OHIO DEPARTMENT OF TRANSPORTATION QUARTERLY RESEARCH REPORT

For Quarter Ending <u>December 31, 2002</u>
Date Submitted: <u>February 19, 2003</u>

Project: International Conference on Highway Pavement Data, Analysis and

Mechanistic Design Applications

Research Agency: Ohio University

Principal Investigator(s): <u>Dr. Shad Sargand and Dr. Gayle Mitchell</u>

Pooled Fund Project No: TPF-5(041)

State Job No.: 14807(0) Contract No.: 11879

Project Start Date: 10/1/02 Contract Funds Approved: \$90,000

Project Completion Date: 12/31/03 Spent To Date: \$28,900

__56__% Funds Expended __60_% Work Done __33_ % Time Expired

List the Technical Liaisons and other individuals who should receive copies of this

report: Roger Green, Karen Panell

SUMMARY OF PROGRESS FOR QUARTER:

Sponsors:

The following organizations were solicited to co-sponsor the Conference:

Federal Highway Administration

Flexible Pavement Incorporated

Ohio Concrete Construction Association

Ohio Ready Mixed Concrete Association

Transportation Research Board

Georgia DOT

Missouri DOT

New Jersey DOT

New York DOT

North Carolina DOT

Ohio DOT

Texas DOT

TRB Committee A2B03 – Flexible Pavement Design

TRB Committee A2B09 – Full Scale / Accelerated Pavement Testing

Executive Committee:

The following people were chosen to participate on the Executive Committee of the Conference:

Chair: Mary Ellen Kimberlin, Assistant Director, Highway Management

Ohio Department of Transportation

Larry Anderson, Acting Division Administrator, FHWA Ohio Division Mike Ayers, Director, Pavement Technology Services, American Concrete Pavement Association

Ken Fults, Material and Pavement Engineer, Texas Department of Transportation

Amir Hanna, Senior Program Office/NCHRP, Transportation Research Board

Gayle F. Mitchell, Ph.D., P.E., Director, ORITE/Chair, Civil Engineering Department Ohio University

Robert L. Sack, P.E., Deputy Chief Engineer; Director, Technical Services Division New York Department of Transportation

Roger Sandberg, Vice President of Technology and Market Development National Asphalt Pavement Association

Mark Swanlund, Senior Pavement Engineer, Office of Pavement Technology Federal Highway Administration

Executive Committee Meetings:

Friday, August 16, 2002, 9:30 am to 3:00 pm, ODOT Conference Room November 26, 2002, 9:30 am to 3:00 pm, Hyatt on Capitol Square

Technical Advisory Committee

The following people were chosen to participate on the Conference Technical Advisory Committee:

L. Julian Bendana John Donohue

New York Department of Transportation Missouri Department of Transportation

Ludwig Figueroa Clark Graves

Case Western Reserve University Kentucky Transportation Cabinet

Co-Chair: Roger Green Max Grogg

Ohio Department of Transportation FHWA – Iowa Division

Gerald Huber Anastasios Ioannides Heritage Research Group University of Cincinnati

Thomas Kazmierowski Co-Chair: William Kenis

Ministry of Transportation, Ontario Canada FHWA

Lev Khazanovich Robert McQuiston

ERES FHWA

Katherine Petros Linda Pierce

FHWA Washington Department of Transportation

David Pittman Rob Rasmussen

US Army Corps of Engineers Transtec

Co-Chair: Shad Sargand Mark Swanlund

Ohio University FHWA

Tayabji Shiraz William Wolfe

Construction Technologies Laboratories, Inc.

The Ohio State University

Ben Worel Wes Yang

Minnesota Department of Transportation New York Department of Transportation

TRB Committee A2B03 TRB Committee A2B09

Flexible Pavement Design Full Scale/Accelerated Pavement Testing

Venue:

A contract to host the Conference was finalized in July 2002 with the Hyatt on Capitol Square, Columbus, OH. A single occupancy rate of \$75.00 has been negotiated with advanced reservations required by August 19, 2003.

Conference Advertisement Summary:

ASCE News

Japan Society of Civil Engineers:

- Emailed brochure text, in word format
- Title of the conference and a link to our conference website has been established on there website
- Will try to include same information in the November or December edition of their magazine

Public Roads Magazine:

• Emailed them conference information for inclusion in their magazine. Usually advertise conferences 4 months before they happen.

Better Roads Magazine:

- Conference will be listed in their printed 2003 Calendar of Events, which will be distributed in the December 2002 edition of the magazine
- Conference is listed on their website with a hyperlink to our conference website
- Conference will be listed in their magazine

Roads and Bridges:

• Submitted information about the conference on their website for inclusion in their magazine

Website:

A website was developed providing information about the Conference. Also, abstracts submitted to the conference were put on-line. An on-line abstract review form was developed giving reviewers the capability to read and submit an abstract review form on-line.

Links from the Conference website have been placed on the web sites of:

- 1. Transportation Research Board
- 2. Ohio DOT
- 3. Texas DOT
- 4. Federal Highway Administration
- 5. New York State DOT

Printed Materials:

1. Announcement/Call for Papers brochure, distributed August/September 2002:

Emailed the brochure, which is distributed electronically among the following organizations:

36 people from FHWA

Warren Baas - Ohio Ready Mixed Concrete Association

David Luhr - Portland Cement Association

65 Gary Mullings - National Ready Mixed Concrete Association

Mike Ayers - American Concrete Pavement Association

Jim Goddard - Advanced Drainage Systems

Jim Kennedy – Battelle

Japan Society of Civil Engineers

Total People Emailed Brochure:

106 people

Mailed the brochure to:

10 people from Federal Lands Highway Office

17 people from FHWA Resource Center Pavement & Materials Engineers

113 people from FHWA Division Offices (includes all 50 states, DC, Puerto Rico)

247 people from the SHA's Pavement Personnel (includes all 50 states, DC, Puerto Rico)

4 people at American Concrete Pavement Association (ACPA) Headquarters

33 people with ACPA State Paving Associations

Portland Cement Association

National Stone, Sand & Gravel Association

National Asphalt Pavement Association

37 people from National Asphalt Pavement Association, State Asphalt Pavement

Associations

Asphalt Institute

Texas Hot Mix Asphalt Pavement Association

594 people from TRB 2000 Directory

71 AASHTO people

44 2001 Conference participants

88 Ohio County Engineers

47 Midwest CE Chairs

285 National CE Departments (Professors w/ Pavement/Transportation Specialty)

54 2000 High Performance Concrete Workshop

6 Finite Element for Pavement Analysis and Design

56 copies (4 copies each) to 14 members of OU CE Advisory Board

Total Brochures Mailed: 1,655

2. Postcard Distributed at the 2003 Annual TRB Meeting, distributed January 2003

Conference Manuscripts: Received 90 abstracts

After Executive Committee review of the abstracts, 77 were accepted to the Conference. Papers will be presented on the following topics:

- Collection and Analysis of Response Data
- Development of Mechanistic/Empirical Models
- Calibration and verification of Mechanistic Empirical Models
- Accelerated Pavement Testing
- Non-Destructive Testing
- Two and Three-Dimensional Finite-Element Pavement Models
- Forensic Studies
- Load and Environmental Pavement Response
- Distress Models

Manuscript guidelines were developed based on the guidelines used by the Transportation Research Board, and sent electronically to the authors of accepted abstracts in December 2002 and February 2003. These guidelines detail how manuscripts should be formatted and submitted. The deadline for manuscript submission is March 1, 2003.

Registration:

Registration for the conference is now available on-line at http://www.ohiou.edu/noncredit/Conferences.htm. Conference brochures with registration information are being printed and will be mailed about March 1, 2003.

Tentative Schedule:

A tentative schedule for the conference is outlined below. The session schedules are based on each presentation being 15 minutes, with an additional 5 minutes for questions giving each presenter 20 minutes total.

Sunday, September 7, 2003

11:00 AM – 5:00 PM	Registration
1 - 5 PM	Workshop I – Ground Penetrating Radar Implementation
	Workshop II – 2002 Guide for Mechanistic Pavement Design
5:30 – 7:00 PM	Reception

Monday, September 8, 2003

7:00 AM – 5:00 PM	Registration, Exhibits Open
7:30 – 8:30 AM	Continental Breakfast
8:30 - 9:00	Welcome and Opening Remarks
9:00-10:00	Keynote Address Dr. Carl Monismith
10:00 - 10:30	Break (Exhibits Open)
10:30 - 12:00	2 Parallel Sessions

	Development of M-E Models
	Distress Models
12:00 – 1:30 PM	Luncheon Address
1:30-3:00	2 Parallel Sessions
	Distress Models
	Non-Destructive Testing
3:00-3:30	Break (Exhibits Open)
3:30-5:30	2 Parallel Sessions
	Distress Models
	Non-Destructive Testing
6:00 - 7:00	Social (Exhibits Open)
	Tuesday, September 9, 2003
7:00 AM – 5:00 PM	Registration, Exhibits Open
7:30 - 8:30 AM	Continental Breakfast
8:30 - 10:00	2 Parallel Sessions
	Calibration and Verification of M-E Models
	Forensic Studies
10:00 - 10:30	Break (Exhibits Open)
10:30 - 12:00	2 Parallel Sessions
	Load and Environmental Pavement Response
	Forensic Studies
12:00 – 1:30 PM	Luncheon Address
1:30-3:00	2 Parallel Sessions
	Load and Environmental Pavement Response
	2 and 3D FEM Models
3:00-3:30	Break (Exhibits Open)
3:30-5:30	2 Parallel Sessions
	Load and Environmental Pavement Response 2 and 3D FEM Models
	Wednesday, September 10, 2003
7:00 – 8:00 AM	Registration, Exhibits Open
7:30 - 8:30 AM	Continental Breakfast (Exhibits Open)
8:30 - 10:00	2 Parallel Sessions
	Accelerated Pavement Testing
	Collection and Analysis of Response Data
10:00 - 10:30	Break
10:30 - 12:00	2 Parallel Sessions
	Accelerated Pavement Testing
	Collection and Analysis of Response Data
12:00 – 1:00 PM	Lunch, Conference Summation
1:00-5:00	Site Visits

Workshops:

The following two pre-Conference workshops have been scheduled for Sunday, September 7, 2003 from 1-5 PM:

- The 2002 Guide for Mechanistic Pavement Design, and
- Ground Penetrating Radar Implementation

The GPR Implementation workshop will be led by Tom Scullion of the Texas Transportation Institute, and Mike Darter and his colleague of ERES Consultants Inc. have agreed to lead the 2002 Guide for MPD workshop.

Keynote Speakers

Dr. Carl Monismith of the University of California – Berkeley will open the conference Monday, September 8 with a Keynote address. Mr. Paul Teng of the Federal Highway Administration has been invited to provide the closing address for the Conference during lunch on Wednesday, September 10. The Director of Ohio DOT, Mr. Gordon Proctor, will provide the welcome. Dr. Günther Leykauf of the Technische Universität München has also been invited to provide a keynote address.

Site Visits

Two site visits have been scheduled in conjunction with the Conference on Wednesday, September 10 from 1 to 5 PM. Participants can choose to tour the Accelerated Pavement Load Facility in Lancaster, Ohio or the U.S. OH-SHRP Test Road in Delaware, Ohio.

PROPOSED WORK FOR NEW QUARTER:

Exhibitors:

Information packets will be mailed to exhibitors and spaces will be selected by the exhibitors on a first come, first serve basis.

Printed Materials:

A Conference brochure, with a registration form will be mailed around March 1, 2003

Manuscripts:

Will be submitted by March 1, 2003. The password-protected manuscripts will be placed on the website for review by members of the Executive and Technical Advisory Committees. An online manuscript review form will be developed and reviews of the manuscripts will be completed via an on-line form.

Notification of manuscript acceptance will occur by April 15, 2003.

Submission of final papers will occur on May 15, 2003.

IMPLEMENTATION:

None.

PROBLEMS (if any):
None.
EQUIPMENT PURCHASED (if any):
None.