



INDIANA RENEWABLE ENERGY

Siting through Technical Engagement and Planning (R-STEP™)

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Indiana Renewables and the Residential Real Estate Market

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Key Points

This brief summarizes the findings of two technical reports published separately. Faulk, Hicks, and Payton (2026) provided an analysis of the impact of large wind projects on nearby residential property values and Niekamp, Faulk, and Hicks (2026) provided an analysis of utility-scale solar projects on nearby residential property values in Indiana.

These reports used data on the Indiana locations of utility-scale wind or solar projects and homes sold before and after these projects became operational to estimate the impact of these projects on the sale price of homes.

The results of the hedonic models and event studies estimated in these reports reveal no statistically significant negative effects of large wind or solar projects on home prices in Indiana.

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Introduction

This brief summarizes the findings of two larger reports examining how proximity to commercial wind turbines or large solar projects affect house values in Indiana. Using data from 2004 to 2024, we provide state-specific estimates to inform state and local officials and residents.

As the number of commercial wind energy developments and utility-scale solar projects has increased, so has opposition to new projects. Among the concerns for property owners is the impact of wind turbines and large solar facilities on nearby property values.

Negative externalities associated with wind turbines that may affect property values include viewshed changes, shadow flicker, signal interference, noise/vibration, lights, drainage, and decommissioning issues. Due to these potential effects, the siting of new wind facilities in Indiana is controversial, and eight of 92 counties had imposed moratoria on wind as of 2021 (Ogle & Salazar, 2021).^[1]

1. Ogle and Salazar are currently working on an update of their 2021 report. Hartley, Weise and Schneider (2025) reported, "40 of Indiana's 92 counties had bans or impediments on new wind development and 24 counties had similar restrictions on solar energy as of September 2025."

Over the past two decades, photovoltaics technology has become more efficient, so that more power is produced per acre of land. Yet, solar projects use large plots of land, and nearby property owners and the public often have concerns related to potential disamenities, including impacts on property values, changes to viewshed, displacement of greenfields or agricultural land, loss of open space, impact on ecosystems and animal migration patterns, fire risk, drainage, and noise.

Lease payments to landowners are one of the benefits of solar projects and wind turbine placement, which guarantee a steady stream of income over the life of the project. Environmental benefits, job creation, and payments-in-lieu-of-taxes (PILOTS) or economic development payments to local governments are other benefits.

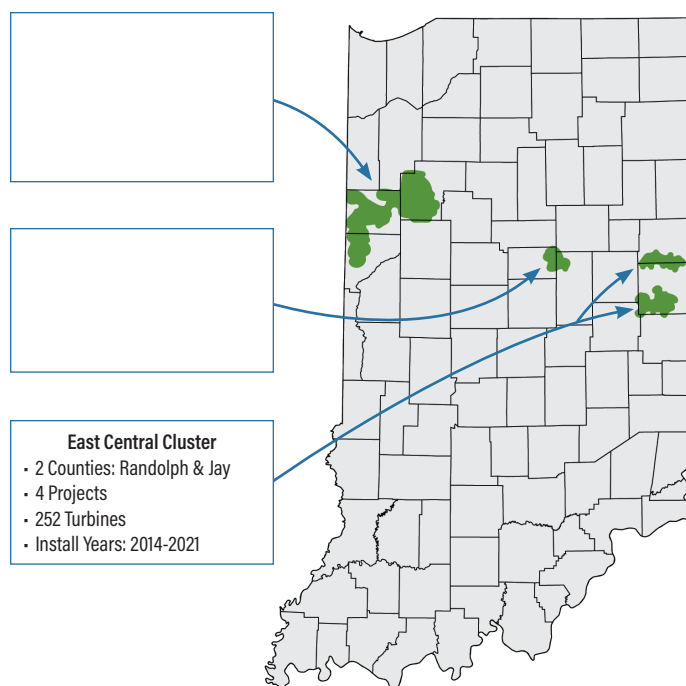
Overview of Utility-Scale Wind and Solar Power in Indiana

Since the 2008 opening of Indiana's first utility-scale wind project in Benton County, the number of wind turbines has expanded significantly, rising from 87 to 1,684 by 2023, and electricity generation from commercial wind has increased from 1.4 million MWH in 2008 to 8.84 million MWH in 2023 (a 530% increase).^[2,3] By 2023, turbines accounted for about 10% of utility-scale electricity generation in the state.^[4,5] Over this same period, Indiana emissions of sulfur dioxide, nitrogen oxide, and carbon dioxide by the electric power industry have decreased dramatically (96%, 77%, and 51% decreases measured in short tons, respectively).^[6]

Of Indiana's 92 counties, seven have commercial wind energy installations (> 600 kW). All of the completed wind projects are located in rural areas with limited residential development in the immediate vicinity. There are three clusters of utility-scale wind projects that were completed between 2008 and 2023 (see *Figure 1*).

Figure 1. Locations of Commercial Wind Energy Installations, 2008-2023

Source: U.S. Wind Turbine Database.



2. Authors' calculations using the U.S. Wind Turbine Database (Hoen et al., 2018).

3. This amount of electricity will power about 842,000 typical homes in a typical year.

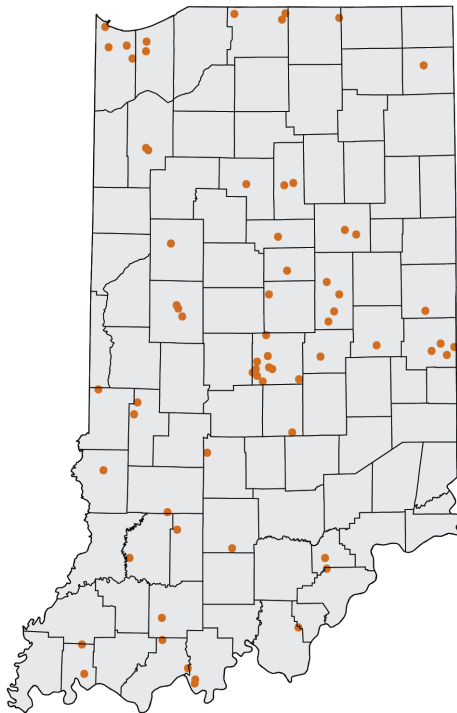
4. These statistics are from U.S. Energy Information Administration, *Indiana Electricity Profile 2023, Full Data Tables 1-17* or authors' calculations using these data.

5. Recent data released by the U.S. Energy Information Administration shows that net generation from wind turbines was 10,309,000 MWH during 2025, a 128% increase over 2015.

6. See U.S. Energy Information Administration, *Indiana Electricity Profile 2023, Table 7*.

Figure 2. Locations of Utility-Scale Solar Energy Facilities, 2011-2023

Source: Solar Energy Industries Association.



7. Recent data released by the U.S. Energy Information Administration shows that utility-scale solar energy net generation increased to 6,730,000 MWH in 2025, an increase of 117% over the previous year.

In Indiana, electric power capacity from utility-scale solar increased from 3.5 MW in 2012 to 1,289 MW in 2023 (USEIA, 2024). Utility-scale solar projects accounted for about 2% of electricity generation in the state in 2023, and they are expected to continue to grow as a component of the state's energy portfolio.^[7]

The first large-scale photovoltaic project in Indiana became operational during 2011 in Marion County. As renewables have become an increasingly important source of energy, the number of large-scale solar projects (> 1 MW AC) increased to 91 in 2023, with an additional 20 projects in process. Also, five battery storage facilities were operational, with two additional battery facilities under development. Of Indiana's 92 counties, 39 had utility-scale solar energy facilities in 2023 (Figure 2).

For more details about the location of wind and solar projects in Indiana, please see the full reports in this study series.

Data and Method of Analysis

This analysis provides state-specific estimates of the impact of utility-scale wind and solar projects on Indiana house values. We approach this with two empirical techniques: The first is a series of hedonic difference-in-differences estimates, and the second is a series of event studies. These methods allow us to compare a treatment group (homes close to a wind or solar site) and a control group (homes further from a wind or solar site) and to compare residential property sale prices before and after the wind or solar

site was operational. We analyze home sales within 5 miles of wind turbines and within 4 miles of solar sites.

Data on the location of utility-scale wind turbines is from the U.S. Wind Turbine Database (Hoen et al., 2018). Solar project locations are from the Solar Energy Industries Association's Major Project List, which contains data on solar projects with production capacity of 1 MW AC or more. Data on home sales is from the Indiana Association of Realtors' Multiple Listing Service and covers sales from 2004-2024 for most Indiana counties.

Please see the full reports for more details about the data, regression equations, and a review of existing studies.

Results

We summarize the results of the statistical analysis in the form of questions and responses. For more details, including tables with regression results, please see the full technical reports.

Does Proximity to a Wind Turbine or Large Solar Project Negatively Affect House Values?

The results of the hedonic models reveal no statistically significant negative effects of large wind or solar projects on home prices in Indiana.

For the wind turbine analysis, we examine each of the three regions separately. The results of the hedonic analysis show no statistically discernable negative effect of wind turbines on the sale price of nearby residential properties. A few of the specifications show a positive and statistically significant effect (i.e., Northwest and North Central regions). In the East Central model with distance bins, the coefficients have a negative sign, suggesting that sale prices are 11.5% lower for properties within 1 mile of a turbine, compared to properties 3 to 5 miles from a turbine. Similarly, the results suggest that properties in the 1-to-2-mile bin sell for 6.8% less than similar properties 3 to 5 miles from a turbine, but *neither of these results are statistically significantly different from zero.*

The analysis of the impact of large solar projects includes the results of several specifications of two models. The first model examines homes within 0.5 miles of a solar project, comparing them to homes near future solar projects. While the coefficients are small and negative (-0.9% to -1.4%), they are statistically insignificant (not different from zero).

The second model (stacked difference-in-differences) also shows no difference in the sale price of a home within 0.5 miles (up to 2 miles) compared to a home 2 to 4 miles away. Again, the regression coefficients for homes within 0.5 miles tend to be small and negative (-0.4 to -0.5%), suggesting a negative relationship, but they are not statistically different from zero.

Other studies have shown that the effects of wind or solar on local property values vary by state. Elmallah et al. (2023) find large and statistically significant negative effects of utility scale solar in North Carolina and New Jersey, but positive statistically insignificant estimates for California and Connecticut. Hu et al. (2025) find that negative effects of solar are concentrated in the Northeast, while Midwest estimates are positive and statistically insignificant. Our statistically insignificant results for Indiana solar are consistent with the Hu et al. (2025) results for the broader Midwest. For wind,

Lang et al. (2014) find no statistically significant negative effect of large wind projects on house prices in Rhode Island and Vyn and McCullough (2014) find no negative effect in Ontario, Canada, while Heintzelman and Tuttle (2012) do find negative effects on property values in Northern New York State. These results suggest that variation in local siting conditions and local housing markets matter.

Does Wind Turbine Density Affect House Values?

In the East Central and Northwest regions, the number of wind turbines in close proximity does not appear to affect the sale price of a home. In the North Central region, the number of turbines within 2 and 3 miles of a home does affect sale price, but we believe this result may be a false positive due to the small sample size or neighborhood effects that are not captured by the model.

We examine the relationship between turbine density (the number of turbines within a specific distance of the sold property) and the sale price of a home. The results for the East Central and Northwest regions show a negative relationship between the number of turbines and the sale price at the closest distances (-5.2% and -5.7%); however, this relationship is not statistically different from zero. The results for the North Central region show a 3.3% increase in sale price as the number of turbines increase within 2 miles. In contrast, as the number of turbines within 3 miles of a turbine increase, the sale price of a home decreases by 1.4%. This region has the smallest sample, which can lead to a false positive result where we conclude that the turbines affect sale price when they do not. Neighborhood effects at these distances (which are not captured by the model) may also lead to this result.

Does the Impact of Wind Turbines and Large Solar Projects on House Values Vary Over Time?

We estimate a series of event studies to examine the impact of wind turbines and large solar projects on home sale prices over time, before and after wind and solar projects became operational. *These event studies provide no evidence that wind or solar projects negatively affect the sale prices of homes over time.*

Figures 3-5 show event studies for homes sold within 1 mile of the nearest wind turbine (2 miles for North Central).^[8]

Home sales occurring 1 to 5 miles from the nearest turbine serve as the control group (2 to 5 miles for North Central). The vertical line denotes the 95% confidence interval. None of these graphs show a protracted decline in home sale prices after the wind turbines became operational.

The results show no statistically significant difference in sale prices for homes within 1 mile of the nearest turbine, relative to the control groups of homes beyond 1 mile (2 miles for North Central). An exception is Year 17 in the Northwest region (Figure 4), which shows a statistically significant positive increase in sale prices relative to homes more than 1 mile from the turbine.

Figures 6 and 7 (next page) show event studies for home sales occurring near large solar projects, noting the start of project construction and operation relative to the sale of the home.

Figure 3. Event Study: Home Prices within 1 Mile of Nearest Wind Turbine, East Central Region, 2005-2024

Note: First turbines operational in 2014. See Appendix Table A3 for corresponding data.

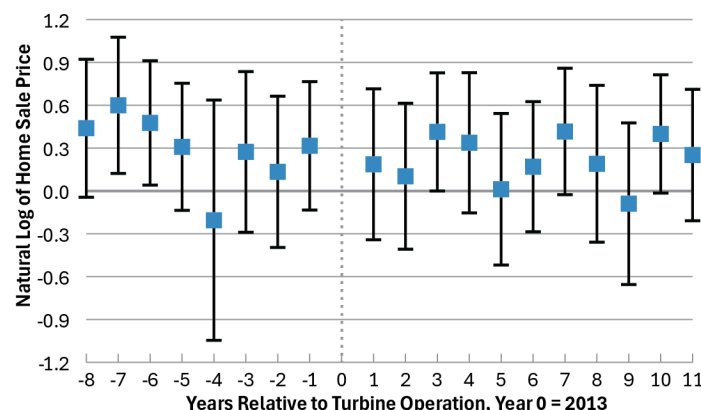


Figure 4. Event Study: Home Prices within 1 Mile of Nearest Wind Turbine, Northwest Region, 2004-2024

Note: First turbines operational in 2008. See Appendix Table A4 for corresponding data.

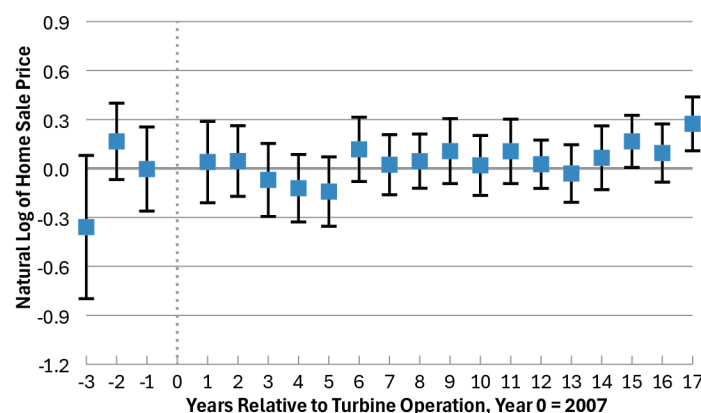
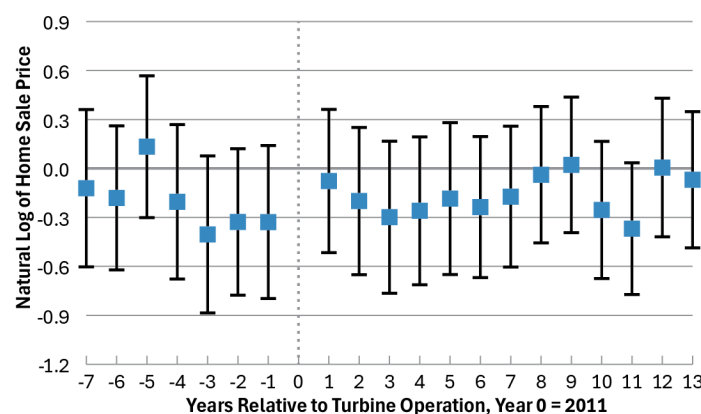


Figure 5. Event Study: Home Prices within 2 Miles of Nearest Wind Turbine, North Central Region, 2004-2024

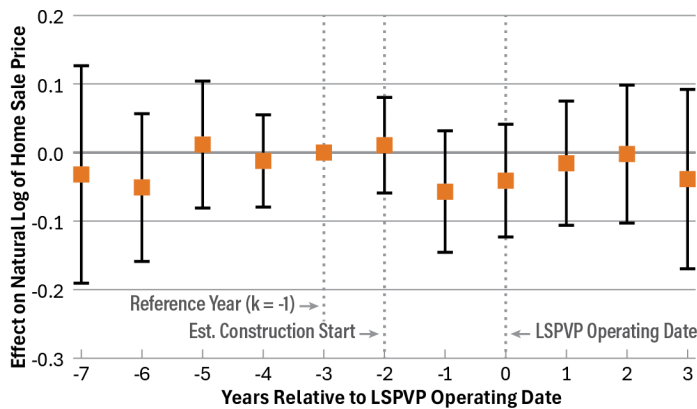
Note: First turbines operational in 2012. See Appendix Table A5 for corresponding data.



8. In the North Central Indiana region, there are not enough residential property transactions within 1 mile of a wind turbine to test effects on home sale prices at this distance, so we create distance bins for transactions within 2 miles as a treatment group for this region.

Figure 6. Event Study: Effect of Solar Project Completion on Home Prices

Note: See Appendix Table A6 for corresponding data.



In Figure 6, we compare home sales within 0.5 miles of an operating solar project (treated) versus home sales within 0.5 miles of a future solar project (not yet treated). Prices may decrease one year before the start of site operation, but the coefficient is statistically insignificant; therefore, there is no evidence that LSPVP construction or operation significantly affects home prices.

Figure 7 presents estimates from a second DiD event study specification including home sales in three distance bins near large solar projects compared to home sales 2 to 4 miles from a solar project. These event study estimates do not provide any evidence of a decline in sale prices in the years after LSPVP construction or operation. Even estimates for properties less than 0.5 miles from a large solar project are statistically insignificant in the year prior to operation and the year of operation start.

Does Solar Project Capacity Affect House Values?

To examine if the size of the solar project matters, we split the sample into home sales near solar projects above and below median production capacity (3 MW AC). The initial specification shows that homes within 0.5 miles of solar projects that are below median capacity sell for 5.7% more than similar homes that are 2 to 4 miles away, while homes near solar projects that are above median capacity sell for 6.2% less than similar homes 2 to 4 miles away. However, this relationship did not hold when additional statistical tests were performed.

Overall, these results suggest that any negative impacts of solar projects on nearby house prices may be driven by larger-capacity projects, though results are not definitive.

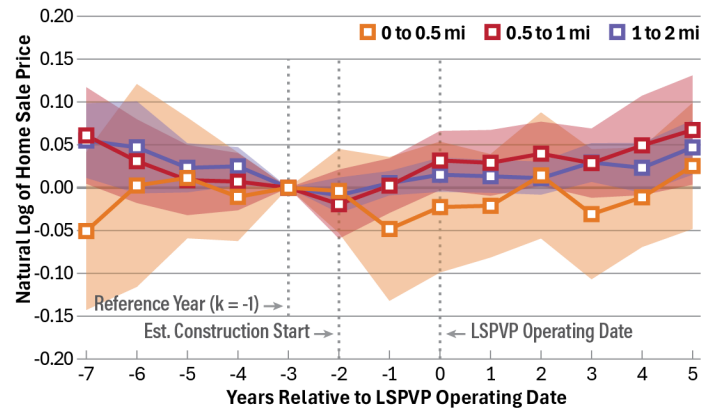
Do Solar Projects Have a Different Effect on House Values in Rural or Urban Areas?

Other studies (Elmallah et al., 2023; Gaur & Lang, 2023) found a differential effect for solar projects in rural areas. In these studies, the sale price was 2% to 6% lower for rural homes within 1 mile of a solar project compared to homes farther away, while in urban areas there was no difference in sale price.

The results for Indiana show no statistically significant difference in the sale price of homes near solar projects in rural or urban areas.

Figure 7. Stacked DiD: Effect of Solar Project Completion on Home Prices

Note: See Appendix Table A7 for corresponding data.



Do Solar Projects Located on or near Brownfields Have a Different Effect on House Values?

Brownfield sites are often abandoned, vacant, or underutilized properties that are marred with environmental contaminants and carry high remediation costs. Solar projects developed on or near brownfield sites may have a positive impact on local property values, as they may serve as a welcome alternative to vacant or underdeveloped lots. In their analysis, Hu et al. (2025) found that solar projects located on brownfields had a small positive and statistically significant impact on residential property values for homes within 3 miles of these projects.

We find no statistical evidence that solar projects located near brownfields have an effect on the average sale price of residential properties in Indiana.

Does the Type of Power Provider Affect House Values?

We examined the relationship between home sale prices and proximity to LSPVPs for three types of providers: (1) independent power producers, which sell electricity to utilities and end users, often operating through power purchase agreements; (2) municipal owned utilities, which operate primarily through the Indiana Municipal Power Agency; and (3) investor-owned utilities, which are privately owned, publicly traded, for-profit companies.^[9]

We find that home sales occurring within 0.5 miles of investor-owned utilities experienced a 7.9% increase in sale price and homes within 0.5 to 1 mile experienced a 4.4% increase after the solar project became operational, relative to homes 2 to 4 miles away.

This positive result may occur because investor-owned utilities better design and maintain their solar facilities to minimize disamenity effects. Another likely explanation for the observed positive relationship between home prices and the presence of large investor-owned solar projects is the offsetting capitalization of property tax revenues in the taxing districts.

9. Investor-owned utilities include Northern Indiana Public Service Company (NIPSCO), Indiana-Michigan Power (I&M), Duke Energy, Indianapolis Power & Light, and Vectren. One federally owned utility, two commercial utilities, and several rural electric cooperatives also operate in Indiana, but sample sizes were too small for statistical analysis.

Summary and Conclusions

This brief summarizes two reports examining the effects of utility-scale wind and solar projects on nearby residential property values using hedonic difference-in-difference regression models and event studies. The results of the hedonic models and event study analysis reveal no statistically significant negative effects of large wind or solar projects on home prices in Indiana.

While these results indicate a lack of negative effects on nearby residential properties, this does not preclude negative effects occurring on individual properties. Regression results are averages, so some nearby properties may have been negatively impacted. This study shows that wind and solar projects do not have widespread negative effects on residential properties proximate to wind turbines or large solar facilities.

We note that the deployment and siting of individual wind turbines and solar facilities followed a permitting process that was designed to mitigate the effects of both wind and solar projects on nearby homes. As an example, *Figure 8* displays the location of wind turbines and home sales in the Northwest region, 2004-2024.

One potential interpretation of our findings is that *the permitting process efforts to mitigate or minimize the effects of wind turbines and solar facilities was largely successful. And, it is that which drives the lack of statistical significance in our findings.*

For solar projects, we also examine heterogeneous effects based on a facility's power capacity, location in an urban or rural area, proximity to brownfield sites, and type of power provider. Analysis of facility capacity (measured in MW AC) suggests that larger solar projects have a statistically significant, negative effect (-6.2%) on sale prices, but this result is not robust across various specifications.

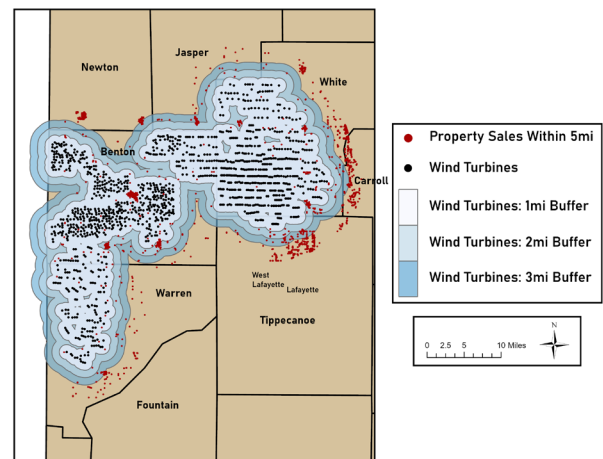
Unlike Elmallah et al. (2023), we find no evidence of negative effects of solar projects on residential property values in rural areas where scenic land may be displaced. Our model results found no statistically significant effect of solar projects on home sale price after solar facilities become operational at any distance in urban, mixed, or rural areas. Moreover, our results provide no evidence that solar projects have a positive effect on the sale price of properties located near brownfields. Finally, the type of provider appears to affect property values with properties within 1 mile of investor-owned utilities experiencing positive effects. This positive effect may result from the capitalization effects operating through the property tax system and/or design and maintenance of the solar facilities to reduce disamenity effects.

We have not examined the fiscal effects of wind and solar projects on the local economy; we leave that for future work.

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Figure 8. Residential Property Sales within 5 Miles of a Wind Turbine, Northwest Region, 2004-2024

Source: Indiana Association of Realtors MLS data and U.S. Wind Turbine Database.



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Appendix A. Corresponding Data

See Pages 8-10.

Appendix A. Corresponding Data

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Table A5. Event Study: Home Values within 2 Miles of Nearest Wind Turbine, North Central Region, 2004-2024

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Table A6. Event Study: Effect of Solar Project Completion on Home Prices

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Table A7. Stacked DiD Event Study: Effect of Solar Project Completion on Home Prices

Table A1. Locations of Commercial Wind Energy Installations in Indiana, 2008-2023

Source: U.S. Wind Turbine Database. Note: Data corresponds with Figure 1.

Category	Northwest Indiana Cluster	North Central Indiana Cluster	East Central Indiana Cluster
# of Counties	3	2	2
Which Counties	Benton, White, & Warren	Tipton & Madison	Randolph & Jay
# of Projects	16	1	4
# of Turbines	1,307	125	252
Install Years	2008-2023	2012	2014-2021

Table A2. Locations of Utility-Scale Solar Energy Sites in Indiana, 2011-2023

Source: Solar Energy Industries Association. Note: Data corresponds with Figure 2.

County	Photovoltaic	Batteries	Hybrid
Cass	1		
Clark	1	1	
Clay	2		
Daviess	1		
Decatur	1		
DeKalb	1		
Dubois	1		
Elkhart	1		
Grant	3		
Greene	2		
Hancock	1		
Harrison	1		
Henry	2		
Howard	1		
Jackson	1		
Jasper	2		
Johnson	1		1
Lake	4		
Lawrence	1		
Madison	8		

County	Photovoltaic	Batteries	Hybrid
Marion	18	1	
Marshall	1		
Martin			1
Miami	3		
Monroe	1		
Montgomery	5		
Perry	2		
Porter	2		
Randolph	1		
Saint Joseph	4		
Scott	1		
Spencer	2		
Sullivan	1		
Tippecanoe	1		
Tipton	1		
Vanderburgh	1		1
Vigo	1		
Wayne	6		
Whitley	1		

Table A3. Event Study: Home Values within 1 Mile of Nearest Wind Turbine, East Central Region, 2005-2024

Note: Year 0 = 2013. First turbines operational in 2014. Data corresponds with *Figure 3*.

Year	Estimate	Std Error	CI Upper	CI Lower
-7	0.5996	0.2432	1.0764	0.1229
-5	0.3086	0.2270	0.7536	-0.1364
-3	0.2734	0.2871	0.8361	-0.2893
-1	0.3162	0.2293	0.7657	-0.1333
1	0.1864	0.2696	0.7147	-0.3419
3	0.4132	0.2108	0.8264	-0.0001
5	0.0118	0.2706	0.5421	-0.5186
7	0.4163	0.2259	0.8590	-0.0264
9	-0.0892	0.2887	0.4766	-0.6550
11	0.2515	0.2348	0.7116	-0.2087

Table A4. Event Study: Home Values within 1 Mile of Nearest Wind Turbine, Northwest Region, 2004-2024

Note: Year 0 = 2007. First turbines operational in 2008. Data corresponds with *Figure 4*.

Year	Estimate	Std Error	CI Upper	CI Lower
-2	0.1659	0.1193	0.3998	-0.0680
0	-	-	-	-
2	0.0454	0.1105	0.2619	-0.1712
4	-0.1211	0.1055	0.0856	-0.3279
6	0.1169	0.1004	0.3136	-0.0798
8	0.0447	0.0847	0.2108	-0.1214
10	0.0186	0.0937	0.2023	-0.1651
12	0.0258	0.0755	0.1738	-0.1221
14	0.0653	0.0997	0.2608	-0.1302
16	0.0942	0.0910	0.2725	-0.0841

Table A5. Event Study: Home Values within 2 Miles of Nearest Wind Turbine, North Central Region, 2004-2024

Note: Year 0 = 2011. First turbines operational in 2012. Data corresponds with *Figure 5*.

Year	Estimate	Std Error	CI Upper	CI Lower
-7	-0.1214	0.2458	0.3604	-0.6033
-6	-0.1804	0.2251	0.2609	-0.6216
-5	0.1333	0.2217	0.5678	-0.3013
-4	-0.2043	0.2416	0.2692	-0.6778
-3	-0.4041	0.2456	0.0772	-0.8854
-2	-0.3275	0.2288	0.1210	-0.7760
-1	-0.3283	0.2391	0.1404	-0.7969
0	-	-	-	-
1	-0.0768	0.2239	0.3620	-0.5157
2	-0.1998	0.2303	0.2516	-0.6513
3	-0.2985	0.2376	0.1673	-0.7642
4	-0.2595	0.2312	0.1938	-0.7127
5	-0.1848	0.2372	0.2801	-0.6497
6	-0.2365	0.2204	0.1955	-0.6684
7	-0.1725	0.2203	0.2593	-0.6044
8	-0.0383	0.2131	0.3794	-0.4559
9	0.0218	0.2119	0.4372	-0.3935
10	-0.2539	0.2143	0.1661	-0.6740
11	-0.3688	0.2057	0.0345	-0.7720
12	0.0055	0.2166	0.4300	-0.4191
13	-0.0690	0.2129	0.3483	-0.4862

Table A6. Event Study: Effect of Solar Project Completion on Home Prices

Note: We compare home sales within 0.5 miles of an *operating* solar project (treated) versus home sales within 0.5 miles mile of a *future* solar project (not yet treated). Confidence Interval (CI) is 95%. Data corresponds with *Figure 6*.

Year	Estimate	Std Error	CI Lower	CI Upper
-6	-0.0510	0.0539	-0.1588	0.0567
-4	-0.0123	0.0337	-0.0797	0.0550
-2	0.0107	0.0349	-0.0590	0.0804
0	-0.0410	0.0411	-0.1231	0.0411
2	-0.0022	0.0504	-0.1029	0.0984

Table A7. Stacked DiD Event Study: Effect of Solar Project Completion on Home Prices

Note: Confidence Interval (CI) is 95%. Data corresponds with *Figure 7*.

Panel A. Distance Bin: Homes Located 0-0.5 Miles from Solar Project

Distance Bin	Year	Estimate	Std Error	CI Lower	CI Upper
0-0.5 mi	-6	0.0026	0.0604	-0.1157	0.1209
0-0.5 mi	-4	-0.0107	0.0263	-0.0622	0.0409
0-0.5 mi	-2	-0.0038	0.0250	-0.0528	0.0451
0-0.5 mi	0	-0.0226	0.0389	-0.0989	0.0537
0-0.5 mi	2	0.0143	0.0375	-0.0592	0.0878
0-0.5 mi	4	-0.0112	0.0296	-0.0692	0.0468

Panel B. Distance Bin: Homes Located 0.5-1 Mile from Solar Project

Distance Bin	Year	Estimate	Std Error	CI Lower	CI Upper
0.5-1 mi	-6	0.0310	0.0249	-0.0178	0.0797
0.5-1 mi	-4	0.0071	0.0170	-0.0263	0.0404
0.5-1 mi	-2	-0.0192	0.0205	-0.0594	0.0211
0.5-1 mi	0	0.0317	0.0176	-0.0027	0.0662
0.5-1 mi	2	0.0396	0.0191	0.0022	0.0770
0.5-1 mi	4	0.0493	0.0296	-0.0087	0.1073

Panel C. Distance Bin: Homes Located 1-2 Miles from Solar Project

Distance Bin	Year	Estimate	Std Error	CI Lower	CI Upper
1-2 mi	-7	0.0550	0.0222	0.0115	0.0985
1-2 mi	-6	0.0471	0.0274	-0.0066	0.1007
1-2 mi	-5	0.0232	0.0146	-0.0054	0.0518
1-2 mi	-4	0.0249	0.0114	0.0025	0.0473
1-2 mi	-3	0.0000	0.0000	0.0000	0.0000
1-2 mi	-2	-0.0089	0.0105	-0.0295	0.0118
1-2 mi	-1	0.0053	0.0072	-0.0089	0.0194
1-2 mi	0	0.0151	0.0101	-0.0048	0.0350
1-2 mi	1	0.0133	0.0098	-0.0059	0.0325
1-2 mi	2	0.0111	0.0098	-0.0081	0.0304
1-2 mi	3	0.0294	0.0115	0.0068	0.0520
1-2 mi	4	0.0232	0.0148	-0.0058	0.0523
1-2 mi	5	0.0470	0.0162	0.0153	0.0787