Motorcycle Safety Through Licensing, Education, and Enforcement

2008 Herman Goldstein Award for Excellence in Problem-Oriented Policing
May 30, 2008

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Dear Dr. Guerette:

It is with great pleasure that I submit the Washington State Patrol’s “Motorcycle Safety Through Licensing, Education, and Enforcement” project for consideration for the 2008 Herman Goldstein Award for Excellence in Problem-Oriented Policing.

As outlined in the submission instructions, our project is submitted in electronic (PDF) format as an e-mail attachment.

By this letter, I attest to the project’s methodology and verify that the project results are accurate and directly attributable to the project.

In addition to nominating this project for award consideration, I ask that it also be considered for presentation at the 2008 POP Conference.

If you have any questions about this project, please contact Lieutenant Michael L. Turcott, Field Operations Bureau, at (360) 596-4124.

Sincerely,

CHIEF JOHN R. BATISTE

JRB:tlu

cc: Captain William F. Hilton, Field Operations Bureau
    Lieutenant Michael L. Turcott, Field Operations Bureau
    Assistant Chief Brian A. Ursino, Investigative Services Bureau
    Assistant Chief Les M. Young, Field Operations Bureau
Motorcycle Safety Through Licensing, Education, and Enforcement
In the fall of 2005, the Washington State Patrol (WSP) became concerned with the increasing number of motorcycle fatalities occurring within the state of Washington. The year ended with 74 motorcycle fatalities, the highest number since Washington reinstated its motorcycle helmet law in 1990—and an increase of 164% since 1997.

As a Problem Oriented Policing (POP) agency since the late 1990s, the WSP utilizes partnerships with government and community stakeholders and the SARA problem-solving model to address repeated traffic safety and crime problems.

In 2006, the WSP joined forces with other state agencies and citizen groups to form the Governor’s Motorcycle Safety Task Force. The goals of the task force were to determine primary causes for fatal motorcycle crashes, then to provide recommendations for reducing these occurrences.

Research showed that in a majority of cases, prevention of fatal motorcycle crashes was within the control of the rider. The most common factors in fatal motorcycle crashes were lane errors, speeding, impaired driving, and inattention. In addition, it was found that one-third of fatally injured riders did not have a motorcycle endorsement.

The task force recommended an evaluation of the rider training program—including increased training opportunities, a public education campaign, and increased rider accountability through traffic law enforcement.

The WSP responded by providing additional training to its officers on the detection of impaired motorcycle riders and increasing enforcement of collision-causing and driver’s license violations. The WSP
WSP co-sponsored legislation to authorize impoundment of motorcycles operated by unendorsed riders. WSP public information officers took advantage of its strong relationship with the news media to speak about motorcycle safety.

The WSP proactively issued press releases in anticipation of the beginning of spring riding season or busy holiday weekends, and reactively followed fatal motorcycle collisions. Troopers focused on serious violations by motorcyclists and significantly increased their enforcement of speeding, impaired driving, and endorsement violations.

The two-year project entered the Assessment phase in January 2008. The year 2007 ended with 14 fewer motorcycle fatalities than 2006, a 17.5% reduction, and the first year showing a drop in motorcycle fatalities for Washington State since 2000.
Motorcycle Safety Through Licensing, Education, and Enforcement
For the past two and one-half years, the WSP has been keenly focused on the problem of motorcycle fatalities. This effort to save lives required the involvement and support of not only the WSP, but numerous external partners in state and local government agencies as well as the motorcycle community itself. While the effort was coordinated from WSP Headquarters, the project's success was due to the paradigm shift that occurred at the line level statewide. For the men and women who go to work every day in the WSP Field Operations Bureau (FOB) and throughout the agency, motorcycle safety became a priority. Troopers tried new ideas and sent a consistent message to the public—we are serious about motorcycle safety.

We are very pleased with the initial results of our efforts and are committed to doing everything possible to continue reducing the number of motorcycle fatalities in the state of Washington.

**Problem Oriented Public Safety (POPS)**

In the late 1990s, the WSP adopted the principles of partnerships and problem-solving as pioneered by Dr. Herman Goldstein and others. This philosophy became known in the WSP as Problem Oriented Public Safety (POPS). Through POPS, the WSP moved beyond the traditional police role of rapid response, investigation, and enforcement to identifying more effective ways of dealing with repetitive public safety and crime issues. POPS relies on internal and external stakeholder partnerships and the four-step SARA (Scanning, Analysis, Response, and Assessment) problem-solving model. SARA is data-driven and outcome-based.

Through the monitoring of collision data as well as media reports, WSP Headquarters personnel recognized the steady increase in motorcycle fatalities and officially opened a POPS project in the fall of 2005 to further explore and address this problem.
In 2005, there were 74 deaths, the **worst year** in Washington State for motorcycle fatalities since the helmet law was reinstated in 1990.

National statistics show a similar trend. This graph depicts the increase in motorcycle fatalities from 1996 to 2005, and the relationship between motorcycle fatalities and all traffic fatalities.

From 1996 through 2005, traffic fatalities in the United States increased 3.4% from 42,065 to 43,510.

During the same period of time, motorcycle fatalities increased 117%, from 2,161 to 4,576. In 1996, motorcycle fatalities represented 5% of all traffic fatalities, but by the end of 2005, they represented 10.5% of all traffic fatalities.

For the purposes of this project, “motorcycle” refers to street-legal, two-wheel motorcycles. This eliminates off-road motorcycles, all-terrain vehicles, pocket bikes, etc. Fatalities occurring on private property or ruled as non-traffic due to medical conditions were also excluded from the study.

There was anecdotal evidence of more motorcycles being operated on Washington highways. Motorcycles were more visible at all times of the year. Increasing gas prices supported the notion that there would be more motorcycles on the road. If there were more motorcycles, would it not be reasonable to expect more fatalities as well?

In fact, between 1997 and 2005, Washington motorcycle registrations increased 73%, from 94,081 to 163,304. However, during the same time period, motorcycle fatalities increased 164%, from 28 to 74. Clearly, the increase in deaths for motorcycle riders was attributable to...
more than just the increase in the number of registered motorcycles. It became clear that further study was needed to determine if it was possible to reduce this needless loss of life.

**ANALYSIS**

The WSP established a relationship with personnel at the Department of Licensing (DOL), the Washington Traffic Safety Commission (WTSC), and the Washington State Department of Transportation (WSDOT). Informal telephone conversations developed into more formal meetings, and collectively, we began to analyze recent motorcycle crash data to determine causes and common factors.

What became clear from the beginning was that a wider range of partners would be needed, specifically the motorcycle industry and the riding community.

**Governor’s Motorcycle Safety Task Force**

Not coincidentally, during the same period, motorcycle fatalities were also a topic of discussion in the Office of Washington State’s Governor, Christine Gregoire. At the Governor’s November 2005 cabinet agency accountability forum, the three traffic safety agencies (WSP, DOL, and WTSC) presented recent motorcycle fatality data. In response to the rising number of motorcycle fatalities, Governor Gregoire commissioned the Motorcycle Safety Task Force, of which the WSP was invited to be a member. This was the first time motorcycle safety had been addressed by a task force of this type in Washington.
In addition to the WSP, members of the Task Force included the Department of Licensing, the Governor’s Office, Washington Traffic Safety Commission, Department of Transportation, Department of Health, Christian Motorcycle Association, Washington Road Riders Association, A.B.A.T.E. (A Brotherhood Against Totalitarian Enactments), Washington Dealer’s Association, and Columbia Motorcycle Training.

In the short term, joining the task force was a minor setback because it returned the WSP to the Scanning phase of the SARA model; however, the value of adding citizen stakeholders and a neutral facilitator made it worthwhile in the long run. The motorcycle community is very passionate about their sport, very well organized, and politically savvy. Citizen involvement and support were critical if the task force was to be successful in passing any new motorcycle-related legislation.

The goal of the task force was to determine primary causes for motorcycle collisions and crashes and provide recommendations that would reduce fatalities and serious injuries. These recommendations came by way of a formal report submitted to the Director of the Department of Licensing on June 30, 2006.

The task force adopted a process virtually identical to the SARA model. They identified the problem and analyzed crash and licensing data. One noticeable strength of the task force was that policy recommendations were based on data, not on emotion or anecdote.

Analysis of collision report data from 1993-2004 showed the following:

- The vast majority of fatalities occurred during daylight hours, in dry weather, between April and September.
- More than half were single-vehicle crashes.
Most common contributing factors were:
- Lane error
- Speeding
- Alcohol
- Inattention

51% of fatalities involved drug and/or alcohol impairment.
39% had no endorsement.

These findings refuted the common misconception that the automobile driver is at fault in most motorcycle crashes. In more than half of the cases, there is no other vehicle, and responsibility in car vs. motorcycle fatalities was a nearly even split. To quote from the task force report:

“The task force concluded that, while there are multiple contributions to motorcycle crashes that result in fatalities or serious injuries, it appears that the most important factors are within the control of the rider. Efforts to reduce fatalities and serious injuries should focus on rider skill and behavior.”

The report was published in June 2006 and is available online at:
http://www.dol.wa.gov/driverslicense/motorcycles.html

The document is an excellent source of current (1993-2004) motorcycle crash data for Washington State and contains recommendations in three areas:

- Rider Education
- Public Awareness
- Accountability and Enforcement
Rider Education

The task force recommended a complete assessment of the rider training curriculum, including data-based reviews of training effectiveness. The Department of Licensing was encouraged to identify and address disparities in the use of training facilities statewide, redistributing resources to reduce waiting time for available courses. It was decided that students should be allowed to take the basic course on their own motorcycles if they desire, and motorcycle awareness training should be added to the driver training curriculum and the state driver’s guide.

Public Awareness

It was suggested the Washington Traffic Safety Commission create a public safety campaign to target the top four collision causes (risk factors) according to crash data: lane errors, speed, impaired driving, and inattention. This campaign was meant to develop and depend on partnerships with the motorcycle community and specifically the military, due to the large number of personnel stationed at military bases in Washington State. The public safety campaign was to target the following audiences:

- Riders up to age 25
- Riders over the age of 40
- Automobile drivers

The campaign should be patterned after the highly successful “Click It or Ticket” campaign, which helped push Washington State’s seat belt compliance rate over 96%, top in the nation.

Accountability and Enforcement

Task force recommendations in this area were minimal. First, it was suggested that law enforcement impound motorcycles operated by unlicensed or unendorsed riders, and seek
legislative authority to do so, if necessary. Second, motorcycle dealers were asked to
discourage unendorsed riders from riding newly purchased bikes from their lots, and it was
suggested the Department of Licensing require motorcycle owners to show proof of a driver’s
license endorsement before their registrations could be renewed.

The **Response** step identified performance measures, established goals, and created an action plan. In a perfect SARA world, the process would have proceeded logically, with one step being completed before the next step began. In this case, **Analysis** and **Response** overlapped. The WSP did not wait for the task force to issue its findings before beginning the third step of SARA.

It was clear from the **Analysis** step that the majority of fatal motorcycle crashes were the result of dangerous and illegal behavior by the riders themselves: speeding, impaired driving, riding without an endorsement, etc. It was clear from past experience that traffic law enforcement, supported by a strong educational message, could be highly effective in changing driver behavior.

Our performance measures focused on outcomes, rather than outputs. For example, an **outcome** is the number of motorcycle fatalities each year—the number of speeding tickets issued to motorcycle riders is an **output**. Through the Governor’s Government Management, Accountability, and Performance (GMAP) process, an outcome-based goal emerged of reducing 2007 motorcycle fatalities by 10 compared to 2006. By 2006, fatalities had risen to 80, so a reduction of 10 would mean 70 fatalities, a reduction of 12.5% overall. This was an ambitious goal; however, all stakeholders were committed to its success. Although the goal of reducing **fatalities** may seem to be one-dimensional, it was felt that “a rising tide floats all boats” and efforts to improve rider behavior to prevent fatality motorcycle crashes would also reduce injury and property damage crashes as well.
The WSP response strategy consisted of four actions:

- Officer Training
- Legislation
- Outreach/Public Education
- Strict Enforcement

**Officer Training**

The first step was to make troopers aware of the motorcycle fatality problem. This was done through the chain of command and through periodic announcements in the department’s Daily Bulletin, which is the primary means of disseminating information to all personnel in a timely fashion. Troopers working on a day-to-day basis within their assigned patrol areas may not have been aware of emerging statewide issues in traffic safety. A project of this size and scope required central coordination and dissemination of critical information.

For our law enforcement partners in the local police and sheriff’s departments, we held a coordination meeting in February 2006, providing current motorcycle fatality crash data and facilitating a brainstorming session on possible response strategies.

Specific training was given to troopers on detecting impaired motorcycle riders. Collision data showed that 51% of fatalities involve drug and/or alcohol impairment and that alcohol was present more frequently in motorcycle fatalities than in any other type of fatality (automobile, small truck, SUV, etc). The National Highway Traffic Safety Administration (NHTSA) provided a law enforcement training video on detecting impaired motorcycle riders. WSP Media Services added a brief introductory segment to the NHTSA video, which consisted of an overview of recent crash data, and encouraged officers to look more closely at motorcyclists. The introductory segment was narrated by WSP Chief John Batiste, WTSC Director Lowell Porter, and Snohomish County Sheriff Rick Bart.
representing the Washington Association of Sheriffs and Police Chiefs. The training video was presented at the Traffic Safety Commission’s April 2006 3-Flags Conference in Wenatchee, Washington, and distributed to every WSP field detachment and every police and sheriff’s department that requested one. In addition, the training video was incorporated into WSP academy basic training for new troopers.

**Legislation**

Two motorcycle-related bills, co-sponsored by the WSP, became law in 2007.

Senate Bill 5134 gave authority to police officers to impound vehicles operated by drivers without specially endorsed licenses. This applied to motorcycles, certain commercial trucks, school buses, and any other vehicle requiring a specially trained and endorsed operator. It was important that this law change affected all specially licensed vehicles so there would not be an appearance of unfairly targeting one group of drivers.

This bill had an immediate effect on unendorsed motorcyclists even before it was implemented in July 2007. Unendorsed veteran riders heard about the new law and went to the Department of Licensing to obtain their endorsements, stating they wanted to avoid having their bikes impounded.

Senate Bill 5237 revised motorcycle driver's license endorsement and education provisions, increasing the fee for the basic motorcycle class, thereby increasing revenue and creating additional training opportunities for student riders.

One piece of legislation deliberately not pursued was a bill to lower the presumptive level of alcohol impairment for motorcyclists from the current .08% to .04%. This law change was not pursued because the data showed relatively few fatally injured riders with blood alcohol concentrations between .04% and .079%, the range that would be affected by this change. The vast majority of fatality cases involving alcohol fell in the .08% to .149% and .15% to .299% ranges.
Lowering the presumptive level of impairment for motorcycles to .04% was clearly seen as a discriminatory move that would face intense political opposition and yield minimal results in terms of removing additional impaired riders from the road. It was the consensus of the task force that because the majority of fatally injured riders with alcohol in their systems were already riding illegally under current law, there was little benefit to lowering the presumptive level for motorcycles to .04%.

**Outreach/Public Education**

The WSP Office of Government and Media Relations was a strong partner in this project from the very beginning. Motorcycles had become a hot topic and the agency was regularly responding to calls on this subject from the public, the legislature, and the media.

Headquarters Public Information Officers (PIOs) proactively issued press releases when appropriate, such as at the beginning of the spring riding season or before major holiday weekends.

At the district level, Field Operations Bureau PIOs responded to media inquiries and proactively generated press releases after fatal crashes in their districts or seasonally as needed. Every fatality collision became an opportunity to get the word out about endorsements, speeding, and impaired driving.

Troopers across the state became engaged in the project through involvement in local motorcycle events, community outreach, or by enforcement efforts. Examples of such events include the Rosalia Motorcycle Rally, Anacortes Oyster Run, Fort Lewis Safety Day, Snohomish Motorcycle Rally, and numerous other events of all sizes.
Strict Enforcement

Troopers increased their enforcement of collision-causing motorcycle violations, including speeding, reckless driving, and licensing violations. Troopers document their enforcement contacts and other activities on a daily Time and Activity Report (TAR). On January 1, 2006, a new TAR code took effect to allow specific documentation of motorcycle enforcement contacts. This activity was tracked at the detachment, district, and bureau level and reported on a monthly basis at the WSP Strategic Advancement Forum (CompStat-style accountability meetings).

This motorcycle data slide was presented to the Executive Staff and discussed every month by each WSP district commander during their SAF.

Based on a suggestion from a Field Operations Bureau line sergeant, an additional TAR code was developed in April 2007 for tracking motorcycle endorsement violations. When Senate Bill 5134 took effect in July 2007, the WSP Communications Division created an automated report that produced a record of all “no-endorsement” impounds for the month. This additional information was also reported at Strategic Advancement Forums.

New partnerships emerged involving Field Operations Bureau personnel, the Office of Government and Media Relations, and the Aviation Section. Special aerial patrols took place during summer weekends, often with members of the media riding along in the WSP aircraft or with troopers in patrol cars on the ground. Troopers in the aircraft...
would watch for motorcycles being driven in a reckless manner, racing, or performing wheelies and other stunts. The trooper-pilot reported those activities to ground units and provided direction in order for an arrest to occur. In the event of a pursuit, ground units could disengage and allow the aircraft to track the suspect until a safe apprehension could be made. This produced dramatic video on a number of occasions that aired on local TV news stations, providing another opportunity for WSP PIOs to talk to the public about motorcycle safety.

**ASSESSMENT**

The *Assessment* phase compares outputs and outcomes in 2007 with those from 2006.

**Outputs**
- DUI arrests: up 87%, from 94 to 176
- Speed arrests (tickets): up 42%, from 1,773 to 2,518
- No endorsement arrests for 2007: 337 (not documented in 2006)
- Motorcycle impounds since July 22, 2007: 133
- New endorsements issued by DOL: up 13%, from 23,260 to 26,397
- Registered motorcycles up 7%

**Outcomes**
- Fatalities fell from 80 to 66, 14 fewer fatalities, a reduction of 17.5% (exceeding the Governor’s goal)
- Fatalities per 100,000 registered motorcycles
  - 2006: 42
  - 2007: 32

This project was a tremendous success, as a multi-year trend was reversed in one year and 14 fewer people died in motorcycle crashes, even though the sport continued to grow. Institutional changes took place within the WSP, the project has momentum of its own, and the WSP continues to focus on motorcycle safety as a way of doing business.
As a lesson learned, the WSP continues to seek increased participation of local police and sheriff’s departments.

Motorcycle Fatalities in Washington State
1990-2007

Agency and Officer Information

The Washington State Patrol Motorcycle Safety POPS Project was initiated at the Headquarters level with the executive sponsorship of FOB Assistant Chief Brian Ursino. The project was supported by officers of all ranks within the Field Operations Bureau, as well as WSP employees in the Aviation Section, Communications Division, and Office of Government and Media Relations.

The WSP has been training its employees in Problem Oriented Policing and the SARA model since 1998. POPS training is part of Trooper Basic Training and Supervisor and Mid-Level Manager Training. In addition, POPS has been integrated into the promotional testing processes and the employee performance evaluations. No additional POP or problem-solving training was provided because of this project. No additional funding was needed for this
initiative, with the exception of the impaired driving training video, which was funded by the Washington Traffic Safety Commission.

The WSP encourages officers to initiate POPS projects when and where appropriate. Districts and divisions report the status of current POPS projects to Headquarters on a monthly basis and are encouraged to submit entries for the Exemplary POPS Project competition held annually in conjunction with the WSP POPS Forum.

The WSP POPS Training Guide is available online to all employees and was used as a reference for this project. The Problem Oriented Policing philosophy and the SARA model were well-suited for use with this project.

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