

2007 Severe Weather Fact Sheet **National Weather Service Lincoln, IL**

The National Weather Service mission:

The National Weather Service provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and property and the enhancement of the national economy. The NWS is the sole United States OFFICIAL voice for issuing warnings during life-threatening weather situations.

Hazardous Weather Impacts

- U.S. fatalities due to tornadoes have decreased from more than **110** per year from the 1950s through the 1970s, to **57** per year since the implementation of Doppler radar in 1995, at more than 120 NWS offices across the country.
- On average, the most weather related fatalities over the past 30 years have been attributed to floods (average of 107); followed by lightning (66), and tornadoes (65).

Central / Southeast Illinois Severe Weather Statistics

- In 2006, nearly 83% of all severe weather events (damaging winds, tornadoes and large hail) in central Illinois had advance warning by the NWS in Lincoln, with an **average lead time of 18 minutes**.
- Since Doppler radar has been installed at the NWS in Lincoln IL, nearly **83%** of all severe weather events have had advance warning, with an **average lead time of 17 minutes**. *(Period from January 1996 - December 2006)*

This is a 30% improvement in accuracy and a 5 minute increase in average lead time over the previous 10 year period *(January 1986-December 1995)*.

- Of the top 15 counties with the most tornadoes in the state of Illinois, 11 are in central or eastern Illinois. These are: Logan (#1), Macon (#2), McLean (#3), Sangamon (#4), Woodford (#6), Tazewell (#7), Champaign (#10), Piatt (#12), Douglas (#13), Coles (#14), and Mason (#15). *[Data based on tornadoes from 1950-2006, normalized to 1000 square miles]*
- More than 2,300 volunteer weather spotters were trained in 26 central and eastern Illinois counties last year. About 700 were new trainees.

Economic Impacts of Weather Forecasts & Warnings

- NWS Implementation of storm based warnings for smaller areas, and portions of counties, will result in a 70% reduction in false alarms. It is projected that this improvement will save businesses and the public, in the United States, nearly \$100 million in sheltering costs each year (e.g. lost business, lost productivity, etc...).
- 33% of the United States Gross Domestic Product (nearly \$3 trillion) is affected by weather and NOAA's National Weather Service forecasts.
- The average U.S. household only pays about \$1.08 per month for NOAA's weather services.
- Average annual damage from tornadoes, hurricanes and floods in the U.S. is \$11.4 billion.
- Economists have estimated that improved *El Nino* forecasts have resulted in annual savings of nearly \$300 million for U.S. agriculture by altering planting decisions.

Visit our Internet homepage at: www.weather.gov/Lincoln for the latest weather and river forecasts, warnings, current conditions, radar & satellite imagery, and climate information.