

OHIO DEPARTMENT OF TRANSPORTATION  
QUARTERLY RESEARCH

REPORT



For Quarter Ending: June 30, 2008

Date Submitted June 26, 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 21% Work Done 65 % Time Expired 42

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.

- Preparing public release version – target date July 4
- Remaining issues to complete by July 4<sup>th</sup>:
  - Convert CPT to tables
  - Discussion item on ID conflict and multiple projects – on forum
  - Final documentation update
- Contacted Tom Lefchik to get GMS approval for review release
- Website ready for public review:
  - Allows for registration of DIGGS ID
  - Allows people to register, get schema and submit comments to forum

#### **PROPOSED WORK FOR NEW QUARTER:**

- Support and monitoring of review comments – updates to schema
  - Review will last 3 months (July-Oct)
  - Schema will be updated minimum of every month (more frequent if changes are significant)
- Release the Translator (AGS->DIGGS) for the new schema changes
- Individual participants will work on making their tools ready to use the schema. (gInt, HoleBase, FDOT spreadsheets, Equis, COSMOS VDC, etc)

#### **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.

Phase 2 of the project (Base schema including AGS, COSMOS and UF piling) is ready for approval and release for public review. It has required additional time to move to UML version and add Geo-Env schema. Will be entering the support and maintenance portion for the base schema. At the end of the public review – the GMS needs to meet and discuss direction for phase 3. It is suggested that a portion of the funding be used to support and maintain the base schema – and the rest be used for new additional SIGs.

No change in the deliverables or cost of the project is expected

**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.

Loren Turner and Marc Hoit participated in the AGS user meeting in Birmingham, UK. They presented progress on DIGGS including working versions of VDC and status of Florida database relating to DIGGS.

<b>Graphic View of Pooled Fund Study TPF 5(111)</b>					
<b>Phase</b>	<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 2</b>	<b>Phase 2</b>	<b>Phase 2</b>
<b>Task Number</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Task</b>	Develop straw survey	Send to GMS team	Finalize Survey Questions	Response comments from GMS	Distribute Survey
<b>Deliverable</b>	Preliminary draft survey (Prototype data dictionary & schema)	Finalized Survey – Consensus version ( <i>Preliminary Draft Dictionary available for DOT use</i> )	Collected responses to survey	Draft dictionary ready for general comment	Comments from general stakeholders on draft dictionary
<b>Estimated Completion Date</b>	30-Nov-05	15-Jan-06	31-Jan-06	6-Mar-06	15-May-06

<b>Phase 2</b>	<b>Phase 2</b>	<b>Phase 2</b>	<b>Phase 3</b>	<b>Phase 3</b>
<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
Reduce Survey Data	Draft out for comments	Final schema/dictionary delivered	Develop additional straw dictionaries, hierarchy and schema	Finalize new elements for draft schema
Final data dictionary	Preliminary draft hierarchy and 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
30-Jul-06	31-Jan-07	1-May-07	1-Mar-07	30-Jun-08

Work Accomplished	Prototype schema and dictionary completed	Draft Dictionary and schema completed - Dictionary needed more work to complete	GMS returned comments	Draft Dictionary behind 2 weeks	Internal review of Draft circulated, no meetings, update to draft for public review by July 12
Actual Completion Date	30-Nov-05	17-Jan-06	6-Feb-06	8-Aug-06	15-Sep-06
Proposed expenditure for task	\$43,240	\$51,299	\$51,140	\$51,140	\$51,140
Proposed % Total expenditure	100%	9%	17%	26%	34%
Actual expenditure for task	\$38,534	\$19,777	\$18,288	\$0	\$0
Actual % Total expenditure	89%	3%	6%	6%	6%
<b>Phase</b>	<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 2</b>	<b>Phase 2</b>	<b>Phase 2</b>

<p>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.</p>	<p>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.</p>	<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 &amp; 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.</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 rdetails 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>
10-Jan-07	20-Feb-07	30-Jun-08	1-Oct-08	
\$43,240	\$51,140	\$40,000	\$150,000	\$105,000
41%	50%	57%	82%	99%
\$3,400	\$0	\$58,212	\$21,241	
7%	7%	17%	20%	20%
<b>Phase 2</b>	<b>Phase 2</b>	<b>Phase 2</b>	<b>Phase 3</b>	<b>Phase 3</b>