

National Address Database Summit

February 2015



Summit Objective

“To identify and discuss possible options for developing a National Address Database”

Determine if there is general agreement on:

- This is a **good idea**...
- A NAD can be **feasibly created**...
- There are strong ideas for the **approach**...
- There are clear **next steps** that can be taken...

After a lot of talking over the years, is it time to start doing?

Background on Summit

Held at Maritime Institute in Linthicum, MD on April 8-9, 2015

- Sponsored by USDOT Bureau of Transportation Statistics (BTS)
- Specialty forum for idea generation
- Multi-sectorial participation
 - Government (Local, State, Federal, Tribal)
 - Private Sector
 - Non-Profits and Trade Organizations

Summit Attendees

58 “Participants”

- 10 Federal agencies
- 16 State governments
- 17 Local governments
- 2 Tribal representatives
- 8 Private companies
- 5 Non-profit /
trade organizations

Plus 25 “Observers”



NGAC National Address Database

Vision Statement

“The National Address Database is an **authoritative** and **publicly available** resource that provides accurate **address location information** to save lives, reduce costs, and improve service provision for public and private interests.”

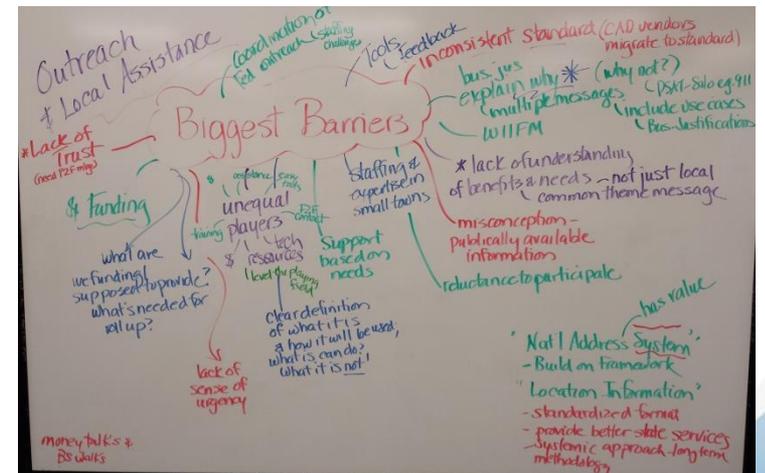
What Is Needed?

Info from Summit discussion

1. Defined achievable mission
2. Regulations and/or incentives
3. Sustainable funding linked to use cases
4. Clarity on licensing, access, multi-directional data sharing
5. Support for “have-not” jurisdictions
6. Standardization (content, accuracy, placement)
7. Training & tools (ETL, de-duplication, etc.)
8. Maintenance plan/workflow
9. Trust
10. Communication & coordination – ability to overcome silos
11. Public outreach and messaging (*and a new name!*)

Summit Breakout Discussion Topics

- Business Justification
- Leadership & Organizational Approaches
- Local Outreach & Assistance
- Data & Technology



Business Justification

- **Status quo is expensive** to maintain
 - Duplication of spending/effort
 - Lots of single-purpose data
 - Conflicting data
- **Need multi-purpose solution** with multi-way value proposition
 - Support multiple use cases
 - Leverage current expertise
 - Save money by de-duplicating data & efforts
 - Improve ROI through collaboration
- **Unique moment in time** where the need/technology are strong and aligned, but Federal policy and leadership are not

Leadership & Organizational Approaches

- Need *partnership and funding*
- **Leverage “drivers”** such as NG911
- Local authorities are the *authoritative source*
- Partners need to be respected, and represented – *trust and mutual benefits* are key
- Avoid “too many hands on the steering-wheel”
- Successful exemplars: **National Broadband Map** and **ARNOLD/HPMS**
 - Federal funding → states
 - State data → Feds for standardization and aggregation

Leadership & Organizational Approaches

- Within National Spatial Data Infrastructure / Circular A-16 organizational framework should addresses be:
 1. A **new theme**?
 - New **location theme** that might include:
 - » Addresses, critical infrastructure, gazetteer, etc.
 - Wholly **new theme** for ***Addresses?***
 2. Part of an **existing theme**?
 - For example, part for **transportation theme**
 - » “Roads and addresses go hand-in-hand”
 - » ARNOLD/HPMS is an exemplar

Local Outreach & Assistance

- **Everyone wants local data**, but many locals need:
 - Support for their efforts
 - Respect for their authority in address assignment and data management
- There are **“haves” & “have-nots”** within the local government data provider community
- Emergency response for **public safety is the primary driver** at the local and state levels with NG-9-1-1 coming on strong
- **Ask once, please**, not many times for the same local data!
 - Overlapping data requests from Federal agencies
- Locals need: **contract vehicles, funding, training and tools**
 - Especially within the “have not” community

Data & Technology

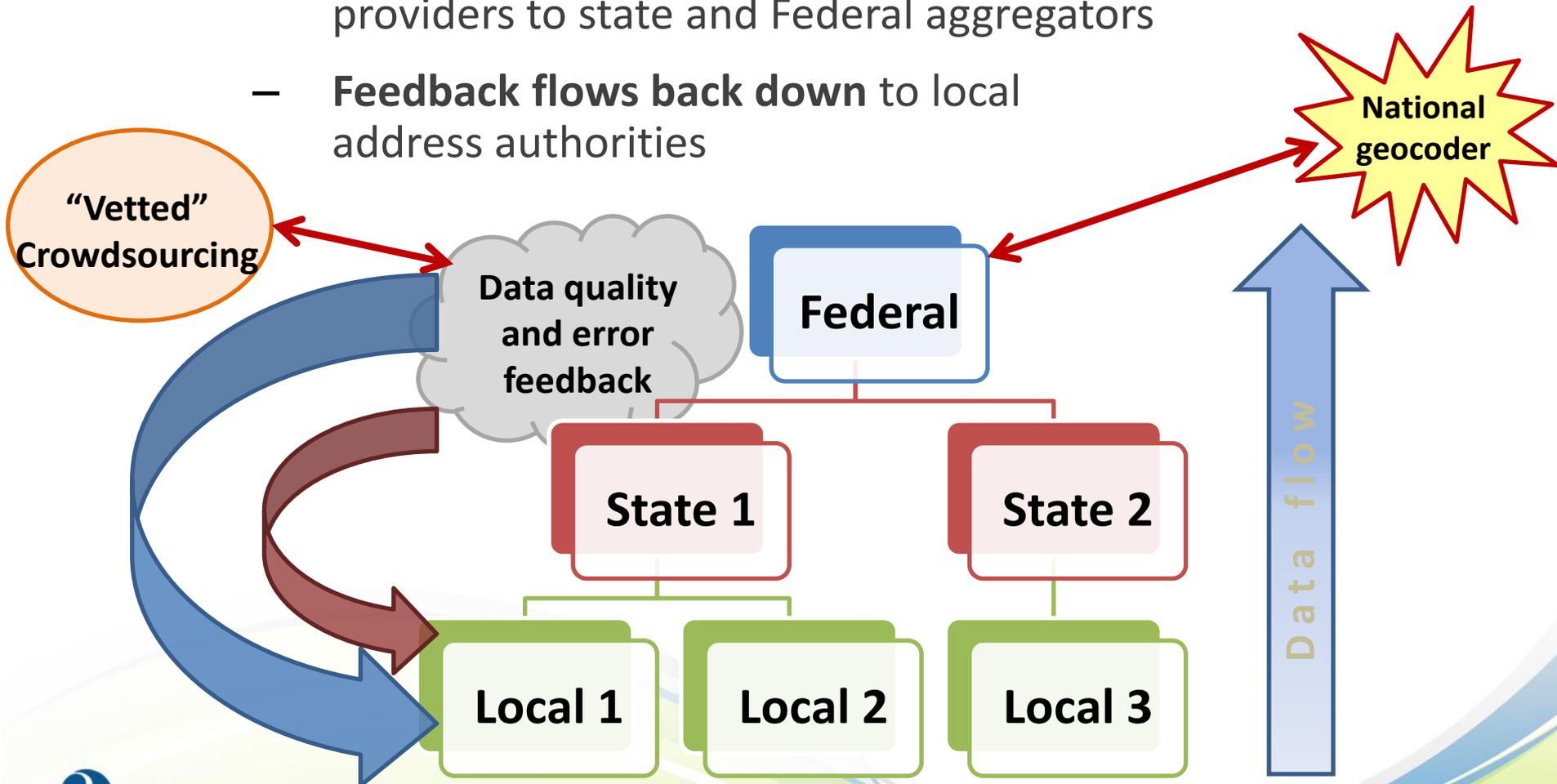
- It's a **system**, not a database *per se*
 - Not a one-time build; Need ongoing updates from locals “up”
- Vendor **neutral**, but with vendor participation in the process
- Support **multiple use cases**
- Define **minimum common elements**, and proceed iteratively
- Clear **“ownership” and authority**
 - Clear jurisdictional authority for assignment
 - Polygonal representation of jurisdictional boundaries
- **Unique location identifier** that is not address
 - Distinguish between “location address” vs “mailing address + zip”
 - Unique internationally

Data & Technology (cont.)

- **Privacy & security** concerns need to be addressed
- Build a quick “***national status map***” on addresses that are authoritative, publicly accessible, and multi-purpose
- **Strive for simplicity** while acknowledging challenges
 - Not all systems can handle related tables (e.g. CAD/911)
- Tools
 - **Leverage existing ones** when possible!
 - Support **interoperability**
 - If web based, issues with **access/connectivity** as well as **security**
 - **ETL/translation/crosswalk** tools to move different models to standard
 - Need for **change detection** and **schema builder**

Data & Technology

- **Feedback mechanisms** needed on data quality
 - **Data flows up** from local address authorities and data providers to state and Federal aggregators
 - **Feedback flows back down** to local address authorities



Where do we go from here?

Suggestions from Summit on Leadership

- Define overall leadership model
- Identify a high-level Federal **Champion**
 - Richard McKinney, USDOT CIO?
 - US Census Geography Division?
- Identify State, Local and Tribal Champions too
- Form multi-sector **working groups** to tackle key components
 - Technology; Standards; Outreach/Communication; etc.
- Reconvene in 6-8 months to gauge progress/continue conversation
- **Just do it!**
 - *Work on short, medium, & long-term goals simultaneously*

Where do we go from here?

Suggestions from Summit on Approach

- Capitalize on/**build momentum**; Reach out to “ready” states
- Conduct **Gap Analysis**: what do we already “have”, and what is “needed”?
- Leverage Federal 18F thinking
 - *“Building the 21st Century Digital Government”*
- Craft branding and messaging that will inform/convince locals to participate
 - Address concerns of “nay-sayers”
 - Potential renaming: Standard Addresses for Everyone (SAFE)
- Conduct a **pilot** (*see next slide*)
- **Just do it!**
 - *Work on short, medium, & long-term goals simultaneously*

Where do we go from here?

Suggestions from Summit on a Pilot Program

- Create a **Pilot Program** to document/validate feasibility
 - Identify willing states / early adopters
 - Define content and standards
 - Test data models
 - Define workflows and feedback loops
- **Test existing resources**
 - Community TIGER
 - OpenAddress
 - FGDC data standard and model
 - CLDXF as simplified, specific implementation of FGDC standard
 - Esri Local Government Information Model (LGIM)

Summit Outcomes

Shared Vision & General Agreements

- **Local authorities are the authoritative source** for address assignment and are data set originators
- **State authorities should be statewide aggregators**
 - Many are already in this role, primarily to support public safety and emergency response (e.g. NG-9-1-1)
- **Tribal authorities must be included in data flow**
 - Authoritative source and aggregator of addresses on tribal lands
- **Federal leadership and support is needed** for there to be a sustainable national approach
 - Address the needs of the “have nots”

Next Steps

- **Final Report**

- Findings briefed to Summit attendees via webinar last week to gain their concurrence
- Delivered within 4-6 weeks, depending on comments
- Will be posted on the Summit website:

<https://sites.google.com/a/appgeo.com/nationaladdressdatasummit/home>

- **Pilot**

- DOT OCIO has identified some funding
- Seeking Federal Partners

GIS-T Discussion

State DOT Comments & Observations

- State DOTs are **concerned about having primary responsibility** for address data collection and maintenance
- Recognize **importance of addressing** to their own orgs/states
 - “Address community is part of the DOT customer base”
 - Road network can be visualized as the infrastructure that connects addresses.
 - “Addresses are the places people are going on the roads.”
 - Tie in to detailed “origin-destination” data
- Understand opportunity that the **HPMS “carrot”** represents
 - Potential “tool” to support statewide addressing
 - Funded mandates are acceptable and typical in DOT arena

State DOT Comments & Observations

- Open to **helping other agencies** with address data creation/maintenance
 - **Leverage existing relationships** with local governments
- In AR, MI, UT: **GIS office and DOT already collaborating** on statewide roads, with address data connections

NSGIC Briefing

Comments & Observations

- **Military representation** was missing, and addressing on military installations is an issue
- Going forward, focus on the use cases and **reach out to other groups besides Public Safety**
- Process needs to be disciplined and documented
- **Guidance for locals on standards** is key
- Don't burden locals with support for every use case; **think about "value added"** up the supply chain
- Proposed a **Unique ID** above and beyond the address

Questions????

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