How to Workshop:

Building a Soapbox
Lesson Plan

• The challenge

• The gaps
  • Understanding how the NGCS behave
  • GIS data for all 9-1-1 systems
  • The “who's who” of public safety stakeholders and data stewards

• The resolution
  • Data forward solutions
  • QA plans
  • Outreach, education and coordination
The Challenge: build your soapbox
The Challenge: identify and reduce data silos
The Challenge: create crosswalks
The Gaps
### NGCS Behaviors: Concept of “Validation”

<table>
<thead>
<tr>
<th>LVF</th>
<th>All LIS features must have a valid geospatial location</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Only one unique representation of a civic location may be contained in address points or centerlines; no duplicates</td>
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<tr>
<td></td>
<td>Results in discrepancy reports</td>
</tr>
<tr>
<td></td>
<td>Forklift (no change detection), thus no persistent unique ID needed</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>ECRF</th>
<th>Uses GIS data in attempt to identify location of civic address</th>
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<tbody>
<tr>
<td></td>
<td>Can use business rules in a “policy store” to bypass addressing anomalies</td>
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NGCS Behaviors: Concept of “Validation”

- Need to understand what a “duplicate” means
- Mapped attributes
- Need GIS solution that provides audit trail, analytics and QC checks for individual PSAP needs AND NGCS
- Data QC policy implementations
1. Not all local government’s have a enterprise GIS

2. Not all PSAP’s who have GIS data available via a enterprise GIS use it in their current PSAP systems. WHY?
   a. System specific data maintenance silos
   b. Little to no inter-governmental coordination
   c. Lacking of GIS knowledge and resources to support 9-1-1 systems
1. Not all local government’s have a enterprise GIS, thus will need to create the data and identify resources to maintain the data in near real-time fashion.

2. PSAP’s who have GIS data available via a enterprise GIS but don’t currently use it in their current PSAP systems.
   a. **Need assistance in “speaking” GIS or find GIS support**
   b. **Assistance in creating policy for persistent inter-governmental coordination**
   c. **Will need solutions to support data maintenance requirements.**
NG9-1-1 is the catalyst that adds to the list of “who” are the public safety stakeholder’s in each locality
NG9-1-1 is the catalyst that requires current first responders to become data stewards.
Data Stewardship: Where to place the PSAP boundary?
Data Stewardship: Where to place the PSAP boundary?

PSAP A

PSAP B

Michael Baker International

“We Make a Difference”
• The gaps

  • Understanding how the NGCS behave
  • GIS data for all 9-1-1 systems
  • Understanding the NG9-1-1 stakeholder catalyst “who's who” of public safety stakeholders and data stewards
Solving the complex equation
<table>
<thead>
<tr>
<th>Strategic Planning</th>
<th>GIS Address Development</th>
<th>DataMark QC Checks</th>
<th>DataMark Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• NG 9-1-1 Consulting and Systems Integration</td>
<td>• Existing workflow evaluation and support</td>
<td>• Complete GIS address database analysis.</td>
<td>• SaaS application for convenience</td>
</tr>
<tr>
<td>• NG9-1-1 Systems Design</td>
<td>• Address database evaluation</td>
<td>• Address Schema evaluation/optimization</td>
<td>• Modular thus configurable to specific client needs and budgets</td>
</tr>
<tr>
<td>• Technology Assessment</td>
<td>• Action Plan for optimization and sustainment</td>
<td>• Centerline Anomalies</td>
<td>• Iterative validations allow you to “flag” and reduce anomalies</td>
</tr>
<tr>
<td>• Drafting a QA plan</td>
<td></td>
<td>• Address Point Anomalies</td>
<td>• Editing environment</td>
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</table>

DataMark Product and Services

Image Caption: "...the strength of the Pack is the Wolf, and the strength of the Wolf is the Pack..."
How we are different?

**Addressing Workflow**
Through the depth of our GIS experience in working with state and local customers on building and maintaining data and solutions specifically for the addressing workflow, we can help guide each 9-1-1 authority as they begin responding to the anomalies in their data.

**ECRF & LVF Agnostic**
The solutions are purposefully configurable to be able to support any NGCS solution. We invite real-time collaboration with the selected vendor as there are spatial nuances that must be considered as part of the data aggregation and gap analysis.

**Data Aggregation**
The DataMark solution coalesces the individual 9-1-1 authority datasets prior to provisioning through the SI. This allows for data quality checks on individual or statewide footprints of data which is critical as the ECRF and LVF "validate" data differently.

**Data Analytics and Audit trail**
DataMark has the ability to record results of the data submissions over time in support of a full audit trail of data quality checks, allowing for tracking of data improvement over time.