

# State GIS Update



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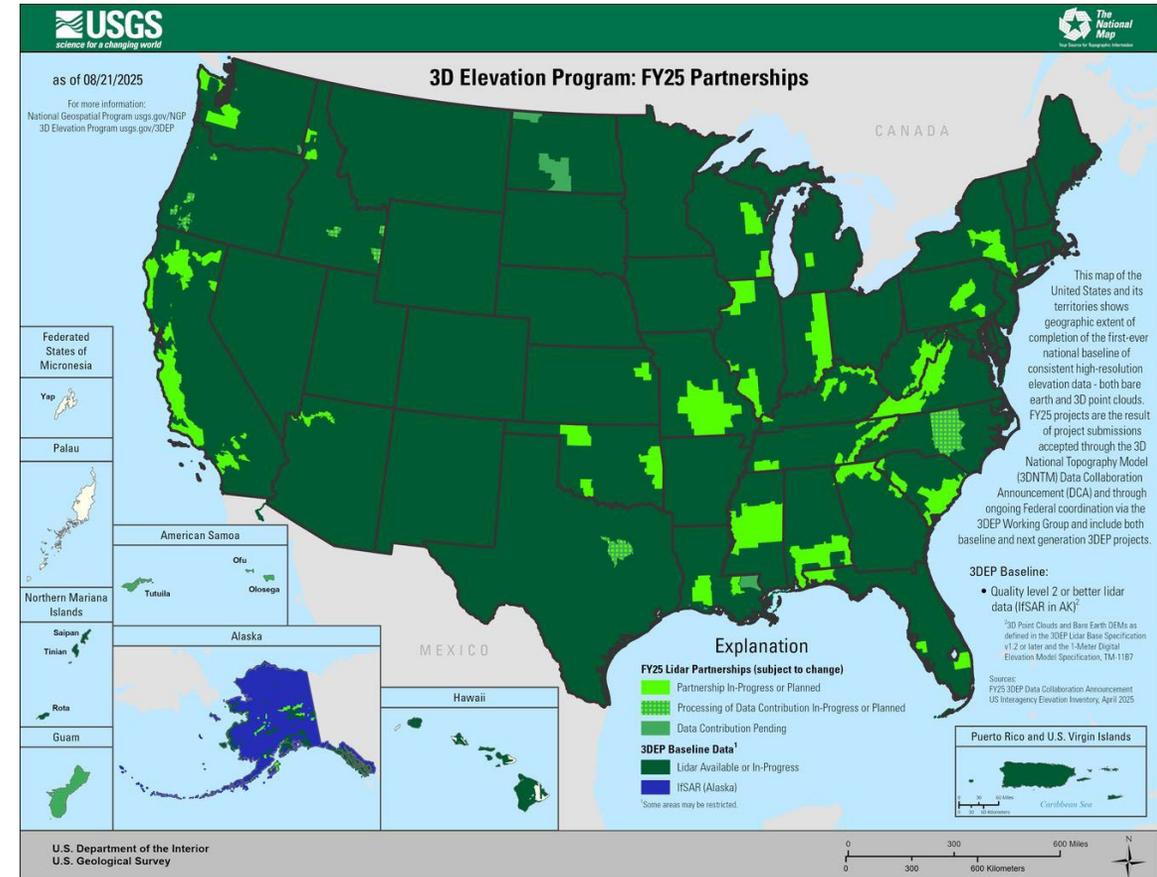
March 3, 2026

# Topics

- Statewide GIS Projects
- Next Generation 911 GIS Readiness
- Michigan GIS Advisory Group
- Data Sharing/Open Data

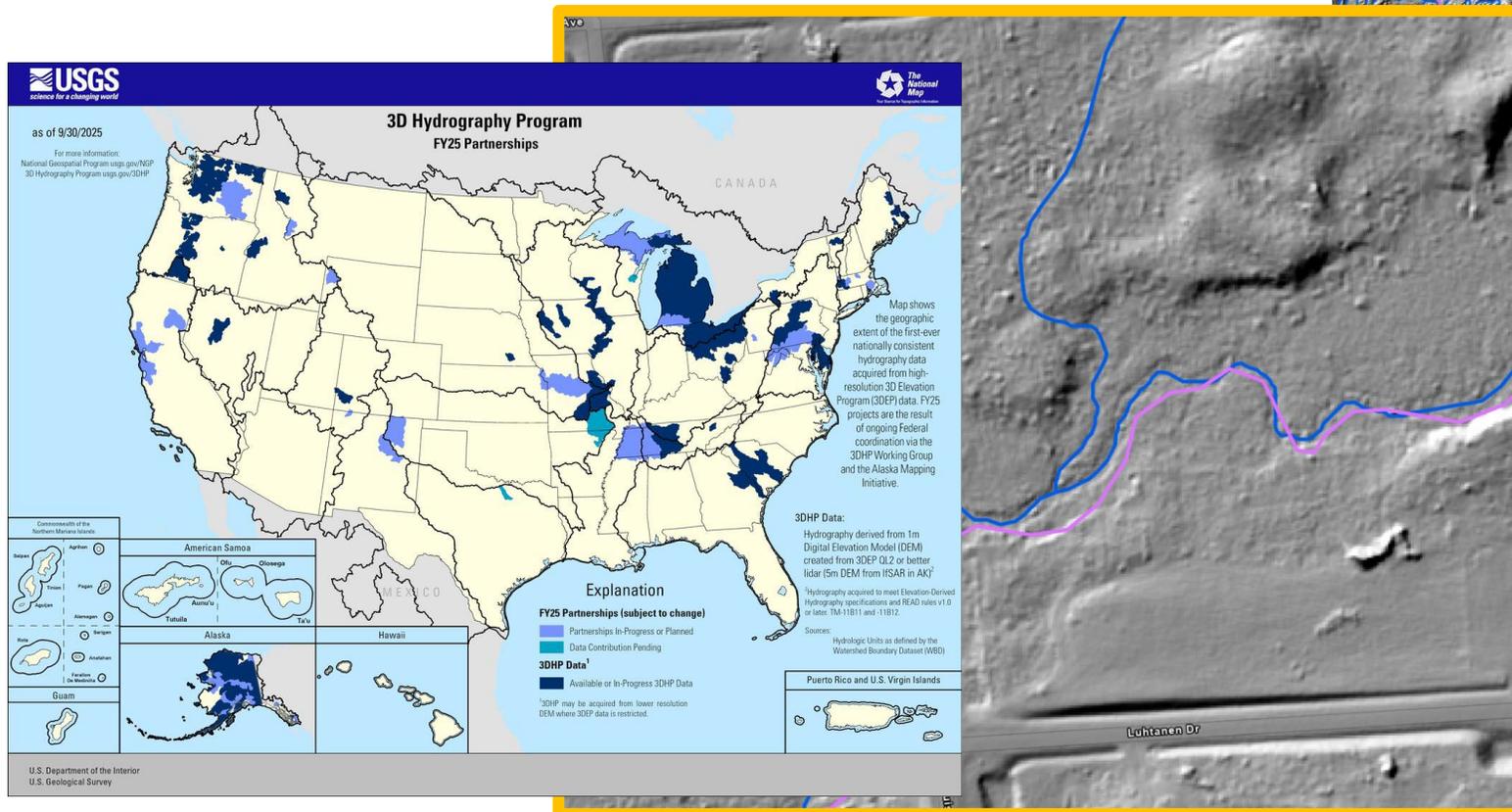
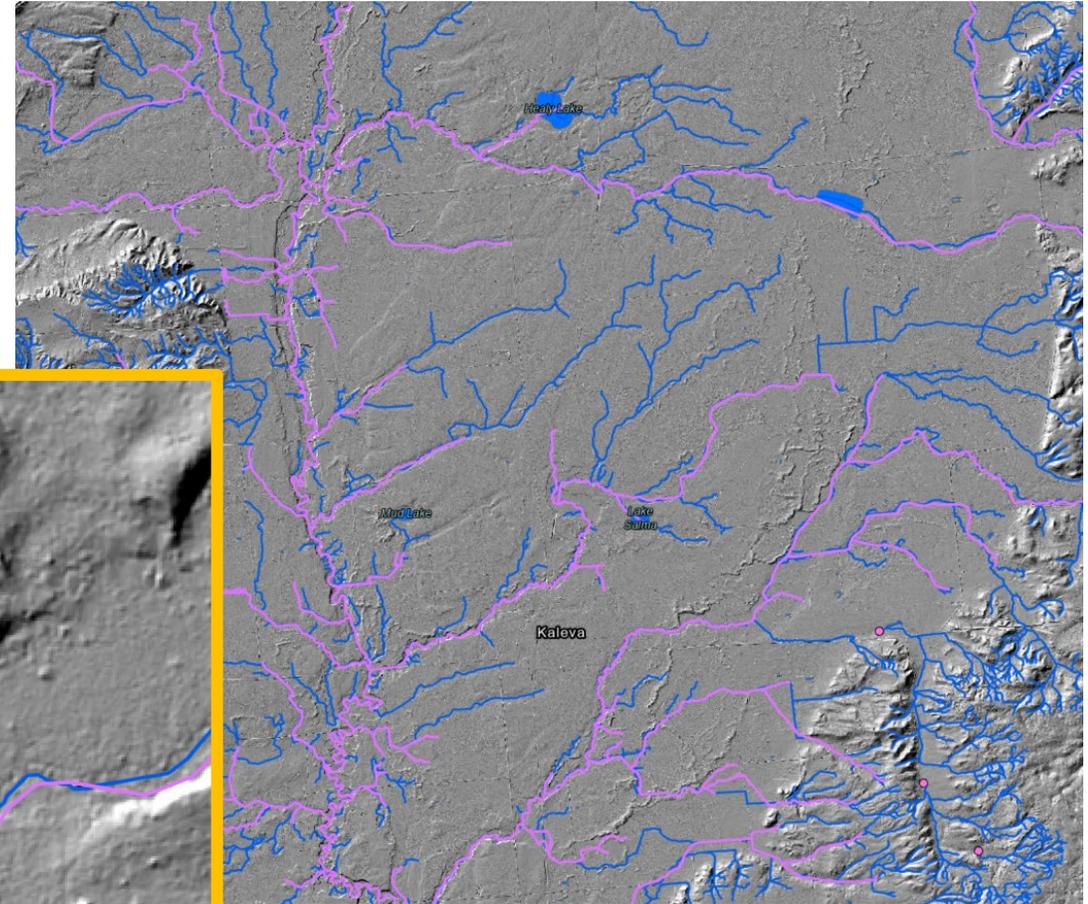
# LiDAR data update grant opportunities

- Current QL2 LiDAR from 2015-2020
- Publicly available data for many uses
- LiDAR has a high ROI
  - Infrastructure
  - Land management
  - Emergency response
  - Asset management
- USGS recommends 5-8 year update cycle
- Coordination of funding partners
- DTMB will facilitate grant applications to USGS
- USGS will provide up to 49% funding
- Contact Ulrika Zay for more information
  - [zayu@michigan.gov](mailto:zayu@michigan.gov)



# Statewide Hydrography Improvement Project

- Project began 2023, expected completion 2027
- HUC 8 watersheds approved by USGS being prepared for open data
- Feedback collection tool released for changes

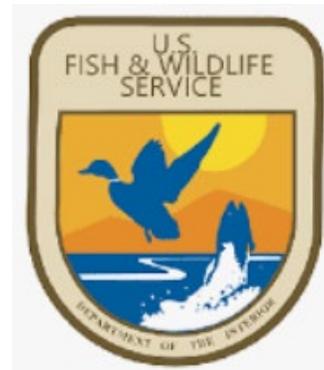


# Statewide Hydrography Improvement Project

- Coordination across many stakeholders

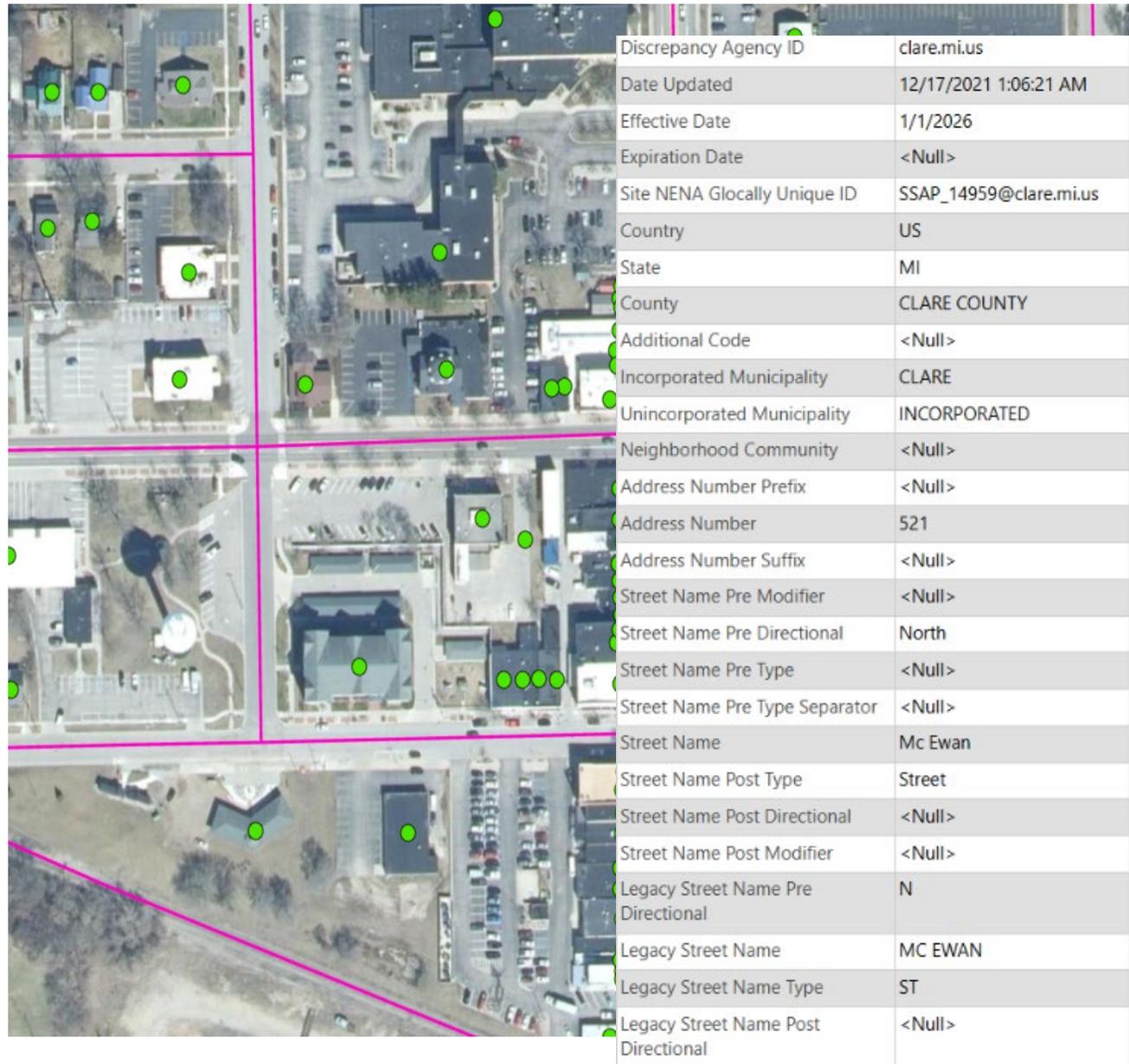


Local Governments



# NG911 GIS Repository/Statewide GIS Data

- Statewide addressing (roads and address points) aggregated from local authoritative data
- GIS data from repository be used starting in 2026 for geo-routing of all 911 calls to PSAPs
- State and local government working together on final GIS data readiness to national standards for geo-routing
- Data also GIS ready for other public safety system needs to increase **interoperability**
- Established support team at DTMB
  - Training/helpdesk
  - Next Generation 911 Working Group
    - Addressing Best Practices Guide development
    - Continued coordination and outreach support



# Addressing Best Practices Guidelines

## 4.3 Primary Address Elements

### 4.3.1 Address Number Prefix

Database Field Name	AddNum_Pre		
Data Type	TEXT	Inclusion	Conditional
Width	15	Domain	
Examples	N123, W123, N, W, S123W		
Description	The non-integer portion of the identifier for a parcel, house, or other feature which precedes the address number, as defined by the Addressing Authority for the given jurisdiction. Used commonly in Metropolitan and Suburban areas to indicate directional to an address number (e.g., N2554 Johnson Street). Used in some counties where grid address numbers exist to include the reference.		

### 4.3.2 Address Number

Database Field Name	Add_Number		
Data Type	LONG	Inclusion	Conditional
Width	6	Domain	Whole
Examples	123, 10546		
Description	The numeric identifier for a parcel, house, building, or other feature, as defined by the official Addressing Authority for a given jurisdiction.		

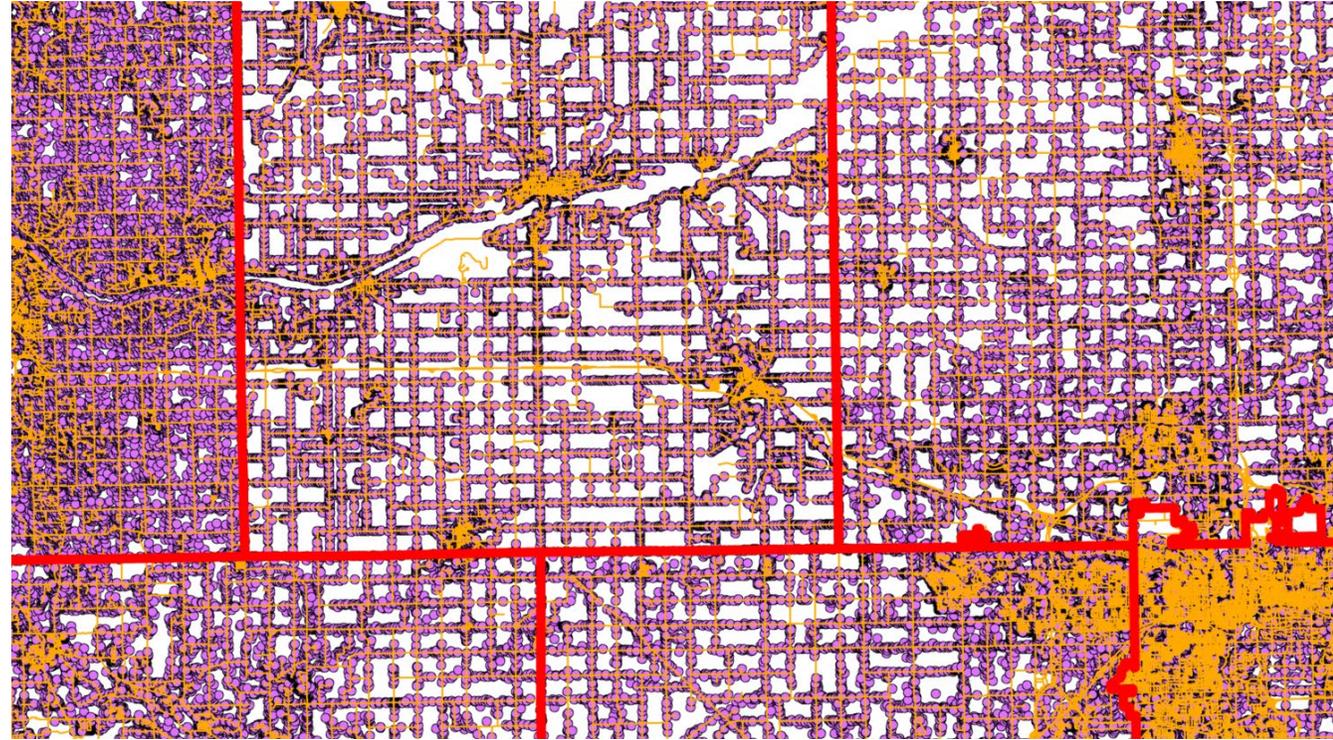
### 4.3.3 Address Number Suffix

Database Field Name	AddNum_Suf		
Data Type	TEXT	Inclusion	Conditional
Width	15	Domain	
Examples	A, 1/2		
Description	The non-integer portion of the identifier for a parcel, house, or other feature which follows the address number, as defined by the Addressing Authority for a given jurisdiction. Not commonly used. Not to be confused with Unit divisions within a building.		



# Benefits of Statewide GIS Data

- Aggregated data in a statewide standard
- Follows national standards
- Ready for cross-boundary needs
- Can be used in various statewide systems
- Improves consistency for citizens
- Efficient and effective data **interoperability**



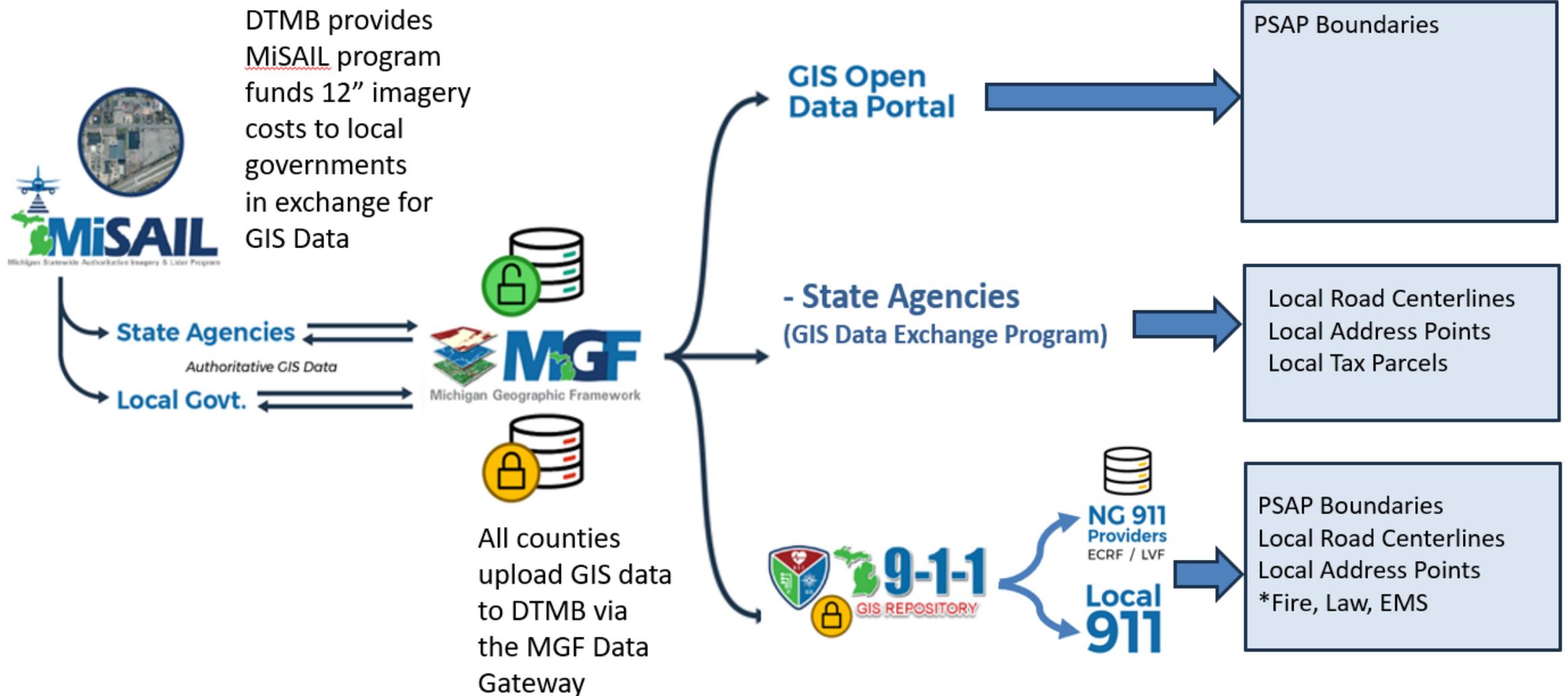
# Benefits realized by local and state data sharing

- Time savings in providing to one place
- Collaboration on continuous data maintenance and standardization
- Some examples of uses that improve coordination and **interoperability**
  - GIS data in statewide layers available for emergency response incidents – no loss of time to gather data
  - MSP helicopter navigation system - addresses
  - State can validate data against other systems to improve addresses accuracy in all systems
  - Improving boundary alignments
  - Create tools for local government uses
  - Help state and local departments have consistent information for coordination on joint programs



# NG911 GIS Repository – Where we are

## Current Workflow For GIS Data Sharing Between State and Local Govt



# Michigan GIS Advisory Group

Members	Organization	Members	Organization
Mark Holmes (GIO)	DTMB	Brent Thelen (CMPASS)	Calhoun Co
Robert Goodwin (Academia)	MSU	Jon Merrick (CMPASS)	Eaton Co
Everett Root, (At-Large)	Retired	Ann VanSlembrouck (Regional Govt)	SEMCOG
Nathan Coon, (At-Large)	EUPRDC	Cory Johnson (State Govt)	MDOT
Chris Cantrell (City/County)	Midland Co	Kevin McKnight (State Govt)	EGLE
Erika Espeland (City/County)	Berrien Co	Nikkia Anderson (State Govt)	MSP
Emily Selph (City/County)	Charlevoix Co	Alan Proctor (Tribal Government)	LTBB Odawa Indians
Thomas Van Bruggen (City/County)	Muskegon Co	Nick Bogen (Utilities)	Midwest Energy & Comm
Mike Cousins (Private Sector)	OHM Advisors		

# Strategic plan for statewide GIS coordination

- Survey response from 400 stakeholders across the state
- Interviews with 60 stakeholders

## 5 Goals (Outcomes) in 3 Strategic Themes

### Leadership and Coordination

- Goal 1: Further strengthen statewide geospatial coordination by expanding DTMB CSS leadership
- Goal 3: Enhance and improve communications with stakeholders and partners

### Data and Data Services

- Goal 2: Incrementally increase sharing of data across the state to support an open data model
- Goal 4: DTMB CSS is clearinghouse for authoritative statewide data and services

### Internal Improvement and Efficiency

- Goal 5: Continuously review and improve State of Michigan (SOM) and DTMB CSS Business Processes

# New Data Sharing Agreement – Background



## 2011 – MOAs

- Local Road Centerlines
- Local Address Points

Local governments sharing GIS data with state for only 911 GIS Repository for access only by 911



## 2018 – MOAs

- Local Road Centerlines
- Local Address Points
- Local Tax Parcel Data

Local governments sharing GIS data with state for use by all state agencies in exchange for costs of 12” imagery. No download access to third parties outside of state government.

# New Data Sharing Agreement – Open Data Option

- Merges the concepts of both MOAs into one Data Sharing Agreement (DSA)
- Reduces confusion and administration of having 2 MOAs
- Maintains the current uses of the GIS data authorized by the counties
- Maintains the Enhanced Access to Public Records Act reference for third party requests
- **Adds option to make GIS data layers open data**
  - DTMB would publish data to State of Michigan GIS Open Data site at no cost
  - Only limited attributes would be made publicly available
  - GIS Open Data site includes data disclaimers to remove liability on state or county for any issues
  - Over 25% of counties in MI make their GIS addresses open today
- New DSA approved by MI GIS Advisory Group
- Endorsement and letter of support from CMPASS board
- Endorsement from State 911 Committee Emerging Technology Subcommittee
  - Presenting new DSA to State 911 Committee on March 11<sup>th</sup> for request of support

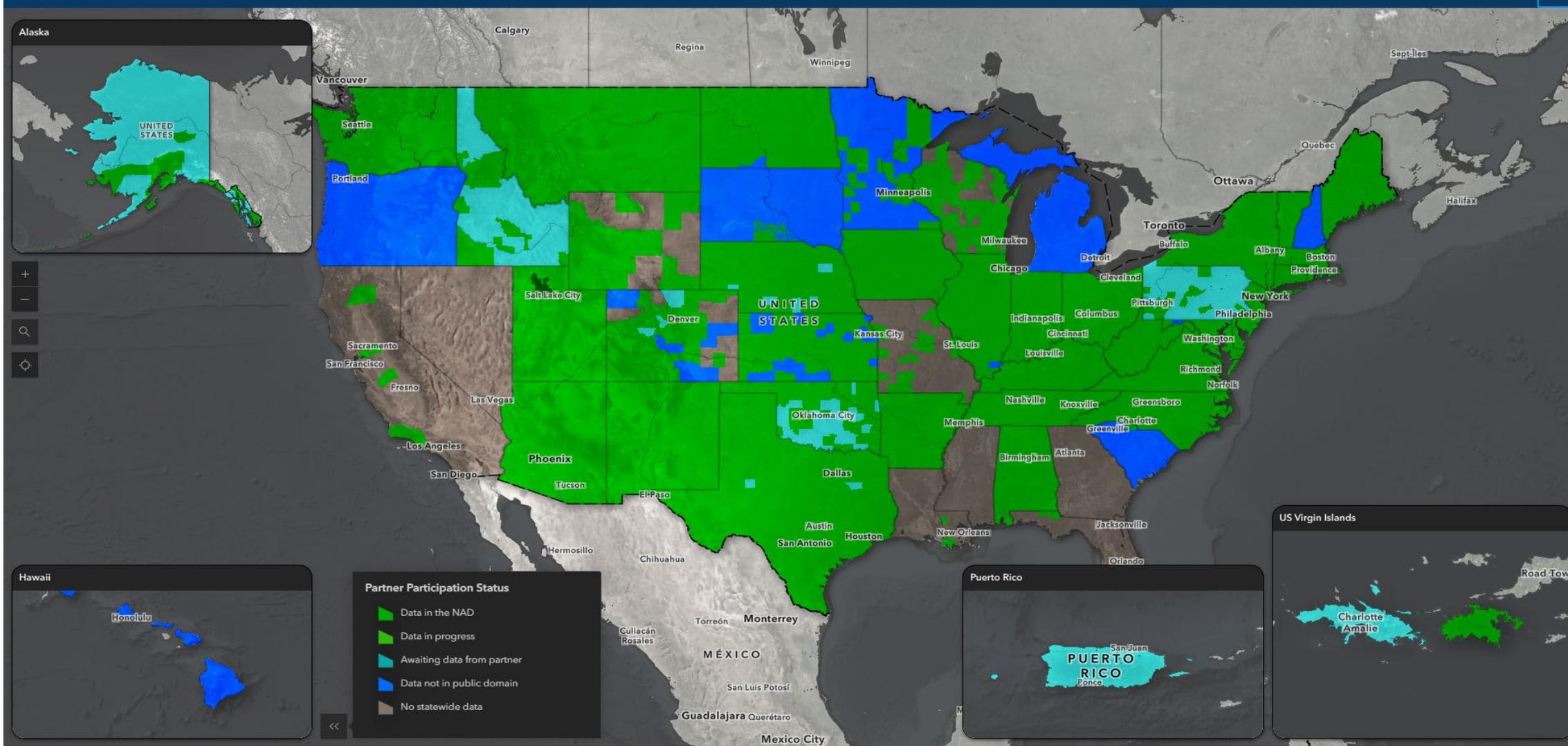
# New Data Sharing Agreement – Open Data Option

Select Authorized Use Below for Dataset A: (select only one)

- 1. **For all uses and free distribution, without restrictions.**
  - i. Partner authorizes its GIS Data to be used and shared for any/all purposes without charge, including being published, with specific attributes, for public download via the State of Michigan GIS Open Data Portal, in accordance with the Data Provisioning document.
  - ii. By selecting this option, partner also authorizes attributes not authorized as open data in the Data Provisioning document, to be used by the programs/users/systems listed in #2 below,
  
- 2. **For only restricted download and uses listed below.**
  - i. its GIS Data to be used and housed by DTMB and made available to all State of Michigan government agencies, including its employees and contractors, in accordance with specifications listed in the Data Schema Table in the Data Sharing Agreement (DSA) Data Provisioning document. This includes making data viewable in public-facing web applications but not downloadable.
  - ii. its GIS Data to be made available to all Public Safety Answering Points (PSAP) authorized users and authorized Next Generation 911 Core Services Provider for download from the NG911 GIS Data Repository.

# National Perspective – Open Address Points

USDOT National Address Database (NAD) Map, Partner Participation



[Link: Getting to know the National Address Database](#)

# National Perspective – National States Geographic Information Council (NSGIC) – Bi-annual data assessment

## GEOSPATIAL MATURITY ASSESSMENT 2021

Michigan Report Card

Overall Grade: B+

COORDINATION

GRADE: A

STATE-LED THEMES

GRADE

Address	C+
Cadastre	B-
Elevation	A-
Orthoimagery Leaf-Off	B

## GEOSPATIAL MATURITY ASSESSMENT 2023

Michigan Report Card

Overall Grade: B+

COORDINATION

GRADE: A

STATE-LED THEMES

GRADE

Address	A-
Cadastre	B-
Elevation	A-
Orthoimagery Leaf-Off	B+

## GEOSPATIAL MATURITY ASSESSMENT 2025

Michigan Report Card

Overall Grade: B

COORDINATION

GRADE: A

STATE-LED THEMES

GRADE

Address	C
Cadastre	B-
Elevation	A
Orthoimagery Leaf-Off	A

# New Data Sharing Agreement – Open Data Option

- Why should I make my GIS data freely available for public download
  - No sensitive data, information is already out on the web (limited attributes for open data)
  - Providing authoritative data so that everyone can be using consistent data (**interoperability**)
    - Provides better service to citizens around Michigan if addresses are consistent
    - Can improve delivery services, tourism, government services, other location services needs
  - Provides better address and housing unit counts for funding opportunities
  - Provides more 'eyes' on the data to help with identifying updates
  - Improves situational awareness using same data (**interoperability**)
  - In today's world, benefits of open data outweigh not making the data freely available
  - Time savings by not having to manage requests for data, administration of agreements, NDAs
  - No cost or staff time to make it open data via State of Michigan GIS Open Data Portal



# Questions

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