

OHIO DEPARTMENT OF TRANSPORTATION
QUARTERLY RESEARCH

REPORT



For Quarter Ending: Sept 30, 2008

Date Submitted Nov 13, 2008

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 22% Work Done 70% Time Expired 46

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.

- Beta release of DIGGS v1.0 beta was done on July 18, 2008
- An email was sent to the selected reviewers as well as some approved Geotech mailing lists
- A news release was sent out to technical publications covering the review
- The Website is being used for public review DIGGSml.org:
 - Allows for registration of DIGGS ID
 - Allows people to register, get schema and submit comments to forum
 - Forum is being monitored by DIGGS core team members

PROPOSED WORK FOR NEW QUARTER:

- Schedule GMS meeting to work on next steps (Proposed in Jan 09)
- Develop plan for moving to release version and required support
- Develop plan developing tools to support schema

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 schema is in a beta review phase. The effort to support the review process is greater than expected and more effort is required. A meeting in January is proposed with the GMS to discuss options.

The US entities do not appear to be developing implementations and reviews. Again, the GMS meeting is expected to produce a plan.

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.

A number of conference calls have been held to discuss the review and process for moving forward. There was a GMS call to discuss planning for a meeting.

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.</p> <p>New merged website is complete and operational for the public review.</p> <p>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.</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</p>
30-Jul-08	1-Oct-08	
\$40,000	\$150,000	\$105,000
57%	82%	99%
\$62,212	\$21,241	
17%	21%	21%
Phase 2	Phase 3	Phase 3