

National Weather Service Kansas City, Missouri

Severe Weather Awareness Week
March 4-10, 2018

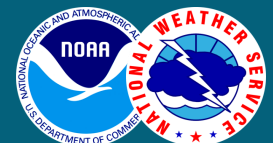


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National Weather Service 2018 Tornado Drill

Tuesday March 6, 2018

10:00 am CST

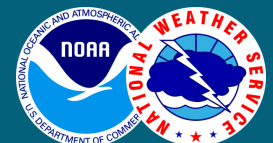
Backup Date: Thursday March 8, 2018

10:00 am CST

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NOAA Weather-Ready Nation™ Ambassadors

Weather-Ready Nation is a movement to unify our communities in preparation for the nation's increasing vulnerability to severe weather.

Your organization can help make our country safer and more resilient to weather-related disasters by becoming a Weather-Ready Nation Ambassador.

This requires the participation and commitment of a vast nationwide network of partners. That's why the NWS is looking for WRN Ambassadors.

Why Become an Ambassador?

WRN Ambassadors serve a pivotal role in affecting societal change — helping to build a nation that is ready, responsive, and resilient to the impacts of extreme weather. You can help drive these changes by:

- Promoting safety & preparedness
- Having a Continuity of Operations Plan
- Collaborating with other Ambassadors
- Sharing your success stories
- Serving as an example to other businesses

Be Weather-Ready Together

Building a Weather-Ready Nation requires more than government alone. We must involve everyone in an effort to move people — and society — toward heeding warnings, taking action, and influencing their circles of family, friends, and social network to act appropriately.

As a Weather-Ready Nation Ambassador, you will join the NWS in Kansas City, along with other federal, state, and local government agencies; city planners; researchers; the media; the insurance agency; the private sector; and many others to achieve the goal of saving lives and minimizing the impact of extreme weather on daily life.

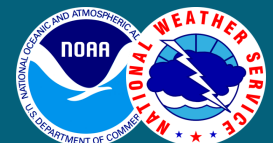
Join In—Team Up With Us!

To learn more about the Weather-Ready Nation initiative and apply to be an Ambassador online, visit the WRN web site at www.noaa.gov/wrn



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2017 Severe Weather Statistics

2017 Severe Weather Season

Seasonal Average (since 2013)

NWS Kansas City Warnings:	300	NWS Kansas City Warnings:	300
Tornado Warnings:	40	Tornado Warnings:	26
Severe T-Storm Warnings:	220	Severe T-Storm Warnings:	227
Flash Flood Warnings:	40	Flash Flood Warnings:	47

Highest EF-Rating

EF-3 Oak Grove, MO

March 6, 2017

Largest Hail Size

4.25" (Bates Co. MO)

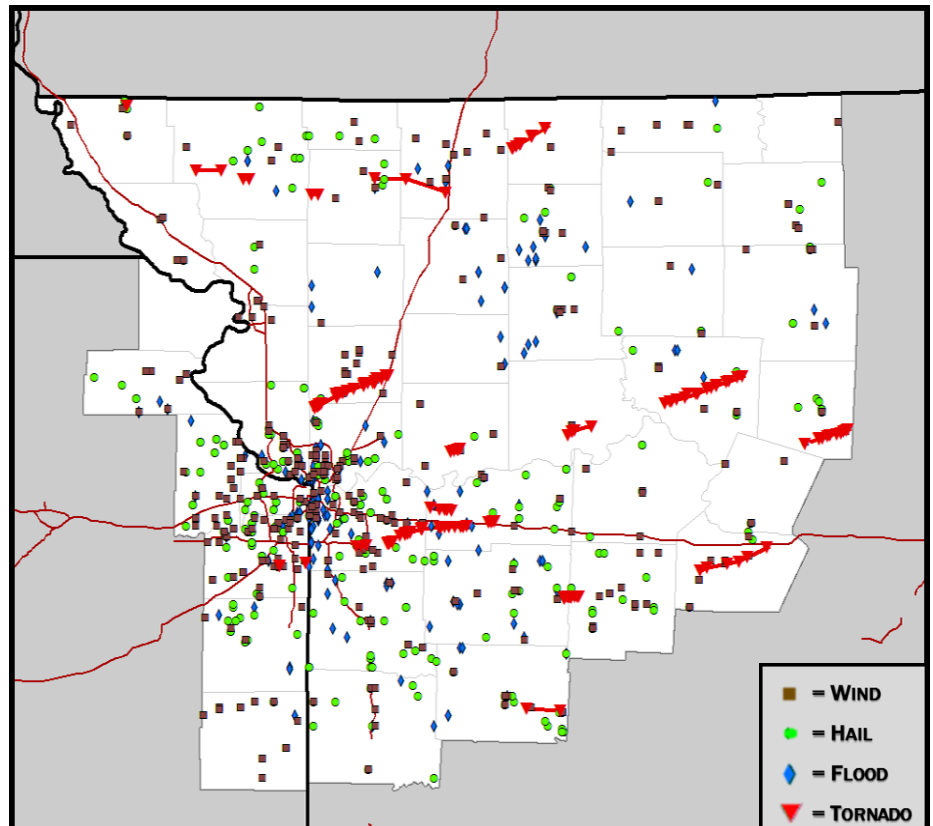
March 27, 2017

Strongest Non-Tor Wind

89 mph (Westboro, MO)

June 16, 2017

Utility Company Measured

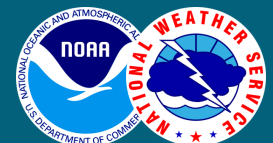


2017 Severe Weather Reports

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2017 Tornado Statistics

NWS Kansas City Warning Area

Number of Tornadoes

18*

Missouri: 17

Kansas: 1

*4 tornadoes cross county lines, leading to different number than tornadoes by county

Highest EF-Rating

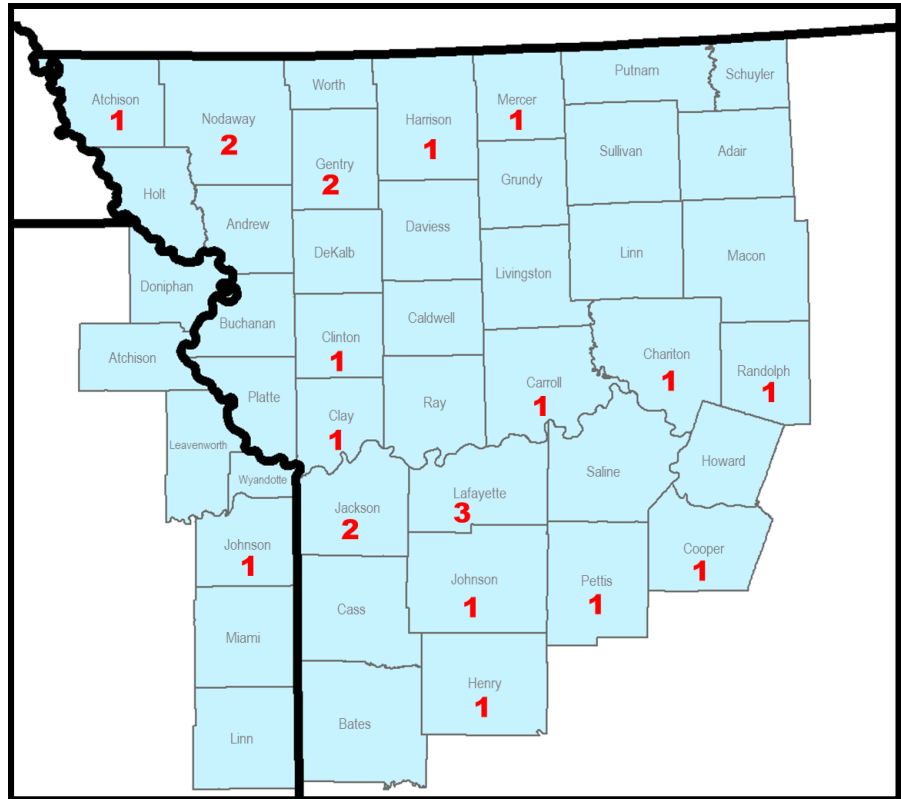
EF-3 Oak Grove, MO

March 6, 2017

Most in Single Event

12

March 6, 2017



2017 Tornadoes By County

EF Scale Wind Speeds

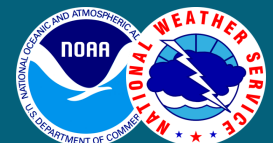
Rating	Winds
EF0	65-85 mph
EF1	86-110 mph
EF2	111-135 mph
EF3	136-165 mph
EF4	166-200 mph
EF5	> 200 mph

2017 Tornadoes By Rating

EF-3: 1 (Oak Grove, MO, March 6, 2017)
EF-2: 1 (Smithville-Lathrop, MO, March 6, 2017)
EF-1: 5
EF-0: 11

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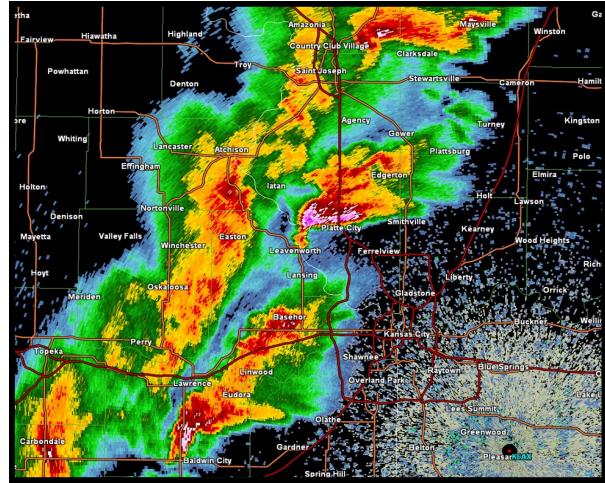


2017 Severe Weather Events

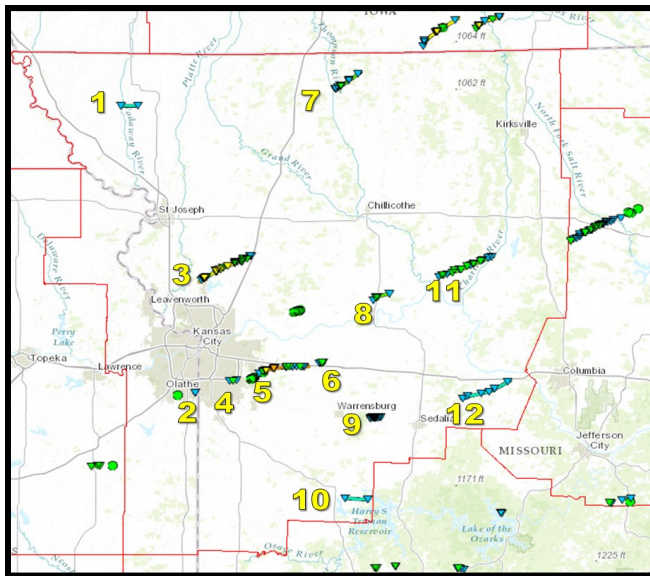
March 6, 2017

Tornado Outbreak

On the evening of March 6, 2017 a line of severe thunderstorms formed, then moved into eastern Kansas and western Missouri. Ahead of and along this line of storms supercells formed and produced large hail, damaging winds, and several tornadoes. Officially the NWS office in Kansas City confirmed 12 tornadoes in this event. The most notable of the tornadoes were the EF-2 and EF-3 tornadoes that impacted Smithville and Oak Grove, Missouri respectively. According to news reports there were 12 injuries associated with the Oak Grove tornado, but despite the widespread significant damage there were no fatalities. As the line of storms moved eastward several embedded supercells and mesovortices produced more tornadoes across northern and central Missouri. By the end of the event, officially there were four EF-1, one EF-2 (Smithville, MO), one EF-3 (Oak Grove, MO), and six EF-0 tornadoes.



Radar image of the Smithville-Lathrop tornado-producing supercell



March 6, 2017 Tornado Tracks

March 6, 2017

By The Numbers

At least 12 confirmed tornadoes

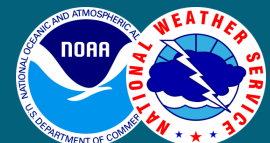
Dozens of hail reports. Largest reported hail stone was 2.75" from Clay and Platte Counties

19 Tornado Warnings issued by NWS Kansas City (as many as all of 2012, 2013, and 2016 combined)

20 Severe Thunderstorm Warnings

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2017 Severe Weather Events

March 6, 2017

Tornado Outbreak



Aerial view of Oak Grove Missouri after the tornado

Image: Blue River Drones

Oak Grove Tornado

Rating: EF-3

Path Length: 17.8 miles

This supercell produced a weak tornado near Leawood, Kansas then another near Lee's Summit, Missouri. As the storm moved over Lake Lotawana it produced a third and more devastating tornado that went through the city of Oak Grove, Missouri, causing EF-3 damage. The most extensive damage was to some residences in Oak Grove that had well built permanent foundation houses completely removed from the foundation and toppled over. There were 12 reported injuries in Oak Grove from this tornado. After the tornado devastated portions of Oak Grove, Missouri it traveled south of Bates City, doing mainly tree damage in rural Lafayette County. It then moved into Odessa, where it produced more EF-1 damage in the west part of Odessa. The bulk of the damage was to permanent residential structures across Odessa. The tornado weakened as it went east of Odessa, and finally dissipated just south of Interstate 70 east of Odessa.

Smithville-Lathrop Tornado

Rating: EF-2

Path Length: 19.6 miles

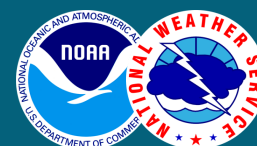
The tornado formed just west of HWY 169 and did some significant damage to a neighborhood along Route W, just east of HWY 169 before the tornado crossed Smithville Lake into Clinton County. The tornado reached its strongest rating and its widest size as it exited Clay County into Clinton County while it crossed Smithville Lake. Like in Clay County, several residences were impacted in Clinton County by this large tornado that reached 1000 yards wide at its largest point. The worst of the damage occurred just east of Smithville lake where numerous structures were completely destroyed. The tornado continued across the rural portions of Clinton County, remaining at least EF-2 until it approached Lathrop. The tornado then dissipated between Lathrop and Interstate 35. Despite the widespread damage from this tornado there were no injuries reported.



Destroyed house near Smithville Lake

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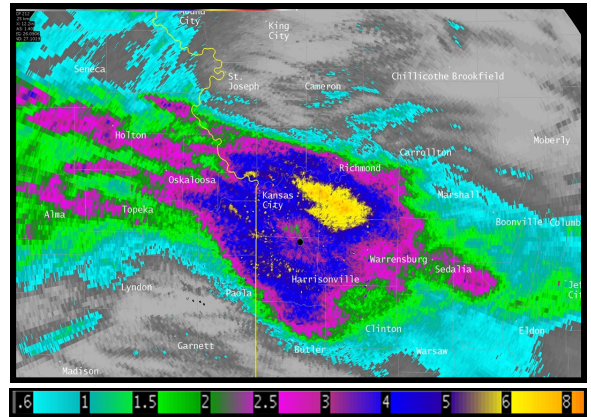


2017 Severe Weather Events

July 26-27, 2017

Kansas City Flash Flooding

After 5 to 7 inches of rain fell across Kansas City in 3-6 hours, one of the hardest hit areas in the Kansas City Metro was along Indian Creek near 103rd and Wornall. Several car dealerships in that area had merchandise inundated and washed away due to the record flood for Indian Creek. Also at that intersection was a restaurant that had two of its owners trapped in the rafters of the business as waters rushed into the building. The owners were rescued by fire fighters when they rode a motorized raft to the building and extracted the owners through the roof. This rescue took place on live television. Other water rescues took place in numerous areas across Kansas City.



Storm Total Precipitation (Inches) July 26-27, 2017



Several car dealerships and businesses at I-435 and Wornall flooded due to the heavy rain . (Images KMBC NewsChopper 9)



Mobile home destroyed by EF-1 tornado Dec 4, 2017

December 4, 2017

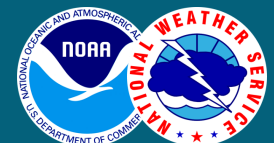
Randolph County Tornado

Rating: EF-1

The tornado formed just east of Higbee and lasted approximately 15 minutes, traveling about 10 miles, before dissipating south of HWY M in far eastern Randolph County. The worst of the damage occurred just south of Moberly, near the town of Renick, where a mobile home was destroyed, injuring one of its occupants, and a house built into an earthen berm was heavily damaged. This rare December tornado marked the first time since December 1, 1982 that a tornado impacted any counties in the Kansas City forecast area during the month of December, a span of over 35 years.

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2018 Integrated Warning Team Seminar

National Weather Service Training Center

The 9th annual Integrated Warning Team (IWT) meeting was held at the National Weather Service Training Center in Kansas City on January 31, 2018. Participants of the meeting included local and state emergency managers; National Weather Service personnel from the Pleasant Hill forecast office, the training center and the Central Region Headquarters; broadcast media from all four Kansas City affiliate stations; the Red Cross, the Kansas and Missouri Departments of Transportation; the MO Department of Natural Resources; local school districts, universities, hospitals, and health departments; and other federal agencies including FEMA, OSHA, and the U.S. Air Force. In total, over 140 attendees registered for the meeting, making it the highest attended IWT in Kansas City's history.



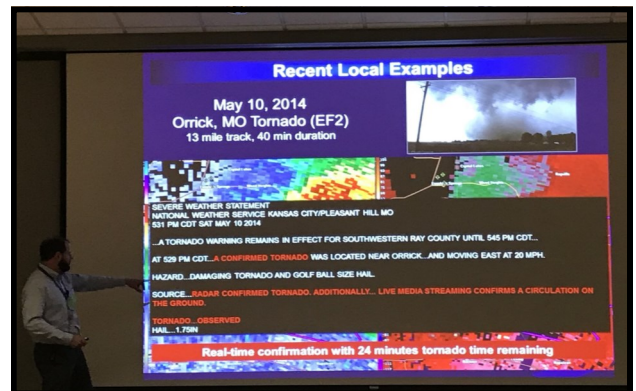
Over 140 attendees participated in the 10th Annual IWT in Kansas City at NWSTC on January 31, 2018



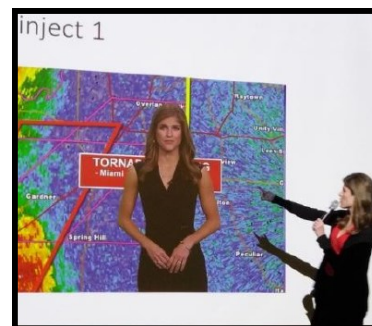
NWS meteorologist Linda Gilbert discussing NWS services and products to new Emergency Managers

New this year was a "Short Course for New Emergency Managers," hosted by Meteorologist, Linda Gilbert, to help new EMs further new relationships and gain knowledge to successfully execute our IWT mission of protecting lives and property. This course was attended by 30 new Emergency Managers and NWS partners

Highlights of the program included a review of the 2017 severe weather season, information on storm reports and when to expect confirmation of tornadoes, an overview of siren policy, and IWT collaboration through exercises. Of particular focus were discussions on the March 6, 2017 tornado outbreak across Missouri, and record flash flooding on Indian Creek in the Kansas City metropolitan area. Recent and planned changes/updates in the NWS were also discussed, including the new hazard simplification process for winter weather, the Weather Ready Nation Ambassador initiative, and the expanding Impact-based Decision Support Services offered by the NWS. Feedback for the meeting was overwhelmingly positive, with all participants indicating they either "Strongly Agree" or "Agree" that the IWT was a valuable experience, and nearly unanimous agreement by the participants expressing they would like to participate in future IWT meetings.



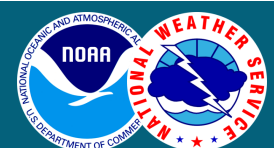
(Above): Scott Blair, NWS meteorologist, presented about the importance of real-time tornado reports in the warning process.



(Left): Lindsey Anderson (KSHB, Kansas City) participated in a severe weather exercise put on jointly by NWS and Johnson County (KS) EMA.

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Americans live in the most severe weather-prone country on Earth. Around 98 percent of all Presidentially declared disasters are weather related, and roughly 500 deaths and nearly \$15 billion in damage per year are attributed to weather-related disasters. The StormReady program helps arm America's communities with the communication and safety skills needed to save lives and property --before, during and after the event. StormReady helps community leaders and emergency managers strengthen local safety programs.



Requirements For StormReady

- Establish a 24-hour warning point and emergency operations center
- Have more than one way to receive severe weather warnings and forecasts and to alert the public
- Create a system that monitors weather conditions locally
- Promote the importance of public readiness through community seminar
- Develop a formal hazardous weather plan, which includes training severe weather spotters and holding emergency exercises.

Who Should Apply?

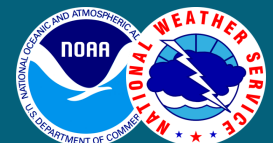
- Communities/Counties
- Native American Nations
- Universities and Colleges
- Government Sites
- Commercial Enterprises

How To Become StormReady

Your local NWS office Warning Coordination Meteorologist will walk you through the easy [application process](#). Sites that can't meet the StormReady criteria can show their support for weather safety by joining the [Storm-Ready Supporter program](#).

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Weather Resources

For Emergency Managers & Weather Service Partners



NWSChat

Chat resource for collaboration with the NWS, other EMs, and media



Situation Report

Hazardous Weather Outlook in PDF format, describing upcoming weather



Event Support

The NWS can provide weather support for events hosted by EM/public safety



Webinar List

Email list for EMs, media, and other partners; for webinar notification



iNWS

Customized mobile & desktop alerts for NWS products and warnings



WRN Ambassadors

NWS partners and stakeholders that commit to promoting weather safety



HYSPLIT

Trajectory and dispersion model for releases of hazardous materials



Social Media

Resource for receiving and sharing weather information & forecasts

Contact Us

Email: andy.bailey@noaa.gov

Phone: 816-540-5147 or 1-800-438-0596

Web: weather.gov/kc or mobile.weather.gov

Find Us on Social

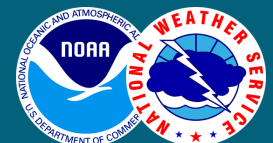
 [Facebook.com/nwskansascity](https://www.facebook.com/nwskansascity)

 twitter.com/nwskansascity

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NWS Decision Support Services



National Weather Service meteorologists are available 24 hours a day to offer weather support for emergency management responsible for public safety at any outdoor event.

Fill out a form for each of your outdoor events!

<http://weather.gov/kc/eventsupport>

How does it work?

- Fill in the blanks on the request form using the provided link, and your event is then populated on our calendar.
- A meteorologist on duty 24 hours will call at the requested time with a weather forecast tailored to your event's needs.
- Updates to the forecast can be requested based on the evolution of the weather through the day.
- Requests can be submitted at any time.

Weather Support Request for Events - NWS Kansas City

**** FOR OFFICIAL GOVERNMENT SUPPORT ONLY ****
Use this form to request NWS weather support for a vulnerable outdoor event. If immediate weather support is needed, please contact the National Weather Service directly.

NWS weather support is designed for those events that as an EM you feel are particularly vulnerable to weather due to location, size or nature of the event. The NWS is committed to providing decision support services on behalf of the EM community in order to help support public safety. After submitting a request for weather support, you will be contacted by your NWS office to clarify specifics of the event and services to be provided.

NWS weather support services for an event includes:

- * The NWS will contact the event POC as requested with a weather briefing.
- * The NWS will maintain a constant weather watch for the event in support of public safety.
- * If hazardous weather will impact the event, the NWS will contact the POC as requested.
- * The POC is also encouraged to contact NWS at any time for updated weather information.
- * All event information will be available to NWS forecasters for analysis and awareness.

* Required

Event Details

Event Name *

Example: Knox County Fair, Bob's Marathon, etc.

Event Venue Name (Optional)

Example: Knox County Fairgrounds, Memorial Stadium, Country Club Plaza

Event Location Latitude (not required if address is used)

Decimal format (example: 41.2345)

Event Location Longitude (not required if address is used)

Decimal format (example: -101.2345)

Event Location Address (Not required if latitude & longitude were used in previous entries)

An exact address is preferred (just the address, NO city state info), but most addresses or location names that can be properly located in Google Maps will work. Visit <https://www.google.com/maps/> to verify. If the event is over a broad area, use the most applicable single location but provide more detailed information in the notes section below.

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