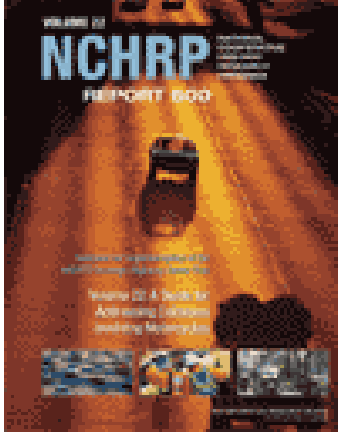




BP2: Highway Features and Policy

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|--------------------------------------|---|---|
| Reference: BP2 021 | Title of Project: | A guide for Addressing Collisions Involving Motorcycles, NCHRP |
| Version: 1 | Website: | http://144.171.11.107/Main/Public/Blurbs/160626.aspx |
| Brief Description of Project: | <div style="display: flex; align-items: flex-start;"> <div style="flex: 1;">  </div> <div style="flex: 2; padding-left: 10px;"> <p>The US Transport Research Board's National Cooperative Highway Research Program (NCHRP) Report 500, Vol. 22: Guidance for Implementation of the Strategic Highway Safety Plan: "A Guide for Addressing Collisions Involving Motorcycles" provides guidance on strategies that can be employed to reduce crashes involving motorcycles on US roads.</p> <p>In 1998 the American Association of State Highway and Transportation Officials (AASHTO) produced a Strategic Highway Safety Plan. The plan now includes strategies in 22 key areas that affect highway safety. The plan's original goal was to reduce the annual number of highway deaths by 5,000 (by 2004). Each of the 22 key areas includes strategies and an outline of what is needed to implement each strategy.</p> <p>The individual strategies are published as volumes to Report 500. Volume 22 is the "Guide to Addressing Collisions Involving Motorcycles" and was produced in 2008. The guide includes a brief introduction, a general description of the problem, the strategies/countermeasures to address the problem, and a model implementation process.</p> <p>Development of the Guide involved contributions from road safety professionals, research academics and rider groups.</p> </div> </div> | |

The Guide's objectives include:

- Incorporate motorcycle-friendly roadway design, traffic control, construction, and maintenance policies and practices
- Reduce the number of motorcycle crashes due to rider impairment
- Reduce the number of motorcycle crashes due to unlicensed or untrained motorcycle riders
- Increase the visibility of motorcyclists
- Reduce the severity of motorcycle crashes
- Increase motorcycle rider safety awareness
- Increase safety enhancements for motorcyclists
- Improve motorcycle safety research, data and analysis

The Guide sets out the problem of injuries to US riders and presents data as a background to the recommended counter measures. The Guide states that number of motorcycles registered in the US has increased by 61% between 1996 and 2005. During the same period rider casualties have risen as shown in the table from the Guide below. As a proportion of the number of fatalities on US roads, PTW fatalities have more than doubled.

EXHIBIT III-2
Motorcycle Fatality and Injury Trends
Source: Adapted from Shankar, 2004; FARS, 2006

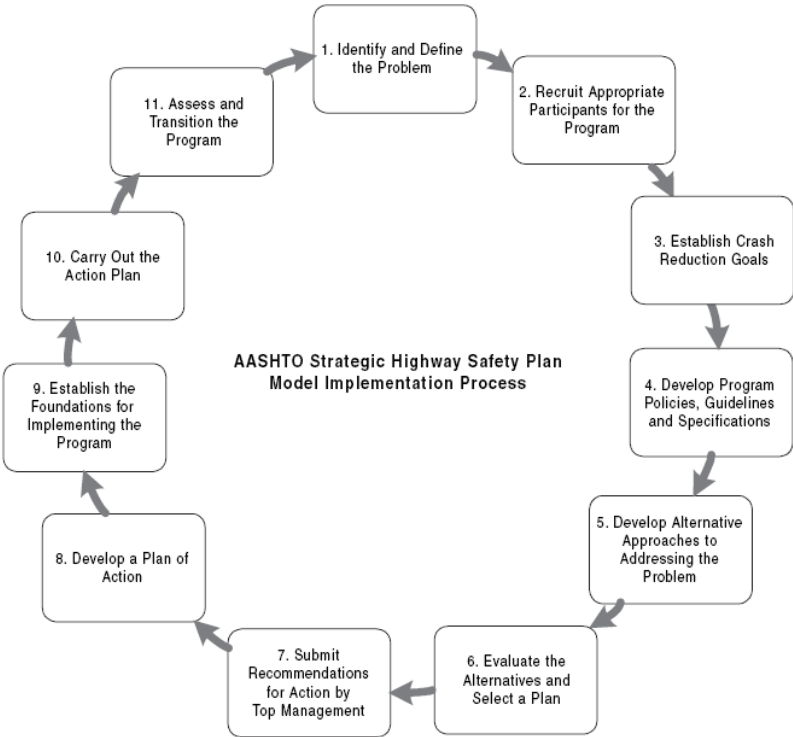
| Fatalities and Injuries | Year | | | | | | | | | |
|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
| Total Killed | 42,013 | 41,501 | 41,717 | 41,945 | 42,196 | 43,005 | 42,884 | 42,836 | 43,510 | 42,642 |
| Change | — | -512 | +216 | +228 | +251 | +809 | -121 | -48 | +674 | -868 |
| Motorcyclists Killed | 2,116 | 2,294 | 2,483 | 2,897 | 3,197 | 3,270 | 3,714 | 4,028 | 4,576 | 4,810 |
| Change | — | +178 | +189 | +414 | +300 | +73 | +444 | +312 | +548 | +234 |
| Percent Change | — | 8.4 | 8.2 | 16.7 | 9.4 | 2.3 | 13.6 | 8.5 | 13.6 | 5.1 |
| Percent of All Fatalities | 5.0 | 5.5 | 6.0 | 6.9 | 7.6 | 7.6 | 8.7 | 9.4 | 10.5 | 11.3 |
| Motorcyclists Injured | 53,000 | 49,000 | 50,000 | 58,000 | 60,000 | 65,000 | 67,000 | 76,000 | 87,000 | 88,000 |

One of the key problems facing those working towards reducing PTW fatalities in the US is the comparatively low use of helmets when compared to some other developed countries. The proportion of riders fatally injured who are alcohol impaired is also greater in the US than in many other countries. Almost 25% of riders involved in fatal collisions in the US are improperly licensed.

Faced with these and other PTW problems, the Guide develops a series of counter measures. An example is shown below.

- | | |
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| <p>11.1 B Reduce the number of motorcycle crashes due to rider impairment</p> | <p>11.1 B1 Increase motorcyclist awareness of the risks of impaired motorcycle operation (T)</p> <p>11.1 B2 Expand existing impaired driving prevention programs to include motorcycle riders and specific motorcycle events (T)</p> <p>11.1 B3 Target law enforcement to specific motorcycle rider impairment behaviors that have been shown to contribute to crashes (T)</p> |
|---|--|

The Guide provides a model for implementation of these specific strategies.



The model implicitly includes the use of casualty data to target projects monitor the effectiveness of the strategies employed.

| | |
|-------------------------|--|
| Monitoring Data: | The Guide utilises a range of data including casualty statistics, research and 'before' and 'after' data from previous activity. |
| Results: | Whilst the document provides a useful reference for US road safety practitioners. It is too early to definitively assess specific results. |

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| <p>Key Effective Conclusions:</p> | <p>The Guide is based on close analysis of the PTW casualty problem in the US and provides suggested counter measures, some of which have a proven record of reducing the number and severity of injuries (eg. a universal helmet law).</p> <p>The layout of the document provides a clear definition of specific problems and provides advice on potentially effective counter measures and a model for implementation.</p> <p>Some of the problems identified in the Guide (low use of approved helmets, impairment through alcohol or drugs, improperly licensed riders) appear to be more of an issue in the US than in many other developed nations.</p> |
| <p>Projects for Comparison:</p> | <p>BP2 009 Positioned for Safety Strategy. BP2 010 DfT Motorcycling Strategy. BP2 012 IHIE Guide for Motorcycling.</p> |
| <p>Justification:</p> | <p>Elements of the Guide appear to contribute to eSUM objectives as they are based on proven research and effective counter measures.</p> |