Comparison of Friction Measurements in the US between SCRIM and Locked-wheel Skid Testers

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The concept of harmonization of friction data measured with different equipment has been a much-discussed issue during the last 20 years. So far, it has also been impossible to determine a model that allows data obtained from the outputs of different devices to be compared in an accurate way. The introduction of the SCRIM device to the US in 2015 has brought up the necessity to compare these measurements with the locked- wheel skid tester, the standard device used in the US.

In May 2016 an equipment comparison was done at the Virginia Smart Road, where measurements taken with different devices were compared with two methodologies. The goal of this paper is to discuss both options, discuss their strengths and weaknesses, and recommend the one with a higher level of accuracy so that a relationship between measurements of these different devices can be better determined.