

U.S. Department of Transportation Federal Highway Administration

TECHNOLOGY DEPLOYED IN MATC

NON-CONTACT LASER BASED SCANNING (NCLBS)

Quantify the macrotexture properties of your pavement surface

HOW IT WORKS

Collect pavement surface information with the touch of a button using this technology that passes a laser over a 4"x4" section of the surface in 90 seconds. NCLBS delivers a high-tech assessment of your pavement's macrotexture properties, including mean profile depth, texture profile index, and estimated texture depth. Mean profile depth is a value that helps to understand the macrotexture of a pavement. The tool is portable, requires minimal training to use, and can be used on any dry and clean pavement surface. This technology can be used to scan an asphalt core or slab specimen as well as the pavement mat, and it can be used during mix design, for acceptance, or for forensic analysis. The technology package includes 3D analysis suite software, built-in GPS receiver, built-in rechargeable battery pack, and storage case—plus a tablet computer for easy remote data collection and HD viewing of scan data like elevation height and scan intensity image.

NCLBS can provide texture data used to analyze friction in skid-prone locations, which can help to reduce vehicular incidents and accidents.



Image Source: FHWA NCLBS Device

NCLBS FEATURES



Current evaluations of NCLBS in: California, Indiana, Michigan, Minnesota, Ohio, Texas

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* These standards and specifications are not FHWA requirements.