

# **PANTHER GROVE WIND ENERGY FACILITY PROPERTY IMPACT STUDY**

**Prepared by Gary K. DeClark, MAI, CRE, FRICS, R/W-AC**



# Qualifications

**Gary K. DeClark, MAI, CRE, FRICS, R/W-AC**  
**Senior Managing Director**  
Valbridge Property Advisors | Chicago Metro

*Independent Valuations for a Variable World*

## State Certifications

Certified General Appraiser  
States of Illinois, Indiana, Michigan, and Wisconsin

## Education

Masters of Arts  
Real Estate and Urban Development  
University of Georgia

Bachelor of Science  
Finance  
University of Illinois

## Membership/Affiliations

Member: Appraisal Institute – MAI Designation  
Member: Counselors of Real Estate – CRE Designation  
Fellow: Royal Institution of Chartered Surveyors – FRICS Designation  
Member: International Right of Way Association – R/W-AC Designation  
Member: Chicago Estate Planning Council

## Appraisal Institute & Related Courses

Continuing education courses and seminars taken through the Appraisal Institute, Counselors of Real Estate, International Right of Way Association, and other real estate organizations.

## Experience

Senior Managing Director  
Valbridge Property Advisors | Chicago Metro (2017-Present)

Senior Vice President  
Valuation and Advisory Division, CBRE, Inc. (2014 - 2017)

Managing Director  
Integra Realty Resources – Chicago Metro (1999-2014)

Valuation and consulting assignments include unique and unusual property types, special purpose parcels, partial and full takings in eminent domain including temporary and permanent easements, fractional interests, condominium developments, apartments, vacant land, office buildings, hotels/motels, service stations, retail, industrial warehouse and manufacturing plants, research and development facilities, landfills, contaminated properties, properties with construction defects, and review appraisals.

Value impact study work includes landfills, waste transfer stations, wind farms, quarries, big box retail, houses of worship, cell towers, and high power tension lines.

Mr. DeClark has provided valuation services in a wide variety of complex civil litigation including real estate, land use cases, condemnation, estate matters, property taxation, contract disputes, partnership and corporate disputes, environmental lawsuits, professional negligence cases, financing, construction defects, and bankruptcy/creditors matters.

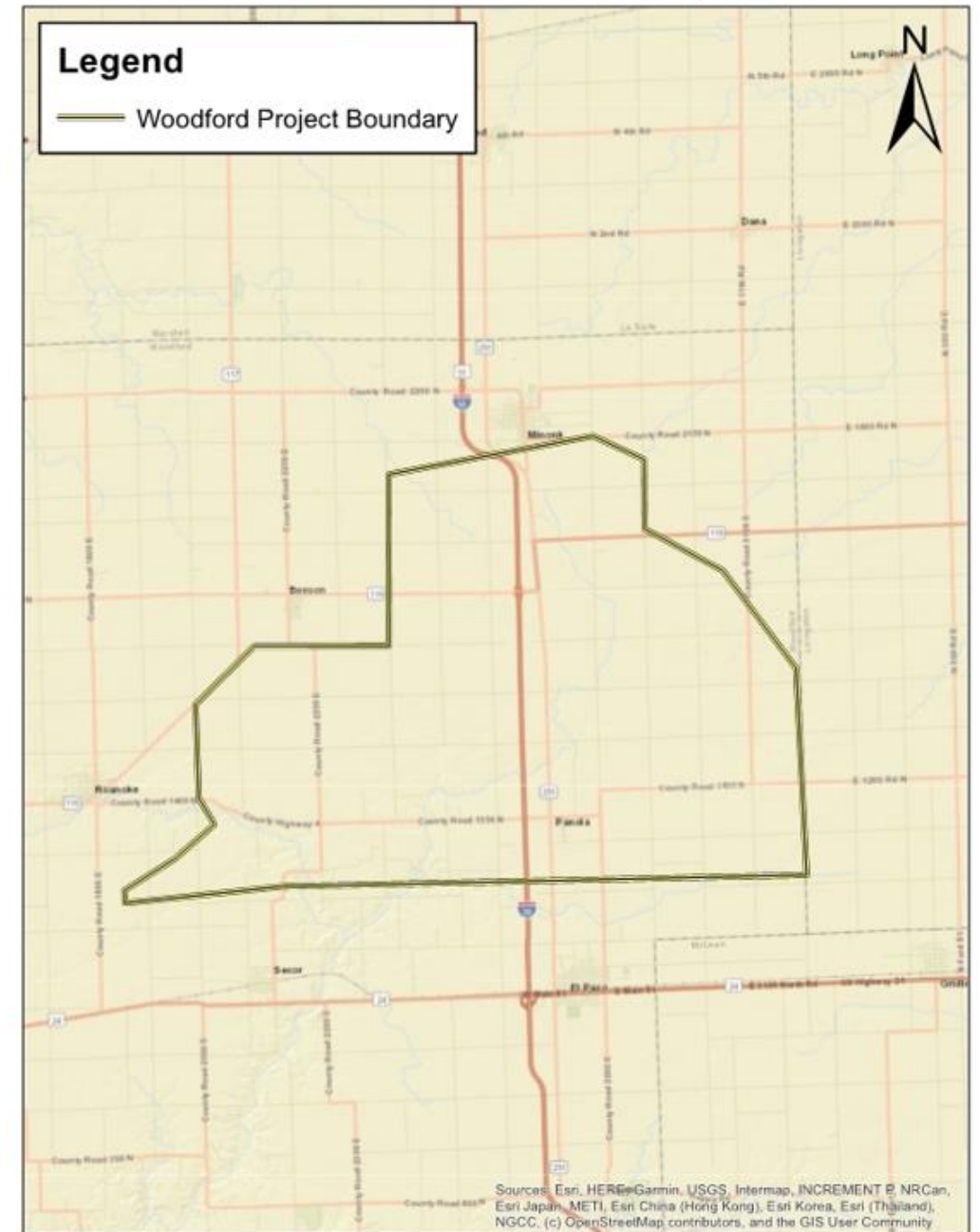
Qualified as an expert witness in federal district courts in northern Illinois, northern and southern Indiana, and southern New York, county circuit courts in Illinois of Cook, Lake, McHenry, Winnebago, Ogle, DeKalb, DuPage, Kane, Grundy, Kendall, Kankakee, Champaign, Peoria and Tazewell. Indiana counties include Lake and Marion. Wisconsin counties include Kenosha, Racine, Milwaukee, Brown, and Dane. Other venues include the U.S. Tax Court and various real estate Tax Tribunals or Appeals Boards in Illinois, Indiana, and Wisconsin. He is a highly experienced forensic appraiser having provided testimony in many trials/hearings over 39 years of practice.

Mr. DeClark has been a guest lecturer at DePaul University's Graduate School of Business and has taught undergraduate courses in real estate appraisal at Northwestern University. He has also taught appraisal theory for the Society of Real Estate Appraisers prior to its merger with the Appraisal Institute. Lastly, he authored many articles and columns in various aspects of real estate analysis over his career.

# PANTHER GROVE WIND ENERGY FACILITY

## The Goal of The Impact Study

Our assignment is to estimate the effect if any on single-family residential and farmette real estate housing values with and without the influence of a wind energy facility.



## How Appraisers Do Impact Studies?

**Paired Data Analysis.** “A quantitative technique used to identify and measure adjustments to the sales prices or rents of comparable properties. To apply this technique, sales or rental data on nearly identical properties, or adjusted data, is compared to isolate and estimate a single characteristic’s effect on value or rent. Often referred to as paired sales analysis.”\*

\*Appraisal Institute, Dictionary of Real Estate Appraisal, 6th Edition, Page 167

# How the Impact Study Was Conducted?

- **Methodology**

We studied the influence of wind turbines in Woodford County single family residential housing sales and farmettes. To expand our study outside of Woodford County, we analyzed single family housing and farmette sales in the Illinois Counties of Henry, LaSalle, Marshall, Mercer, Moultrie and Putnam County.

- **Target Group**

A target group is a statistically significant portion of participants in an experiment that are reasonably proximate and maybe affected by the exposure to wind turbines.

For our target groups we have defined the area of influence as within 7 miles of a wind turbine located with a wind energy facility.

- **Control Group**

A control group is a statistically significant portion of participants in an experiment that are shielded and removed from exposure wind turbines.

For our control groups we have defined the area of influence as beyond 11 miles of a wind turbine located with a wind energy facility.

- **We compared single family and farmette pricing in the target group and control group.**

## Criteria for Target and Control Group

- Located in an area conducive for a wind energy facility.
- Similar demographic to the subject's footprint area.
- Distance from nearest wind energy facility.
- Single family housing and farmettes.
- Within Illinois.
- For this study, a farmette is defined as a parcel improved with a single-family house, in a country setting abutting large tracts of undeveloped land. Also included in this definition are farmettes created by the sale of farms where the farmhouse and cropland were partitioned and sold separately.
- Single family housing are within the municipal boundaries.
- Farmettes are outside the municipal boundaries.

## What Defines the Area of Influence From Wind Turbines?

For our target groups we have defined the area of influence as in a range of 7 miles of a wind turbine located with a wind energy facility.

For our control groups we have defined the area of influence as beyond 11 miles (18-mile average) of a wind turbine located with a wind energy facility.

## Sale Data Sources

- United States Census Bureau
- Site to Do Business (demographic data source)
- Claritas (demographic data source)
- Midwest Real Estate Data MRED (Multiple Listing Service)
- Realtors Property Resource (property database associated with MRED)
- Zillow (property database)
- County Recorder of Deeds Office
- County Assessor's Office
- County Treasurer's Offices
- National Renewable Energy Laboratory
- Appraisal Institute



# Demographics

- Demographics is a series of statistical characteristics of human populations (such as age or income) used specially to identify markets.
- The common variables that are gathered in demographic research include population, age, income level, employment, location, homeownership, and level of education.
- Our study demographics concentrated on population, median household income, median home value and per capita income.
- We compared the demographics of the various control and target groups with those of the subject, being defined as found lying within a 7-mile radius of the approximate center of the Panther Grove Wind Energy Facility.
- We used Site to Do Business and Claritas as our demographic data source.

# Woodford County Demographics

- This chart illustrates the key demographics of Woodford County as a whole, then within a 2-, 5-, and 7-mile radius using the approximate center of the Panther Grove Wind Energy Facility.
- For our subject area analysis the primary focus was the data within a 7-mile radius from Panther Grove Center
- The 7-mile radius represents the Panther Grove Wind Energy Facility area of footprint coverage.

Demographics	Woodford County	Wind Facility Radius From Panther Grove Center		
		2 miles	5 miles	7 miles
<b>Population Summary</b>				
2020 Total Population	38,787	108	2,909	4,207
<b>Median Household Income</b>				
2020	\$74,942	\$63,826	\$64,850	\$65,522
<b>Median Home Value</b>				
2020	\$180,824	\$132,500	\$113,422	\$134,914
<b>Per Capita Income</b>				
2020	\$35,827	\$35,645	\$32,154	\$34,118
<b>Compiled by Valbridge Property Advisors   Chicago</b>				

# Subject Demographic Comparison

This chart displays demographics within the 7-mile subject radius when compared to the country, state, MSA and county for:

- Population
- Median Household Income
- Median Home Value
- Per Capita Income

					Subject	
	United States	Illinois	Peoria, IL MSA	Woodford County	Wind Facility Radius From Panther Grove Center	Difference From Woodford County and 7-Mile Radius
					7 miles	
<b>Population Summary</b>						
2020 Total Population	333,793,107	12,830,632	380,447	38,787	4,207	
<b>Median Household Income</b>						
2020	\$66,010	\$68,850	\$61,720	<b>\$74,942</b>	<b>\$65,522</b>	<b>-13%</b>
<b>Median Home Value</b>						
2020	\$245,219	\$212,960	\$139,990	<b>\$180,824</b>	<b>\$121,064</b>	<b>-33%</b>
<b>Per Capita Income</b>						
2020	\$35,593	\$36,871	\$33,367	<b>\$35,827</b>	<b>\$34,118</b>	<b>-5%</b>
Compiled by Valbridge Property Advisors   Chicago						

## Subject Demographic Summary

- The 2020 total Median Household Income for the subject area is less than the county by 13%, higher than the Peoria MSA and similar to state and country.
- The 2020 total Median Home Value for the subject area is less than the county by 33%, less than the state, Peoria MSA, and the country.
- The 2020 total per capita Income for the subject area is less than the county by 5%, less than the state, greater Peoria MSA, and the less than the country.
- The formula to calculate the percent difference between the subject and Woodford County is;  
$$\text{Subject 7-Mile Radius} - (\text{less}) \text{ Woodford County} / (\text{divided by}) \text{ Woodford County} = (\text{equals}) \% \text{ difference.}$$

# Woodford County Single Family Residential Housing Located in Municipalities

This study set out to determine the property value impacts from the existing Minok wind project located in Woodford County. For the control group we chose, and surveyed the municipalities of Metamora, Eureka, and Roanoke located outside the influence of a wind turbine. For the target group we chose, and surveyed the municipalities of Benson, El Paso and Minok located inside the influence of a wind turbine. There were 125 sales that occurred during the twelve-month period from August 12, 2019 and August 11, 2020. Of the 125 sales, 67 had at least one prior sale dating back to the late 1990's. We used these 67 sales to measure the growth rate by comparing the last sale to the earliest sale. The growth rate was then annualized. We excluded 8 renovated, bank, and sheriff sales. We used Midwest Real Estate Data, Realtors Property Resource and Zillow. The sales were confirmed using public records available from the county recorder of deeds, assessor, and treasurers' offices.

## **For our control and target area data sets we used the following determinants:**

- Distance from nearest wind energy facility.
- Located in an area conducive for a wind energy facility.
- In Woodford County.
- Similar demographic to the Panther Grove Wind Energy Facility using a 7-mile radius from its approximate center.



# Woodford County Single Family Residential Housing Located in Municipalities

Our total sample consisted of the following:

- Total population size of 16,288.
- Sale of 125 single family residences occurring within August 12, 2019 and August 11, 2020.
- Of the 125 sales, 8 had been extensively renovated, a bank sale or a sheriff sale. These were excluded from our results.
- Of the 125 sales, 67 had prior sales dating back to the late 1990's. We used these 67 sales to measure the growth rate by comparing the last sale to the earliest sale. The growth rate was then annualized.

	Control				Target				Combined Total
	Outside the Influence of Wind Turbines				Within the Area Influence of Wind Turbines				
	Metamora	Eureka	Roanoke	Control Total/Average	Benson	El Paso	Minonk	Target Total/Average	
<b>Population Summary</b>									
2020 Total Population	3,829	5,192	2,135	11,156	389	2,766	1,977	5,132	
<b>Median Household Income</b>									
2020	\$73,353	\$60,481	\$74,229	\$69,354	\$69,021	\$63,169	\$63,675	\$65,288	
<b>Median Home Value</b>									
2020	\$181,886	\$153,867	\$149,758	\$161,837	\$116,489	\$139,819	\$107,258	\$121,189	
<b>Per Capita Income</b>									
2020	\$32,588	\$28,451	\$36,959	\$32,666	\$30,533	\$33,832	\$31,812	\$32,059	
<b>Sales Transactions</b>									
Sale Transaction Dates	8/12/19 - 8/11/20	8/12/19 - 8/11/20	8/12/19 - 8/11/20		8/12/19 - 8/11/20	8/12/19 - 8/11/20	8/12/19 - 8/11/20		
Earliest sale Occurred	1997	1996	1998		2006	1997	1996		
Sample Size	32	18	23	73	5	32	15	52	125
Rehabs / Bank / Sheriff Sales Excluded	0	4	0	4	0	3	1	4	8
Resales	20	9	10	39	3	18	7	28	67
<b>Sales Range</b>									
Average	\$191,561	\$123,943	\$99,770	\$138,425	\$67,280	\$121,024	\$85,821	\$91,375	
<b>Annualized Growth Rate</b>									
Average	1.5%	0.7%	1.9%	1.4%	1.2%	1.7%	0.9%	1.3%	
Calculation excludes rehabs, bank & sheriff sales.									
<b>Listing Period (Days)</b>									
Average	173	164	158	165	372	135	267	258	
<b>Distance to Wind Energy Facility (Miles)</b>									
	18.59	11.67	11.50		6.66	6.65	2.23		
Compiled by Valbridge Property Advisors   Chicago									

# Woodford County Single Family Residential Housing Located in Municipalities

The control group had an average growth rate of 1.4%. The target group had an average growth rate of 1.3%.

We have concluded there is no negative impact on the value of single family residential real estate in this area because the rate of appreciation was reasonably similar in the target area proximate to the nearest wind energy facility as compared to the appreciation rate of the control area away from the wind energy facility

Based on the analysis and data presented and/or held in our file, we have concluded there is no detriment to the price of single family residential real estate when comparing the sale of single-family residences outside and inside the influence of a wind energy facility.

	Control Outside the Influence of Wind Turbines				Target Within the Area Influence of Wind Turbines			
	Metamora	Eureka	Roanoke	Control Total/Average	Benson	El Paso	Minonk	Target Total/Average
<b>Annualized Growth Rate</b>								
<b>Average</b>	1.5%	0.7%	1.9%	1.4%	1.2%	1.7%	0.9%	1.3%
Calculation excludes rehabs, bank & sheriff sales.								
<b>Listing Period (Days)</b>								
Average	173	164	158	165	372	135	267	258
<b>Distance to Wind Energy Facility (Miles)</b>	18.59	11.67	11.50		6.66	6.65	2.23	
Compiled by Valbridge Property Advisors   Chicago								

## Farmette Sales

For the control and target groups we chose and surveyed farmettes outside municipal boundaries located in the Illinois counties of Woodford, Marshall, Putnam, and Moultrie County. Due to a lack of recent sale data for a twelve-month period, sales data for farmettes went back further and was for a period from August 12, 2017 and September 22, 2020. There were 102 sales of farmettes occurring within this time frame. Of the 102 sales, 44 had prior sales dating back to the late 1990's. We used these 44 sales to measure the growth rate by comparing the last sale to the earliest sale. The growth rate was then annualized. We excluded 10 renovated, bank, and sheriff sales. We used Midwest Real Estate Data, Realtors Property Resource and Zillow. The sales were confirmed using public records available from the county recorder of deeds, assessor, and treasurers' offices.

### **For our control and target area data sets we used the following determinants:**

- Distance from nearest wind energy facility.
- Located in an area conducive for a wind energy facility.
- Sales occurring from August 12, 2017 to September 22, 2020.
- Similar demographic to the Panther Grove Wind Energy Facility using a 7-mile radius from its approximate center.



# Farmette Sales

Our total sample consisted of the following:

- Total population size of 16,288.
- Sale of 102 farmettes occurring within August 12, 2017 and September 22, 2020.
- Of the 102 sales, 10 had been extensively renovated, a bank sale, or sheriff sale. These 10 sales were excluded from our results.
- Of the 102 sales, 44 had prior sales dating back to the late 1990's. We used these 44 sales to measure the growth rate by comparing the last sale to the earliest sale. The growth rate was then annualized.



# Farmette Sales

	Control Outside the Influence of Wind Turbines						Target Within the Area Influence of Wind Turbines			Total		
	Marshall County	Marshall County Farmettes	Moultrie County	Moultrie County Farmettes	Putnam County	Putnam County Farmettes	Wind Facility Radius From Panther Grove	Woodford County	Woodford County Farmettes			
<b>Population Summary</b>												
2020 Total Population	12,567	Individual statistics for each Farmette is not available from the U.S. Census Bureau	14,997	Individual statistics for each Farmette is not available from the U.S. Census Bureau	6,175	Individual statistics for each Farmette is not available from the U.S. Census Bureau	4,207	38,787	Individual statistics for each Farmette is not available from the U.S. Census Bureau			
<b>Median Household Income</b>												
2020	\$56,586		\$54,411		\$62,854		\$65,522	\$74,942				
<b>Median Home Value</b>												
2020	\$117,089	\$117,541	\$134,117	\$121,064	\$180,824							
<b>Per Capita Income</b>												
2020	\$29,947	\$26,758	\$35,052	\$34,118	\$35,827							
<b>Sales Transactions</b>												
Sale Transaction Dates		9/23/2017-9/22/2020		9/23/2019-9/22/2020		9/23/2017-9/22/2020			8/12/17 - 8/11/20			
Earliest sale Occurred		1992		2005		2003			1998			
Sample Size		23		30		36			13	102		
Rehabs / Bank / Sheriff Sales Excluded		3		6		1			0	10		
Resales		15		14		5			10	44		
<b>Sales Range</b>												
Average		\$152,686		\$172,620		\$147,400			\$177,754			
<b>Annualized Growth Rate</b>												
Average		1.5%		0.1%		1.2%			2.2%			
Calculation excludes rehabs, bank & sheriff sales.												
<b>Distance to Wind Energy Facility (Miles)</b>		11.5		29.4		16.4			5.1			

Compiled by Valbridge Property Advisors | Chicago

# Conclusion Farmette Sales

The control group had average growths of 1.5%, .07% and 1.24%. The target group had an average growth rate of 2.2%.

We have concluded there is no negative impact on the value of farmette real estate in this area because the rate of appreciation was reasonable similar in the target area's proximate to the nearest wind energy facility than the growth rate of the control area away from the wind energy facility.

Based on the analysis and data presented and/or held in our file, we have concluded there is no detriment to the price of farmette real estate when comparing the sale of farmettes outside and inside the influence of a wind energy facility.

	Control Outside the Influence of Wind Turbines			Target Within the Area
	Marshall County Farmettes	Moultrie County Farmettes	Putnam County Farmettes	Woodford County Farmettes
<b>Annualized Growth Rate</b>				
<b>Average</b>	1.5%	0.1%	1.2%	2.2%
Calculation excludes rehabs, bank & sheriff sales.				
<b>Distance to Wind Energy Facility (Miles)</b>	11.5	29.4	16.4	5.1
Compiled by Valbridge Property Advisors   Chicago				

## Outside Woodford County Single Family Residential Housing

Control and target areas were noted in two groups. For the control groups we chose and surveyed the municipalities of Peru and Aledo located outside the influence of a wind turbine. For the target group we chose, and surveyed the municipalities of Cambridge, Woodhull and Ohio located inside the influence of a wind turbine. For Group 1 we compared Peru to Cambridge. For group two we compared Aledo to Woodhull and Ohio.

In the two groups there were 171 sales that occurred during the twelve-month period from May 5, 2019 and May 7, 2020. Of the 171 sales, 62 had prior sales dating back to the late 1990's. We used these 62 sales to measure the growth rate by comparing the last sale to the earliest sale. The growth rate was then annualized. We excluded 21 renovated, bank, and sheriff sales. We used Midwest Real Estate Data, Realtors Property Resource and Zillow. The sales were confirmed using public records available from the county recorder of deeds, assessor, and treasurers' offices.

### **For our control and target area data sets we used the following determinants:**

- Sales occurring from May 8, 2019 and May 7, 2020.
- Distance from nearest wind energy facility.
- Located in an area conducive for a wind energy facility.
- In Illinois.
- Similar demographic to the Panther Grove Wind Energy Facility using a 7-mile radius from its approximate center.



# Outside Woodford County Single Family Residential Housing

Our total sample consisted of the following:

- Total population size of 16,831.
- Sale of 171 single family residences occurring within May 8, 2019 and May 7, 2020.
- Of the 171 sales, 21 had been extensively renovated, a bank sale or sheriff sale. These were excluded from our results.
- Of the 171 sales 62 had prior sales dating back to the late 1990's. We used these 62 sales to measure the growth rate by comparing the last sale to the earliest sale. The growth rate was than annualized.

	Group One			Group Two			Grand Total Group One and Two
	Control Outside the Influence of Wind Turbines	Target Within the Area Influence of Wind Turbines	Group One	Control Outside the Influence of Wind Turbines	Target Within the Area Influence of Wind Turbines	Target Within the Area Influence of Wind Turbines	
	City of Peru	Village of Cambridge	Total	City of Aledo	Village of Woodhull	Village of Ohio	Total
<b>Population Summary</b>							
2019 Total Population	9,895	2,132	12,027	3,496	766	542	4,804
<b>Median Household Income</b>							
2020	\$55,045	\$63,092		\$54,006	\$58,712	\$64,583	
<b>Median Home Value</b>							
2020	\$135,540	\$121,020		\$119,457	\$98,148	\$96,765	
<b>Per Capita Income</b>							
2020	\$30,797	\$30,365		\$28,349	\$28,806	\$36,713	
<b>Sales Transactions</b>							
Sale Transaction Dates	5/8/2019- 5/7/2020	5/8/2019- 5/7/2020		5/8/2019- 5/7/2020	5/8/2019- 5/7/2020	5/8/2019- 5/7/2020	
Earliest sale Occurred							
Sample Size	98	30	128	19	11	13	43
Rehabs / Bank / Sheriff Sales Excluded	11	7	18	1	1	1	3
Resales	30	15	45	4	7	6	17
<b>Sales Range</b>							
Average	\$144,444	\$186,534		\$123,094	\$88,945	\$145,833	
<b>Annualized Growth Rate</b>							
<b>Average</b>	<b>2.1%</b>	<b>2.2%</b>		<b>0.8%</b>	<b>1.7%</b>	<b>2.5%</b>	
Calculation excludes rehabs, bank & sheriff sales.							
<b>Distance to Wind Energy Facility (Miles)</b>	20 Miles	1.73 Miles		23 Miles	1.04 Miles	.35 Miles	

# Conclusion Outside Woodford County Single Family Residential Housing

In Group One, the control had an average growth rate of 2.1%. The target group had an average 2.2%.

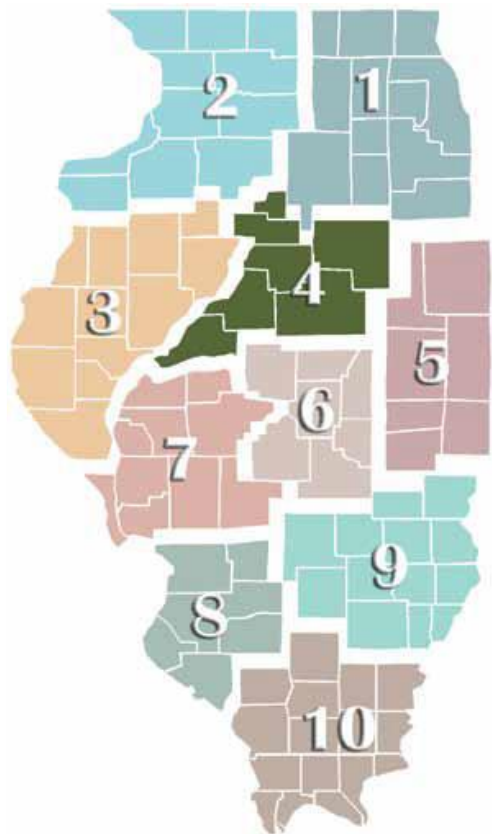
In Group Two, the control had an average growth rate of .8%. The target group had average growth rates of 1.7% and 2.5%.

Therefore, we have concluded there is no negative impact on the value of single family residential real estate in this area because the rate of appreciation was GREATER but reasonably similar in the target area's proximate to a wind energy facility than the growth rate of the control area away from the wind energy facility.

Based on the analysis and data presented and/or held in our file, we have concluded there is no detriment to the price of single family residential real estate when comparing the sale of single-family residences outside and inside the influence of a wind energy facility.

	Group One		Group Two		
	Control	Target	Control	Target	Target
	Outside the Influence of Wind Turbines	Within the Area Influence of Wind Turbines	Outside the Influence of Wind Turbines	Within the Area Influence of Wind Turbines	Within the Area Influence of Wind Turbines
	City of Peru	Village of Cambridge	City of Aledo	Village of Woodhull	Village of Ohio
Annualized Growth Rate					
Average	2.1%	2.2%	0.8%	1.7%	2.5%
Calculation excludes rehabs, bank & sheriff sales.					
Distance to Wind Energy Facility (Miles)	20 Miles	1.73 Miles	23 Miles	1.04 Miles	.35 Miles
Compiled by Valbridge Property Advisors   Chicago					

# Wind Turbine Farmland Impacts



- Farmland with wind turbines increases the annual cashflow of the farming operations and therefore increases the value of the property.
- Illinois Society of Professional Farm Managers and Rural Appraisers - 2020 Illinois Farmland Values and Lease Trends report stated Illinois farmland properties with wind turbines experienced less sale transactions while also experiencing an appreciation versus similar farm property without wind turbines.



# Reference Wind Energy Residential Property Value Impact Studies

**All large-scale, empirical studies of U.S. wind facilities conclude that there is no identifiable effect of operating wind power projects on nearby residential property values. The eight studies listed below cover over 248,000 residences**

- *A Spatial Hedonic Analysis of the Effects of Wind Energy Facilities on Surrounding Property Values in the United States (2008 & 2013 versions)* - Berkeley National Lab
  - 58,000 residences located within 10 miles of 67 wind energy facilities across 27 different counties in 9 different states revealed no evidence of a negative impact of value when being located near a wind energy facility.
- *The Effect of Wind Farms on Residential Property Values in Lee County, Illinois (2011)*- Jason Carter Illinois State University
  - Studied 1,298 residential property transactions between 1998 - 2010 near the Mendota Hills, GSG, and Lee-Dekalb Wind Farms in Lee County, IL revealed no adverse impact to nearby residential properties was caused by those wind energy facilities
- *Wind Farm Proximity and Property Values: A Pooled Hedonic Regression Analysis of Property Values in Central Illinois (2011)* - Jennifer Hinman Illinois State University
  - 3,851 residential properties adjacent to wind operating projects revealed no adverse impact to the value of those properties was caused by the nearby wind projects.
- Other Studies revealing no impacts to residential property value is attributal to proximity to wind turbines:
  - Heintzelman and Tuttle (2012), New York (11,331 home sales analyzed)
  - Magnusson and Gittell, (2012), New Hampshire (2,593 homes sales analyzed)
  - Atkinson-Palombo and Hoen (2014), Massachusetts (122,198 home sales analyzed)
  - Lang, Opaluch, and Sfinarolakis, (2014), Rhode Island (48,554 homes sales analyzed)



## Conclusion

Based on our analysis of actual transactions in Woodford County and other similar areas in Illinois and the legitimate literature presented by other contributors who have evaluated whether wind turbines cause negative impacts to property within the proximity of a wind energy facility we have concluded the following:

- There is no evidence that suggests a wind energy facility will cause a negative impact to the value or reduce time of sale for a residence located within proximity to a wind energy facility.
- There is no evidence to suggest that the Panther Grove Wind Energy Facility will cause nearby residential or farmland to devalue or cause the time of sale to increase.