

OHIO DEPARTMENT OF TRANSPORTATION
QUARTERLY RESEARCH

REPORT



For Quarter Ending: March 31, 2009

Date Submitted April 20, 2009

Project Title: Development of Geotechnical Data Schema in Transportation

Research Agency: University of Florida

Principal Investigator(s): Marc Hoit

State Job No.: 134254

Agreement No.: 20982

Pooled Fund Study No. (if applicable): TPF5(111)

Project Start Date: October 1, 2005

Contract Funds Approved: \$ 600,000

Project Completion Date: June 30, 2011

Spent To Date: \$ 118,219

% Funds Expended 30 % Work Done 70 % Time Expired 54

List the Technical Liaisons and other individuals who should receive copies of this report: _____ Kirk Beach _____

Note: no cost extension given until June 2011 (old date June 08) – hence %time has been adjusted accordingly.

SUMMARY OF PROGRESS FOR QUARTER:

Attach a progress schedule consisting of graphical information depicting (1) a schedule of research activities tied to the tasks defined in the proposal, (2) a comparative status of actual versus estimated expenditures, and (3) a percentage completion of the research.

- A GMS meeting was held in Orlando, March 25 & 26, topics were:
 - How to get v1.0 released (what needs to be fixed)

- How to restructure the governance for the long term
- A plan of action was developed with timelines and actions
- Loren Turner is acting as project manager for these tasks (in conjunction with Marc Hoit)

PROPOSED WORK FOR NEW QUARTER:

- Major tasks for next quarter resulting from GMS meeting:
 - Hire consultants to review and advise on remaining issues with schema and suggest corrections
 - Develop governance options for long term stability (present to GMS)
 - By June, we will have the plan for releasing v1.0 and options for governance.
 - Will try and create final release ASAP (June if issues are small) – Final schema will include:
 - AGS tables (Boring, insitu, testing) – official
 - Piling – as is (from UF) – considered draft
 - Geo-env – as-is – considered draft
 - Geophysical – as-is – from Cosmos

IMPLEMENTATION (if any):

PROBLEMS & RECOMMENDED SOLUTIONS (if applicable):

Describe any problems encountered or anticipated that might affect the completion of the project within the time, scope, and fiscal constraints set forth in the contract, along with recommended solutions to those problems. **NOTING DIFFICULTIES IN THIS SECTION DOES NOT CONSTITUTE A REQUEST TO MODIFY THE PROJECT.** Requests for additional time, money, or scope revisions must be submitted in a separate letter to the Office of R&D Administrator.

The remaining issue is how to make the schema easier to implement – so adoption is better. We have a plan to simplify the schema and still retain most of the benefits.

EQUIPMENT PURCHASED (if any):

N/A

CONTACTS & MEETINGS:

Describe any meetings or contacts with ODOT technical liaisons and other pertinent

individuals relative to this project.

The March 25&26 GMS meeting in Orlando. Many of the GMS members were there as well as the GDC and Core team. All participated and we developed a plan for completion.

Graphic View of Pooled Fund Study TPF 5(111)

Phase	Phase 1	Phase 2	Phase 2
Task Number	1	2	3
Task	Develop straw survey	Send to GMS team	Finalize Survey Questions
Deliverable	Preliminary draft survey (Prototype data dictionary & schema)	Finalized Survey – Consensus version (<i>Preliminary Draft Dictionary available for DOT use</i>)	Collected responses to survey
Estimated Completion Date	30-Nov-05	15-Jan-06	31-Jan-06
Work Accomplished	Prototype schema and dictionary completed	Draft Dictionary and schema completed - Dictionary needed more work to complete	GMS returned comments
Actual Completion Date	30-Nov-05	17-Jan-06	6-Feb-06
Proposed expenditure for task	\$43,240	\$51,299	\$51,140
Proposed % Total expenditure	100%	9%	17%
Actual expenditure for task	\$38,534	\$19,777	\$18,288
Actual % Total expenditure	89%	3%	6%
Phase	Phase 1	Phase 2	Phase 2

Phase 2	Phase 2	Phase 2	Phase 2
4	5	6	7
Response comments from GMS	Distribute Survey	Reduce Survey Data	Draft out for comments
Draft dictionary ready for general comment	Comments from general stakeholders on draft dictionary	Final data dictionary	Preliminary draft hierarchy and schema
6-Mar-06	15-May-06	30-Jul-06	31-Jan-07
Draft Dictionary behind 2 weeks	Internal review of Draft circulated, no meetings, update to draft for public review by July 12	Draft corrected and readyed for Limited Public Review (new step added) - Launched Aug 7,06 - Completed Sept 15, 06 - New effort to make correction in Schema from Limited review comments - Expected completion by Jan 30 - Public release expected. Public comments will be received by May 1.	Survey from GMS and limited public review completed. Found inconsistencies in the schema. New effort launched to convert to UML description which automatically creates the XSD files - no change in the hierarchy or an major changes to schema.
8-Aug-06	15-Sep-06	10-Jan-07	20-Feb-07
\$51,140	\$51,140	\$43,240	\$51,140
26%	34%	41%	50%
\$0	\$0	\$3,400	\$0
6%	6%	7%	7%
Phase 2	Phase 2	Phase 2	Phase 2

Phase 2	Phase 3	Phase 3
8	9	10
Final schema/dictionary delivered	Develop additional straw dictionaries, hierarchy and schema	Finalize new elements for draft schema
Draft hierarchy and schema	New additions to phase 1 schema for additional elements	Final hierarchy and schema of new elements - ready for standards groups and use
1-May-07	1-Mar-07	30-Jun-08
<p>Working on putting all schema data into new tool (UML) - v0.10 was delivered April 08 - final public review draft planned July 4th - UML agreed by GMS & GDC - Cost is \$40K - Draft Release will have wide dissemination and be treated as the Full public release. New merged website is complete and operational for the public review. V1Beta was released on July 18, 2008 for review. The forum is being monitored for review</p>	<p>A new Sig has been developed for Environmental data. The kickoff meeting was held February 13-14, 07 in Orlando. The SIG includes US EPA, US Army Corps, AGS, Earthsoft, Department of the Navy and UF. The Dictionary Workshop was held June 18-21, 07 in Orlando to work out the details of the including of EPA schemas into DIGGS. The group developed the ENV additions and added them directly to the UML description. The Nov workshop meeting in Salt Lake City finalized the draft schema which has been incorporated for the June 08 public review. New SIGs will be discussed one release is complete. March 25&26 GMS meeting developed actions to release v1.0 schema and develop governance for future.</p>	<p>Env schema is incorporated into the Base schema public review. At end of public review - GMS needs to discuss future efforts and SIGs - Env schema is the only new schema that will be added - rest of efforts will be on tools, adoption, support, etc</p>
30-Jul-08	1-Oct-08	
\$40,000	\$150,000	\$105,000
57%	82%	99%
\$62,212	\$21,241	\$50,000
17%	21%	29%
Phase 2	Phase 3	Phase 3