

TECHNOLOGY DEPLOYED IN MATC

PAVER-MOUNTED THERMAL PROFILER (PMTP)

Detect segregation potential of your asphalt mat with this real-time thermal profiler

HOW IT WORKS

The PMTP is mounted to a paver, providing professionals with real-time two-dimensional infrared thermal maps of the mat behind it. Its non-contact surface temperature measurements can help detect the thermal segregation which can make field density difficult to achieve. If severe, segregation has been found to lead to other distresses that reduce the pavement's service life. PMTP can be used as a quality control tool to improve uniformity, providing not only temperature information but also information to address factors such as paving speed, loading, hauling times, mechanical issues, and the number of stops. Four components must be set up to use the system: the infrared mast and base plate, the infrared scanner, the distance measuring instrument, and the monitor. Initial setup of these components takes about two hours, and subsequent daily setups can be done in 20 minutes each. There are multiple vendors that sell the PMTP technology.

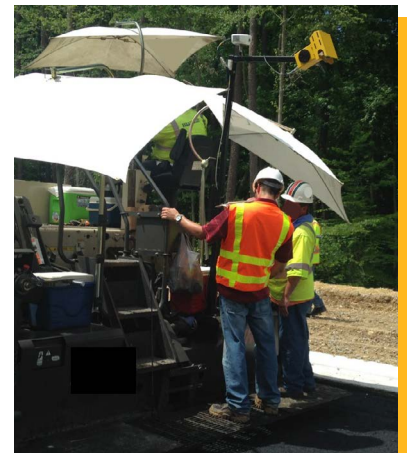
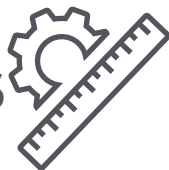


Image Source: FHWA
PMTP Device

PMTP helps to improve monitoring and quality of the asphalt mat and can be an effective on-site visual aid for training industry and agency personnel.

PMTP FEATURES

Make real-time
ADJUSTMENTS
saving time & resources



Get trained to
operate in
<4 HOURS



IDENTIFY DEFECTS
before compaction



Meets
**AASHTO
PP 80-20**



standards and specifications*

Add remote
access for
~\$1,200



Costs
~\$35,000
including accessories



Current practice of PMTP in: Alabama, Alaska, Illinois, Maine, Minnesota, Missouri, New Jersey, North Carolina, Texas, Virginia, West Virginia, Washington, FHWA Eastern Federal Lands**

Learn more at <https://www.fhwa.dot.gov/MATC>

FHWA-HIF-21-033

* These standards and specifications are not FHWA requirements.

** For more information, visit [AASHTO - Strategic Highway Research Program 2 - Technologies to Enhance Quality Control on Asphalt Pavements \(R06C\)](https://www.fhwa.dot.gov/strategic-research-program-2-technologies-to-enhance-quality-control-on-asphalt-pavements-r06c/)([transportation.org](https://www.transportation.org))