

data interchange for geotechnical and geoenvironmental specialists

2005

2016





Prior to 2004 – {Fill in your history here}

June 2004 – Newport Beach, CA – National Geotechnical Management Workshop: Archiving and Web Dissemination of Geotechnical Data

Co-Hosts

- Federal Highway Administration (FHWA)
- Consortium of Organizations for Strong Motion Observation Systems (COSMOS)
- Pacific Earthquake Engineering Research Center (PEER)

FHWA and Ohio DOT formed the Geotechnical Management System (GMS) group

GMS Group – 2004

Members of the GMS Group:

• The DOTs

California Minnesota Connecticut Missouri

Florida North Carolina

Georgia Ohio

Indiana Tennessee

Kentucky

- FHWA Ohio Division
- FHWA Federal Lands Highway
- UK Highway Agency
- USACE
- USEPA
- USGS



GMS Group – First Priority

Develop geotechnical and geoenvironmental data interchange standards

Transportation Pooled Fund project TPF-5(111), Development of Standards for Geotechnical Management Systems

- August 2005, University of Florida, Marc Hoit (PI) and Mike McVay (Co-PI)
- \$599,000, 3 years
- GMS, Core Team to provide 4,000 hours (\$521,000) of in-kind services
- Special Interest Groups (SIGs) to provide all in-kind services



- Atlanta May 2005;
 Pre-planning
 Workshop
- Develop consensus (COSMOS, UF, AGS) on basic structure of schema

Date	Meeting	Outcomes		
May 16-17, 2005, Atlanta, GA	Pre-planning	Draft schema structure and plans to submit proposal		
August 10-13, 2005, San Francisco, CA	First Workshop	Structured into schema team and dictionary team Draft schema, dictionary and users guide for presentation to GMS Approved		
November 18, 2006, Orlando, FL	Second Workshop			
January 18-19, 2006, Atlanta, GA	GMS Meeting			
March 2007, UK	AGS Meeting	Developed plan to move to UML version with new tool to automate schema creation for consistency		

Date	Meeting	Outcomes	
September, 2007, Boston, MA	Workshop V1.0a review	Set actions, assignments and tasks to finalize V1.0a – set release for Spring 2008	
Orlando Florida, March 25-26, 2009	Invitational Workshop	Approved new timeline, use of consultant for final stages, develop plans for permanent governance/ownership	
August 2009	Consultant hired	Galdos hired to complete Schema	
May 19, 2010	Update Schema to v1.1	V1.1 released	
June 30, 2012	Completion of v2.0a	V2.0a released	
June 22-23, 2012, SF, CA	Final Transfer Workshop	Developed proposal to ODOT for new funding to transfer schema to ASCE-GeoInstitute and make available to community.	

POOLED FUND STUDY - PARTICIPANTS

Association of Geotechnical and Geoenvironmental Specialists (AGS)	Keynetix Ltd.	DIGGS Final Report Page 5	Loren Turner, California Department of Transportation (Technical Lead)	Jean Benoit, University of New Hampshire	Joe Solsky, United States Army Corps of Engineers
Bridge Software Institute at the University of Florida	Minnesota Department of Transportation	Corey Bobba, Federal Highway Administration - Office of Federal Lands Highway	David Wilson, United States Environmental Protection Agency	John Bobbitt, Petrochemical Open Standards Consortium	Kim Stagg, Delta Environmental Consultants, Inc.
California Department of Transportation	Missouri Department of Transportation	Derrick Dasenbrock, Minnesota Department of Transportation	Geotechnical Data Coalition	Chris Bray, Keynetix Ltd	David Trevino, United States Navy
Connecticut Department of Transportation	Mott MacDonald	Cyprian Fonge, Georgia Department of Transportation	Kirk Beach, Ohio Department of Transportation (Project Lead)	Salvatore Caronna, gINT Software Inc. (Bentley Systems, Inc.)	Scot Weaver, EarthSoft Inc
Consortium of Organizations for Strong-Motion Observation Systems (COSMOS)	North Carolina State University	Leo Fontaine, Connecticut Department of Transportation		Roger Chandler, Keynetix Ltd	
Construction Industry Research and Information Association	North Carolina Department of Transportation	Mike Fritz, Missouri Department of Transportation	Roger Chandler, Association of Geotechnical and Geoenvironmental Specialists	Marc Hoit, North Carolina State University (Group Leader)	
(CIRIA)	Ohio Department of Transportation	Laurel Gorman, United States Army Corps of Engineers	Marc Hoit, North Carolina State University (Technical Lead)	Mike McVay, Bridge Software Institute at the University of Florida	
Delta Environmental Consultants, Inc.	Petrochemical Open Standards Consortium	Will Holmes, Kentucky Department of Transportation	Thomas Lefchik, Federal Highway Administration - Ohio Division Office (Technical Lead)	Daniel Ponti, United States Geological Survey	
EarthSoft Inc.	Tennessee Department of Transportation	David Horhota, Florida Department of Transportation	Tim Spink, Construction Industry Research and Information Association	Paul Quinn, Keynetix Ltd	
Federal Highway Administration (FHWA) - Office of Federal Lands Highway	United Kingdom Highways Agency (UKHA)		Loren Turner, Caltrans, Division of Research and Innovation	Tim Spink, Mott MacDonald	
Federal Highway Administration (FHWA) - Ohio Division Office	United States Army Corps of Engineers (USACE)	Thomas Lefchik, Federal Highway Administration - Ohio Division Office (Technical Lead)	(Technical Lead) and Consortium of Organizations for Strong- Motion Observation Systems	Mark Styler, University of Florida	
Florida Department of Transportation	United States Environmental Protection Agency (U.S. EPA)	Mohammed Mulla, North Carolina Department of Transportation	Associate Members	Loren Turner, California Department of Transportation (Technical Lead)	
Galdos Inc.	United States Geological Survey (USGS)	Len Oliver, Tennessee Department of Transportation	Jean Benoit, Consortium of Organizations for Strong-Motion Observation Systems		
Georgia Department of Transportation	United States Navy	Jon Paauwe, Indiana Department of Transportation	Kirk Hatfield, University of Florida	Geoenvironmental Special Interest Group	
gINT Software Inc. (Bentley Systems, Inc.)	University of New Hampshire	David Patterson, United Kingdom Highways Agency	Mike McVay, Bridge Software Institute, University of Florida	Roger Chandler, Keynetix Ltd	
Indiana Department of Transportation	Geotechnical Management System Group	Gary Person, Minnesota Department of Transportation	David Patterson, United Kingdom Highways Agency	Kirk Hatfield, University of Florida (Group Leader)	
Kentucky Department of Transportation	Kirk Beach, Ohio Department of Transportation (Project Lead)	Daniel Ponti, United States Geological Survey	Core Special Interest Group	DIGGS Final Report Page 6 Anand Mudambi, United States Environmental Protection Agency	

IMPLEMENTATION AND TRANSITION OF DIGGS

- Contract between Ohio DOT and ASCE-GI
 - \$80,000, October 2013 October 2015; no cost time extension to October 2016
- $^{\circ}$ Oversee conversion from DIGGS 2.0 α to DIGGS 2.0
- Transition DIGGS data schema and data dictionary ownership and management to ASCE-GI