

WORKSHOP SUMMARY

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This workshop brought together engineers and researchers from the United States and Canada to discuss the development and uses of the road meter. The meeting was divided into 5 distinct phases:

1. Concepts and development of the road meter;
2. Evaluation of the road meter;
3. Correlation of road meter data with information obtained from other instruments;
4. Road meter correlation with rating panels and effects of variables; and
5. Use of the road meter for mass inventories and maintenance studies.

In addition to the formal sessions, a $\frac{1}{2}$ -day session was devoted to field inspection of several meters. During the field inspection, the participants were permitted to observe operation of the meters and to ask questions pertinent to their performance.

It is difficult to summarize in several paragraphs the results of a comprehensive session such as this, but several points were brought up from time to time by the participants that suggest needed areas of research. It was agreed by all attendees that the road meter offers a quick and easy tool for obtaining a large number of measurements in a short period of time. It was brought out that its greatest usefulness is probably in mass inventories and in maintenance and priorities planning.

The discussions at several points brought out the need for establishing some type of standards against which road meters of various makes can be calibrated. Perhaps this standard can take the form of a specially instrumented car or a standard pavement section at some central locale to which the various meters could be brought for comparative purposes.

Another point that came up on several occasions was the manner in which correlations between road meter data and serviceability ratings can be made. Some individuals correlate road meter data with information from the CHLOE, roughometer, or some other instrument, and they then rely on established serviceability equations previously set up for these instruments. Other individuals establish their own equations by correlating road meter data with information obtained from rating panels. This latter method is the preferred method.

Throughout the meeting a great deal of discussion was centered on the accuracy of data obtained by the road meter. It was recognized that the shock absorbers on the car, the type of vehicle, the temperature, and many other factors have their effect on the data obtained from the instrument. However, great advances have been made in eliminating much of the variance caused by these factors. The null-seeking device recently developed is a major step in this direction. The null device accounts for shifting of the readings as the test car progresses down the road. This and other refinements in the instrument have increased its accuracy greatly.

There is little question that additional research should be conducted on this method of measuring pavement condition. Nevertheless, it is apparent that a great deal of information is already on hand and that the device can be put into routine use by highway departments in all parts of the world.