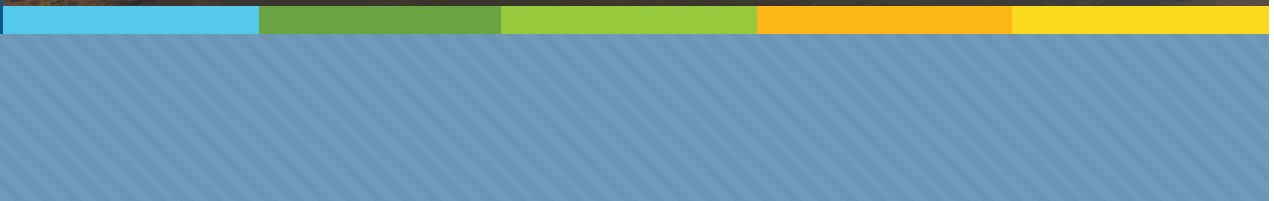




**A Renewable
America**

TALE OF TWO PROJECTS:

OHIO'S WIND SETBACK LAW IS
BLOCKING ECONOMIC OPPORTUNITY
FOR RURAL COMMUNITIES





A Renewable America



A Renewable America Wind Energy Foundation

1501 M Street NW, Suite 900
Washington, DC 20005
202-552-8105
<http://arenewableamerica.org/>
info@ARenewableAmerica.org





**A Renewable
America**

TALE OF TWO PROJECTS:

**OHIO'S WIND SETBACK LAW IS
BLOCKING ECONOMIC OPPORTUNITY
FOR RURAL COMMUNITIES**



APRIL 2018



EXECUTIVE SUMMARY

Like the two cities in the famous novel by Charles Dickens, Ohio's rural communities are facing two very different sets of circumstances. For some, wind energy development is already delivering unprecedented economic benefits. For others, the state's overly restrictive property setback law for new wind projects is blocking billions in potential local economic impact, including millions in annual payments in lieu of tax (PILOT), and thousands of jobs.

In Van Wert, Paulding, and Hardin Counties, the revolution in clean electricity production that is happening in the larger American economy has also come to their backyards.¹ Wind energy projects developed in these counties - which were grandfathered under the state's property setback laws prior to a 2014 change - are generating millions in new annual revenue for their school districts, parks, and general funds, with just under \$20 million in PILOT payments delivered over the last seven years. Landowners in these communities are benefitting as well, receiving \$33.8 million to date, with stable annual revenue projected for the next few decades.

Other Ohio counties, however, are getting left behind, as their plans to develop wind farms are stymied by one of the nation's most stringent statewide property setbacks for wind power development. Nearly four years have now passed since the Ohio Legislature enacted changes to the existing law, and only two new in-state wind power projects have come online since - both grandfathered under the old law.

As described in greater detail in a previous report on Ohio's wind development, in 2014 the property line setback changes were passed without public testimony or justification, and far exceed more common restrictions implemented in neighboring states. In practice, the increased restrictions have effectively closed off the state for future wind development, as the Ohio Power Siting Board has yet to receive a single new project application that complies with the setback since their enactment four years ago.



In contrast, the American wind industry has developed 17 projects in nearby and neighboring states such as Illinois, Indiana, Michigan, and Pennsylvania since 2014, representing over \$2 billion in project investment.²

In addition to effectively blocking new project applications, the setback law has also put \$4.2 billion in local economic development from wind farms at risk.³ Although two wind projects have come online since our last report, they were both grandfathered in under the old laws and over \$4 billion in local economic impact remains at risk.⁴ This total includes five projects approved under the prior setback laws and nine proposed but not yet permitted projects.

As a result, many rural Ohio communities that would welcome wind development are unable to add to their tax base and grow their local economies. Similarly, Ohio farmers and other rural landowners are deprived of the stable income that leasing their land for wind development would provide.

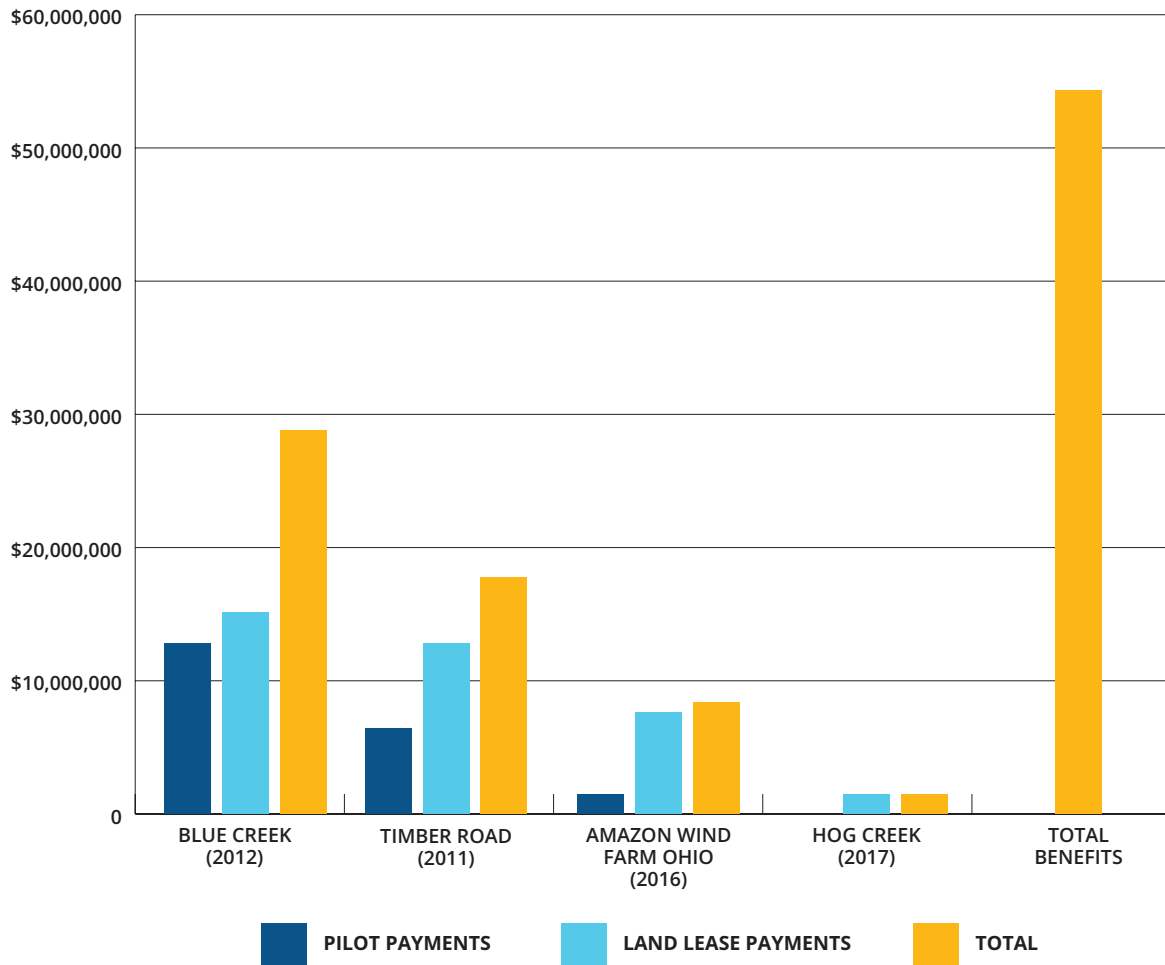
This report highlights the benefits that continue to accrue for Paulding County residents from the Timber Road Wind Farm, and contrasts them with the possible benefits that the Republic wind project would provide for Sandusky and Seneca Counties if the property setback law is restored to a reasonable limit that protects the property rights of all landowners.

PROJECTED LOCAL ECONOMIC BENEFITS THROUGH 2018, EXISTING OHIO WIND FARMS

PROJECT NAME	YEAR PLACED IN SERVICE	LAND LEASE PAYMENTS	PILOT PAYMENTS	COUNTIES BENEFITTING
BLUE CREEK WIND FARM	2012	\$15,000,000	\$13,680,000	VAN WERT, PAULDING
TIMBER ROAD WIND FARM	2011	\$12,000,000	\$5,390,000	PAULDING
AMAZON WIND FARM OHIO	2016	\$5,800,000	\$910,000 ¹	PAULDING
HOG CREEK WIND FARM	2017	\$1,000,000	\$0 ²	HARDIN
TOTAL		\$33,800,000	\$19,980,000	

¹ This project will begin making PILOT payments in 2018

² PILOT payments of approximately \$600,000 per year will begin in 2019





CASE STUDY:

PAULDING COUNTY REAPING MILLIONS IN ANNUAL BENEFITS FROM THE TIMBER ROAD WIND FARM



ECONOMIC IMPACT

Total investment: \$220 million
Local spending: \$17.9 million to-date
Total PILOT payments, through end of 2018: \$5.39 million
Total land lease payments, through end of 2018: \$8.6 million
Job creation: 800 total employment, 104 FTE during construction, 10 permanent

SUMMARY

Located in Paulding County, Timber Road Wind Farm is owned and operated by EDP Renewables North America (EDPR). Opening in the fall of 2011, the project was the first operational wind farm in the state, representing a capital investment of about \$220 million.⁵

The wind farm has greatly benefited the local community, including creating hundreds of jobs during construction and will have generated more than \$17.3 million in cumulative payments to local government and landowners through the end of 2018.⁶ Additionally, on-going operations and maintenance of the project has resulted in \$17.9 million spent locally through 2017.⁷

The project has a maximum output of slightly less than 100 megawatts (MW), which is purchased by American Electric Power Ohio (AEP Ohio) subsidiaries, Ohio Power Company and Columbus Southern Power Company.⁸

BACKGROUND

In 2008, Ohio passed an Alternative Energy Portfolio Standard (AEPS), which required utilities to provide 12.5 percent of their 2025 electricity sales from renewable resources.⁹ This policy certainty, combined with a strong wind resource, led EDPR to develop the state's first utility-scale wind farm, Timber Road.¹⁰

Originally planned as a 149 MW project, the project was split-up into Timber Road II (now known as the Timber Road Wind Farm) and III after construction began in late 2010.¹¹ Timber Road III would later combine with Timber Road I to form Amazon Wind Farm Ohio-Timber Road, which came online in 2016.¹²

Timber Road Wind Farm was completed in October 2011 and is comprised of 55 1.815 MW Vestas V100 wind turbines. The maximum output for the project is just under 100 MW, which produces enough clean electricity to power more than 29,000 average homes in Ohio.¹³

LOCAL ECONOMIC BENEFITS

The Timber Road Wind Farm has delivered many local economic benefits for Paulding County, as well as the surrounding communities. The initial capital investment of \$220 million will result in more than \$5.39 million in cumulative payments in lieu of taxes (PILOT) to local government through the end of 2018.¹⁴ In that same time, local landowners will have received \$12 million in land lease payments.¹⁵ These supportive landowners participate in long-term lease and easement agreements that cover turbines, access roads, and transmission corridors.

One of those landowners is Dave Greulach, a farmer in Paulding. According to Greulach, his family “farm[s] right under [the turbines], go right under them and so forth. It doesn’t bother us any.” Greulach, who owns 450 acres and has farmed in the county for the last 25 years, has had such a good experience with the turbines on his property that he hopes when EDPR builds a wind farm nearby that he’ll get another [turbine].¹⁶

Jay and Jason Dangler, owners of Dangler Excavating in Paulding, are also benefitting from the wind farm. Originally hired to work on the septic system at the office facility, their company ended up doing tile repair work on the project. The Dangers note that their workers “really look forward to the wages from a project like this, and it’s beneficial to us as a company. We were able to buy new equipment and new service trucks.”¹⁷

In addition to the work created for Dangler Excavating, EDPR provided the local Vantage Career Center with scholarship funding for students as well as funding to purchase a Wind Turbine Nacelle Trainer.¹⁸

In total, Timber Road Wind Farm created 104 full-time equivalent jobs during construction and 10 permanent jobs that will last for the life of the project.¹⁹ Seventy percent of the workers on the project lived in Ohio and EDPR estimated that 800 different Ohioans in total were employed at some point during construction.²⁰



**DAVE GREULACH,
FARMER, PAULDING**



**JAY AND JASON DANGLER,
DANGLER EXCAVATING, PAULDING**



**KARL & NEDRA MIELKE,
FARMERS, ANTWERP**

CASE STUDY:

SENECA AND SANDUSKY COUNTIES AWAIT A LEGISLATIVE FIX



ECONOMIC IMPACT

Total investment: \$400 million
Local economic impact: \$120 million
Projected annual PILOT payments: \$1.1-1.8 million
Job creation: 740 direct, in-direct, and induced jobs that could result in up to \$43.1 million of earnings; 166 FTE during construction, 12 permanent jobs

SUMMARY

Located in Seneca and Sandusky Counties, the proposed 200 megawatt (MW) Republic Wind project would represent a private investment of over \$400 million.²¹ The project would create near-term construction jobs for the two counties, as well as induce local investment in materials and services. Over the long term, the project would deliver sustained tax revenue to the county for the local government and schools, as well as 30 years of local purchasing, employment, and investment.

Farmers who host turbines on their property and other participating landowners would also receive annual lease payments. These payments would continue over the lifespan of the wind farm, injecting millions of dollars into the economies of Seneca and Sandusky Counties that would support local merchants, contractors, and equipment suppliers.

However, the project is unlikely to move forward without a change to the existing setback law. As a result, the citizens of Seneca and Sandusky Counties are deprived of up to \$120 million in local economic impact, including \$1.1-1.8 million in new PILOT revenue each year that could support local schools and infrastructure projects.²²

BACKGROUND

The proposed Republic Wind project, under development by Apex Clean Energy, would have the capacity to produce 200 MW of clean wind energy.²³ The wind farm is projected to produce enough power to supply 57,000 average American homes each year.

Located on approximately 35,000 acres in rural Seneca and Sandusky Counties, the project would consist of 58 turbines.²⁴

LOCAL ECONOMIC BENEFITS

The project would deliver significant economic benefits to the two counties, in the form of local investment during construction, on-going spending for maintenance and operations, PILOT payments to the local townships, and land lease payments to landowners.

It is estimated that the project would represent a total investment of \$400 million, and \$120 million in local economic impact over the life of the project.²⁵ That includes projected annual PILOT payments of \$1.1-\$1.8 million, which would be distributed among the five municipalities (Adams, Pleasant, Reed, Scipio, and Thompson Townships) and four school districts (Bellevue City School District, Clyde-Green Springs Exempted Village School District, Old Fort Local School district, Seneca East Local School District) in Seneca County, and one municipality (York Township) and one school district in Sandusky County (Bellevue City School District).²⁶

In addition, the wind farm will create new jobs, both during both the initial construction period and in the years following in which project is in operation. The money injected into the statewide economy through the creation of these jobs will have long-term, positive impacts on individuals and businesses in Ohio. In total, the wind farm is projected produce 740 direct, indirect, and induced jobs that would result in up to \$43 million in lifetime earnings.²⁷

“Property owners strongly support this project. In [Seneca] County, landowners are voting with their feet by signing up for wind leases that would place wind turbines on their family’s ground. There are limited other opportunities for economic development in this rural part of our county. This is an opportunity to grow the tax base for our rural schools with a \$400 million-dollar investment that would provide \$36 million in revenue for the schools over 30 years.”

**SHAYNE THOMAS
SENECA COUNTY COMMISSIONER**





CONCLUSION

By failing to restore the state's property line setback law for new wind power projects to a reasonable limit, the Ohio Legislature is putting \$4 billion in projected economic impact at risk from approved and proposed in-state wind farms, most of which would flow to its rural counties. As this report demonstrates, these communities would greatly benefit from continued wind energy development in the state. Ohio risks leaving these communities behind, as wind energy development continues to flourish in rural areas of neighboring states and across the nation.

Earlier this year, State Senator Matt Dolan (R-24) introduced Senate Bill (SB) 238 to adjust the property setback requirements to 120 percent of a turbine's height.²⁸ In practice, this would mean that 500-foot tall turbine, including blade height, would be setback 600 feet from the nearest property line.²⁹ In addition, turbines would also have to be at least 1,225 feet from the nearest habitable residential structure on adjacent property.³⁰

Those requirements are stricter than the previous law that was in place prior to the 2014 change, which had been 110 percent of a turbine's height.³¹ SB 238 also has new language to make sure potentially affected landowners get notice about proposed projects.³² Local control also remains a crucial aspect of this bill, by allowing county commissioners to approve construction on a project-by-project basis or declare the entire county an alternative energy zone, which qualifies all projects.³³ This common-sense approach would allow Ohio's rural communities control over their own economic future.

ACKNOWLEDGEMENTS

LEAD AUTHOR:

Kevin O'Rourke, Wind Energy Foundation

LEAD CONTRIBUTOR:

Robbie Newell, Wind Energy Foundation

REPORT REVIEWERS:

EDP Renewables – Bevan Augustine, Erin Bowser, Blair Matocha

REPORT DESIGN:

Kate Ross

IMAGE CREDITS:

AWEA – Blue Creek Wind Farm, Van Wert and Paulding Counties, pages 1, 4, 5, 6, 7, 9, 11.

APEX Clean Energy – Stock image, representing land for the potential Republic Wind Farm, page 10.

EDP Renewables – Timber Wind Farm, participating landowners and local contractors, page 8.

ABOUT THE ORGANIZATION

WIND ENERGY FOUNDATION

The Wind Energy Foundation is a 501c3 nonprofit organizations dedicated to raising public awareness of wind as a clean, domestic energy source through communication, research, and education. The Foundation is also committed to supporting ongoing research that furthers the continued growth of wind energy. For more information, visit www.windenergyfoundation.org. A Renewable America (ARA), a campaign to educate on the economic benefits of the growing wind and solar industries and the transmission and storage technologies that support them, is a project of the Foundation.

To learn more, visit: www.arenewableamerica.org.

ENDNOTES

- 1 Business Council for Sustainable Energy, Sustainable Energy in America Fact Book, Spring 2018, "With 18.4GW of new additions, 2017 marked another boom year for renewables build, second only to 2016's record of 22.7GW. Overall, renewables have contributed 55% of total build in the past 10 years. Non-hydro renewables continued to represent the largest share of all U.S. new installations, hitting roughly 62% in 2017.", available at <http://www.bcse.org/sustainableenergyfactbook/>.
- 2 American Wind Energy Association, proprietary data, 2014-2017, available upon request.
- 3 Wind Energy Foundation, Blowing in the Wind, 2017 https://static1.squarespace.com/static/58ecc722197aea316e9b93fc/t/59480439725e25bf7ae33cab/1497891904817/ARA_Ohio_Wind_Setback_Report_5.25.17.pdf.
- 4 Id.
- 5 EDP Renewables, internal data, available upon request.
- 6 Id.
- 7 Id.
- 8 Clean Technica, Timber Road II Wind Farm Commissioning Marks a First For Ohio, 2011, <https://cleantechnica.com/2011/10/06/timber-road-ii-wind-farm-commissioning-marks-a-first-for-ohio/>
- 9 AWEA, Wind Energy in Ohio, 2017, <http://awea.files.cms-plus.com/FileDownloads/pdfs/Ohio.pdf>.
- 10 <http://timberroad.edpr-windfarms.com/wp-content/uploads/sites/16/2018/03/OH-Timber-Road-Wind-Farm-Factsheet-March-2018.pdf>.
- 11 Paul Dvorak, WINDPOWER ENGINEERING & DEVELOPMENT, Ohio's first large wind farm becomes three, April 17, 2011, <https://www.windpowerengineering.com/construction/ohio%E2%80%99s-first-large-wind-farm-becomes-three/>.
- 12 Id.
- 13 Business Wire, Amazon Web Services Announces Amazon Wind Farm US Central, 2015, <https://www.businesswire.com/news/home/20151119006690/en>.
- 14 EDP Renewables, supra n. 5.
- 15 Id.
- 16 Id.
- 17 EDP Renewables, Landowner case study, Dave Greulich, 2017, available upon request.
- 18 EDPR, Dangler Excavating case study, 2017, available upon request.
- 19 EDP Renewables, supra n. 5.
- 20 AEP Ohio, AEP Ohio Participates in wind energy ribbon cutting with EDP Renewables, North America, October 5, 2011, <https://www.aepohio.com/info/news/viewRelease.aspx?releaseID=1137>.
- 21 Republic Wind Energy, Republic Wind Project Profile, 2015 http://www.republicwindenergy.com/about_republic_wind.
- 22 Ohio Power Siting Board, Application for a Certificate of Environmental Compatibility and Public Need: Republic Wind Farm, February 2018, <http://dis.puc.state.oh.us/TiffToPDF/A1001001A18B02B25341E03492.pdf>.
- 23 Republic Wind Energy, supra n. 22.
- 24 Id.
- 25 Id.; OH PSB supra n. 23 at 38.
- 26 Id.
- 27 Id. at 37.
- 28 Kathiann Kowalski, MIDWEST ENERGY NEWS, Ohio bill would relax wind setbacks, but rule change could derail process, Feb. 20, 2018, <https://energynews.us/midwest/ohio-bill-would-relax-wind-setbacks-but-rule-change-could-derail-process/>
- 29 <https://energynews.us/midwest/ohio-bill-would-relax-wind-setbacks-but-rule-change-could-derail-process/>
- 30 Id.
- 31 Id.
- 32 Id.
- 33 Id.
- 34 Id.



**A Renewable
America**

