

**UTILIZATION OF UAVA
(UNMANNED AERIAL VEHICLE) TECHNOLOGY
to identify road damage
(Case Study: Jalan Wonosari Tengah, Kab. Bengkalis)**

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ABSTRAK

Road maintenance, rehabilitation and repair are an important part of road infrastructure. Previously, steps were needed to identify each type of road failure. UAV (Unmanned Aerial Vehicle) is a platform that has advantages in creating geodatabases. The location of this study is Jalan Wonosari Tengah in Bengkalis District, Bengkalis Regency. The type of road studied is a road with bending pavement. Aerial imagery data is processed and analyzed using Agisoft Metashape Professional software to create orthophoto images. Orthophoto is used during visual interpretation to identify road damage. Several forms of road damage were obtained in the form of longitudinal cracks, transverse cracks, potholes, collapses or subsidence and patch damage. The calibration of data from both methods is 0.0272 m² and the total area of damage from aerial photographs is 7.01% higher than the damage accuracy data from manual surveys which is 4.57%, and the difference between the two percentages is 2.44%.

Keywords: Aerial photography, Road damage, Orthophoto, Image interpretation