

WIND ENERGY AND PROPERTY VALUES

With over 70,000 operating wind turbines across the United States, hundreds of thousands of people live and work around wind energy every day.

For communities that are considering their first wind project, one common question is whether wind turbines affect land and home values. Researchers have also been interested in this topic, and several high-quality studies on the relationship between wind energy and property values have been conducted in recent years.

Recent Studies

A 2022 study published in the *Energy Policy Journal* found that wind projects led to meaningful increases in both median household income and home value.¹ Researchers noted that the significant tax benefits from wind projects contributed to increased county investment in schools, highways, and hospitals, making the counties more attractive places to live.

In 2023, Lawrence Berkley National Laboratory released a study² that examined approximately 500,000 home transactions across 34 states and 428 different wind projects between 2005 and 2020, including data from both the preconstruction and operations phases. This new, large-scale study found no impacts from wind farms on home values in rural counties (with a population under 250,000), which host 94% of all installed wind capacity.

A 2024 study published in the peer-reviewed *Proceedings of the National Academy of Sciences* focused on visibility of wind turbines from homes. This study found no effect on property values for modern wind turbines installed since 2017.³



Numerous studies show that the planning, construction, and operation of wind projects have no long-term negative impact on property values.

Good News for Wind Farmers: Wind Projects Raise Land Values

According to rural appraisers, farmland hosting wind turbines or receiving lease payments often increases in value, reflecting the new stream of steady, long-term income the property generates by harnessing wind energy. Consequently, it is not surprising that a 2014 survey of over 1,200 farmers found that those with wind turbines on their property viewed them favorably and invested twice as much money into their farms compared to farmers without turbines on their property.⁴

END NOTES

1. Eric Brunner and David Schwegman, "Commercial wind energy installations and local economic development: Evidence from U.S. counties." *Energy Policy* 165 (2022), <https://doi.org/10.1016/j.enpol.2022.112993>.
2. Eric J. Brunner, Ben Hoen, Joe Rand, and David Schwegman, "Commercial wind turbines and residential home values: New evidence from the universe of land-based wind projects in the United States." *Energy Policy* 185 (2024), <https://doi.org/10.1016/j.enpol.2023.113837>.
3. Wei Guo, Leonie Wenz, and Maximilian Auffhammer, "To see or not to see: The visual (dis)amenity value of wind turbines." *Proceedings of the National Academy of Sciences* (2024) <https://www.pnas.org/doi/10.1073/pnas.2309372121>.
4. Sarah Mills, "Farming the Wind: The Impact of Wind Energy on Farming," University of Michigan (2015), <https://closup.umich.edu/research/farming-wind-impact-wind-energy-farming>.