt;&gt;&gt;&gt;</td>
<td>&gt;&gt;&gt;&gt;&gt;&gt;&gt;</td>
<td></td>
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<tr>
<td>UNDER 21</td>
<td>&gt;&gt;&gt;&gt;&gt;&gt;&gt;</td>
<td>&gt;&gt;&gt;&gt;&gt;&gt;&gt;</td>
<td></td>
</tr>
<tr>
<td>PROOF OF INSURANCE REQUIRED</td>
<td>AB 229 SKILL TEST</td>
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*Numbers from the "Unknown" category are not included in the calculation of the "INVALID %."
In focus groups undertaken by SYSTAN for NHTSA and the DMV, licensed and unlicensed riders alike ridiculed the riding test administered by the California DMV. One rider noted that if you rode your bike to the test site you had passed a much more stringent test than the one administered by the examiners. Riders also complained that the circle portion of the "lollipop" test course was too difficult to negotiate on a large bike. One woman had renewed her learner’s permit every year for seven years rather than attempt the skill test on her 750cc Yamaha.

To the extent that contempt for or fear of the DMV skill test kept riders from getting a valid motorcycle license, AB 229 offered an alternative that could possibly reduce the incidence of unlicensed riding in California. The early impact of the law on CMSP training suggested that many veteran riders were taking the course in order to waive the skill test and obtain a valid license. During 1994, the first year under the provisions of AB 229, the age and experience level of riders taking the basic CMSP course rose significantly. The average age of students taking the basic course rose from 30 to 33, and the percentage of students reporting past riding experience increased from 25% to 29%. These changes suggest that AB 229 had significant impact in lowering the number of California’s unlicensed riders and in influencing the decline in unlicensed fatalities documented between 1994 and 1998. It is impossible to separate the impact of this law from the impact of the concurrent licensing campaign.

**National Levels.** At the nationwide level, the incidence of unlicensed fatalities, which had averaged 42% of all motorcycle fatalities in the decade prior to 1991, had dropped to 21% in 1995 and reached a low of 18% in 1997, the final year of the "Campaign to License America." Again, there has been no attempt to document any causal impact the campaign might have had on the concurrent decline in the incidence of unlicensed fatalities. Given the pronounced drop in this incidence at both the state level in California and the national level, however, it is difficult to believe that the campaign did not have a positive impact on motorcycle licensing.