



LOUISVILLE TORNADO

SCOTT L TRAPOLINO, GISP

DESOTO COUNTY, MS

“THE REAL VALUE OF GIS IS
NOT IN THE RESPONSE PHASE,
BY THEN IT'S TOO LATE...”

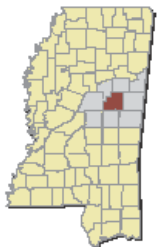
WINSTON COUNTY



Winston County
Economic Development Partnership

311 W. Park St., Louisville MS 39339
Phone: 662-773-8719 Fax: 662-773-8909
www.winstoncounty.com

Major Communities in Winston County, Mississippi



Winston County

County in Mississippi

Winston County is a county located in the U.S. state of Mississippi. In the 2010 census, the population was 19,198. Its county seat is Louisville.

[Wikipedia](#)

Area: 610 mi² (1,580 km²)

Founded: 1833

Population: 18,788 (2013)

Unemployment rate: 10.2% (Dec 2014)

County seat: [Louisville](#)

Cities: [Louisville](#), [Noxapater](#)

TOPICS OF DISCUSSION

- **Available Data**
- **Economic Impact**
- **GIS on Scene**
- **Looking into the Future**

AVAILABLE DATA

- Mississippi Automated Resource Information System (MARIS)
<http://www.maris.state.ms.us/>
- Mississippi Geospatial Clearinghouse
<http://www.gis.ms.gov/Portal/home.aspx?dom=&x=1440&y=739&browser=Netscape>
- Where is the Data?
Golden Triangle Planning and Development District
Digital Globe (Imagery)
- Data Collection and Accountability

ECONOMIC IMPACT AT A LOCAL AND STATE LEVEL

An EF-4 Tornado touched down outside of Winston County, MS at 3:51 PM on April 28, 2014. This EF-4 tornado ran for a length of 35 miles, maximum span of 3/4 of a mile in width, wind speeds reaching 185 mph, 647 damaged structures (including the only County Hospital and Two Major Manufactures), 10 fatalities and unknown injuries.

CLARION-LEDGER

Nearly 1,000 Miss. jobs lost due to tornadoes

Clay Chandler and Jeff Ayres, The Clarion-Ledger 10:08 a.m. CDT May 9, 2014

Hundreds of jobs are temporarily gone, dozens of businesses destroyed or damaged in the hardest-hit areas, including Winston, Lee and Rankin counties



(Photo: Joe Ellis/The Clarion-Ledger)



The severe thunderstorms that battered Mississippi last week gashed the state's economic base as unequivocally as it did houses, vehicles and trees, in the form of hundreds of jobs at least temporarily gone along with dozens of businesses destroyed or heavily damaged statewide.

Gerald Mills estimates an EF-4 tornado that caused most of the storm's deaths stripped Winston County of 500 jobs, at least temporarily.

A lot of those were in Louisville's industrial complex. Teters Floral Products operated a warehouse that employed 100 people, and was severely damaged. Saving those jobs is a priority for Mills, executive director of the Winston County Economic Development District Partnership. Teters' parent company said in a statement on its website that it is still evaluating the extent of the damage.

Making sure scheduled jobs still arrive is another of Mills' priorities. Starting in June, Natron Wood Products was set to employ 200 people making plywood panels in the old Georgia Pacific facility.

The 265,000 square-foot facility was heavily damaged. "But they've already promised to build back," Mills said. About 70,000 square feet of the building, which has been reduced to a slab and will house the mobile hospital that will temporarily replace the destroyed Winston Medical Center.

Teters Floral Products

- ❑ 5-10 million in revenue annually
- ❑ 100 employees
- ❑ Artificial Flowers

Winston County Medical Facility

- ❑ Served three surrounding counties
- ❑ 200 employees





NORTH CAROLINA MOBILE HOSPITAL



Winston County Medical Center
Mobile Hospital

























ADDRESS: 602 Armstrong St

COORDINATES:
LATITUDE: 33.10973331550002
LONGITUDE: -89.04062939419996

STRUCTURE: WOOD FRAME
ADDRESS TYPE: RESIDENCE
OWNER:

SUPERVISOR: 3

PARCEL OWNER: WORK JOHN ETUX
GEORGIA
PARCEL ID: 141220301 0100101

ROAD NAME: ARMSTRONG ST

COMMENT: ROOF DAMAGE

DAMAGE: LITTLE

TOTAL VALUE: 44629
PERCENT LOSS: 10%



ADDRESS:

COORDINATES:
LATITUDE: 33.109280615999999
LONGITUDE: -89.046602058300005

STRUCTURE: WOOD FRAME
ADDRESS TYPE: RESIDENCE
OWNER:
PARCEL OWNER: LOVE MARGIE E
PARCEL ID: 141220301 0200500

SUPERVISOR: 3

ROAD NAME: BEAL ST

COMMENT:

DAMAGE: COMPLETE

TOTAL VALUE: 13253
PERCENT LOSS: 100%



ADDRESS: 104 Beal St

COORDINATES:
LATITUDE: 33.109509316
LONGITUDE: -89.046917705300004

STRUCTURE: SWT
ADDRESS TYPE: RESIDENCE
OWNER:

SUPERVISOR: 3

PARCEL OWNER: MCDANIEL MARY
HUGHES ESTATE
PARCEL ID: 141220301 0300100

ROAD NAME: BEAL ST

COMMENT:

DAMAGE: COMPLETE

TOTAL VALUE: 37475
PERCENT LOSS: 100%



ADDRESS:

COORDINATES:
LATITUDE: 33.109173730899997
LONGITUDE: -89.047234678300001

STRUCTURE: BRICK
ADDRESS TYPE: BUSINESS
OWNER:
PARCEL OWNER: CALVARY APOS-
TOLIC CHURCH
PARCEL ID: 141220301 0301000

SUPERVISOR: 3

ROAD NAME: BEAL ST

COMMENT:

DAMAGE: COMPLETE

TOTAL VALUE: 0
PERCENT LOSS: 100%





ADDRESS: **105 Beal St**

STRUCTURE: **BRICK**

ADDRESS TYPE: **RESIDENCE**

OWNER:

PARCEL OWNER: **BURRAGE GLORIA JEAN & TASHA S**

PARCEL ID: **141220301 0200600**

DAMAGE: **COMPLETE**

TOTAL VALUE: **28979**

PERCENT LOSS: **100%**

COORDINATES:
LATITUDE: **33.1089162046**
LONGITUDE: **-89.046591501600005**

SUPERVISOR: **3**

ROAD NAME: **BEAL ST**

COMMENT:



ADDRESS: **200 Beal St**

STRUCTURE: **BRICK/SIDING**

ADDRESS TYPE: **BUSINESS**

OWNER: **THE REVIVAL APART-**

MENTS

PARCEL OWNER: **M & M INVEST-**

MENTS LLC

PARCEL ID: **141220301 0101700**

DAMAGE: **COMPLETE**

TOTAL VALUE: **528329**

COORDINATES:
LATITUDE: **33.108126928099999**
LONGITUDE: **-89.046595073000006**

SUPERVISOR: **3**

ROAD NAME: **BEAL ST**

COMMENT:



ADDRESS: **110 Beal St**

STRUCTURE: **BRICK**

ADDRESS TYPE: **BUSINESS**

OWNER: **WINSTON COUNTY MEDI-**

CAL CENTER

PARCEL OWNER: **CALVARY APOS-**

TOLIC CHURCH

PARCEL ID: **141220301 0301000**

DAMAGE: **COMPLETE**

TOTAL VALUE: **0**

COORDINATES:
LATITUDE: **33.108553600900002**
LONGITUDE: **-89.047240159200001**

SUPERVISOR: **3**

ROAD NAME: **BEAL ST**

COMMENT:



ADDRESS: **200 Beal St**

STRUCTURE: **BRICK/SIDING**

ADDRESS TYPE: **APARTMENTS**

OWNER: **THE REVIVAL APART-**

MENTS

PARCEL OWNER: **M & M INVEST-**

MENTS LLC

PARCEL ID: **141220301 0101700**

DAMAGE: **COMPLETE**

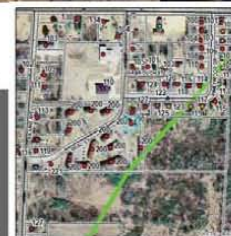
TOTAL VALUE: **528329**

COORDINATES:
LATITUDE: **33.1079240754**
LONGITUDE: **-89.046632996300005**

SUPERVISOR: **3**

ROAD NAME: **BEAL ST**

COMMENT:



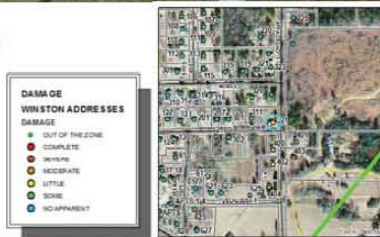


ADDRESS: **321 Birmingham St**
 STRUCTURE: **SIDING**
 ADDRESS TYPE: **RESIDENCE**
 OWNER:
 PARCEL OWNER: **MILLER KATIE**
 PARCEL ID: **151263401 0702200**

DAMAGE: **LITTLE**

TOTAL VALUE: **23226**
 PERCENT LOSS: **30%**

COORDINATES:
 LATITUDE: **33.11746409860003**
 LONGITUDE: **-89.04466511990003**
 SUPERVISOR: **3**
 ROAD NAME: **BIRMINGHAM ST**
 COMMENT:

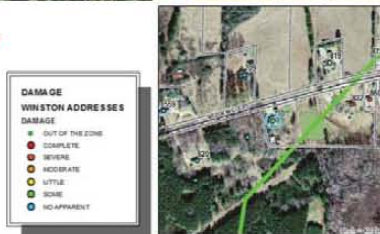


ADDRESS: **730 Brooksville Rd**
 STRUCTURE: **BRICK/SIDING**
 ADDRESS TYPE: **RESIDENCE**
 OWNER:
 PARCEL OWNER: **DONALD TROY**
ETUX MILDRED (LIFE EST)
 PARCEL ID: **151262301 0400700**

DAMAGE: **SOME**

TOTAL VALUE: **57590**
 PERCENT LOSS: **30%**

COORDINATES:
 LATITUDE: **33.146826194200003**
 LONGITUDE: **-89.02878163690007**
 SUPERVISOR: **1**
 ROAD NAME: **BROOKSVILLE RD**
 COMMENT: **ROOF DAMAGE**



ADDRESS: **619 Brooksville Rd**
 STRUCTURE: **BRICK**
 ADDRESS TYPE: **RESIDENCE**
 OWNER:
 PARCEL OWNER: **BALL MARCOS**
 PARCEL ID: **151262301 0300900**

DAMAGE: **LITTLE**

TOTAL VALUE: **104579**
 PERCENT LOSS: **30%**

COORDINATES:
 LATITUDE: **33.147892277899999**
 LONGITUDE: **-89.027554330100003**
 SUPERVISOR: **1**
 ROAD NAME: **BROOKSVILLE RD**
 COMMENT: **ROOF DAMAGE**



ADDRESS: **632 Brooksville Rd**
 STRUCTURE: **BRICK**
 ADDRESS TYPE: **RESIDENCE**
 OWNER: **DICKERSON**
 PARCEL OWNER: **DICKERSON IDA**
MAE
 PARCEL ID: **151262301 0400600**

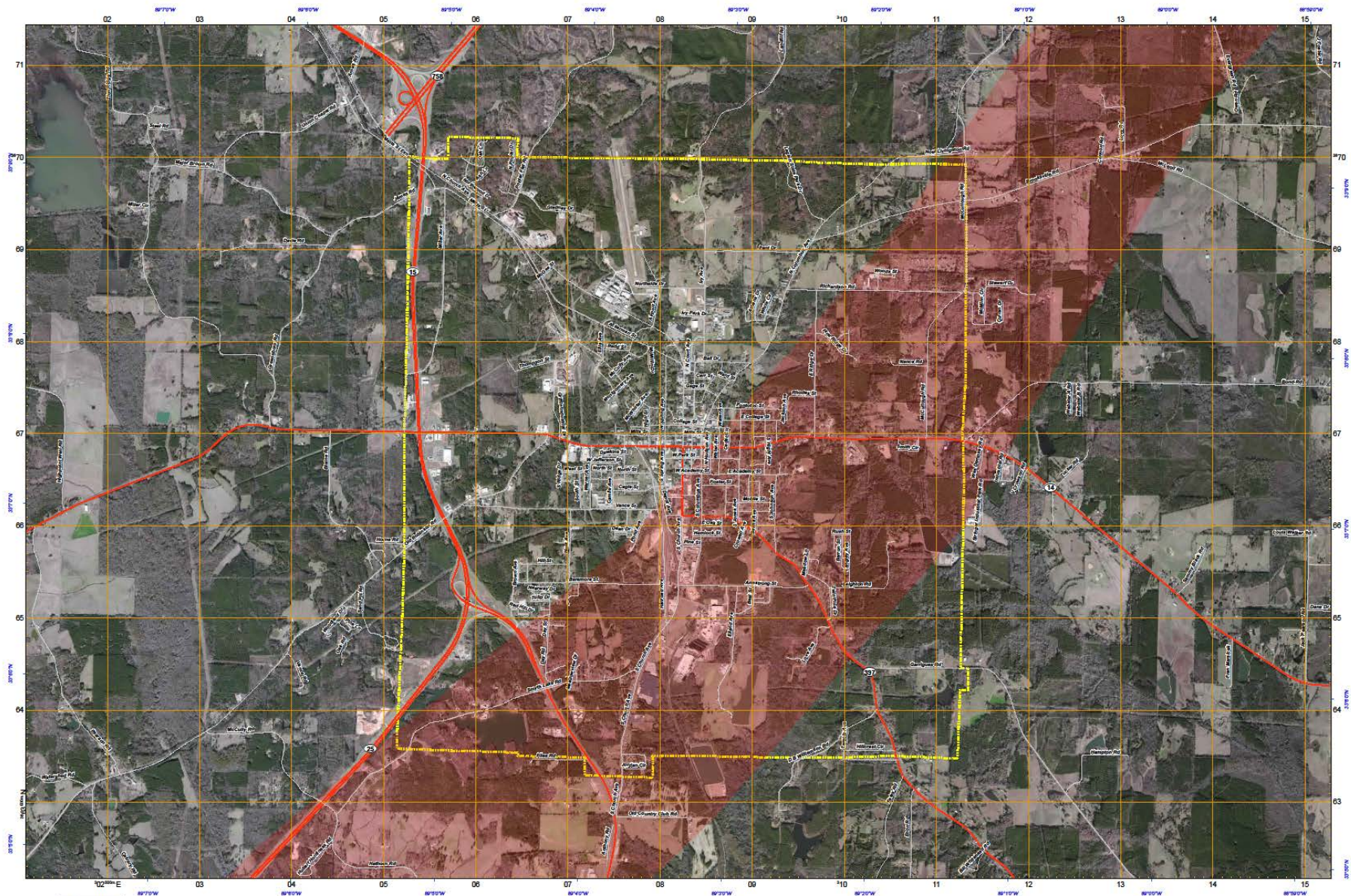
DAMAGE: **SEVERE**

TOTAL VALUE: **57223**
 PERCENT LOSS: **90%**

COORDINATES:
 LATITUDE: **33.147127947800001**
 LONGITUDE: **-89.027073074900002**
 SUPERVISOR: **1**
 ROAD NAME: **BROOKSVILLE RD**
 COMMENT:







U.S. National Grid
100,000-m Square ID
CB
Grid Zone Designation
16S

Grid Zone 16S
Magnetic Declination
1°31'53"W
Changing 6.9"/year
Declination Date 2014



1:25,000

LOUISVILLE, MS
WINSTON CO.

Before Imagery

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, IGN, USDA, USDA, AEX, GeoMapping, AeroGRID, IGN, IGP, swisstopo, and the GIS User Community



After Imagery

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Before Imagery

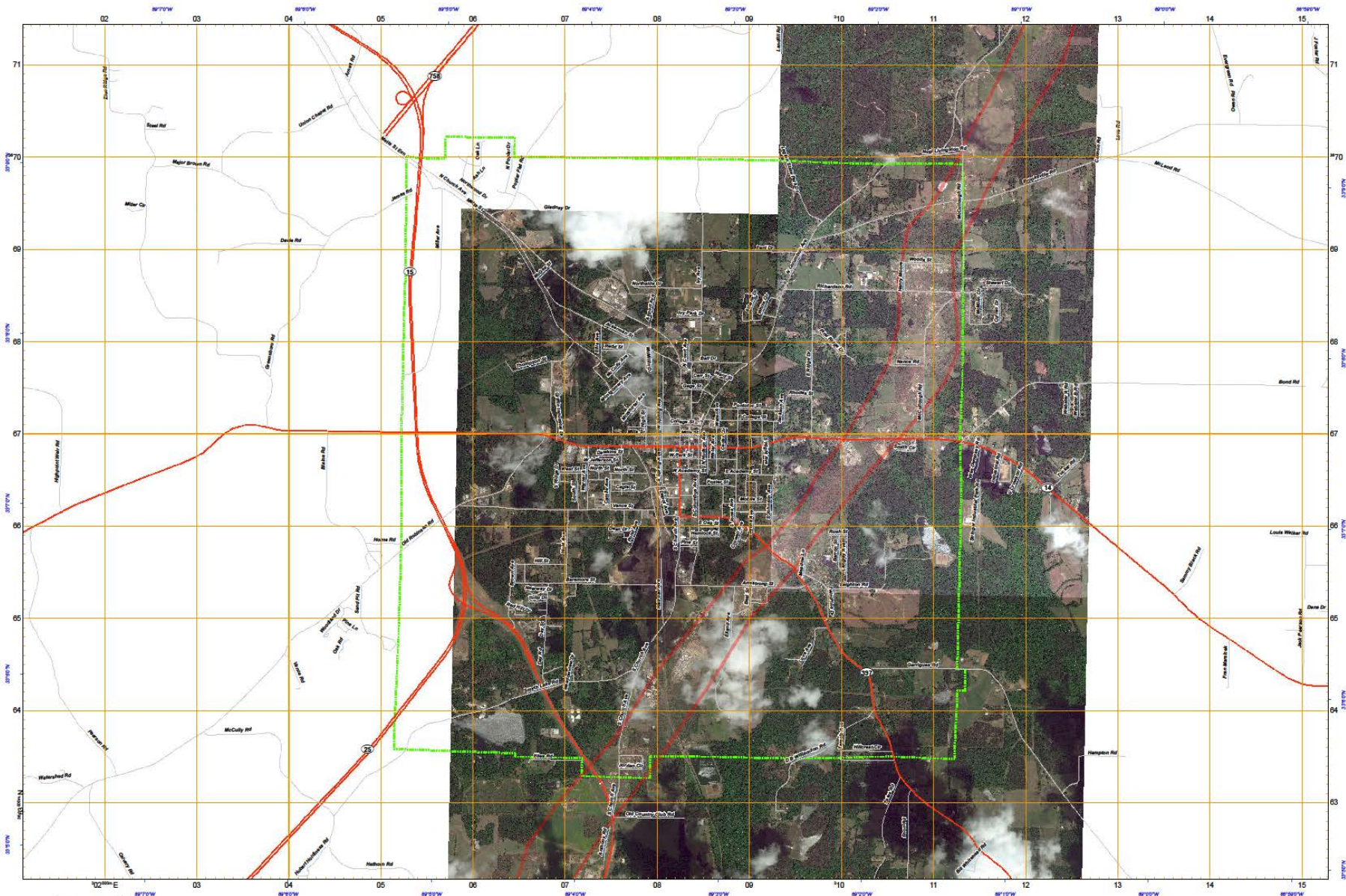


Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

After Imagery



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U.S. National Grid
100,000-m Square ID
CB
Grid Zone Designation
16S

Grid Zone 16S
Magnetic Declination
1°31'53"W
Changing 6.9"/year
Declination Date 2014



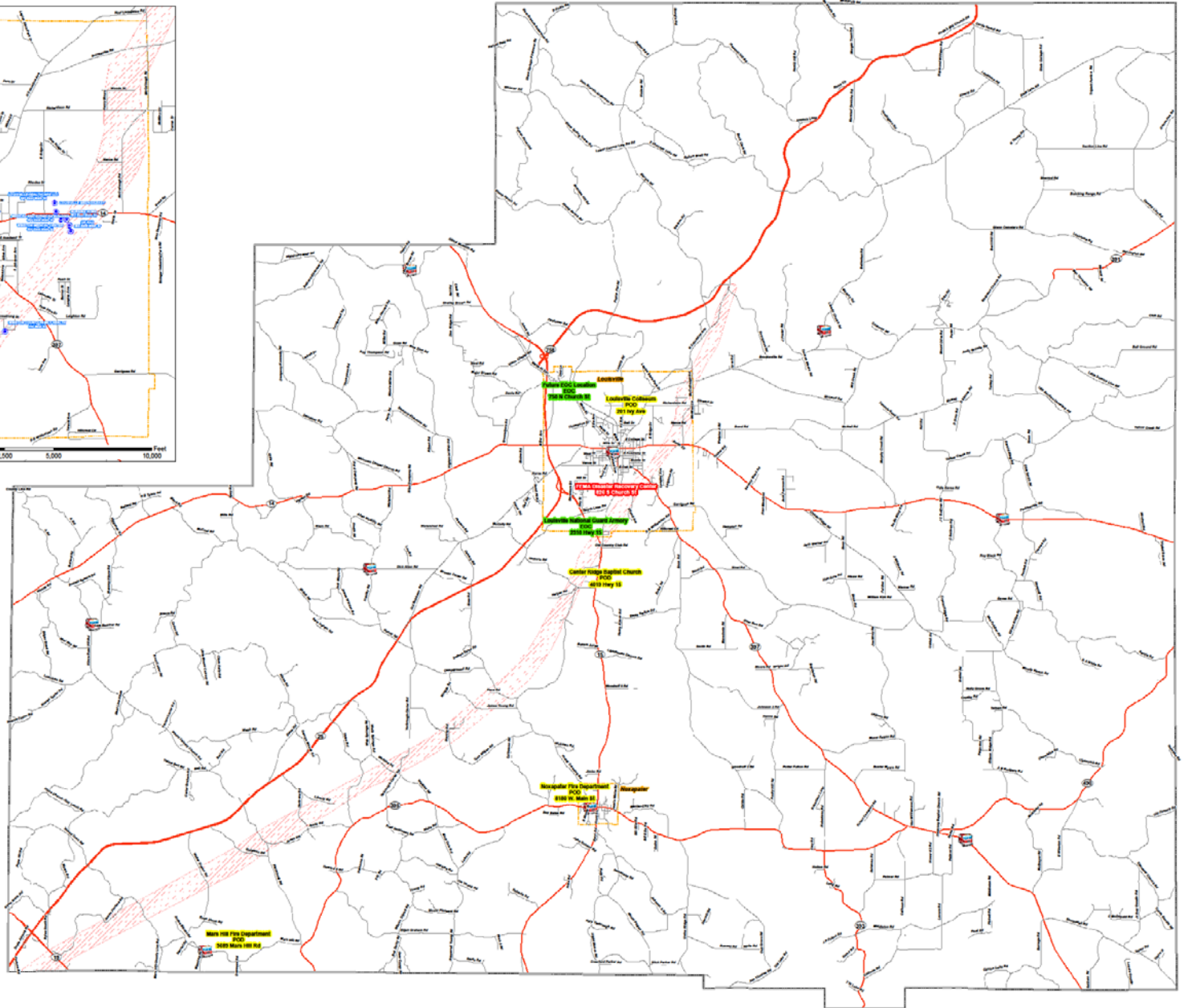
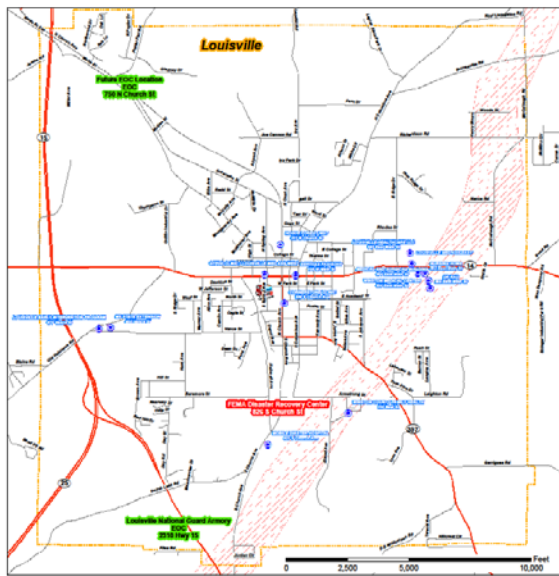
0 1,000 Meters
0 3,000 Feet

1:25,000

LOUISVILLE, MS
WINSTON CO.

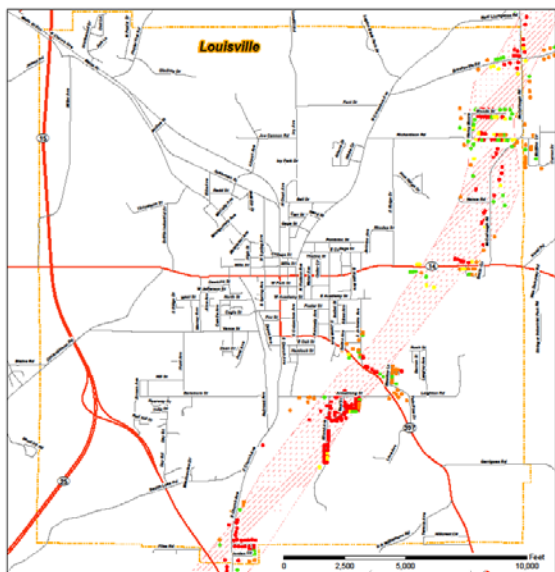
 Louisville Tornado Path
 Louisville Municipal Boundary

Imagery Provided by:
"Copyright 2014 Digital Globe Nextview License"



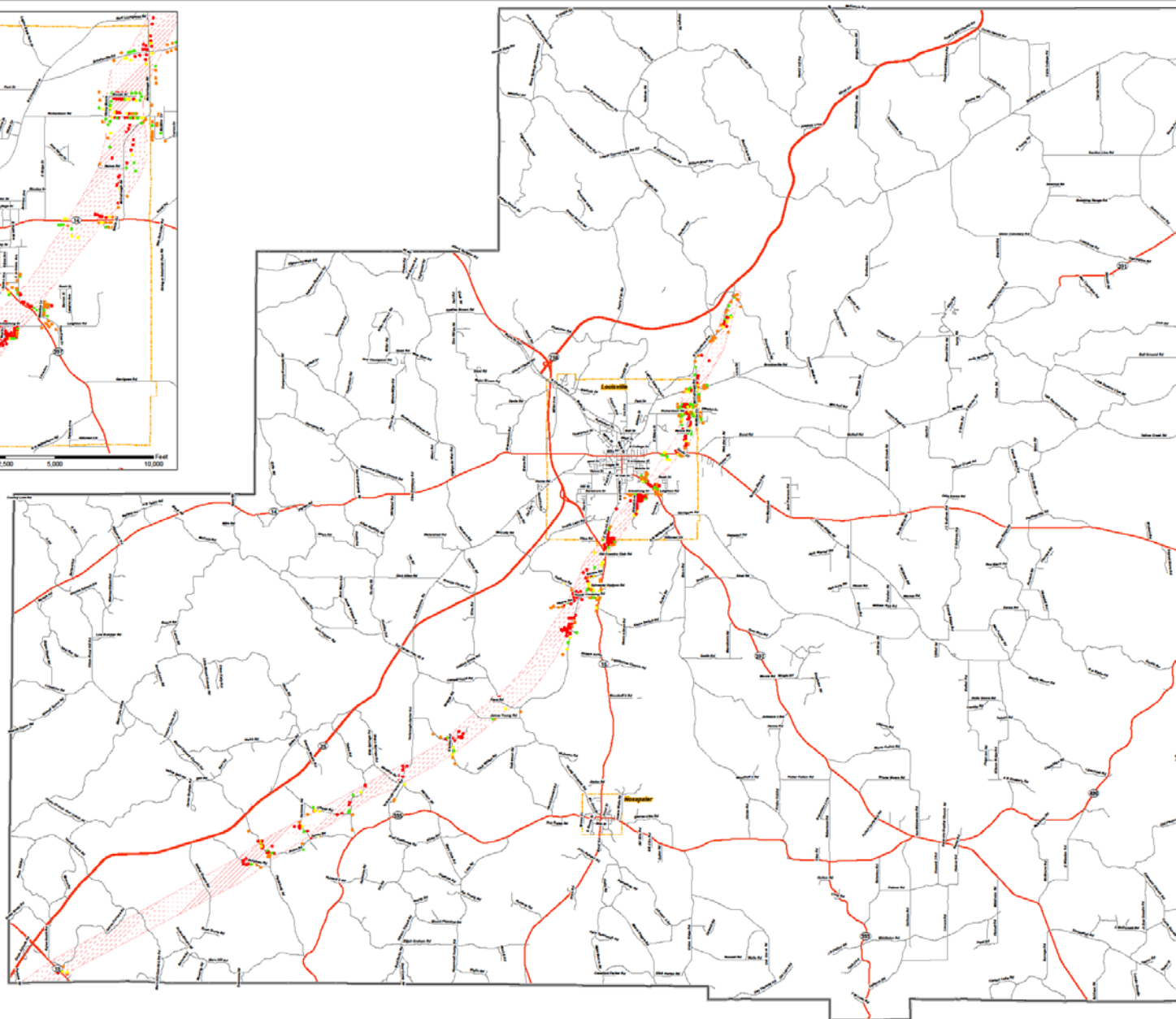
Critical Facilities **Winston County, Mississippi**

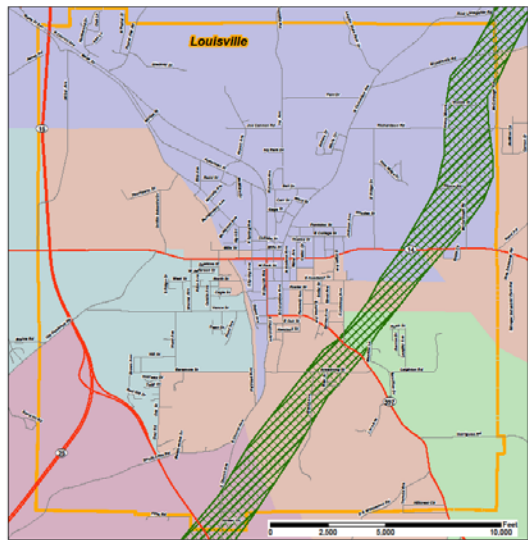
0 2.5 5 10 Miles



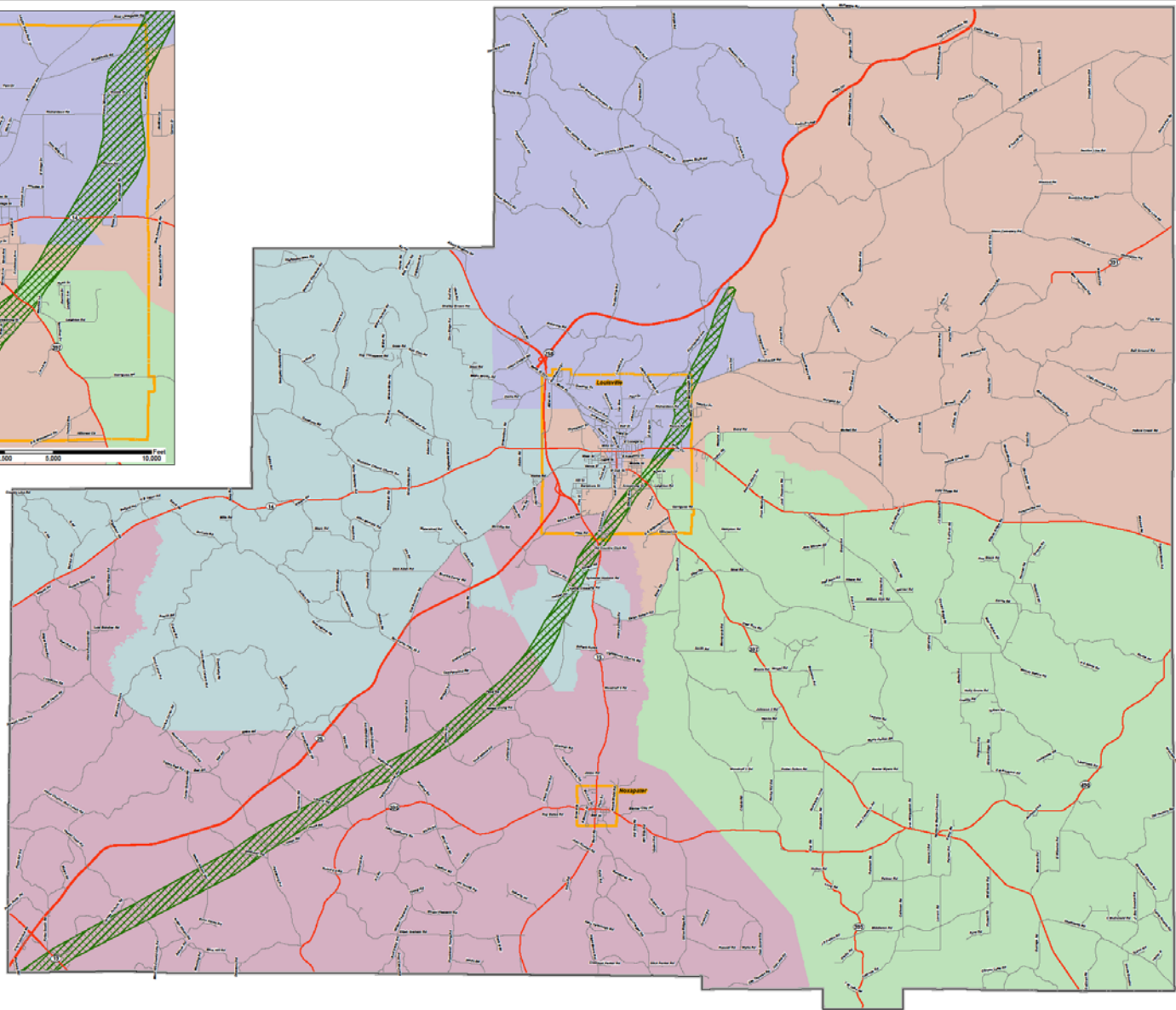
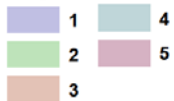
DAMAGED STRUCTURES

- DESTROYED
- AFFECTED
- MAJOR
- MINOR

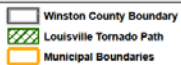




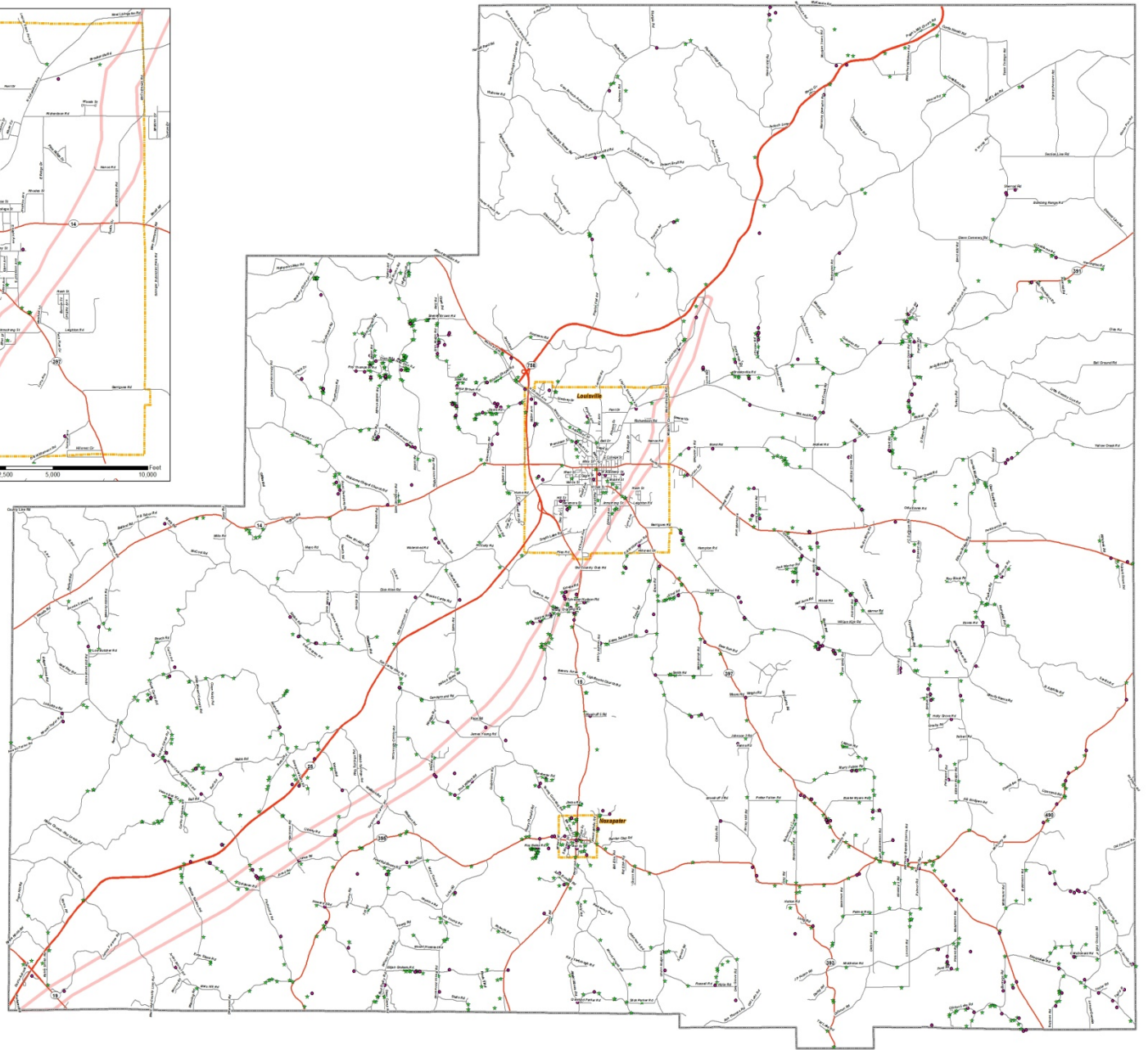
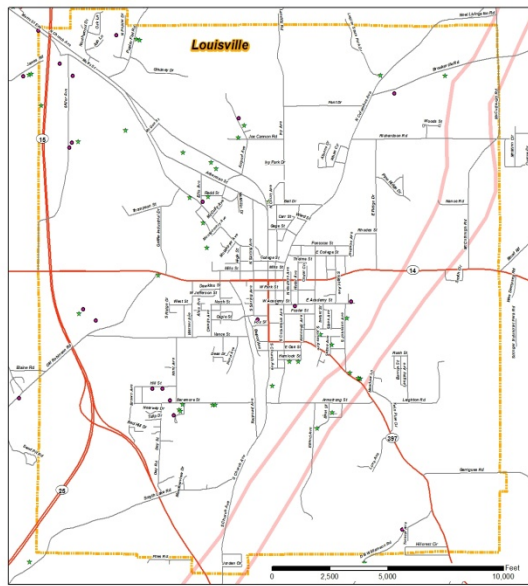
Supervisor Districts



Louisville Tornado Path Winston County

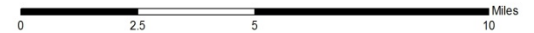


May 10, 2014

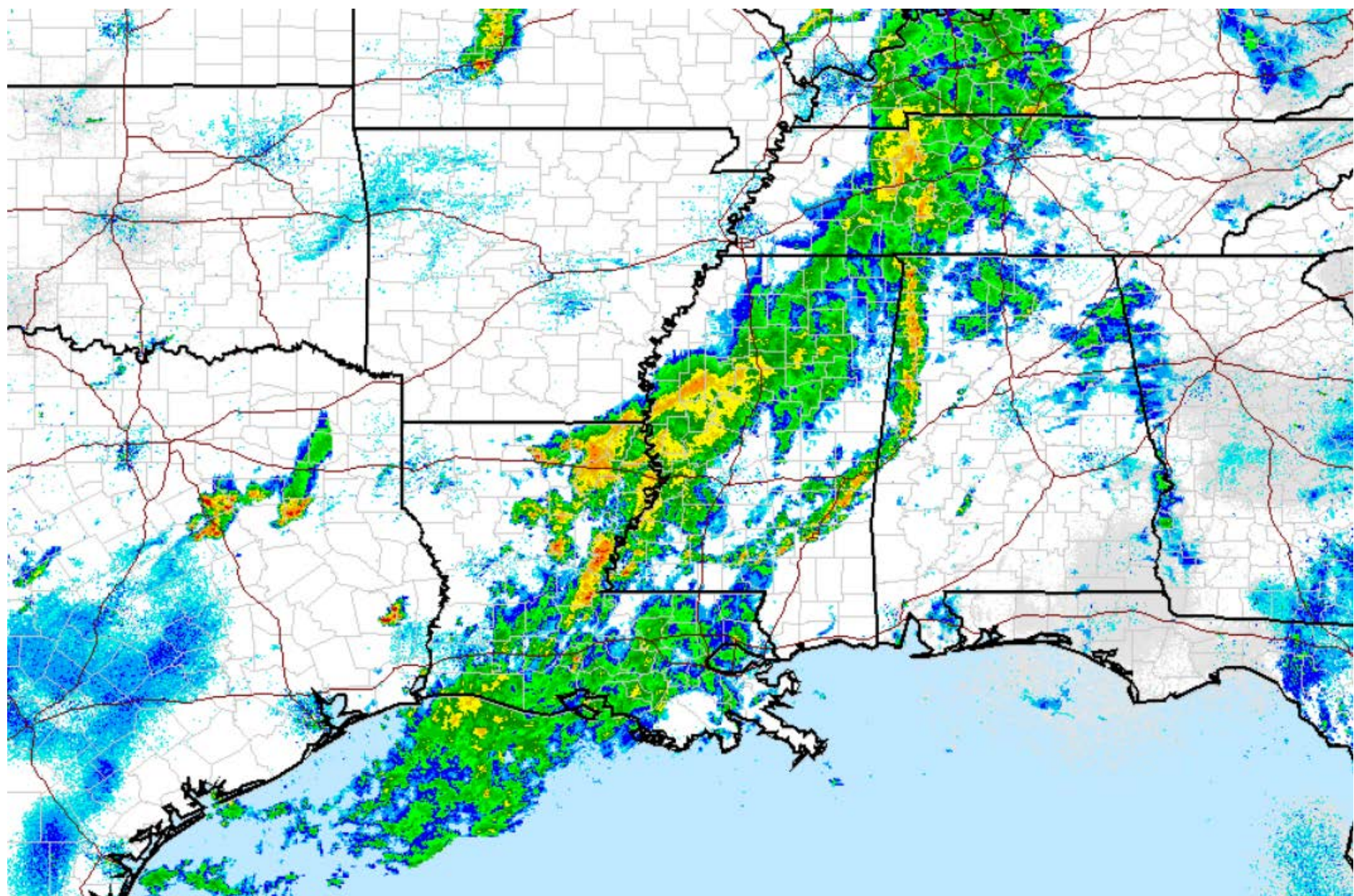


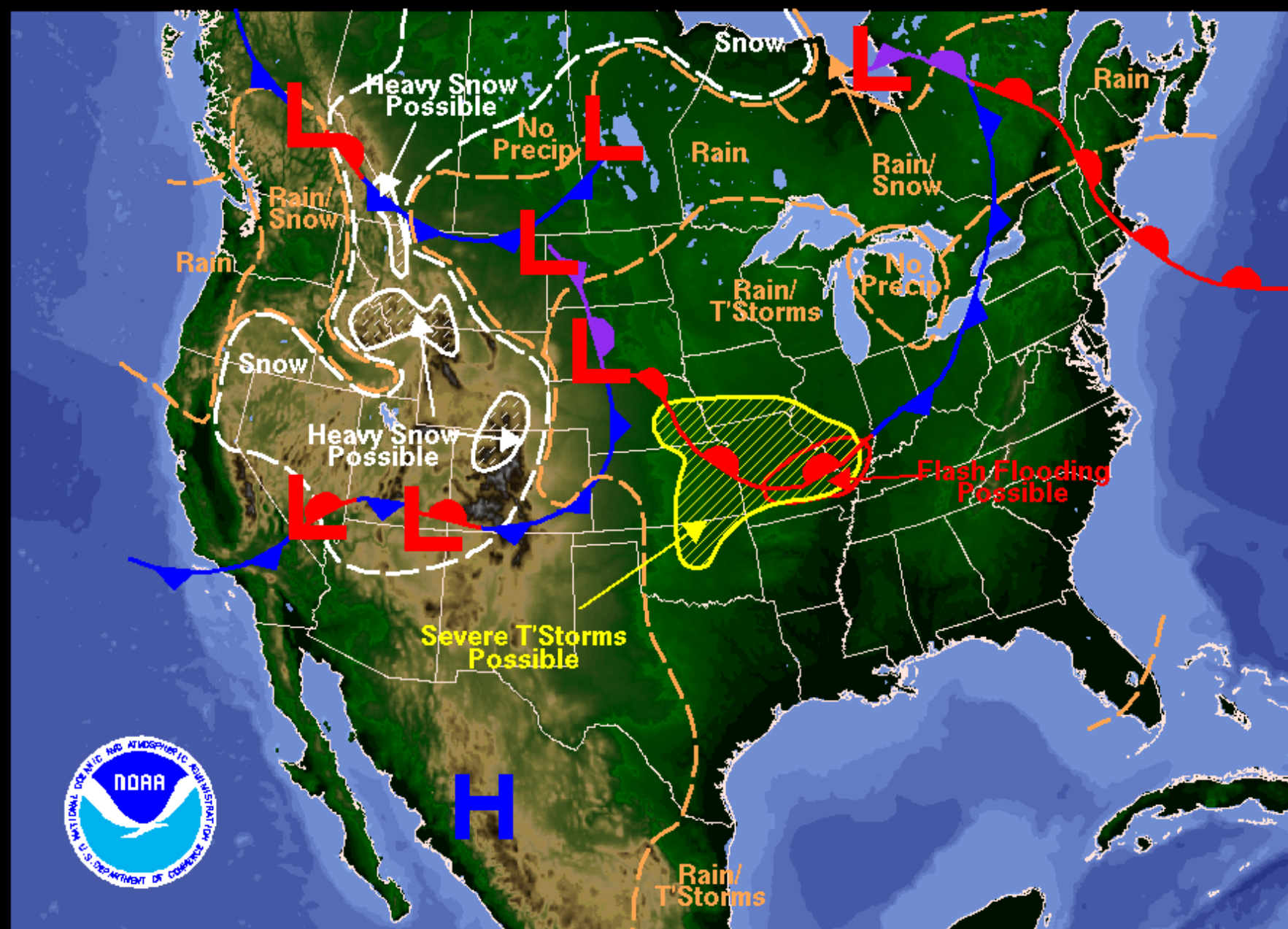
- Doublewide Trailer
- ★ Singlewide Trailer

Louisville Tornado Path Winston County



May 4, 2014

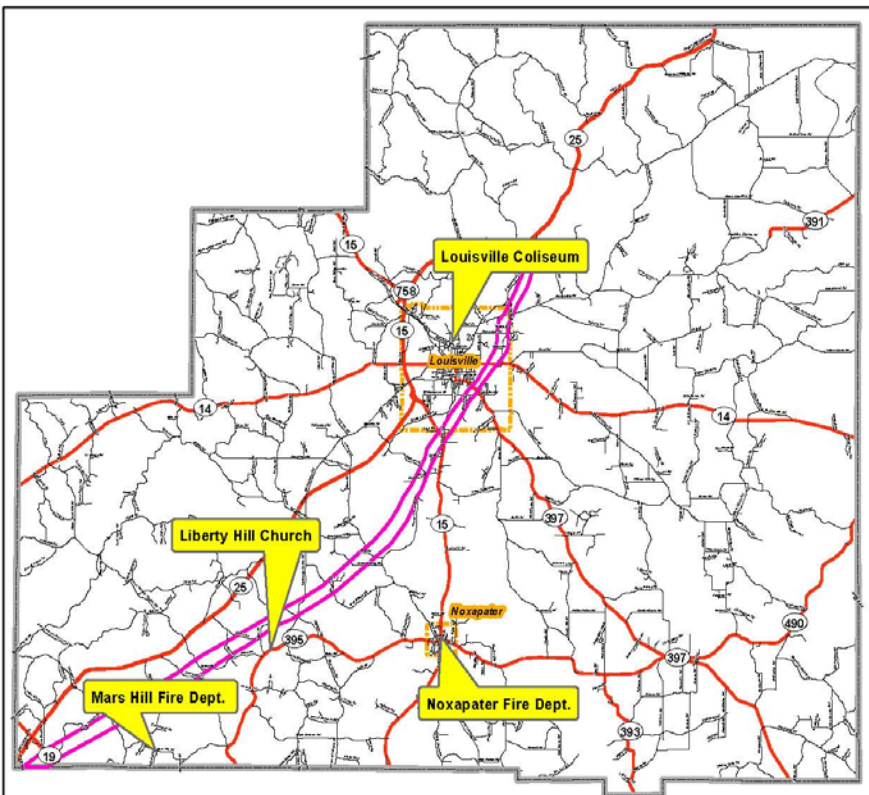




Weather Forecast for Sat, May 10, 2014, issued 10:44 AM EDT
DOC/NOAA/NWS/NCEP/Weather Prediction Center
Prepared by Hurley/Ryan based on WPC, SPC and NHC forecasts

300+ VOLUNTEER GROUPS

AND MORE FEMA KIDS THAN YOU
COULD COUNT.....



Mars Hill (Southern Winston County) Contact: Greg Sisson 662-312-0883

□*Mars Hill Fire Dept. 4416 Mars Hill Road, Philadelphia (will be open)

Noxapater Area - Contact: Steve Jones 662-803-3005

□*Liberty Baptist Church - 6343 Hwy 395, Noxapater, (call contact number first)

□* Noxapater Fire Department - 145 West Main Street, Noxapater

Louisville City -Contact: Randall Livingston 662-803-8393

□*Coliseum - 201 Ivy Avenue, Louisville

May 8, 2014

INCLEMENT WEATHER SHELTERS
WINSTON COUNTY, MS



SCAN CODE TO OBTAIN DIGITAL COPY

0 1 2 4 6 8 10 Miles

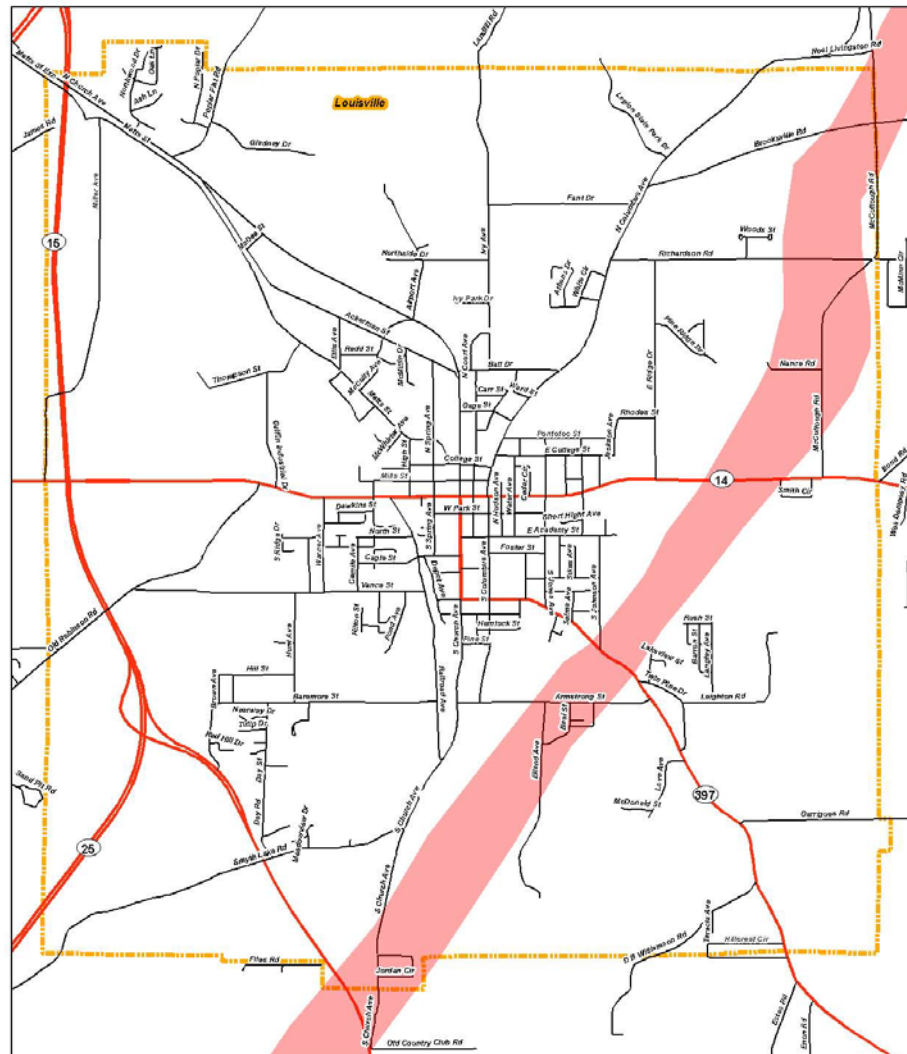


TORNADO PATH
LOUISVILLE, MS

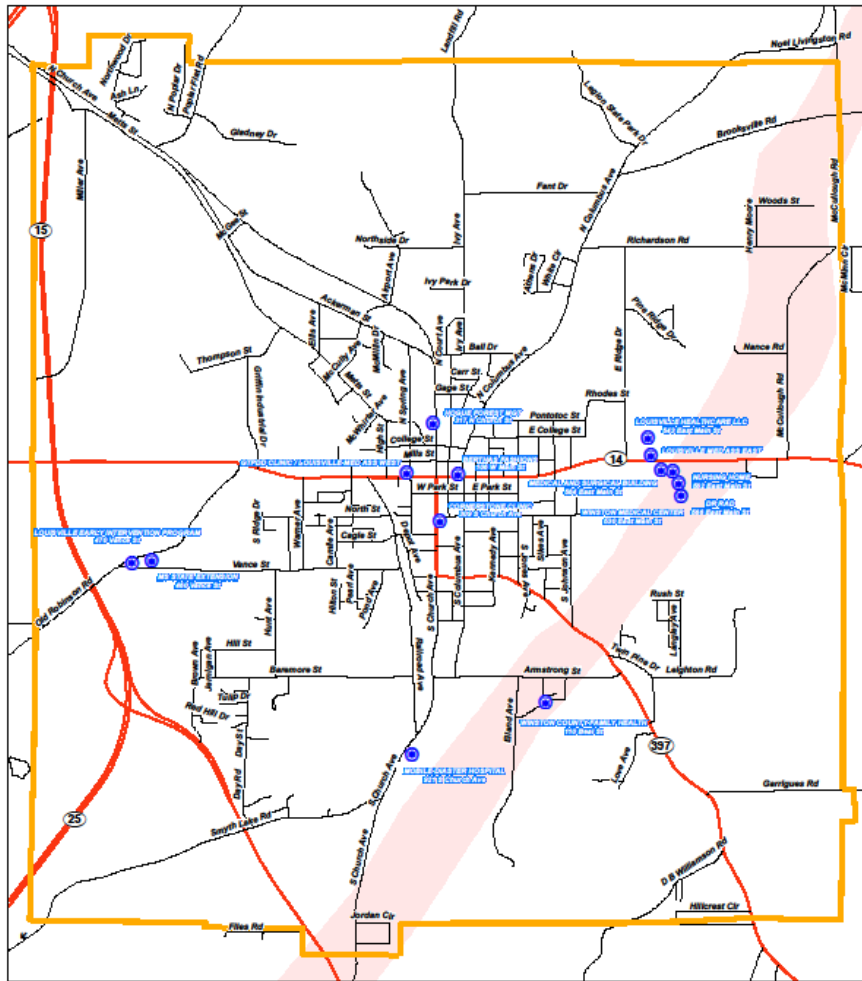


SCAN CODE TO OBTAIN DIGITAL COPY

0 0.25 0.5 1 Miles



May 4, 2014



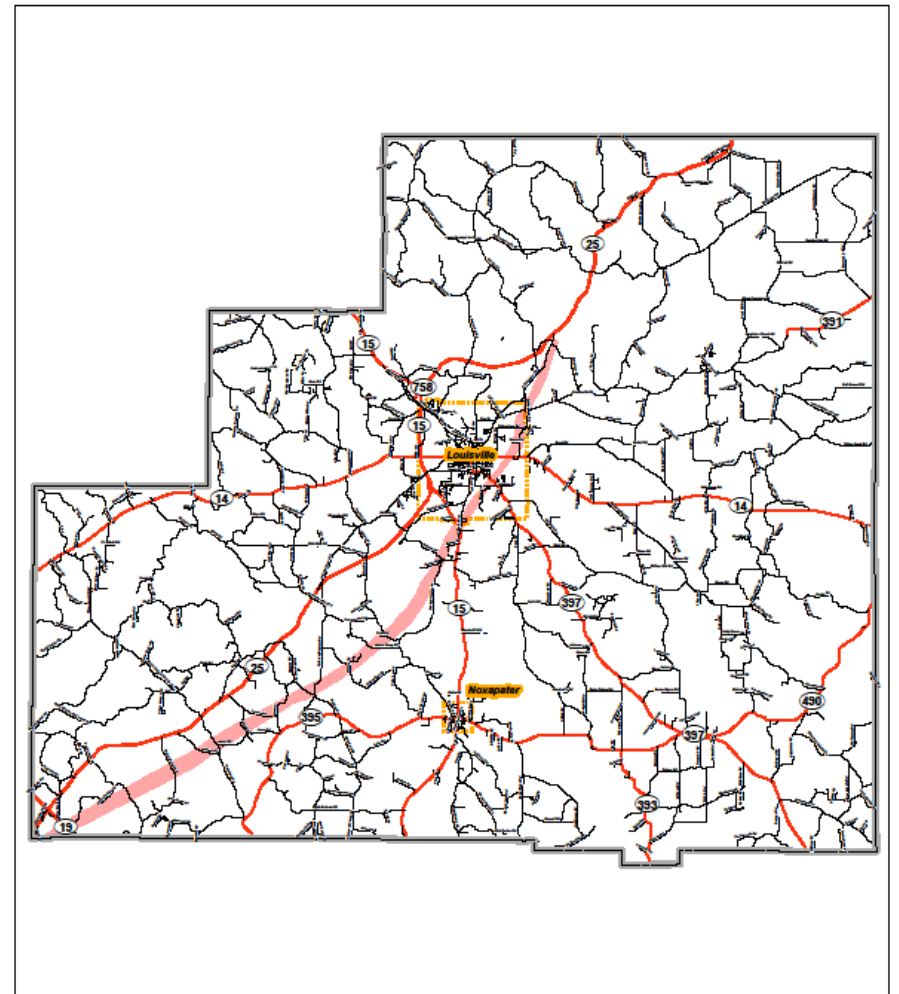
**MEDICAL FACILITIES
LOUISVILLE TORNADO**



TEAM CODE TO OPEN DIGITAL COPY



May 8, 2014



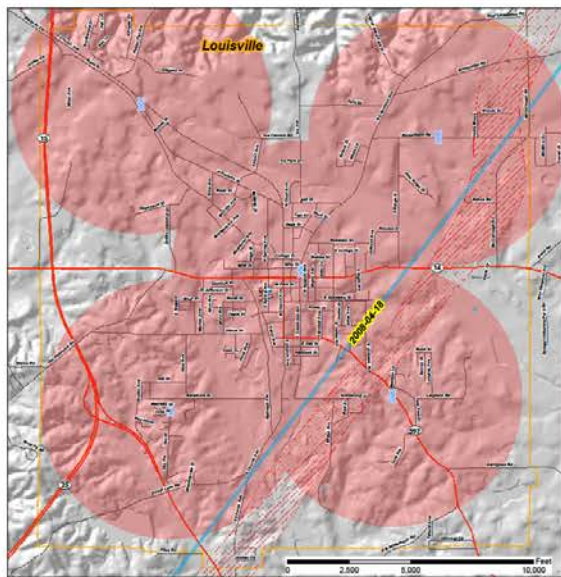
**TORNADO PATH
WINSTON COUNTY, MS**



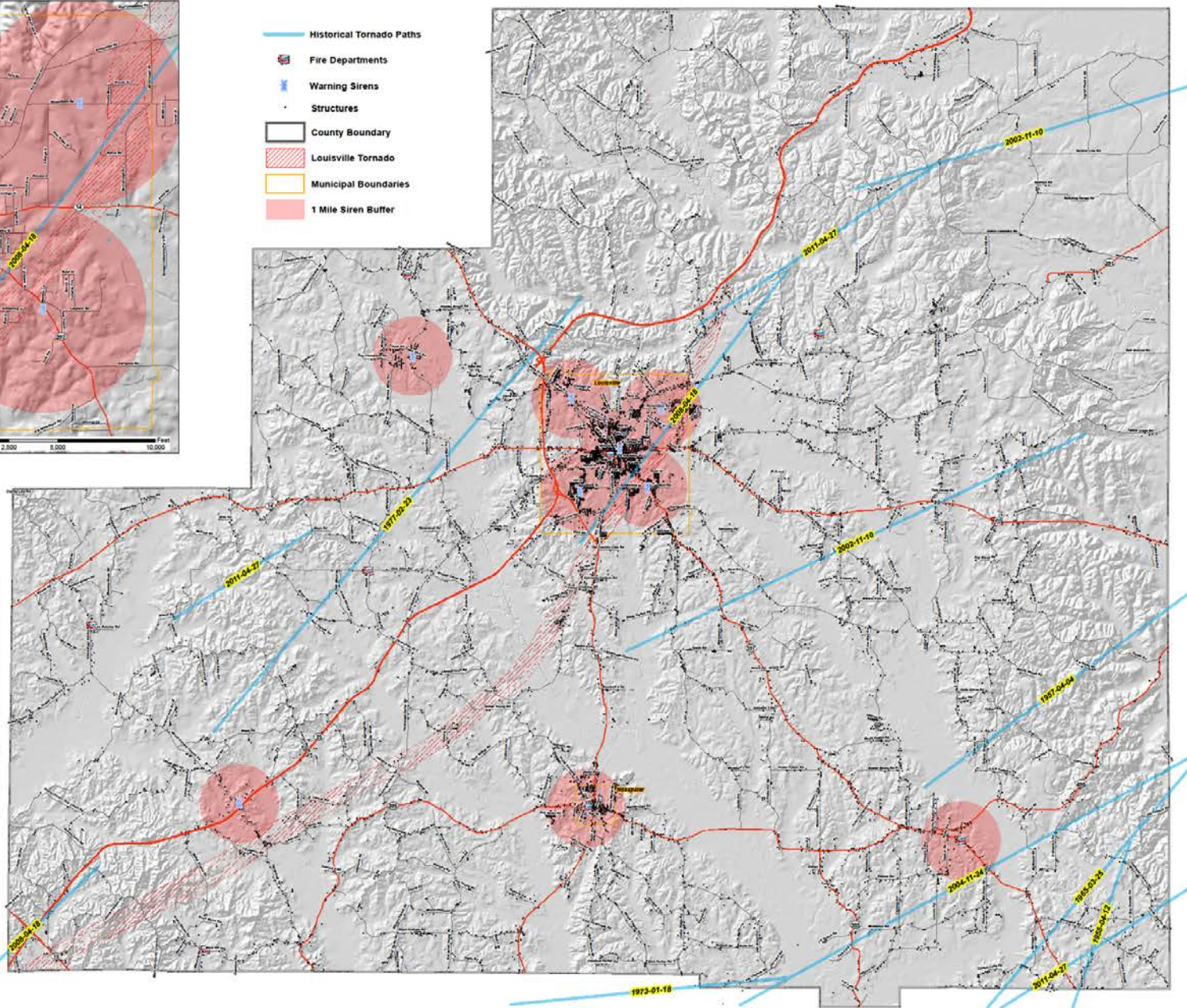
TEAM CODE TO OPEN DIGITAL COPY



May 4, 2014



- Historical Tornado Paths
- Fire Departments
- Warning Sirens
- Structures
- County Boundary
- Louisville Tornado
- Municipal Boundaries
- 1 Mile Siren Buffer



Warning Siren Analysis Winston County

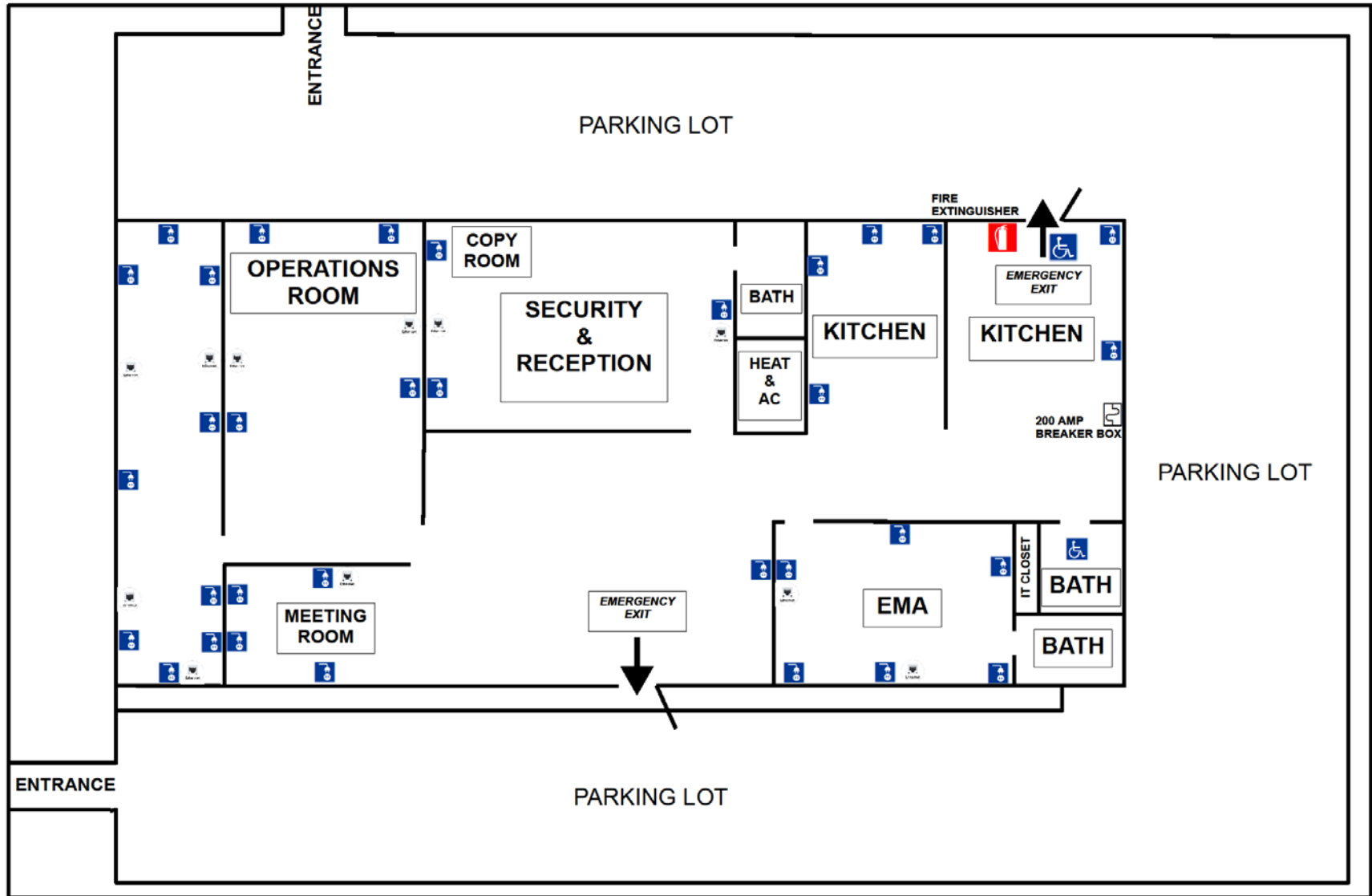
0 2.5 5 10 Miles

May 8, 2014

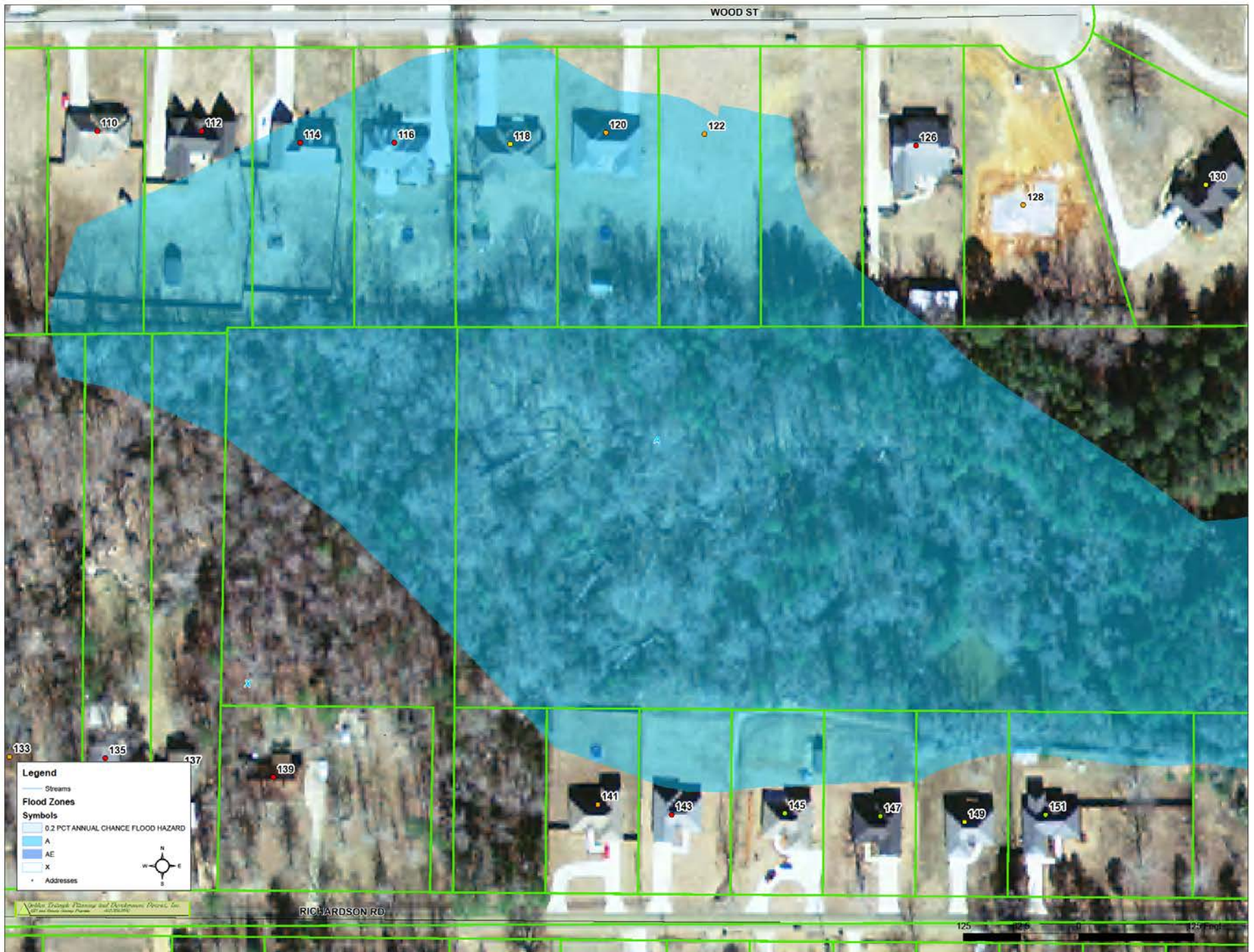
Winston County

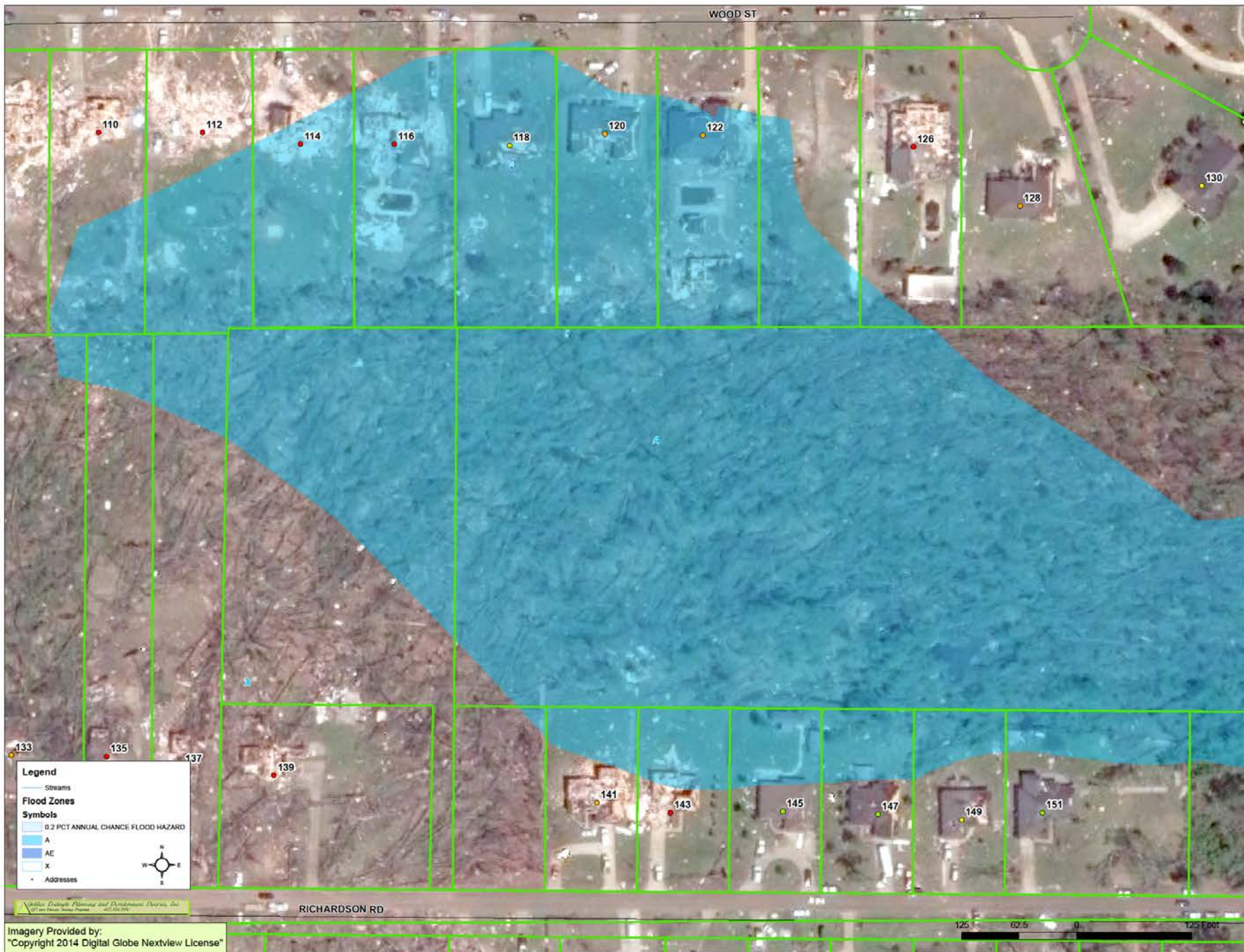
Emergency Operations Center

750 N Church St.



WOOD ST





AFTER ACTION REPORT

Major Strengths

The major strengths identified during this Event are as follows:

- The Ability to Produce Map Products in a Timely Manner
- Understanding GIS Capabilities by IMT Members
- Quality of GIS Data Available for the Event Area.

AFTER ACTION REPORT

Primary Areas for Improvement

Throughout the event, several opportunities for improvement in MEMA's ability to respond to the incident were identified. The primary areas for improvement, including recommendations, are as follows:

- **Additional Personnel: GIS Analyst, GIS Technician, & Coordinator (Ideal Situation)**
- **Educate Emergency Management Personnel on GIS Capabilities (Create and Implement Statewide GIS Outreach Plan)**
- **The need for establishing standardized mapping products and procedures.**
- **Establish a Standard Job Description for GIS Professionals within an IMT, Including a Field Operating Guide.**
- **Define and Establish Key Functions for Situational Events to be added to the Field Operating Guide.**



Unified SAR GIS
Coordination
Mark Sanders (MEMA)
Charlie Welch (MDWFP)
Scott Trapolino (Desoto)



SAR GIS Coordinator
Region 1 Scott Trapolino
Desoto County
Chris Downs Panola Co.



SAR GIS Coordinator
Region 2 Lance Cooper
Rankin County
Kay Little Madison Co.



SAR GIS Coordinator
Region 3 Paul Barnes
Harrison County
Dusty Reed Harrison Co.

ANY QUESTIONS?

Scott L. Trapolino

DeSoto County, Mississippi

strapolino@desotocountyms.gov

901-371-1113