

United Way of Metropolitan Dallas

*serving Dallas, Collin, Rockwall Counties
and Greater Lewisville*



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2006 Community Needs Assessment Creating a Healthier Community

Disaster Planning

Disaster Planning – North Texas Overview

Definitions:

Structure fires include both residential and commercial buildings. Statewide, about 75% of all structure fires are residential.

In reporting the number of tornados, only tornados of magnitude F1 and above as reported by the National Climatic Data Center are included. (Fo tornados were not included.)

The Fujita Tornado Damage Scale is an indicator of severity:

- Fo = Light damage
- F1 = Moderate damage
- F2 = Considerable damage
- F3 = Severe damage
- F4 = Devastating damage
- F5 = Incredible damage

In reporting floods, only floods that involved deaths and/or property damage as reported by the National Climatic Data Center were included.

Episodes of excessive heat, as defined by the National Weather Service, occur when there is a maximum heat index of 106F or higher for 3 hours or more for consecutive days AND a minimum heat index of 80F or higher at night; OR a heat index of 115F regardless of duration or nighttime minimum temperature.

Extreme cold, as defined by the National Weather Service, involves wind chill and other factors. Generally such episodes involve with wind chill temperatures of -10F or colder.

Disasters are inherently irregular and unpredictable. However, past experience teaches that disasters will occur, though no one can predict the time or place.

By far, the most frequent disasters in the North Texas region are structure fires. Other disasters include tornados, floods, and episodes of extreme temperatures. Extreme temperatures have adverse effects on homeless persons, the elderly, and on low income/fixed income populations due to increased utility bills. The increasing cost of utilities heightens the impact of periods of extreme heat and cold.

In 2004, there were more than 4,000 structure fires in the North Texas Region.

In 2004, 77% of structure fires in Texas were residential fires. According to a report by the State Fire Marshal's office, there were 15,169 residential fires in Texas in 2004 resulting in 90 deaths, 837 injuries, and \$196,800,851 in property loss.

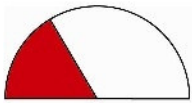
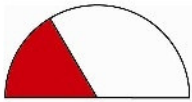
This section does not include all types of disasters that might potentially affect (directly or indirectly) the North Texas Region. Recent experience with hurricanes Rita and Katrina has shown that even disasters in other regions can have an impact on the need for services in North Texas.

As a major metropolitan area with a large and growing population, the potential for disasters that result in loss of property and loss of life is always present. As population density increases and spreads over a larger geographical area, the risk of disaster increases.

In the 15-year period from 1990 through 2005, there were:

- 22 tornados (F1 & above).
- 29 floods (resulting in property damage and/or deaths).
- 9 official episodes of excessive heat, resulting in 64 deaths.
- 3 official episodes of extreme cold, resulting in 6 deaths.

Disaster Planning: Indicators and Trends

INDICATOR	SUMMARY	TREND	CONDITION
Structure Fires	Structure fires are the most frequent disasters experienced in the North Texas Region. As would be expected, structure fires are increasing in areas of high population growth.	N/A	 Manageable
Tornados	From 1990 to 2005, there were 22 tornados (F1 & above), or an average of 1.4 tornados per year in the UWMD four county service region.	N/A	N/A
Floods	From 1990 to 2005, there were 29 floods (with property damage and/or loss of life), or an average of 1.8 floods per year in the UWMD four county service region.	N/A	N/A
Extreme Temperatures	<p>From 1990 to 2005, there were 9 episodes of excessive heat, with 64 deaths in the UWMD four county service region.</p> <p>During that same time period, there were 3 episodes of extreme cold, with 6 deaths.</p>	N/A	 Manageable

Disaster Planning: By County

Collin County

- The number of structure fires has increased steadily, from 253 in 2000, to 411 in 2004. It is likely that the number of structure fires is increasing with the growing population and number of households.
- From 1990 through 2005, Collin County officially experienced 4 tornados (F1 & above) and 3 floods.

Dallas County

- In 2004, Dallas County recorded 3,219 structure fires, by far the highest number among counties in the North Texas Region.
- From 1990 through 2005, Dallas County officially experienced 13 tornados (F1 & above) and 17 floods.

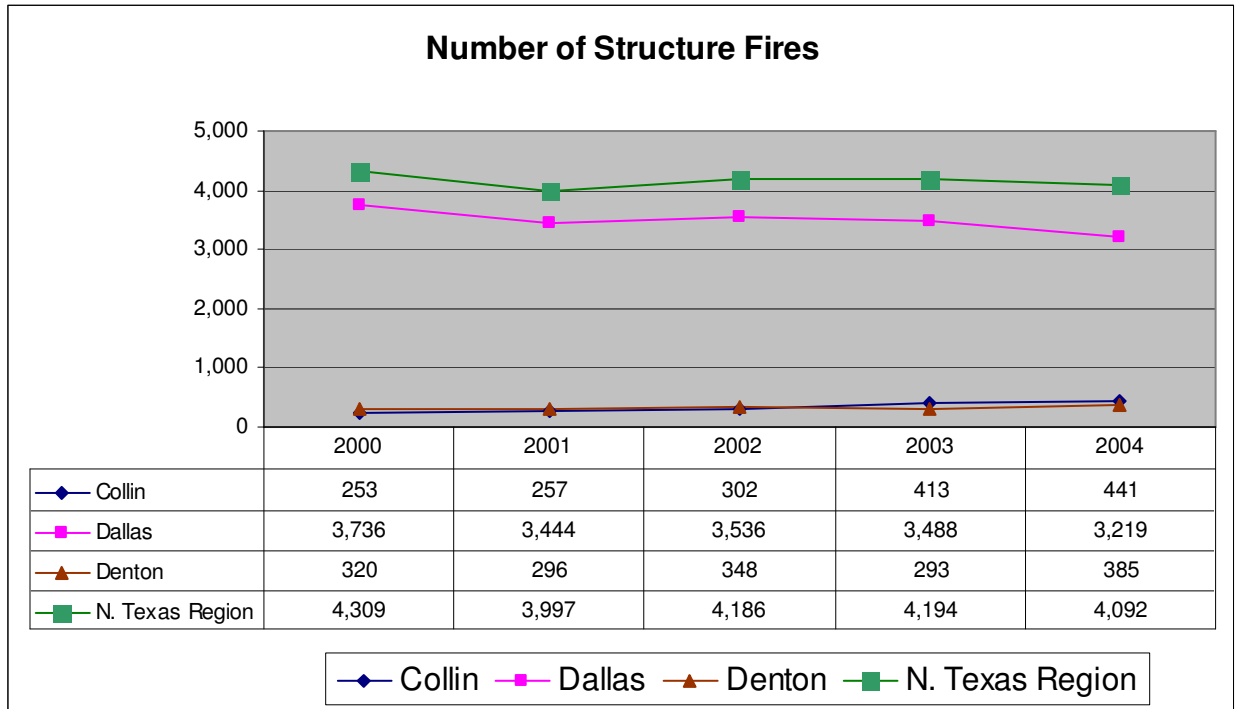
Denton County

- In 2004, Denton County recorded 385 structure fires.
- From 1990 through 2005, Denton County officially experienced 5 tornados (F1 & above) and 8 floods.

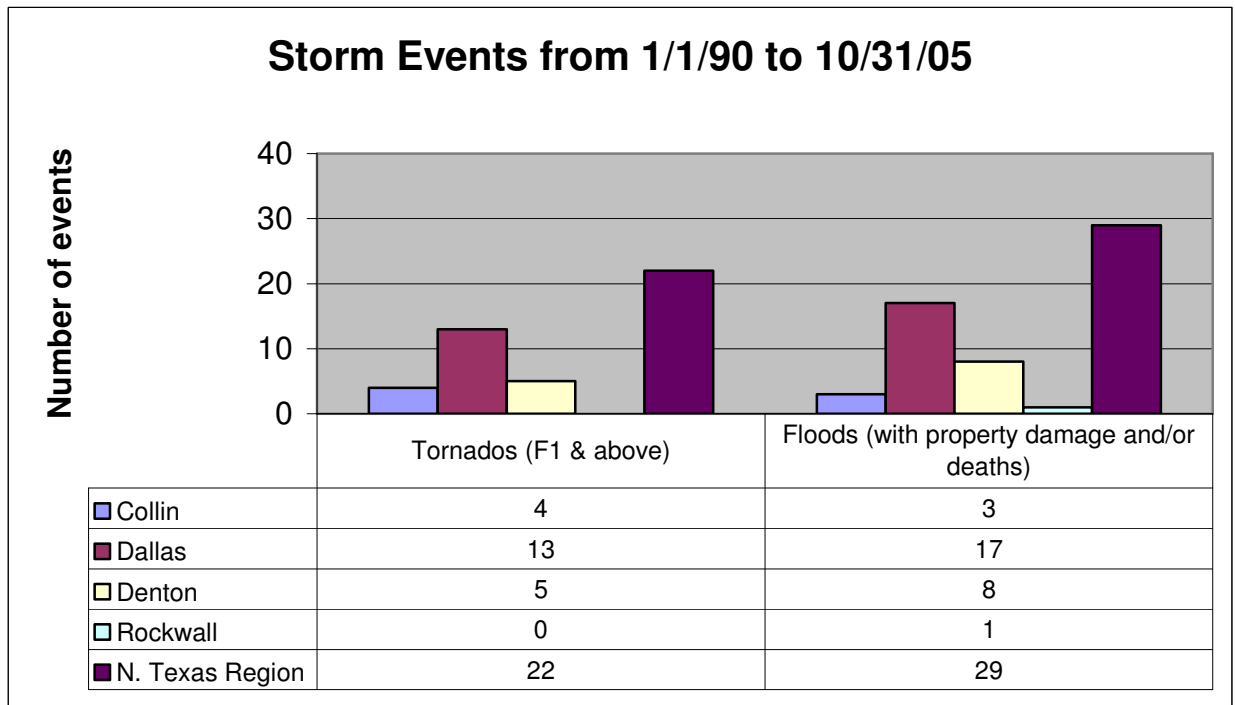
Rockwall County

- In 2004, Rockwall County recorded 47 structure fires.
- From 1990 through 2005, Rockwall County officially experienced no tornados (F1 & above) and 1 floods.

Disaster Planning: Supporting Data

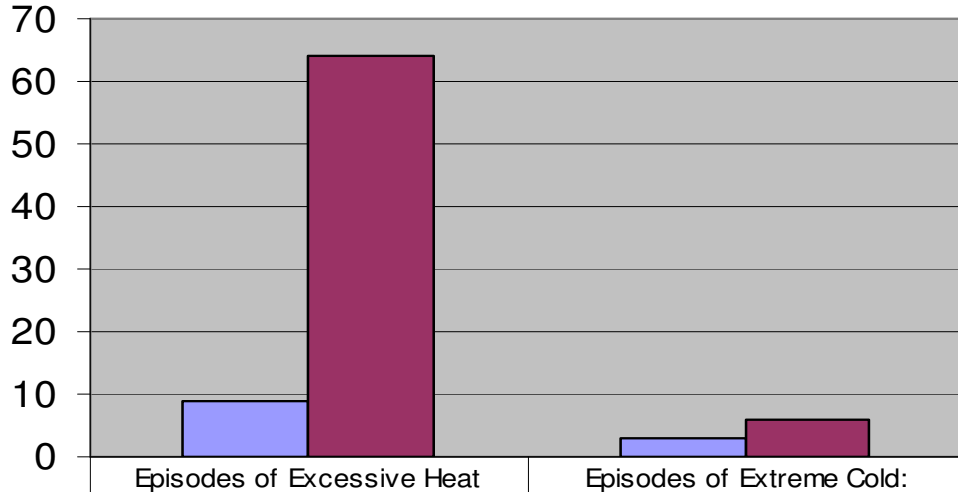


Source: Texas Department of Insurance, State Fire Marshal's Office, [Fires in Texas](#)



Source: National Climatic Data Center, U.S. Local Storm Events Data

Episodes of Extreme Temperatures & Number of Deaths in the North Texas Region, 1/1/90--10/31/05



	Episodes of Excessive Heat	Episodes of Extreme Cold:
Number of episodes	9	3
Number of deaths	64	6

Source: National Climatic Data Center, U.S. Local Storm Events Data