Weather Wise
Severe Winds

Not all severe thunderstorm winds are caused by tornadoes. "Straight-line" thunderstorm winds can also cause widespread damage and occasional fatalities. Damaging wind from thunderstorms is much more common than tornadoes. In fact, many people mistakenly blame tornadoes for the damage caused by these "straight-line" winds.

July 1-5, 2005 was a perfect example of non-tornadic damage, beginning with the overturning and sinking of a boat on Tom Steed Lake in Kiowa County on the 2nd. Winds from 60-80 mph were reported in many areas on the 4th, peaking with a 102 mph wind gust at Blackwell. Widespread wind damage was reported with these storms, including downed power lines, tree damage, and damage to structures. A brick storage building and several car ports were destroyed in Braman, and roofs were blown off in Blackwell. The police station's antenna in Blackwell was another casualty for the storms.

Wind Gusts (70 mph or greater) for July 2005

Location	County	Day	Speed in mph	Location	County	Day	Speed in mph
Hooker, OK	Texas	1	70	Elmwood, OK	Beaver	1	70
Near Kaw City, OK	Kay	3	70	Near Bessie, OK	Washita	1	71
Near Minco, OK	Grady	4	75	Near Milfay, OK	Creek	4	72
Near Blackwell, OK	Kay	4	71	Near Minco, OK	Grady	4	70
Ponca City, OK	Kay	4	78	Ponca City, OK	Kay	4	71
Blackwell, OK	Kay	4	102	Ponca City, OK	Kay	4	80
Near Meno, OK	Major	4	81	Blackwell, OK	Kay	4	75
				Near Meno, OK	Major	4	71

Activity: Use the data from the chart to answer the following questions.

- Highlight on the map, the counties where winds greater than or equal to (≥) 70 mph occurred.
- What is the mean of the wind gusts shown in the table?
- What is the median of the wind gusts shown in the table?
- What is the mode of the wind gusts shown in the table?
- Draw the frequency histogram for the wind gusts listed above.
- An outlier is a value that is either much lower or much higher than all the other data values. Are there any outliers in the wind gust data? List the outliers.
- If the 102 mph value were removed from the set of data above, how is the mean affected?
- Which method (mean, median, or mode) best describes the data set in the table? Why?