



BP2: Highway Features and Policy

Reference: BP2 005	Title of Project:	Motorcycle Only Lane, Route R2 Malaysia
Version: 1	Website:	Motorcycle Lane Report pdf document: http://www.miros.gov.my/publications/TheValueOfExclusiveMotorcycleLanesToMotorcycleLanesToMotorcycleAccidentsAndCasualtiesInMalaysia.pdf
Brief Description of Project:	<p>In the early 1970s a Motorcycle Only Lane was constructed as part of Federal Highway Route 2. Unfortunately no 'before' monitoring data is available.</p> <p>In 1992 this route was extended and in 1993 an extension to the Motorcycle Only Lane was introduced. A monitoring process was included as part of the project.</p> <p>The casualty data recorded only covers 12/13months before and after the implementation but did show a significant reduction in the number and severity of PTW casualties. However, overall casualties increased.</p> <p>Collisions with other vehicles, which tend to produce the greatest severities, were reduced although PTW collisions with other PTWs increased.</p> <p>The route is signed as 'Motorcycles Only' and in an attempt to reduce collisions between PTWs the narrower sections have an overtaking ban.</p> <div style="text-align: center;"> </div>	

<p>Monitoring Data:</p>	<p>An abstract from the report is reproduced below.</p> <p>Table 1: Chi-Squared Analysis on Motorcycle Accidents Along the Federal Highway Route F02</p> <table border="1"> <thead> <tr> <th>Accident Type</th> <th>Before Period (Dec 92 - Nov 93)</th> <th>After period (Dec 93 - Nov 94)</th> </tr> </thead> <tbody> <tr> <td>All Motorcycle Accidents (On Tracks)</td> <td>155</td> <td>112</td> </tr> <tr> <td>All Accidents in Shah Alam (Control)</td> <td>2818</td> <td>3070</td> </tr> </tbody> </table> <p>$(\chi^2= 7.2, df=1, p<0.01)$</p>	Accident Type	Before Period (Dec 92 - Nov 93)	After period (Dec 93 - Nov 94)	All Motorcycle Accidents (On Tracks)	155	112	All Accidents in Shah Alam (Control)	2818	3070
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<p>Results:</p>	<p>The monitoring report (The Value of Exclusive Motorcycle Lanes to Accidents and Casualties in Malaysia; Radin Sohardi 1995) claims an overall reduction of 39% in PTW casualties against an increase of 14% in the control.</p>									
<p>Key Effective Conclusions:</p>	<p>Segregating PTWs from other vehicles appears to show significant positive effects on the number and severity of PTW casualties. The key element is the reduction in collisions between PTWs and other vehicles, reducing the collision mass ratio from approximately 5:1 to 1:1.</p> <p>Although predominantly rural in character, R2 is 'urban' in places.</p> <p>This treatment was only possible due to the high level of PTW use in Malaysia where 60% of registered vehicles are PTWs.</p>									
<p>Projects for Comparison:</p>	<p>None although it is understood that a PTW lane is planned for the Avenue des Grande Armees in Paris.</p>									
<p>Justification:</p>	<p>The results are impressive, although a longer period of before and after monitoring, consistent with European practice, would be desirable.</p> <p>There are issues around the transferability of the treatment. Without sufficient PTW flows there is likely to be significant abuse leading to a requirement for robust enforcement.</p> <p>This project appears to potentially meet eSUM WP3, BP2 providing collision/casualty reduction through the introduction of PTW priority measures.</p>									