





### **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"

# LVF

All LIS features must have a valid geospatial location

Only one unique representation of a civic location may be contained in address points or centerlines; no duplicates

Results in discrepancy reports

Forklift (no change detection), thus no persistent unique ID needed

## **ECRF**

Uses GIS data in attempt to identify location of civic address

Can use business rules in a "policy store" to bypass addressing anomalies

Forklift (no change detection), thus no persistent unique ID needed





### NGCS Behaviors: Concept of "Validation"

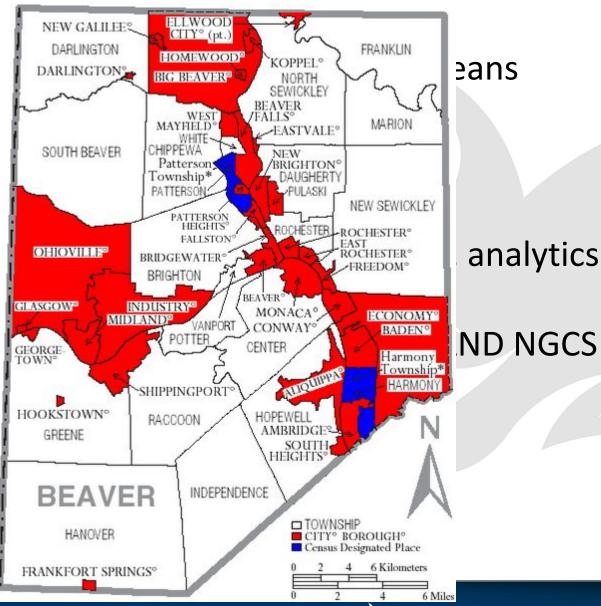
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Data QC pol







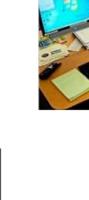
### GIS Data for all 9-1-1 Systems



Automated Vehicle Location (AVL)



**Call Taking System** 





Dispatch System (CAD)

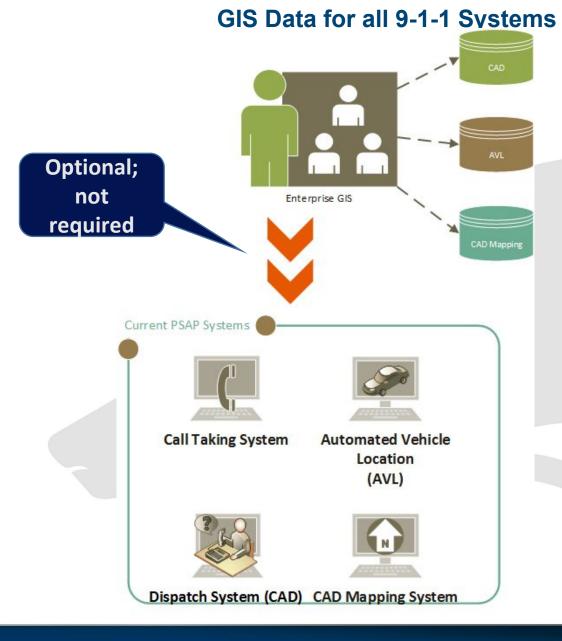


**CAD Mapping System** 





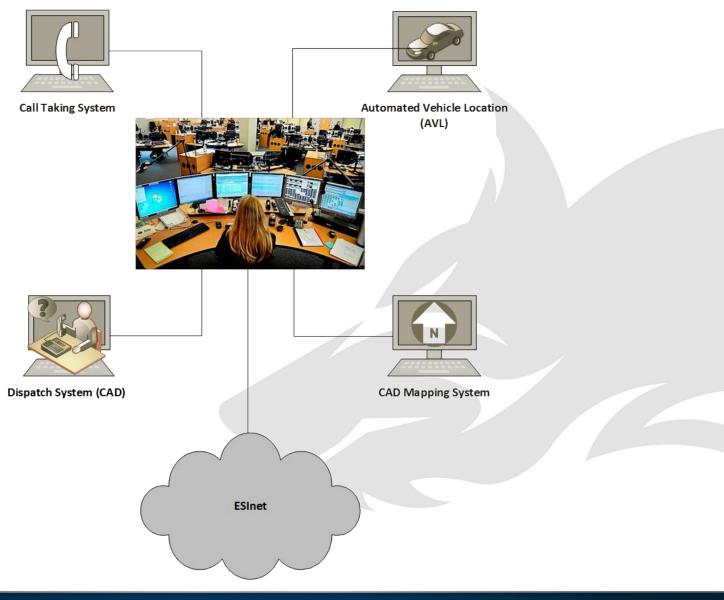
- Not all local government's have a enterprise GIS
- Not all PSAP's who have GIS data available via a enterprise GIS use it in their current PSAP systems. WHY?
  - a. System specific data maintenance silos
  - b. Little to no inter-governmental coordination
  - c. Lacking of GIS knowledge and resources to support 9-1-1 systems







### GIS Data for all 9-1-1 Systems

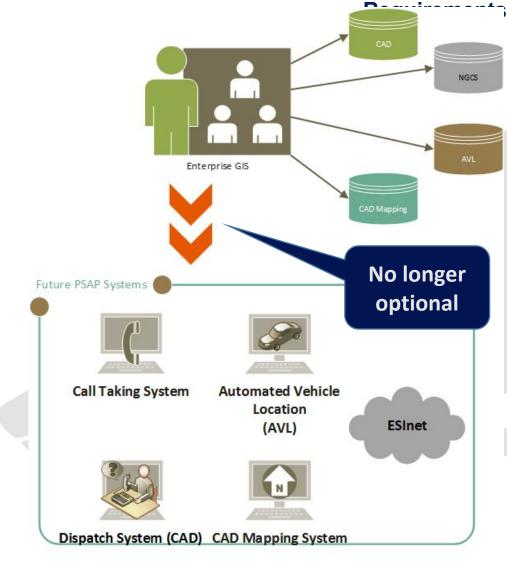






**Changes in PSAP Responsibility: Pain Points in Meeting** 

- 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.
- 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







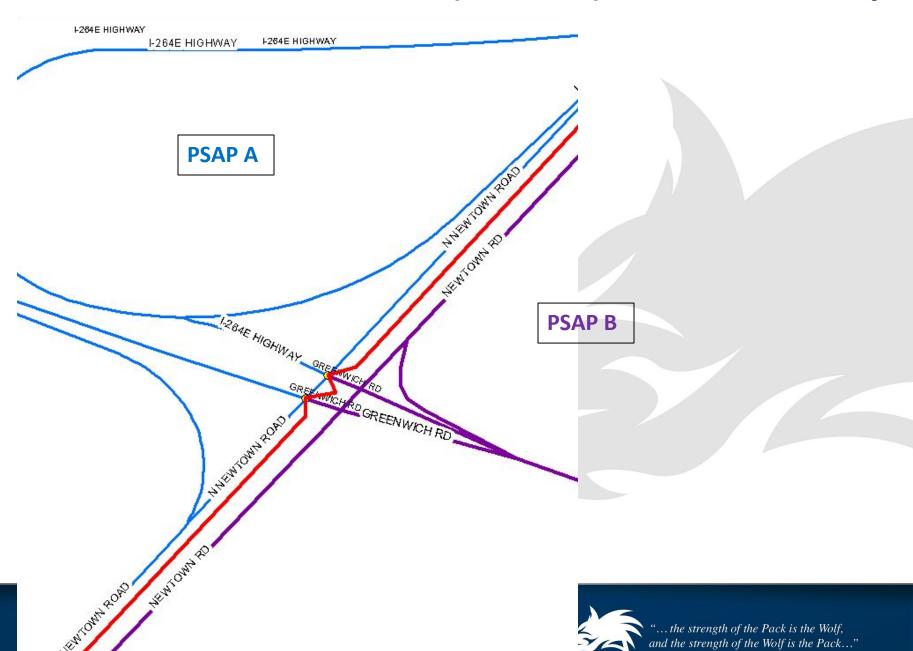
# NG9-1-1 is the catalyst that requires current first responders to become data stewards



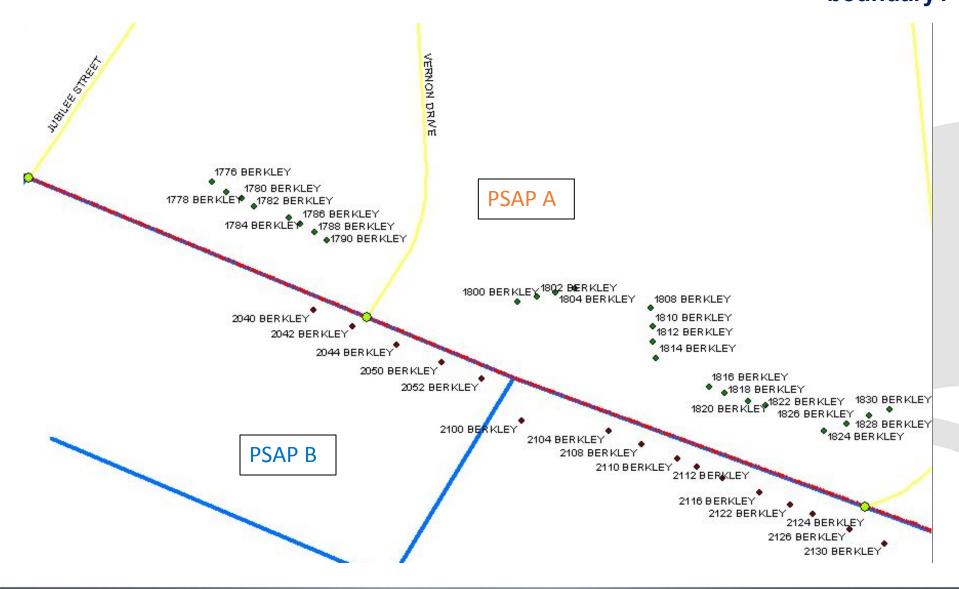




### Data Stewardship: Where to place the PSAP boundary?



## boundary?







- 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





### **Equation**









#### **DataMark Product and Services**



#### Strategic Planning

- NG 9-1-1
   Consulting and
   Systems
   Integration
- NG9-1-1 Systems Design
- Technology Assessment
- Drafting a QA plan

### GIS Address Development

- Existing workflow evaluation and support
- Address database evaluation
- Action Plan for optimization and sustainment

#### DataMark QC Checks

- Complete GIS address database analysis.
- Address Schema evaluation/ optimization
- Centerline Anomalies
- Address Point Anomalies

## DataMark Solutions

- SaaS application for convenience
- Modular thus configurable to specific client needs and budgets
- Iterative validations allow you to "flag" and reduce anomalies
- Editing environment





### How we are different?



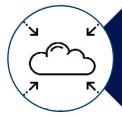
#### Addressing Workflow

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 Analyitics 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.



