# USE OF 3D MODELING TO ASSESS POTHOLE GROWTH

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*ABSTRACT*
This paper considers the use of 3d modeling to quantify the growth of pot holes. These are a common problem around the world and cause problems with the road user and those involved with its maintenance. Assessing the size of a pothole, or being able to understand their growth has not really been considered in the literature. 3D modeling techniques based on stereo photogrammetry were used to quantify 2d and 3d parameters of potholes. The experiment was carried out the laboratory. Roller compacted slabs were prepared and an artificial pothole created on its surface. This was photographed and a 3D model created. The artificial pothole was enlarged and the process repeated. At each stage the actual diameter, circumference and volume of the hole was determined. The 3D models were analyzed using DigitalSurf MountainsMap software. Good correlation was found between parameters from the 3d model and those measured. It is proposed that this method gives a simple and robust method to better understand potholes.