



# Emergency Management and Communication

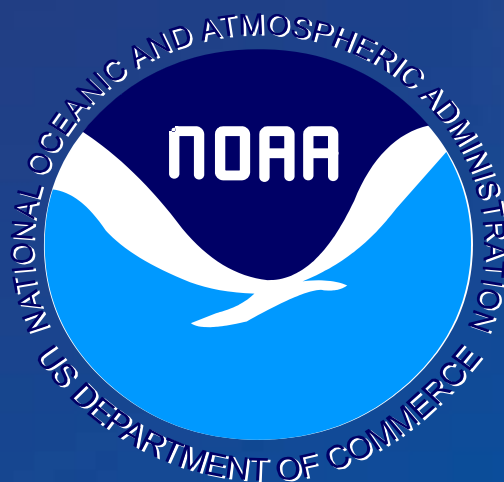
**Presented by:**

**Steve Drillette, Meteorologist-in-Charge  
National Weather Service, Little Rock, AR**



# National Weather Service

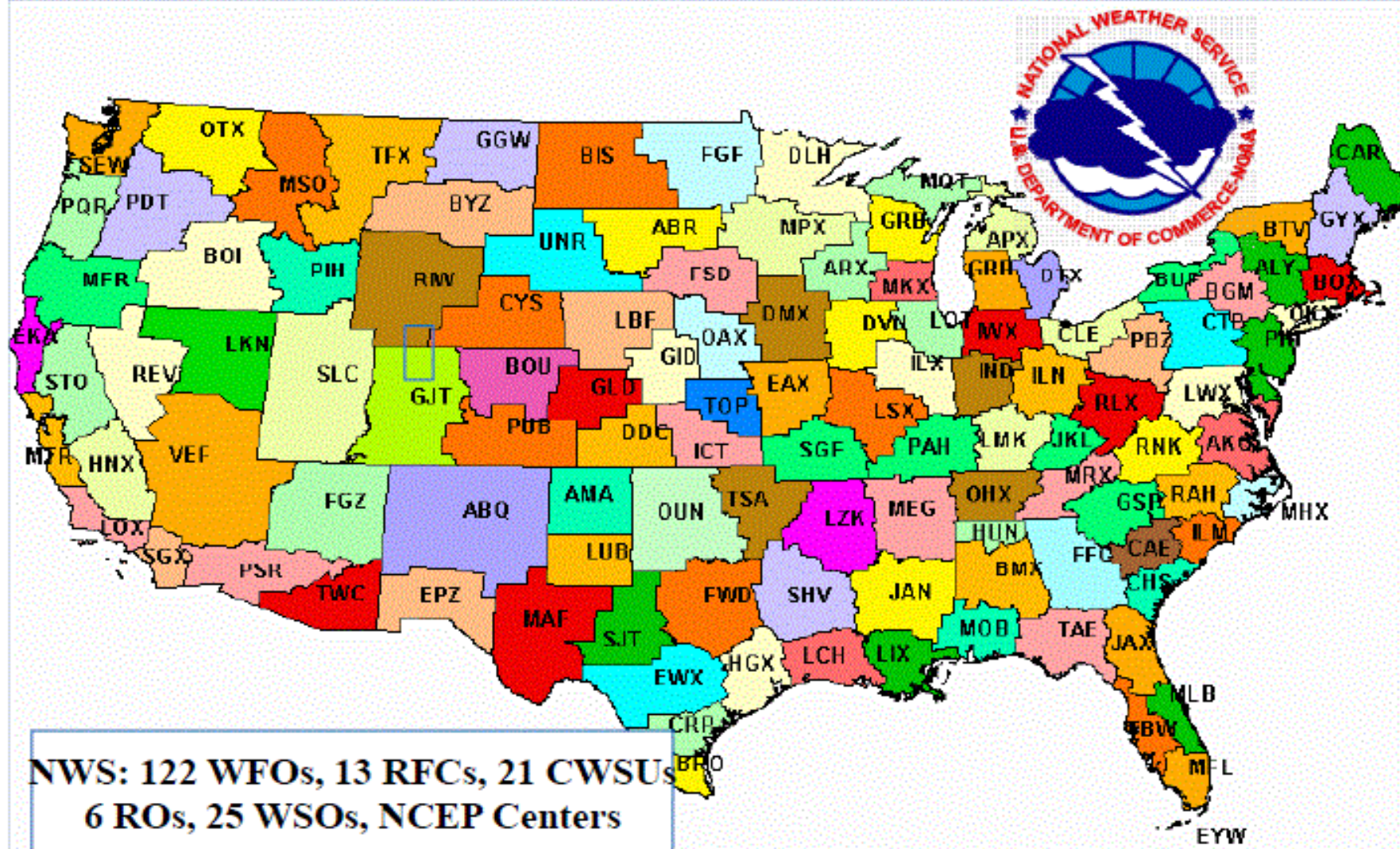
## Who are we??



Since 1870



# Government Closest to the People, *Serves Best!*



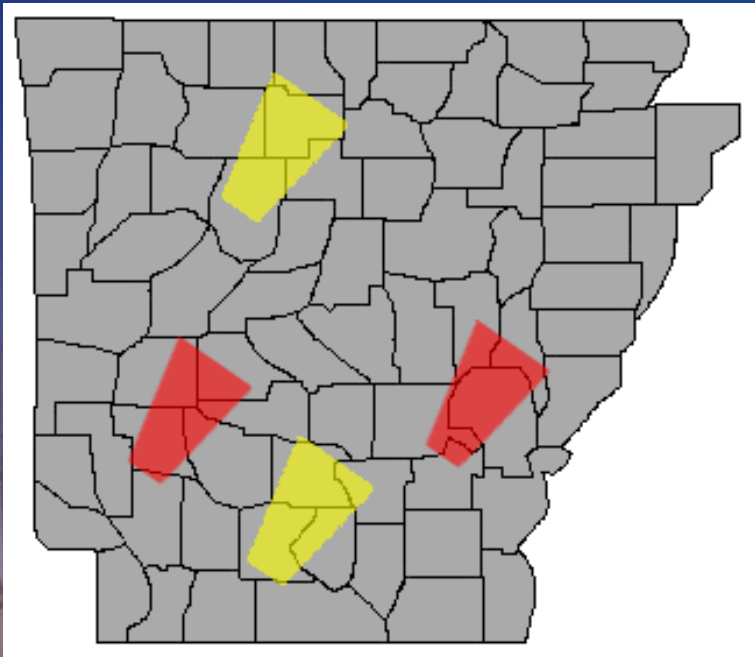




# Our Mission



**To protect life and property by issuing timely warnings (i.e. for tornadoes, severe thunderstorms, flash flooding, etc).**



**Tornado Warning**  
**Severe Thunderstorm Warning**



# When We Are Open

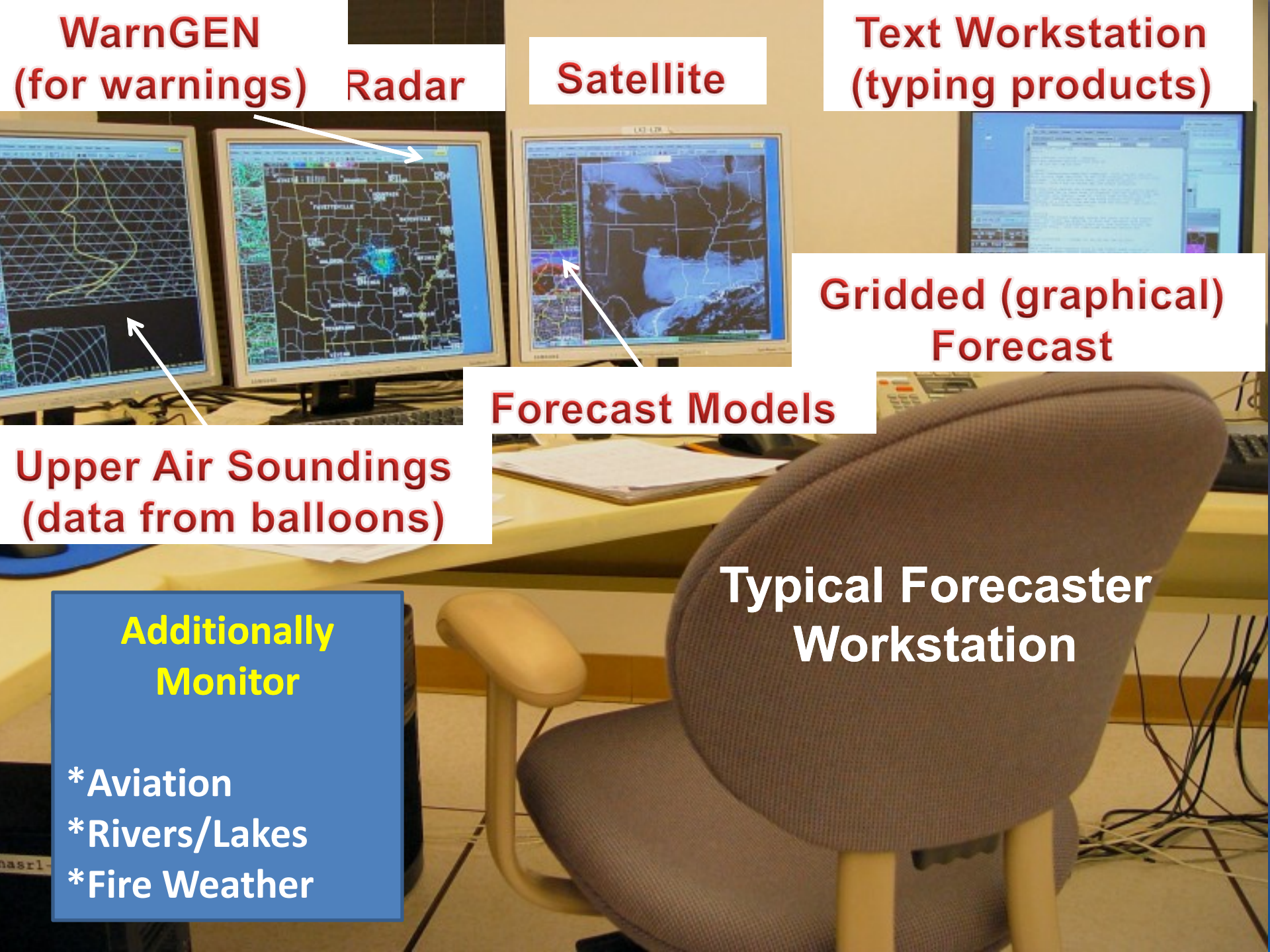


**Weather never stops, so we are open 24 hours a day/7 days a week (even on Christmas, Thanksgiving, etc).**

## Our Team



- 10 Forecasters (2 per shift)
- 2 Meteorologist Interns
- 1 Hydrologist
- 3 Electronic Technicians
- 1 Electronic Systems Administrator
- 1 Information Technology Officer
- 1 Observation Program Leader
- 1 Warning Coordination Meteorologist
- 1 Science and Operations Officer
- 1 Meteorologist-in-Charge
- 1 Administrative Assistant



**WarnGEN  
(for warnings) Radar**

**Satellite**

**Text Workstation  
(typing products)**

**Gridded (graphical)  
Forecast**

**Forecast Models**

**Upper Air Soundings  
(data from balloons)**

**Additionally  
Monitor**

- \*Aviation
- \*Rivers/Lakes
- \*Fire Weather

**Typical Forecaster  
Workstation**





# Weather Impacts on Society



## BILLION DOLLAR CLIMATE and WEATHER DISASTERS 1980 - 2010\*



NUMBER OF EVENTS



NOAA's NATIONAL CLIMATIC DATA CENTER ■ ASHEVILLE, N.C.

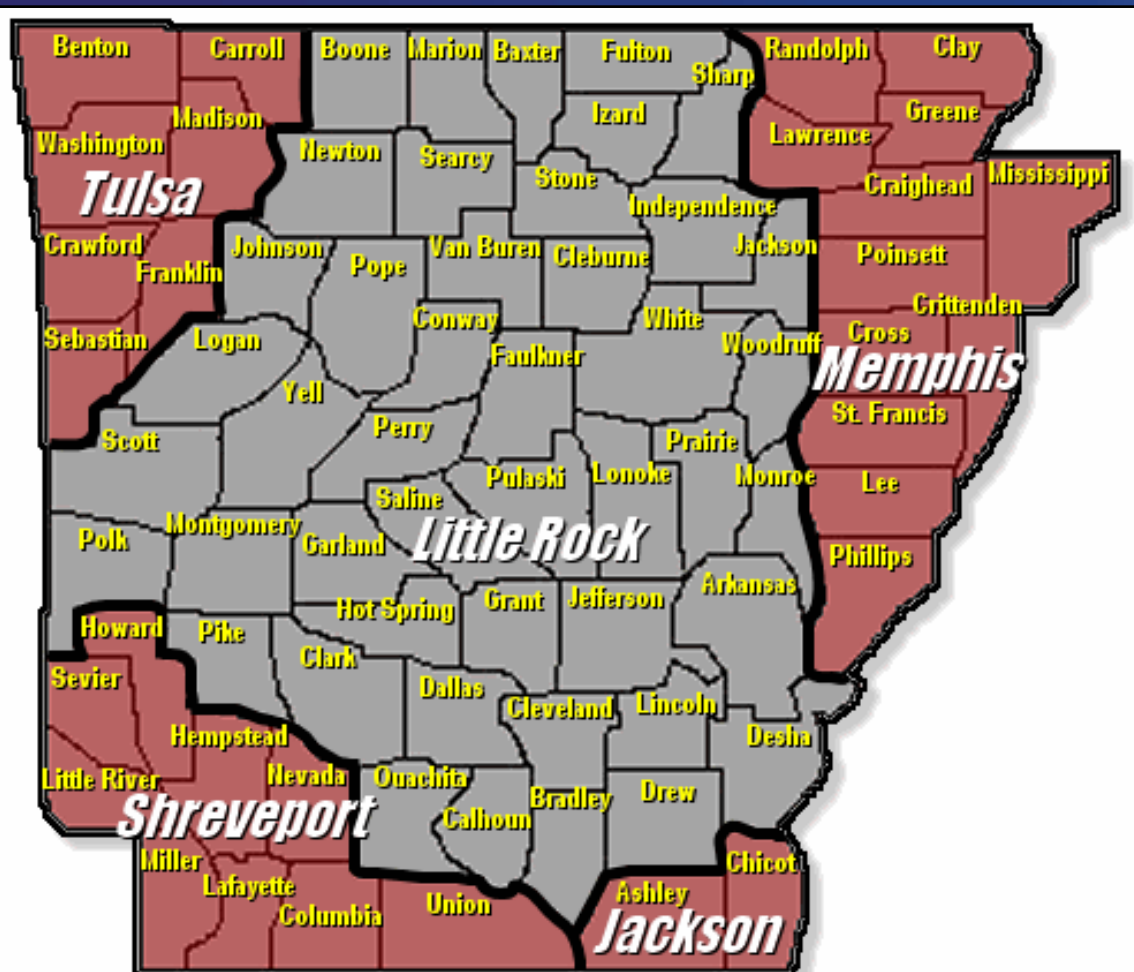
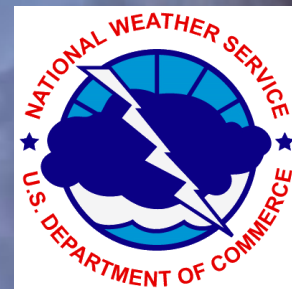


[www.ncdc.noaa.gov/oa/reports/billions.html](http://www.ncdc.noaa.gov/oa/reports/billions.html)

*Protecting the past... Revealing the future*



# Offices Serving Arkansas



Five National Weather Service Forecast Offices serve the state of Arkansas.

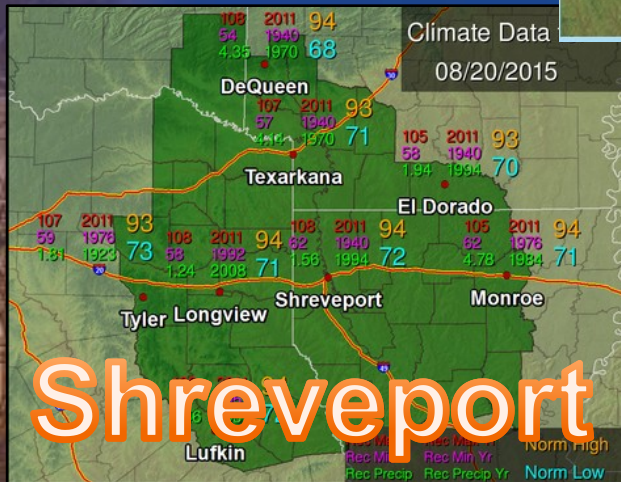
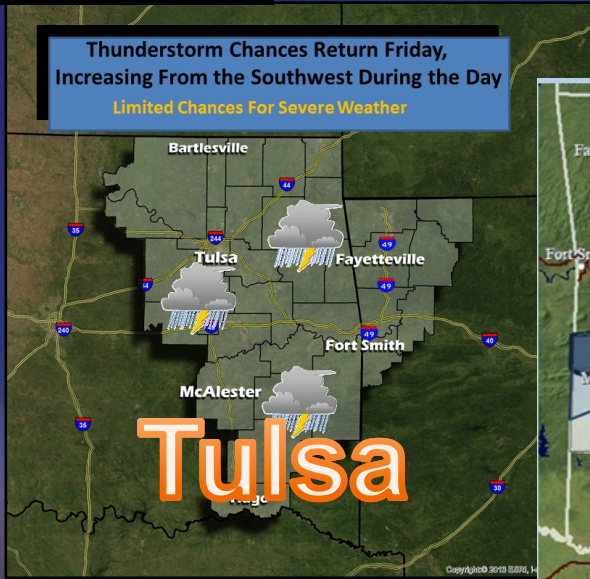




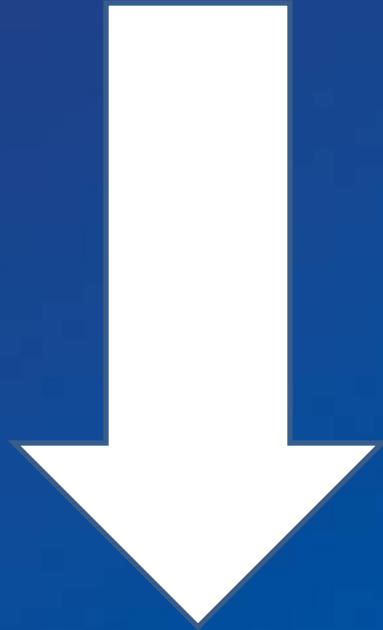
# 5 Offices → 5 Briefings



Thunderstorm Chances Return Friday,  
Increasing From the Southwest During the Day  
Limited Chances For Severe Weather



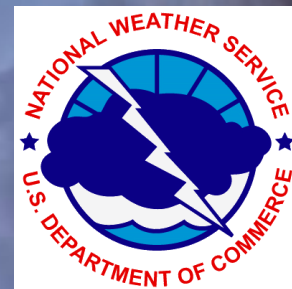
# One Briefing for the State of Arkansas





# Severe Briefing Example

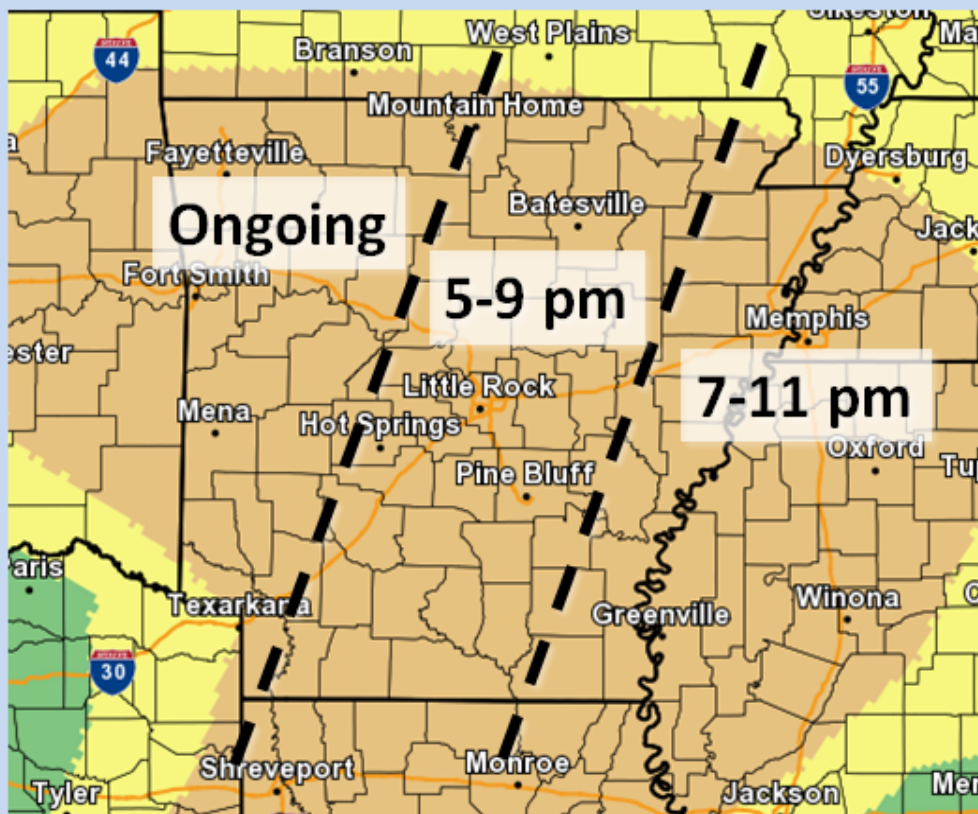
## Risk Region of Severe Storms



NATIONAL WEATHER SERVICE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION



## Severe Weather Timing Sunday Afternoon/Evening



### Main Threats:

- Large damaging Hail
- 60+ mph Winds
- Isolated Tornado

### Day One Severe Weather Outlook

- General Thunderstorms
- Marginal
- Slight Risk
- Enhanced
- Moderate Risk
- High Risk








# DSS Webpage




<http://www.srh.noaa.gov/lzk/?n=dssarkansas.htm>



National Weather Service Weather Forecast Office

Little Rock, AR

weather.gov



[Home](#) [Site Map](#) [News](#) [Organization](#) Search for:  [NWS](#) [All NOAA](#) [Go](#)

Local forecast by  
"City, St" or Zip Code

[Go](#)

**XML** RSS Feeds

**Current Hazards**

- Local
- Nationwide
- Outlooks
- Submit Report
- Recent Events
- GIS Data

**Forecasts**


- Local
- Forecast Discussion
- Activity Planner
- Graphical
- Tropical Weather
- Fire Weather
- Aviation Weather

**Current Weather**

- Observations
- Satellite Images
- Rivers/Lakes
- Local Hydrology
- AHPS Precip
- AR Precip Plot
- Monitor Drought

**Radar Imagery**

- Nationwide
- Local



**Decision Support**

This page is designed for the Arkansas Emergency Management community as a one stop shop for pertinent weather information.

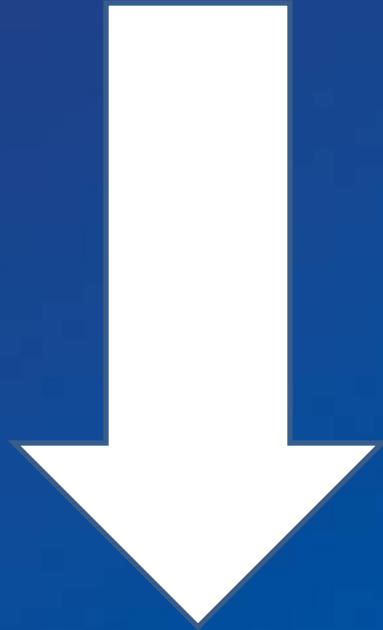
**Hazardous Weather Today**

**Please Note:** This is just a sample of how the "Hazardous Weather Today" section might function in the future. For now, this section is experimental and will not update on a daily basis. When this section is finalized, it will update as necessary and this message will be removed.

**No Hazards**

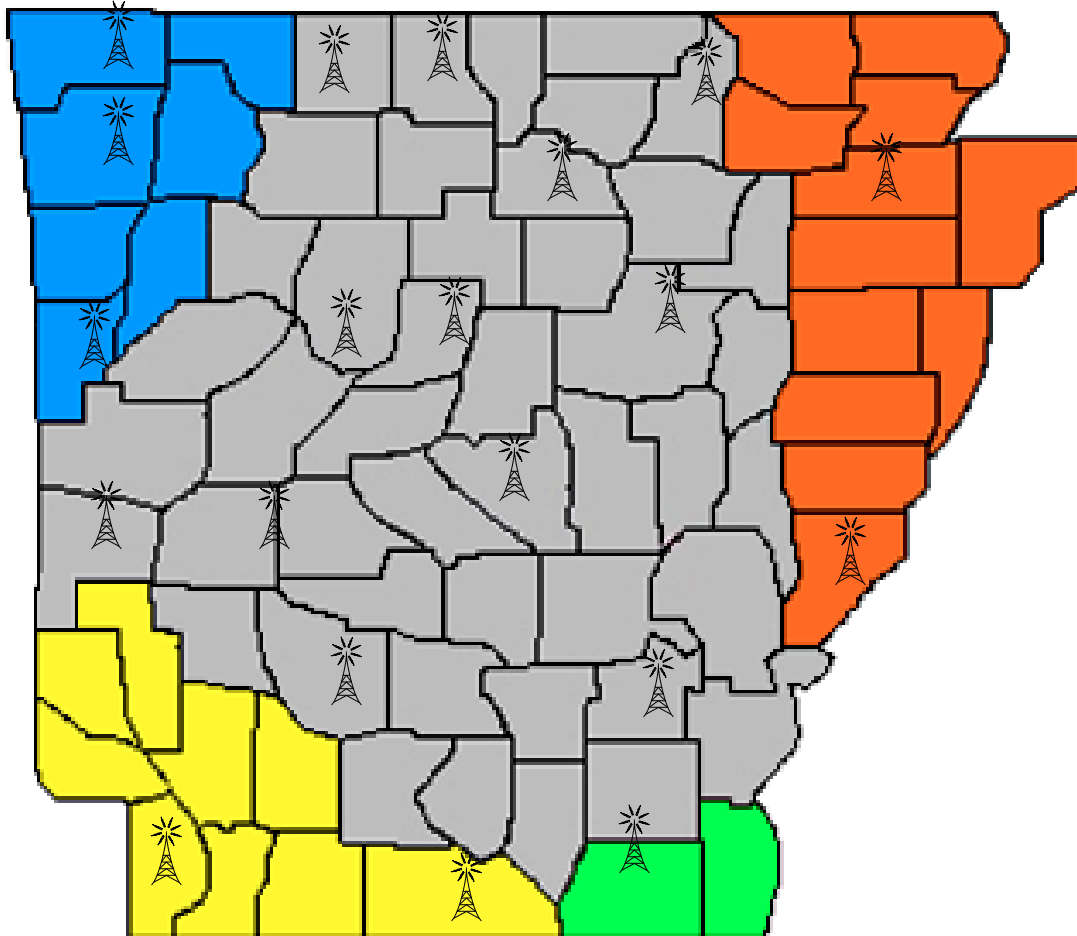
Weather Hazards in Arkansas: No hazardous weather is expected at this time.

# When Watches/Warnings are Issued





# NOAA Weather Radio



## Transmitter

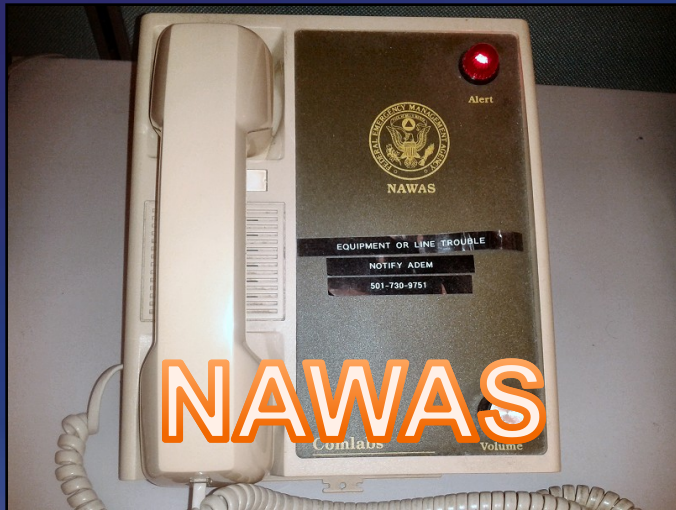
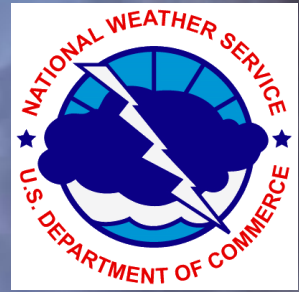
## Frequency

Cherokee Village	162.475
El Dorado	162.525
Fayetteville	162.475
Fort Smith	162.550
Fountain Hill	162.475
Gurdon	162.475
Harrison	162.525
High Peak	162.425
Jonesboro	162.550
Little Rock	162.550
Marvell	162.525
Mena	162.400
Morrilton	162.475
Mountain View	162.450
Russell	162.400
Russellville	162.525
Springdale	162.400
Star City	162.400
Texarkana	162.550
Yellville	162.500





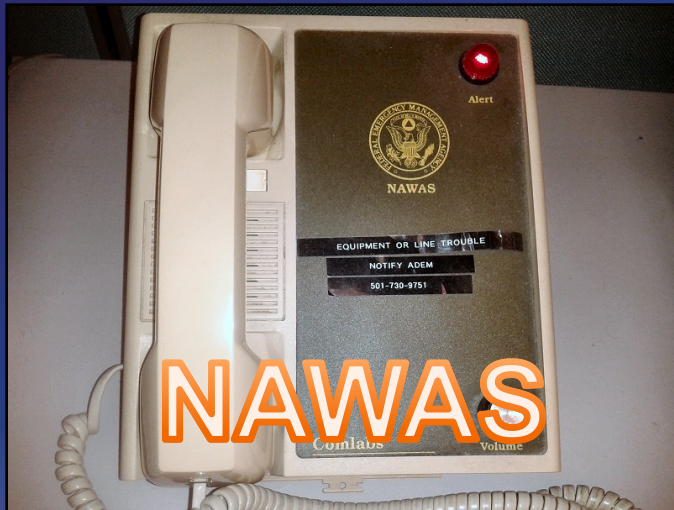
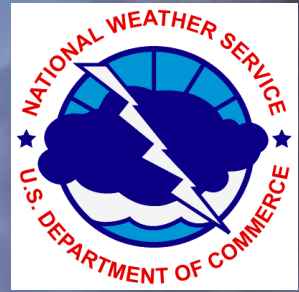
# Relay Watch/Warning



**The National Warning System (NAWAS) and AWIN (Arkansas Wireless Information Network) Mutual Aid Channel Pool (MAC) phones are used to convey watches/warnings to Federal, State and local governments, as well as law enforcement.**



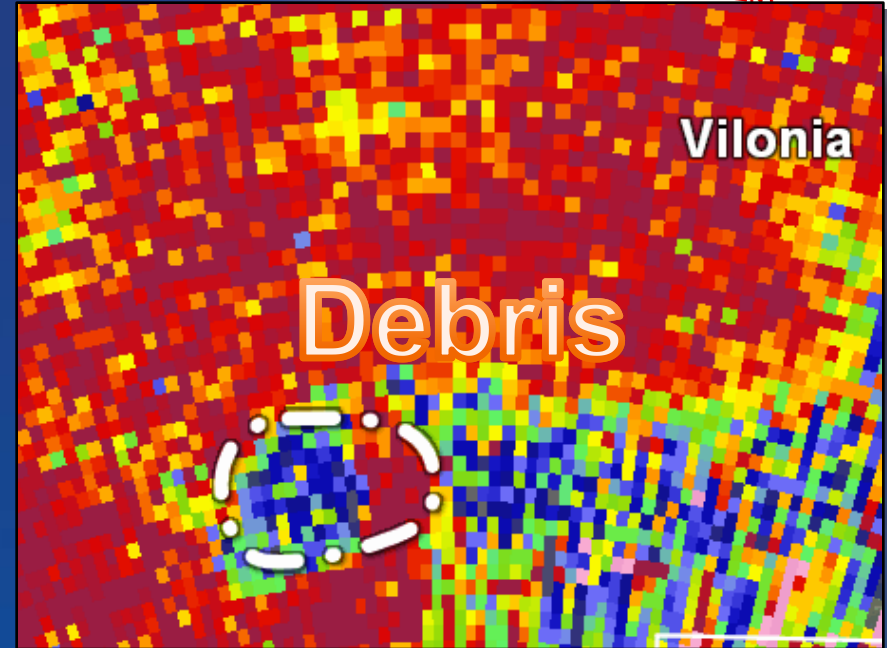
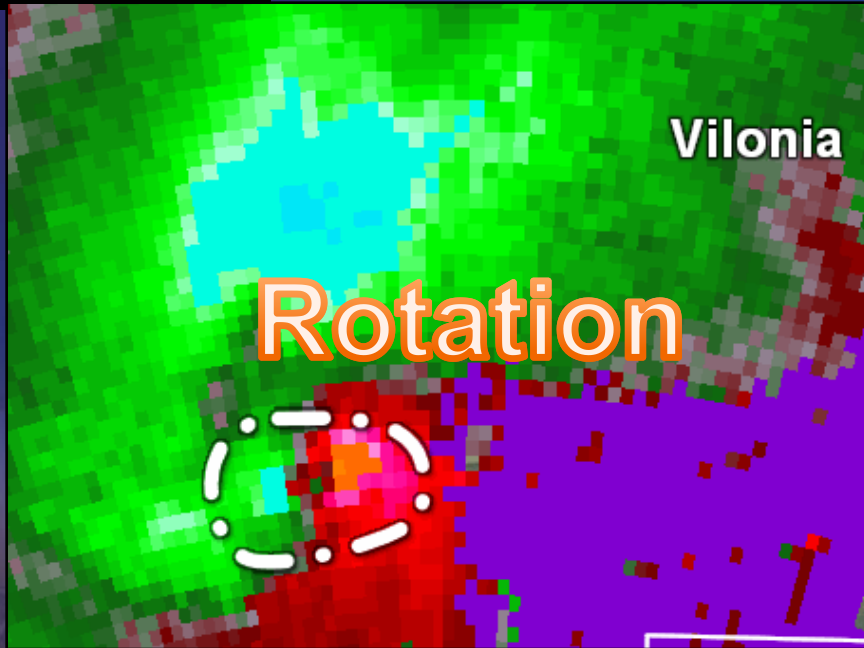
# Relay Watch/Warning



**During significant events (such as when Tornado Warnings are issued), phone calls are often made to affected counties. That was the case on April 27, 2014 (the Mayflower/Vilonia Tornado), when the Faulkner County Sheriff was contacted.**



**On April 27, 2014**



**At 743 pm CDT, the WSR-88D (Doppler Weather Radar) showed strong rotation to the southwest Of Vilonia (Faulkner County). A Dual-Pol Correlation Coefficient (CC) image indicated a Tornado Debris Signature (TDS).**





# Tornado Emergency



...TORNADO EMERGENCY FOR MAYFLOWER AND VILONIA...

THE NATIONAL WEATHER SERVICE IN LITTLE ROCK HAS ISSUED A

\* TORNADO WARNING FOR...

SOUTHWESTERN WHITE COUNTY IN CENTRAL ARKANSAS...

NORTH CENTRAL PULASKI COUNTY IN CENTRAL ARKANSAS...

EXTREME NORTHWESTERN LONOKE COUNTY IN CENTRAL ARKANSAS...

SOUTHERN FAULKNER COUNTY IN CENTRAL ARKANSAS...

\* UNTIL 800 PM CDT

\* AT 724 PM CDT...STORM SPOTTERS AND NATIONAL WEATHER SERVICE DOPPLER RADAR WERE TRACKING A LARGE AND EXTREMELY DANGEROUS TORNADO. THIS TORNADO WAS LOCATED 2 MILES EAST OF ROLAND...OR 5 MILES NORTHWEST OF MAUMELLE. DOPPLER RADAR SHOWED THIS SEVERE STORM MOVING NORTHEAST AT 50 MPH.

**Given information from the radar, and also from trained storm spotters, a rare “Tornado Emergency” was declared.**



# Social Media



**Storm reports rolled in from social media outlets such as Twitter and Facebook.**



# HAM Radio

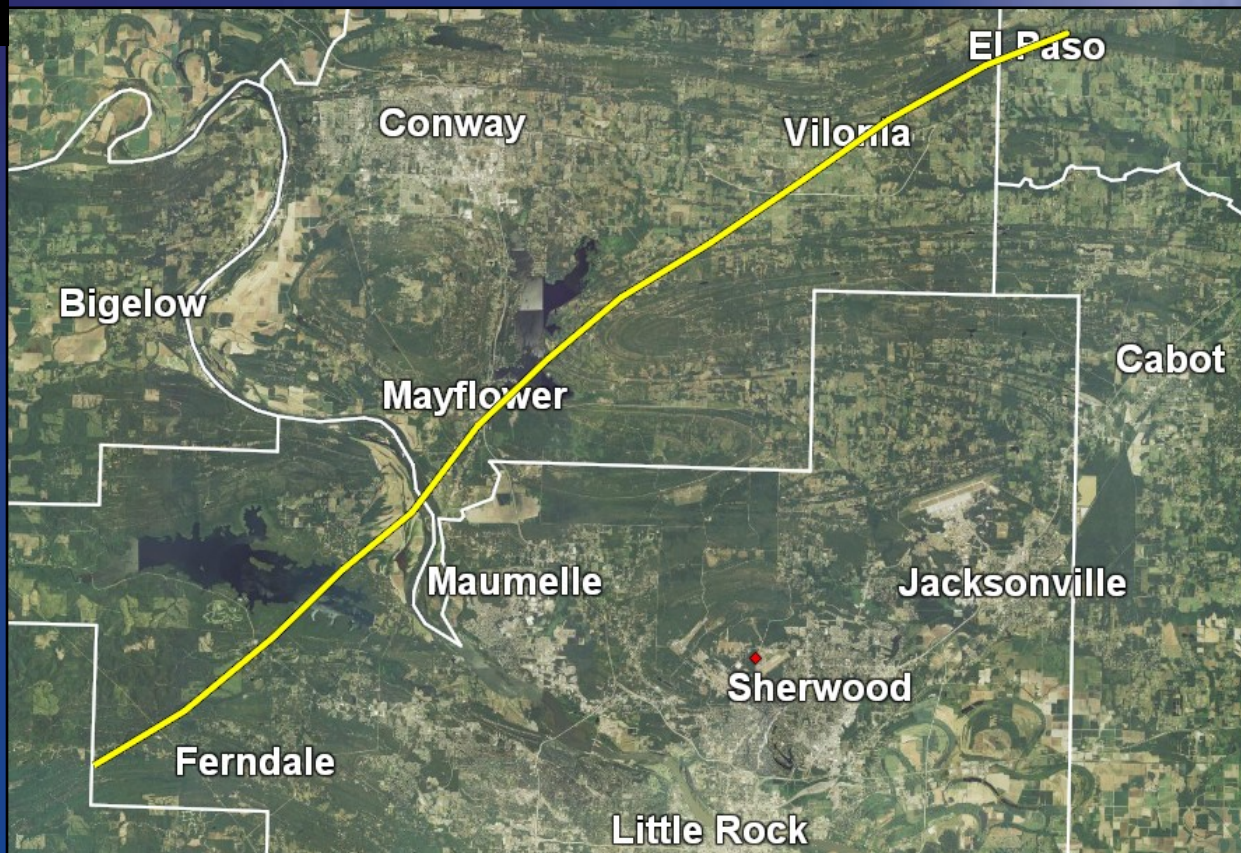
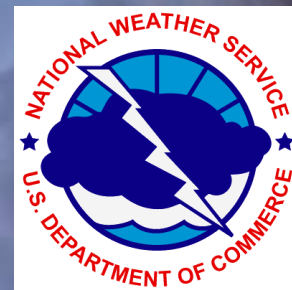


**Amateur radio operators were asked to come to the office during this event to collect valuable information from the public.**





# Preliminary Track



**To help in the search and recovery process, preliminary tornado track information was made available.**





# Flying the Track



**To get a better (more clear) understanding of what happened, forecasters flew over the damage with the Civil Air Patrol.**



# On the Web



<http://www.srh.noaa.gov/lzk/?n=svr0414cyr.htm>

National Weather Service Weather Forecast Office

Little Rock, AR

Home Site Map News Organization Search for:  NWS All NOAA Go

Local forecast by "City, St" or Zip Code

City, St Go

XML RSS Feeds

Current Hazards

- Local
- Nationwide
- Outlooks
- Submit Report
- Recent Events
- GIS Data

Forecasts

- Local
- Forecast Discussion
- Activity Planner
- Graphical
- Tropical Weather
- Fire Weather
- Aviation Weather

**Climate Data**

**Yearly Reports**

Interested in what kind of weather occurred in a recent year? Check out the most memorable events below.

**Tornadoes/Flooding on April 27-28, 2014**

**One to Remember**

2014 was considered slow for severe weather. There were only 20 tornadoes in Arkansas (33 is normal), and a miniscule 7 tornadoes in the spring (March, April and May). One of these was a monster that claimed more lives than any other tornado nationwide during the year. This horror show lasted 56 minutes (706 pm to 802 pm CST) and wiped away years of memories. It is something that will never be forgotten.

**An extensive report was posted to the office website.**





# **The End**



## **Thanks for coming!**

## **Any questions?**