

**Table 3: Fujita Scale & Enhance Fujita Scale**

Fujita Scale		Enhanced Fujita Scale		Potential Damage
Rating	Wind	Rating	Wind	Description
F0	40-72 mph	EF0	65-85 mph	Light Tree branches are broken and shallow-rooted trees are toppled.
F1	73-112 mph	EF1	86-110 mph	Moderate Roof surfaces are peeled off, windows are broken, some tree trunks are snapped, and unanchored mobile homes or outbuilding overturned.
F2	113-157 mph	EF2	111-135 mph	Considerable Roof structures are damaged, mobile homes are destroyed, debris becomes airborne (missiles are generated); large trees are snapped or uprooted.
F3	158-206 mph	EF3	136-165 mph	Severe Roofs and walls are torn from structures, some small buildings are destroyed, non-reinforced masonry buildings are destroyed, and trees are uprooted.
F4	207-260 mph	EF4	166-200 mph	Devastating Well-constructed houses are destroyed, some structures are lifted from foundations and blown some distance, cars are blown some distance, and large debris becomes airborne.
F5	261-318 mph	EF5	>200 mph	Total Destruction Strong frame houses are lifted from foundations, reinforced concrete structures are damaged, automobile-sized missiles become airborne, and trees are completely debarked.

Tornadoes that occur in areas of low development cause little to no damage; conversely, tornadoes which drop in heavily populated areas can cause extreme loss of property and loss of human life. Winds of such velocity can lift even the most solidly built structure. Mature trees can be uprooted and flung across fields or into homes or businesses. Cars and automobiles can be lifted and projected into other structures. Smaller projectiles made of glass shards, splintered lumber, or metal have been documented to pierce trees, homes, and other property. Death can result from any debris source at this speed. The most severe impact by a tornado would be the result of an EF4 or EF5 tornado moving through the county and hitting several communities.

#### 4. Previous Occurrences

Fannin County has 46 documented tornado events recorded with NOAA between the years 1955-2008, and one of these was an F3 tornado and claimed one death. There have been 10 reported injuries and over \$6 million in damages.

**Table 4: Fannin County Texas Reported Tornadoes 1955-2008**

Location or County	Date	Time	Magnitude	Damage
Fannin	5/1/1954	11:00 PM	F1	
Fannin	4/6/1955	3:00 AM	F3	2.5M
Fannin	8/12/1958	5:00 PM	F1	3K
Fannin	3/20/1959	12:30 PM	F2	25K
Fannin	3/20/1959	12:30 PM	F2	25K
Fannin	5/20/1960	5:10 AM	F1	1 injury & 3K
Fannin	5/23/1966	4:00 PM	F0	
Fannin	5/23/1966	4:00 PM	F0	
Fannin	5/23/1966	4:00 PM	F1	
Fannin	5/23/1966	4:00 PM	F1	
Fannin	5/23/1966	4:00 PM	F1	
Fannin	5/23/1966	4:00 PM	F1	
Fannin	5/23/1966	4:00 PM	F1	
Fannin	3/25/1967	11:00 PM	F2	
Fannin	4/25/1970	5:20 AM	F1	
Fannin	12/14/1971	10:00 PM	F1	250K
Fannin	5/6/1973	7:20 PM	F2	25K
Fannin	5/6/1973	11:20 PM	F2	3 injuries & 250K
Fannin	4/20/1976	1:20 AM	F1	
Fannin	5/30/1976	8:20 PM	F1	
Fannin	4/18/1977	5:00 PM	F0	
Fannin	4/18/1977	7:30 PM	F1	
Fannin	10/17/1980	5:10 AM	F1	250K
Fannin	10/17/1980	5:20 AM	F1	3K
Fannin	5/13/1981	6:03 AM	F2	25K
Fannin	4/2/1982	3:10 PM	F3	1 death, 1 injury, & 2.5 M
Fannin	4/2/1982	3:15 PM	F2	
Fannin	4/25/1982	4:20 PM	F0	
Fannin	11/22/1982	6:30 PM	F1	3K
Fannin	6/28/1983	7:00 PM	F0	25K
Fannin	4/20/1984	6:25 PM	F0	
Fannin	4/4/1986	5:20 PM	F0	
Fannin	6/4/1986	7:10 PM	F0	
Fannin	6/4/1986	7:15 PM	F0	
Fannin	6/4/1986	7:30 PM	F0	
Fannin	6/23/1987	5:05 PM	F0	
Fannin	6/23/1987	5:05 PM	F0	

Location or County	Date	Time	Magnitude	Damage
Fannin	6/23/1987	17:05	F0	
Fannin	4/5/1988	4:15 PM	F0	
Fannin	8/12/1988	12.30 PM	F1	
Fannin	10/7/1992	5:20 PM	F1	3K
Lake Bonham	4/26/1994	6:00 PM	F0	
Bonham	4/26/1994	6:10 PM	F0	
Honey Grove	4/26/1994	6:10 PM	F0	50K
Ivanhoe	1/17/1996	9:55 PM	F2	5 injuries & 150K
Trenton	4/26/1999	8:42 AM	F1	40K
Leonard	5/27/2000	4:42 PM	F0	
				6.130 M

Source: [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov)

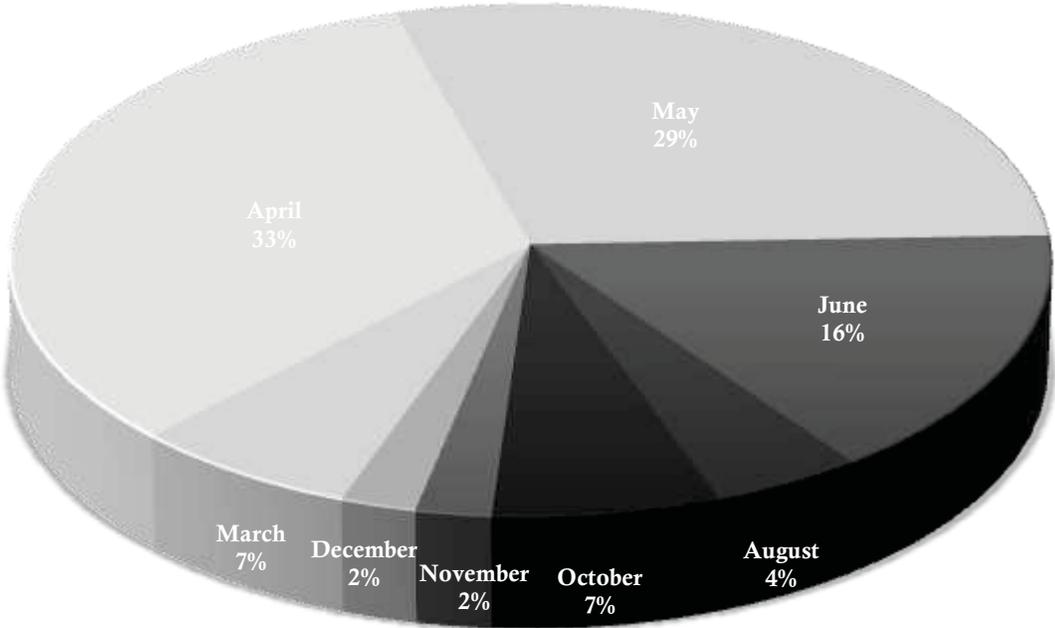
Fannin County has had some significant tornado events in the past. The most damaging one in the past 55 years was the April 2, 1982 tornado outbreak. The storm moved into Fannin County from the west where it had just produced golf ball sized hail in Grayson County. The storm reportedly generated hailstones as large as six inches in diameter. A rotating cloud was then spotted over Ravenna before it touched down as an F2 three miles south-southeast of the community. This twister was briefly accompanied by another smaller tornado. The storm continued in an eastward track into Lamar County where it struck the county seat of Paris. The storm left Fannin County with six homes, two mobile homes, ten barns, and countless storage building and power lines destroyed.

Most tornado events in Fannin County have a magnitude of F0 to F1. These tornadoes are on the ground for a short time, less than 50 yards in width and damage is mostly confined to trees and power lines. These small tornadoes can do significant damage in a more vulnerable surrounding. The F1 tornadoes on October 1980 caused over \$150,000 in damage.

## 5. Probability of Future Events

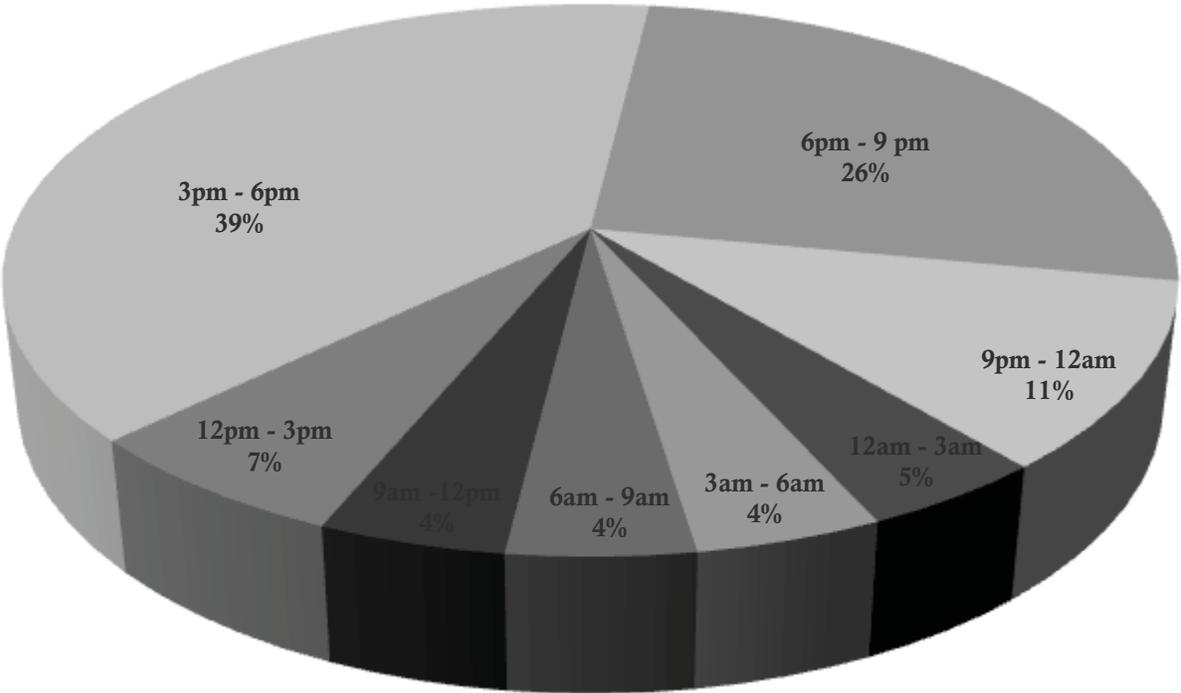
In the last 53 years Fannin County had 46 tornadoes, resulting in an average of 0.87 reported tornadoes per year. Therefore the probability of a tornado occurring within the county each year is highly likely. April to June is the predominate tornado season, though again, they can occur any time of year. Over 75% of tornadoes occur between noon and midnight, and one third from 3:00 to 6:00 pm.

**Chart 5a: Percentages of Tornado Occurrences by Month**



Source: [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov)

**Chart 5b: Percentages of Tornado Occurrences by Time**



Source: [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov)