ACTIVE RESEARCH PROJECT
SP&R WORK PROGRAM
RESEARCH, DEVELOPMENT AND TECHNOLOGY TRANSFER
Fiscal Year 2002

TITLE: Continued Monitoring of Instrumented Pavement in Ohio

STATE JOB NO: 14652(0) START DATE: 9-3-96
PS NO: 97-26 END DATE: 3-3-02
AGENCY: Ohio University CONTRACT FUNDS: $1,083,534
INVESTIGATOR(S): Shad Sargand FORCE ACCOUNT FUNDS: $30,000
ODOT LIAISON(S): Aric Morse, Roger Green TOTAL STUDY COST: $1,113,534

FUNDING TYPE: 80% Federal, 20% State

OBJECTIVE(S):

For U.S. 33, S.R. 2, and U.S. 35:

To determine long term performance of flexible and rigid pavement.

To compare field results from nondestructive testing such as Falling Weight Deflectometer and Dynaflect with data obtained from controlled testing.

To determine the influence of factors such as temperature, moisture content, and freezing on pavements.

To compare the structural response of pavement systems subjected to static and dynamic loading.

To determine the level of stress introduced in the slab, base and subbase by traffic loads.

To evaluate the impact of drainability of base material on the structural performance of flexible pavements.

For U.S. 23:

To maintain operational status of sensors and data acquisition systems.

To continuously collect seasonal data and monitor structural performance due to environmental factors.

To continuously monitor pavement distress.

To assist ODOT and SHRP personnel in conducting controlled tests.

To install new sensors in rehabilitated sections if required by ODOT or FHWA.

To analyze and prepare data for the FHWA LTPP program using the ORACLE software.

To present data in user friendly charts and tables for application by ODOT engineers.