



# How Auditors Can Interact With GIS Beyond Parcel Maintenance

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Shelby County

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Mahaska County



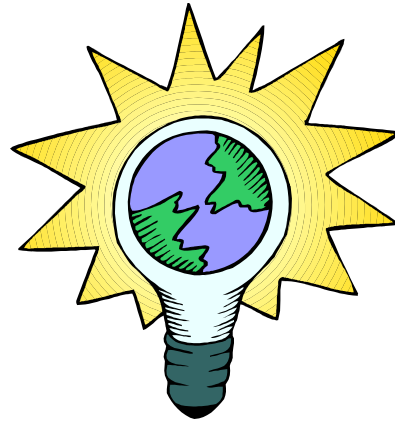
# Geographic Information Systems

- A GIS is a system for management, analysis, and display of geographic knowledge, which is represented using a series of information sets such as maps and globes, geographic data sets, processing and work flow models, data models, and metadata.



# “Intelligent Maps”

- While a computer-aided mapping system may represent a road simply as a line, a GIS may also recognize that road as the border between wetland and urban development, or as the link between Main Street and 4th Avenue.





# Base Map – Parcel Data





# Parcel Data – The Beginning

- Most county GIS begins with  
*“It’s time to update our aerial photography so since we’re going to be spending a lot of money, let’s go ahead and develop a GIS.”*
- Usually is initiated by the Auditor’s or Assessor’s Office



# Beyond the Parcel Map

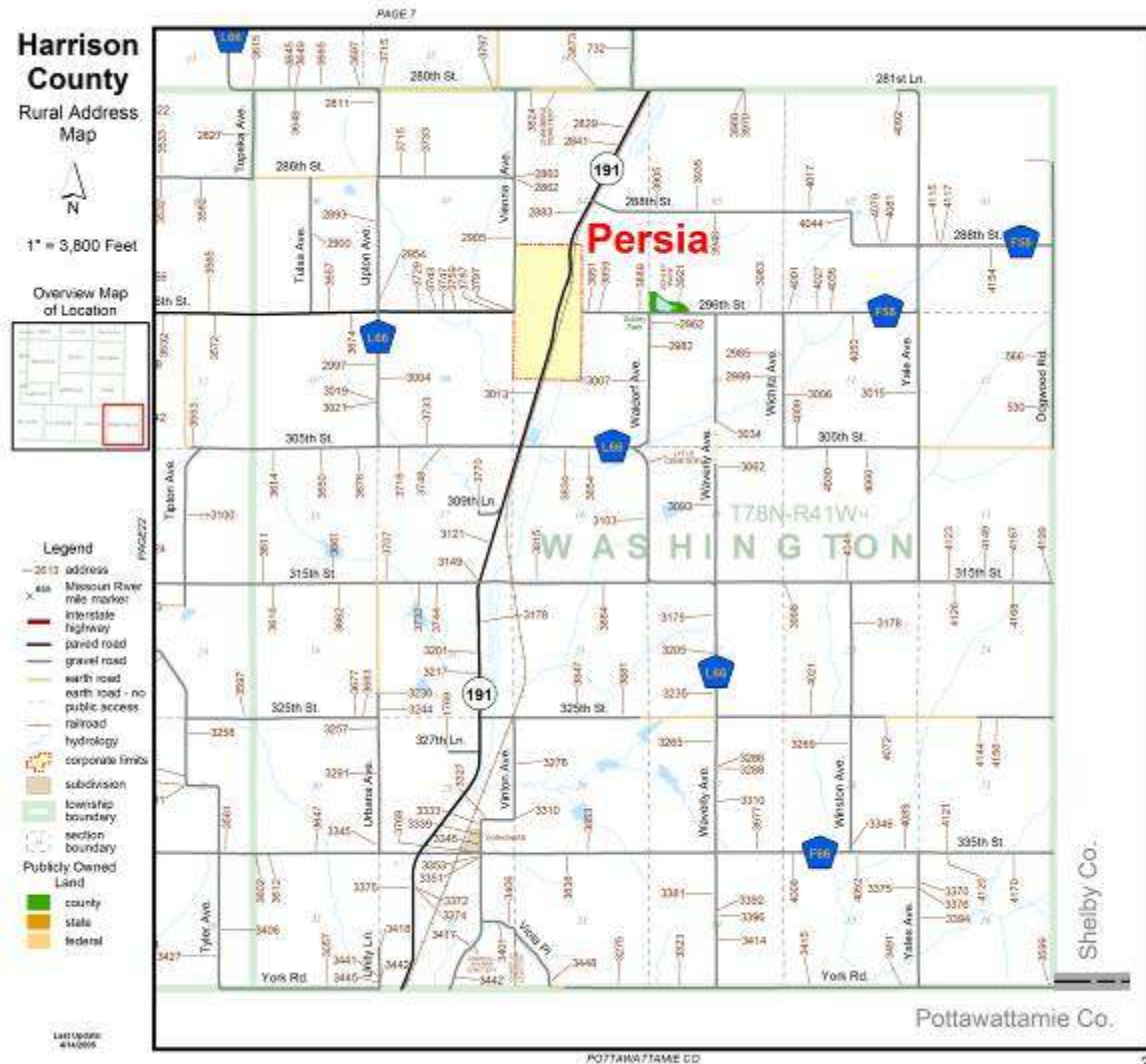
- Once the data conversion is complete, now what?
- The county has invested a significant amount of money and resources into creating an accurate parcel base map,

**EXPAND THE POSSIBILITIES!**



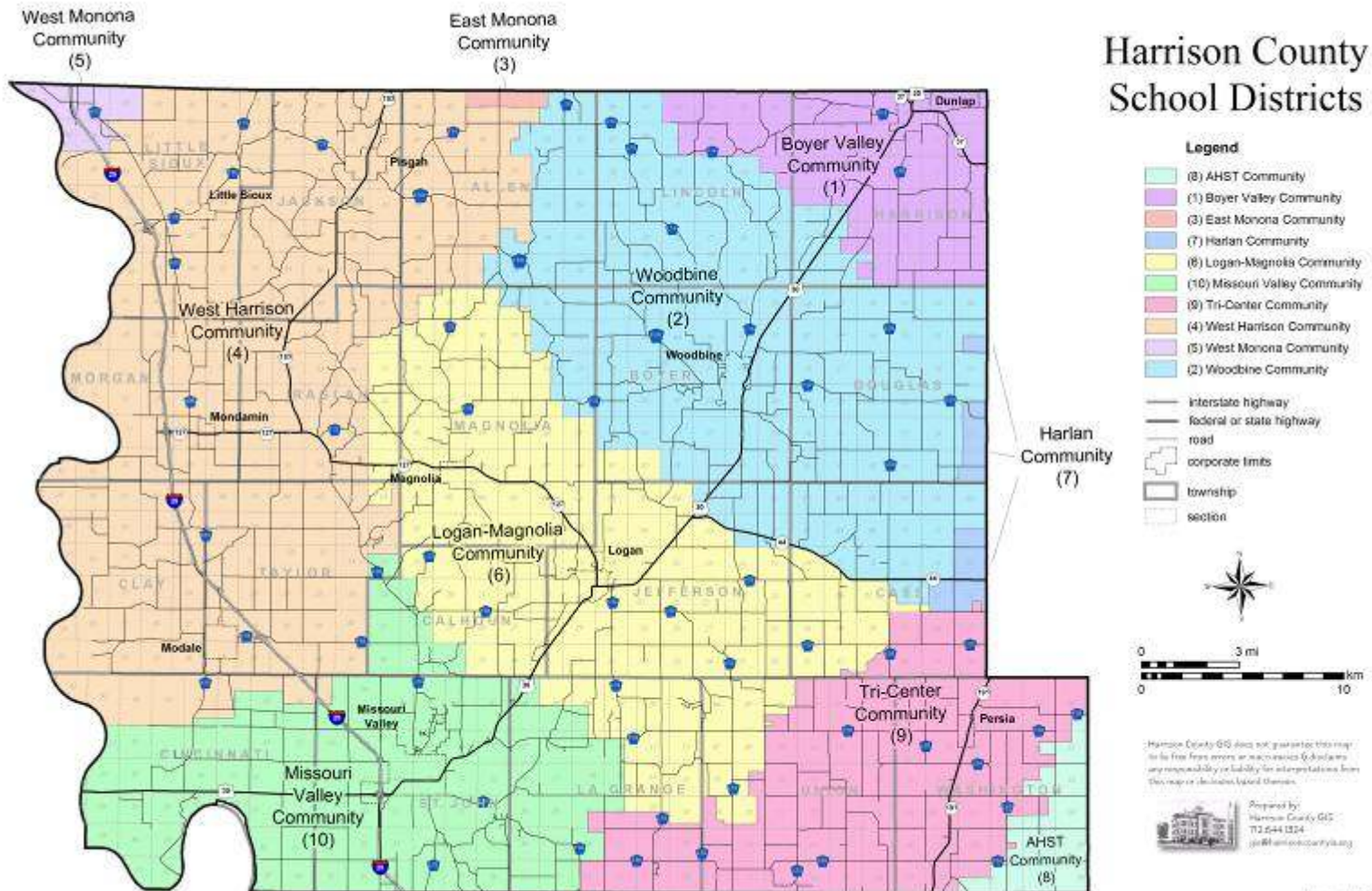


# Custom Map Books



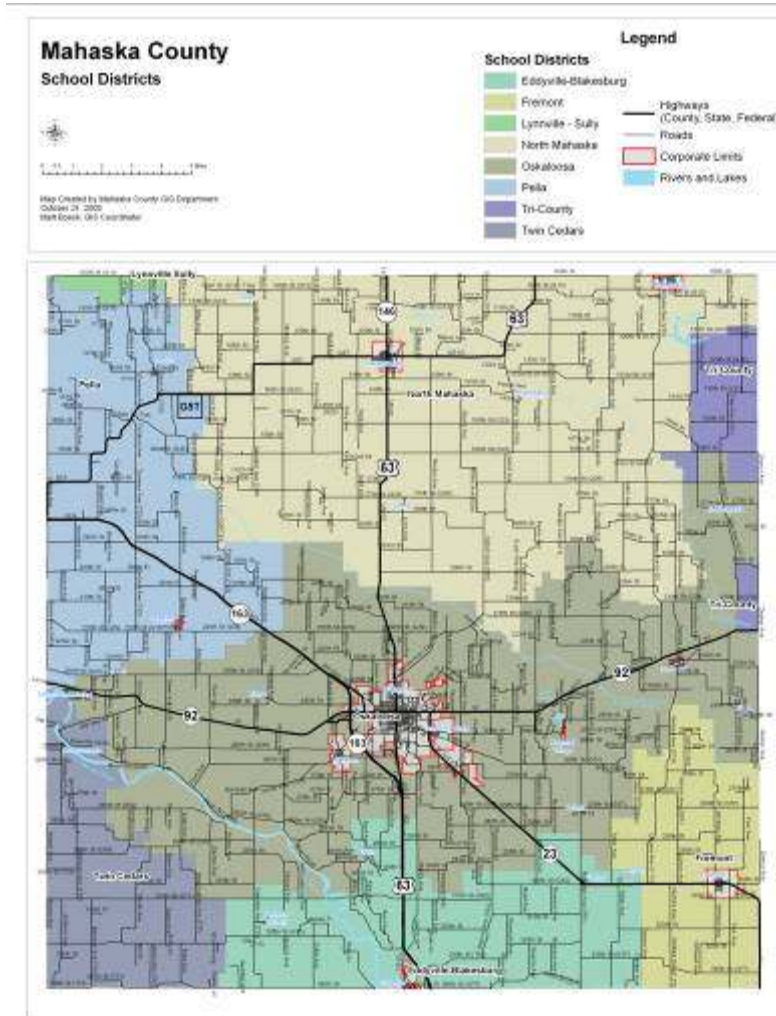


# School Districts





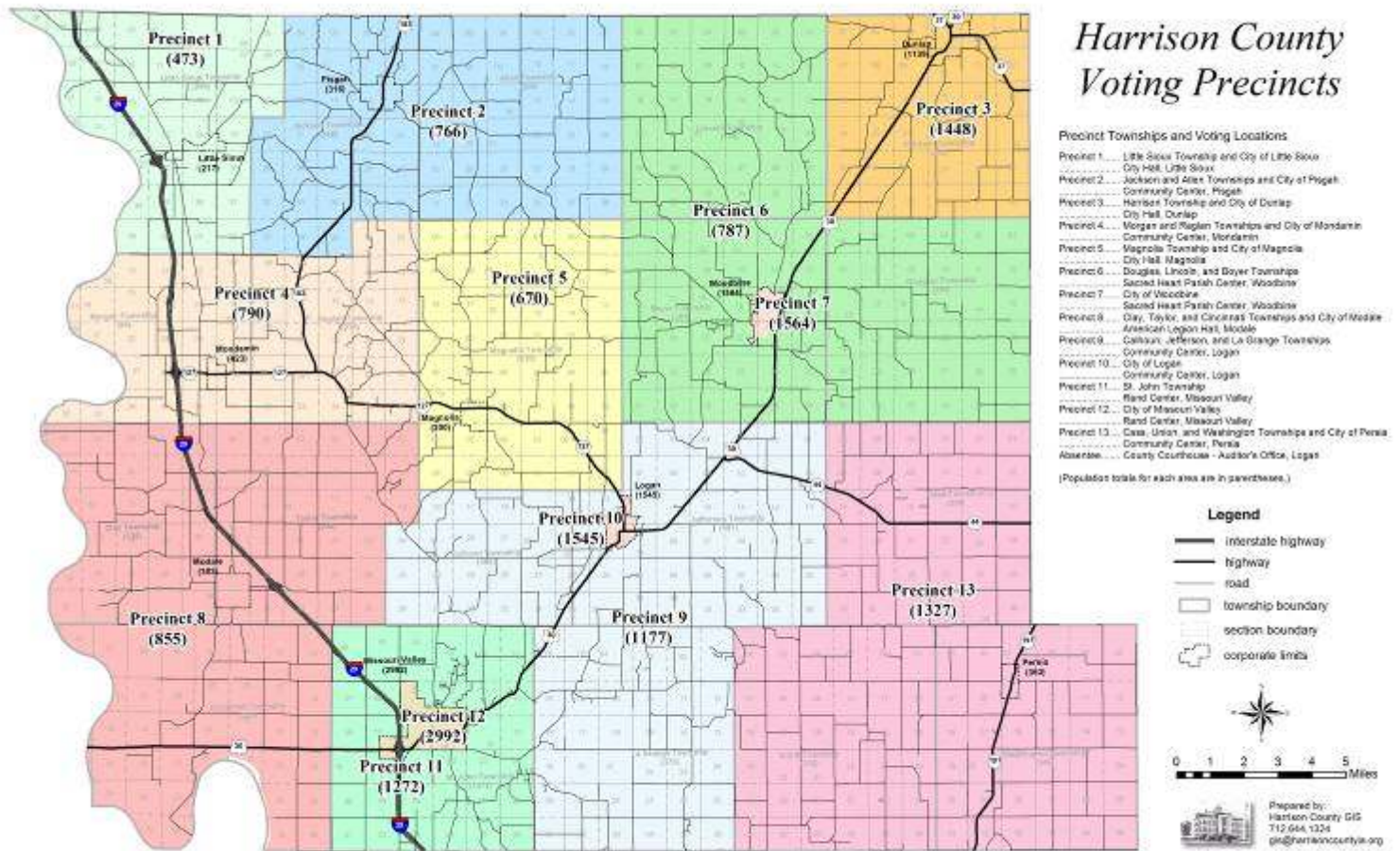
# School Districts







# Voting Precincts



Harrison County GIS does not guarantee this map to be free from errors or inaccuracies & disclaims any responsibility or liability for interpretations from this map or decisions based thereon.

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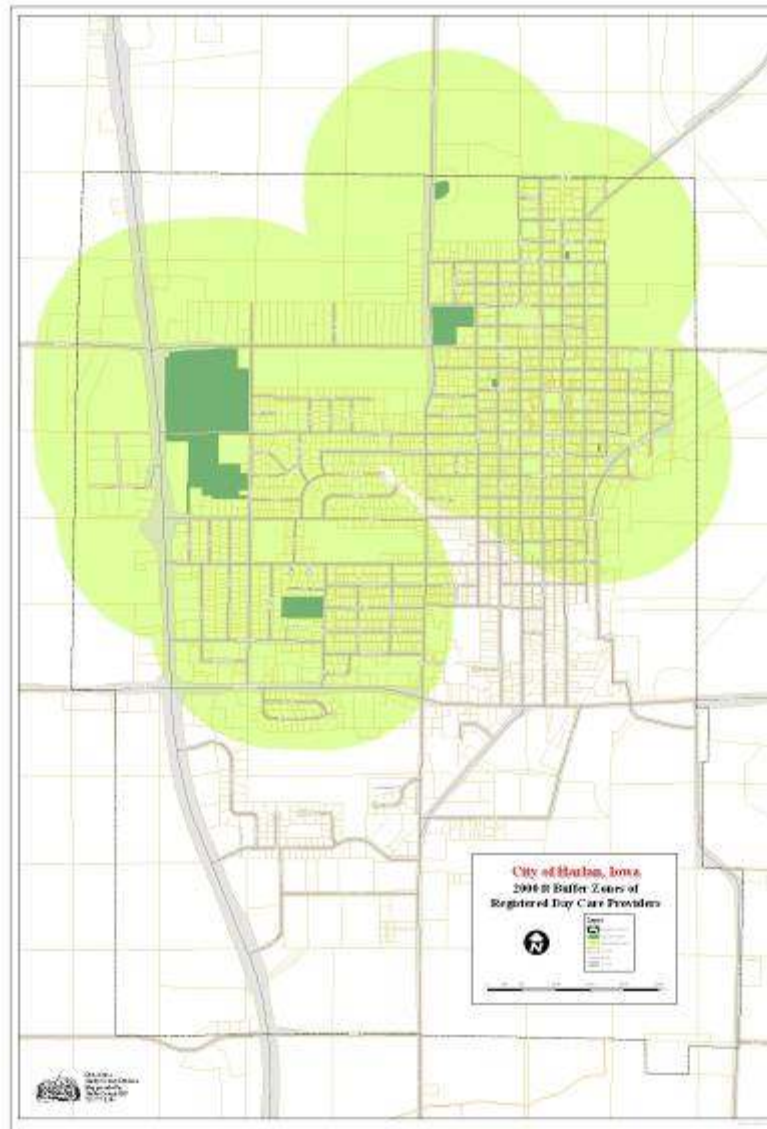
# Sex Offender Exclusion Zones

- 2000 foot buffer zones around licensed day care facilities and school property
- Boundaries and property ownership taken from the parcel layer information





# Sex Offender Exclusion Zones



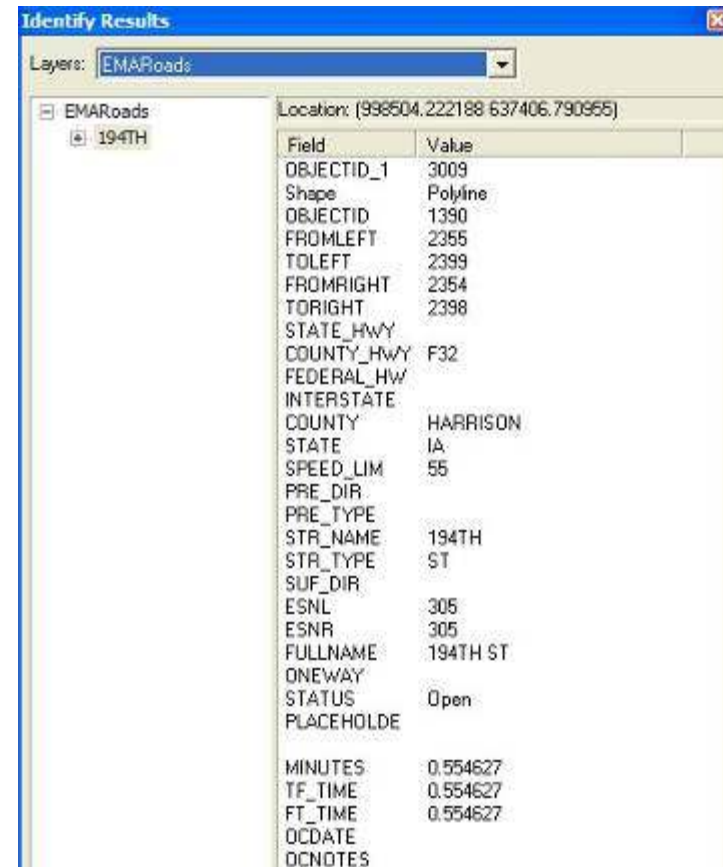


# E911/Emergency Management

- Combine data used in the parcel base map with address information for the E911 Communications Center
  - Railroads
  - Railroad Crossings
  - River Markers
  - Highway Mile Markers
  - Cemeteries
  - Surrounding Siren Locations
  - Evacuation Zones
  - Fire Districts/EMA Districts
  - Hydrology (*county-produced or sourced from Iowa DNR*)
  - Corporate Limits
  - Townships/Sections
  - County Conservation Lands
  - State/Federal Lands

# E911/Emergency Management

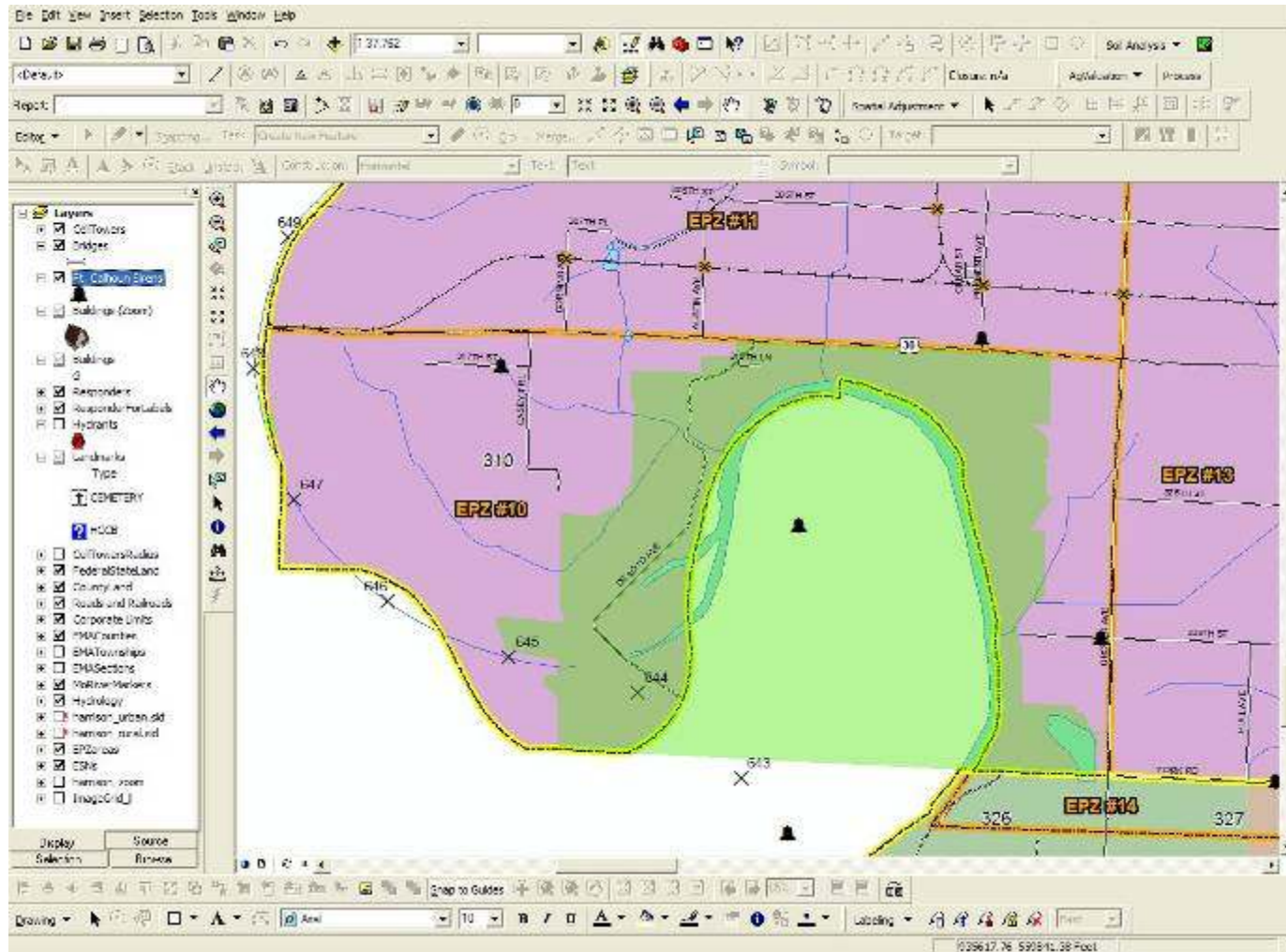
- Expand the road layer so that it is appropriate for geocoding addresses.
- Road Layer Fields
  - Left From
  - Left To
  - Right From
  - Right To
  - County
  - State
  - Speed Limit
  - Prefix Direct
  - Prefix Type
  - Street Name
  - Street Type
  - Suffix Direction
  - Full Name
  - ESN Left
  - ESN Right
  - Status (Open/Closed)



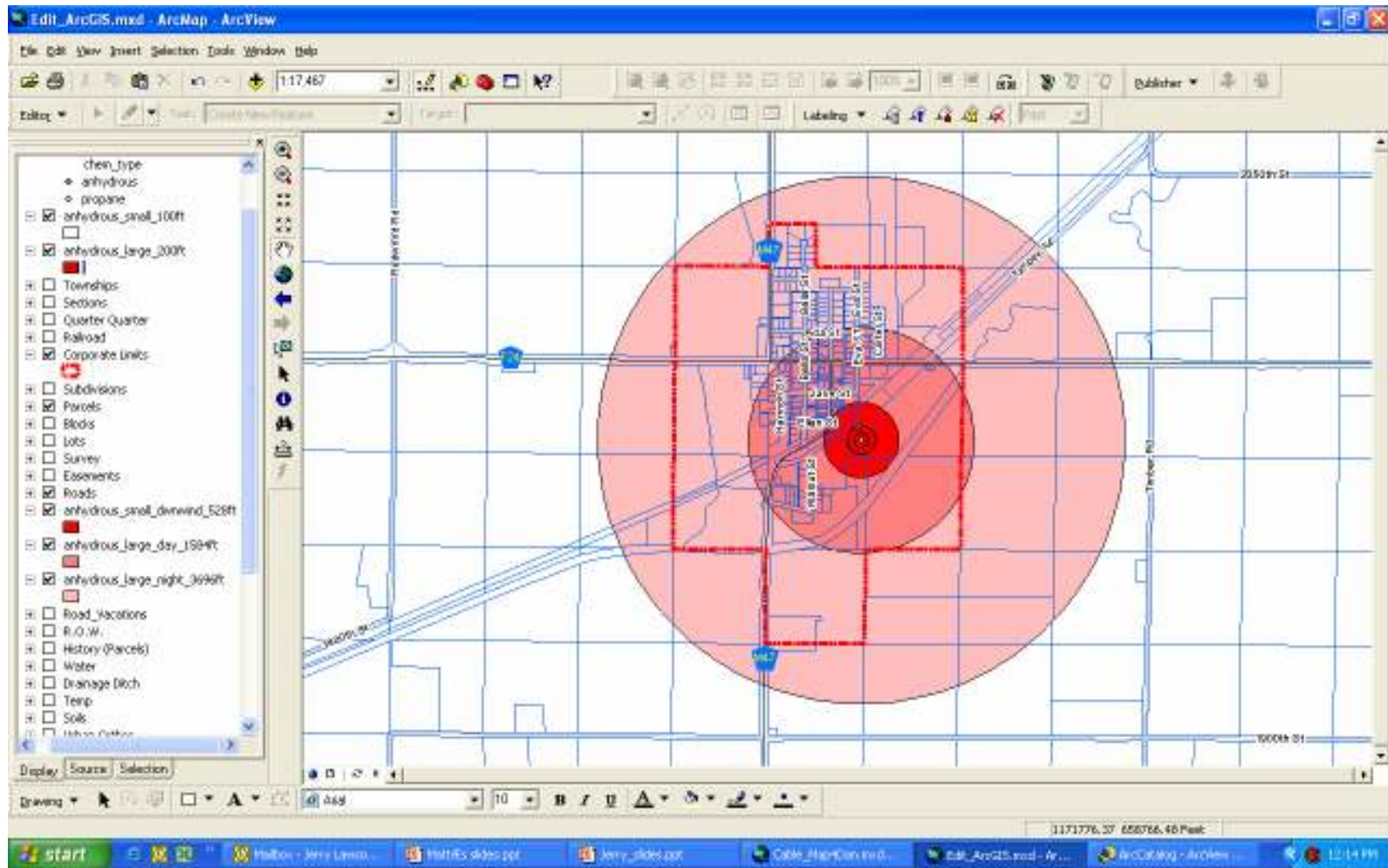
The screenshot shows a software window titled 'Identify Results'. It displays a table of fields and values for a selected road feature. The table has two columns: 'Field' and 'Value'. The fields include object IDs, shape, street names, directions, and administrative information like county and state. The values are specific to the selected feature, such as '194TH' for the street name and 'HARRISON' for the county.

Field	Value
OBJECTID_1	3009
Shape	Polyline
OBJECTID	1390
FROMLEFT	2355
TOLEFT	2399
FROMRIGHT	2354
TORIGHT	2398
STATE_HWY	
COUNTY_HWY	F32
FEDERAL_HW	
INTERSTATE	
COUNTY	HARRISON
STATE	IA
SPEED_LIM	55
PRE_DIR	
PRE_TYPE	
STR_NAME	194TH
STR_TYPE	ST
SUF_DIR	
ESNL	305
ESNR	305
FULLNAME	194TH ST
ONEWAY	
STATUS	Open
PLACEHOLDE	
MINUTES	0.554627
TF_TIME	0.554627
FT_TIME	0.554627
OCDATE	
OCNOTES	

# E911/Emergency Management



# Anhydrous Spill Critical Zones

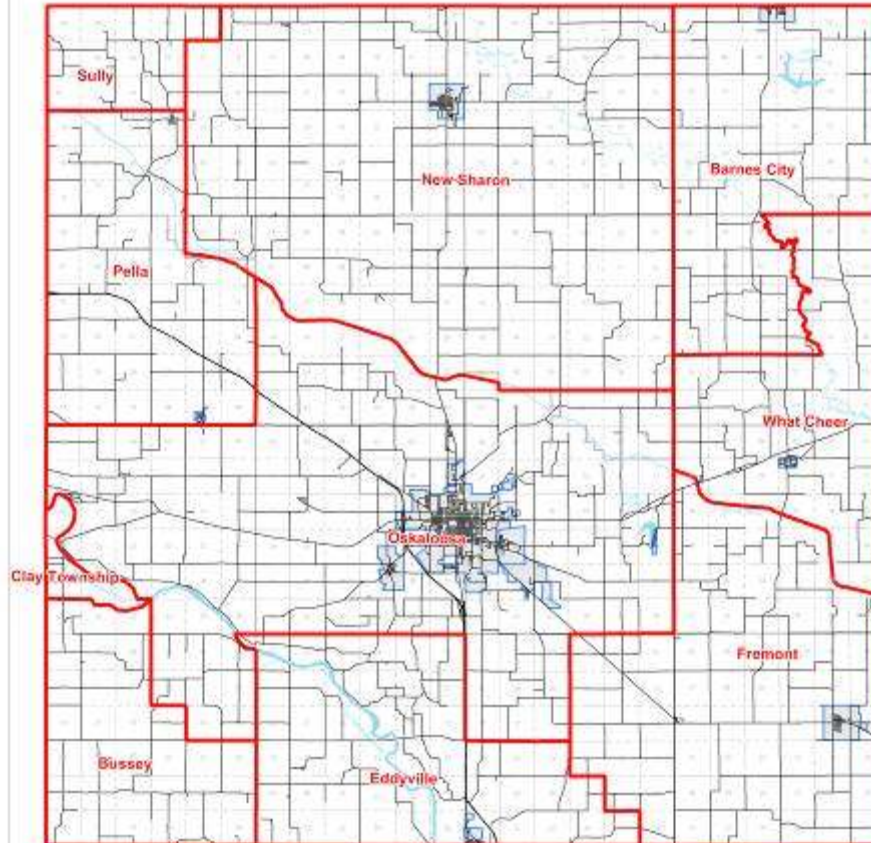




# Fire Districts

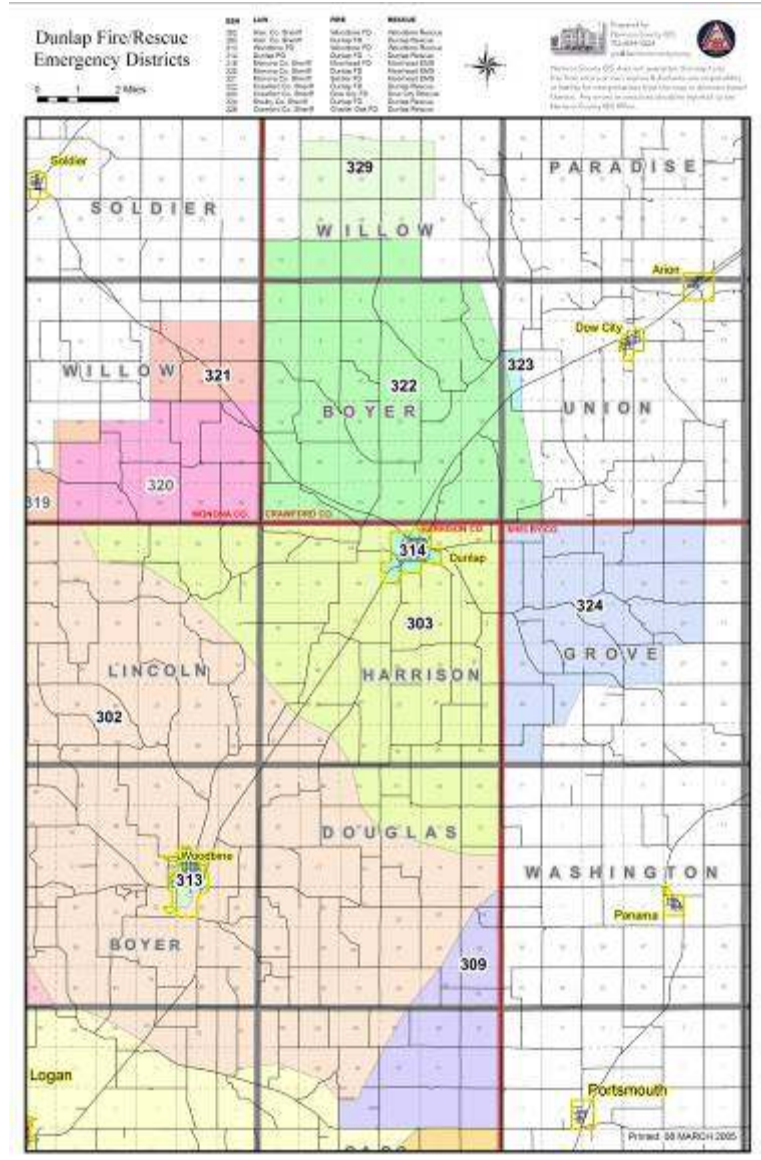
Mahaska County - Fire Districts

Map Created by Mahaska County GIS Department  
March 24, 2004  
MWF Bend - GIS Coordinator





# Fire Districts



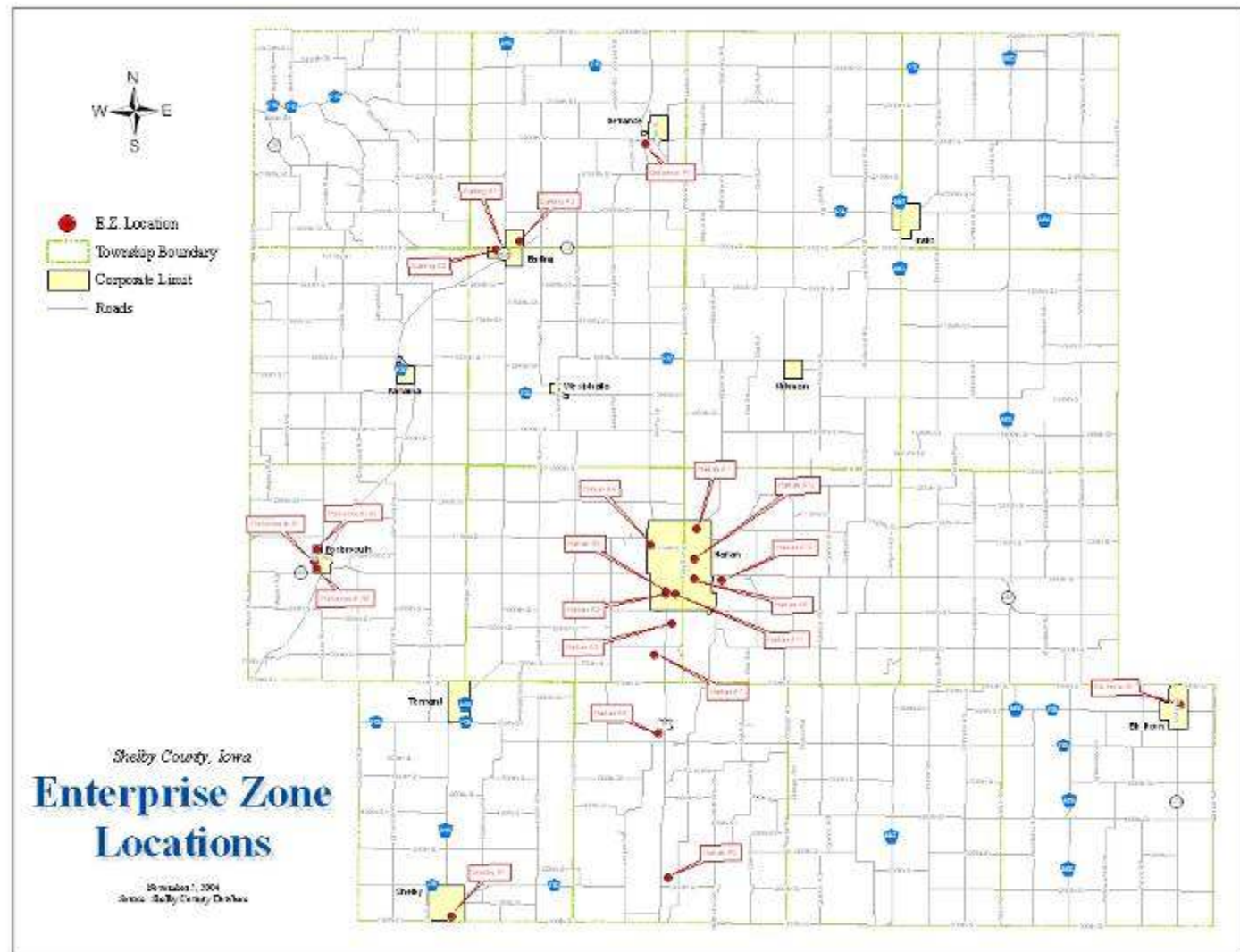


# Planning Meetings



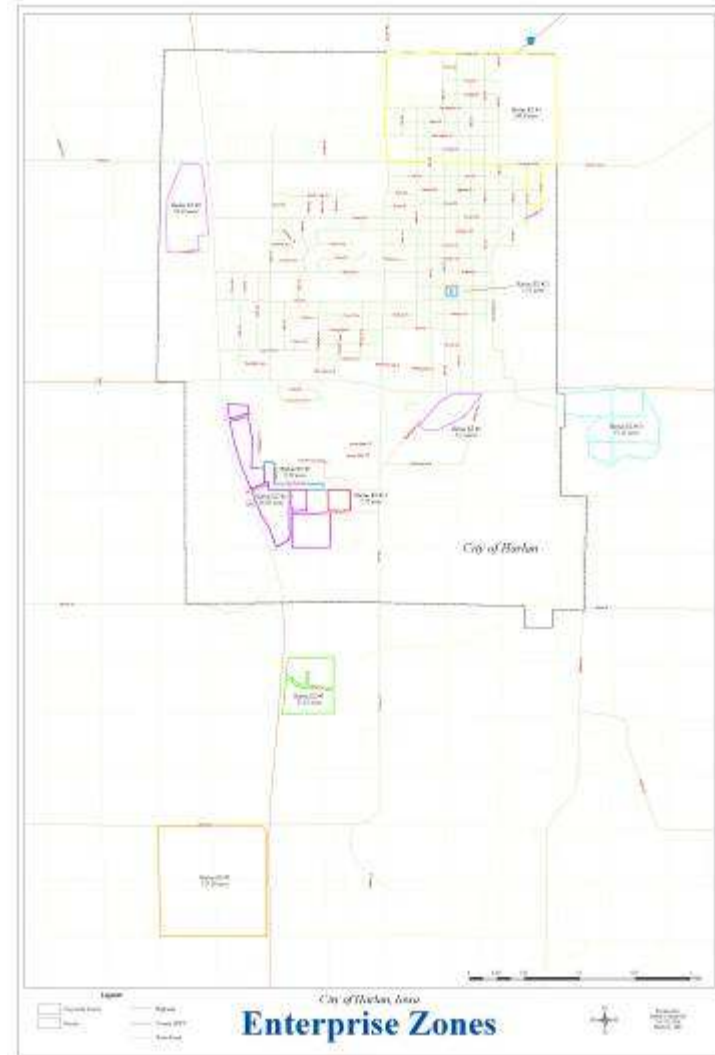


# Countywide Enterprise Zone Locations

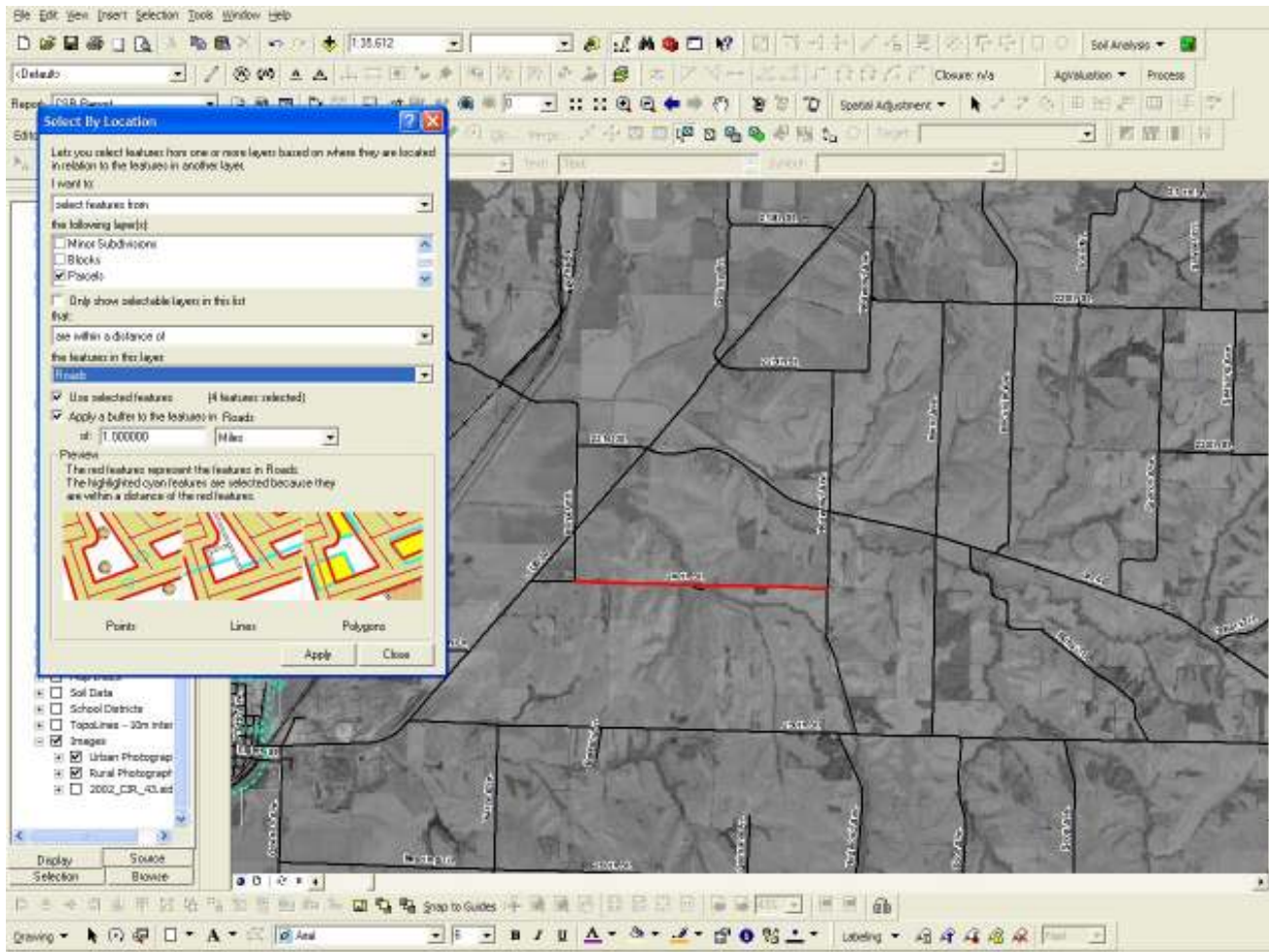




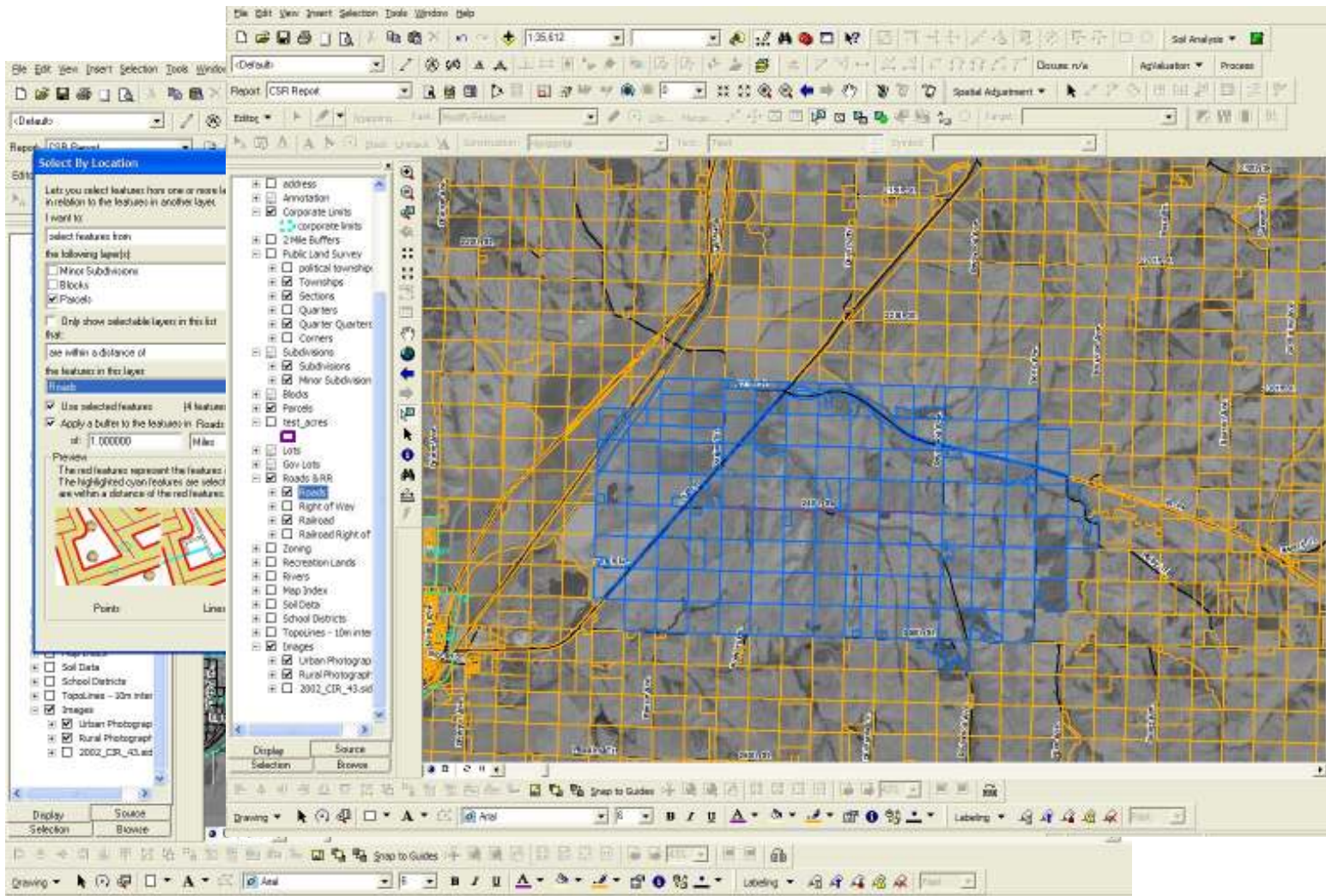
# Harlan Enterprise Zones



# Engineer Road Closure Notification



# Engineer Road Closure Notification



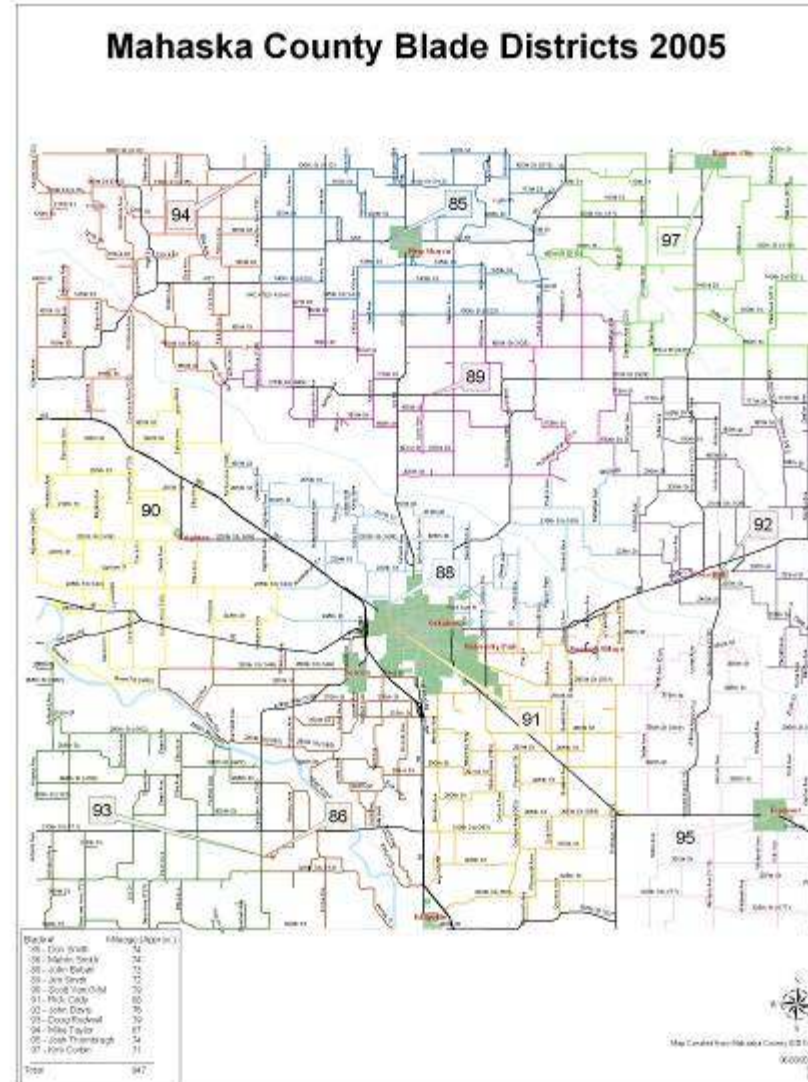
# Engineer Road Closure Notification

The screenshot displays a GIS application interface. On the left, a 'Select By Location' dialog box is open, showing options to select features from various layers based on their proximity to other features. The main window shows a map with a grid overlay and a table of selected parcel attributes.

PARCEL_ID	DEEDHOLD1	DEED1ADDR	DEED1CITY	DEED1STATE
260001462400000	Latta Charitable Trust, Lucile	< Po Box 13	Mapleton	IA
260001462401000	Armstrong, James R.	< 3005 Hwy 44	Logan	IA
260001464400000	Clark, David M.	< 2374 Parker Trl	Logan	IA
260001522000000	Latta Charitable Trust, Lucile	< Po Box 13	Mapleton	IA
260001464300000	Clark, Daniel M.	< 2374 Parker Trl	Logan	IA
260001464301000	Gardner, Stanley	< 208 Fischer Dr	Woodbine	IA
260001553300000	Seck, William R.	< c/o Diane Andersen 812 Birchwood Circle	Co Bluffs	IA
260001507401000	Clark, Daniel M.	< 2374 Parker Trl	Logan	IA
260001507500000	Gardner, Stanley	< 208 Fischer Dr	Woodbine	IA
260001507400000	Gardner, Stanley	< 208 Fischer Dr	Woodbine	IA
260001523600000	Leonard Rev Trust, Edward J.	< 305 W 4Th	Logan	IA
260001523700000	Leonard Rev Trust, Edward J.	< 305 W 4Th	Logan	IA
260001525100000	Hustak, Gary S.	< 3002 240Th St	Logan	IA
260001525300000	Logan, James Edward	< 202 S 19th Ave	Logan	IA
260001525301000	Keller, Robert J.	< Po Box 201	Bur	IA
260001525400000	Logan, James Edward	< 202 S 19th Ave	Logan	IA
260001527200000	Lowell, Paul W.	< 221 E 8th St	Logan	IA
260001567600000	Fell, Patricia	< 262 Elmwood Ave	Co Bluffs	IA
260001567900000	Thomas, Michael E.	<	<	00000
260001567901000	Thomas, Michael E.	<	<	00000
260001554300000	Seck, William R.	< c/o Diane Andersen 812 Birchwood Circle	Co Bluffs	IA
260001554500000	Seck, William R.	< c/o Diane Andersen 812 Birchwood Circle	Co Bluffs	IA
260001566900000	Stueve Trustee, Jerry L.	< 2974 Fir Trail	Woodbine	IA
260001457100000	Johnson, Jerry K.	< c/o Jay Johnson 3306 Hwy 44	Logan	IA
260001524300000	Leonard, Kenneth	< 415 E 5Th	Logan	IA
260001460600000	Gardner, Stanley R.	< 208 Fischer Dr	Woodbine	IA
260001460601000	Lange, Darrel L.	< 3001 Highway 44	Woodbine	IA
260001460700000	Gardner, Stanley R.	< 208 Fischer Dr	Woodbine	IA
260001567100000	Stueve Trustee, Jerry L.	< 2974 Fir Trail	Woodbine	IA
260001558500000	Finley Management Llc	< 1000 W 64Th Terrace	Kansas City	MO
260001558600000	Finley Management Llc	< 1000 W 64Th Terrace	Kansas City	MO
260001554000000	Seck, William R.	< c/o Diane Andersen 812 Birchwood Circle	Co Bluffs	IA
260001554100000	Seck, William R.	< c/o Diane Andersen 812 Birchwood Circle	Co Bluffs	IA
260001554200000	Seck, William R.	< c/o Diane Andersen 812 Birchwood Circle	Co Bluffs	IA
260001565400000	Seck, William R.	< c/o Diane Andersen 812 Birchwood Circle	Co Bluffs	IA
260001467900000	Wendt, Jr, Charles E.	< 2394 Redwood Ave	Woodbine	IA

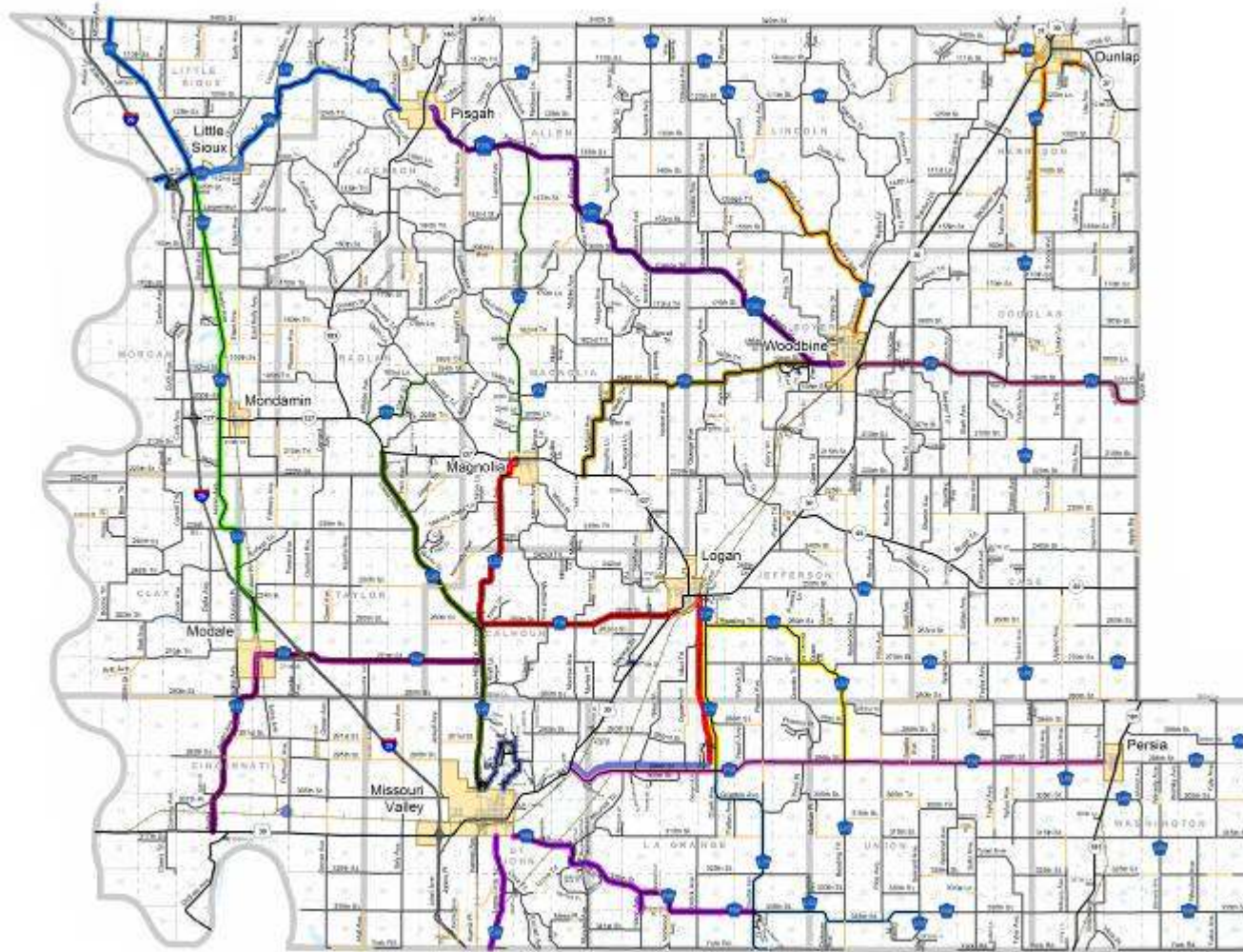


# Engineer – Blade Districts



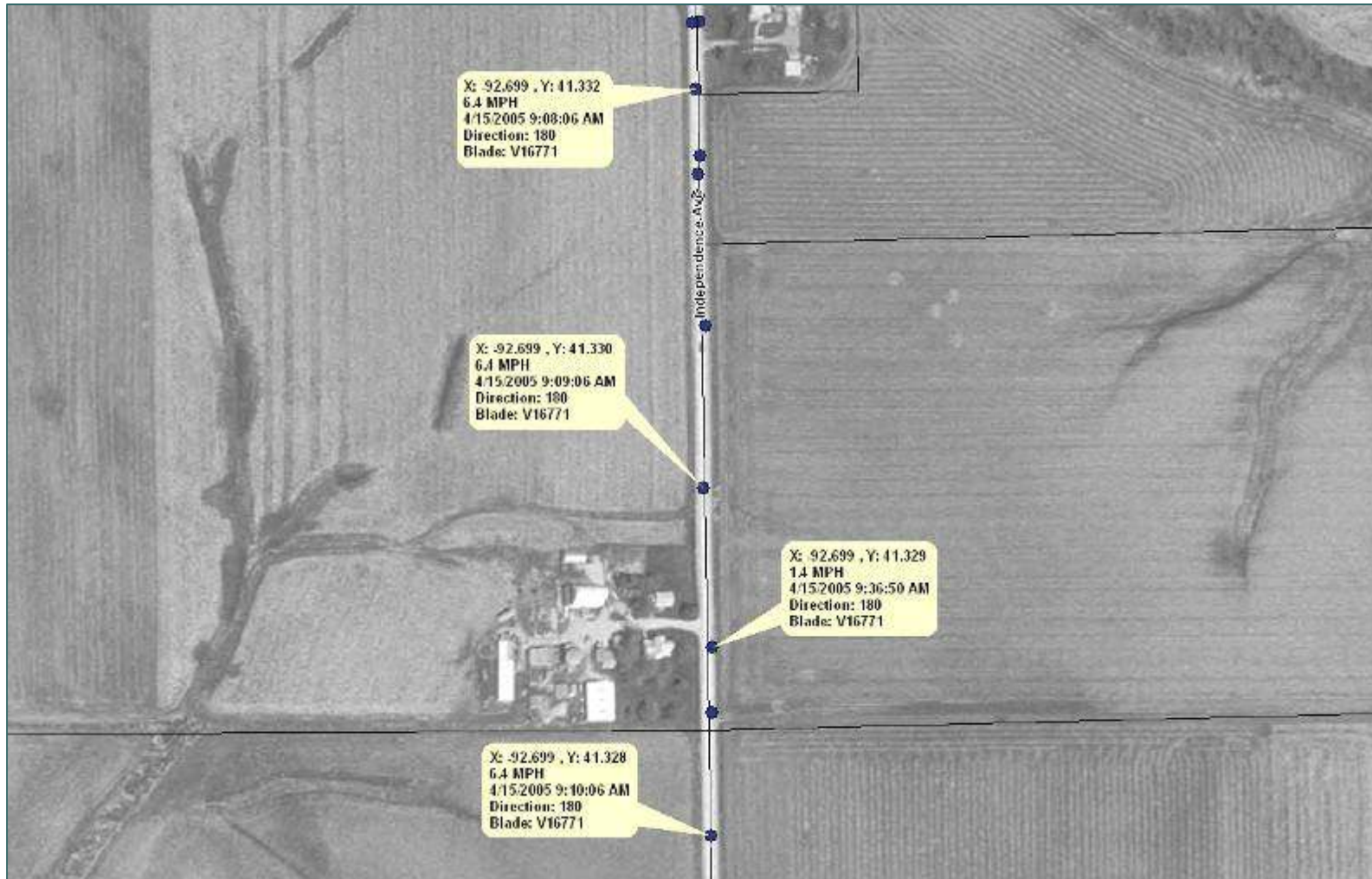


# Engineer – Blade Districts



Harrison County Snow Removal Routes

# AVL Integration (Automatic Vehicle Location)



# AVL Integration (Automatic Vehicle Location)

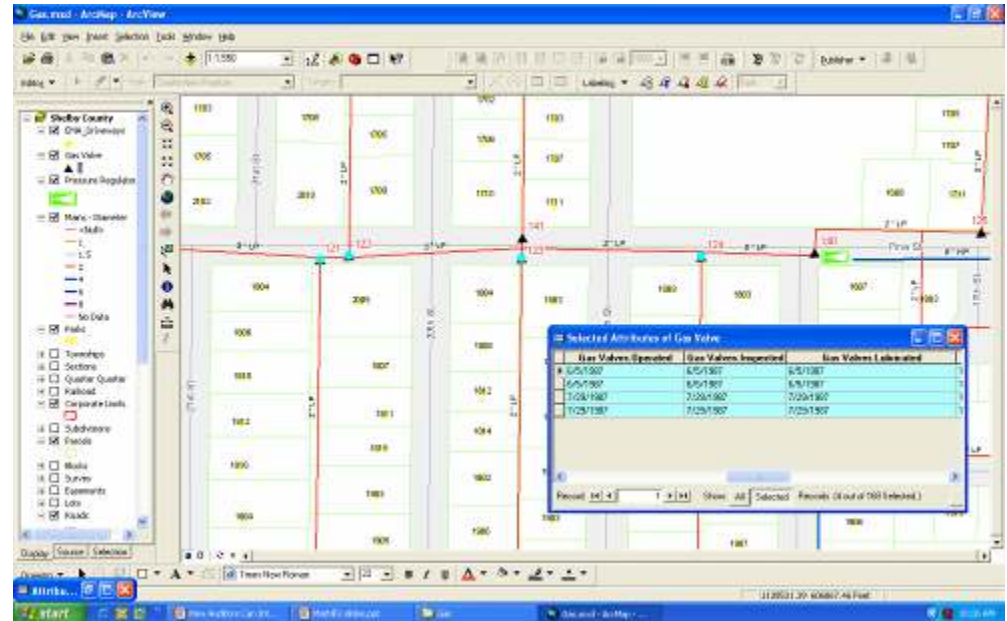




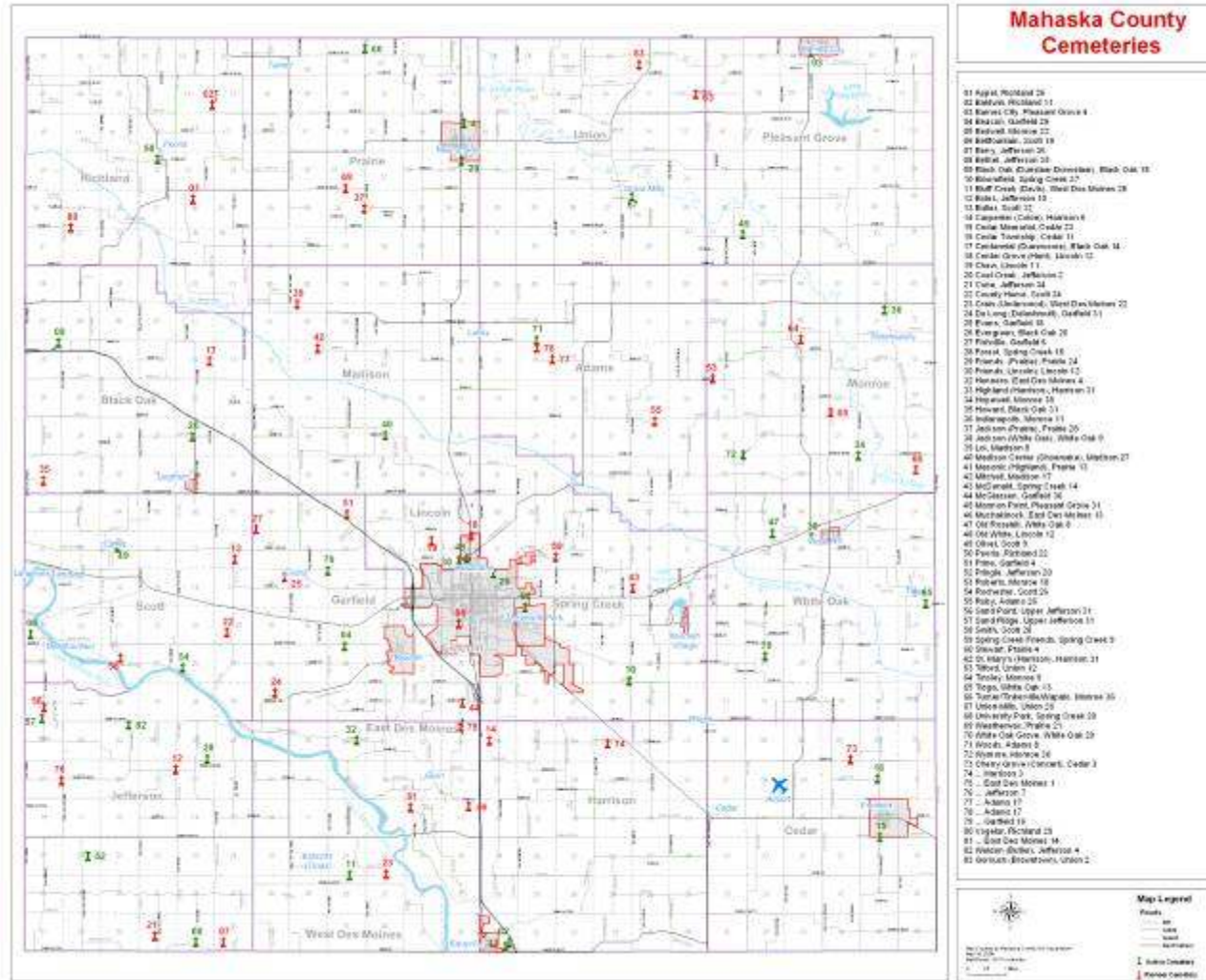
# Utilities – Gas & Cable



**HMU**  
Cable Features

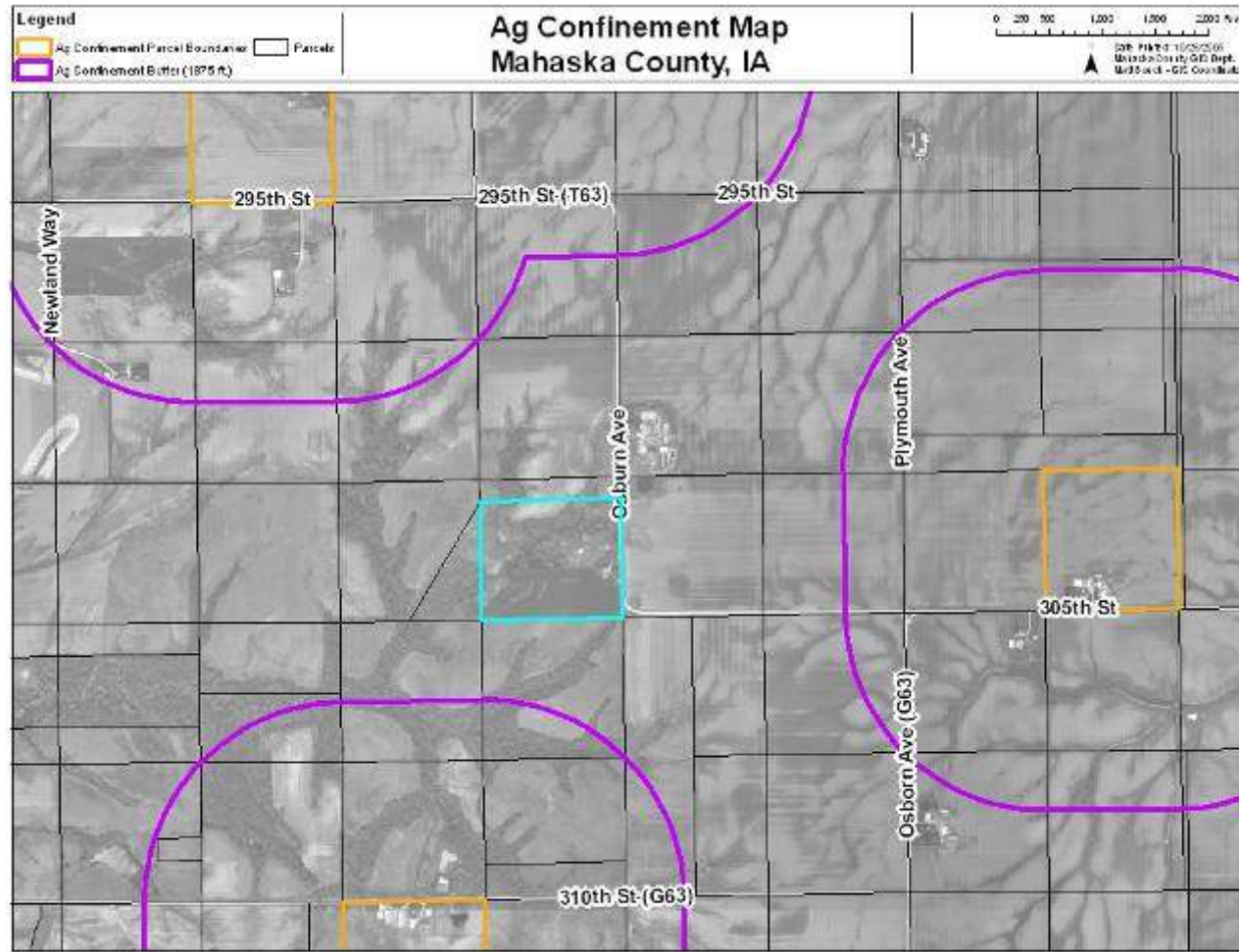


# Cemetery Mapping



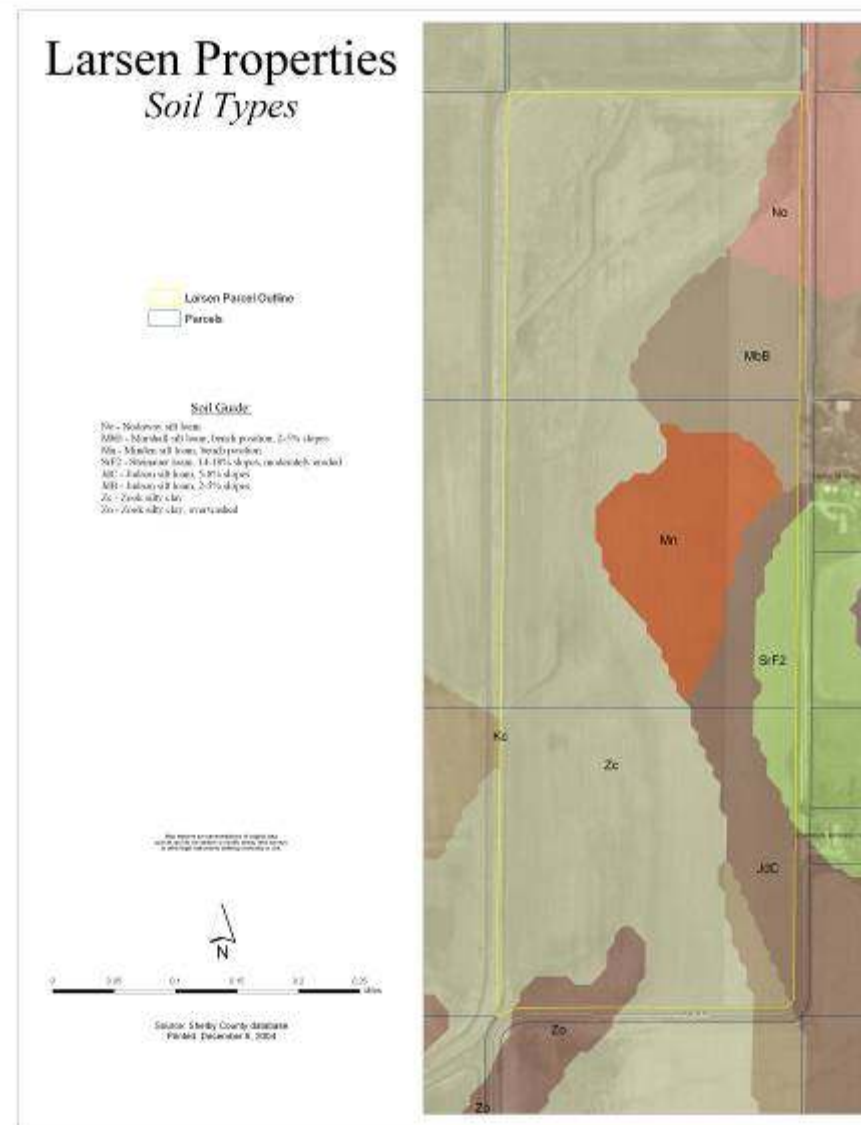


# Ag Confinement Buffers



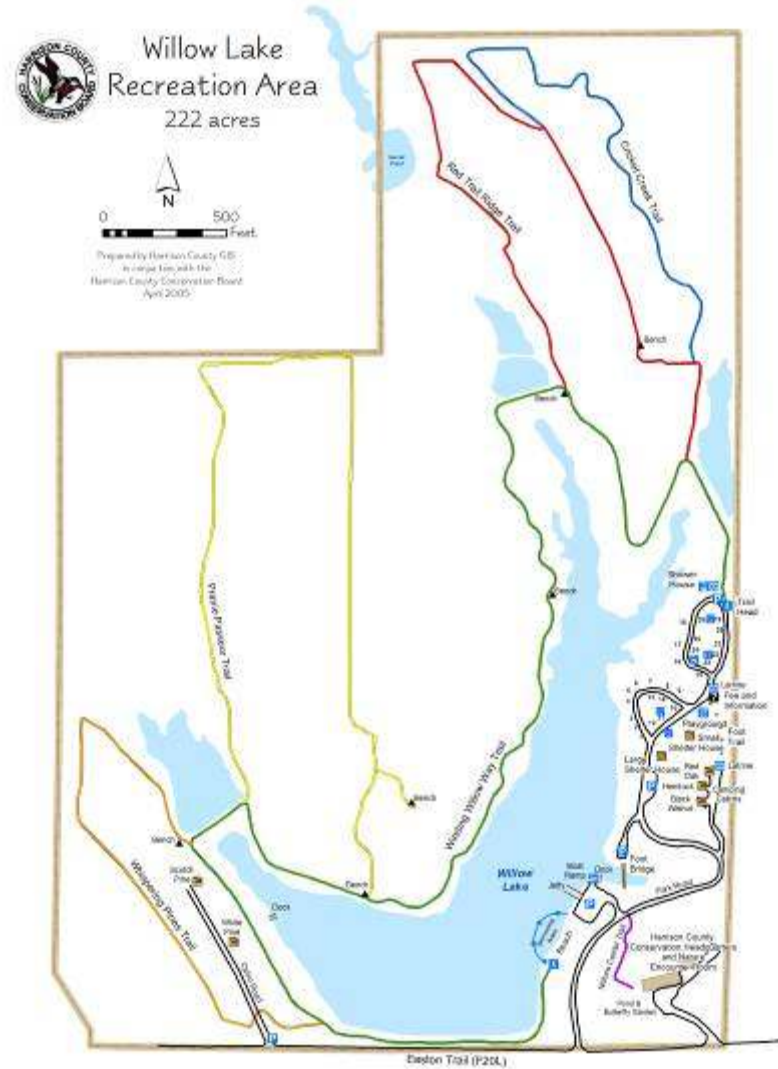
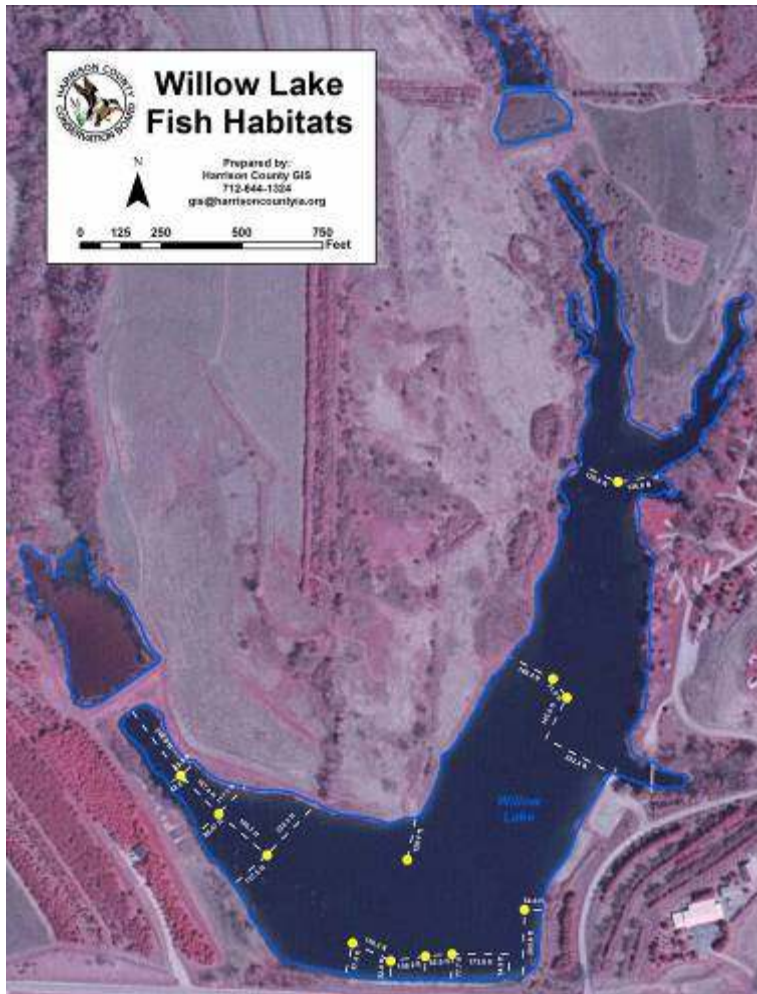


# Soil Map Shown at Auction



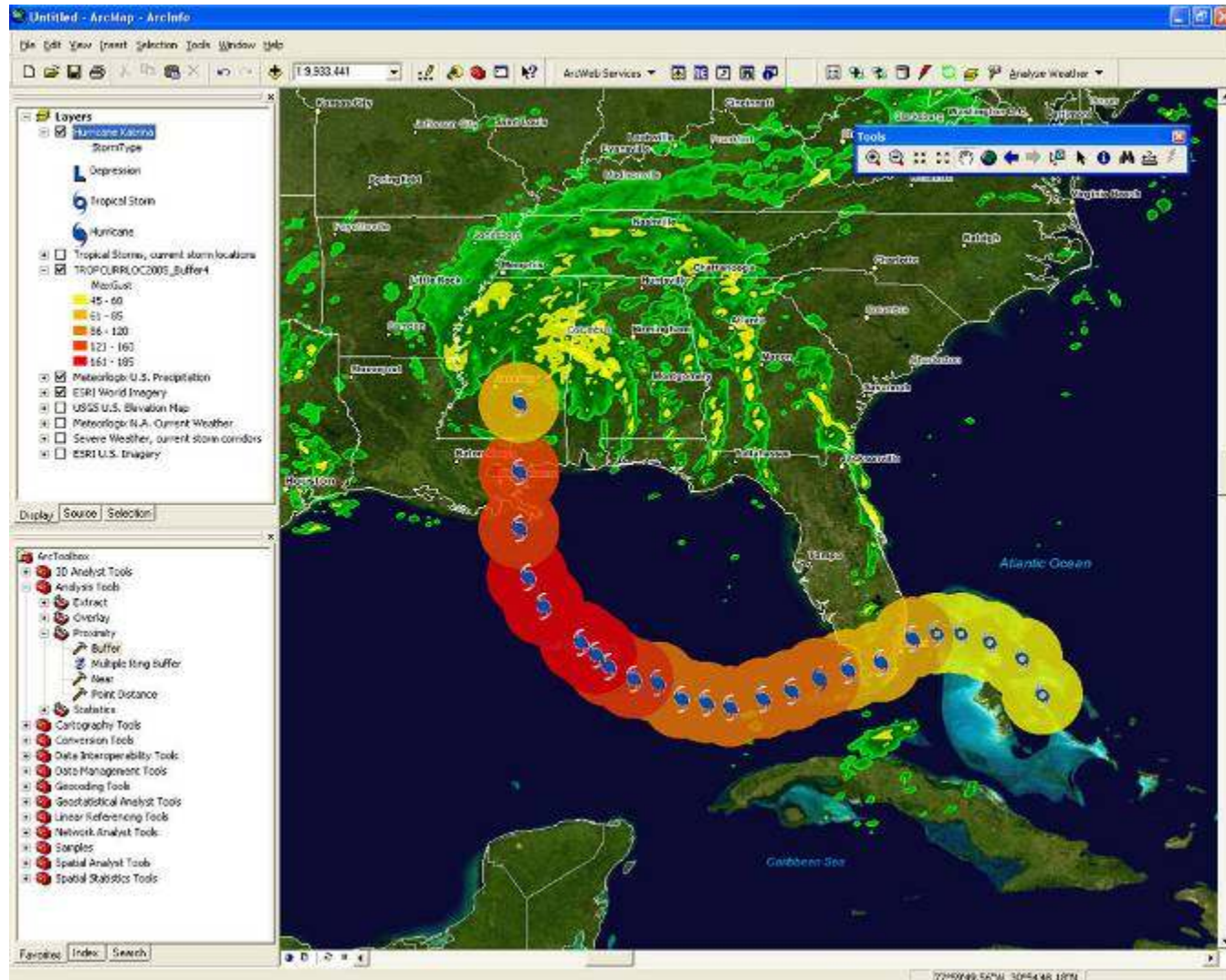


# County Conservation





# Disaster Mitigation



● ● ● | **Thank You!**

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jlawson@shco.org



EVERYONE NEEDS SUPPORT  
EVERY NOW AND THEN...

EVEN THOSE WHO ARE IN THE  
BUSINESS OF PROVIDING  
SUPPORT TO OTHERS

JOIN ICIT OR ATTEND OUR  
CONFERENCES TO BECOME  
ENGAGED IN BOTH RECEIVING  
AND PROVIDING SUPPORT

*Iowa Counties Information Technology*