Louisiana Address Maintenance Plan (LaAMP)

_Craig Johnson, AICP_
Louisiana Geographic Information Center, Baton Rouge, LA

_Kathrine Cargo, GISP, ENP_
Orleans Parish Communication District, New Orleans, LA
Partners

- Federal Geographic Data Committee (FGDC) CAP Grant awarded for 2011 to fund the Business Plan creation
- Louisiana Chapter NENA
- Louisiana Geographic Information Center
- Orleans Parish Communication District
Now is the time to implement an address plan

- **Louisiana Broadband Initiative** – Federally Funded effort to increase broadband coverage.

- **Improved Emergency Preparedness** – USGS-funded collection of coastal infrastructure.

- **Next Generation 911** data requirements – new NENA standards and new FGDC addressing standard now exist.
LaAMP Stakeholders

- Communication Districts and First Responders
- Assessors
- Registrar of Voters
- Economic Development Agencies
- Homeland Security & Emergency Preparedness Agencies
- Local and State Government Agencies, including healthcare services, taxing districts, school districts
The Address Maintenance Survey developed with input from LANENA

Survey constructed to assess:

- Current address maintenance practices
- Organizational ability to create and maintain addresses
- How Automated Location Information (ALI) is maintained
- Parish preparation for Next Gen 911
Survey Goals

- Identify the status of 911 addressing in Louisiana.
- Determine requirements of address users.
- Develop consensus on how addresses should be maintained.
- Develop a Business Plan that meets state and local government needs.
The Address Maintenance Survey developed with input from LANENA

- 57/64 Parishes (90%) responded (June-October, 2011)

- Survey designed to be completed in less than 10 minutes, 21 questions

- On-line survey link sent to every Communication District Director in the state
Results from the Survey

- 72% of responding Communication Districts are the addressing authority for their parish
- 58% use address ranges, and the remainder use address points or a combination of points and ranges to locate 911 calls for service
- 56% have an addressing ordinance to ensure a standardized addressing process
Results from the Survey

- 57% say their highest priority for NextGen 911 implementation is increased funding
  - Second priority: NENA and industry need to agree on common communication standards
  - Next highest priority is increased bandwidth and improved broadband capacity
Data and Resource Gaps

- 14 parishes are not Phase II compliant.
- 28% of communication districts are not the primary addressing authority.
  - Assessors
  - Permits department
  - Planning departments
  - Streets/Public Works
  - GIS Departments
Data and Resource Gaps

- Many parishes do not have access to sufficient bandwidth to implement NextGen911.
- 13 Parishes do not maintain any digital address data as either points or ranges.
- 24 Parishes (38%) have no members in Louisiana Chapter of NENA.
2012 NENA Membership by Parish

Membership Status
- Green: Members
- Turquoise: Non-Members
- Beige: Did not respond to survey

Source: 2011 Louisiana Address Maintenance Plan
December 2011
General Observations from the Survey Results

- The proposed business plan should include a phased approach for address maintenance implementation to account for the widely varying levels of Parish capability.

- Address issues consistent throughout the state include:
  - Need for funding
  - Need for use of standardized address data
  - Need for technical assistance
Progression from Survey Results to an Address Maintenance Business Plan

- For ease of implementation, the Plan should employ web-based solutions
- The Plan shall be easy to implement by a non-GIS/non-technical professional
- The Plan should provide cost-effective solutions
- The Plan should facilitate the use of address data standards.
LaAMP

Louisiana Address Maintenance Plan
Illuminating the way forward...

The Louisiana Address Maintenance Plan
A Business Plan for Statewide Address Management

December 2012

Developed by:
The Louisiana Geographic Information Center (LAGIC) in coordination with the Louisiana GIS Council Addressing Subcommittee and the Orleans Parish Communication District
LaAMP Contents

• Executive Summary
• Program Goals
• Benefits and Justification
• Requirements and Costs
• Implementation Plan
• Measuring Success and Feedback
• Appendices
LaAMP Policy Recommendations

- Digital address points should be created for all parishes. The data should be maintained in the FGDC address standard and the parish’s original data format.

- The State should institutionalize the use and updating of high resolution state-wide orthoimagery (6” to 1 foot resolution minimum) pursuant to available funding.

- State agencies, under the supervision of the State CIO, should adopt the FGDC-approved address standard and implement it enterprise-wise.
LaAMP Policy Recommendations

- Existing state and local address databases should be migrated to the FGDC standard within three years of the LaAMP adoption by the state.

- An address data repository should be developed to serve up spatially enabled address data to local, regional, state and federal government.

- The state should provide a geocoding service and technical support to state and local governments that need to use point address data.
LaAMP Program Goal

The goal of the Louisiana Address Maintenance Plan (LaAMP) is to develop a set of procedures and best practices for the collection, storage, maintenance and distribution of addresses and address points for residential and business addresses throughout the state.
LaAMP Program Objectives

- Identify the current state of addressing practices. (2011 Survey)
- Conduct a pilot project to estimate the amount of time and resources required to provide point addresses. (LAGIC project W. Carroll Parish)
- Prepare a plan with costs and benefits of providing a statewide address maintenance system that is coordinated with local government.
LaAMP Program Objectives

- Develop web-based tools to perform address maintenance remotely. (LAGIC)
- Create a database template that conforms to the FGDC Address Standard.
- Create training programs for use of tools and template. (LAGIC)
- Create minimum specifications for future addressing programs.
Pilot Project in W. Carroll Parish

- Completed in 2011.
- Used a combination of high resolution aerial imagery, Pictometry, and Google Street View to locate the houses and businesses.
- Used the Parish address ordinance and other data to accurately assign almost 90% of the addresses without going in the field.
- Developed an on-line data editing tool to perform updates in the field.
Products of the Pilot Project

- Approximate cost/address was determined.
- On-line tool for address maintenance created for I-Pad.
- Wireless data update process developed.
- Workflow identified and training program outlined.
Plan Requirements

- **Data Requirements**
  - Digital address
  - Resource materials
  - Aerial imagery

- **Technology Requirements**
  - Server to serve imagery and store address data
  - Data template capable of ETL process
  - Computer with internet connection for parish access to LAGIC server
Plan Requirements

- **Resource Requirements**
  - LAGIC staff to handle training of parish personnel on the use of the template
  - LAGIC staff to support parish personnel on use of on-line editing tool
  - LAGIC staff to assist in parish in preparation of digital addresses
  - Parish personnel to maintain address data and keep addresses current
Budget Requirements

- Data Collection – approximate cost: $2.00 per address

- LAGIC projects that there are an additional twenty parishes that have not been slated for point address development through the Louisiana Broadband Initiative.
Benefits and Justifications

80% of all State databases have an address component.

Less than 50% of Parishes have address point data.

Following LaAMP recommendations:
- Creates addresses in a standard format
- Improves ability to share address data between local/state/federal agencies
- Reduces redundant address data creation and maintenance
Implementation Steps

- Proposed implementation steps are as follows:

  1. Outreach to the local and regional governments to present the business case for address maintenance.

  2. Acknowledge governance issues for each parish; sign MOU agreement.

  3. Training local government users on the use of the data collection tools and on-line address maintenance procedures.

  4. Training of local decision makers on the benefits of standardized address data.

  5. Database administration shall be performed by LAGIC staff. Establishment of QA/QC methods to identify any issues with the data throughout the process.
LaAMP Project Timeline

2011

- Awarded 2011 FGDC CAP Grant
  2/15/2011
- Start of Online Survey
  3/25/2011
- Start of Pilot Project - West Carroll Parish
  6/12/2011
- End of Online Survey
  10/10/2011
- Project Presentation to the US Census
  11/1/2011

2012

- 1st Address Data Standards Workshop
  2/15/2012
- 2nd Address Data Standards Workshop
  4/23/2012
- End of Pilot Project - West Carroll Parish
  6/6/2012
- Drafting Address Maintenance Plan
  6/15/2012
- Completion Address Maintenance Plan
  11/30/2012

April 24, 2013
Remote Sensing/GIS Workshop
Questions and Comments

Contact information:

Craig Johnson, Director
LAGIC
cjohnson@lsu.edu

Kathrine Cargo, GIS/Mapping Coordinator
OPCD
cargo@911nola.org