

**WIND TURBINE PROJECT  
AT JARRELL ISD  
BY  
FOURTH AND FIFTH GRADES**

The purpose of the project is to determine whether or not there are sufficient wind speeds at Jarrell ISD to operate one or more wind turbines.

# The Winds At Jarrell ISD

After observing the wind speeds at the open areas of our campus, we found the average winds at JISD to vary from 8-20 mph per month. Even though the U.S. wind maps have placed us in a low wind speed zone, we, at Jarrell do experience higher wind speeds. This may be due to our elevation.

Although the JISD campus has good wind speeds for turbines, the JISD sports complex has even stronger wind speeds. At the sports complex the average speeds are 20-30 mph year round .This would probably be the best location for the turbines to be placed.

*The average monthly kWh usage at JISD is 70,000. JISD will probably need 50 wind turbines to supply 100% of the the district's energy needs. The The cost for a wind turbine that that would generate 4,250 kWh kWh is approximately \$21,000. \$21,000.*

Please see our model  
of the campuses and  
our pictures that  
describe the  
importance of using  
wind energy.