

Criteria	Description	Weight
Report	<ul style="list-style-type: none"> <li>• Clear definitions of Criticality and Vulnerability that are grounded in literature. Explanations are provided when needed.</li> <li>• Each element included in the operationalisation of the metrics (such as categories of bridges, number of lanes, location etc.) is well-argued for and/or originates from literature.</li> <li>• Assumptions made in including or excluding some elements (due to complexity or unavailability of data) are described.</li> <li>• Probabilities used, if any, are well-argued for and referenced where possible.</li> <li>• Explanation of the methods and results are logical and understandable; clear link (reference) to the code submitted</li> <li>• Good visuals with the comparison of results; use, e.g., boxplots, histograms to visualise results (avoid using long tables); for the figures included, non-trivial observations/insights from the visualisation are included. (This also means not every figure created is included.) Use flow charts to visualise processes if needed</li> <li>• Interesting relationships between different key performance indicators are reflected upon</li> <li>• A brief reflection describing the limitations, possible improvement, extension, etc., of the solution</li> <li>• Well-structured and concise report with conceptual and logical soundness</li> <li>• Clear link to literature</li> </ul>	4
Option 1: Data Analysis (2.a)	<ul style="list-style-type: none"> <li>• Assumptions made in using and combining data from the different sources (RMMS, bridges and roads dataset provided earlier) are clearly explained.</li> <li>• Choice of visualization method is aimed for use in policy support.</li> <li>• Information about vulnerability and criticality of different roads and bridges in the network can be interpreted clearly.</li> <li>• Top-10 critical and vulnerable roads and bridges are identified separately.</li> <li>• The resulting rank order, implications for policy recommendations and limitations are critically discussed. Choice of metrics and implications on the rank order are discussed.</li> </ul>	4
Option 2: Simulation Experiments (2.b)	<ul style="list-style-type: none"> <li>• Model runs without errors</li> <li>• Experimental design for analyzing criticality and vulnerability in the model is grounded in literature where applicable.</li> <li>• Explorative and iterative process of experimentation is described.</li> <li>• Assumptions made in using traffic flow data from RMMS datasets as input into the model are well argued for.</li> <li>• Measures taken to introduce delays, probability of link breakdowns etc. are explained and well-argued for.</li> <li>• The resulting rank order of critical and vulnerable bridges are critically examined considering the methods used and assumptions made.</li> <li>• Use different seeds for the replications in a scenario</li> <li>• Code (changes made by you) is well-structured and documented</li> </ul>	4
Submission	<ul style="list-style-type: none"> <li>• Submit in accordance with the submission guidelines</li> <li>• Include a README file describing the necessary information to use your program</li> </ul>	2
Total		10