Good Morning,

My name is Bryan Coover and I am a farmer and business owner in Galesburg, Kansas. I want to give my support and that of the Concerned Citizens group of Neosho County for HB2273. I'm here to talk about sound from industrial wind turbines.

I started out to list a bunch of studies listing the medical issues with loud chronic noise from industrial sources in general and wind turbines in particular. You can find those with google all by yourself. I don't have the time, and you don't have the time, for me to try to make you sound experts. The fact is you are already sound experts, because you have experienced it your whole life.
The wind industry can't fix the fact that turbines are loud. That's a problem. But it's worse because the noise turbines make is unmanageable, intrinsically annoying, and oddly, partially inaudible. They can't fix it. The physical laws prevent it. So, they do the next best thing-hide the problem and discount the complaints.

"The sound from a wind turbine is comparable to your refrigerator." Every wind developer uses this statement. In fact, when measured with a sound pressure meter set for voice range frequencies 'dBa', this statement has some accuracy. But it is not the truth. Low frequency sounds and infrasound are heavily discounted in A-range measurements. These sound frequencies are too low to be easily audible to humans. The best example I know to differentiate frequency bands is recall a common traffic experience. While you are waiting at the light, a car with sub-woofer speakers approaches. Before you hear it, you can feel and that pulse you hear is infrasound. Then you hear the bass, but you can't make out the tune, low frequency sound. Finally, the car gets close enough for you to make out the tune, sometimes. This common occurrence perfectly demonstrates how sound travels. Infrasound and low frequency sounds travel much farther than high frequency sounds. Wind developers love to counter with "What you can't hear doesn't count." In this case, it does. Read 'Wind Turbine Syndrone' by Nina Pierpont M.D.

Human reaction to infrasound and low frequency audible sound varies from person to person and is dose dependent. Annoyance, nausea, sleep deprivation, and stress induced health issues have been reported in every country in the world anywhere wind turbines are built. Several countries have setback distances at over one mile. In fact, "Wind Turbines and Human Health" published in Frontiers in Public Health, recommends setbacks for health reasons should exceed 2 km. Published in 2014, the study predates most turbines over 400 feet tall. At roughly 600 feet tall, today's turbines height and greater blade length make the sound pressure greater and likely to travel farther.

Hard data related to safety issues with wind turbines has been collected. The industry has been around a long time. We have repeatedly asked Apex, the local developer, for sound profile data so that we could contract an independent acoustical consultant to advise the county commission. We have contacted GCube Insurance, a leading insurer of wind facilities, asking for safety data on blade failure, fire risk, and collapse risk. GCube's web page lists a dozen internal reports on such subjects. GCube's response is that safety data is considered proprietary in the wind industry. Those of us living under a wind turbine shadow evidently have no right to know the danger. The Neosho County Commission has asked Apex repeatedly for GCube's blade failure analysis to no avail.

Wind developers will argue today that this statute will kill wind development in the state. But several wind farms in the state meet this criteria. Most others would have required minimal adjustments. It will curtail development in areas of relatively high rural population. It will help protect unleased property values. Most importantly, HB2733 will greatly reduce the annoyance people feel when they are forced to live too close to industrial wind turbines, and encourage a greater acceptance to those that are responsibly placed.