



Emerging Opportunities for ATSSA
Members in
Motorcycle Safety





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1 –EXECUTIVE SUMMARY

The purpose of this report is to provide business ideas and opportunities exclusively for ATSSA members as they apply to motorcycle safety.

The many issues addressed in this report, and the details associated with them, are expanded in detail throughout the text. Additionally, numerous European roadway safety devices and features not seen or used in the U.S. are also provided to illustrate what is being done outside of the U.S. to help drive down the number of motorcycle-related injuries and fatalities. ATSSA members who have a desire to immediately become more actively involved with motorcycle safety and the business, outreach and community opportunities associated with motorcycles on our nation's roadways, should consider visiting the "Getting Involved" or the "Resources in Motorcycle Safety" chapters of this report first, then explore the remainder of this report in greater detail at their leisure.

2 – INTRODUCTION AND MARKET ASSESSMENT

Motorcycles and “motor scooters” are everywhere, and with a relatively low operating cost, a motorcycle is an affordable (and fun) alternative to the automobile if driven responsibly and safely.

One of the benefits of motorcycles includes access to HOV lanes during rush hour. These lanes are generally open to motorcycles at all times, resulting in a quicker commute. Motorcycles are easy to park and they save gasoline. On weekends, more and more Americans turn to their motorcycles as a hobby for touring, recreation, relaxation and networking with others who share their same passion. It’s a fact that motorcycle use in the United States is popular and it continues to rise.

So, as millions of men and women take to our nation’s roadways on motorcycles, how can ATSSA members make America’s roadways even safer for those on two-wheels?

A motorcycle safety “Scan Team,” led by the Federal Highway Administration and the American Association of State Highway and Transportation Officials, traveled to Europe in September 2010. The purpose of the journey was to examine how several European countries are already making their roadways safer – specifically for motorcyclists – and how some of those practices could possibly be adopted in the United States¹.

An ATSSA representative was present on the scan team that included representatives from several state DOTs, the University of Virginia, the American Motorcyclist Association and other roadway safety partners. During the scan tour, the team was briefed by transportation officials in Norway, Germany, France, Belgium and England on motorcyclist training, safety and infrastructure issues. Although the official U.S.-DOT final report from the scan tour isn’t expected to be published until the fall of 2011, this preliminary report – prepared especially for ATSSA members – provides what could be several member business opportunities that were observed on the scan tour.

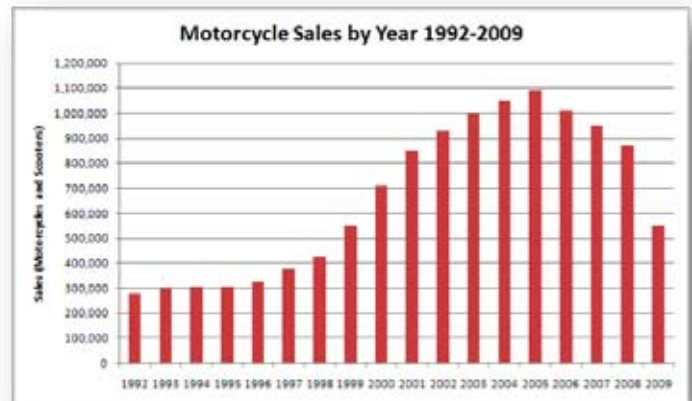
This report surely cannot capture all of those resources – but it will hopefully inspire many ATSSA members to seek new business opportunities aimed at motorcyclists. This report also contains several ways for ATSSA members “To Advance Roadway Safety” for motorcyclists such as participating in

1 The official final report of the Scan Team is expected to be released by the U.S.-DOT in late 2011.

Road Safety Audits and other activities. These ideas are covered in the “Getting Involved” section of this report.

Also, to assist ATSSA members in understanding the potential for business opportunities in motorcycle safety, it is important to know the size of the market.

The U.S. motorcycle “market” is estimated to be about \$14.6 billion today and is expected to reach \$21 billion by 2011.² The chart below reflects the trend of motorcycle sales from 1992-2009. A report³ released by the Governors Highway Safety Association (GHSA) on April 22, 2010 reveals that “motorcycle fatalities declined in 2009 by at least ten percent. Based on preliminary data, GHSA projects that motorcycle fatalities declined from 5,290 in 2008 to 4,762 or less in 2009. The projection is based on data from 50 states and the District of Columbia. The declines come on the heels of **11 straight years of dramatic increases in motorcyclist deaths.**”⁴ With such a large number of motorcycles on American roadways, safety improvements for motorcyclists should always be considered when building or improving roadways.



USA 2009 Motorcycle Safety Facts⁵

- 4,462 motorcyclist fatalities and 90,000 injuries
- 35% of all motorcyclists involved in fatal crashes were speeding

2 State-of-the-Cruiser Address Optimism Gets a Caution, Motorcycle.com, Apr. 28, 2008

3 Motorcyclist Traffic Fatalities by State®, prepared for the Governors Highway Safety Association by Dr. James Hedlund, Highway Safety North

4 GSHA press release dated April 22, 2010, “New Study: Motorcycle Deaths Down Dramatically in 2009
“Fatalities Decline at Least 10%; First Drop in 12 Years”

5 NHTSA Traffic Safety Facts, Motorcycles, 2008 Data and NHTSA National Occupant Protection Use Survey

- 22% of all motorcyclists involved in fatal crashes had invalid licenses
- 36% of motorcyclists killed had a BAC >0.08
- 67% of motorcyclists wear helmets

The demographics of new riders are as follows:⁶

Age

20 years and younger	1%
21-25	7%
26-30	9%
31-40	22%
41-50 ⁷	30%
51-60 ⁸	23%
61-70	7%
71 and older	1%

Gender

Male	90%
Female	10%

Marital Status

Married	65%
Single (never married)	17%
Widowed	2%
Divorced/separated	16%

Crash Rates

According to the Federal Highway Administration, *“The number and rate of motorcyclist deaths on U.S. roads are rising dramatically. Motorcycle rider fatalities rose 115 percent between 1997 and 2005. During the same time, fatality numbers and rates for passenger car crashes dropped. In just one year - 2005 - motorcycle crash-related fatalities increased by 13 percent (to 4553), making motorcycle rider fatalities a significant contributor to the slight overall increase that year in the national highway fatality rate.*

Trends accompanying the rising motorcyclist death toll include a dramatic increase in motorcycle ownership, particularly by riders over 40, along with changes in other factors such as

⁶ An in-depth study on the new bike buyer, [Powersports Business, Market Data Book 2007](#)

⁷ Riders beginning to experience a need for brighter, clearer signage – especially at night.

⁸ As with the previous age group, riders beginning to experience a need for brighter, clearer signage, especially at night.

motorcycle size and rider experience. The rate of increase in fatalities has outpaced the rate of increase in motorcycle registrations, and the death and injury rates among middle-aged motorcycle riders have increased more rapidly. Per vehicle mile traveled in 2004, motorcyclists were about 34 times more likely than passenger car occupants to die in motor vehicle traffic crash and 8 times more likely to be injured.

Motorcycle riders face more risks of crashing and being injured than passengers in four-wheeled vehicles. Two-wheeled motorcycles are more difficult to operate and more unstable than four-wheeled cars and trucks. Some roadway design and maintenance features add additional risks. Other vehicle drivers may not expect to see motorcycles on the road, may not watch for them, and may not know how to accommodate them in traffic. And when they crash, motorcycles provide almost no protection to their riders.”

ATSSA members can make significant contributions “To Advance Roadway Safety” for motorcyclists, and the information contained in this report will hopefully assist ATSSA members in getting a business opportunity “jump-start” that focuses on making roadways safer for motorcyclists. The report also encourages ATSSA members to become actively involved in motorcycle safety-related issues and programs in their local communities.

3 – THE “VISION ZERO ROADWAY” IN NORWAY

In Europe, motorcycles – or “*Power Two Wheelers (PTWs)*” as they are called – are everywhere, and Europeans attempt to make their roadways more accommodating and safer for all of them. The scan team had several opportunities to study roadways in the countries that they visited, and to learn how European roadways are made safer, specifically for motorcyclists.

In Telemark, Norway for example, PTWs frequent a winding and hazardous stretch of Route 32 (from Solvika, Siljan to Gjerpen Church, Skien) for the challenges and thrills that lie within the road’s curves. Unfortunately, this nine-mile stretch of Route 32 is also notorious for motorcycle crashes.

To help save lives, Norway adopted a “Vision Zero” approach to this stretch of roadway that takes into consideration the safety of the motorcyclists, as well as those who travel the road in automobiles.

According to a press release posted by Motorcycle.com on May 21, 2008, “*One of the main purposes of (Norway’s) Vision Zero Motorcycle Road is to show that the Vision Zero philosophy includes all motorists, including those on two wheels.*”

To make the roadway safer – rocks, shrubs, trees and other obstructions were removed in corners and at the road’s edge to improve the line of sight. Signposts and light poles were repositioned behind guardrails. Special motorcycle guardrails were installed in curves, clear zones were widened and lighting was installed in various locations.

Figures 1 through 3 are examples of the Norwegian “Zero Fatality Roadway.” The detailed PowerPoint presentation that was presented to the motorcycle scan team in Norway regarding this road is posted at the “Roadway Safety Outreach” link of ATSSA.com. The presentation has many before and after photographs of roadway safety improvements that were made.

It was also observed that there was no use of centerline or edgeline rumble strips on this roadway. Brighter signage, wider edgelines and reflective stripes and pavement markings would have further improved the safety on this roadway.

In the U.S., similar examples of making roadways even safer



Figure 1
Crosswalk lighting (Norway)
Photo – Bjorn Richard Kirste, Per Harald Hermansen



Figure 2
Chevrons on Route 32 (Norway)
Photo – Bjorn Richard Kirste, Per Harald Hermansen



Figure 3
Installing polyethylene on Route 32 (Norway)
Photo – Bjorn Richard Kirste, Per Harald Hermansen

for motorcyclists are now emerging.

In rural Virginia for example, Route 211 is a hilly, curve-filled approach to the Shenandoah National Park's famous Skyline Drive. Like Norway's Route 32, this route is extremely popular with motorcyclists who not only find the route scenic – they also find the countless hair-pin turns a tremendous challenge.

Attempts to make this high crash-rate route safer for motorcyclists were recently made, through an effective use of signage, rumble strips and warning pavement markings ahead of the curves – specifically targeted to warn motorcyclists of approaching hazards.

The cover photo of this report is another example of targeting motorcyclists with a safety message.

The cover shot features a motorcycle safety sign in-use in Texas. The new sign was unveiled on a route called "Three Sisters" – a popular hilly Texas route – on October 26, 2010. A ceremony marked the unveiling of the signs that were welcomed by representatives from the Texas-DOT, Texas State Police, local police, emergency responders and numerous motorcyclists.

4 – EUROPEAN ROADWAY SAFETY DEVICES AND FEATURES

Motorcycle Specific Guardrail

One of the biggest safety devices – *targeted specifically to benefit motorcyclists in Europe* – are “Motorcycle Guardrail” systems that are found in curves or in locations with a high-crash rate (Black Spots). There is a widespread application of this roadway safety device in countless locations throughout Europe.

These guardrail systems (Figures 4 through 8) feature a solid, flat beam across the bottom, manufactured in either metal or by a series of horizontally-run polyurethane tubes (Figures 9 through 11). The purpose of the lower beam is to prevent the motorcyclist from striking the vertical guardrail posts while sliding across the road surface following a crash.



Figure 6
France
Photo – J. Baron



Figure 4
Germany
Photo – Uwe Ellmers



Figure 7
Germany
Photo – Uwe Ellmers



Figure 5
France
Photo – J. Baron



Figure 8
Box Beam (Germany)
Photo – Uwe Ellmers



Figure 9
Belgium
Photo – Phillip Guillaume



Figure 10
Norway
Photo – J. Baron



Figure 11
Norway
Photo – J. Baron

Research is ongoing with these systems to determine what physical damage actually occurs to the motorcyclist who comes in contact with one of these devices. The scan team had the opportunity to witness a crash test of this type at the French National Institute for Transport and Safety Research (Figure 12), in which a crash test dummy was projected into the device at 60 kph (37.28 mph). These systems are tested for structural stability and survivability of the motorcyclist in accordance with European standards.



Figure 12
Members of the FHWA/AASHTO Motorcycle Scan Team witnessed the crash test of a “dummy” into a motorcycle guardrail at 60 km/h at the French National Institute for Transport and Safety Research in September 2010.
Photo – J. Baron

As for research in the U.S., according to the Federal Highway Administration, “Any time a motorcyclist leaves the roadway unintentionally there is likely to be severe consequences. Even the ‘safest’ barriers can cause serious injury whether the motorcyclist is still on his/her bike or they are sliding/rolling on the pavement. Although there are many barrier modifications being used in Europe intended to moderate the severity of impact with guardrail posts, FHWA does not yet advocate the use of any such modifications on the NHS. As of fall 2010, there are two research projects underway that will analyze motorcycle crashes in depth. One is a general study of motorcycle crash causes, while the other is specifically targeting motorcycle impacts with roadside barriers. When these studies are completed, we hope to have information that will help us to determine the nature of motorcycle impacts with barriers, and whether or not the barriers can be redesigned without adversely affecting the good performance we have experienced with four-wheel passenger vehicle impacts to date.”⁹

⁹ FHWA memorandum dtd Nov. 3, 2010, subject: ACTION: Application and Installation of Roadside Hardware

Another detailed and interesting study titled, *“The Risk of Fatality in Motorcycle Crashes with Roadside Barriers,”* by Hampton C. Gabler of Virginia Tech, is posted at the “Roadway Safety Outreach” link of ATSSA.com.

To address the snow-plow damage issue (Figure 13) that occurs on these devices when the two beams – top and bottom - are mounted “flush” together, the lower beam is recessed (Figures 14 and 15) to prevent damage from occurring.



Figure 13

Snowplow damage to motorcycle guardrail – lower rail (Norway).
Photo – Bjorn Richard Kirste, Per Harald Hermansen

Figures 16 through 19 are example drawings of both the “flush” and the recessed European motorcycle guardrail systems.

Another guardrail enhancement observed on the scan tour was the use of reflective red and white sheeting that was applied to the top of guardrails in curves in Germany (Figures 20 and 21) to alert motorcyclists of potential hazards.

Pavement Markings and Treatment

Several different types of pavement markings and surface treatments were noted on the scan tour. These included colored pavement areas (Figure 22) that warn motorcycles – and all motorists for that matter – to exercise caution in the approach to a curve. Figures 23 and 24 show a double, continuous line into a roadway curve in Germany. The double line helps keep the motorcyclist in his/her lane.



Figure 14

Norway

Photo – Bjorn Richard Kirste, Per Harald Hermansen



Figure 15

Germany

Photo – Uwe Ellmers

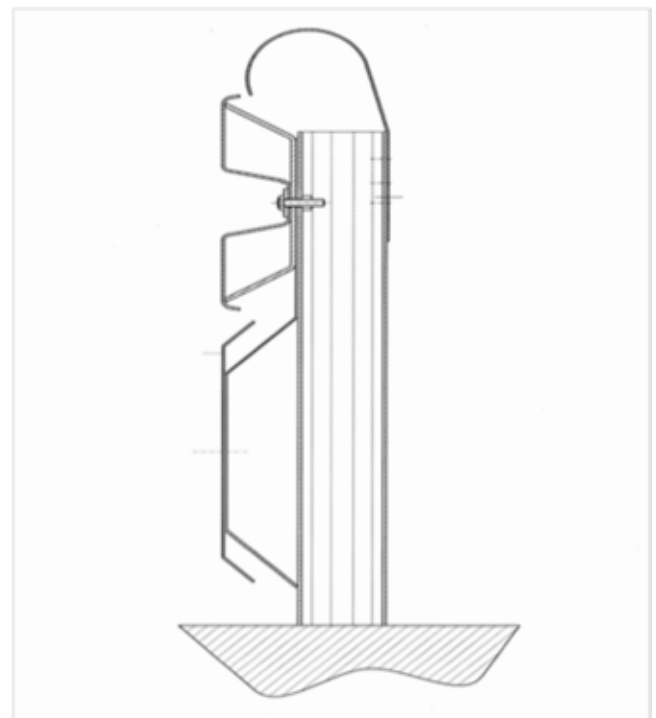


Figure 16

Germany

Photo – Uwe Ellmers

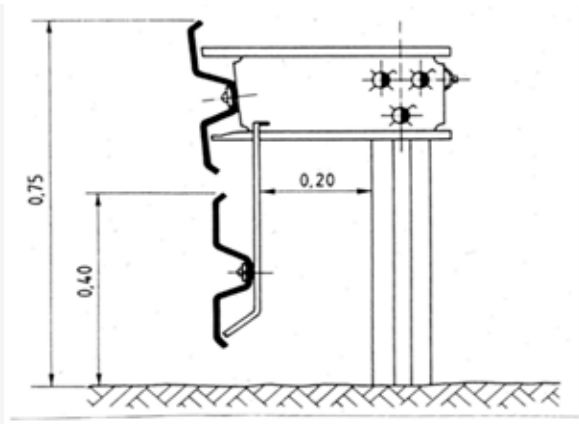


Figure 17
Germany
Photo – Uwe Ellmers



Figure 20
Reflective white and red sheeting is applied to the top of motorcycle guardrail in a curve. Image from EuroRAP's Barrier to Change: Designing Safe Roads for Motorcyclists.
Photo – ADAC, Germany

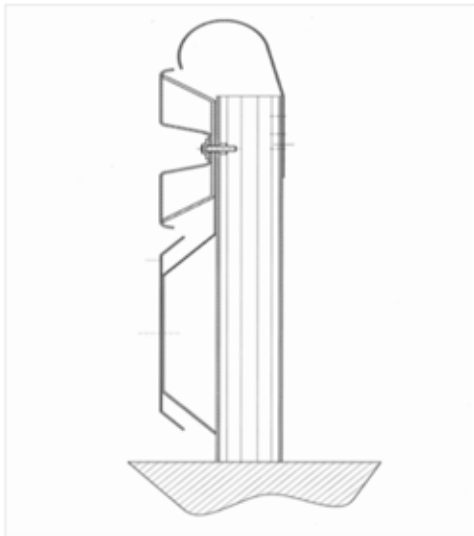


Figure 18
Germany
Photo – Uwe Ellmers



Figure 21
Germany
Photo – Biker Union E.V.

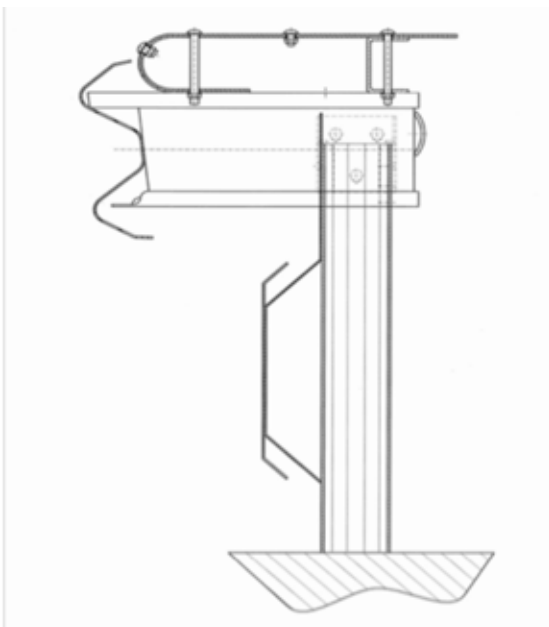


Figure 19
Germany
Photo – Uwe Ellmers



Figure 22
Red paint on pavement warns for caution in a dangerous curve (from EuroRAP's Barrier to Change: Designing Safe Roads for Motorcyclists).
Photo – Cheshire County Council, UK



Figure 23
Double, continuous line in a curve.
Photo – Biker Union, E.V.



Figure 24
Double, continuous line in a curve (Germany).
Photo – Andreas Hegewald



Figure 25
Rumble strip (Germany).
Photo – Andreas Hegewald



Figure 26
“Football” shaped edged centerline rumble strips (Germany).
Photo – Andreas Hegewald

Figures 25 and 26 are two separate examples of rumble strips. The latter of the two – a “football” shaped rumble strip – was reported to be more “forgiving” for motorcyclists.

Figure 27 shows a pavement marking that achieves skid resistance by “trowling” the surface after it has been heated.



Figure 27
Pavement marking with a “textured” surface for skid-resistance achieved by “trowling” heated thermo (Belgium)
Photo – Benoit Dupriez

Figure 28 shows a “motorcycle friendly” crosswalk in Belgium, where the authorities there specify a .5-meter gap to allow motorcycles to pass through, and Figures 29 through 31 show examples of lanes that are specifically for motorcycles, or those lanes that permit motorcycle travel within them. Although not part of the scan tour, Figure 32 shows an example of “Frisbee-style” reflectors in use in an Italian taxi/bus lane to help keep motorists and motorcyclists separated each in their respective lanes.



Figure 28
In recognition of the effects of slick pavement markings, the authorities specify a 0.5 meter “gap” for motorcyclists and bicycles to pass through in this crosswalk (Belgium).
Photo – Benoit Dupriez



Figure 29
Designated motorcycle lanes (Belgium).
Photo – J. Baron



Figure 30
Designated motorcycle lanes (Belgium).
Photo – J. Baron



Figure 31
Motorcyclist in London bus lane (England) Photo – UK Department of Transport DfT publication "Traffic Advisory Leaflet," 2/07, The Use of Bus Lanes by Motorcycles



Figure 32
Italy
Photo – Andy Mayo

Figure 33 is an example of skid-resistant material being applied to the surface of a manhole cover in Belgium. Although not part of the September 2010 European scan tour, Figure 34 (from Australia) and Figure 35 demonstrate the use of a calcium bauxite material applied to the surface of a metal plate cover to increase friction. This same type of material is used to increase friction at high-risk locations to improve braking at curves, intersections, roundabouts and rail crossings. Figure 36 is another type of skid resistant material applied to increase friction and braking capacity in a cloverleaf in Ireland.



Figure 33
Belgium
Photo – Benoit Dupriez



Figure 34
Australia
Photo – Anti-Skid Industry Alliance



Figure 35
Australia
Photo – Anti-Skid Industry Alliance



Figure 36
Ireland
Photo – Anti-Skid Industry Alliance



Figure 37
Delineators in a curve (Germany).
Photo – Biker Union E.V.



Figure 38
Delineators in a curve (Germany).
Photo – Biker Union E.V.



Figure 39
Flexible bollard in a curve versus a rigid sign post (Germany).
Photo – Biker Union E.V.

Signage and Delineation

Figures 37 and 38 are both examples of the use of reflective delineators in curves that provide advanced warning to motorists in virtually any condition – day or night. Figure 39 illustrates a flexible “bollard” warning device in a curve that has replaced a rigid sign post.

Breakaway lattice sign posts/mounts were noted in many areas in Europe. Figure 40 is an example of this type of support system

on an interstate in Norway. Use of these lattice support systems is widespread in the countries visited by the scan team. A motorcyclist is less likely to sustain life threatening injuries from striking lattice structures than other support posts.

Figures 41 and 42 are two examples of signage that warns motorcyclists of upcoming hazards, and Figure 43 is an example a roadside protection device specifically installed to protect motorcyclists in Belgium.



Figure 40
Breakaway lattice on a 100 km/h sign (Norway).
Photo – J. Baron



Figure 41
Belgium
Photo – Morten Hansen



Figure 42
Belgium
Photo – Benoit Dupriez



Figure 43
Belgium
Photo – Aliene Delhaye

Apparel

Potential additional business opportunities for ATSSA members were noted in the area of reflective clothing as seen in Figure 44. Unlike many motorcyclists in the U.S. who dress in nothing more than a t-shirt and blue jeans while riding, most Europeans dress in full protective and reflective clothing.



Figure 44
Norway
Photo – J. Baron

Regarding “conspicuity” in the U.S., NHTSA reports, “One of the easiest and most effective ways for a motorcyclist to be seen by other motorists is by wearing brightly colored, upper-torso clothing and/or retroreflective material. However, only a minority of motorcyclists choose such brightly colored apparel, whether for fashion or other reasons. Social and fashion pressures are apparently a powerful reason for not wearing brightly colored clothing. Although sport bike riders, who imitate racers, have largely accepted bright colors, the larger cruiser category chooses apparel in almost nothing but inconspicuous black. Other categories often choose other hard-to-see colors such as gray, beige, and other neutral colors. The olive-drab and camouflage apparel that the Hurt Report¹⁰ found over-represented in the typical right-of-way-violation crash is still worn.¹¹”

¹⁰ A summary of the findings of the Hurt Report is posted at the “Roadway Safety Outreach” link of ATSSA.com

¹¹ “National Agenda for Motorcycle Safety, Conspicuity,” National Highway Traffic Safety Administration

5 – GETTING INVOLVED IN MOTORCYCLE SAFETY

There are varying points of view regarding motorcycles in general. When roadways and work zones are designed or constructed, they are designed for automobiles – rarely with the motorcyclist in mind.

Personal experience on two-wheels is certainly a plus when helping address the roadway safety needs of motorcyclists, but it is certainly not required. There are several opportunities for ATSSA members – *riders or not* – to become actively involved in advancing roadway safety for motorcyclists.

According to the National Agenda for Motorcycle Safety (NAMS), “Highway safety organizations throughout the United States, public and private, place less emphasis on motorcycle safety when compared with other modes of transportation. Little attention is paid at any level to the impact overall traffic safety has on motorcycle safety.

- The emphasis on motorcycle safety is placed on helmet usage and laws.
- Funding for other motorcycle safety issues is very limited.
- Highway safety publications and public education campaigns rarely focus on motorcycle safety issues.”

NAMS further states that, “Greater emphasis on motorcycle safety by United States highway safety organizations can advance motorcycle safety efforts in a number of key ways:

- Funding for motorcycle safety programs should be increased.
- Motorcycle safety programs should be more widely publicized and promoted. To give motorcycle safety efforts a new legitimacy and urgency, key leaders in the traffic safety community must be well informed about pertinent issues to help those involved in promoting motorcycle safety receive greater support.

Key leaders in the traffic safety community and the motorcycle community can champion motorcycle safety efforts by working with the appropriate highway safety decision-makers. These efforts should lead to a comprehensive application to promote motorcycle safety that can be applied nationwide.

- Develop cooperative arrangements between motorcycle

safety advocates and the media to increase publicity surrounding the issue of motorcycle safety and increase public awareness of drivers’ responsibility to detect and avoid motorcycles.

- Traffic safety organizations outside of the motorcycling community can better influence motorcycle safety issues by becoming more educated about motorcycle safety issues and adopt them where applicable.

- Increase funding for motorcycle safety programs by elevating their importance to state highway safety offices.

- Representatives of the motorcycle safety community should be integrated into the larger highway safety community to improve cooperative efforts.¹²”

On the federal level, the Federal Highway Administration sees a need for greater motorcycle safety. In their “Roadway Safety for Motorcycles” brochure, it is reported, “*Consider motorcyclist safety when designing roadsides. The potential impact on motorcycle riders should be considered in design and placement of roadside safety hardware, clear zones and side slopes, and other roadside safety strategies*”¹³”

At the state level, some states are focusing directly on motorcycle safety through dedicated DOT “motorcycle safety coordinators” who manage public awareness campaigns that include public service announcements on radio, television and on billboards aimed directly at motorcyclists. Several of these programs also include motorcyclist training.

States can also focus more on infrastructure improvements – including signs, stripes, guardrails and crash cushions – and that’s where ATSSA members could contribute significantly with their expertise in roadway safety issues.

Many states address motorcycles in their Strategic Highway Safety Plans. New York, for example, reports “*motorcyclists are among the most vulnerable motorists on the roadways, operating at the same speeds and on the same roads as other motorists, but without the same protection afforded by other*

12 “National Agenda for Motorcycle Safety, **Traffic Safety Community Attitude,**” National Highway Traffic Safety Administration.

13 Roadway Safety for Motorcycles: Tips for Designing, Constructing, and Maintaining Roadways for Increased Motorcycle Safety

types of motor vehicles.” Other states – such as Florida – have stand-alone motorcycle safety strategic plans. Florida’s plan is posted at the “Roadway Safety Outreach” link of ATSSA.com. As of December 2010, 30 states have specifically identified motorcycles as part of the Strategic Highway Safety Plans.

Locally, ATSSA members can help advance roadway safety for motorists by becoming a member of a State DOT “Road Safety Audit” team. These audits can be tailored to address roadway hazards specific to motorcyclists which in turn will improve the safety of all motorists. Partnering with motorcycle advocacy groups, associations and clubs to join in the audits builds a collaborative team dedicated to identifying and mitigating hazards.

According to the Federal Highway Administration, “A Road Safety Audit (RSA) is the formal safety performance examination of an existing or future road or intersection by an independent, multidisciplinary team. It qualitatively estimates and reports on potential road safety issues and identifies opportunities for improvements in safety for all road users. The FHWA works with State and local jurisdictions and Tribal Governments to integrate RSAs into the project development process for new roads and intersections, and also encourages RSAs on existing roads and intersections.

The aim of an RSA is to answer the following questions:

What elements of the road may present a safety concern: to what extent, to which road users, and under what circumstances?

What opportunities exist to eliminate or mitigate identified safety concerns?¹⁴

ATSSA members should consider becoming involved with their local independent, multidisciplinary RSA teams. The first step is receiving RSA team member training. Visit www.nhi.fhwa.dot.gov to find out more. The website also includes all of the information related to hosting and requesting a course. For your planning purposes, the RSA course number is FHWA-NHI-380069.

“SAFETEA-LU, 23 established the Highway Safety Improvement Program (HSIP) as a core federal program. A Strategic Highway Safety Plan (SHSP) is a major component and re-

quirement of the HSIP¹⁵. An SHSP is a statewide-coordinated safety plan that provides a comprehensive framework for reducing highway fatalities and serious injuries on all public roads. The SHSP is developed by the State DOT in a cooperative process with Local, State, Federal, and private sector safety stakeholders. The SHSP is a data-driven, four to five year comprehensive plan that establishes statewide goals, objectives, and key emphasis areas and integrates the four E’s - engineering, education, enforcement and emergency medical services (EMS). The purpose of an SHSP is to identify the State’s key safety needs and guide investment decisions to achieve significant reductions in highway fatalities and serious injuries on all public roads. The SHSP allows all highway safety programs in the State to work together in an effort to align and leverage its resources. It also positions the State and its safety partners to collectively address the State’s safety challenges on all public roads.”¹⁶

Many state SHSPs do contain a motorcycle safety component. A listing of ALL state SHSPs is located at the “Roadway Safety Outreach” link of ATSSA.com.

Finally, in addition to any outside partnerships you may gain with members of the DOT or with other stakeholders in motorcycle safety, ATSSA chapter members should consider inviting those with an interest in motorcycle safety (i.e. members of local motorcycle rider groups) to their local chapter meetings. In Germany, that country’s “Biker Union” has a keen interest in infrastructure improvements to benefit motorcyclists, and members of this group work closely with transportation officials¹⁷.

Other Suggestions

Get to know your local member of Congress who is “motorcycle friendly.” Here is a list of those who currently support safer roads for motorcyclists – <http://www.ama-cycle.org/legisltn/congress>

Another motorcycle safety resource is the National Association of State Motorcycle Safety Administrators. The group is dedicated to serving the needs and interests of state motorcycle safety administrators and programs by advocating motorcycle safety and fostering and promoting the exchange of ideas and resources. The National Association of State Motorcycle Safety Administrators has representatives in every state and a full list is located at http://www.smsa.org/membership/state_listing

Consider contacting the local representative in your area to see how you can become involved in advancing roadway safety for motorcyclists in your area.

¹⁵ All State Strategic Highway Safety Plans are available at the “Roadway Safety Outreach” link of ATSSA.com

¹⁶ <http://safety.fhwa.dot.gov/hsip/shsp/>

¹⁷ The Biker Union PowerPoint presentation that was presented to the FHWA/AASHTO motorcycle Scan Team is located at the “Roadway Safety Outreach” link of ATSSA.com

¹⁴ <http://safety.fhwa.dot.gov/rsa/>

6 – RESOURCES FOR MOTORCYCLE SAFETY

(All of these resources are posted at the “Roadway Safety Outreach” link of ATSSA.com)

Motorcycle Safety Foundation
<http://online2.msf-usa.org/msf/Default.aspx>

The National Agenda for Motorcycle Safety
<http://www.nhtsa.gov/people/injury/pedbimot/motorcycle/00-NHT-212-motorcycle/toc.html>

Personal Protection Gear
<http://www.nhtsa.gov/people/injury/pedbimot/motorcycle/00-NHT-212-motorcycle/human27-29.html>

Metropolitan Planning Organizations (MPO)
Metropolitan Planning Organizations are responsible for planning, programming and coordination of federal highway and transit investments in urbanized areas. Within your local MPO, you may find a motorcycle safety coordinator to partner with. A complete list of MPOs can be found here –
http://www.bts.gov/external_links/government/metropolitan_planning_organizations.html

These additional resources are also posted for your convenience at the “Roadway Safety Outreach” link of ATSSA.com –

Federal Highway Administration “Roadway Safety for Motorcycles” Brochure

National Council on State Legislatures Transportation Review: Motorcycles

National Conference of State Legislators produced a report titled, “Transportation Review: Motorcycle Safety,” that provides an overview of motorcycle safety, including federal regulations and guidelines, information about state policy and laws that address motorcycle safety, and the effectiveness of those laws.

Summary of Findings Contained in the Hurt Report

The Hurt Report is a motorcycle safety study initiated in 1976 and published in 1981. The report is named after its author, Professor Harry Hurt. The report has been described as “the most comprehensive motorcycle safety study of the 20th century.”

Motorcycle Accidents in Depth Study – MAIDS

The MAIDS (Motorcycle Accidents In Depth Study) report is a large-scale, comprehensive study of Powered Two Wheelers (PTW, i.e., motorcycles, scooters and mopeds) accidents carried out across five European countries, using both accident and exposure cases. The study is the most comprehensive

in-depth data currently available for Powered Two-Wheelers (motorcycle) accidents in Europe. The investigation was conducted during three years on 921 accidents from five countries.

PowerPoint Presentation: Roadway Safety Measures on the Motorcycle “Vision Zero” Section of Route 32 Telemark, Norway

The Risk of Fatality in Motorcycle Crashes with Roadside Barriers (Paper Number 07-0474)

Hampton C. Gabler, Virginia Tech

Traffic Safety Facts - Motorcycles

Individual State “Strategic Highway Safety Plans”

7 – HELPFUL EXTERNAL LINKS

American Motorcyclists Association
www.ama-cycle.org

Insurance Institute for Highway Safety
www.iihs.org

Minnesota Motorcycle Safety Center
www.motorcyclesafety.state.mn.us/latest/MMSCHome.asp?cid=2

Motorcycle Riders' Foundation
www.mrf.org

National Transportation Safety Board
www.nts.gov/Surface/highway/highway.htm

NHTSA's motorcycle safety program
www.nhtsa.gov/Safety/Motorcycles

Federal Highway Administration Motorcycle Website
<http://www.fhwa.dot.gov/motorcycles>

TRB Committee Roster (Motorcycles and Mopeds – ANF-30.
(This committee is concerned with all aspects of motorcycles and mopeds, including the operator, the vehicle, and the transportation environment).
<http://www.trb.org/CommitteeandPanels/OnlineDirectory.aspx#DetailsType=Committee&ID=1570>



