RESEARCH PROBLEM STATEMENT

I. PROBLEM TITLE

Pavement Performance Data Needs Assessment

II. RESEARCH PROBLEM STATEMENT

An assessment is needed to determine what types of surface distress and transverse profile data State Highway Agencies (SHA) need in order to support decision-making processes and existing as well as anticipated future reporting requirements. Examples include, but are not limited to, data to support existing SHA's pavement management systems, safety program requirements, pavement mechanistic empirical (ME) data, HPMS reporting, and future anticipated MAP-21 reporting requirements.

Tasks: The research will include the following tasks:

1. Survey and review current SHA's practices regarding currently used pavement condition standards.
2. Determination of an anticipated acceptable level of precision and bias for collected pavement performance data based upon the relative impact of distress types on decision-making processes.
3. Comparison of SHA pavement condition standards relative to AASHTO distress protocols.
4. Identification of gaps in AASHTO protocols and draft provisional standards accordingly.

Final Product:
Products include, but are not limited to: (1) a summary existing SHA data collection practices (including such things as how data are classified by type, severity, quantity, extent, units, etc.); (2) a summary of SHA desired surface distress type data; (3) identification of research needs and activities based on individual distresses; (4) how data are used in decision-making processes (implicit in this evaluation is how the data are used for modeling and pavement management purposes); (5) how collected data are used for SHA internal reporting requirements; and (6) how collected data are used for existing federal and anticipated future federal reporting requirements.

III. RESEARCH OBJECTIVE

The primary objective of this research is to better address SHA's needs from standardized pavement condition protocols.

IV. ESTIMATE OF PROBLEM FUNDING AND RESEARCH PERIOD

Estimated Budget: $350,000
Estimated Project Duration: 24 months