



BP4: Specified Highway Remedial Measures

Reference: BP4 011	Title of Project:	Risk Zones Application (RiZA), Barcelona
Version: 1	Website:	(Website not available)
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>Operating initially as a pilot project, the Barcelona municipality Road Safety team collaborated with local police (Guardia Urbana: GU) and technicians developing traffic management measures to develop a procedure for registering road accidents. These data were linked with a geographic database such that the locations having more than 10 accidents per year were identified. The procedure was originally developed for all accidents, typically including 1000 accident cases (of the 10,000 accidents that annually occur in the city).</p> </div> </div> <div style="margin-top: 10px;"> </div> <p>The RiZA application enables police and traffic managers to propose remedial actions and the ones implemented are also recorded by the system. Hence a feedback is established whereby the accidents recorded in the next period are used to assess the impact of the various actions implemented.</p> <p>The system started by handling small-scale (but rapid!) interventions (changes to signal phases, small traffic management interventions, etc...) and many of these were found to be extremely cost-effective. To help the traffic management designer, the system provides menus of actions ranked by the proven performance.</p>	

	<p>The procedure has been realized for zones having high concentrations of PTW accidents. The system is now being deployed fully as an application, involving all local police.</p> <p>More recently, RiZA has been used to identify signal junctions with the highest concentrations of collisions related to red-light jumping, that are to be treated using video enforcement cameras (see BP3).</p> <p>Barcelona Accident Management System Presentation: BCN Accidents Mngmt System.pdf</p>																
<p>Monitoring Data:</p>	<p>RiZA provides a mechanism for identifying 'black-spots' from casualty data and includes automatic feedback on performance.</p> <p>The figures provided appear to show substantial reductions in collisions and casualties at the treated sites.</p> <table border="1"> <thead> <tr> <th>Category</th> <th>December 06-07</th> <th>December 07-08</th> <th>Change (%)</th> </tr> </thead> <tbody> <tr> <td>Accidents</td> <td>31</td> <td>22</td> <td>-29.03%</td> </tr> <tr> <td>Injured</td> <td>41</td> <td>25</td> <td>-39.02%</td> </tr> <tr> <td>Vehicles</td> <td>68</td> <td>43</td> <td>36.76%</td> </tr> </tbody> </table>	Category	December 06-07	December 07-08	Change (%)	Accidents	31	22	-29.03%	Injured	41	25	-39.02%	Vehicles	68	43	36.76%
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<p>Results:</p>	<p>The results appear to be for all vehicles and show impressive casualty reduction performance. The 'before and after' comparison is based on a single year for each period so some caution is required.</p> <p>Specific PTW results do not appear to be available.</p>																
<p>Key Effective Conclusions:</p>	<p>From the information supplied the RiZA system appears to be a powerful and effective targeting and monitoring system. The facility to rank the performance of interventions would be particularly useful to road safety professionals.</p> <p>One of the key issues for road safety professionals is the availability of resources to effectively monitor the performance of counter-measures. RiZA appears to provide this.</p>																
<p>Projects for Comparison:</p>	<p>iRAP Toolkit (BP4 010).</p>																
<p>Justification:</p>	<p>RiZA appears to be a data led, data monitored system which is achieving impressive results. Further monitoring of specific PTW data should be undertaken but the system appears to contribute to eSUM WP3 objectives.</p>																