

REPORT RECAP: REVIEW OF WIND ENERGY SETBACKS

The continued development of wind energy has proven to be an economic driver for many rural areas, providing a range of benefits to local communities while producing renewable electricity. However, as development continues to expand, many counties are seeking to develop or update zoning ordinances for wind energy projects.

One of the most common inclusions in a wind energy ordinance is a setback from a turbine or project. These setbacks allow local officials to address a variety of concerns or potential impacts, while also being easier to enforce than requirements like noise standards.

COMPARISON OF THREE STATES

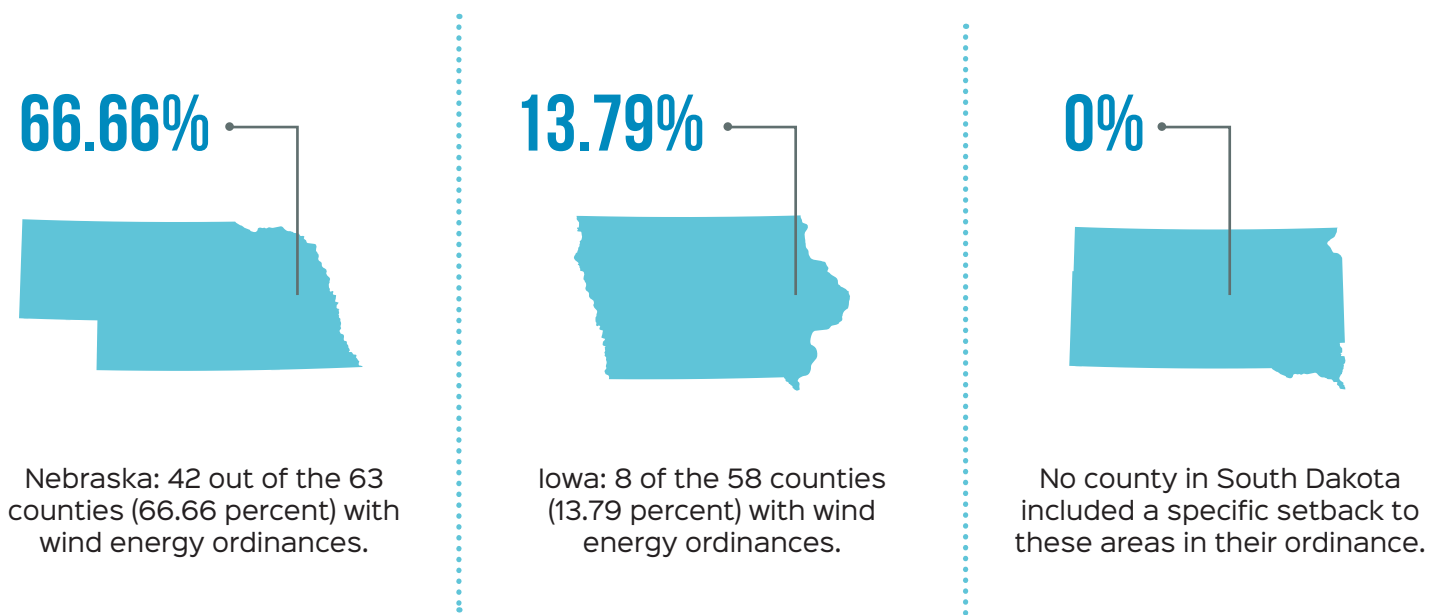
To provide an overview of setbacks in wind energy ordinances, the Center for Rural Affairs examined zoning employed by 258 counties in three Midwest states—Iowa, Nebraska, and South Dakota.

Setbacks varied significantly between counties and states, but there were similarities such as, distinctions between participating and non-participating landowners. While counties varied on the use of fixed or variable distance setbacks, ordinances commonly used the greatest distance as the setback when both types of setbacks were used.

Significantly more counties in Nebraska featured setbacks to wildlife management areas than counties in Iowa or South Dakota, as shown in Figure 1.

The majority of wind projects are located in counties that have zoning for wind energy in place. A possibility is that these ordinances were developed as a reaction to proposed development or construction in neighboring counties. This points to the presence of setbacks and ordinances not limiting development, although specific requirements may be restrictive.

FIGURE 1: COUNTIES WITH ESTABLISHED WIND ENERGY ORDINANCES AND SETBACKS FROM WILDLIFE MANAGEMENT AREAS



RECOMMENDATIONS

While zoning standards should be tailored to the needs of each county and its residents, some principles related to setbacks from wind energy systems are useful as guidance to local officials.

Fixed versus variable distance setbacks

- Fixed distance setbacks offer clear and well-defined standards for turbine siting. These setbacks are also easily measured by a county and local stakeholders.
- Unlike variable distance setbacks, fixed distance standards can quickly become outdated as technology changes.
- Variable distance setbacks are much more versatile, as they are often based on the height of a wind energy system.
- Ensuring compliance may be more difficult with variable distance setbacks. It sometimes requires additional information such as system height that may not be readily available to the public.
- Many counties employed a combination of fixed and variable distance setbacks, selecting whichever was the greatest of the two in each case.

Identify setback locations

- Ordinances should clearly identify properties that are prone to setbacks from wind energy projects.
- Residences and property lines are most common, but each county may identify special locations within their boundaries that may be the subject of setbacks.
- Before determining these locations, counties should consult with comprehensive plans and review the impact competing setbacks may have on future development.

Waivers

- Competing setbacks may lead to limitations on the development of a wind energy project. One method for offering developers and landowners flexibility in the siting of projects is the inclusion of voluntary waivers in ordinances.
- Waivers act as an allowance for projects to have a diminished setback from certain properties. These waivers should be acquired after negotiations between landowners and project developers.
- Once an agreement has been reached, developers should submit written proof to a county to obtain a setback waiver.



VIEW THE ENTIRE REPORT:

“Review of Wind Energy Setbacks: Commonalities and Differences Among Three States,” a report published in 2020 by Lucas Nelsen and the Center for Rural Affairs, can be found at cfra.org/publications/ReviewOfWindEnergySetbacks.

