



This is the print version of the [Skeptical Science](http://sks.to/windhomeval) article '[Wind turbines destroy nearby property values](http://sks.to/windhomeval)', which can be found at <http://sks.to/windhomeval>.

What is the effect of wind turbines on property values?

What The Science Says:

While there might initially be a small decrease in property values, the effect all but disappears with time and distance from a wind project and the presence of a fossil fuel fired power plant has greater impact on property values.

Climate Myth: Wind turbines destroy nearby property values

"[T]he presence of a wind power facility is likely to drive down the value of surrounding properties."
([Wind Watch](#))

Multiple academic studies have assessed the impact of wind turbines on property values. Most recently, a March 2024 study found that having a wind turbine in a home's viewshed reduces the sales price by 1.12% on average (Guo et al. 2024). The study found that the negative impact of turbines on property values was primarily observed for urban, rather than rural, properties, and that any negative impact on property values disappeared within ten years after turbine installation. The study also found that turbine installations have become less disruptive to home values over time: the researchers found no statistically-significant impact on home values for turbines installed after 2017 and stated that the 1.12% average impact "is larger than the effect one would expect for recent and future installations."

For comparison, a December 2023 study found evidence that, when a wind development is announced within one mile of a home, prices decline by up to 11% compared to homes three to five miles away (Brunner et al. 2024). However, home prices return to within 2% of inflation-adjusted pre-announcement levels roughly five years after the project enters operation. The study found that the population of the county mattered: the decrease was roughly 15% in counties with over 250,000 people but statistically insignificant in counties with fewer than 250,000 people. The study also found no statistically-significant adverse impacts on home sale prices outside of 1.25 miles from the nearest turbine.

An earlier study from 2021 testing how turbine size affects property values at varying distances found that, on average, nearby turbine installation decreases home value by 1.8% (Dröes & Koster 2021). The study also found that the farther a turbine was placed from a home, the less impact it had on property value. The greatest impact, a price drop of 8.3%, occurred when a large turbine (>150 meters) was placed within 750 meters of a home. The greatest impact from a medium sized turbine (50–150 meters) was 3.4%. Beyond 2,250 meters, moreover, the 2021 study found no discernible price impact from turbines. A separate study found no impact beyond 3 km (Jensen et al. 2018). The figure below shows how, for the 2021 study, size and distance of a turbine impacted property value.

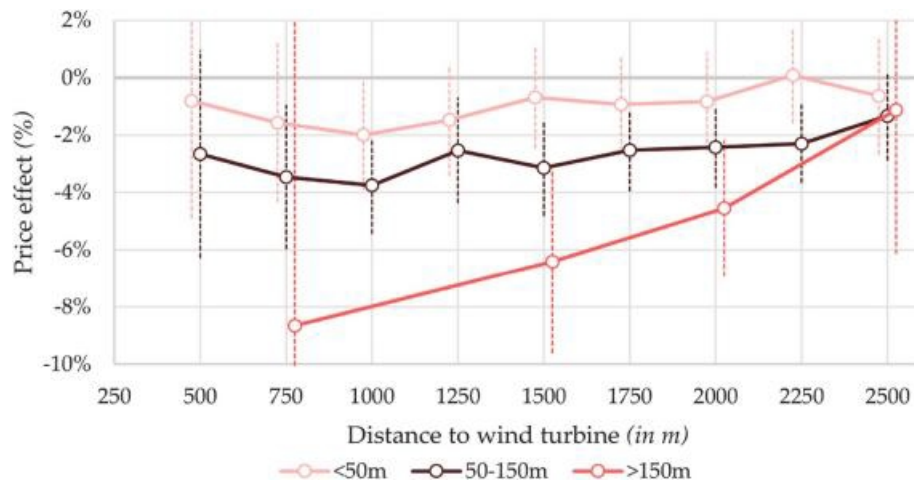


Figure 16: Graph shows how different size of wind turbines, and distance from property, affects home value. Turbine height is calculated as axis height plus half of the rotor blade diameter. Source: [Droes & Koster \(2021\)](#)

Another academic study of roughly 50,000 Rhode Island single-family home transactions located within 5 miles of a turbine site found no statistically significant price impact (Lang et al. 2014). While yet another academic study of roughly 50,000 home transactions (spread across nine states) within 10 miles of a turbine site likewise found no statistically significant evidence of a price change.¹ By contrast, a 2011 paper found that the presence of a fossil fuel fired power plant within 2 miles of one's home decreased its value by 4–7% (Davis 2011). Among the fossil fuel power plants in the study sample, 92% were natural gas plants.

Finally, these impacts can be mitigated. For example, multiple studies recommend clustering turbines within wind farms (Jensen et al. 2018, Dröes & Koster 2021). One of these studies found that adding a turbine within two kilometers of an existing turbine had a statistically insignificant impact on house prices. It bears noting, however, that turbines must be spaced in such a way as to minimize wake interference, the phenomenon where an upstream wind turbine interferes with the production of a downstream turbine (Houck 2021).

Footnotes:

[1] Lucas Nelsen, [Are Property Values Affected by Wind Farms?](#), Center for Rural Affairs (July 19, 2018).

This rebuttal is based on the report "[Rebutting 33 False Claims About Solar, Wind, and Electric Vehicles](#)" written by Matthew Eisenson, Jacob Elkin, Andy Fitch, Matthew Ard, Kaya Sittinger & Samuel Lavine and published by the [Sabin Center for Climate Change Law](#) at Columbia Law School in 2024. Skeptical Science sincerely appreciates Sabin Center's generosity in collaborating with us to make this information available as widely as possible.

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