



STATE OF ALABAMA
HIGHWAY DEPARTMENT

MONTGOMERY, ALABAMA 36130

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September 28, 1992

M & T Technical Advisory 3-92

M E M O R A N D U M

TO: All Division Engineers

FROM: Larry Lockett *Larry Lockett*
Materials and Tests Engineer

RE: Design & Rehabilitation of Asphalt Pavements

Recently you received new guidelines (6-11) for pavement treatment and design in the resurfacing and rehabilitation of asphalt pavements. Following are some suggestions this Bureau feels will be helpful to you in evaluating how much and what type build-up will be required to give the most cost effective treatment in this work.

1. Review Pavement Management Data

The Pavement Management Section of this Bureau should be able to furnish you with a computer print-out containing distress data and a pavement rating for a given route and milepost location. They should also be able to furnish you with the in-place pavement build-up.

Falling Weight Deflectometer data, if available, may also be obtained from the Pavement Management Section. For the immediate future, this information will be limited to 4-R work and selected roadways. This information will be made available to you upon request. The future plans of this Bureau is to furnish this data on all four-lane and Interstate systems in the State.

2. Confirm Pavement Management Data

Sufficient cores should be taken to confirm the in-place pavement build-up and its condition.

3. Windshield Survey

A windshield survey should be conducted to assess the extent of distressed areas, rutting, ravelling, etc.; along the proposed resurfacing project.

4. Determine Type of Distress

The type and length of distressed areas should be determined (i.e., full depth cracking, stripping of underlying layers, base failure, etc.). This will probably involve additional coring. A 500 foot distressed area should not dictate the build-up for an entire project. Engineering judgement should determine the removal, undercutting and reconstruction of any particular area.

5. Review Traffic Data

The current and projected traffic counts and percentage of commercial vehicles, along the proposed resurfacing project should be evaluated for future structural requirements.

6. Milling or Leveling

It should be determined whether or not milling is required on the in-place roadway prior to placing an overlay, or whether or not a leveling course is required. Existing condition may be such that neither milling or leveling is required.

If a decision is made to mill the in-place roadway, make sure that sufficient build-up remains after milling to allow density to be obtained on the proposed layers that are to be placed as an overlay.

7. Engineering Judgement

Generally, sound engineering judgement should be used on a case by case, or project by project basis, to determine what the in-place pavement requires for good serviceability.

The Pavement Management Steering Committee, along with the Bureau of Materials and Tests, is in the process of developing a bituminous overlay design procedure for bituminous pavements in Alabama. Upon completion of this procedure, it will be made available to you.

If you should have any questions concerning this matter, please do not hesitate to contact this office.

ELS/cs

cc: Mr. W. E. Page
Mr. William J. Hartzog
All Division Materials Engineers
FHWA
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