Ohio Department of Transportation
Quarterly Research Report

For Quarter Ending December 31, 2002
Date Submitted: February 19, 2003

Project: International Conference on Highway Pavement Data, Analysis and Mechanistic Design Applications
Research Agency: Ohio University
Principal Investigator(s): Dr. Shad Sargand and Dr. Gayle Mitchell

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
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](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
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 on-line 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.