

4th Annual Technical Forum

Geologic Hazards impacting Transportation Systems in the Appalachian Region

Sponsored by:

Nick J. Rahall, II
Appalachian Transportation Institute
&
Ohio Department of Transportation

August 4-5, 2004
Columbus, Ohio

www.marshall.edu/rti
www.dot.state.oh.us/geotechnical



Appalachian Coalition

Chair: Dr. Tony Szwilski, P.E. Co-Chair: Kirk Beach

Geologic Hazards impacting Transportation Systems in the Appalachian Region

The 4th Annual Technical Forum, an activity of the Appalachian States Coalition for Geohazards in Transportation, is sponsored by Nick J. Rahall, II, the Appalachian Transportation Institute (RTI), and the Ohio Department of Transportation.

RTI, a U.S. Department of Transportation University Transportation Center, was established at Marshall University by the U.S. Congress in the Transportation Equity Act for the 21st Century on June 8, 1998. The grant includes four partner schools in southern West Virginia.

The Appalachian States Coalition is comprised of representatives from the principal federal, state, and private transportation entities.



The Appalachian states are tied by common geographical and geological challenges.

Multi-Modal transportation in the Appalachian Region is essential for economic development. The coalition includes members from Kentucky, Ohio, West Virginia, Pennsylvania, and Virginia U.S. Geological Survey, U.S. Army Corps of Engineers, CSX and Norfolk Southern Companies.



This grassroots organization's objectives, as they develop, include sharing of resources and information, exchange of methodologies and experiences, and collaboration on geologic projects and research activities.



It is an exciting prospect to work with federal, state, and private entities faced with prevention, correction or remediation of similar geologic problems in the Appalachian region.

Exhibitor Information

Exhibiting is an excellent opportunity for your organization to display its recent achievements and network with transportation professionals. It also provides an unprecedented source of advertisement. Many companies have capitalized on this opportunity and fault this conference for increasing their business.

The exhibitor registration fee is \$200. This fee includes:

- (2) Full Registrations
- (1) 2'x8' skirted table display
- (1) Lunch
- (2) Continental Breakfasts



Opening Session**10:30 a.m.**

Chair: Kirk Beach

1. Synthesis Study of State DOTs and the UK Geotechnical Data Systems.
Robert Bachus, GeoSyntec. Atlanta GA
2. Overview of Geological Hazards that may Impact Ohio's Transportation Network
Thomas Berg, State Geologist, Ohio Geological Survey

Lunch Buffet**11:30 - 1:00 p.m.****Session 2: GeoHazards Investigations****1:00 p.m.**

Chair: John Keifer

1. Geological Hazard Investigations for MUS-93-4.96.
Richard Williams, BBC & M Engineering
2. Integrated Geotechnical Data Management for Working Engineers and Geologists
Scott Weaver of Earthsoft. East Paradise, UT
3. Arresting Subsidence Using Low Cost Pozzolan Materials
Paul Petzircik, DNR, MD; Terry Ackman, NETL, Pittsburgh

Break**2:30 p.m.****Session 3: GIS Applications in Geotechnical Issues****3:00p.m.**

Chair: Steve Brewster

1. Development of Abandoned Underground Mines GIS Application
Charles Banks et al, Ohio Geological Survey
2. GIS Application for Landslide
Ghulan Bham & Krishna Murthy, West Virginia University Institute of Technology, Montgomery, WV
3. GIS/GPS Applications for a Geotech Corridor Study
Ed Bennet & Kirk Beach, ODOT
4. Grid Analysis of Landslide Hazards Impacting Transportation Systems
Sean Davies, Intergraph Corporation
Matt West, Keigan Systems

Adjourn**5:00 p.m.****Continental Breakfast****7:30 a.m.****Session 4a: Ground Stabilization Issues****8:00 a.m.**

Chair: James Fisher

1. Embankment and MSE Wall Design and Construction using Lightweight Backfill
James Fisher, West Virginia DOT
2. Mine Shaft Grouting Using CCPs to Reduce Ground Water Infiltration
Gary Fuhrman, Western Maryland Resouce Conservation and Development Council
3. Use of Expanded Polysyrene (EPS) in Slope Stabilization
Marvin Cook, Cedar City, UT

Session 4b: GIS Analytical Tools and Karst**8:00 a.m.**

Chair: Steve Brewster

1. Internet GIS Tool for Site Analysis in Kentucky
Dan Carey, Kentucky Geological Survey
2. A Geospacial Analysis for an Environmental Restoration Feasibility Study of the Monday Creek Watershed
John Ferguson, USACE, Huntington, WV
3. Karst Inventory and Vulnerability Assesment for I-66, Somerset to London
Mitchell Weber, Gannet Fleming Engineers and Architects

Break / Hotel Checkout**10:00 a.m.****Session 5: Landslides and Rockfalls****10:30 a.m.**

Chair: Tony Szwilski

1. Determining the Validity and Effectiveness of Landslide Susceptibility Maps
Richard Pohana, City of Cincinnati, OH
2. Rockfall Control Measures in ODOT District 11
James Graham, Ohio DOT
3. Landslide Investigation on SR 7 Along Ohio River
Peter Narsavage & Paul de Verteuil, DLZ Columbus, OH
4. Exploring Construction on Sites Underlain by Colluvial Deposits in the Eastern Kentucky Coal Fields
Hugo Aparicio, Fuller, Mossbarger, Scott and May Engineers

Adjourn**12:30 p.m.**

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Deadline : Friday, July 30, 2004

Name _____ Title _____

Organization _____

Address _____

Day Phone _____ Fax _____ E-mail _____

Attendee Type: Professional (\$50) On-Site (\$75) Full-Time Student (Free)
(Cash or Check Only)

Payment Information

Check or Money Order made payable to RTI is enclosed. Please invoice me

VISA MASTERCARD Number: _____ Expiration ____ / ____

Cardholder's Signature _____

Credit Card Billing Address _____

Check here if billing address is the same as above.

Detach and mail to: ODOT, Attn: Debbie Sparkes, 1600 W. Broad St., Columbus OH, 43223

Registration Information

Please pre-register by Friday, July 30, 2004.

Cost: \$50 - Professionals
 \$0 - Students
 \$75 - On-site

Questions? Please contact:

Debbie Sparkes

Tel. 614.466.2846
Fax 614.275.1354
Email Debbie.Sparkes@dot.state.oh.us
Mail 1600 West Broad Street
 Columbus, OH 43223

A block of rooms is reserved at the Clarion Dublin Hotel at 660 Metro Place North, Dublin, Ohio 43017, under Rahall Transportation. Call 614.764.2200 by July 12 for the special rate of \$75 per night.

