

Spatial Focus FGDC CAP Grant 2011 Review of Planned Activities



**PRESENTATION TO FGDC CAP GRANT COMMITTEE
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The United States Thoroughfare, Landmark, and Postal Address Data Standard



- Endorsed by FGDC on Feb. 9, 2011
- Developed by Address Standard Working Group of URISA, under authorization by FGDC
 - Broad community participation (Wiki, presentations, etc.)
 - Early adoption by users
 - ✦ States (Massachusetts, Oregon, Minnesota)
 - ✦ Local Governments (DC; Fairfax County, VA; City of Charlotte; Fulton County, GA)
 - Strongly expressed need for standards

Background of the Address Standard



- The Address Standard is complex
- Implementation is expected at the Federal, State and local government levels
 - There are significant differences in the overall strategy of implementation at each of these levels
- Private sector implementation by address aggregators and software vendors is also expected
 - Simplified reference implementation will give them guidance and assistance
- Keeping with the development methodology previous followed by the Address Standard Working Group under the authority of FGDC and URISA, a professional organization
 - The design of the quality and data exchange tools will be an open and transparent process

Starting a Practical Implementation



- Wide variety of user address management systems in place
- Wide variety of data schemes in use
 - Implementation tools need to be flexible
 - Implementation tools need to be extensible
 - Implementation tools need to support simple and common cases
- Inconsistent Quality Control Usage
 - No standard Quality Control reporting
 - Implementation needs to (partially) automate QC testing
 - Implementation needs to automate QC reporting

Tools For Practical Implementation



- Focus on Address Data Quality (SQL) and Address Data Exchange (XML)
 - Least readable parts of the standard
 - Technical components make them less approachable
 - Tools can help users “decode” the standard
- Spectrum of users targeted
 - Address assignment and repository personnel
 - Commercial and open source software designers
 - Data aggregators
- Prototypes will point to fertile ground for developing “finished” tools
- Approach applicable to multiple platforms

Towards Tools



- **Step 1: Identify Tool Modules**
 - Candidates include:
 - ✦ Field mapping to Data Quality views or Data Exchange XML tags
 - ✦ Decision trees for using elements of Data Quality and Data Exchange
 - ✦ Flagging data
 - ✦ Prototype implementations for selected Data Quality measures
- **Step 2: Describe Tool Modules**
 - Functional requirements
 - Work flows
 - Dependencies

Towards Tools



- Step 3: Design prototypes for tools
 - Prototypes will be incomplete
 - May simulate selected functionalities
 - Created to discover further design requirements
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- Step 4: Review design criteria and prototypes with addressing community
 - Consult with local, state and federal agencies
 - Gather input from various parts of the country
- Step 5: Prepare Work Program for Implementation

Addressing Community: the Heart of the Effort



- Address standard itself came from community needs
- Address standard process provides a model for community involvement
- Essential for including a broad range of perspectives.
 - ✦ Examples from the address standard
 - Separator elements to accommodate hyphenated addresses in Queens, NY and Hawaii
 - Address Number Prefixes for:
 - PLSS references in midwestern addresses
 - Negative addresses in the Pacific Northwest
 - Examples describing subaddresses of unnumbered thoroughfare addresses in Puerto Rico
- Similar conditions will inform address tool designs.

Schedule



Task	Description	Deliverable
Identify Tool Modules	Complete a requirements list of the tools required	Technical Memorandum: Requirements List for Tools for Address Data Exchange and Address Data Quality Testing
Design Prototypes for Tools	Design prototypes for most critical tools	Prototypes for most important tools for Data Exchange and Data Quality Testing, with documentation
Test Tools with in-house data, adjust and re-test with clients and volunteer organizations	Coordinate review of outlines and content descriptions with local, state, and federal agencies, and address practitioners for comprehensiveness of detail and information	Technical Memorandum: Results of User Testing with Prototype Tools

Schedule



Task	Description	Deliverable
Prepare Work Program for Completion of Tools	Prepare a comprehensive work program for the development of tools as modules, including content testing and peer review.	Report: Work Program (including Tasks, Level of Effort, Estimated Costs) for development of tools for Address Data Quality and Address Data Exchange



Questions?