

0187 Development and Pilot Testing of a European Methodology for Network Wide Road Safety Assessment



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INTRODUCTION

Directive 2008/96/EC as amended by Directive (EU) 2019/1936, introduced the concept of the network-wide road safety assessment as a methodology to evaluate crash and impact severity risk on the entire road network in operation. Member States shall classify all sections of the road network in no fewer than three categories according to their level of safety.

OBJECTIVE

This research describes the conceptual framework and assumptions for the development of a methodology for **a common network-wide road safety assessment (NWA)** and a **common safety rating system** for classification of the existing road network.

BACKGROUND

The methodology was based:

- on a **questionnaire survey** to identify similar existing methodologies and understand their strengths and weaknesses, as well as identify relevant limitations of Member States (e.g. on data availability, accuracy, etc.)
- on close collaboration with the **European Commission** and the **Expert Group of Road Infrastructure Safety (EGRIS)**.

METHODOLOGY

The NWA methodology comprises two assessment approaches both applied over the same network and then combined (see flowchart below):

1. the **proactive methodology (NWA-proactive)** assessing the in-built safety of roads,
2. the **reactive methodology (NWA-reactive)** assessing the roads on the basis of crash occurrence analysis,
3. the **integration methodology** combining assessment outcomes to provide the final road network rating and ranking.

PILOT IMPLEMENTATION

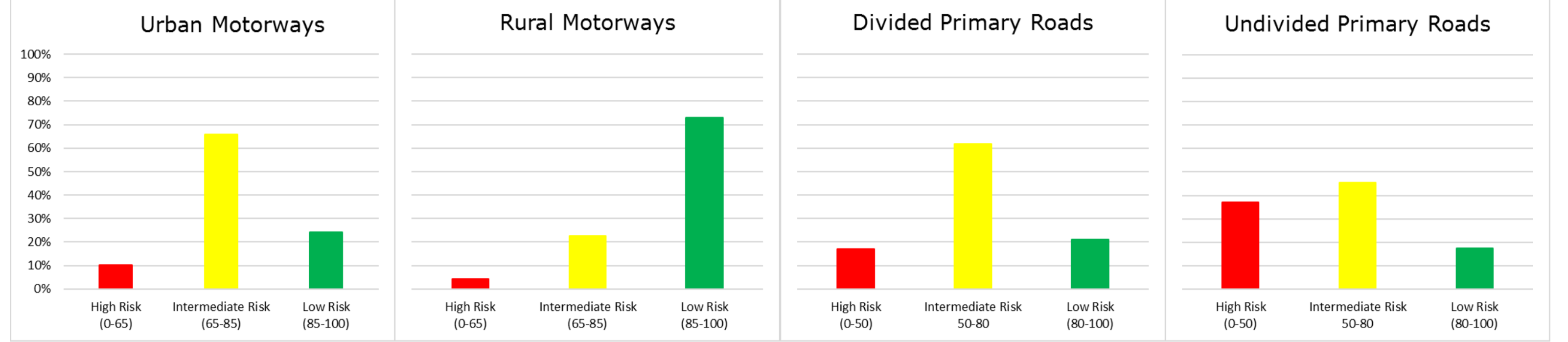
Fourteen (14) countries participated in the pilot implementation of the NWA process (Austria, Cyprus, Greece, Spain, Finland, France, Croatia, Ireland, Italy, Lithuania, Poland, Portugal, Romania, Sweden).

RESULTS

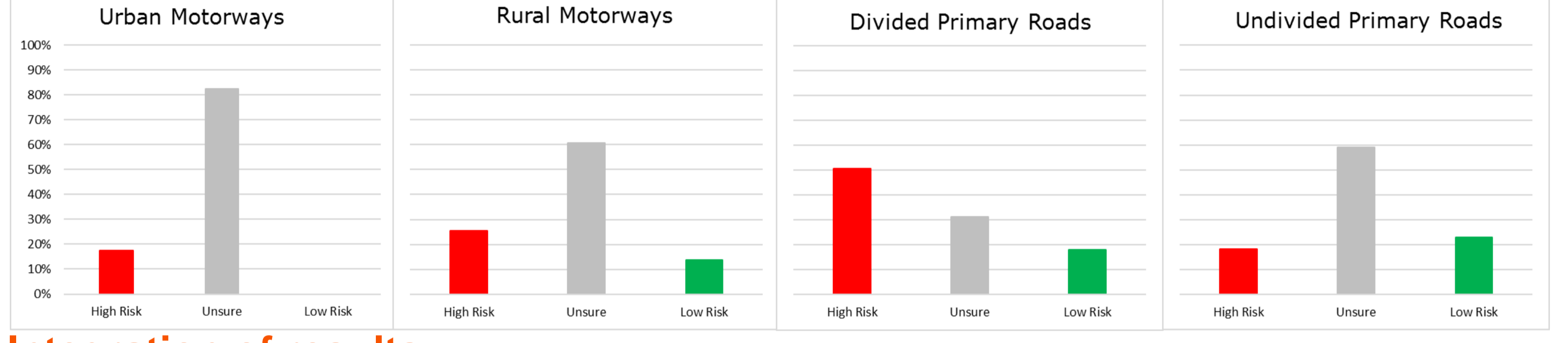
The pilot implementation of the NWA methodology has been applied to the following road types:

Road type	Total km
Urban motorway	71 (single direction)
Rural motorway	742 (single direction)
Primary divided road	220 (single direction)
Primary undivided road	269 (both directions)

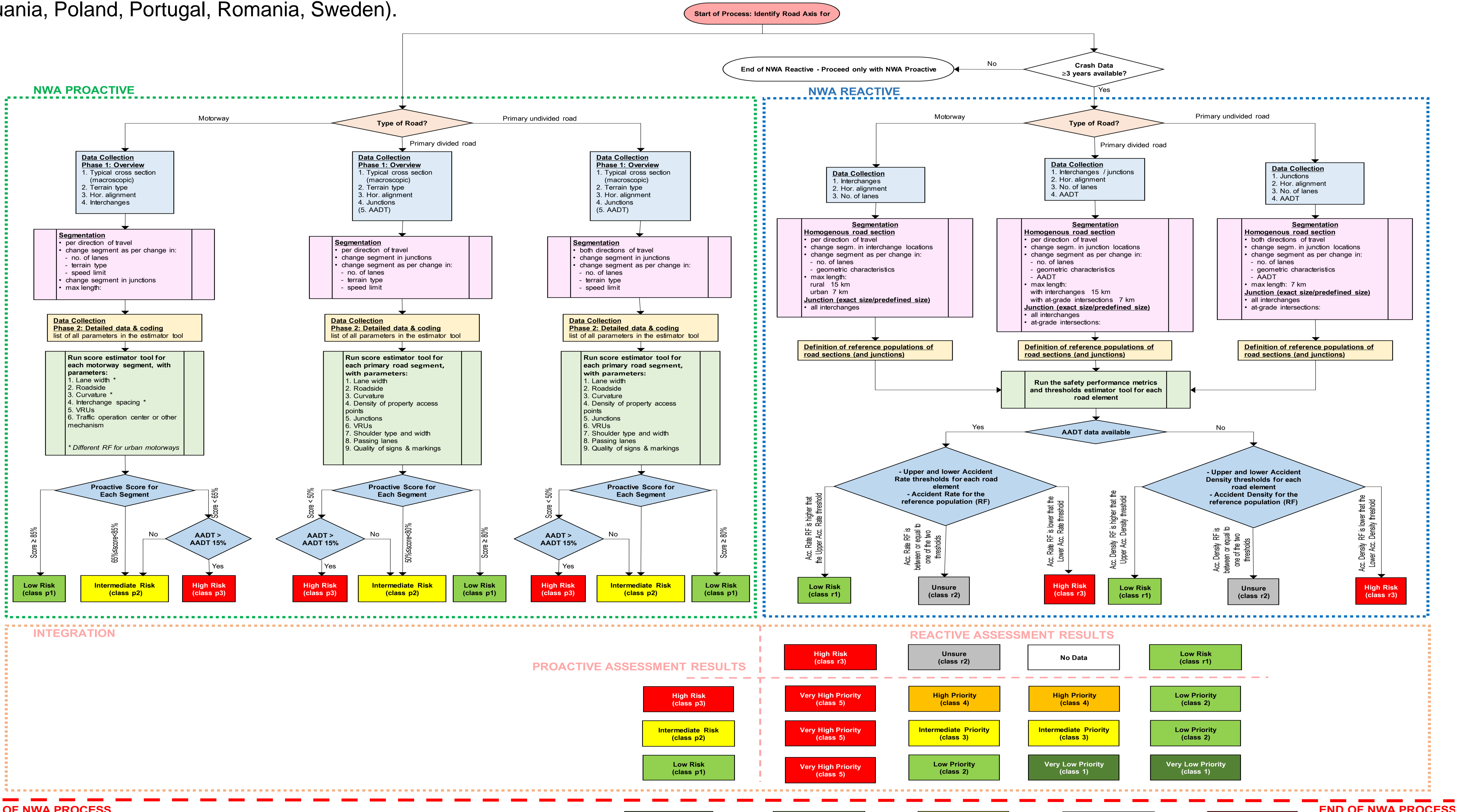
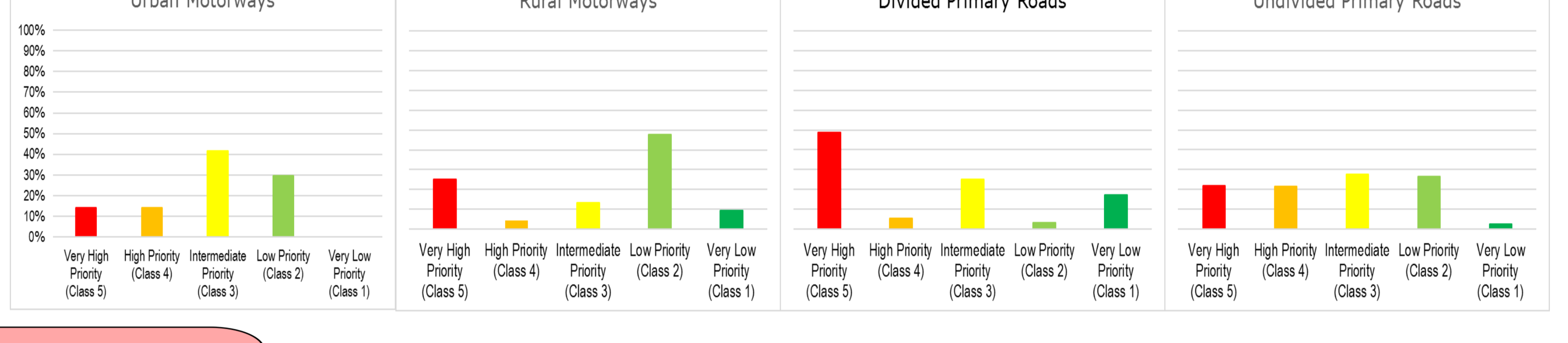
NWA-proactive



NWA-reactive



Integration of results



END OF NWA PROCESS

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