

## **MSDOT Profiler Certification Program**





#### GENERAL INFORMATION

- Currently certifying for Profilograph Index
- Plan to implement MRI Specification and Certification in the next calendar year
- Mississippi Contractors' Profiler Manufacturers include ICC, SSI, and Ames
- Must have dual laser system spaced @ 67 to 72 inches
- Will be certified annually barring any repair
- All operators must be certified with each profiler



# **Profiler Certification**MSDOT's Primary Profiler Types:



**ICC High Speed Profiler** 



ICC SurPRO 3500



Pathway High Speed Profiler



## MSDOT's 3 MRI Categories

- Category A
  - New construction, three or more lifts, mill and two lifts
- Category B
  - Mill and one lift, two lift overlays (no milling)
- Category C
  - Single lift overlay (no milling)



## MRI Specification Project Categories

Pavement Category	Long Continuous Interval Tolerance (in/mile)	Short Continuous Interval Tolerance (in/mile)
A	60	130
В	70	140
С	50% improvement or 80*	150

<sup>\*</sup> The surface smoothness requirements will then be considered a 50% improvement of the existing pavement or 80 in/mile per 0.10-mile segment, whichever is higher.



#### SMOOTHNESS PAY INCENTIVES

 Incentive payments are based upon the Long Continuous MRI scale at intervals of 5 inches/mile

Categories A & B		Category C	
MRI (in/mile)	Price Adjust. (%)	MRI (in/mile)	Price Adjust. (%)
<30.0	108	<30.0	103
30.1 to 35.0	106	30.1 to 35.0	103
35.1 to 40.0	104	35.1 to 40.0	103
40.1 to 45.0	102	40.1 to 45.0	103
45.1 to 50.0	100	45.1 to 50.0	100
>60.0 or 70.0	must correct	>80.0	must correct



#### **CERTIFICATION SITES**

- Flat, tangent, and wheelpaths marked appropriately
- 528' (0.1 miles) in length
- Preferably 4 lane non-interstate highway

### PAVEMENT TYPES

- 'Smooth' Dense Graded HMA (MRI < 60 in/mile)</li>
- 'Rough' Dense Graded HMA (MRI > 90 in/mile)
- Stone Matrix Asphalt
- Portland Cement Concrete (Optional)



## TESTING REQUIREMENTS

- Based on AASHTO R 56-10
- Calibrations include the following: DMI, Block, Bounce, and Accelerometer (if applicable)
- Basis Profile established w/ MSDOT's ICC SurPRO 3500
- A minimum of five runs per section for comparison
- Data analyzed thru ProVAL's Profiler Certification Module
- Pass/Fail based on 92% Repeatability and 88% Accuracy
- All operators will take a written exam



# QA/QC

- Collect approximately 10% of jobs annually across the State
- Plans to cover all six districts and all contractors evenly
- Will use ASTM E950 as basis of comparison
- Will ensure Contractors' profilers are within tolerance throughout the year between certification dates



## **Questions?**

