



# **Next Generation 9-1-1 GIS Project**

**Southeast MN GIS User Group Meeting  
Project Update  
February 23, 2017**

**Presenters:  
Adam Iten, Project Manager**

# GIS Data in NG9-1-1

- **Location validation** of devices capable of calling 9-1-1
- **Route 9-1-1 calls** to the proper destination
- Determine the correct **emergency response** agency
- Enhanced data quality, interoperability, and sharing
- Streamlined data maintenance



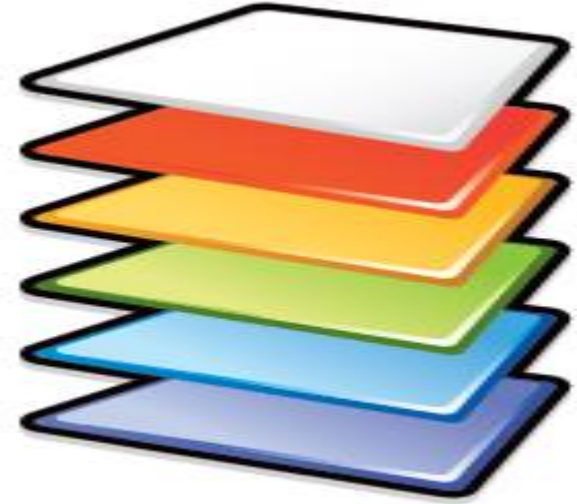
# NG9-1-1 GIS Data

- **Required GIS Data**

- Street centerlines with address ranges
- Address points
- Public Safety Answering Point (PSAP) boundaries
- Emergency Service boundaries
  - Fire
  - Law Enforcement
  - Emergency Medical Service
- Data maintenance boundaries

- **Synchronize with 9-1-1 Data**

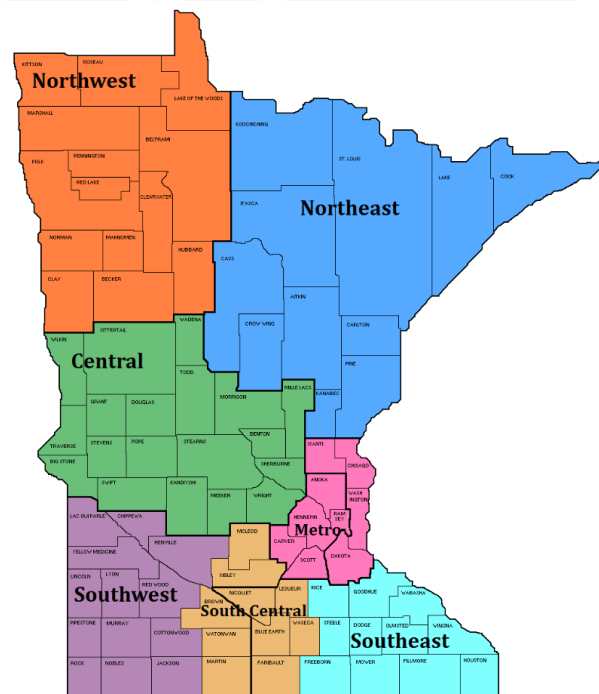
- Master Street Address Guide (MSAG)
- Automatic Location Information (ALI)
- English Language Translation (ELT)



# NG9-1-1 GIS Project Update

## Project Update and 2017 Goals

- MN NG9-1-1 GIS Data Standards
- GIS Data Preparation
- GIS Data Maintenance
- Communication Plan



# Project Timeline

Standards

Preparation KOs

SE

CENTRAL

SC

NW

SW

SECB Grant – County Projects (2017)

SECB Grant – County Projects (2018)

NG9-1-1 GIS Data Preparation

NG9-1-1 GIS Data Maintenance

Transition to ECRF and LVF

January  
2017

July  
2017

January  
2018

July  
2018

- Developing GIS data requirements for NG9-1-1 in Minnesota
- Aligning with NENA standards and validate against similar standards
  - Other states (IA, KS, ND, TN, TX) and MRCC
  - Standards Comparison spreadsheet
- Standards Workgroup working toward Version 1.0
- Second stakeholder review – **closed November 2016**



## 2017 Key Milestones

- Respond to Second Review Comments – January 2017
- Third PSAP and GIS Stakeholder Review – March 2017
- Respond to Third Review Comments – April/May 2017
- Stakeholder Approval – July 2017

- Stakeholders for Third Review and Comment – **March 2017**
  - ✓ MN PSAP and GIS Managers
  - ✓ Metropolitan Emergency Services Board (MESB)
  - ✓ Metro Regional Centerline Collaborative (MRCC)
  - ✓ MetroGIS Address Point Workgroup
  - ✓ MN GAC Standards Committee
  - ✓ ECRF, LVF, and other NG9-1-1 vendors
  - ✓ Neighboring states



- Stakeholder approval of v1.0 – **July 2017**
  - ✓ Metropolitan Emergency Services Board (MESB)
  - ✓ GIS Subcommittee
  - ✓ NG9-1-1 Committee
  - ✓ Statewide Emergency Communications Board (SECB)
  - ✓ MN Geospatial Advisory Council (MGAC)
  - ✓ MN Information Technology Agency (MNIT)

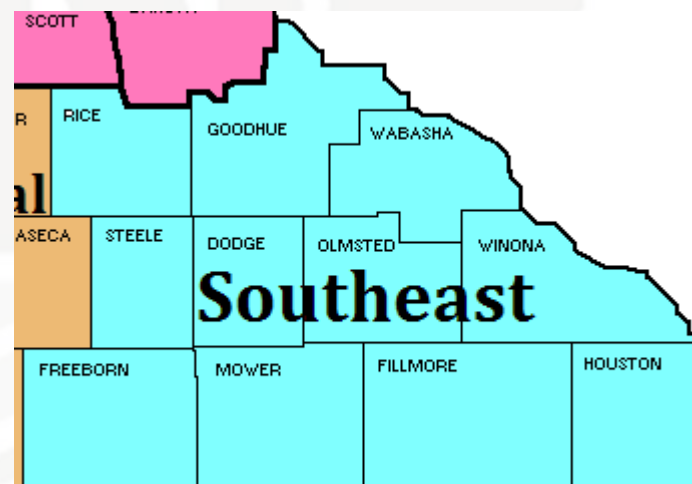
## Data Preparation Projects

- Timeline
  - Metro – ongoing with MESB
  - NE – ongoing (except Pine - 3/2 kickoff)
  - SE – ongoing
  - Central – ongoing in 3 of 19 counties
  - NW, South Central, and SW – complete kickoffs Q3 2017
- General Project Tasks
  - Kickoff, roles/responsibilities, workflows
  - Community name validation
  - Street name validation
  - Address validation
  - Geospatial validation
  - Edge-matching
  - Emergency service boundary validation



## 2017 Key Milestones – Southeast Region

- Complete kickoff meetings
- Complete portal onboarding
- Complete PSAP boundaries
- Data Preparation ongoing

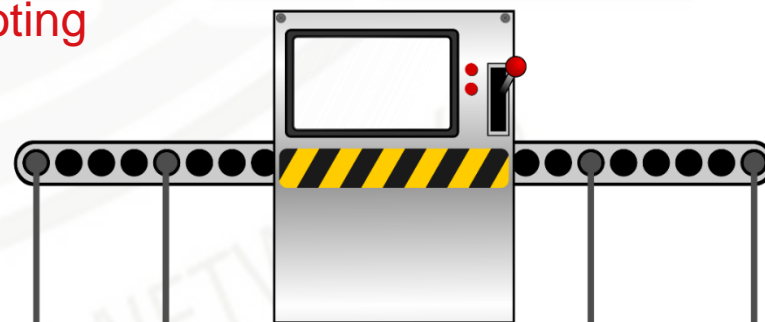


## Other 2017 Key Milestones

- Document Validation Processes and Condition Reports
  - Community Name Validation – complete
  - Street Name Validation – nearly complete
  - Address Validation – ongoing
  - Geospatial Validation
  - Edge-matching Validation – ongoing with ESBs
  - Emergency Service Boundary Validation
- Emergency Service Boundary Map Viewer

## 2017 Key Milestones

- Document Maintenance Processes and Requirements
  - Data Uploads and Portal – ongoing
  - Normalization – ongoing
  - Validation – ongoing
  - Aggregation – begin Q2 2017
- Provision
  - Geospatial Commons – ongoing
  - PSAPs and Responders – piloting
  - ECRF/LVF – TBD
  - Legacy MSAGs/TSPs – TBD

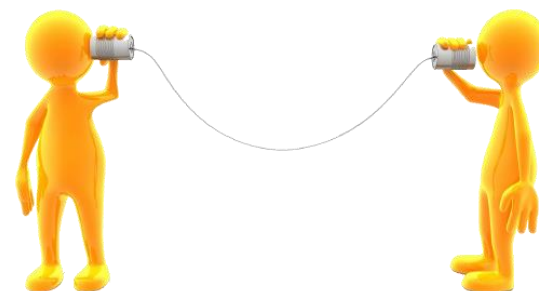


## 2017 Key Milestones

- Proof of Concept: use of a GIS-based MSAG, ECRF, and LVF with 2-3 PSAPs
  - Create GIS-based MSAGs as necessary and deliver updates to West and IES
  - Manage 9-1-1 call routing and location data (i.e. road centerlines, address points, and emergency service boundaries) independent of any ECRF or LVF vendor
  - State intends to establish relationships with all MN TSPs in pursuit of 9-1-1 address validation



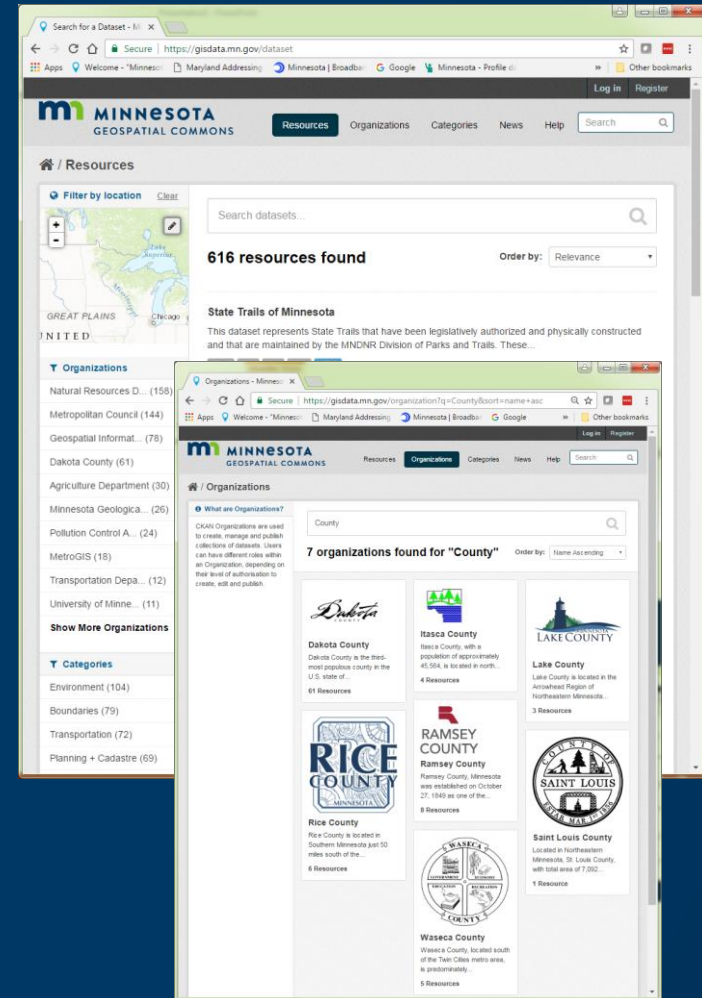
- ECN website
  - Project newsletter - **Issue #4** available on [ECN website](#)
- Monthly
  - GIS Subcommittee meeting
    - **Next meeting: Thursday, March 9 at 2pm**
  - NG9-1-1 Committee meeting
  - SECB meeting
- Quarterly
  - Regional PSAP/GIS meetings
  - MN Geospatial Advisory Council



# MN Geospatial Commons

**Focus** – Discovery of all significant state and partner geospatial resources to the Geospatial Commons

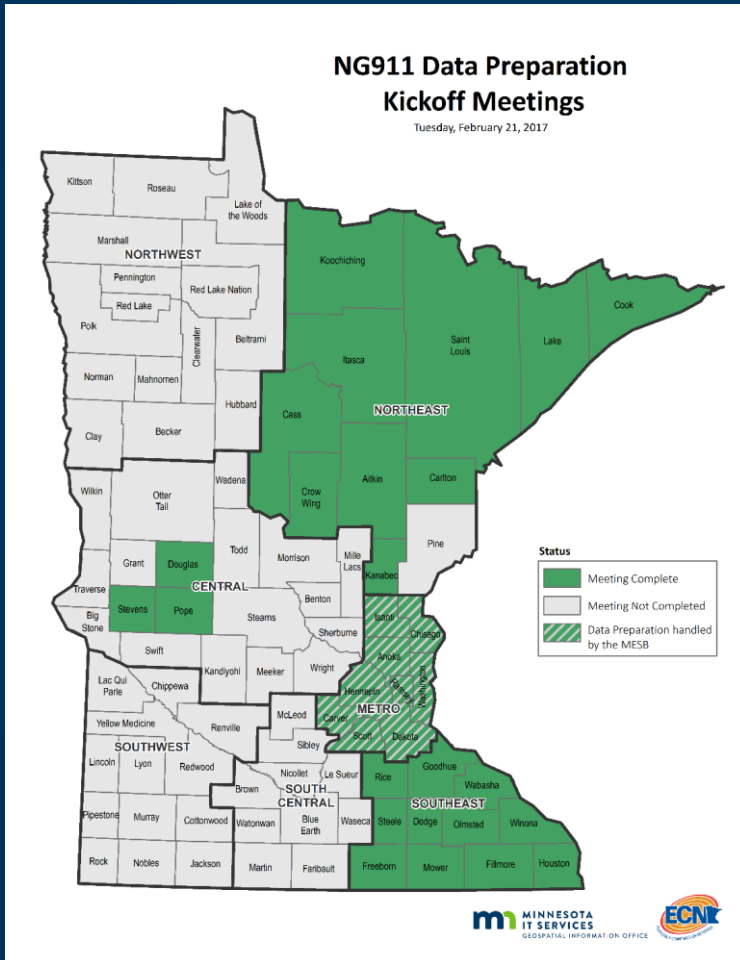
- Published resources accessible
  - **24 Organizations**
  - **7 Counties**
  - **616 Resources**
- The site is now open to broader participation
- Integrating partners who want to represent their data via the Geospatial Commons
- Will undergo somewhat of a refresh in the coming months



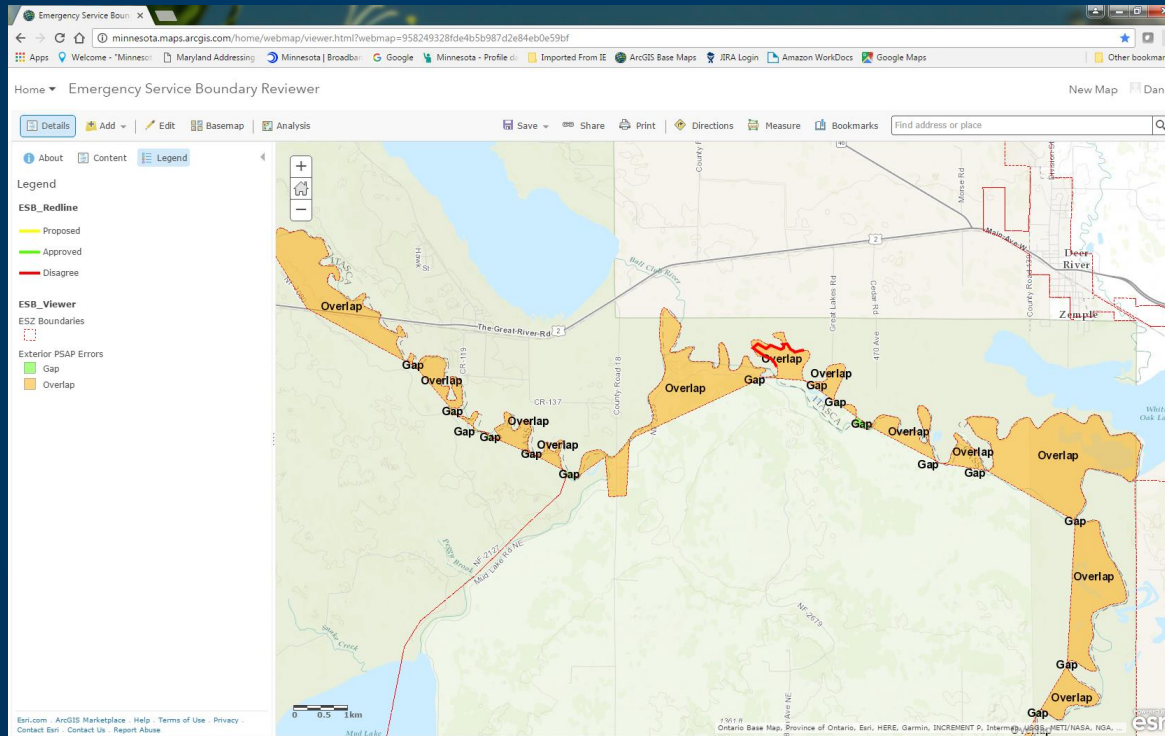
# Next Generation 9-1-1

## Focus

- Meetings with stakeholder to review data accuracy
- Onboarding additional partners to the new portal
- Standards
  - Approval – **mid 2017**
  - Road centerlines
  - Address points
  - Emergency Service Boundaries (PSAP, Fire, Law, Medical)
  - Authoritative Boundaries



# Online Editor for Emergency Service Zone Boundaries

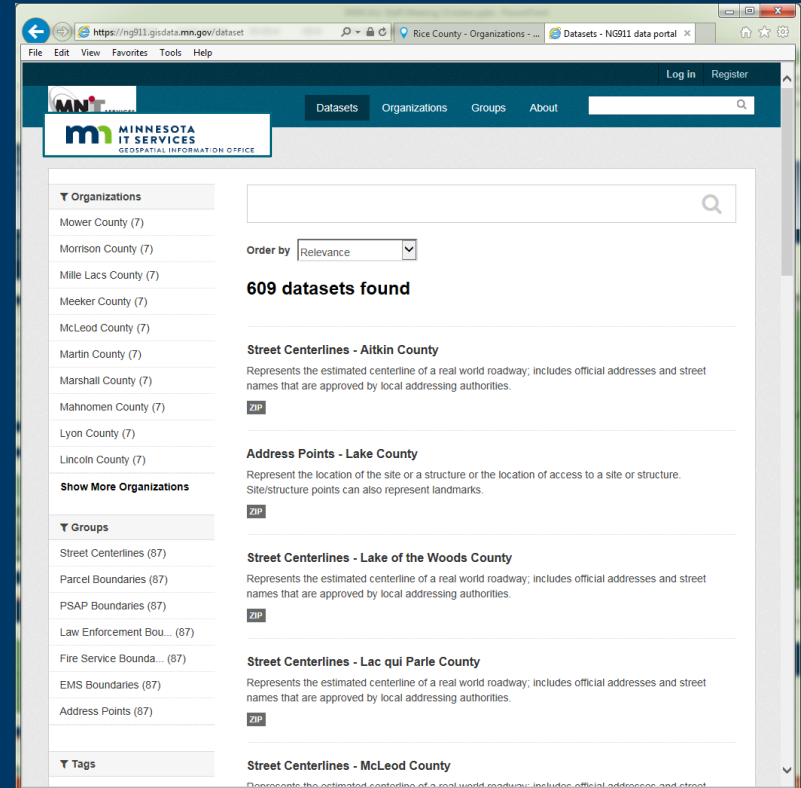


- PSAP, Fire, Law, and Medical
- Local Partners Edit online
- Remove gaps and overlaps - lines and polygons
- State reviews and approve addition to statewide data layer

# Working with the partners to collect and share data...

## Provide:

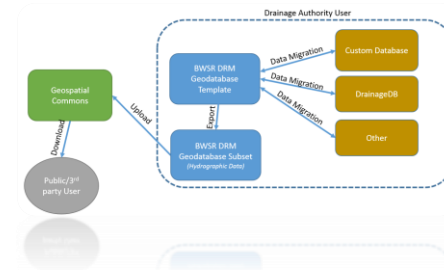
- Common method for accepting data from authoritative sources
- Common standards
- Common methods, tools for validating, standardizing, aggregating data
  - RFI on the Street
- Consistent communications about status



# Other statewide efforts....

## Drainage Records Modernization

- Data template, Guidelines, Map Viewer
- Completed December 2016
- Available on the Geospatial Commons
- Rice County a participant



## State Archeologist Web Application – OSA, MNDOT, SHPO

- Digital, secure system for managing inventory of archaeological sites, surveys, and associated forms and documents
- Complete February 2017

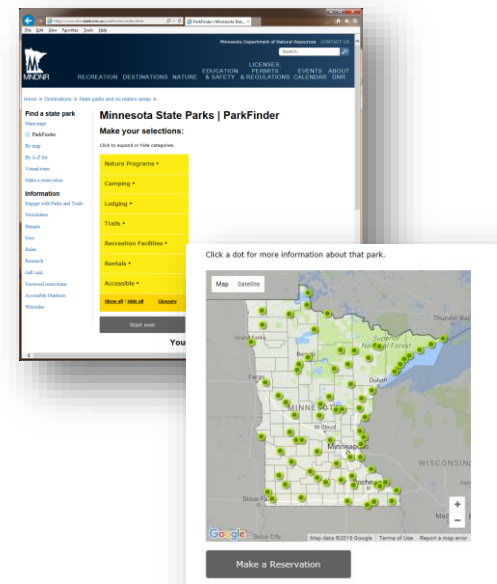




# Parks and Trails

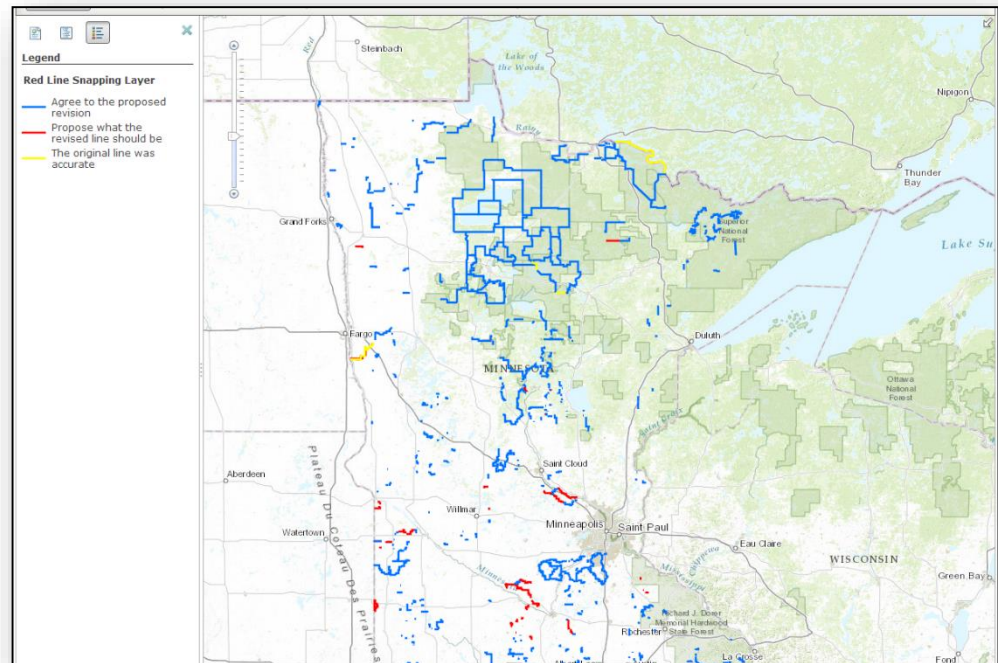
## Two efforts in progress

- Parks and Trails Legacy Fund (U of M)
  - Data standard for parks and trails
  - Website for tracking grant funding and planning
  - To be complete June 2017
- Responsive Website for Parks and Trails of Regional
  - Searchable by activity/amenity or map
  - Brings users to more detailed local data
  - To be complete June 2017

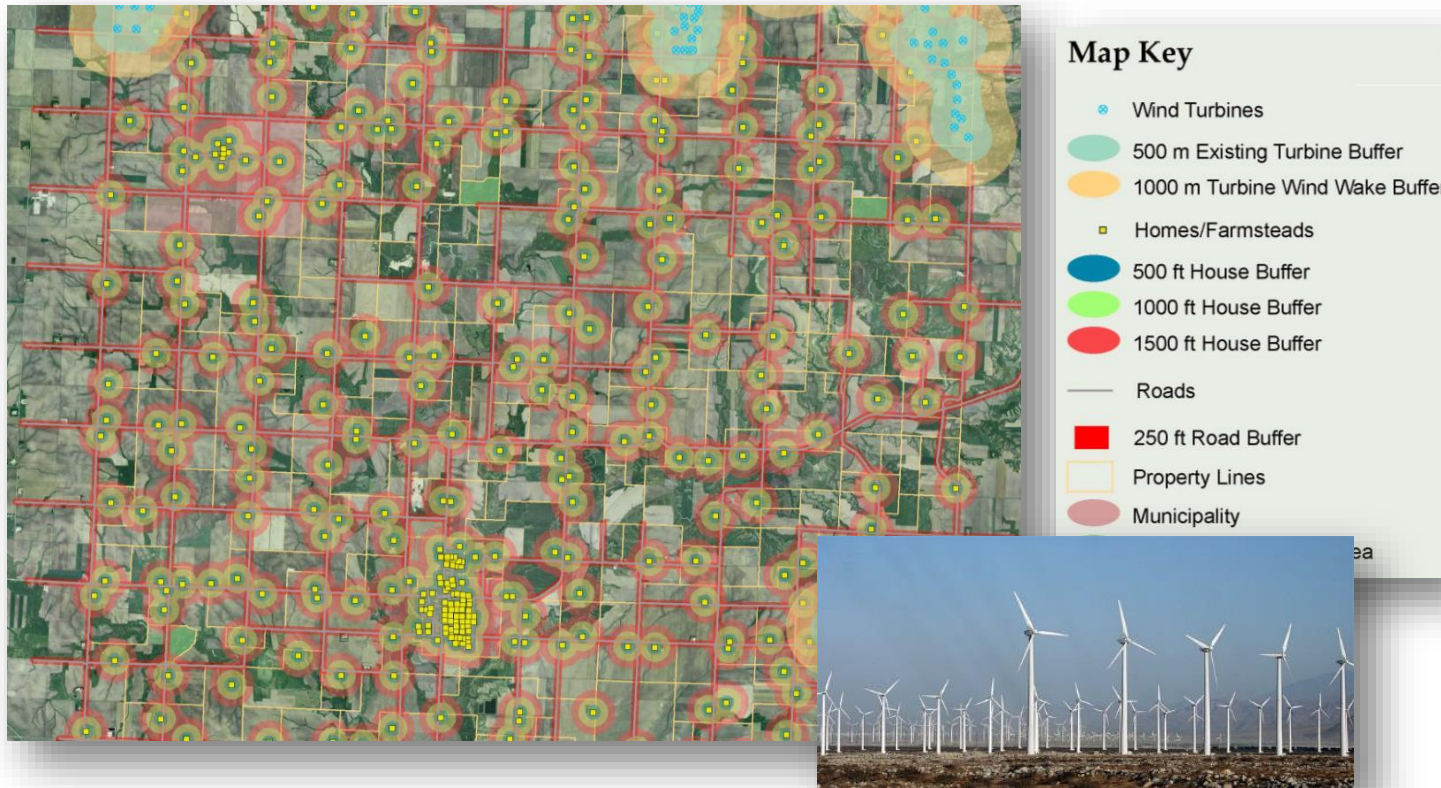


# Ongoing - MN Telephone Exchange Mapping

- Client: MN Dept. of Commerce in collaboration with the MN Telephone Alliance (MNTA), over 100 Local Exchange Carriers (LEC) and the Federal Communications Commission (FCC)
- Technology: Esri ArcGIS Online (for web-based review & editing by LECs)
- Deliverables: Updated telephone exchange service area boundaries delivered to the FCC annually
- Who Benefits: PUC, Electric Utilities, HSEM, Businesses, General Public



# Ongoing - Wind Turbine Inventory & Analysis



# Thank You!



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