PRINCIPLES OF iRAP AND DISCUSSION OF ROAD SAFETY FINDINGS FOR SELECTED ROADS IN LIMPOPO PROVINCE

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ABSTRACT

This presentation outlines the application of the International Road Assessment Programme (iRAP) methodology on selected roads within the Limpopo Province, with a focus on how advanced mobile survey technologies were utilized to support evidence-based road safety planning. iRAP provides a globally recognized framework for assessing road safety risks and identifying cost-effective measures that can save lives and reduce serious injuries.

To support the assessment, high-resolution imaging, and other automated data collection tools were deployed to survey the road network efficiently and accurately. These technologies enabled the detailed capture of roadway attributes, including geometry, roadside hazards, signage, and pedestrian infrastructure – key inputs required for the iRAP model. The data was then processed and uploaded to the ViDA platform, where it was analysed to generate Star Ratings for vehicle occupants, motorcyclists, cyclists, and pedestrians.

The presentation will share the results of the Limpopo assessment, including identification of high-risk road sections, network-wide Star Rating distributions, and priority areas for targeted interventions. It will also discuss the broader benefits of integrating iRAP assessments into provincial road safety strategies, such as aligning with the Safe System approach and supporting the achievement of national and international road safety targets.

By combining international best practice with modern data collection tools, this initiative highlights how road authorities can make informed, data-driven decisions to enhance safety for all road users, especially vulnerable groups. The session will conclude with insights into how these assessments can be scaled to other regions to support strategic road safety investment planning.