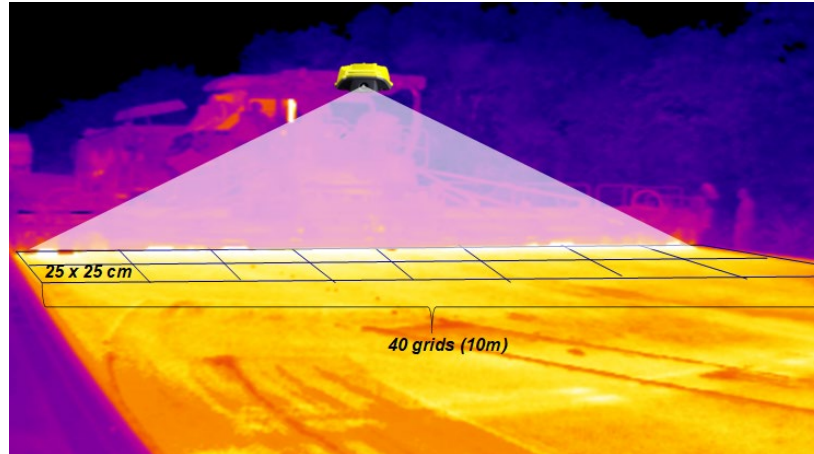


Productivity

April 2021

Prepared by Transportation Planning
Missouri Department of Transportation

Quality Assurance Toolkit for Intelligent Asphalt Paving Technologies



Description and Benefit

The creation of Quality Assurance (QA) tools allows agencies to verify Intelligent Compaction (IC) and Paver Mounted Thermal Profile Scanning (PMTPS). These tools are used to verify the measurements submitted by the contractor, qualifying surface thermal profiles and roller pass count information that is submitted to MoDOT for payment. This tool allows the opportunity to complete an independent QA review unlike no other resource which existed before its creation. The QA tools use images collected from MoDOT owned thermal imaging cameras for PMTPS and Roller Coverage Data from Dirtmate GPS tracking devices for IC, and then compares those results with the records submitted by the contractor. While the comparison process is quite elaborate, this tool breaks the required actions down into a few easy steps for the operator and outputs pass/fail criteria. These tools report to the MoDOT representative information needed to validate the contractor's IC and PMTPS submissions which will ultimately be used for pay adjustment. The contractor and MoDOT benefit from immediate quality control feedback, allowing changes to be made in real-time. This innovation promotes technologies which increased pavement performance, reducing maintenance costs and extending the life of asphalt pavements. Safety is increased by allowing agency representatives to focus on other critical construction elements reducing exposure to traffic and construction hazards by accomplishing labor intensive tasks.

For More Information Contact

Central Office/Construction and Materials
Dan Oesch at daniel.oesch@modot.mo.gov or 572-291-2788.

