



# Property Valuation Study

# REAL ESTATE CONSULTING REPORT

*Of*

Influence of Wind Farms  
On Residential Real Estate Values  
Proposed Ball Hill Wind Energy Project  
Towns of Hanover and Villenova  
Chautauqua County, New York

*For*

Brian Evans, President  
RES America Developments, Inc.  
11101 West 120<sup>th</sup> Avenue, Suite 400  
Broomfield, Colorado

*Effective Date of Valuation*

July 22, 2016

Prepared by:  
Darrel R. Lloyd, Jr.  
IREM SOLUTIONS  
586 North French Road, Suite 1  
Amherst, NY 14228  
File: 16-396

July 28, 2016

Brian Evans, President  
RES America Developments, Inc.  
11101 West 120<sup>th</sup> Avenue, Suite 400  
Broomfield, Colorado 80021

**Re: *Real Estate Consulting Report  
Influence of Wind Farm on Residential Real Estate Value  
Proposed Ball Hill Wind Energy Project  
Towns of Hanover and Villenova, Chautauqua County, New York***

Dear Mr. Evans:

The purpose of the assignment is to update a previous report prepared by Darrel R. Lloyd Jr. dated June 3 2008. The scope of that report was to determine if wind farm development impacts residential real estate values in the surrounding market area.

The June 3, 2008 report concluded there is no conclusive evidence which would indicate any impact or potential impact on residential real estate values in the market area analyzed due to being in close proximity or in the view shed of an operational wind farm.

Four studies were performed on comparable operational wind farms within New York State. Two of the wind farms are located in Madison County, New York and two are located in Wyoming County, New York.

This report will update these studies with sales data which has occurred from 2008 to 2016. Additionally, current literature will be researched and reviewed in assisting the conclusions drawn from this report.

### **Project Description:**

The Ball Hill Wind Energy Project is an approximately 100 megawatt wind energy project proposed for an area located within two towns in the northeastern portion of Chautauqua County, New York. The proposed project will consist of a total of 29 turbines located on approximately 5,569 acres (includes all easements and setbacks necessary for project construction). The turbines are proposed to be located in the Town of Hanover and the Town of Villenova.

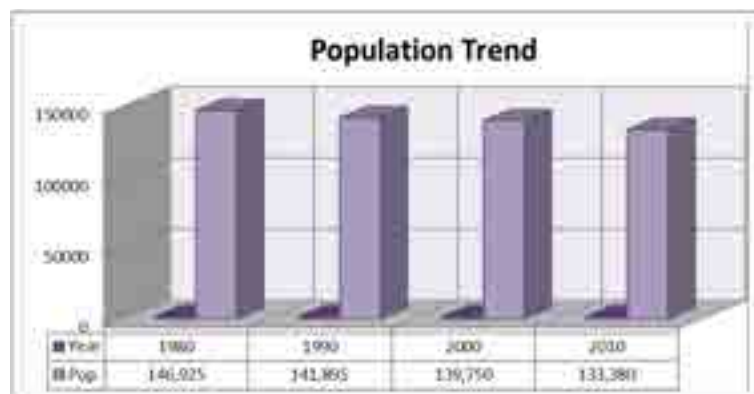
### Chautauqua County Area Data:

Chautauqua County is located in the southwestern-most portion of New York State on the eastern/southern shore of Lake Erie. Located on the western/northern shore of Lake Erie, across the lake, is Canada. Chautauqua County is bordered by Erie County, NY to the northeast, Cattaraugus County, NY to the east, Warren County, PA to the south, and Erie County, PA to the southwest. West of Chautauqua County on the western boundary of Erie County, PA is the State of Ohio.



Chautauqua County contains approximately 1,065 square miles of area with elevations from 573 feet above sea level to 2,190 feet. The topography of the region conforms to four major features. The first is the Lake Erie Plain. This area forms the northern border of Chautauqua County and extends inland distances varying from 3 to 9.5 miles from Lake Erie. This area is relatively flat with an elevation above sea level of approximately 573-900 feet. Immediately to the south and east is the Allegheny Escarpment; a long steep series of hills which ascends from the Lake Erie Plain. The Allegheny Plateau is the third feature, and consists of rolling hills that are deeply gored by valleys containing the Cassadaga and Conewango Creeks and Chautauqua Lake. This area makes up approximately 80% of the county. Chautauqua Lake, which is centrally located, is the most prominent geographic feature in the county as well as the center of recreation. The lake is approximately 20 miles long with 50 miles of shoreline. Chautauqua County has a total of six lakes and approximately 50 miles of Lake Erie shoreline.

**Population** - According to the U.S. Census Bureau, the 2010 population of Chautauqua County is 133,380 a 3.5% decrease from 2000. It has been steadily declining since reaching its peak in 1970. The adjacent chart shows the population trend since 1980. Chautauqua County has the third largest population in Western New York, ranking behind Erie and Niagara counties to the north.



## **Economic Indicators**

**Employment** – According to the U.S. Department of Labor, the 2016 unemployment rate for Chautauqua County was 6.1%, higher than the New York State rate of 4.8%. Since 2011, the unemployment rate in the county has been slightly higher than the state’s rate with the exception of 2014. The adjacent chart shows the unemployment trend since 2011.



**Employment Base** – A diverse business community provides the backbone of Chautauqua County's economy.

The food processing industry alone employs approximately 2,100 people. Food processing and food related manufacturers produce ice cream, canned fruit, canned vegetables, preserves, chocolate and cocoa products, cookies, milk, and frozen foods for institutional and restaurant use.

Non-food manufacturers and other industries provide furniture, plastic products, glass products, tool & die, machining, metal stamping, steel and iron, automotive products, refractory's, bearings, lumber products, precision measuring, metal, hardware, machinery and electronics. Chautauqua County has four separate industrial parks, covering 397± acres, all of which are ready for additional growth.

Communications, technology, health care, education, retail, tourism and other service related fields support Chautauqua County's economy and continue to grow as well. Rounding out the economy are hundreds of locally owned and operated small to medium size companies.

The largest manufacturing employers in the county are MRC Bearings, Bush Industries and Cummins Engines Company. In the service area, the largest employers are WCA Hospital in Jamestown, Chautauqua County, Jamestown Public Schools, SUNY College at Fredonia, and Jamestown Community College.

Agriculture plays a significant role in Chautauqua County's economy. Chautauqua County is also known for its grape farms. The primary varieties of grapes grown are Concord and Niagara, which are used to produce juice, jams, jellies and wine. Chautauqua County is the largest grape producing county in New York State.

Chautauqua County's tourism industry generates approximately \$100 million annually in local visitor spending. Considering multiplier effects, tourism impacts the economy by \$145 to \$160 million annually and employs approximately 6,000 persons.

**Employment** - The following table is based on 2014 Census Bureau data and lists the major employment sectors and approximate number of employees.

<b>Subject</b>	<b>Number</b>	<b>Percent</b>
<b>INDUSTRY</b>		
Agriculture, forestry, fishing and hunting, and mining	1,458	2.5
Construction	2,977	5.1
Manufacturing	10,084	17.4
Wholesale trade	1,103	1.9
Retail trade	6,592	11.4
Transportation and warehousing, and utilities	2,316	4.0
Information	730	1.3
Finance, insurance, real estate, and rental and leasing	1,964	3.4
Professional, scientific, management, administrative & waste management services	3,113	5.4
Educational, health and social services	16,092	27.7
Arts, entertainment, recreation, accommodation and food services	5,474	9.4
Other services (except public administration)	3,631	6.3
Public administration	2,531	4.4

**Median Household Income** - \$42,720

**Median Home Price** - \$84,100

*Source: Census Bureau 2014*

**Transportation:**

**Highway System** – Major Highways in the county include the New York State Thruway (I-90), Southern Tier Expressway (I-86 and State Route 17), US Routes 20 and 62, and State Routes 5, 60, 394, and 430. Interstate 90 runs in a southwest/northeast direction, along the Lake Erie shoreline, at the northern edge of the county. It leads southwest through



Erie, PA and Cleveland, OH; as well as northeast towards Buffalo before pointing due east through Rochester, Albany, and beyond. Interstate 86 (SR 17) travels east/west across New York State near the southern state border. In Chautauqua County, it leads west toward Erie, PA and travels east through Jamestown, into Cattaraugus County, and beyond.

US Route 20 and SR 5 both run parallel to I-90 through the county. State Route 60 is the main, north/south thoroughfare in the county connecting Dunkirk, Fredonia, I-90, and the northern part of the county with Jamestown, I-86, and the southern part of the county. US Route 62 is a north/south road located in the southeastern part of the county. It leads south through Warren, PA and beyond; as well as north, through northwestern Cattaraugus County and continuing through the city of Buffalo. State Route 394 and 430 follow the southern and northern shorelines of Chautauqua Lake, respectively.

**Rail service** - Rail service is provided by CSX, Norfolk Southern & Western New York and Pennsylvania Rail Road. Bus service is provided by Niagara Scenic, Jamestown Area Regional Transit System (JARTS), and Chautauqua Area Regional Transit System (CARTS)

**Air Service** - Air transportation needs are met predominantly by the Buffalo Niagara International Airport located approximately 42 miles north of Dunkirk and 62 miles north of Jamestown. Chautauqua County has two smaller regional airports located in Jamestown and Dunkirk. The Jamestown Airport has commuter service affiliated with major airlines to Buffalo and other larger cities in the area. Charter service and aircraft rental is also available. The Dunkirk/Chautauqua County Airport provides a limited amount of commercial airline service primarily on a charter basis.

**Waterways** – The main geographic features of the county are the two major lakes: Erie and Chautauqua. Chautauqua Lake is centrally located in the county, about 17 miles in length, and offers about 40 miles of shoreline. The Lake Erie shoreline at the northern border is also about 40 miles in length.

**Education** - There are 19 public school systems located within Chautauqua County, as well as many private and parochial schools. In addition, the Board of Cooperative Educational Services (BOCES) offers a wide range of educational, administrative and support services to the community with two technical schools located in Ashville and Fredonia. Higher educational needs are supplied by the State University of New York College at Fredonia (four year), Jamestown Community College (two year), and Jamestown Business College. Fredonia State had a fall 2011 enrollment of 5,725 students (graduate and undergraduate) and offers baccalaureate degree programs in education, liberal arts, music, and technology. Jamestown Community College is part of the State University of New York system, and had a fall 2011 enrollment of 3,926 (both full and part time). Jamestown Business College primarily offers associate degrees and certificate programs.

**Health Care** - Health care needs are met at four acute care hospitals, totaling 545 beds. The largest is WCA Hospital in Jamestown, with 337 beds. Brooks Memorial Hospital in Dunkirk has 157 beds. Two others, Lakeshore Health Care Center and Westfield Memorial Hospital have significantly fewer beds, with the Lakeshore facility being oriented more towards long term care. In addition to acute care hospitals, there are nine licensed nursing homes in Chautauqua County with a total of 1,270± beds. Three of these facilities are located in the Dunkirk/Fredonia area. The balance is in the southern portion of the county. There are also numerous licensed companies and agencies that provide skilled nursing or medical care in homes under physician supervision.

### **Conclusion:**

Overall, the county of Chautauqua is characterized as a rural area. Over 90% of its area is devoted to agricultural and productive forestland. The two largest population centers are widely spaced and are dependent to some degree on other larger nearby metropolitan areas for services. Both population and employment numbers are expected to stabilize and possibly show a modest increase this decade. There appears to be little demand for additional real estate development, residential, commercial or industrial. At present, demand and supply are in balance with property values are generally stable. New development that may occur will primarily be for owner occupancy.

**Town of Villenova Area Data:**

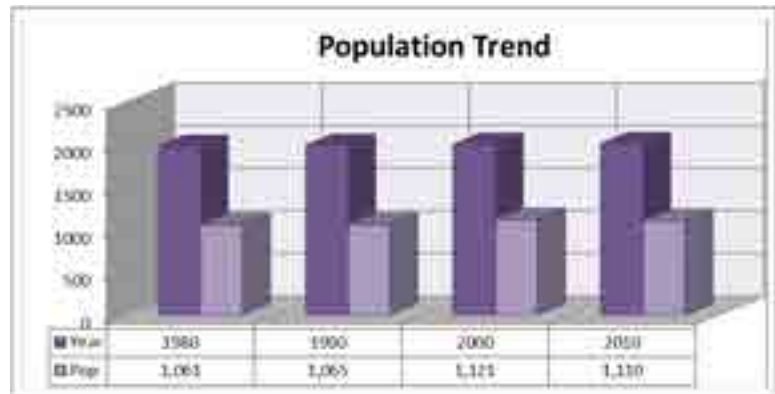
**Location:**

The Town of Villenova is located on the eastern border of Chautauqua County and is southeast of the City of Dunkirk, New York. It has a land area of 36.2 square miles, of which 36.1 square miles is land and 0.12 square miles is water. Villenova is proximate to the Jamestown-Dunkirk-Fredonia metro area. The east town line is shared with the Town of Dayton in Cattaraugus County and the Town of Arkwright is to the west. To the north is the Town of Hanover, and the Town of Cherry Creek is to the south.

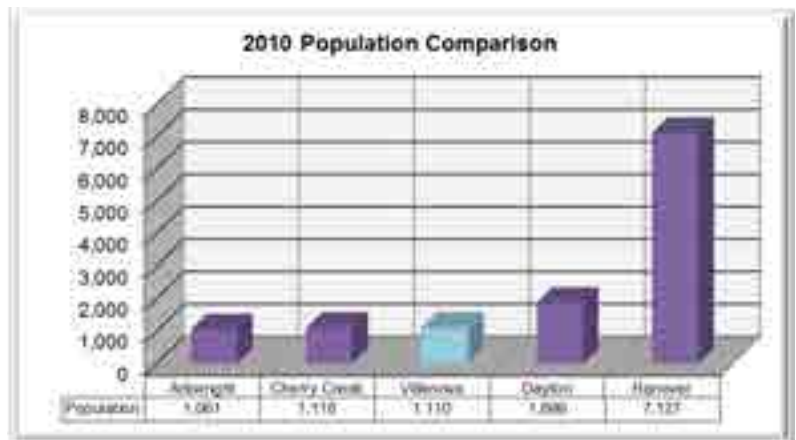


**Population** - According to the U.S. Census Bureau, the 2010 population for the Town of Villenova was 1,110, a 1.0% decrease over the previous decade; however the town's population has been increasing slightly since 1980. The adjacent graph shows the population trend since 1980.

Source: U.S. Census Bureau



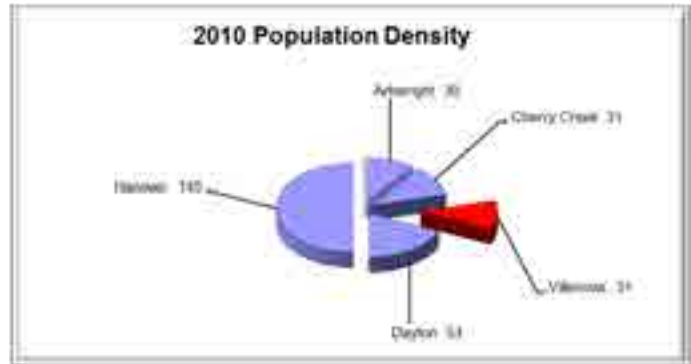
**Population Comparison** - The Town of Villenova is a rural town with very little population. It's location in Chautauqua County places it near to other towns with similar population statistics. The Town of Hanover has a population that far exceeds that of the surrounding towns and includes the population of the Villages of Silver Creek and Forestville, which make up nearly half the population. The Town of Dayton has the second largest population, followed by the remaining towns as indicated by the adjacent graph.





**Population Density** - The Town of Villenova has a population density of 31 people per square mile, similar to the Town of Arkwright and Cherry Creek. Hanover has the highest population density of 145 people per square mile. The following graph represents a comparison between Villenova and its surrounding municipalities.

Source: U.S. Census Bureau



**Employment** - The following is based on 2014 Census Bureau data and shows the percentage of workers from the town of Villenova and the business sector they are employed in.

INDUSTRY	Number	Percent
Agriculture, forestry, fishing and hunting, and mining	43	9.8
Construction	48	11
Manufacturing	73	16.7
Wholesale trade	9	2.1
Retail trade	46	10.5
Transportation and warehousing, and utilities	11	2.5
Information	6	1.4
Finance, insurance, real estate, and rental and leasing	12	2.7
Professional, scientific, management, administrative, and waste management services	16	3.7
Educational, health and social services	108	24.7
Arts, entertainment, recreation, accommodation and food services	26	5.9
Other services (except public administration)	20	4.6
Public administration	20	4.6

Source: U.S. Census Bureau

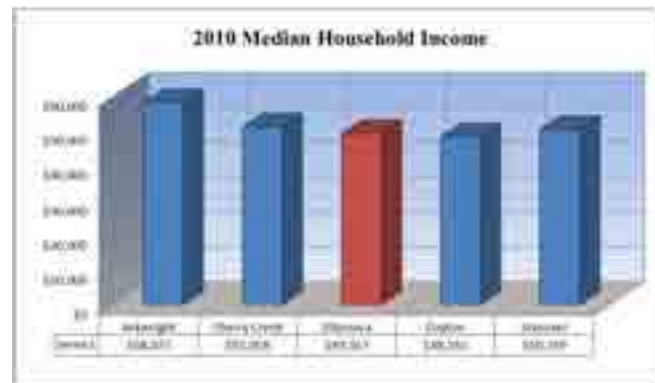
The educational, health, and social services sector is the most dominant employer in the area. The manufacturing sector is the second largest.

**Buying Power:**

The 2010 Census Bureau median household income for the Town of Villenova was \$35,208. The following compares the 2010 median household income for the Town of Villenova in relation to its surrounding towns.

Source: U.S. Census Bureau

The residents in the town of Arkwright have the largest amount of disposable income in the area, and the residents of Dayton have the least. Villenova falls in the middle range of the towns.



**Housing** - The 2010 median home value in the Town of Villenova was \$87,700. The following Graph compares the 2010 median home value for Villenova and the surrounding towns.

*Source: 2000 U.S. Census*

The people in the Town of Arkwright paid the most for their homes, followed closely behind by the Town of Villenova. The people in Dayton paid the least for their homes at \$77,000.



**Transportation** - The main route running through Villenova is New York State Route 83, which travels in an east-west direction and then in a north-south direction at Balcom Corners.



Airports certified for carrier operations nearest to Villenova include:

- Chautauqua Airport
- County/Jamestown Airport (approximately 19 miles)
- Buffalo Niagara International Airport (approximately 47 miles)
- Niagara Falls International Airport (about 51 miles)

Additional public-use airports nearest to Villenova Include:

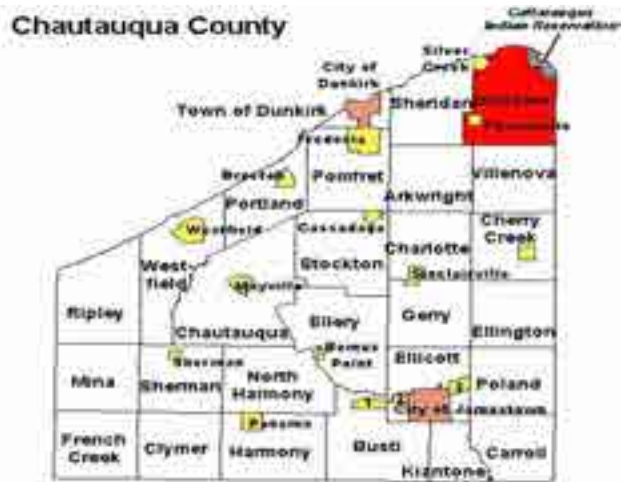
- Chautauqua County/Dunkirk Airport (approximately 13 miles)
- Gowanda Airport (approximately 14 miles)
- Randolph Airport (approximately 19 miles)

**Conclusion:**

The Town of Villenova's main attraction is its rural setting. The population should remain fairly stable well into the next decade. Only limited commercial or industrial growth is forecast.

**Town of Hanover Area Data:**

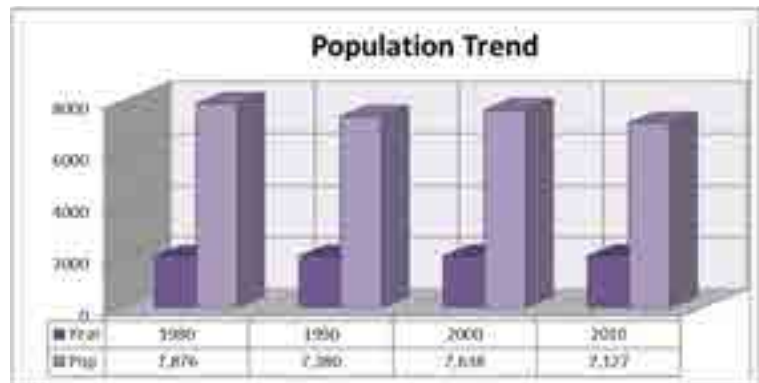
**Location** - The Town of Hanover is on the south shore of Lake Erie situated at the northeast corner of Chautauqua County. Hanover is bordered by the Towns of Arkwright and Villenova to the south, and the Town of Sheridan to the west. The town is also bordered by the Cattaraugus Indian Reservation, Erie County and Perrysburg, to the east. Hanover encompasses an area of 49.3 square miles, which is divided into 5,109 land parcels. Located within the town are the Villages of Silver Creek and Forestville.



**Population** – According to the U.S Census Bureau, the 2010 population in the town of Hanover was 7,127, a decrease of 6.7% from the 2000 with a population of 7,638. The adjacent graph shows the population trend since 1980.

*Source: U.S Census Bureau*

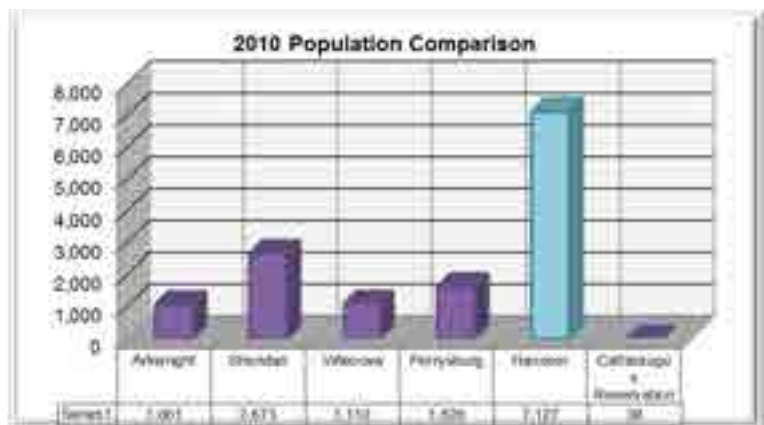
The town’s population dropped (6.3%) in the 1980’s, however the trend reversed itself in the 1990’s with the population growing by 3.5%. Overall the population of the town has remained relatively stable over the last 40 years.



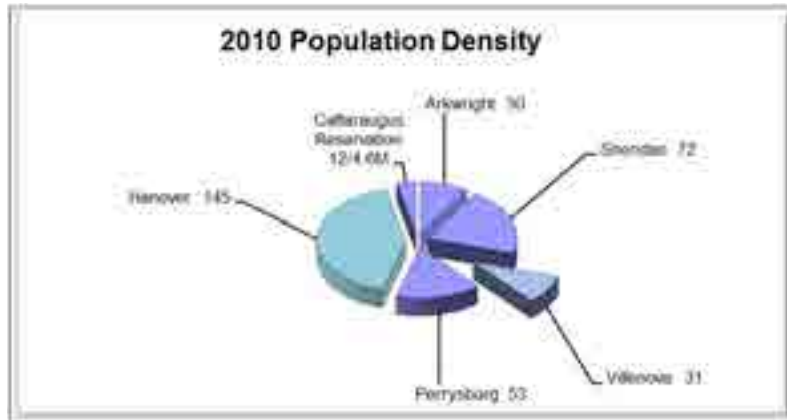
**Population Comparison** - The adjacent chart compares the 2010 population of the town of Hanover its surrounding municipalities.

*Source: U.S Census Bureau*

The larger population of the town of Hanover can be attributed to the easier access to the interstate highway system, which provides for easy commuting to both the Buffalo and Fredonia-Dunkirk areas.



**Population Density** - The 2010 population density for the town of Hanover was 145 persons per square mile, followed by the Town of Sheridan with a population density of 72. The population density for the Cattaraugus Reservation reflects the portion located in Cattaraugus County with a population density of 12 persons per in this 4.6 mile area. The adjacent chart compares the population density of Hanover and neighboring towns.



**Employment** - The following chart shows the percentage breakdown of employment sectors in the town according to the 2014 U. S. Census Bureau.

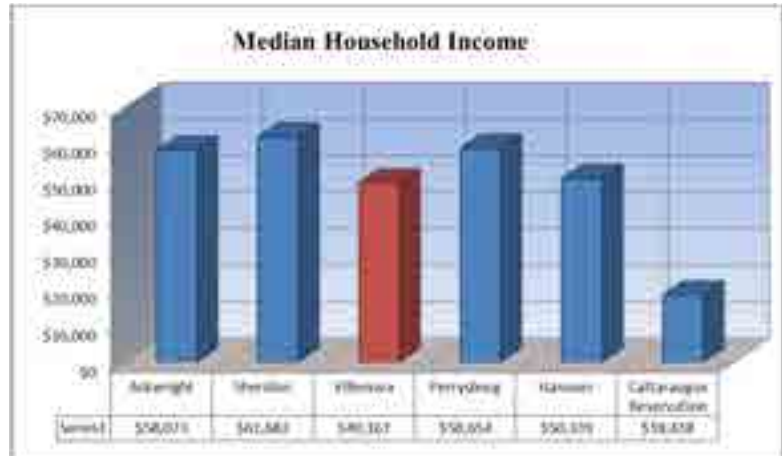
INDUSTRY	Hanover	Silver Creek	Forestville
Agriculture, forestry, fishing and hunting, and mining	2.9	0	1.2
Construction	7.4	6.3	2.7
Manufacturing	13.5	14.1	16.4
Wholesale trade	2.7	2.4	0.6
Retail trade	10.5	8.7	15.8
Transportation and warehousing, and utilities	4.9	4.8	3.6
Information	1.0	1.4	0.0
Finance, insurance, real estate, and rental and leasing	4.3	2.1	2.1
Prof., scientific, management, admin. & waste management services	2.0	2.5	2.4
Educational, health and social services	22.5	26.3	28.9
Arts, entertainment, recreation, accommodation and food services	12.1	14.0	8.0
Other services (except public administration)	5.6	7.2	7.1
Public administration	10.5	10.3	11.3

The table above illustrates that the manufacturing and health service sectors makeup approximately 40% of the overall employment in the town and villages. The large manufacturing base is supported by several employers in the area; some of the largest being Belden & Blake Corp., Iroquois Natural Gas, Gernatt Asphalt Products, Schreiner Oil & Gas Inc. and the Great Lakes Energy Partnership. Several of these companies also have retail sales; to include the energy, oil and gas companies. These sectors account for a significant portion of the retail trade in the area.

**Buying Power** - The 2014 median household income in the Town of Hanover was \$50,339. The adjacent chart shows this income in relation to the surrounding towns

*Source: U.S. Census Bureau*

The median household income of the town is slightly lower than the surrounding towns with the exception of the Cattaraugus Indian reservation, which tends to have very high unemployment rates and low-income levels.



Silver Creek - The 2014 median household income for the Village of Silver Creek was \$42,798.

Forestville - The 2014 median household income for the Village of Forestville was \$49,191.

**Housing** - According to the 2014 Census Bureau, the median home value in the town was \$94,500.

The majority of the housing units in the town are owner occupied. The adjacent chart compares the median home value in the town of Hanover with surrounding towns.



Silver Creek - The 2014 median home value for this village was \$73,600 and approximately 70.4 percent of the homes were owner occupied.

Forestville – The 2014 median home value in Forestville was \$88,200 and approximately 67.8 percent of the homes were owner occupied.

---

The Native American community, just across Cattaraugus Creek from Hanover, is seeing an increase in their economy. This trend is mainly due to their ability to sell items such as gasoline and cigarettes tax free on their reservation; as well as revenue from the gaming industry located on the reservation.

**Transportation** - The main traffic corridor in the town is Interstate highway 90 running east/west. The town is also served by state highways 5 and 20 that also run east-west and state highway 39 that runs north-south. Overall the easy access to I-90 gives the northern portion of the town a good transportation system.



Most development activity in Hanover has occurred along Routes 5 & 20, near the Thruway. There is little other new development in the commercial area of the village. While Silver Creek is a rural commercial village it has easy access to the I-90 (NYS Thruway) about half a mile to the northeast. The Thruway provides good access to the Buffalo metropolitan area, approximately 40 miles (35 minutes) to the north and to Dunkirk and Fredonia, approximately 12 miles (10 minutes) to the south.

Alleghany Road is a local connecting corridor between the lakeshore resort areas and Silver Creek on the north, and rural communities to the south, including Forestville and Perrysburg. The Cattaraugus Indian Reservation is about one mile northeast of Silver Creek, where Routes 5 and 20 split. Routes 5 and 20 are State highways into Erie County from the southwest. State Routes 5 and 20 both parallel Lake Erie, and at one time were primary east-west. These routes join in Silver Creek, and are one highway into Erie County and the Buffalo metropolitan area to the east. These routes contributed to growth in communities like Silver Creek but are now primarily scenic tourist routes. An exit to the New York State Thruway (I-90) is located on Routes 5 & 20, in the town, just north of the village. A number of industries are located in these Northern Chautauqua County communities.

**Conclusion:**

This town and its villages are likely to remain a mostly rural area due to its distance from Buffalo. The area does offer limited seasonal recreational activities associated with Lake Erie. Overall the town and villages should remain generally stable with respect to population, commercial and economic base.

### Market Area Analysis:



The subject market area is considered relatively similar to the four comparable wind farms being considered in this analysis. The market area has varied terrain and is predominately rural in character. With the exception of small localized community centers, the area is largely undeveloped. Large tracts of agricultural land cover the area with lands unsuitable for agricultural use being primarily mature deciduous woodlands. With the exception of the more developed community centers, the area contains minimal low-density single-family residential structures and farmsteads. The terrain is varied with little level land and it is characterized by undulating hills, ridges and smaller rounded hillocks.

The transportation infrastructure in the market area is considered average. There are several county routes and town roads that provide access throughout the market area.

Residential uses are either clustered at various crossroad hamlets or are very sparsely located on individual parcels. Residences are often located roadside, however many are located on isolated lots not viewable from local roads. These rural homes range in quality and condition from well-maintained single-family frame construction to older homes exhibiting significant signs of deferred maintenance. There are also a number of seasonal homes, camps and cabins interspersed throughout the market area. New residential development is limited in the market area.

### **Review of Available Literature:**

In preparation for our analysis, a review of literature concerning property value impacts related to wind farm development was undertaken. With the somewhat recent development of wind farms as an alternative energy source in the United States, limited research has been done. The literature on wind energy facilities and surrounding property values that have been conducted can be grouped into two categories: survey based studies and transaction based studies.

Survey based studies are generally question based studies that involve soliciting feedback from assessors, real estate agents and residents in areas affected by, or proposed to be affected by, wind farm development. They are generally subjective and offer insights on community attitudes, however their reliance on qualitative data limit their usefulness in ascertaining true property value impacts and this has led to varied conclusions.

A brief description of each study, its conclusions and flaws are presented below:

The most well-known wind farm study is The Effect of Wind Development on Local Property Values produced in May 2003 by the Renewable Energy Policy Project (REPP). This report studied eleven wind farms located in California, New York, Texas, Vermont, Wisconsin, Pennsylvania and Iowa. The report reviewed approximately 25,000 residential sales within the five-mile view shed of the various wind farms and compared them to sales in a similar “control area” outside of the view shed. The study employed simple regression analysis to look at the rate of change in property values in both the view shed and control area over the entire study period, before the wind farms came on line and after the wind farms came on line. The general conclusion of this study was that “the statistical analysis does not support a contention that property values within the view shed of wind developments suffer or perform poorer than in a comparable region” and even states that “for the great majority of projects (wind farms) the property values rose more quickly in the view shed than they did in the comparable community.” This studies method has been criticized for several reasons:

There is no effort to discern which properties within the 5-mile view sheds have an actual view of the wind farm. The analysis does not control for distance to the turbines. There is no attempt to sort out inappropriate (non-arms-length) transactions.

A second wind farm study is A Real Estate Study of the Proposed White Oak Wind Energy Center produced in 2007 by Poletti and Associates, Inc. This study focuses on two wind farms located in Wisconsin and Illinois. It reviews approximately 300 residential land and home sales and takes a similar approach to the REPP report with two key differences. It eliminates non-arms-length sales and excludes sales of homes built prior to 1960 in an effort to control for residential dwelling specific characteristics like construction quality, amenities and condition.



The report's conclusion was that "there was no significant difference in price per square foot for residences within the target area (view shed) when compared to those within the control area" and "similarly, analysis of vacant agricultural land and small and medium sized residential tracts indicated that there was no significant difference in the price per acre for these types of properties". Criticism of this study lies in two areas:

There is no effort to discern which properties within the 5-mile view sheds have an actual view of the wind farm.

The analysis does not control for distance to the turbines.

A transaction based study is the Impacts of Windmill Visibility on Property Values in Madison County, New York produced in 2006 by Ben Hoen of the Bard Center for Environmental Policy. This report analyzed 280 arms-length residential home sales within five miles of the Fenner wind farm between 1995 and 2005. A visit to each home was made and an unbiased scoring method was used to quantify the degree to which each of the houses could see the wind farm and the distance from the home to the turbines was calculated. These and other characteristics were incorporated into an econometric model to ascertain if the properties sales prices were uniquely affected by windmill visibility. This in depth report found no measurable effect of windmill visibility on property values and even indicated that this evidence holds when concentrating on homes within one-mile of the turbines and on those that sold immediately following construction of the facility in 2001. This is by far the most extensive and soundly designed study completed to date.

#### **Updated Literature:**

Relationship between Wind Turbines and Residential Property Values in Massachusetts is a Joint Report of University of Connecticut and Lawrence Berkeley National Laboratory dated January 9, 2014

To determine if wind turbines have a negative impact on property values in urban settings, this report analyzed more than 122,000 home sales, between 1998 and 2012, that occurred near the current or future location of 41 turbines in densely-populated Massachusetts communities.

The results of this study do not support the claim that wind turbines affect nearby home prices. Although the study found the effects from a variety of negative features (such as electricity transmission lines and major roads) and positive features (such as open space and beaches) generally accorded with previous studies, the study found no net effects due to the arrival of turbines in the sample's communities. Weak evidence suggests that the announcement of the wind facilities had a modest adverse impact on home prices, but those effects were no longer apparent after turbine construction and eventual operation commenced. The analysis also showed no unique impact on the rate of home sales near wind turbines.

A Spatial Hedonic Analysis of the Effects of Wind Energy Facilities on Surrounding Property Values in the United States dated August 2013 and prepared jointly by Ben Hoen†, Ryan Wiser, Peter Cappers of Lawrence Berkeley National Laboratory ; Jason P. Brown; Federal Reserve Bank of Kansas City; Thomas Jackson, AICP, MAI, CRE, FRICS of Real Analytics Inc. and Texas A&M University and Mark A. Thayer; San Diego State University.

This study concluded “previous research on the effects of wind energy facilities on surrounding home values has been limited by small samples of relevant home-sale data and the inability to account adequately for confounding home-value factors and spatial dependence in the data. This study helps fill those gaps. We collected data from more than 50,000 home sales among 27 counties in nine states. These homes were within 10 miles of 67 different wind facilities, and 1,198 sales were within 1 mile of a turbine—many more than previous studies have collected. The data span the periods well before announcement of the wind facilities to well after their construction. We use OLS and spatial-process difference-in-difference hedonic models to estimate the home-value impacts of the wind facilities; these models control for value factors existing before the wind facilities’ announcements, the spatial dependence of unobserved factors effecting home values, and value changes over time. A set of robustness models adds confidence to our results. Regardless of model specification, we find no statistical evidence that home values near turbines were affected in the post-construction or post-announcement/pre-construction periods.”

The windy city: Property value impacts of wind turbines in an urban setting dated October 2013 and prepared by The Department of Environmental and Natural Resource Economics, University of Rhode Island.

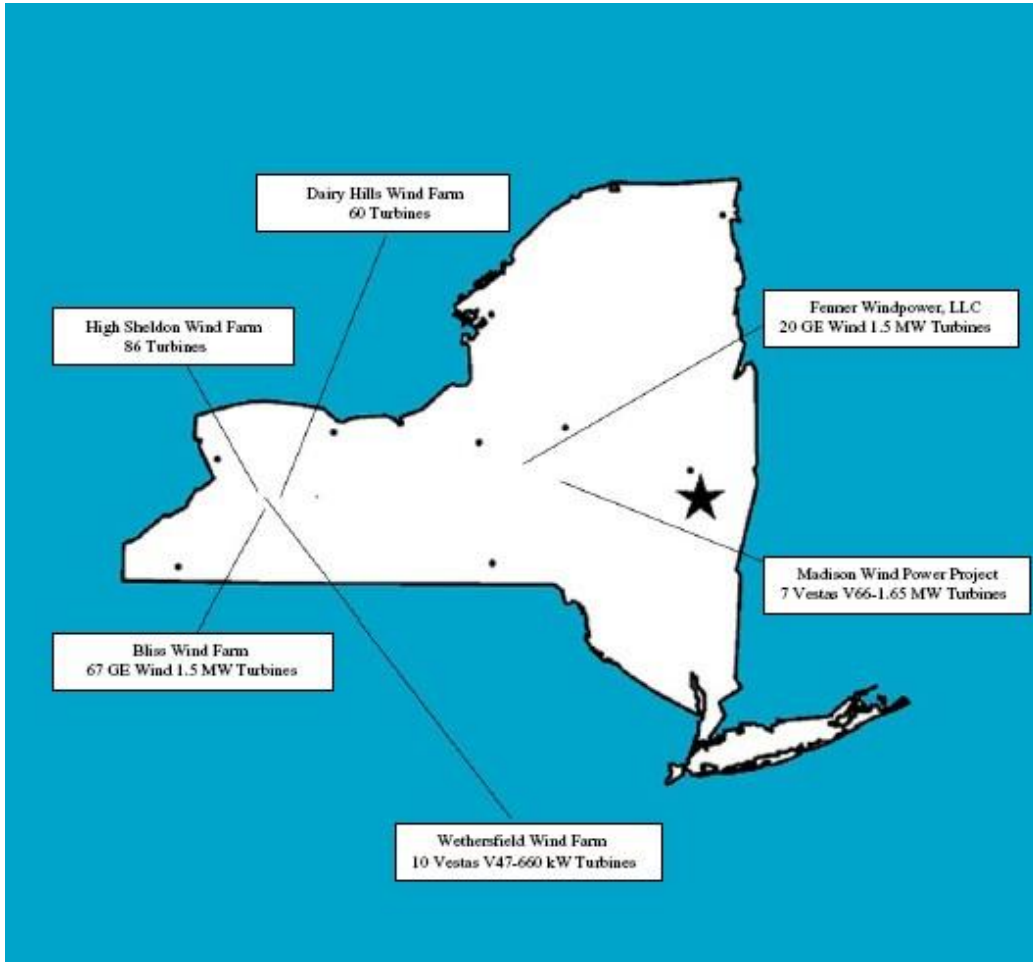
This paper examined the impact of wind turbines on house values in Rhode Island. In contrast to wind farms surrounded by sparse development, in Rhode Island single turbines have been built in relatively high population dense areas. As a result, we observe 48,554 single-family, owner-occupied transactions within five miles of a turbine site, including 3254 within one mile, which is far more than most related studies. We estimate hedonic difference-in-differences models that allow for impacts of wind turbines by proximity, viewshed, and contrast with surrounding development. Across a wide variety of specifications, the results suggest that wind turbines have no statistically significant negative impacts on house prices, in either the post public announcement phase or post construction phase.

### **Conclusions:**

The various studies reviewed offer varied conclusions. Transaction based studies, however, have consistently produced results that demonstrate no apparent effect of wind farm development on property values for surrounding areas.

Our analysis will consider sales data within an approximate five square mile area surrounding four existing wind farms located throughout New York State. Surrounding land uses are predominately agricultural with interspersed residential development along the roadside. The following wind farms were considered.

**Windfarm Location Map:**



Below is a basic overview of the wind farms utilized in our analysis.

Project Name	Madison Wind Power	Wethersfield Wind Farm	Fenner Windpower	Noble Bliss Windpark
Town	Madison	Wethersfield	Fenner	Eagle
County	Madison	Wyoming	Madison	Wyoming
Project Owner	Horizon Wind Energy	Enel North America	Enel North America	Noble Power LLC
# of Turbines	7	10	20	67
Turbine Type	Vestas V66-1,650 kw	Vestas V47-660 kw	GE Wind-1,500 kw	GE Wind-1,500 kw
Rotor Diameter	216.5 ft. (66m)	154 ft. (47m)	231 ft. (70.5m)	253 ft. (77.1)
Hub Height	220 ft. (67m)	213 ft. (65m)	213 ft. (65m)	262 ft.
Total Turbine Height	339.25 ft.	290 ft.	328.5 ft.	388.9 ft.

### Madison & Fenner Wind Farms Madison County, New York



### Wethersfield Wind Farm & Noble Bliss Windpark Wyoming County, New York



**Madison Wind Farm**  
**Madison County, New York**

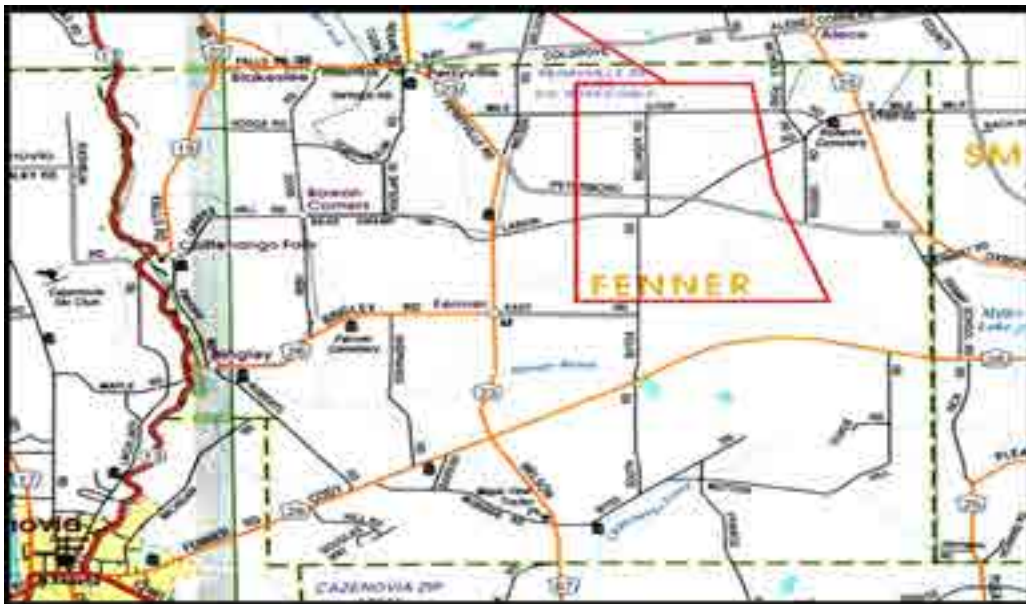


The Madison Wind Farm is located in the Town of Madison, Madison County, New York. This project was New York's first commercial wind farm and has been on line since September 2000. The site consists of seven (7) 220-foot high turbine towers & 216-foot rotor diameter. Total turbine height is 339.25 feet.

**Fenner Wind Farm**  
**Madison County, New York**



The Fenner Windpower Project is located at the Town of Fenner, Madison County, New York. The Project encompasses an area of approximately 2,000 acres of leased land. This wind farm and has been on line since November 2001. The site consists of twenty (20) 213-Foot High turbine towers & 231 foot rotor diameter. Total turbine height is 328.5 feet.



**Wethersfield Wind Farm**  
**Wyoming County, New York**



The Wethersfield Wind Farm is a 10 turbine, 6.6 MW wind energy farm located in the Town of Wethersfield, in Wyoming County, New York. The 310 acre Wethersfield site is located along one of the highest ridges in Wyoming County. The wind energy project came online in October 2000. The site consists of ten (10) 213-Foot High turbine towers & 154 foot rotor diameter. Total turbine height is 290 feet.



**Noble Bliss Windpark**  
**Wyoming County, New York**



*Source: Sherry Grugel*

The Noble Bliss Windpark is a 67 turbine park, on approximately 93 acres, encompassing a 5,071 acre area in the Town of Eagle, Wyoming County. The project was recently completed in the fall of 2007 and went online in the spring of 2008. The wind turbines are General Electric 1.5 Megawatt turbines, approximately 253 feet tall, in an MTS configuration, with T-Flange generators. The project area spans a wide variety of land, with a mixture of 2,532 acres of agricultural land, 2,475 acres of forested land, and 49 acres of wetlands.



*Source: Sherry Grugel*



### **Scope of Work:**

Real estate values are influenced by many factors external to the property itself. These factors are divided into four major categories: social trends, economic trends, governmental controls and regulations and environmental conditions. Social trends consist of population characteristics which could influence property values due to sudden shifts in population and household size dictating demand to specific locations and size of dwellings. Economic trends consider relationships between supply and demand and the economic base of the region. Governmental controls and regulation consider zoning, building codes, utilities, as well as local, state and federal policies. Environmental forces which could influence property values include climate conditions, topography, noise, surrounding land uses as well as other factors. It is fundamental to this type of analysis to understand all of the value-influencing forces which effect property values.

The primary conditions specific to wind farms which may impact surrounding property values include the view shed, noise and shadow flicker from the blades.

The category fundamental to this analysis are environmental concerns, which considers surrounding land uses. This analysis will address the impact of a wind farm in close proximity to residential development. Externalities can impact housing values in several ways; i.e., unpleasant odors, excessive noise, health and safety concerns and view. The existence of the wind farms do not produce odors, nor have they been proven to cause any health and safety concerns, therefore, the only external influence common to a wind farms is view, noise and potential shadow flicker.

In the June 2003 study, a qualitative analysis in the form of relative comparison was utilized by comparing sales 5 years prior to the construction of the respective wind farms to sales subsequent to the construction and operation of the wind farm. The market area considered approximately a five mile radius surrounding the respective wind farms. The five mile radius was considered applicable due to the view shed of these properties ranging great distances in some instances. The second technique is called paired sales analysis. This technique compares sales and re-sales of the same property before and after the construction of the respective wind farms. In order to determine if the wind farm had an influence on real estate values, a specific residential sale prior to the construction of the wind farm was compared to its subsequent sale after the date of construction. Market sales and re-sales were researched and analyzed within the respective market areas from January 1995 to December 2007 as provided by municipal records and local realtors.

This report will consider any new sales data that has occurred since December 2007 and correlate the findings to the previous study to determine if sales prices have been impacted since our last report. Additionally any re sales of properties considered in the previous study will be reviewed.

**Wethersfield Wind Farm  
Wyoming County, New York**

The Wethersfield Wind Farm came online in October 2000. Sales data from 1995 to 1999 in the subject market area was compared to sales data from 2000 to 2007.

The following results were drawn from the previous study.

**SALES 1995-1999**

County	Municipality	SBL	Address	Street	Land Area	SF	SaleDate	SalePrice	Year Built	Price/SF
Wyoming	Wethersfield	107-2-19	4344	HERMITAGE	N/A	N/A	10/2/1995	\$32,000	N/A	N/A
Wyoming	Orangeville	95.-1-7	3344	ORG-CTR RD	2.00	1,336	5/6/1996	\$63,900	1976	\$47.83
Wyoming	Orangeville	94.-2-44	38	ORG-CTR RD	1.72	913	5/29/1996	\$45,000	1971	\$49.29
Wyoming	Orangeville	94.-2-8	2865	DUNHAM RD	5.48	1,820	9/11/1996	\$94,500	1976	\$51.92
Wyoming	Orangeville	96.-1-10	4286	LIBERTY ST RD	1.40	1,080	4/18/1997	\$58,000	1993	\$53.70
Wyoming	Orangeville	94.-1-6.122	2982	DUNHAM RD	1.25	945	8/20/1997	\$39,900	1993	\$42.22
Wyoming	Orangeville	95.-2-24	4080	QUAKERTOWN RD	N/A	1,856	9/19/1997	\$75,000	1975	\$40.41
Wyoming	Orangeville	94.-1-4.1	2930	DUNHAM RD	9.63	2,016	3/25/1998	\$82,000	1970	\$40.67
Wyoming	Orangeville	94.-1-9		SYLER RD	5.94	1,325	5/27/1998	\$41,000	1970	\$30.94
Wyoming	Wethersfield	120.-1-7.2	4759	HERMITAGE RD	17.14	2,134	7/16/1998	\$77,000	1900	\$36.08
Wyoming	Orangeville	94.-2-12.2	3130	DUNHAM RD	9.07	1,671	8/12/1998	\$141,000	1983	\$84.38
Wyoming	Orangeville	94.-2-50.12	2949	DUNHAM RD	5.56	1,344	1/21/1999	\$45,000	1983	\$33.48
Wyoming	Orangeville	94.-2-5	2849	DUNHAM RD	3.43	1,480	6/3/1999	\$69,000	1974	\$46.62
Wyoming	Wethersfield	108.3-1-17	4173	WETHERSFIELD RD	0.67	1,168	6/16/1999	\$52,000	1900	\$44.52
Wyoming	Orangeville	94.-2-22.2	3853	WEBER RD	0.88	1,800	9/30/1999	\$127,000	1991	\$70.56

Average = **\$69,487** **\$48.05**  
 Median = **\$63,900** **\$45.57**

**SALES 2000-2007**

County	Municipality	SBL	Address	Street	Land Area	SF	SaleDate	SalePrice	Year Built	Price/SF
Wyoming	Orangeville	94.-2-35	28	MEADOW LARK LN	2.07	800	4/2/2000	\$44,900	1975	\$56.13
Wyoming	Wethersfield	108.3-1-22	4261	HERMITAGE RD	0.76	1,601	5/8/2000	\$23,000	1920	\$14.37
Wyoming	Orangeville	95.-1-4	3	CARDINAL DR	2.40	1,288	6/5/2000	\$70,000	1993	\$54.35
Wyoming	Orangeville	94.-2-45	39	ORG-CTR RD	1.72	912	12/5/2000	\$44,000	1970	\$48.25
Wyoming	Orangeville	94.-2-22.2	3853	WEBER RD	0.88	1,800	11/2/2001	\$110,000	1991	\$61.11
Wyoming	Orangeville	95.-1-11	6	ROBIN LA	1.86	912	9/13/2002	\$53,000	1972	\$58.11
Wyoming	Wethersfield	108.3-1-30	4200	WETHERSFIELD RD	1.03	1,044	1/31/2003	\$55,000	1965	\$52.68
Wyoming	Wethersfield	118.-1-19.2	4027	SODOM RD	4.73	1,872	7/25/2003	\$85,000	1980	\$45.41
Wyoming	Orangeville	96.-1-33.2	3801	HERMITAGE RD	0.33	960	3/19/2004	\$20,000	1930	\$20.83
Wyoming	Wethersfield	106.-2-8.2	3071	WETHERSFIELD RD	1.90	2,421	8/30/2004	\$157,000	1870	\$64.85
Wyoming	Wethersfield	108.3-1-4	4201	HERMITAGE RD	0.73	1,998	1/31/2005	\$76,000	1900	\$38.04
Wyoming	Wethersfield	108.3-1-30	4200	WETHERSFIELD RD	1.03	1,044	9/27/2005	\$65,000	1965	\$62.26
Wyoming	Wethersfield	119.-1-21.2	4596	HERMITAGE RD	1.39	2,400	10/11/2005	\$125,000	1995	\$52.08
Wyoming	Orangeville	96.-1-5.11	3742	HERMITAGE RD	1.21	1,311	10/21/2005	\$117,500	1880	\$89.63
Wyoming	Orangeville	94.-2-54.12	2953	DUNHAM RD	5.57	2,125	12/21/2005	\$140,000	1986	\$65.88
Wyoming	Orangeville	94.-2-50.12	2949	DUNHAM RD	5.56	1,344	6/28/2006	\$96,000	1983	\$71.43
Wyoming	Wethersfield	120.00-1-4.112	4502	HERMITAGE RD	8.56	1,624	3/17/2006	\$50,000	1900	\$30.79
Wyoming	Orangeville	108.3-1-6	4217	HERMITAGE RD	0.50	1,480	6/2/2006	\$75,000	1900	\$50.68
Wyoming	Orangeville	82.00-2-44	22	DEER POND ACRES	6.10	1,024	6/28/2006	\$85,000	1984	\$83.01
Wyoming	Orangeville	94.00-2-50.12	2949	DUNHAM RD	5.56	1,344	6/28/2006	\$96,000	1983	\$71.43
Wyoming	Orangeville	83.00-1-24.2	9	DEER POND ACRES	5.06	1,200	7/20/2006	\$97,000	1995	\$80.83
Wyoming	Orangeville	96.00-1-33.2	3801	HERMITAGE RD	0.33	960	9/1/2006	\$74,000	1930	\$77.08
Wyoming	Orangeville	82.00-2-32	3203	SYLER RD	1.10	1,266	10/20/2006	\$74,200	1980	\$58.61
Wyoming	Wethersfield	132.01-1-36	5129	SHEPPARD	0.48	1,160	1/18/2007	\$60,000	1900	\$51.72
Wyoming	Orangeville	81.00-3-16	2661	CENTERLINE RD	0.24	1,335	2/2/2007	\$54,902	1890	\$41.13
Wyoming	Orangeville	81.00-3-14	2671	CENTERLINE RD	0.46	2,504	4/20/2007	\$84,800	1890	\$33.87
Wyoming	Wethersfield	108.03-1-28	4180	WETHERSFIELD RD	1.17	1,200	6/5/2007	\$18,000	1900	\$15.00
Wyoming	Wethersfield	117.00-2-2	2618	SODOM RD	2.66	780	6/22/2007	\$47,500	1959	\$60.90
Wyoming	Orangeville	94.00-2-10.113	3332	SYLER RD	1.86	1,196	7/10/2007	\$130,000	1985	\$108.70
Wyoming	Orangeville	105.00-3-7	3853	HOLLOW RD	4.28	1,080	7/30/2007	\$73,000	1905	\$67.59
Wyoming	Orangeville	95.00-2-20	4011	QUAKERTOWN RD	1.41	1,344	7/31/2007	\$82,000	1950	\$61.01
Wyoming	Wethersfield	107.-2-14.112	4038	WETHERSFIELD RD	6.14	1,012	8/24/2007	\$81,000	1994	\$80.04
Wyoming	Orangeville	82.-1-3	3133	ROYCE RD	3.55	2,464	9/27/2007	\$168,000	1971	\$68.18
Wyoming	Orangeville	95.-1-17	13	ROBIN LA	2.07	2,135	11/30/2007	\$50,000	1982	\$23.42

Average = **\$78,877** **\$56.45**  
 Median = **\$74,600** **\$58.36**

**Updated Sales Data**

*Sales 2008-2016*

County	Municipality	SBL	Address	Street	Land Area	SF	Deed Date	Sale Price	Year Built	Price/SF
Wyoming	Wethersfield	132.-1-6	4324	BUG ROAD	0.92	1,904	4/10/2012	\$68,000	1900	\$35.71
Wyoming	Wethersfield	119.-1-14.2	3709	DEVINNEY	21.89	1,352	12/21/2015	\$112,500	1994	\$83.21
Wyoming	Wethersfield	119.-1-14.2	3709	DEVINNEY RD	21.89	1,352	7/16/2010	\$82,500	1994	\$61.02
Wyoming	Wethersfield	119.-1-2	3535	DEVINNEY RD	44.2	1,296	10/3/2014	\$128,000	1987	\$98.77
Wyoming	Wethersfield	132.1-1-24	4268 & 4266	DOLPH RD	1.02	1,088	11/10/2009	\$35,000	1900	\$32.17
Wyoming	Wethersfield	132.-1-10	5017	HERMITAGE RD	0.76	1,232	5/6/2011	\$66,000	2012	\$53.57
Wyoming	Wethersfield	119.-1-18	4438	HERMITAGE RD	4	2,146	9/13/2013	\$111,000	1892	\$51.72
Wyoming	Orangeville	96.-1-5.11	3742	HERMITAGE RD	0	1,842	10/2/2013	\$117,500	1880	\$63.79
Wyoming	Wethersfield	132.-1-13	4974	HERMITAGE RD	0.92	1,964	12/3/2013	\$72,000	1910	\$36.66
Wyoming	Wethersfield	119.-1-21.111	4602	HERMITAGE RD	90.81	1,280	6/18/2015	\$280,000	2009	\$218.75
Wyoming	Orangeville	96.-1-33.2	3801	HERMITAGE ROAD	0.33	960	8/31/2015	\$70,000	1930	\$72.92
Wyoming	Wethersfield	108.3-1-3	4183	HERMITAGE ROAD	1.88	1,248	10/28/2015	\$69,900	1900	\$56.01
Wyoming	Orangeville	84.-1-31	4351	LIBERTY STREET RD	2.72	1,092	10/3/2014	\$75,000	1993	\$68.68
Wyoming	Wethersfield	142.-1-34	5749	MAXWELL RD	3.84	1,716	12/17/2008	\$60,000	1974	\$34.97
Wyoming	Wethersfield	142.-1-34	5749	MAXWELL RD	3.84	1,716	12/29/2010	\$15,000	1974	\$8.74
Wyoming	Wethersfield	130.-1-12	2834	PEE DEE RD	1.34	1,152	4/11/2014	\$50,400	1975	\$43.75
Wyoming	Wethersfield	130.-1-13	2834	PEE DEE RD	1.16	1,176	12/21/2015	\$105,000	1970	\$89.29
Wyoming	Wethersfield	130.-1-11	2860	PEE DEE ROAD LOT	1.29	1,176	5/5/2015	\$95,200	1994	\$80.95
Wyoming	Wethersfield	142.-1-47	5398	PLEASANT VALLEY	10.98	1,882	12/5/2013	\$92,000	1900	\$48.88
Wyoming	Wethersfield	131.-1-25	5249	POPLAR TREE RD	8.33	1,044	5/15/2008	\$177,500	1900	\$170.02
Wyoming	Wethersfield	106.-2-71	4100	POPLAR TREE RD	30.34	1,384	5/13/2011	\$40,000	1960	\$28.90
Wyoming	Wethersfield	130.-2-11	5120	POPLAR TREE RD	0.92	760	10/13/2011	\$45,000	1938	\$59.21
Wyoming	Wethersfield	106.-2-71.1	4100	POPLAR TREE RD	2.18	1,384	9/9/2013	\$130,000	1960	\$93.93
Wyoming	Wethersfield	119.-1-7	4685	POPLAR TREE ROAD	2.76	1,400	9/9/2014	\$85,600	1989	\$61.14
Wyoming	Wethersfield	142.-1-37.1	2830	ROUTE 78	2.91	1,950	10/19/2009	\$40,000	1900	\$20.51
Wyoming	Wethersfield	142.-1-37.1	2830	ROUTE 78	2.91	1,950	8/11/2014	\$20,000	1900	\$10.26
Wyoming	Wethersfield	131.-1-28	3816	ROUTE 78	104.91	2,727	9/19/2014	\$181,400	1920	\$66.52
Wyoming	Wethersfield	131.-1-33.11	3846	ROUTE 78	4.11	1,212	11/18/2015	\$20,000	1900	\$16.50
Wyoming	Wethersfield	142.-1-23.111	5797	ROUTE 362	3.26	1,320	5/15/2013	\$140,000	1986	\$106.06
Wyoming	Wethersfield	142.-1-23.11	5797	ROUTE 362	79.96	1,320	2/3/2011	\$84,374	1986	\$63.92
Wyoming	Wethersfield	132.-1-23	5344	SHEPPARD RD	4.26	3,120	5/13/2013	\$150,000	1900	\$48.08
Wyoming	Wethersfield	132.-1-23	5344	SHEPPARD RD	4.26	3,120	8/26/2013	\$150,000	1900	\$48.08
Wyoming	Wethersfield	132.-1-23	5344	SHEPPARD RD	4.26	3,120	3/30/2015	\$150,000	1900	\$48.08
Wyoming	Wethersfield	118.-1-19.2	4027	SODOM RD	4.73	1,872	12/13/2012	\$116,000	1980	\$61.97
Wyoming	Wethersfield	107.-2-17.112	4038	WETHERSFIELD ROA	6.14	1,968	11/13/2015	\$62,500	1994	\$31.76
Wyoming	Wethersfield	143.-1-2	5493	HUBBARD RD	80	720	7/3/2012	\$275,000	1975	\$381.94
							<b>Average =</b>	<b>\$99,233</b>		<b>\$71.01</b>
							<b>Median =</b>	<b>\$84,987</b>		<b>\$57.61</b>

As can be seen by the above sales data there appears to be no influence on property values with the continued operation of the wind farm since our last study. Average and median sales prices on a whole have increased indicating that the existence of the wind farm has not diminished real property values in this sub market.

Additionally sales and re-sales of properties were considered from 2008-2016 as follows:

County	Municipality	SBL	Address	Street	Land Area	SF	Deed Date	Sale Price	Year Built	Price/SF
Wyoming	Wethersfield	119.-1-14.2	3709	DEVINNEY RD	21.89	1,352	7/16/2010	\$82,500	1994	\$61.02
Wyoming	Wethersfield	119.-1-14.2	3709	DEVINNEY RD	21.89	1,352	12/21/2015	\$112,500	1994	\$83.21
Wyoming	Wethersfield	142.-1-34	5749	MAXWELL RD	3.84	1,716	12/17/2008	\$60,000	1974	\$34.97
Wyoming	Wethersfield	142.-1-34	5749	MAXWELL RD	3.84	1,716	12/29/2010	\$15,000	1974	\$8.74
Wyoming	Wethersfield	130.-1-12	2834	PEE DEE RD	1.34	1,152	4/11/2014	\$50,400	1975	\$43.75
Wyoming	Wethersfield	130.-1-13	2834	PEE DEE RD	1.16	1,176	12/21/2015	\$105,000	1970	\$89.29
Wyoming	Wethersfield	106.-2-71	4100	POPLAR TREE RD	30.34	1,384	5/13/2011	\$40,000	1960	\$28.90
Wyoming	Wethersfield	106.-2-71.1	4100	POPLAR TREE RD	2.18	1,384	9/9/2013	\$130,000	1960	\$93.93
Wyoming	Wethersfield	142.-1-23.11	5797	ROUTE 362	79.96	1,320	2/3/2011	\$84,374	1986	\$63.92
Wyoming	Wethersfield	142.-1-23.111	5797	ROUTE 362	3.26	1,320	5/15/2013	\$140,000	1986	\$106.06
Wyoming	Wethersfield	132.-1-23	5344	SHEPPARD RD	4.26	3,120	8/26/2013	\$150,000	1900	\$48.08
Wyoming	Wethersfield	132.-1-23	5344	SHEPPARD RD	4.26	3,120	3/30/2015	\$150,000	1900	\$48.08

As is evident by the above correlated sales, there appears to be little to no effect on real estate values of the respective properties based on the continued operation of the facility. Of the 6 sales analyzed 4 increased in value, 1 decreased and 1 stayed the same. This analysis did not include an interview with the respective property owners at the time of sale to determine any underlying factors which may have additionally impacted sales prices. (i.e. capital improvements, additions, deferred maintenance). However, the sales data utilized is considered representative of the market as a whole and it is unlikely that every property had some or all of the previously mentioned underlying factors impacting their respective properties from sale to resale.

There are a limited number of properties with direct views of the wind farm due to extreme topography changes. Therefore the view shed, any noise level and potential for shadow flickers from the blades is mitigated. This is typical with wind farms due to the high elevations and rural nature of the project areas.

Overall, there is considered to be no stigma attached to the project due to the continual sale and resale of properties near the project and considering that the values have appreciated at similar rates when compared to the rest of the county. In conclusion it appears that the existence of the wind farm does not appear to have any impact on surrounding property values as a whole.

**Madison Wind Farm  
Madison County, New York**

The Madison Wind Farm came online in September 2000. Sales data from 1995 to 1999 in the subject market area was compared to sales data from 2000 to 2007.

The following results were drawn from the previous study.

***SALES 1995-1999***

County	Municipality	SBL	Address	Street	Land	SF	SaleDate	SalePrice	Year Built	Price/SF
Madison	Madison	114.6-1-17	7264	VALLEY RD	0.23	1,658	2/1/1995	\$22,000	1870	\$13.27
Oneida	Sangerfield	397.000-1-	715	MASON RD	100.50	2,072	4/5/1995	\$106,800	1840	\$51.54
Madison	Madison	114.-1-43	3753	SOLSVILLE	0.12	1,146	6/16/1995	\$37,000	1955	\$32.29
Madison	Madison	114.-2-19	7561	ROUTE 20	7.69	1,704	1/19/1996	\$150,000	1875	\$88.03
Madison	Madison	102.-1-15.13	4017	STRATFORD	2.44	2,722	3/1/1996	\$77,500	1902	\$28.47
Madison	Madison	114.-2-35	7490	ROUTE 20	0.45	1,359	3/8/1996	\$56,000	1875	\$41.21
Madison	Madison	114.-1-75.2	3652	MADISON	7.79	768	6/27/1996	\$135,000	1960	\$175.78
Madison	Madison	126.-1-36.3	3355	FREDERICK	3.15	2,160	8/19/1996	\$76,500	1970	\$35.42
Madison	Madison	114.19-1-36	3513	SOUTH ST	0.21	1,650	12/27/1996	\$40,700	1973	\$24.67
Madison	Madison	114.15-1-36	7337	ROUTE 20 E	0.21	1,832	6/24/1997	\$35,500	1885	\$19.38
Madison	Madison	102.-1-59	7481	WATER ST	3.31	2,269	8/22/1997	\$43,000	1850	\$18.95
Madison	Madison	126.-1-6.2	3631	RT 12B	4.77	2,320	9/19/1997	\$75,000	1878	\$32.33
Madison	Madison	114.15-1-7	7323	ROUTE 20 W	6.50	2,892	10/27/1997	\$80,000	1840	\$27.66
Madison	Madison	114.6-1-18	7267	VALLEY RD	0.29	1,538	1/20/1998	\$21,500	1875	\$13.98
Madison	Madison	114.15-1-55	7402	ROUTE 20 E	0.49	2,768	2/7/1998	\$20,000	1815	\$7.23
Madison	Madison	114.15-1-56	7400	ROUTE 20 E	0.35	1,596	2/7/1998	\$38,000	1815	\$23.81
Madison	Madison	102.-1-43	7470	BROOKSIDE	1.05	1,691	5/11/1998	\$59,900	1905	\$35.42
Madison	Madison	102.-1-47	7523	VALLEY RD	0.13	1,080	6/1/1998	\$33,200	1860	\$30.74
Madison	Madison	114.19-1-30	3571	SOUTH ST	0.26	1,115	7/15/1998	\$43,000	1920	\$38.57
Madison	Madison	126.-1-62	3247	CENTER RD	1.72	2,092	8/7/1998	\$68,600	1900	\$32.79
Madison	Madison	114.-1-16	3835	SOLSVILLE	0.50	1,508	9/8/1998	\$65,000	1972	\$43.10
Madison	Madison	114.-2-33	7484	ROUTE 20	1.72	2,379	3/8/1999	\$87,500	1900	\$36.78
Madison	Madison	103.-1-55	4239	CAMP RD	3.62	1,457	3/11/1999	\$66,000	1966	\$45.30
Madison	Madison	126.-1-56	3275	LOVEJOY	0.43	1,730	5/18/1999	\$45,000	1850	\$26.01
Madison	Madison	102.-1-14	4032	BIRD RD	2.16	720	6/14/1999	\$72,000	1977	\$100.00
Madison	Madison	114.-2-32	7478	ROUTE 20	0.54	1,287	8/31/1999	\$55,000	1840	\$42.74
Madison	Madison	102.-1-59	7481	WATER ST	8.00	2,269	9/30/1999	\$46,000	1850	\$20.27
Madison	Madison	114.19-1-11	7306	ROUTE 20 W	0.85	1,233	10/29/1999	\$50,000	1850	\$40.55
Madison	Madison	127.-1-15	3430	CENTER RD	3.08	1,254	12/9/1999	\$69,000	1974	\$55.02
Madison	Madison	126.-1-6.2	3487	RT 12B	4.77	2,320	12/10/1999	\$75,000	1878	\$32.33
								<b>Average=</b>		<b>\$40.45</b>
								<b>Median =</b>		<b>\$32.56</b>

**SALES 2000-2007**

County	Municipality	SBL	Address	Street	Land Area	SF	SaleDate	SalePrice	Year Built	Price/SF
Madison	Madison	102.-1-34	4317	SOLSVILLE-	1.87	1,395	2/25/2000	\$50,000	1958	\$35.84
Madison	Madison	114.6-1-5	3885	AUGUSTA RD	0.56	1,920	4/28/2000	\$20,000	1890	\$10.42
Madison	Madison	114.19-1-15.1	7316	MAIN ST RT 20	0.42	2,160	5/10/2000	\$72,500	1810	\$33.56
Madison	Madison	102.-1-16.1	3963	AUGUSTA RD	0.90	1,680	5/12/2000	\$28,000	1990	\$16.67
Madison	Madison	126.-1-32.1	3381	FREDERICK RD	0.89	2,088	5/19/2000	\$110,000	1984	\$52.68
Madison	Madison	114.-1-42	7270	INDIAN	1.49	2,223	6/7/2000	\$77,500	1850	\$34.86
Madison	Madison	114.15-1-23	3712	NORTH ST	1.22	2,322	6/15/2000	\$87,400	1940	\$37.64
Madison	Madison	115.-1-1.1	3522	LOVEJOY RD	1.00	1,092	7/25/2000	\$72,500	1990	\$66.39
Madison	Madison	114.19-1-7	7280	RT 20	0.45	2,112	7/27/2000	\$63,000	1850	\$29.83
Madison	Madison	102.-1-16.1	3963	SOLSVILLE	0.90	1,680	10/5/2000	\$40,000	1990	\$23.81
Madison	Madison	126.-1-11	3200	WEST HILL ROAD	8.18	2,448	11/20/2000	\$148,000	1966	\$60.46
Madison	Madison	126.-1-61	3261	LOVEJOY RD	1.98	1,344	4/3/2001	\$82,000	1990	\$61.01
Madison	Madison	103.-1-23.11	4099	ST RTE 12B	1.59	1,906	4/17/2001	\$70,000	1850	\$36.73
Madison	Madison	114.15-1-29	3678	NORTH ST	0.34	1,374	6/8/2001	\$52,500	1850	\$38.21
Madison	Madison	114.15-1-61	7382	RT 20 E	0.25	1,651	7/23/2001	\$47,000	1850	\$28.47
Madison	Madison	114.15-1-43	7377	RT 20	0.30	1,271	7/25/2001	\$48,000	1830	\$37.77
Madison	Madison	115.-1-41	3840	CENTER RD	1.82	1,916	10/19/2001	\$65,000	1900	\$33.92
Madison	Madison	114.15-1-56	7400	RT 20 EAST	0.35	1,596	4/8/2002	\$62,000	1815	\$38.85
Madison	Madison	103.-1-41	4172	RT 12B	1.95	832	6/10/2002	\$68,500	1952	\$82.33
Madison	Madison	114.15-1-6	7321	ROUTE 20	0.50	2,240	7/31/2002	\$83,900	1890	\$37.46
Oneida	Sangerfield	397.000-1-32	805	PLEASANT	N/A	2,184	8/20/2002	\$76,000	1920	\$34.80
Madison	Madison	115.-1-27	3723	CENTER RD	1.75	1,728	11/14/2002	\$120,000	1850	\$69.44
Madison	Madison	126.-1-51	3200	W LAKE	2.57	1,108	11/19/2002	\$58,000	1967	\$52.35
Madison	Madison	114.15-1-25	3696	NORTH ST	0.22	1,566	3/10/2003	\$21,000	1920	\$13.41
Madison	Madison	114.19-1-54	3538	SOUTH ST	0.41	1,608	4/17/2003	\$40,000	1910	\$24.88
Madison	Madison	114.15-1-12	3665	NORTH ST	0.44	1,943	6/5/2003	\$90,000	1914	\$46.32
Madison	Madison	103.-1-56	4285	CAMP RD	0.41	922	8/12/2003	\$64,000	1960	\$69.41
Madison	Madison	103.-1-63	6676	SANGER HILL	1.36	1,326	11/13/2003	\$85,000	1835	\$64.10
Madison	Madison	114.19-1-42	3602	SOUTH ST	0.44	1,550	11/24/2003	\$60,000	1865	\$38.71
Madison	Madison	114.19-1-46	3502	SOUTH STREET	0.85	1,311	1/28/2004	\$80,400	1924	\$61.33
Madison	Madison	114.19-1-36	3513	SOUTH ST	0.21	1,650	2/23/2004	\$88,250	1973	\$53.48
Madison	Madison	126.-1-61	3261	LOVEJOY RD	1.98	1,344	2/23/2004	\$95,000	1990	\$70.68
Madison	Madison	126.-1-9.1	3353	WEST HILL RD	4.77	1,248	4/15/2004	\$78,500	1975	\$62.90
Madison	Madison	114.-1-33	3712	HORSESHOE	0.45	936	4/16/2004	\$90,000	1973	\$96.15
Madison	Madison	114.-2-19	7561	STATE ROUTE 20	7.69	1,704	4/30/2004	\$260,000	1875	\$152.58
Madison	Madison	114.-1-16	3835	SOLSVILLE	0.50	1,508	6/11/2004	\$67,000	1972	\$44.43
Madison	Madison	114.15-1-5	7317	RT 20	0.39	1,868	6/30/2004	\$95,000	1932	\$50.86
Madison	Madison	114.15-1-42	7373	RT 20	0.72	2,138	6/30/2004	\$70,000	1830	\$32.74
Madison	Madison	126.-1-38.11	3458	FREDERICK RD	7.38	1,644	8/13/2004	\$92,000	1988	\$55.96
Madison	Madison	114.19-1-42	3602	SOUTH ST	0.44	1,550	8/29/2004	\$110,000	1865	\$70.97
Madison	Madison	114.-2-31	7474	RT 20	0.12	768	9/29/2004	\$21,275	1935	\$27.70
Madison	Madison	114.-2-34	7490	ROUTE 20	0.45	1,359	9/29/2004	\$55,000	1875	\$40.47
Madison	Madison	114.19-1-7	7280	ROUTE 20W	0.45	2,112	11/5/2004	\$66,000	1850	\$31.25
Madison	Madison	114.15-1-54	7406	STATE RT 20	0.47	1,200	1/25/2005	\$71,500	1968	\$59.58
Madison	Madison	103.-1-40.2	4874	STATE RTE 12B	3.21	1,836	1/31/2005	\$55,000	1995	\$29.96
Madison	Madison	114.15-1-41	7363	ST RT 20	0.60	2,030	4/13/2005	\$31,500	1850	\$15.52
Madison	Madison	103.-1-23.13	4759	NYS RT 12B	1.39	1,906	4/26/2005	\$86,000	1850	\$45.12
Madison	Madison	126.-1-17.2	7124	HILLCREST RD	1.83	2,240	7/7/2005	\$82,500	1997	\$36.83
Madison	Madison	115.-1-34	8141	ROUTE 20	2.48	2,542	10/17/2005	\$90,000	1805	\$35.41
Madison	Madison	114.19-1-35	3519	SOUTH ST.	0.10	814	10/21/2005	\$61,000	1948	\$74.94
Madison	Madison	114.15-1-47	7401	Route 20	0.32	1,845	11/15/2005	\$59,000	1905	\$31.98
Madison	Madison	126.-1-70	3134	CENTER RD	1.41	1,271	2/7/2006	\$67,500	1880	\$53.11
Madison	Madison	114.19-1-56	3524	SOUTH ST.	0.41	1,288	3/27/2006	\$86,000	1978	\$66.77
Madison	Madison	114.15-1-26	3692	NORTH ST.	0.23	1,448	7/28/2006	\$27,500	1870	\$18.99
Madison	Madison	138.00-1-28	3115	LAKE MORRAINE	4.3	888	8/2/2006	\$130,000	1961	\$146.40
Madison	Hamilton	154.00-2-49.118	5605	LAKEVIEW CT	2.9	2,400	8/15/2006	\$380,000	2005	\$158.33
Madison	Hamilton	154.00-2-49.5	5551	LAKEVIEW CT	2.34	2,340	8/17/2006	\$258,000	2003	\$110.26
Madison	Waterville	391.00-1-57	1394	BROTHERTOWN F	0.94	3,024	9/1/2006	\$141,000	1980	\$46.63
Madison	Hamilton	126.00-1-14	3161	W HILL RD	1.08	1,920	9/29/2006	\$99,000	1830	\$51.56
Madison	Madison	126.00-1-62	3139	CENTER RD	1.72	2,092	10/2/2006	\$162,500	1900	\$77.68
Oneida	Oriskany Falls	390.06-1-2.2	6320	BARKER RD	0.92	1,483	10/6/2006	\$73,140	2000	\$49.32
Madison	Madison	114.00-1-2	3920	STRATFORD ST	0.48	1,150	11/6/2006	\$75,000	2000	\$65.22
Madison	Madison	125.08-1-19	6845	US ROUTE 20	0.69	1,664	11/14/2006	\$107,900	1870	\$64.84
Madison	Sangerfield	391.00-1-12	7065	SANGER HILL RD	0.65	2,960	11/15/2006	\$96,500	1960	\$32.60
Madison	Madison	125.07-1-31	6763	US ROUTE 20	0.28	1,667	11/29/2006	\$70,000	1900	\$41.99
Madison	Waterville	391.00-1-20	1342	BROTHERTOWN F	0.48	1,404	1/3/2007	\$167,890	1974	\$119.58
Oneida	Oriskany Falls	381.00-1-39.7	101	PINEHURST LN	1.16	1,800	5/3/2007	\$250,000	2003	\$138.89
Madison	Hamilton	138.-1-55.12	5483	HILL RD	4.59	2,616	7/2/2007	\$395,000	1988	\$150.99
Oneida	Oriskany Falls	381.19-1-34	253	MAIN ST	2.8	2,592	7/17/2007	\$67,980	1910	\$26.23
Madison	Madison	154.-2-49.2	5124	HILL RD	0.81	1,440	7/30/2007	\$130,000	1977	\$90.28
Madison	Madison	126.-1-42	3373	FREDERICK RD	0.53	1,216	8/31/2007	\$97,400	1948	\$80.10
								Average=		\$93,648
								Median =		\$76,000
										\$46.63

**Updated Sales Data - Sales 2008-2016**

County	Municipality	SBL	Address	Street	Land Area	SF	Sale Date	Sale Price	Year Built	Price/SF
Madison	Madison	127.-1-29	3425	TINKER HOLLOW RD	0.82	1,797	2/3/2009	\$49,000	1850	\$27.27
Madison	Madison	155.-2-15.2	2746	QUARTERLINE RD	4.43	1,792	2/11/2009	\$82,900	2001	\$46.26
Madison	Madison	114.19-1-10	7296	RTE 20	1.38	1,866	6/1/2009	\$40,000	1890	\$21.44
Madison	Madison	114.15-1-6	7321	STATE ROUTE 20	0.5	2,240	7/7/2009	\$95,000	1890	\$42.41
Madison	Madison	114.-2-23	7581	RTE 20	0.96	1,050	8/5/2009	\$55,000	1945	\$52.38
Madison	Madison	114.19-1-10	7296	ROUTE 20	1.38	1,866	10/9/2009	\$33,000	1890	\$17.68
Madison	Madison	126.-1-38.11	3458	FREDERICK RD	7.38	1,644	12/30/2009	\$130,000	1988	\$79.08
Madison	Madison	114.15-1-57	7396	ROUTE 20	0.36	1,696	3/1/2010	\$88,000	1885	\$51.89
Madison	Madison	114.19-1-42	3602	SOUTH ST	0.44	1,550	4/30/2010	\$120,000	1865	\$77.42
Madison	Madison	115.-1-38	3948	STONE ROAD	2.6	1,758	4/30/2010	\$170,000	1993	\$96.70
Madison	Hamilton	154.-1-16.2	7224	MASON RD	0.78	1,046	5/14/2010	\$62,000	1930	\$59.27
Madison	Madison	102.-1-18	4028	AUGUSTA RD	0.45	1,536	8/4/2010	\$57,000	1860	\$37.11
Madison	Madison	138.-1-27.1	3119	LAKE MORAIN RD	0.58	1,680	10/12/2010	\$72,500	1960	\$43.15
Madison	Madison	103.-1-55	4349	CAMP RD	3.52	1,457	11/26/2010	\$82,500	1966	\$56.62
Madison	Madison	114.15-1-30	3674	NORTH ST	0.32	3,107	8/22/2011	\$79,000	1850	\$25.43
Madison	Madison	127.-1-14	3453	QUARTERLINE RD	1.94	1,960	9/29/2011	\$1,985	1985	\$1.01
Madison	Madison	102.-1-56.12	7339	VALLEY RD	2.95	2,240	10/26/2011	\$104,940	2000	\$46.85
Madison	Madison	114.15-1-58	7392	ROUTE 20	0.33	1,750	12/10/2011	\$97,500	1900	\$55.71
Madison	Madison	114.19-1-7	7280	RT 20	0.45	2,112	2/3/2012	\$118,614	1850	\$56.16
Madison	Madison	127.-1-14	3453	QUARTERLINE RD	1.94	1,960	5/21/2012	\$167,000	1985	\$85.20
Madison	Madison	103.-2-63	6676	SANGER HILL RD	0.35	2,022	6/14/2012	\$118,000	1835	\$58.36
Madison	Madison	114.15-1-57	7396	ROUTE 20	0.36	1,750	7/17/2012	\$89,000	1885	\$50.86
Madison	Madison	114.-2-30.2	7470	STATE ROUTE 20	1.08	1,647	9/14/2012	\$85,000	1875	\$51.61
Madison	Hamilton	154.-1-19	7179	MASON RD	0.33	850	11/1/2012	\$23,120	1948	\$27.20
Madison	Madison	126.-1-32.1	3473	FREDERICK RD	1.27	2,088	11/12/2012	\$152,000	1984	\$72.80
Madison	Madison	114.19-1-59	3504	SOUTH ST	3.72	3,000	1/16/2013	\$245,000	1802	\$81.67
Madison	Madison	127.-1-25.11	3257	QUARTERLINE RD	95.58	1,596	1/30/2013	\$143,000	1895	\$89.60
Madison	Madison	114.19-1-36	3513	SOUTH ST	0.21	1,650	5/17/2013	\$110,000	1973	\$66.67
Madison	Madison	127.-1-5.12	3325	PICKETT RD	5.2	1,984	7/3/2013	\$160,000	2004	\$80.65
Madison	Madison	103.-1-24	4779	NYS RTE 12B	48.29	4,432	10/24/2013	\$328,000	2007	\$74.01
Madison	Madison	114.-2-17	7549	US RT 20	0.99	1,561	11/18/2013	\$143,100	1988	\$91.67
Madison	Madison	103.-1-29	7854	BONUS ALLEY RD	0.34	1,881	5/27/2014	\$130,000	2005	\$69.11
Madison	Madison	114.15-1-4	7313	ROUTE 20	0.87	2,208	6/11/2014	\$90,000	1807	\$40.76
Madison	Madison	126.-2-38.11	3458	FREDERICK RD	7.38	1,644	6/24/2014	\$117,925	1988	\$71.73
Madison	Madison	138.-1-27.1	3119	LAKE MORAIN RD	0.58	1,680	7/2/2014	\$149,000	1960	\$88.69
Madison	Madison	115.-1-25	3739	CENTER RD	33.2	1,092	10/23/2014	\$150,000	1981	\$137.36
Madison	Madison	114.19-1-37	3511	SOUTH ST	0.2	1,396	11/26/2014	\$80,000	1963	\$57.31
Madison	Madison	127.-1-3	3161	PICKETT ROAD	1.01	1,922	12/5/2014	\$108,000	1830	\$56.19
Madison	Madison	138.-1-27	3121	LAKE MORAIN RD	0.71	2,015	12/29/2014	\$160,000	1820	\$79.40
Madison	Madison	127.-1-13	3563	QUARTERLINE ROAD	1.07	1,830	1/27/2015	\$99,600	1968	\$54.43
Madison	Madison	114.19-1-10	7296	US ROUTE 20	1.38	1,866	8/27/2015	\$102,000	1890	\$54.66
Madison	Madison	103.-1-51.22	4125	CAMP ROAD	1.74	1,680	9/4/2015	\$157,900	2001	\$93.99
Madison	Hamilton	154.-1-19.1	7180	MASON ROAD	6.15	3,272	9/8/2015	\$415,000	2013	\$126.83
Madison	Madison	114.6-1-5	7247	VALLEY RD	0.56	1,920	9/10/2015	\$50,000	1890	\$26.04
Madison	Madison	114.-2-28	7452	STATE ROUTE 20	0.75	1,449	9/21/2015	\$80,000	1925	\$55.21
Madison	Madison	103.-2-79.21	8323	US STATE ROUTE 20	27.03	2,056	10/27/2015	\$77,000	1860	\$37.45
Madison	Madison	126.-1-31.12	3425	BISHOP ROAD	10.72	2,322	11/2/2015	\$223,000	1989	\$96.04
Madison	Madison	114.15-1-58	7392	RT 20	0.33	1,750	11/16/2015	\$109,000	1900	\$62.29
Oneida	Oriskany Falls	381.019-4-4	165	SO MAIN ST	0	1,356	7/25/2008	\$65,000	1900	\$47.94
Oneida	Sangerfield	391.000-1-8.1	6878	SANGER HILL RD	5.4	1,500	8/4/2008	\$190,000	2004	\$126.67
Oneida	Waterville	392.010-3-7	217	MADISON ST	0.48	1,320	8/14/2008	\$51,500	1865	\$39.02
Oneida	Oriskany Falls	390.007-4-3	118	COOPER ST	0	1,960	9/23/2008	\$93,700	1930	\$47.81
Oneida	Oriskany Falls	381.019-4-2	256	MAIN ST	0	1,736	10/31/2008	\$100,700	1900	\$58.01
Oneida	Oriskany Falls	381.015-1-4	121	COLLEGE ST	0	1,272	11/13/2008	\$105,000	1954	\$82.55
Oneida	Oriskany Falls	381.020-1-1	165	N MAIN ST	0	2,318	11/26/2008	\$62,500	1900	\$26.96
Oneida	Oriskany Falls	381.019-4-38	112	S. MAIN ST.	0	1,584	1/8/2009	\$62,700	1948	\$39.58
Oneida	Oriskany Falls	381.019-4-25	222	MAIN ST	0	1,650	6/30/2009	\$40,700	1880	\$24.67
Oneida	Sangerfield	410.000-1-4	102	NYS RT 12 ES	2.5	1,614	7/28/2009	\$77,000	1890	\$47.71
Oneida	Sangerfield	404.000-1-28.2	315	STATE RT. 12	4.5	1,716	8/28/2009	\$94,000	1995	\$54.78
Oneida	Waterville	392.007-3-71	111/113	MAIN ST	0	1,269	11/2/2009	\$98,000	1865	\$77.23
Oneida	Waterville	392.007-3-55	144	MAIN ST	0	1,998	11/12/2009	\$86,000	1900	\$43.04
Oneida	Sangerfield	391.000-1-28.5	7266	MADISON ST	1.46	1,664	2/18/2010	\$150,000	2004	\$90.14
Oneida	Oriskany Falls	381.019-3-29	102	COOPER ST	0	1,617	2/23/2010	\$77,000	1890	\$47.62
Oneida	Waterville	392.007-3-64	124	MAIN ST	0	1,920	2/26/2010	\$40,000	1950	\$20.83
Oneida	Oriskany Falls	381.020-1-2	169	N MAIN ST	0	1,350	4/12/2010	\$97,400	1890	\$72.15
Oneida	Sangerfield	392.019-1-22	7655	US ROUTE 20	0.25	970	5/19/2010	\$40,000	1920	\$41.24
Oneida	Oriskany Falls	381.020-1-7	140	NORTH MAIN ST	0	2,016	6/24/2010	\$25,000	1860	\$12.40
Oneida	Oriskany Falls	381.015-1-6	117	COLLEGE ST	0	1,766	6/30/2010	\$96,000	1904	\$54.36

**Sales 2008-2016 (Cont'd)**

County	Municipality	SBL	Address	Street	Land Area	SF	Sale Date	Sale Price	Year Built	Price/SF
Oneida	Oriskany Falls	390.007-2-5	127	MADISON ST	0.5	1,432	11/10/2010	\$84,800	1930	\$59.22
Oneida	Oriskany Falls	381.019-1-5	107	COLLEGE ST	0	1,960	12/10/2010	\$52,000	1840	\$26.53
Oneida	Oriskany Falls	381.019-4-26	220	MAIN ST	0	1,480	2/2/2011	\$54,000	1900	\$36.49
Oneida	Sangerfield	391.000-1-55.7	1322	SAWMILL RD	1	1,232	2/28/2011	\$128,900	2006	\$104.63
Oneida	Oriskany Falls	390.007-2-15	151-153	MADISON ST	0	2,704	4/25/2011	\$39,000	1900	\$14.42
Oneida	Sangerfield	391.000-1-49	6779	US RT 20	1.31	1,440	5/11/2011	\$119,000	1959	\$82.64
Oneida	Waterville	392.010-1-32	182	MADISON ST	0	1,596	5/13/2011	\$128,000	1880	\$80.20
Oneida	Sangerfield	392.019-1-24	7645	US RT 20	0	2,256	8/2/2011	\$150,000	1925	\$66.49
Oneida	Oriskany Falls	390.007-3-11	158	MADISON ST	0	1,429	12/2/2011	\$70,000	1900	\$48.99
Oneida	Sangerfield	391.000-1-8.2	1387	SAWMILL RD	17.1	2,453	12/12/2011	\$235,000	1972	\$95.80
Oneida	Waterville	392.010-1-26	132	MADISON ST	0	2,851	2/24/2012	\$70,000	1840	\$24.55
Oneida	Sangerfield	391.000-1-28.3	7247	MADISON ST	1.2	1,245	4/4/2012	\$119,000	1936	\$95.58
Oneida	Oriskany Falls	381.019-2-26	174	N MAIN STREET	0.14	1,260	6/12/2012	\$38,500	1950	\$30.56
Oneida	Sangerfield	391.000-1-39.5	6934	US RT 20	2.21	1,744	4/9/2013	\$133,900	1940	\$76.78
Oneida	Sangerfield	391.000-1-57	1394	BROTHERTOWN	0	1,512	5/9/2013	\$95,000	1980	\$62.83
Oneida	Oriskany Falls	381.019-2-17	179	NORTH MAIN ST	0	2,024	5/17/2013	\$30,000	1880	\$14.82
Oneida	Oriskany Falls	381.019-3-7	118	MADISON ST	0	2,534	5/28/2013	\$87,874	1900	\$34.68
Oneida	Oriskany Falls	381.019-4-27	218	SOUTH MAIN STREE	0	2,040	6/15/2013	\$29,000	1950	\$14.22
Oneida	Waterville	392.010-3-4	349	MADISON ST	0.35	1,248	7/1/2013	\$145,000	1950	\$116.19
Oneida	Sangerfield	403.000-1-25	195	MASON RD	1.17	1,464	10/23/2013	\$255,000	1850	\$174.18
Oneida	Sangerfield	392.000-1-9	7439	MADISON ST	5.26	1,032	10/30/2013	\$113,300	1967	\$109.79
Oneida	Oriskany Falls	381.019-3-31	106	COOPER ST	0	900	12/12/2013	\$20,000	1925	\$22.22
Oneida	Sangerfield	392.000-2-31.2	7564	RT 20	0	1,568	6/25/2014	\$51,500	1990	\$32.84
Oneida	Waterville	392.010-1-39.3	350	MADISON ST	1.91	2,752	7/10/2014	\$270,000	2000	\$98.11
Oneida	Sangerfield	404.000-1-21	192	ST RT 12 ES	0	2,048	7/15/2014	\$77,000	1920	\$37.60
Oneida	Oriskany Falls	390.007-2-15	151-153	MADISON ST	0	2,704	8/5/2014	\$75,000	1900	\$27.74
Oneida	Sangerfield	391.000-1-55.8	7230	SAWMILL RD	27.7	2,440	10/17/2014	\$335,000	2009	\$137.30
Oneida	Waterville	392.010-3-13	183	MADISON ST	0	1,880	10/31/2014	\$133,000	1900	\$70.74
Oneida	Oriskany Falls	390.007-2-15	151 153	MADISON STREET	0	2,704	11/4/2014	\$22,500	1900	\$8.32
Oneida	Sangerfield	391.000-1-55.5	1336	SAWMILL ROAD	1	1,880	12/5/2014	\$163,085	1989	\$86.75
Oneida	Sangerfield	391.000-1-8.10	6860	SANGER HILL RD	2.3	1,328	12/24/2014	\$142,000	2013	\$106.93
Oneida	Oriskany Falls	381.019-1-16	213	MAIN ST	0	4,341	6/15/2015	\$145,000	1800	\$33.40
Oneida	Waterville	392.010-3-4	349	MADISON STREET	0	1,248	9/11/2015	\$144,160	1950	\$115.51
Oneida	Oriskany Falls	390.007-2-28	100	ELM AVE	0	1,392	12/11/2015	\$52,000	1900	\$37.36
Oneida	Waterville	392.010-1-25	126	MADISON STREET	0	2,895	1/19/2016	\$56,500	1900	\$19.52
							<b>Average =</b>	<b>\$107,930</b>		<b>\$60.10</b>
							<b>Median =</b>	<b>\$95,000</b>		<b>\$55.21</b>

As can be seen by the above sales data there appears to be no influence on property values with the continued operation of the wind farm since our last study. Average and median sales prices on a whole have increased indicating that the existence of the wind farm has not diminished real property values in this sub market.

Additionally sales and re-sales of properties were considered from 2008-2016 as follows:

County	Municipality	SBL	Address	Street	Land Area	SF	Sale Date	Sale Price	Year Built	Price/SF
Madison	Madison	126.-1-38.11	3458	FREDERICK RD	7.38	1,644	12/30/2009	\$130,000	1988	\$79.08
Madison	Madison	126.-2-38.11	3458	FREDERICK RD	7.38	1,644	6/24/2014	\$117,925	1988	\$71.73
Madison	Madison	138.-1-27.1	3119	LAKE MORAIN RD	0.58	1,680	10/12/2010	\$72,500	1960	\$43.15
Madison	Madison	138.-1-27.1	3119	LAKE MORAIN RD	0.58	1,680	7/2/2014	\$149,000	1960	\$88.69
Oneida	Oriskany Falls	390.007-2-15	151-153	MADISON ST	0	2,704	4/25/2011	\$39,000	1900	\$14.42
Oneida	Oriskany Falls	390.007-2-15	151-153	MADISON ST	0	2,704	8/5/2014	\$75,000	1900	\$27.74
Madison	Madison	127.-1-14	3453	QUARTERLINE RD	1.94	1,960	9/29/2011	\$155,000	1985	\$79.08
Madison	Madison	127.-1-14	3453	QUARTERLINE RD	1.94	1,960	5/21/2012	\$167,000	1985	\$85.20
Madison	Madison	114.15-1-57	7396	ROUTE 20	0.36	1,696	3/1/2010	\$88,000	1885	\$51.89
Madison	Madison	114.15-1-57	7396	ROUTE 20	0.36	1,696	7/17/2012	\$89,000	1885	\$52.48

As is evident by the above correlated sales, there appears to be little to no effect on real estate values of the respective properties based on the continued operation of the facility. Of the 5 sales analyzed 4 increased in value and 1 decreased in value.



This analysis did not include an interview with the respective property owners at the time of sale to determine any underlying factors which may have additionally impacted sales prices. (i.e. capital improvements, additions, deferred maintenance). However, the sales data utilized is considered representative of the market as a whole and it is unlikely that every property had some or all of the previously mentioned underlying factors impacting their respective properties from sale to resale.

Overall, there is considered to be no stigma attached to the project due to the continual sale and resale of properties near the project and considering that the values have appreciated at similar rates when compared to the rest of the county. In conclusion it appears that the existence of the wind farm does not appear to have any impact on surrounding property values as a whole.

**Fenner Wind Farm  
Madison County, New York**

The Fenner Wind Farm came online in November 2001. Sales data from 1995 to 1999 in the subject market area was compared to sales data from 2000 to 2007.

The following results were drawn from the previous study.

**SALES 1995-1999**

County	Municipality	SBL	Address	Street	Land Area	SF	SaleDate	SalePrice	Yr Built	\$/SF
Madison	Smithfield	71.-1-54	5447	BUYEA ROAD	0.86	1,224	2/7/1995	\$16,000	1870	\$13.07
Madison	Fenner	78.-1-8	2893	BINGLEY	3.28	2,567	2/28/1995	\$165,900	1860	\$64.63
Madison	Smithfield	80.-1-56	5275	BUYEA ROAD	2.17	872	4/23/1995	\$17,000	1928	\$19.50
Madison	Lincoln	60.-1-26.13	RR 3	NELSON RD	2.87	2,428	5/26/1995	\$150,000	1994	\$61.78
Madison	Fenner	77.-2-22.5	2434	CARY HL RD	6.86	1,847	6/23/1995	\$90,600	1977	\$49.05
Madison	Fenner	60.3-1-6	103C	PERRYVILLE RD	0.74	1,350	8/11/1995	\$54,000	1900	\$40.00
Madison	Fenner	87.-1-44	4867	SOUTH	1.58	1,105	8/15/1995	\$64,000	1825	\$57.92
Madison	Fenner	79.-1-21	5308	SWAMP SCHL	0.94	1,680	10/4/1995	\$72,500	1965	\$43.15
Madison	Fenner	77.-2-14	5195	EMHOFF	1.50	1,875	10/20/1995	\$74,900	1890	\$39.95
Madison	Fenner	68.-1-23.2	2489	CAREY HILL	2.52	1,280	10/31/1995	\$69,300	1995	\$54.14
Madison	Fenner	68.-1-39.2	5615	RT 13	0.39	1,436	11/6/1995	\$75,000	1978	\$52.23
Madison	Fenner	87.-1-18	4803	NELSON	0.76	2,728	3/1/1996	\$30,000	1801	\$11.00
Madison	Fenner	88.-1-24	3966	CODY RD	6.99	2,015	3/28/1996	\$87,500	1981	\$43.42
Madison	Lincoln	60.-1-28	6003	NELSON RD	5.37	2,012	4/17/1996	\$125,000	1976	\$62.13
Madison	Fenner	79.-1-19	5365	SWAMP SCHOOL RD	0.35	1,524	5/22/1996	\$69,900	1963	\$45.87
Madison	Fenner	70.-1-48	3921	PETERBORO	1.14	1,824	7/17/1996	\$68,500	1981	\$37.55
Madison	Fenner	87.-1-10.121	2910	FENNER RD	5.71	2,961	8/16/1996	\$180,000	1991	\$60.79
Madison	Fenner	88.-1-12.2	4499	FRANCIS RD	28.49	1,300	8/20/1996	\$106,000	1990	\$81.54
Madison	Fenner	69.-1-31.1	3181	LARKIN RD	4.80	960	8/23/1996	\$83,000	1989	\$86.46
Madison	Fenner	78.-1-14	2786	BINGLEY	0.85	1,348	9/17/1996	\$85,000	1968	\$63.06
Madison	Smithfield	89.-1-5.12	4675	RICH RD	4.72	2,150	10/4/1996	\$95,000	1908	\$44.19
Madison	Smithfield	89.-1-28	4799	GILL ROAD	5.03	1,664	10/8/1996	\$78,000	1989	\$46.88
Madison	Lincoln	60.-1-5.12	3097	INGALLS CORNERS RD	2.88	1,979	10/11/1996	\$120,000	1992	\$60.64
Madison	Fenner	87.-1-67.8	3573	WYSS RD	0.92	640	11/21/1996	\$50,000	1977	\$78.13
Madison	Fenner	68.-1-28.32	5421	IRISH RIDGE	2.85	1,920	11/22/1996	\$90,900	1992	\$47.34
Madison	Lincoln	61.-1-14	6811	OXBOW	0.39	1,034	12/2/1996	\$38,500	1843	\$37.23
Madison	Fenner	70.-1-18.118	6348	OXBOW RD	5.04	1,608	8/25/1997	\$86,400	1992	\$53.73
Madison	Fenner	87.-1-61.3	4794	SOUTH ROAD	6.41	2,080	10/29/1997	\$95,500	1985	\$45.91
Madison	Lincoln	61.-1-45.6	4136	WHITMAN	1.22	1,316	12/19/1997	\$90,000	1986	\$68.39
Madison	Lincoln	60.-1-26.22	3151	RAY	1.51	1,632	12/23/1997	\$87,500	1973	\$53.62
Madison	Lincoln	61.-1-40	6734	OXBOW	0.89	2,716	12/23/1997	\$74,000	1974	\$27.25
Madison	Smithfield	80.-1-5.13	5815	OXBOW	2.82	1,260	12/30/1997	\$35,000	1963	\$27.78
Madison	Fenner	78.-1-32	5042	NELSON ROAD	5.46	1,453	3/24/1998	\$30,000	1850	\$20.65
Madison	Fenner	87.-1-31.2	4875	BUYEA RD	1.70	2,164	5/29/1998	\$77,349	1932	\$35.74
Madison	Fenner	88.-1-24	3966	CODY RD	6.99	2,015	6/8/1998	\$105,000	1981	\$52.11
Madison	Fenner	88.-1-9	3663	MUTTON HILL RD	1.85	1,840	6/12/1998	\$42,500	1973	\$23.10
Madison	Fenner	77.-2-17	5099	EMHOFF RD	2.00	1,159	6/29/1998	\$60,000	1969	\$51.77
Madison	Fenner	70.-1-18.116	4027	MILESTRIP RD	1.93	1,158	7/2/1998	\$79,200	1993	\$68.39
Madison	Fenner	88.-1-13.126	4538	FRANCIS RD	2.77	1,500	7/20/1998	\$72,500	1987	\$48.33
Madison	Lincoln	60.-1-30	3038	RAY	0.90	920	7/23/1998	\$41,200	1850	\$44.78
Madison	Lincoln	61.-1-22.1	3825	ALENE COR	8.01	1,776	7/28/1998	\$81,800	1951	\$46.06
Madison	Fenner	68.-1-18	2424	STABLES	0.98	1,322	9/16/1998	\$54,500	1965	\$41.23
Madison	Fenner	70.-1-43.1	5566	ROUSES	3.97	1,450	9/18/1998	\$84,000	1986	\$57.93
Madison	Smithfield	80.20-1-1	5173	SWAMP ROAD	6.13	1,743	9/24/1998	\$50,000	1850	\$28.69
Madison	Lincoln	61.-1-40	6734	OXBOW	0.89	2,716	10/15/1998	\$82,800	1974	\$30.49
Madison	Smithfield	80.15-1-52	5256	PLST VLL Y	0.36	1,212	11/17/1998	\$50,000	1850	\$41.25
Madison	Smithfield	80.15-1-4.2	5323	OXBOW	1.07	2,138	12/17/1998	\$37,500	1860	\$17.54
Madison	Lincoln	60.-1-9	3171	INGALLS CORNERS RD	0.63	1,104	5/6/1999	\$54,900	1959	\$49.73
Madison	Fenner	79.-1-9	3813	CODY ROAD	4.15	1,202	6/29/1999	\$79,000	1970	\$65.72
Madison	Fenner	88.-1-29.1	4269	MUTTON HILL ROAD	2.68	816	7/9/1999	\$70,000	1974	\$85.78
Madison	Fenner	87.-1-10.121	2910	FENNER ROAD	5.71	2,961	7/27/1999	\$186,750	1991	\$63.07
Madison	Fenner	87.-1-55.2	4631	SOUTH ROAD	4.68	2,905	9/10/1999	\$133,000	1971	\$45.78
Madison	Lincoln	60.-1-26.14	3168	INGALS CRNERS	2.33	1,680	9/23/1999	\$89,409	1995	\$53.22
Madison	Fenner	77.-2-52.11	5240	IRISH RIDGE ROAD	5.98	2,407	10/18/1999	\$75,000	1870	\$31.16
Madison	Fenner	88.-1-27.12	4390	MUTTON HILL ROAD	1.17	995	10/18/1999	\$65,000	1974	\$65.33
Madison	Fenner	70.-1-47.2	3947	PETERBORO ROAD	1.01	2,388	11/22/1999	\$52,500	1880	\$21.98

Average= \$78,193 \$47.65  
Median = \$75,000 \$47.11

**SALES 2000-2007**

County	Municipality	SBL	Address	Street	Land Area	SF	Sale Date	Sale Price	Yr Built	\$/SF
Madison	Smithfield	80.19-1-9	4538	ELIZABETH ST	1.15	420	1/18/2000	\$47,500	1940	\$113.10
Madison	Fenner	87.-1-8	2894	MORAIN RD	0.94	2,380	1/20/2000	\$120,000	1974	\$50.42
Madison	Lincoln	60.-1-5.13	3111	INGALLS CORNERS RD	21.03	1,710	3/10/2000	\$200,000	1900	\$116.96
Madison	Fenner	69.-1-31.16	3061	BEAR SWAMP RD	4.76	1,404	3/14/2000	\$75,100	1988	\$53.49
Madison	Smithfield	71.-1-47.12	4538	MILE STRIP RD	4.92	1,144	4/13/2000	\$63,680	1997	\$55.66
Madison	Fenner	68.1-1-25	5626	FOSSIL ROCK RD	4.28	1,710	5/1/2000	\$84,000	1956	\$49.12
Madison	Fenner	88.-1-27.3	4272	MUTTON HILL ROAD	2.07	1,720	7/28/2000	\$84,200	1984	\$48.95
Madison	Smithfield	71.-1-47.3	4522	MILE STRIP RD	1.00	1,323	9/21/2000	\$65,000	1974	\$49.13
Madison	Fenner	78.-1-47	3517	CODY RD	1.17	1,440	10/4/2000	\$67,900	1974	\$47.15
Madison	Fenner	88.-1-13.123	3646	MUTTON HILL RD	0.91	1,380	10/13/2000	\$69,900	1974	\$50.65
Madison	Lincoln	60.-1-26.22	3151	RAY RD	1.51	1,632	10/20/2000	\$87,000	1973	\$53.31
Madison	Fenner	69.-1-31.7	5362	NELSON RD	5.71	1,322	3/29/2001	\$85,000	1900	\$64.30
Madison	Fenner	88.-1-13.128	3662	MUTTON HILL RD	0.92	960	5/4/2001	\$40,000	1990	\$41.67
Madison	Fenner	78.-1-8	2893	BINGLEY RD	3.28	2,567	5/18/2001	\$237,000	1860	\$92.33
Madison	Fenner	70.-1-59	6200	OXBOW RD	7.58	1,680	5/31/2001	\$107,000	1970	\$63.69
Madison	Lincoln	60.-1-5.12	3097	INGALLS CORNERS RD	2.88	1,979	6/6/2001	\$140,000	1992	\$70.74
Madison	Fenner	77.-2-22.5	2434	CARNEY HILL RD	6.86	1,847	6/13/2001	\$108,000	1977	\$58.47
Madison	Smithfield	80.15-1-46	4708	PARK ST	0.49	2,642	7/18/2001	\$40,000	1797	\$15.14
Madison	Fenner	69.-1-31.222	2965	BEAR SWAMP RD	1.89	1,976	8/6/2001	\$78,700	1995	\$39.83
Madison	Fenner	78.-1-10	2829	BINGLEY RD	23.78	2,068	8/6/2001	\$147,000	1900	\$71.08
Madison	Smithfield	80.15-1-15.12	5304	PETERBORO ROAD	1.71	1,452	8/15/2001	\$90,000	1880	\$61.98
Madison	Smithfield	80.-1-60	5183	BUYEA RD	0.68	960	8/23/2001	\$64,600	1970	\$67.29
Madison	Fenner	87.-1-12	4595	DAVIS ROAD	1.19	2,480	8/31/2001	\$150,000	1803	\$60.48
Madison	Smithfield	89.-1-8	4651	PLEASANT VALLEY RD	7.94	3,380	10/3/2001	\$150,000	1850	\$44.38
Madison	Fenner	77.-2-10.1	5237	EMHOFF RD	2.26	1,740	10/24/2001	\$78,000	1954	\$44.83
Madison	Fenner	79.-1-18.11	4042	PETERBORO RD	9.38	2,040	11/9/2001	\$146,150	1988	\$71.64
Madison	Lincoln	61.-1-34.4	6625	OLD COUNTRY RD	23.96	620	11/27/2001	\$67,000	1984	\$108.06
Madison	Fenner	78.-1-31.12	5116	NELSON ROAD	1.06	1,488	12/21/2001	\$79,900	1976	\$53.70
Madison	Fenner	70.-1-18.116	4027	E MILES STRIP ROAD	1.93	1,158	1/25/2002	\$99,500	1993	\$85.92
Madison	Lincoln	60.-1-26.3	3179	RAY ROAD	1.52	1,666	1/29/2002	\$105,000	1976	\$63.03
Madison	Fenner	60.3-1-5	2752	PERRYVILLE RD	0.70	2,262	3/4/2002	\$72,000	1878	\$31.83
Madison	Fenner	70.-1-55.2	5945	OXBOW RD	4.87	1,735	5/31/2002	\$111,200	1850	\$64.09
Madison	Fenner	78.-1-48	3510	CODY ROAD	0.90	1,920	7/1/2002	\$116,500	1997	\$60.68
Madison	Smithfield	71.-1-37	5928	BUYEA ROAD	2.03	864	7/10/2002	\$100,000	1998	\$115.74
Madison	Lincoln	61.-1-45.6	4136	WHITMAN RD.	1.22	1,316	8/21/2002	\$97,500	1986	\$74.09
Madison	Lincoln	60.-1-34.2	6104	NELSON ROAD	2.67	1,948	9/19/2002	\$120,000	1998	\$61.60
Madison	Fenner	87.-1-61.4	4804	SOUTH RD	6.41	2,080	9/20/2002	\$139,000	1985	\$66.83
Madison	Lincoln	60.-1-2.1	6006	QUARRY RD	0.91	1,440	9/30/2002	\$25,000	1974	\$17.36
Madison	Fenner	78.-1-33	5030	NELSON RD	0.76	1,829	10/16/2002	\$79,500	1825	\$43.47
Madison	Fenner	88.-1-27.42	4300	MUTTON HILL RD	7.00	1,008	10/16/2002	\$125,000	1984	\$124.01
Madison	Lincoln	60.-1-26.22	3151	RAY RD	1.51	1,632	10/25/2002	\$108,000	1973	\$66.18
Madison	Smithfield	71.-1-30.2	4691	E MILESTRIP RD	88.13	1,299	11/20/2002	\$115,000	1980	\$88.53
Madison	Smithfield	80.15-1-64	5223	SWAMP RD	1.74	1,880	4/30/2003	\$43,500	1850	\$23.14
Madison	Lincoln	61.-1-45.2	6471	OLD COUNTRY RD	1.68	1,232	6/27/2003	\$86,900	1977	\$70.54
Madison	Fenner	87.-1-62.11	4691	SOUTH RD	2.94	1,184	7/1/2003	\$105,000	1987	\$88.68
Madison	Fenner	87.-1-18	4803	NELSON RD	0.76	2,728	7/28/2003	\$56,700	1801	\$20.78
Madison	Fenner	68.1-1-16	2446	STABLES RD	0.74	1,627	8/1/2003	\$53,500	1985	\$32.88
Madison	Fenner	69.-1-31.2	3151	LARKIN RD	4.45	1,344	9/8/2003	\$144,900	1988	\$107.81
Madison	Fenner	88.-1-13.126	4538	FRANCIS ROAD	2.77	1,500	9/29/2003	\$75,500	1987	\$50.33
Madison	Fenner	77.-2-40	2657	BINGLEY ROAD	1.85	2,073	10/24/2003	\$135,000	1870	\$65.12
Madison	Fenner	78.-1-22.2	3022	BINGLEY	1.00	1,242	10/28/2003	\$72,500	1985	\$58.37
Madison	Fenner	70.-1-23.1	3560	LARKIN RD	3.81	1,128	11/5/2003	\$120,000	1979	\$106.38
Madison	Fenner	87.-1-61.3	4794	SOUTH RD	6.41	2,080	11/14/2003	\$142,000	1985	\$68.27
Madison	Smithfield	80.15-1-30	4619	PETERBORO ROAD	0.69	1,611	11/28/2003	\$51,500	1865	\$31.97
Madison	Lincoln	61.-1-45.15	4141	WHITMAN ROAD	13.10	1,359	12/10/2003	\$125,000	1994	\$91.98
Madison	Fenner	87.-1-10.4	4610	SHEPHARD ROAD	0.42	1,372	12/16/2003	\$161,000	1974	\$117.35
Madison	Fenner	70.-1-18.119	4045	E MILESTRIP ROAD	4.72	1,120	12/22/2003	\$107,000	1993	\$95.54
Madison	Smithfield	80.20-1-6	5224	SWAMP RD	0.58	1,365	7/27/2004	\$80,000	1900	\$58.61
Madison	Fenner	87.-1-17	4771	NELSON RD	0.95	1,144	8/4/2004	\$64,890	1977	\$56.72
Madison	Fenner	70.-1-18.2	6414	OXBOW RD	1.41	1,113	8/12/2004	\$80,000	1973	\$71.88
Madison	Fenner	79.-1-26.3	5217	SWAMP SCHOOL RD	0.53	1,536	9/24/2004	\$37,000	1900	\$24.09
Madison	Fenner	77.-2-40	2657	BINGLEY ROAD	1.85	2,073	10/28/2004	\$158,000	1870	\$76.22
Madison	Fenner	88.-1-14.123	3743	MUTTON HILL ROAD	1.29	1,560	11/1/2004	\$72,500	1989	\$46.47
Madison	Fenner	88.-1-13.123	3646	MUTTON HILL&FRANCIS	0.91	1,380	11/30/2004	\$79,900	1974	\$57.90
Madison	Fenner	88.-1-8	4614	FRANCIS RD	0.83	1,040	3/14/2005	\$76,850	1975	\$73.89
Madison	Smithfield	80.-1-5.11	5801	OXBOW RD	1.31	1,812	5/2/2005	\$90,000	1800	\$49.67
Madison	Fenner	77.-2-14	5195	ENHOFF RD	1.50	1,875	5/27/2005	\$93,000	1890	\$49.60
Madison	Smithfield	80.15-1-15.12	5304	PETERBORO RD	1.71	1,452	6/22/2005	\$107,000	1880	\$73.69
Madison	Smithfield	89.-1-8	4651	PLEASANT VALLEY RD	7.94	3,380	6/30/2005	\$185,000	1850	\$54.73
Madison	Fenner	69.-1-8	3085	PERRYVILLE RD	0.79	1,437	7/26/2005	\$119,800	1850	\$83.37

**SALES 2000-2007 (Cont'd.)**

County	Municipality	SBL	Address	Street	Land Area	SF	Sale Date	Sale Price	Year Built	Price/SF
Madison	Lincoln	60.-1-5.12	3097	INGALLS CORNERS RD	2.88	1,979	8/22/2005	\$196,000	1992	\$99.04
Madison	Smithfield	89.00-1-4	4747	RICH RD	96.07	1,535	8/29/2005	\$56,000	1870	\$36.48
Madison	Lincoln	61.-1-34.4	6625	OLD COUNTY RD	23.96	620	9/22/2005	\$70,300	1984	\$113.39
Madison	Fenner	79.-1-13.2	3837	CODY RD	2.73	1,260	10/21/2005	\$83,000	1966	\$65.87
Madison	Fenner	78.-1-6.2	3019	BINGLEY RD	1.44	1,620	11/2/2005	\$124,900	1995	\$77.10
Madison	Smithfield	80.-1-65.1	5302	BUYEA RD	22.54	1,040	11/23/2005	\$60,000	1998	\$57.69
Madison	Fenner	87.-1-10.121	2910	FENNER RD	5.71	2,961	12/7/2005	\$310,000	1991	\$104.69
Madison	Fenner	79.-1-29	4109	CODY RD	3.9	1,500	12/23/2005	\$116,600	1949	\$77.73
Madison	Lincoln	60.-1-26.5	3144	INGALLS CORNERS RD	0.89	1,308	12/30/2005	\$79,900	1985	\$61.09
Madison	Fenner	69.-1-31.2	3151	LARKIN RD	4.45	1,344	1/3/2006	\$189,900	1988	\$141.29
Madison	Smithfield	80.15-1-46	4708	PARK ST	0.49	2,642	1/30/2006	\$60,500	1797	\$22.90
Madison	Fenner	60.3-1-14	2802	PERRYVILLE RD	0.33	1,525	4/4/2006	\$87,000	1960	\$57.05
Madison	Fenner	79.-1-18.16	4042	PETERBORO RD	9.38	2,040	4/13/2006	\$170,000	1988	\$83.33
Madison	Lincoln	44.00-2-36.52	4009	SEEBER RD	1.67	1,744	4/18/2006	\$127,900	1999	\$73.34
Madison	Fenner	78.-1-8	2893	BINGLEY RD	3.28	2,567	4/25/2006	\$210,000	1860	\$81.81
Madison	Smithfield	80.-1-74	4642	GLASSFACTORY RD	1.58	1,196	5/2/2006	\$97,500	1974	\$81.52
Madison	Fenner	77.00-2-34.12	2507	BINGLEY RD	1.00	1,856	5/9/2006	\$155,000	1850	\$83.51
Madison	Fenner	69.-1-31.18	3043	BEAR SWAMP RD	4.74	1,344	5/26/2006	\$27,000	1989	\$20.09
Madison	Fenner	77.-2-38	2625	BINGLEY RD	2.75	2,272	6/12/2006	\$269,900	1978	\$118.79
Madison	Fenner	69.-1-31.222	2965	BEAR SWAMP RD	1.89	1,976	6/15/2006	\$79,000	1995	\$39.98
Madison	Fenner	86.00-2-3	2454	BINGLEY RD	1.50	1,666	7/25/2006	\$119,000	1869	\$71.43
Madison	Fenner	68.-1-10	2710	NYS RT 13	0.82	1,488	8/10/2006	\$45,000	1985	\$30.24
Madison	Fenner	77.00-2-8	1200	FALLS RD	0.75	1,932	8/24/2006	\$35,000	1930	\$18.12
Madison	Fenner	70.00-1-18.111	6330	OXBOW RD	5.19	1,768	8/29/2006	\$110,000	2000	\$62.22
Madison	Fenner	96.00-2-34	4364	NELSON RD	0.64	912	9/7/2006	\$108,000	1940	\$118.42
Madison	Lincoln	44.00-2-36.75	6828	FORBES RD	2.20	4,384	11/13/2006	\$385,000	2004	\$87.82
Madison	Fenner	70.00-1-18.115	6374	OXBOW RD	5.15	1,980	11/22/2006	\$179,500	2000	\$90.66
Madison	Lincoln	51.00-1-5.1	3265	COTTONS RD	0.54	1,148	11/22/2006	\$49,900	1920	\$43.47
Madison	Fenner	86.00-2-34.13	4570	ROBERTS RD	1.11	1,456	1/3/2007	\$142,000	1987	\$97.53
Madison	Fenner	77.00-2-52.11	5214	IRISH RIDGE RD	2.82	1,860	2/28/2007	\$245,000	2000	\$131.72
Madison	Lincoln	52.00-1-33.23	4021	CLOCKVILLE RD	5.54	2,056	3/22/2007	\$140,000	1995	\$68.09
Madison	Lincoln	44.00-2-42.52	4034	SEEBER RD	0.79	1,444	3/29/2007	\$93,000	1974	\$64.40
Madison	Fenner	77.00-2-28.1	5082	EMHOFF RD	2.22	1,428	5/7/2007	\$131,000	1986	\$91.74
Madison	Fenner	87.00-1-24	3201	CODY RD	3.49	1,346	5/10/2007	\$126,000	1969	\$93.61
Madison	Smithfield	71.00-1-47.3	4522	E MILESTRIP RD	1	1,323	5/11/2007	\$72,500	1974	\$54.80
Madison	Lincoln	44.00-2-11.2	7586	OXBOW RD	0.61	1,344	6/14/2007	\$114,000	1991	\$84.82
Madison	Lincoln	60.-1-26.12	3098	INGALLS CORNERS RD	0.90	2,240	7/11/2007	\$137,800	1981	\$61.52
Madison	Fenner	78.-1-22.2	3022	BINGLEY RD	1.00	1,242	7/13/2007	\$123,400	1985	\$99.36
Madison	Fenner	86.-2-30.3	2767	FENNER RD	0.90	1,079	7/20/2007	\$86,000	1850	\$79.70
Madison	Lincoln	51.-1-7	3229	COTTONS RD	0.59	1,590	7/25/2007	\$113,300	1878	\$71.26
Madison	Fenner	78.-1-28.21	5300	BUYEA RD	2.66	1,820	9/11/2007	\$100,000	1991	\$54.95
Madison	Fenner	69.-1-31.1	3181	LARKIN RD	4.80	960	10/5/2007	\$138,947	1989	\$144.74
Madison	Lincoln	52.1-1-45	3853	TIMMERMAN	0.42	1,124	10/19/2007	\$48,000	1920	\$42.70
Madison	Lincoln	44.-2-42.3	4016	SEEBER RD	0.68	1,334	11/20/2007	\$108,500	1974	\$81.33

Average= \$109,044 \$68.67  
 Median = \$100,000 \$64.76

**Updated Sales Data****Sales 2008-2016**

County	Municipality	SBL	Address	Street	Land Area	SF	Sale Date	Sale Price	Year Built	Price/SF
Madison	Fenner	78.-1-23.13	3040	BINGLEY RD	1.02	1,758	3/31/2010	\$159,000	1992	\$90.44
Madison	Fenner	78.-1-10.2	2829	BINGLEY RD	20.9	2,068	9/28/2012	\$160,000	1900	\$77.37
Madison	Fenner	78.-1-10.21	2829	BINGLEY ROAD	20.6	2,068	8/5/2015	\$170,000	1900	\$82.21
Madison	Fenner	78.-1-28.22	5296	BUYEA RD	2.11	672	8/30/2012	\$65,000	1977	\$96.73
Madison	Lincoln	62.-1-43.12	6005	BUYEA RD	155.63	2,859	7/7/2009	\$325,000	1890	\$113.68
Madison	Lincoln	62.-1-17.2	5960	CHAPMAN RD	1.21	2,400	2/22/2013	\$180,000	2001	\$75.00
Madison	Lincoln	52.-1-45.1	3932	CLOCKVILLE RD	1.22	884	9/15/2010	\$20,000	2012	\$22.62
Madison	Lincoln	52.-2-25	3881	CLOCKVILLE RD	1.49	2,581	2/27/2012	\$152,500	1861	\$59.09
Madison	Fenner	79.-1-13.2	3837	CODY RD	2.73	1,260	10/17/2008	\$95,000	1966	\$75.40
Madison	Fenner	78.-1-47	3517	CODY RD	1.17	1,440	10/14/2009	\$90,000	1974	\$62.50
Madison	Fenner	78.-1-48	3510	CODY RD	0.9	1,920	7/9/2013	\$118,000	1997	\$61.46
Madison	Fenner	78.-1-47	3517	CODY RD	1.17	1,440	10/9/2013	\$89,000	1974	\$61.81
Madison	Fenner	78.-1-48	3510	CODY RD	0.9	1,920	5/8/2015	\$124,000	1974	\$64.58
Madison	Fenner	88.-1-27.2	4445	CODY RD	0.1	2,083	3/30/2016	\$122,500	1878	\$58.81
Madison	Smithfield	80.-1-34	4329	CODY RD.	2.07	1,536	5/12/2015	\$75,000	1860	\$48.83
Madison	Fenner	79.-1-30	4145	CODY ROAD	82.36	1,151	12/12/2014	\$165,000	1974	\$143.35
Madison	Lincoln	60-1-39	3347	COLGROVE RD	1.05	1,892	3/8/2012	\$99,500	1985	\$52.59
Madison	Lincoln	51.-1-37.12	3530	COTTONS RD	1.1	2,136	5/2/2011	\$90,000	1860	\$42.13
Madison	Lincoln	51.-1-15.2	3523	COTTONS RD	10.2	2,144	6/4/2014	\$154,500	1940	\$72.06
Madison	Lincoln	52.-1-13	3670	COTTONS RD	1.68	3,010	12/16/2015	\$110,000	1826	\$36.54
Madison	Lincoln	52.-1-12	3776	COTTONS RD	0.47	1,509	2/23/2016	\$75,000	1900	\$49.70
Madison	Fenner	70.-2-18.116	4027	E MILESTRIP RD	1.93	1,158	11/22/2013	\$140,000	1993	\$120.90
Madison	Lincoln	51.-1-14.14	6572	HARP RD	1.35	1,000	6/7/2009	\$75,000	1985	\$75.00
Madison	Lincoln	60.-1-17	3451	INGALLS CORNER RD	13.52	2,176	7/29/2008	\$120,000	1943	\$55.15
Madison	Lincoln	61.-1-11.4	3852	INGALLS CORNERS F	1.83	2,314	1/21/2010	\$225,000	1989	\$97.23
Madison	Lincoln	61.-1-12	3878	INGALLS CORNERS F	3.67	2,095	10/17/2013	\$269,000	1972	\$128.40
Madison	Lincoln	61.-1-11.4	3852	INGALLS CORNERS F	1.83	2,314	6/19/2015	\$247,000	1989	\$106.74
Madison	Fenner	77.-2-52.11	5214	IRISH RIDGE RD	2.82	1,860	1/20/2011	\$189,168	2000	\$101.70
Madison	Fenner	77.-2-52	5258	IRISH RIDGE RD	68.34	1,472	2/6/2012	\$197,000	1984	\$133.83
Madison	Fenner	77.-2-49.2	5317	IRISH RIDGE RD	4.51	3,316	6/18/2012	\$245,000	1870	\$73.88
Madison	Fenner	68.-1-31	5445	IRISH RIDGE RD	25.28	2,176	12/19/2012	\$370,000	1998	\$170.04
Madison	Fenner	69.-1-44	3253	LARKIN RD	1.02	1,877	10/30/2012	\$102,000	1860	\$54.34
Madison	Fenner	69.-1-31.2	3151	LARKIN RD	7.22	1,344	4/17/2013	\$170,000	1998	\$126.49
Madison	Fenner	70.-1-18.119	4045	MILESTRIP RD	4.72	1,280	12/30/2008	\$132,400	1993	\$103.44
Madison	Fenner	70.-1-61.5	4158	MILESTRIP RD	17.76	976	7/22/2009	\$163,500	1979	\$167.52
Madison	Fenner	70.-2-18.119	4045	E. MILESTRIP RD	4.72	1,280	3/11/2014	\$139,500	1993	\$108.98
Madison	Fenner	69.-1-36.1	3384	MILESTRIP RD	0.51	1,280	3/3/2016	\$195,000	1979	\$152.34
Madison	Smithfield	71.-1-28.2	4503	MILESTRIP RD	1.78	1,104	7/16/2012	\$95,000	1996	\$86.05
Madison	Smithfield	71.-1-47.12	4538	MILESTRIP ROAD	4.92	1,144	5/22/2015	\$50,000	1997	\$43.71
Madison	Fenner	88.-1-13.122	3678	MUTTON HILL RD	0.78	1,272	9/25/2008	\$80,000	1991	\$62.89
Madison	Fenner	88.-2-13.128	3662	MUTTON HILL RD	0.92	960	9/18/2013	\$80,000	1990	\$83.33
Madison	Fenner	88.-1-13.112	3633	MUTTON HILL RD	0.79	1,350	9/12/2014	\$40,000	1801	\$29.63
Madison	Fenner	88.-2-14.3	3764	MUTTON HILL RD	7.67	2,288	3/30/2015	\$197,000	2006	\$86.10
Madison	Lincoln	51.-1-32	6682	NELSON RD	0.91	1,696	12/21/2009	\$170,500	1969	\$100.53
Madison	Lincoln	51.-1-16.2	6689	NELSON RD	3.2	2,039	8/27/2010	\$198,000	1825	\$97.11
Madison	Lincoln	60.-1-26.13	5951	NELSON ROAD	2.87	2,428	6/18/2015	\$233,500	1994	\$96.17
Madison	Lincoln	51.-1-26	6835	NELSON ROAD	9.56	2,980	7/7/2015	\$200,000	1970	\$67.11
Madison	Fenner	70.-1-9.2	5818	NICHOLS POND ROA	2.62	1,612	7/31/2015	\$199,900	1984	\$124.01
Madison	Lincoln	61.-1-35	6511	OLD COUNTRY RD	0.85	1,550	1/24/2013	\$90,000	1970	\$58.06
Madison	Lincoln	52.-2-62.2	6900	OLD COUNTY RD	0.87	1,452	9/9/2011	\$97,600	1974	\$67.22
Madison	Lincoln	52.10-1-3.2	7246	OLD COUNTY RD	0.31	1,467	6/24/2014	\$63,600	1900	\$43.35
Madison	Smithfield	89.-1-27.5	4920	OLD COUNTY RD	5.3	960	1/14/2011	\$87,500	1990	\$91.15
Madison	Smithfield	89.-1-32.22	4843	OLD COUNTY RD	38.8	2,092	4/16/2013	\$90,000	1891	\$43.02
Madison	Lincoln	52.-2-63.111	6864	OLD COUNTY ROAD	30	1,344	8/14/2015	\$222,650	2005	\$165.66
Madison	Fenner	70.-1-18.111	6330	OXBOW RD	5.19	1,820	11/12/2009	\$128,500	2000	\$70.60
Madison	Fenner	70.-1-18.115	6374	OXBOW RD	5.15	1,980	8/10/2010	\$219,000	2000	\$110.61
Madison	Lincoln	61.-1-17	6765	OXBOW RD	3.58	1,416	8/28/2015	\$82,500	1950	\$58.26
Madison	Smithfield	80.-1-5.11	5801	OXBOW RD	1.31	1,812	8/7/2012	\$90,000	1800	\$49.67

**Sales 2008-2016 (Cont'd)**

County	Municipality	SBL	Address	Street	Land Area	SF	Sale Date	Sale Price	Year Built	Price/SF
Madison	Fenner	69.-1-8	3085	PERRYVILLE RD	0.71	1,436	7/30/2008	\$112,000	1850	\$77.99
Madison	Fenner	60.3-1-14	2802	PERRYVILLE RD	0.36	1,525	9/15/2008	\$91,000	1960	\$59.67
Madison	Fenner	60.3-1-9	2774	PERRYVILLE RD	0.97	2,223	2/26/2010	\$65,000	1803	\$29.24
Madison	Fenner	60.3-1-14	2802	PERRYVILLE RD	0.36	1,525	8/8/2011	\$95,000	1960	\$62.30
Madison	Fenner	69.-1-8	3085	PERRYVILLE RD	0.71	1,436	9/3/2014	\$130,000	1850	\$90.53
Madison	Fenner	60.3-1-14	2802	PERRYVILLE RD	0.36	1,525	6/1/2015	\$103,000	1960	\$67.54
Madison	Fenner	69.-1-25.2	3196	PERRYVILLE ROAD	12.98	1,512	4/9/2015	\$199,900	1998	\$132.21
Madison	Fenner	60.3-1-12	5872	PERRYVILLE ROAD	0.21	1,764	8/21/2015	\$11,999	1832	\$6.80
Madison	Smithfield	89.-1-27.111	4992	PLEASANT VALLEY	2.27	1,904	10/30/2009	\$110,000	1997	\$57.77
Madison	Smithfield	89.-1-27.7	4918	PLEASANT VALLEY	2.11	1,176	7/10/2013	\$65,000	1996	\$55.27
Madison	Smithfield	89.-1-27.111	4992	PLEASANT VALLEY	2.27	1,904	7/11/2014	\$135,000	1997	\$70.90
Madison	Fenner	70.-1-42	5474	ROUSES RD	6.25	1,242	9/30/2010	\$169,000	1960	\$136.07
Madison	Fenner	87.-2-63	4676	SOUTH RD	12.89	1,834	4/19/2013	\$205,000	1970	\$111.78
Madison	Fenner	79.-1-19	5365	SWAMP SCHOOL RD	0.35	1,524	10/15/2014	\$82,000	1963	\$53.81
Madison	Lincoln	52.10-1-34	3842	TIMMERMAN RD	1.07	1,680	7/20/2012	\$78,000	1995	\$46.43
Madison	Lincoln	62.-1-36.2	4576	WHITMAN RD	0.98	1,120	9/30/2009	\$60,000	1992	\$53.57
Madison	Lincoln	62.-1-32.1	4442	WHITMAN RD	0.77	968	12/28/2012	\$12,000	1968	\$12.40
Madison	Lincoln	62.-1-37	4566	WHITMAN RD	2	1,680	2/20/2014	\$73,000	1990	\$43.45
Madison	Lincoln	62.-1-37	4566	WHITMAN ROAD	2.16	1,680	6/27/2012	\$65,000	1990	\$38.69
Madison	Lincoln	62.-1-31	4448	WHITMAN ROAD	3.06	1,144	9/7/2012	\$129,000	1994	\$112.76
Madison	Lincoln	61.-1-45.13	4183	WHITMAN ROAD	12.7	1,976	5/4/2015	\$203,000	2000	\$102.73
Madison	Lincoln	61.-1-45.5	4114	WHITMAN ROAD	1.22	1,799	5/12/2015	\$175,000	1985	\$97.28
							Average =	\$133,784		\$79.70
							Median =	\$121,250		\$72.97

As can be seen by the above sales data there appears to be no influence on property values with the continued operation of the wind farm since our last study. Average and median sales prices on a whole have increased indicating that the existence of the wind farm has not diminished real property values in this sub market.

Additionally sales and re-sales of properties were considered from 2008-2016 as follows:

County	Municipality	SBL	Address	Street	Land Area	SF	Sale Date	Sale Price	Year Built	Price/SF
Madison	Fenner	78.-1-10.2	2829	BINGLEY RD	20.9	2,068	9/28/2012	\$160,000	1900	\$77.37
Madison	Fenner	78.-1-10.21	2829	BINGLEY RD	20.9	2,068	8/5/2015	\$170,000	1900	\$82.21
Madison	Fenner	78.-1-47	3517	CODY RD	1.17	1,440	10/14/2009	\$90,000	1974	\$62.50
Madison	Fenner	78.-1-47	3517	CODY RD	1.17	1,440	10/9/2013	\$89,000	1974	\$61.81
Madison	Fenner	78.-1-48	3510	CODY RD	0.9	1,920	7/9/2013	\$118,000	1997	\$61.46
Madison	Fenner	78.-1-48	3510	CODY RD	0.9	1,920	5/8/2015	\$124,000	1974	\$64.58
Madison	Lincoln	61.-1-11.4	3852	INGALLS CORNERS F	1.83	2,314	1/21/2010	\$225,000	1989	\$97.23
Madison	Lincoln	61.-1-11.4	3852	INGALLS CORNERS F	1.83	2,314	6/19/2015	\$247,000	1989	\$106.74
Madison	Fenner	70.-1-18.119	4045	MILESTRIP RD	4.72	1,280	12/30/2008	\$132,400	1993	\$103.44
Madison	Fenner	70.-2-18.119	4045	MILESTRIP RD	4.72	1,280	3/11/2014	\$139,500	1993	\$108.98
Madison	Fenner	69.-1-8	3085	PERRYVILLE RD	0.71	1,436	7/30/2008	\$112,000	1850	\$77.99
Madison	Fenner	69.-1-8	3085	PERRYVILLE RD	0.71	1,436	9/3/2014	\$130,000	1850	\$90.53
Madison	Fenner	60.3-1-14	2802	PERRYVILLE RD	0.36	1,525	9/15/2008	\$91,000	1960	\$59.67
Madison	Fenner	60.3-1-14	2802	PERRYVILLE RD	0.36	1,525	8/8/2011	\$95,000	1960	\$62.30
Madison	Fenner	60.3-1-14	2802	PERRYVILLE RD	0.36	1,525	6/1/2015	\$103,000	1960	\$67.54
Madison	Smithfield	89.-1-27.111	4992	PLEASANT VALLEY	2.27	1,904	10/30/2009	\$110,000	1997	\$57.77
Madison	Smithfield	89.-1-27.111	4992	PLEASANT VALLEY	2.27	1,904	7/11/2014	\$135,000	1997	\$70.90
Madison	Lincoln	62.-1-37	4566	WHITMAN ROAD	2.16	1,680	6/27/2012	\$65,000	1990	\$38.69
Madison	Lincoln	62.-1-37	4566	WHITMAN RD	2.16	1,680	2/20/2014	\$73,000	1990	\$43.45

As is evident by the above correlated sales, there appears to be little to no effect on real estate values of the respective properties based on the continued operation of the facility. Of the 9 sales analyzed all increased in value. Additionally, 2802 Perryville Road sold three times over 7 years with increases in value with each sale.

This analysis did not include an interview with the respective property owners at the time of sale to determine any underlying factors which may have additionally impacted sales prices. (i.e. capital improvements, additions, deferred maintenance). However, the sales data utilized is considered representative of the market as a whole and it is unlikely that every property had some or all of the previously mentioned underlying factors impacting their respective properties from sale to resale.

Overall, there is considered to be no stigma attached to the project due to the continual sale and resale of properties near the project and considering that the values have appreciated at similar rates when compared to the rest of the county. In conclusion it appears that the existence of the wind farm does not appear to have any impact on surrounding property values as a whole.

**Conclusion:**

In conclusion, there is no conclusive evidence which would indicate any impact or potential impact on residential real estate values in the market area analyzed due to being in close proximity or in the view shed of a operational wind farm. As can be seen by the three studies performed on the respective comparable operational wind farms there appear to be no evidence which would indicate that these facilities have had a detrimental effect on real property values. Each of the studies concluded that prices continued to increase in value within the respective sub markets after construction and the ongoing operation of the facility. Additionally sales and re-sales of the same property within the respective submarkets indicate that the majority of the properties were unaffected by the existence of the wind farm. The sales data indicated increases in property values consistent with typical market fluctuations. This conclusion is in concert with much of the quantitative research available today on wind farm development effects on property value. While it is impossible to definitively say that there will be no effect on every affected properties value, it is apparent from studying similar areas where wind farms have been developed that no broad based value effects have occurred in those markets.

Respectfully submitted,

**IREM Solutions, Inc.**

*Darrel R. Lloyd Jr.*

Darrel R. Lloyd Jr.  
New York State Certified General  
Real Estate Appraiser  
Certificate #46-5539



**Addenda**

Qualifications of Darrel R. Lloyd, Jr.

## QUALIFICATIONS OF DARREL R. LLOYD, JR.

---

**IREM Solutions, Inc.**

### **Education:**

- Valencia College, Orlando, Florida
- State University of New York at Buffalo

### **Technical Training:**

- Society of Real Estate Appraisers-Course 101, "Introduction to Appraising Real Property", Buffalo, New York, 1989
- Society of Real Estate Appraisers-Course 102, "Applied Residential Property Valuation", Buffalo, New York, 1987
- Society of Real Estate Appraisers-Course 201, "Principles of Income Property Appraising", Buffalo, New York, 1988
- Society of Real Estate Appraisers-Course 202, "Applied Income Property Valuation", Tarpon Springs, Florida, 1989
- Society of Real Estate Appraisers, "Professional Practice Seminar", Kingston, NY, 1989
- Marshall & Swift Cost Valuation Seminar, "Calculator Cost Method", Buffalo, NY, 1988
- Appraisal Institute, "Standards of Professional Practice", Buffalo, New York, 1991
- Appraisal Institute - Course 520, "Highest & Best Use and Market Analysis", West Palm Beach, Florida, 1994
- American Society Appraisers, "Machinery and Technical Specialties", Chicago, IL, 1994
- American Society Appraisers, "Business Valuation", Toronto, Canada, 1994
- National Golf Foundation, "Golf Course Development and Revaluation", San Francisco, California, 1995
- Appraisal Institute, "Appraisal of Nursing Facilities", Syracuse, New York, 1997
- Appraisal Institute, "Standards of Professional Practice", Buffalo, New York, 1996
- Appraisal Institute, "Standards of Professional Practice", Boca Rotan, Florida, 12/2002
- Appraisal Institute, "Evaluating Commercial Construction", Tampa, Florida, 11/2003
- Appraisal Institute, "National USPAP Course", Amherst, New York, 05/2006
- Appraisal Institute, "Analyzing Operating Expenses", 11/2007
- Seminar: "Law of Easements", Buffalo, New York, 06/2008
- Appraisal Institute, "Valuation Case Studies", Ellicottville, New York, 01/2009
- Appraisal Institute, "Valuation Case Studies", Tampa, Florida,
- Appraisal Institute, "Office Building Valuation", Tampa, Florida, 10/2010
- Appraisal Institute, "Business Practice & Ethics", 10/2010
- Appraisal Institute, "Analyzing Tenant Credit Risk/Commercial Lease Analysis", Lakewood Ranch, FL, 09/2011
- Appraisal Institute, "National USPAP Course", 07/2011
- Appraisal Institute, "Valuation Perspectives Course", Ellicottville, New York 02/2012
- Appraisal Institute, "Fundamentals of Separating Real Property, Personal Property and Intangible Business Assets Course", Lakewood Ranch, FL,03/2012
- Pennsylvania Law for Appraisers, 5/2013
- 2014-2015 "National USPAP Course", 11/2013
- Appraisal of fast food facilities, 4/2015
- Expert witness for commercial appraisers, 6/2015
- Appraisal of self-storage facilities, 11/2015

**Appraisal Assignments:**

- Apartment Complexes
- Automobile Dealerships
- Bulk Petroleum Storage Terminals
- Certiorari Actions
- Community Shopping Plazas
- Condemnation Properties
- Feasibility Studies
- Funeral Homes
- Gas and Service Stations
- Golf Courses
- High Rise Condominiums & Office Bldgs.
- Hotels
- Industrial Complexes
- Land Fills
- Medical Offices
- Nursing Homes
- ROW Projects
- Rehabilitation
- Restaurants
- Retail Department Stores
- Residential
- Steel Plants
- Special Purpose Properties  
Banks, Steel Plants, Pipelines, Petroleum Bulk  
Storage Facilities, Nascar Raceways
- Temporary and Permanent Easements
- Urban Renewal
- Vacant Land and Subdivision Analysis
- Waterfront Properties

**Prepared & Participated in Appraisals For:**

- AT&T Financial Services
- Affiliated Capital Corporation
- Bank of New York
- Benchmark Financial, Inc.
- Buffalo Urban Renewal Agency
- Central Trust Company
- Citibank (NYS) N.A.
- Citizen Associates, Ltd.
- Diversified Capital
- Empire of America, FSA
- Erie Cnty. Industrial Development Agency
- Fleet Bank, N.A.
- Future Funding Mortgage Co., of NY, Inc.
- ITT Small Business Finance Corporation
- KPMG Peat Marwick
- Key Bank of New York
- Liberty Mutual
- First Niagara Bank
- Manufacturers & Traders Trust Company
- HSBC Bank
- Midas Realty Corporation
- Niagara Frontier Transportation Authority
- NYS Housing Finance Agency
- NYS DOT
- Sibley Mortgage Corporation
- Statewide Capital Corp.
- The Chase Manhattan Bank
- Various Municipalities
- UAW Legal Services
- Various attorneys & private clients

**Licensure/Certifications:**

- New York State Certified General Real Estate Appraiser #46-5539
- Pennsylvania State Certified General Real Estate Appraiser #GA003387
- New York State Appraisal Continuing Education Instructor

**Prepared Appraisals in:**

- California, Colorado, Connecticut, Delaware, Florida, Georgia, Maine, Massachusetts, Missouri, New Hampshire, New York (including New York City), Ohio, Oklahoma, Pennsylvania, Rhode Island, Texas, Vermont.
- 

**Qualified As Expert Witness:**

- The appraiser has appeared as an expert witness regarding real estate valuation in New York State Supreme and Federal Courts.
- The appraiser has also appeared before municipal assessment review boards.

**Employment History:**

- IREM Solutions, Inc., Amherst, NY, CEO, 2012-Present
- Klauk, Lloyd & Wilhelm Inc., Buffalo, NY, Vice President/Partner, 1995-2012
- Upstate Appraisal, Inc. - Commercial, Buffalo, NY, Vice President/Manager, 1993-1995
- International Appraisal Associates (Commercial, Industrial, and Residential), Tonawanda, NY, President, 1990-1993
- Northeastern Appraisal Associates - Commercial Division, Amherst, NY, Associate Appraiser, 1986-1989
- Century 21 M.J. Peterson, Sales Associate, 1982-1986