

Tuscola County
Wind Turbine Revenue Significance, Uncertainty, Projections and
Considerations to Reduce Dependency

Purpose

The following information was prepared per the 2017 county work program task of projecting wind turbine (WT) revenue for Tuscola County government operations. It is intended to provide information for planning methods of adjusting to the eventual reduction in the amount of WT revenue the county receives. WT revenue is critical to the county GF and the nine dedicated special purpose millages. WT have also provided significant revenue for roads, schools, police, and libraries and other governmental services as further explained below. The helpful assistance provided by the County Equalization Director in preparing statistical information for this report is appreciated.

Broad Based Significance of WT Revenue

The benefits of WT revenue extend beyond just the county government. A total of approximately \$6,279,000 in WT revenue was received in 2016 when all taxing jurisdictions in Tuscola County are included. Of this total, approximately \$2,067,249 was received for GF operations and the nine special purpose millages. There is no question WT revenue has had a major financial impact. The following table shows the total 2016 WT revenue received organized by category. Taxing jurisdictions that have WT and levy millage qualify for WT revenue.

2016 Wind Turbine (WT) Revenue by Category for Governmental Services in Tuscola County	
Category	2016 Amount
Roads and Bridges (County and Townships)	\$1,008,578
Schools (ISD, Debt and Operating)	\$2,772,239
Police (Sheriff Road Patrol)	\$239,714
Fire Protection	\$49,351
Veterans	\$45,279
Emergency/Ambulance Service	\$121,916
Senior Citizen Service	\$53,270
Medical Care Facility	\$66,587
County and Township General Operations	\$1,413,592
Mosquito Abatement	\$168,225
Recycling	\$39,952
MSU Extension	\$26,635
Drains	\$47,336
Libraries	\$203,487
Other	\$23,088
Total	\$6,279,249

Significance of Wind Tax Revenue to County Government

WT revenue first became available in 2013 when the county received \$383,000 in GF revenue from a NextEra project in Gilford Township. With the addition of a second NextEra project and a Consumers Energy project, the amount of GF revenue peaked in 2015 at \$1,127,000. WT revenue is currently the third largest revenue source to the GF. It accounts for approximately 9% of total GF revenue in 2015. There are currently 189 WT in the county, but no additional turbines have been constructed since 2014. The overall county ability to continue to deliver services at current levels is heavily dependent upon WT development and the corresponding amount of revenue received.

WT revenue enabled the county to sustain GF services that otherwise would not have been possible. Property tax and other major county revenue sources remain flat. WT revenue became available at an opportune time because the county had just come through one of the worst recessions in modern history. Without WT revenue, more cuts or more millage or some other significant source of revenue would have been necessary to sustain current services.

The table below shows the amount of WT revenue the county received by category for 2016. In order to raise \$2,067,424, a millage would have to be approved of about 1.2 mills.

2016 Wind Turbine (WT) Revenue for Tuscola County Services	
Category	2016 Amount
General Fund Operations	\$1,042,516
Roads	\$257,213
Sheriff Road Patrol	\$239,714
Mosquito Abatement	\$168,225
Bridges	\$128,033
Medical Care Facility	\$66,587
Senior Citizens	\$53,270
Veterans	\$45,279
Recycling	\$39,952
Michigan State University Extension	\$26,635
Total	\$2,067,424

Land owners who have leases with wind companies are also beneficiaries. Some of these funds are infused back into the local economy. The county does not have official record of the amount of lease payments made to landowners. The following table is based on the current 189 turbines using different lease amounts. It is estimated that the economic benefit from leases with land owners is currently between \$2.3 and \$3.3 million annually.

Estimated Wind Turbine Revenue to Land Owners	
189 WT @ \$12,500 per WT per year	\$2,362,500
189 WT @ \$15,000 per WT per year	\$2,835,000
189 WT @ \$17,500 per WT per year	\$3,307,500

Uncertainty of Wind Revenue and Wind Companies Tax Appeals

It is important to note the actual amount of revenue the county will receive could be significantly less than the amounts presented. This is because wind companies are unfortunately appealing their tax assessments to the Michigan Tax Tribunal based on the multiplier schedule and the Federal Cash grants (1603 grant) claiming the assessed value is less because Federal grant funds were received by NextEra. This adds another complication to planning and using portions of these funds. This situation has also made it necessary to annually escrow funds in case the county and local units of government lose the wind companies appeal.

The Michigan Renewal Energy Collaborative (MREC) was formed (5 counties and many townships) and hired legal assistance with the goal of fairly assessing and taxing WT. The outcome of these legal proceedings will determine the actual amount of revenue the county will receive. If the county loses the appeal, significant amounts of WT revenue already collected would likely have to be paid back for every year WT taxes were collected. For example, just considering 2016, the \$6.3 million collected by all taxing jurisdictions may be reduced by potentially 30% or about \$1.9 million to \$4.4 million.

A summary of major factors causing WT revenue uncertainty is as follows:

- Outcome of wind companies tax appeal regarding the federal 1603 grant funds could reduce annual revenue received by 30% or more
- Outcome of wind companies tax appeal regarding which multiplier schedule will be used
- Changes in federal and state financing and taxation of renewable energy
- Whether more WT are built and how many

WT Scenario Planning to Project Future Revenue

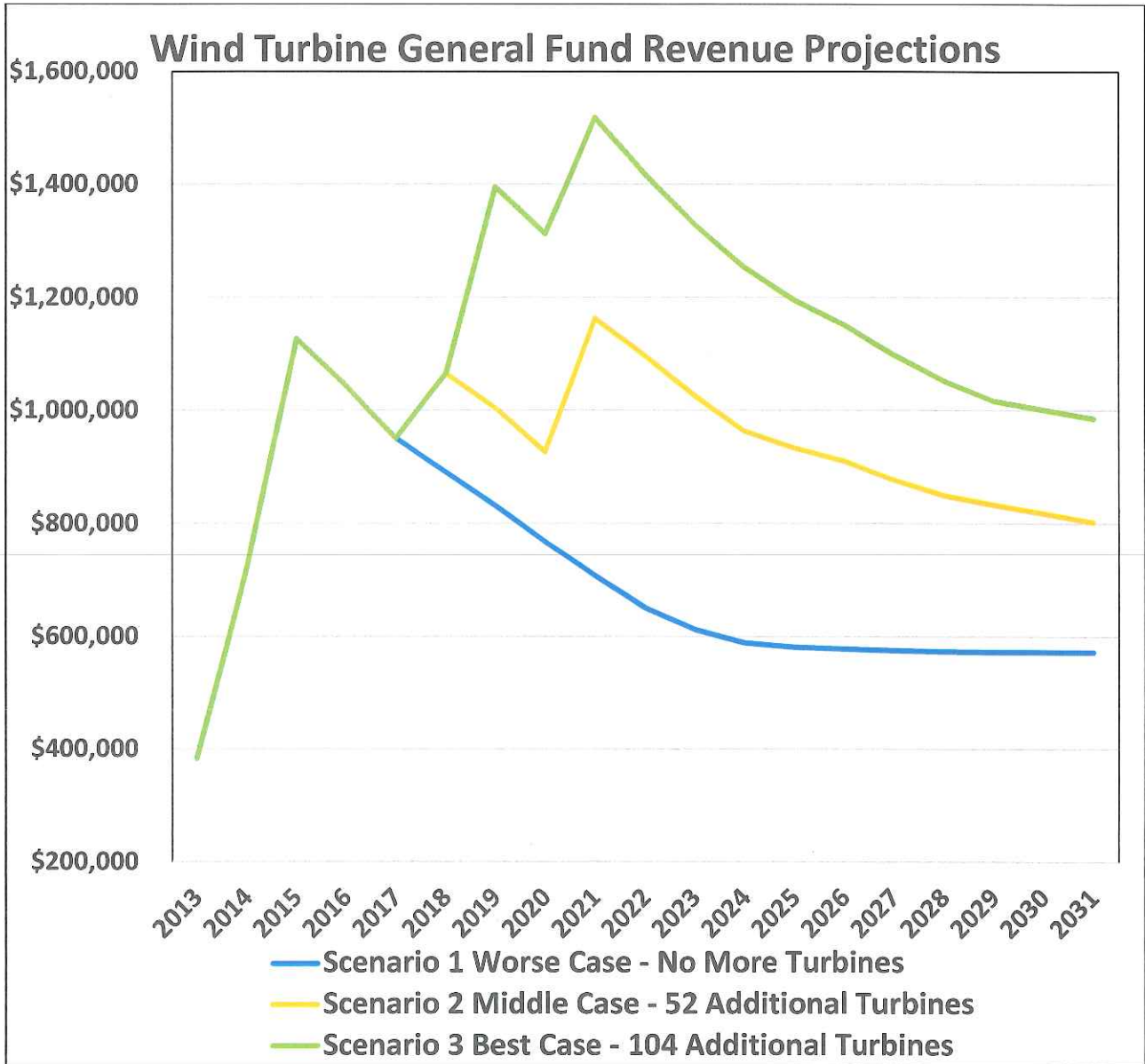
Understanding and planning future amounts of WT revenue is critical to long term county financial stability. At this time we are aware of two potential additional WT projects that may be built in the next few years: NextEra III in Almer, Ellington and Fairgrove Townships (estimated 52 WT) and Consumers Energy in Columbia Township (estimated 52 WT). Unfortunately, there is no guarantee either of these projects will actually be constructed. At this time it is most likely the Consumers Energy project will proceed on schedule. The Appraisal Economics Multiplier was used in preparing these projections. Please remember that if the wind companies win the tax appeal, the amount of revenue presented in this document could be reduced by as much as 30%.

The most important point of all WT revenue scenarios is that ultimately the amount of revenue received from WT declines with time. However, as long as more turbines are built the revenue decline is delayed. This occurs because revenue from new projects offsets revenue declines from existing projects at least for a period of time. The question is not whether a revenue decline will occur but how long before the decline occurs.

Wind Turbine General Fund Revenue Projections Using 3 Scenarios			
Year	Scenario 1 Worst Case - No More Turbines	Scenario 2 Middle Case - 52 Additional Turbines	Scenario 3 Best Case - 104 Additional Turbines
2013	\$383,162	\$383,162	\$383,162
2014	\$721,121	\$721,121	\$721,121
2015	\$1,127,177	\$1,127,177	\$1,127,177
2016	\$1,042,518	\$1,042,518	\$1,042,518
2017	\$949,653	\$949,653	\$949,653
2018	\$889,196	\$1,065,331	\$1,065,331
2019	\$829,713	\$1,004,262	\$1,395,672
2020	\$765,922	\$925,500	\$1,313,387
2021	\$705,905	\$1,163,463	\$1,518,080
2022	\$649,187	\$1,096,353	\$1,417,309
2023	\$610,694	\$1,025,256	\$1,329,381
2024	\$587,102	\$962,405	\$1,253,203
2025	\$579,760	\$931,912	\$1,195,331
2026	\$576,753	\$909,627	\$1,151,519
2027	\$574,014	\$876,339	\$1,099,051
2028	\$572,101	\$848,397	\$1,051,930
2029	\$571,203	\$832,156	\$1,016,119
2030	\$571,203	\$816,800	\$1,000,762
2031	\$571,203	\$801,143	\$985,106

Scenario 1 is the worst case scenario. It assumes no additional WT are built. Under this scenario the GF WT revenue decline has already begun and will continue until about 2024 when a projected \$587,000 in GF revenue is received instead of the \$1,127,000 which was received in 2015. This means that to stay wind revenue neutral \$540,000 in other revenue would need to be raised. The actual amount needed to stay even would be considerably higher if inflation is considered.

Scenario 2 is the middle case scenario. It assumes one new WT project with the construction of 52 WT by Consumers Energy in Columbia Township in two phases. The first phase would be constructed in 2017 with GF revenue becoming available in 2018. The second phase would be constructed in 2020 with GF revenue becoming available in 2021. Under this scenario the revenue position is improved and similar amounts of revenue (non-inflation adjusted) are projected to be received through 2023 as were received in peak year 2015. Ultimately, under this scenario GF WT revenue declines to a projected \$800,000 compared to the \$1,127,000 received in 2015.



Scenario 3 is the best case scenario. This scenario is based on the construction of two new WT projects: the 52 WT Consumers Energy project in Columbia Township (discussed above) and the 52 WT NextEra III project in Almer, Ellington and Fairgrove Townships. Under this scenario, the revenue position is further improved and more GF revenue is received than the current peak year of 2015. By 2021, an estimated \$1,518,000 in GF revenue is received. After 2021, the revenue decline would occur and eventually drop to about \$985,000 in non-inflation adjusted dollars.

Conclusions/Considerations

There is no question WT revenue has played an important part in helping to stabilize the county's financial position on a short term basis.

It is extremely difficult to plan for changes in WT revenue. There are many factors that impact the amount of actual revenue that is received. Most importantly, the number of additional turbines constructed and the outcome of the wind company tax appeals. It may be several more years before the outcome of these appeals are determined.

The method of assessing and taxing wind turbines results in a situation where the revenue is here today, but a significant portion is gone tomorrow. Yet, county officials are 100% dependent on this revenue source to provide services knowing that at some point in the future considerably less will be received. The financial objective should be to start now to make adjustments for that point in time when the county will receive much less revenue. Simply stated the county has too high of a dependency on a revenue source that it is likely to be much less in the future. The sooner the county can reduce WT revenue over-dependency the better. Some alternative methods of reducing dependency for discussion include:

Alternatives for Board Consideration

- Public safety millage
- Other special purpose millage
- Increase court and other county revenues
- Work for a new state method to fund county and local government
- Grow the tax base
- Review potential of housing prisoners for revenue
- Service base consolidation
- Headlee override