ROUGET ROAD SOLAR FARM, LLC

ECONOMIC AND FISCAL CONTRIBUTION TO PALMYRA TOWNSHIP AND LENAWEE COUNTY, MICHIGAN

Prepared for

RWE

MANGUM economics®

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About Mangum Economics, LLC

Mangum Economics was founded in 2003 and since then, we have become known as a leader in industry analysis, economic impact assessment, policy and program evaluation, and economic and workforce strategy development. The Mangum Team specializes in producing objective and actionable quantitative economic research that our clients use for strategic decision making in a variety of industries and environments. We know that our clients are unique, and that one size does not fit all. As a result, we have a well-earned reputation for tailoring our analyses to meet the specific needs of specific clients, with a specific audience.

Most of our research falls into four general categories:

- **Energy:** The Mangum Team has produced analyses of the economic and fiscal impact of over 35 GW of proposed solar, wind, battery energy storage, and hydro project spanning twenty-nine states. Among those projects was Dominion's 2.6 GW Coastal Virginia Offshore Wind project off of Virginia Beach. In addition, the Mangum Team has also performed economic and fiscal impact analyses for the natural gas, nuclear, oil, and pipeline industries.
- **Economic Development and Special Project:** The Mangum Team has performed hundreds of analyses of proposed economic development projects. One recent example was an analysis of the proposed $2.3 billion Green City "net-zero eco district." The Mangum Team has also authored multiple economic development plans, including identifying industry recruitment opportunities created by the high-speed MAREA and BRUSA sub-sea cable landings in Virginia Beach.
- **Advanced Applied Technology:** The Mangum Team specializes in analyzing how advanced technology developments (like data centers, fiber networks, and advanced manufacturing plants) contribute to the state and local economies. We have worked with local governments, trade associations, developers, and operating firms across the country to show how investments in advanced critical infrastructure transform local economies across the country.
- **Policy Analysis:** The Mangum Team also has extensive experience in identifying and quantifying the intended and unintended economic consequences of proposed legislative and regulatory initiatives.

The Project Team

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Executive Summary

This report assesses the economic and fiscal contribution that the proposed Rouget Road Solar Farm, LLC (Rouget Road Solar Farm) would make to the township of Palmyra and to Lenawee County, Michigan.

Rouget Road Solar Farm is a proposed 175-megawatt (MW) alternating current (AC) solar photovoltaic power generating facility. The project would be located in the township of Palmyra in Lenawee County, Michigan. The total leased and purchased acreage for the project encompasses approximately 2,150 acres of agricultural land. The actively used, fenced-in portion of the solar site would be approximately 1,400 acres.

The primary findings from the assessment are as follows:

1) **The proposed Rouget Road Solar Farm would make a significant economic contribution to Lenawee County:**

   - The proposed Rouget Road Solar Farm would employ approximately 320 local and non-local full-time equivalent construction workers over an assumed 12-month construction period (or 320 job years).
   - The proposed Rouget Road Solar Farm would provide an estimated one-time pulse of economic activity to Lenawee County during its construction phase supporting approximately:[1,2]
     - 37 direct and 64 indirect and induced local job years.
     - $6.5 million in associated local wages and benefits.
     - $22.7 million in local economic output (in 2025 dollars).
   - The proposed Rouget Road Solar Farm would provide an estimated annual economic impact to Lenawee County during its ongoing operational phase supporting approximately:
     - 4 direct and 10 indirect and induced local jobs.
     - $1.0 million in associated local wages and benefits.
     - $3.0 million in local economic output (in 2025 dollars).

2) **The proposed Rouget Road Solar Farm would have a significant fiscal impact on Lenawee County and its local taxing jurisdictions. The proposed project would generate approximately:**

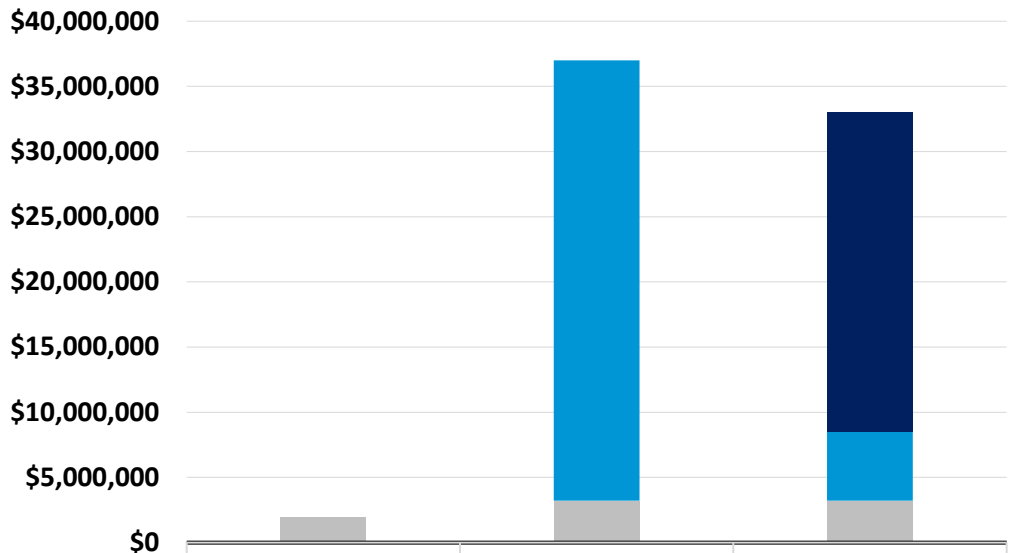
   - $1.2 million in state and local tax revenue from the one-time pulse of economic activity associated with the project's construction (in 2025 dollars).

[1] It is important to note that construction sector jobs are not necessarily new jobs, but the investments made can also support an existing job during the construction of the project. Please note it is not possible to know with certainty what proportion of these jobs would go to county construction contractors or be filled by Lenawee County residents.
[2] A construction sector job, also referred to as a job year, is equal to one job over one year. It is used to denote employment on construction projects to account for the fact that actual on-site employment may vary over the period.

- $37.0 million in cumulative county, township, and school district tax revenue over the facility's anticipated 35-year operational life assuming revenues are generated from the taxation of the real property and the taxation of the associated capital investments (Scenario 1) (in 2025 dollars); or
- $33.0 million in cumulative county, township, and school district tax revenue over the facility's anticipated 35-year operational life assuming revenues are generated from the taxation of the real property, PILT (payments in lieu of tax) payments during years 1 through 20, and taxation of the associated capital investments in years 21 through 35 (Scenario 2) (in 2025 dollars).

3) **The proposed Rouget Road Solar Farm would have a significantly greater fiscal impact on Lenawee County than the property generates in its current agricultural use:**
   - The proposed Rouget Road Solar Farm would generate approximately $37.0 million (Scenario 1) or approximately $33.0 million (Scenario 2) in cumulative revenue over the facility's anticipated 35-year operational life as compared to approximately $2.0 million in cumulative revenue in the property's current use – this constitutes a 19 or 17-fold increase over current revenues for Scenario 1 and Scenario 2 respectively.

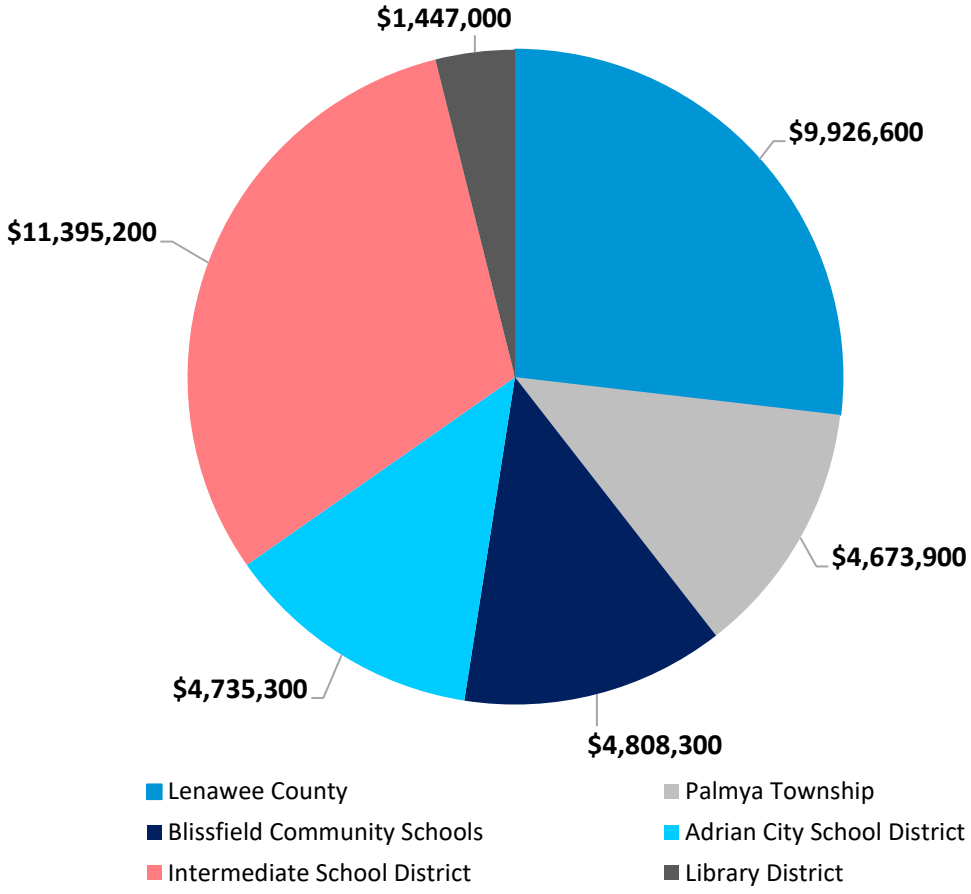
Estimated Cumulative Local Revenue over 35 Years (2025 Dollars)



	Current Agricultural Use	Solar Use (Taxation - Scenario 1)	Solar Use (PILT - Scenario 2)
PILT			$24,500,000
Taxation of Capital Investment		$33,775,700	$5,286,600
Taxation of Land	$1,971,300	$3,210,600	$3,210,600

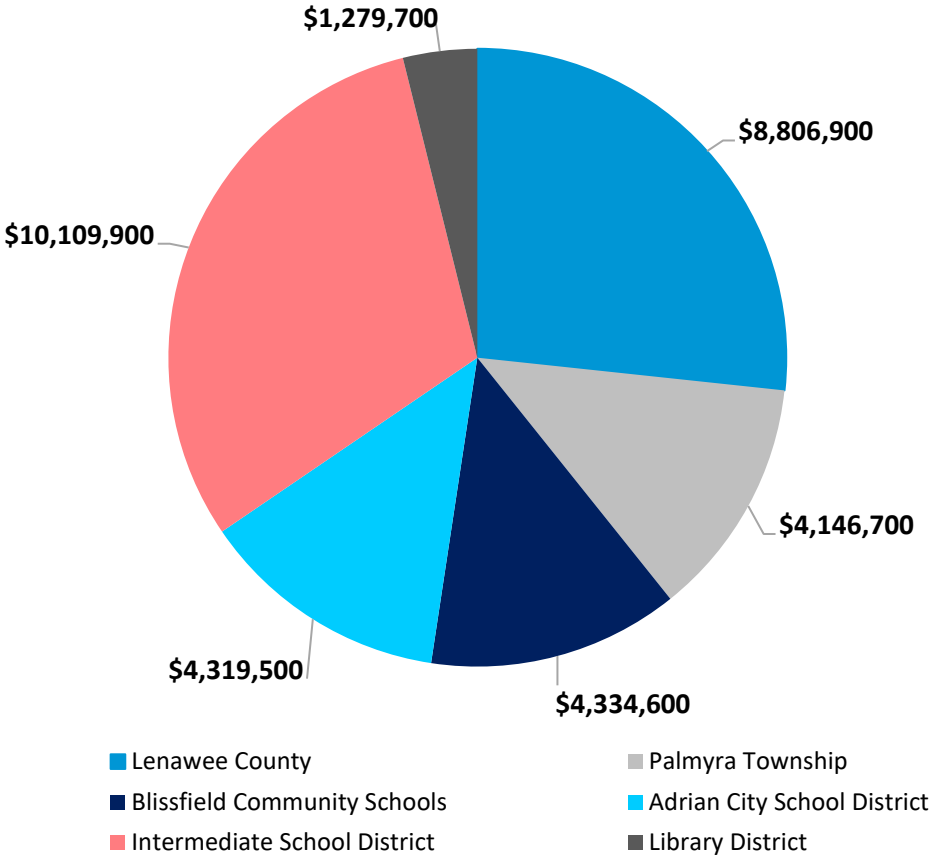
- Taxation of the land and taxation of the associated capital investments (Scenario 1) of the proposed Rouget Road Solar Farm over the facility's anticipated 35-year operational life would generate approximately:
    - $9.9 million in cumulative Lenawee County tax revenue,
    - $4.7 million in cumulative Palmyra Township tax revenue,
    - $4.8 million in cumulative Blissfield School District tax revenue,
    - $4.7 million in cumulative Adrian City School District tax revenue,
    - $11.4 million in cumulative Lenawee Intermediate School District tax revenue, and
    - $1.4 million in cumulative Library fund revenues,
    - for a total cumulative revenue of approximately $37.0 million (in 2025 dollars).

Estimated Cumulative Local Revenue over 35 Years from the Rouget Road Solar Farm - Taxation of Capital Investments (Scenario 1) (2025 Dollars)



- Taxation of the land, PILT payments in years 1 through 20, and taxation of the associated capital investments in years 21 through 35 (Scenario 2) of the proposed Rouget Road Solar Farm would generate approximately:
    - $8.8 million in cumulative Lenawee County tax revenue,
    - $4.1 million in cumulative Palmyra Township tax revenue,
    - $4.3 million in cumulative Blissfield School District tax revenue,
    - $4.3 million in cumulative Adrian City School District tax revenue,
    - $10.1 million in cumulative Lenawee Intermediate School District tax revenue, and
    - $1.3 million in cumulative Library fund revenues,
    - for a total cumulative revenue of approximately $33.0 million (in 2025 dollars).

Estimated Cumulative Local Revenue over 35 Years from Rouget Road Solar Farm - PILT (Scenario 2) (2025 Dollars)



4) **The proposed Rouget Road Solar Farm project would provide a boost to the county's construction sector:**

- At 1,007 jobs, construction is the county's seventh largest major industry sector, and it pays average weekly wages ($1,147 per week) that are 19 percent above the countywide average ($965 per week).[3]
- Additionally, the construction sector was among the industry sectors that posted a job gain in the county between 2022 and 2023 (a gain of 12 jobs).[4]
- The proposed Rouget Road Solar Farm project would directly support approximately 37 job years and $4.0 million in wages and benefits to Lenawee County's construction sector.

The estimates provided in this report are based on the best information available and all reasonable care has been taken in assessing the quality of that information. However, because these estimates attempt to foresee the consequences of circumstances that have not yet occurred, it is not possible to be certain that they will be representative of actual events. These estimates are intended to provide a good indication of likely future outcomes and should not be construed to represent a precise measure of those outcomes.

[3] Data Source: U.S. Bureau of Labor Statistics.
[4] Data Source: U.S. Bureau of Labor Statistics.

Introduction

This report assesses the economic and fiscal contribution that the proposed Rouget Road Solar Farm, LLC (Rouget Road Solar Farm) would make to Lenawee County, Michigan. This report was commissioned by RWE Clean Energy and produced by Mangum Economics.

The Project

Rouget Road Solar Farm is a proposed 175-megawatt (MW) alternating current (AC) solar photovoltaic power generating facility. The project would be located in the township of Palmyra in Lenawee County, Michigan. The total leased and purchased acreage for the project encompasses approximately 2,150 acres of agricultural land. The actively used, fenced-in portion of the solar site would be approximately 1,400 acres.

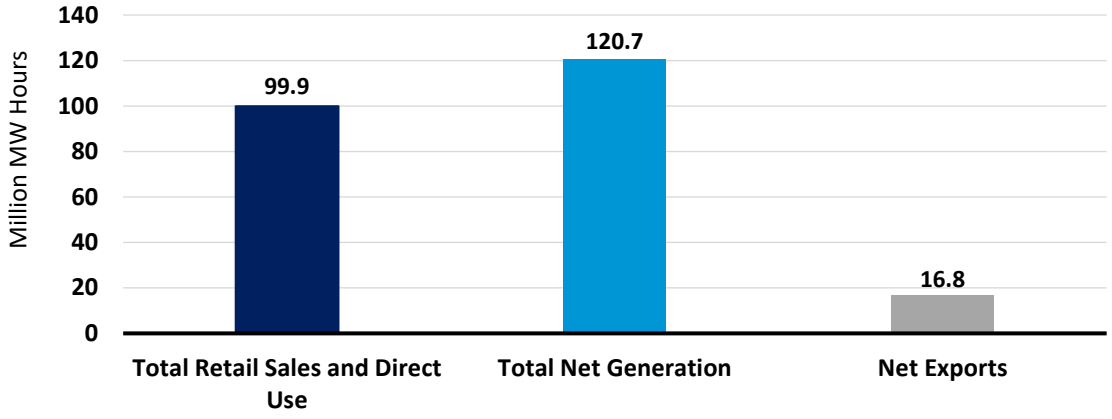
Electricity Production in Michigan

This section provides a backdrop for the proposed Rouget Road Solar Farm by profiling Michigan's electricity production sector and the role that solar energy could play in that sector.

Overall Market

As shown in Figure 1, in 2023 electricity sales and direct use in Michigan totaled 99.9 million megawatt hours and all of that demand was met by in-state utilities, independent producers, and other sources. As a result, Michigan exported the remaining electricity it produced to other states. As with all exports, this means that the jobs, wages, and economic output created by that production went to localities in Michigan.

Figure 1: Demand and Supply of Electricity in Michigan in 2023 (in millions of megawatt-hours)[5]



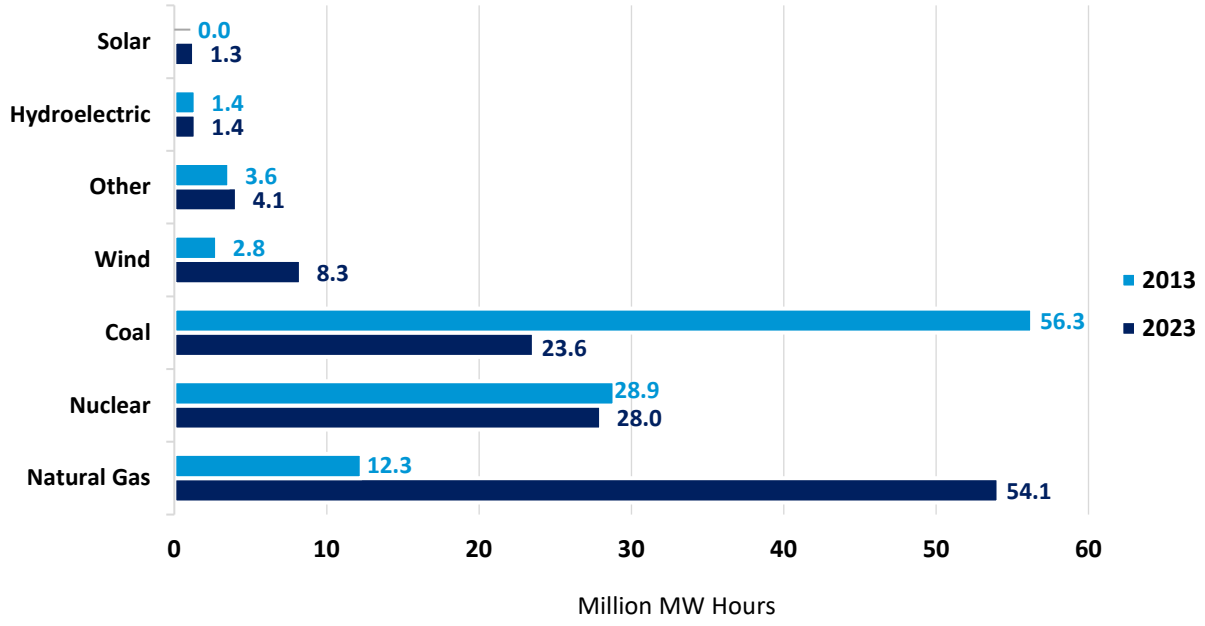
[5] Data Source: U.S. Energy Information Administration. In this chart, "Net Imports" also takes into account losses during transmission. As a result, it does not directly equal the residual of "Total Net Generation" minus "Total Retail Sales and Direct Use."

Sources of Production

Between 2013 and 2023, the total amount of electricity produced in Michigan increased from 105.4 to 120.7 million megawatt hours, while retail and direct consumption of electricity decreased from 105.4 to 99.9 million megawatt hours. As a result, exports of electricity increased by 18.1 million megawatt hours during this time.[6] Figure 2 provides a comparison of the energy sources that were used to produce electricity in Michigan in each of those years. As these data show, the most significant change between 2013 and 2023 was a decrease in the use of coal and an increase in the use of natural gas. Where coal was the state's largest source of electricity in 2013, accounting for 56.3 million megawatt hours (or 54 percent) of production, by 2023 production had fallen by 32.7 million megawatt hours, making coal a third-place source of electricity with 20 percent of production.

In contrast, the share of electricity produced using cleaner-burning low-emissions energy sources increased over the period. Where natural gas accounted for 12.3 million megawatt hours (or 12 percent) of Michigan's electricity production in 2013, by 2023 that proportion had more than quadrupled to 54.1 million megawatt hours (or 45 percent of production), making natural gas the state's largest source of electricity. In addition, solar, which entered the Michigan electricity production market in 2015, increased its share to 1.3 million megawatt hours in 2023.

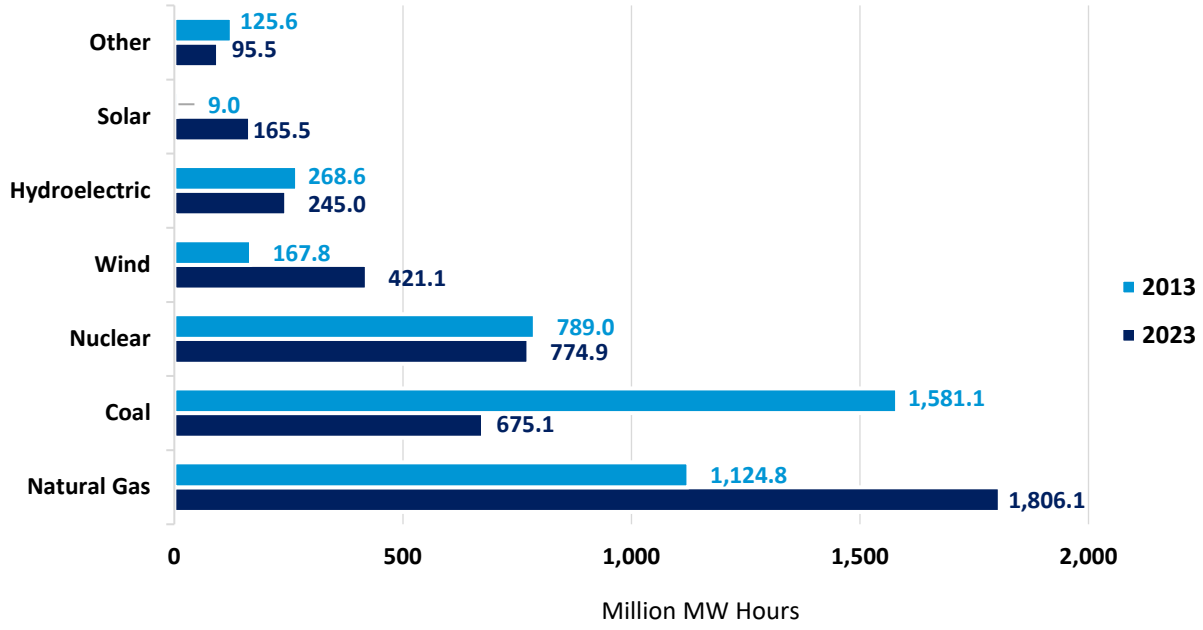
Figure 2: Electricity Generation in Michigan by Energy Source in 2013 and 2023 (in millions of megawatt-hours)[7]



[6] Exports also takes into account losses during transmission. As a result, totals do not equal sum of components.
[7] Data Source: U.S. Energy Information Administration. The "Other" category includes battery, wood, petroleum, other biomass, "other", other gas, and pumped storage.

Figure 3 provides similar data for the U.S. as a whole. A quick comparison of Figures 2 and 3 shows that in the U.S. the trend toward lower-emissions energy sources is similar to Michigan. Nationally, between 2013 and 2023 the amount of electricity produced using coal declined by 906.0 million megawatt hours from 39 to 16 percent of production, while in contrast the amount of electricity produced using natural gas increased by 681.3 million megawatt hours from 28 to 43 percent of production. Nationwide, as in Michigan, the reliance on renewable energy sources such as solar increased during this time but at a quicker pace than in Michigan. Between 2013 and 2023, the amount of electricity produced using solar increased by 156.5 million megawatt hours to 4 percent of total electricity production in the nation compared to 1 percent of total electricity production in Michigan.

Figure 3: Electricity Generation in the United States by Energy Source in 2013 and 2023 (in millions of megawatt-hours)[8]

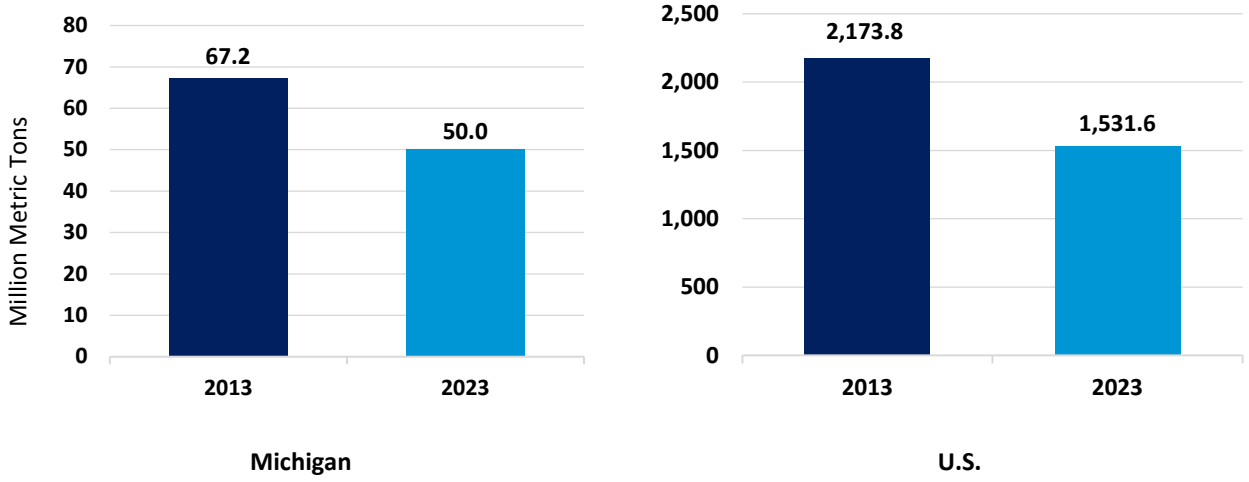


Impact on the Environment

In discussing the impact of these trends on the environment, it is important to realize that electricity production is one of the U.S.'s largest sources of greenhouse gas emissions. Figure 4 depicts carbon dioxide emissions from electricity production in 2013 and 2023 for both Michigan and the U.S. As these data indicate, between 2013 and 2023, as the share of electricity produced in Michigan by coal fell from 54 to 20 percent, carbon dioxide emissions from electricity production fell from 67.2 to 50.0 million metric tons (a 26 percent decrease). Where at the national level, as the share of electricity produced by coal fell from 39 to 16 percent, carbon dioxide emissions from electricity production fell from 2,173.8 to 1,531.6 million metric tons (a 30 percent decrease).

[8] Data Source: U.S. Energy Information Administration. "Other" includes battery, geothermal, other, other biomass, other gas, petroleum, pumped storage, and wood.

Figure 4: Carbon Dioxide Emissions from Electricity Production (millions of metric tons)[9]

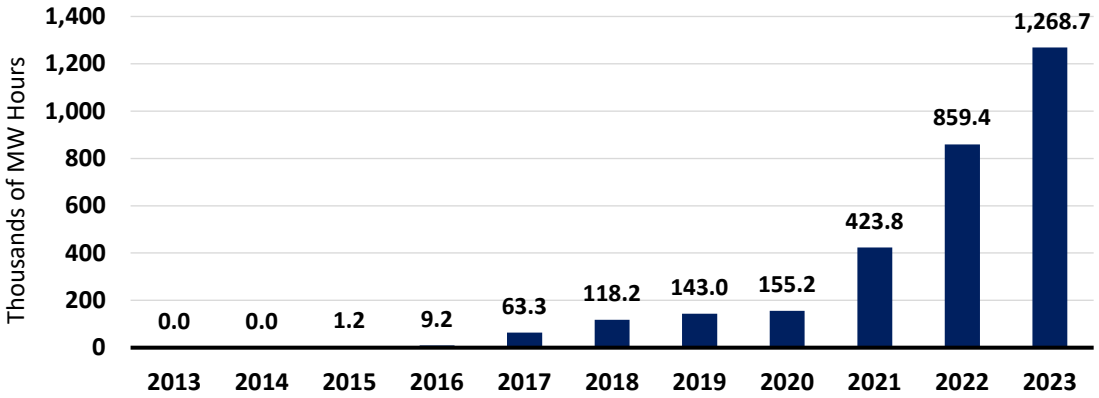


Michigan Solar Industry Trends

Michigan ranks 15th in the nation in terms of proposed solar capacity. With a total of 13 projects in the pipeline totaling a combined 1,652.9 megawatts of capacity, these proposed projects would add a significant amount of renewable energy to the state's grid.[10] Total investment into the solar industry in Michigan as of the third quarter of 2024 amounts to $2.1 billion.[11]

Figure 5 depicts the progression of solar energy generation in Michigan from 2013 to 2023 expressed in thousands of megawatt-hours. Solar entered the electricity market in Michigan in 2015 with 1.2 thousand megawatt hours. Generation has continued to grow throughout the period, reaching its peak, so far, in 2023, with solar generation totaling 1,268.7 thousand megawatt-hours.

Figure 5: Solar Generation in Michigan (in thousands of megawatt-hours) – 2013 to 2023[12]



[9] Data Source: U.S. Energy Information Administration.
[10] Data Source: U.S. Energy Information Administration.
[11] Data Source: Solar Energy Industries Association. Includes residential, community, commercial, and utility solar.
[12] Data Source: U.S. Energy Information Administration.

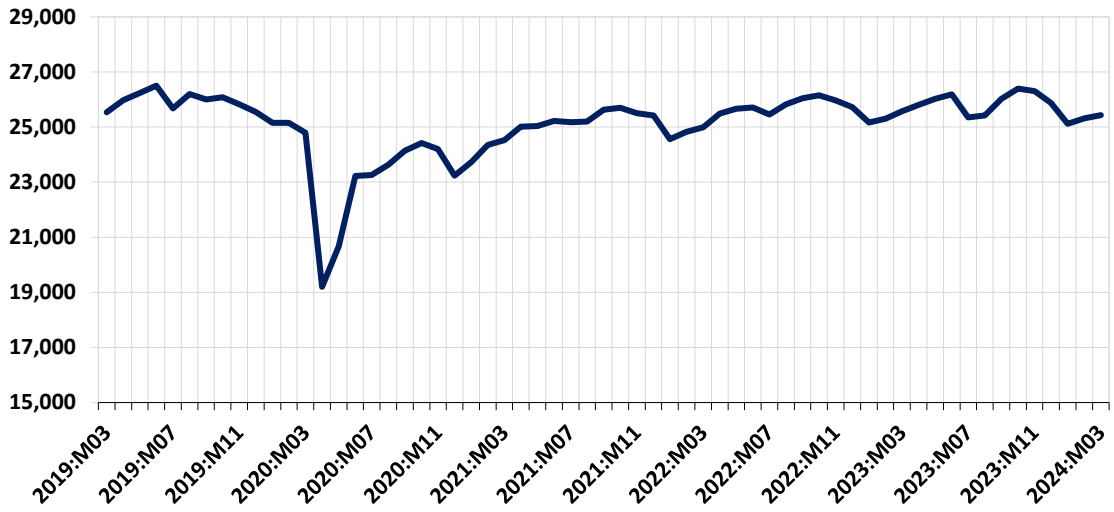
Local Economic Profile

This section provides context for the economic and fiscal impact assessments to follow by profiling the local economy of Lenawee County.

Total Employment

Figure 6 depicts the trend in total employment in Lenawee County during the five-year period from March 2019 through March 2024. Employment in the county remained generally stable throughout the period until April 2020, when it experienced a sharp decline due to decreased economic activity associated with the COVID-19 pandemic. After this decline, total employment rebounded and has gradually returned to pre-pandemic levels. As of March 2024, total employment in the county stood at 25,434 jobs, which represents an overall decrease in employment of 0.4 percent (or 109 jobs) over the five-year period. To put this number in perspective, over this same period, total statewide employment in Michigan increased by 1.0 percent.[13]

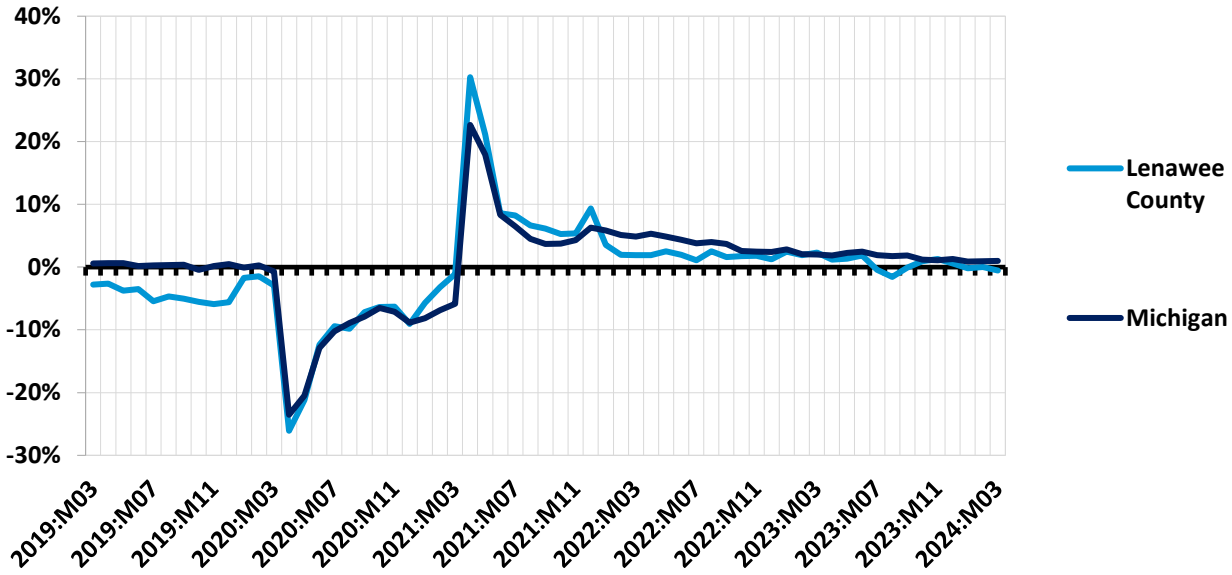
Figure 6: Total Employment in Lenawee County – March 2019 to March 2024[14]



To control for seasonality and provide a point of reference, Figure 7 compares the year-over-year change in total employment in Lenawee County to that of the state of Michigan over the same five-year period. Any point above the zero line in this graph indicates an increase in employment, while any point below the zero line indicates a decline in employment. As these data show, Lenawee County tracked below the statewide average for most of the period. As of March 2024, the year-over-year change in total employment in Lenawee County was minus 0.5 percent as compared to 1.0 percent statewide in Michigan.

[13] Data Source: U.S. Bureau of Labor Statistics.
[14] Data Source: U.S. Bureau of Labor Statistics.

Figure 7: Year-Over-Year Change in Total Employment – March 2019 to March 2024[15]



Employment and Wages by Industry Supersector

To provide a better understanding of the underlying factors motivating the total employment trends depicted in Figures 6 and 7, Figures 8 through 10 provide data on private employment and wages in Lenawee County by industry supersector.[16]

Figure 8 provides an indication of the distribution of private sector employment across industry supersectors in Lenawee County in 2023. As these data indicate, the county's largest industry sectors that year were Education and Health Services (5,084 jobs), followed by Trade, Transportation and Utilities (4,906 jobs), and Manufacturing (4,122 jobs).

Figure 9 provides a similar ranking for average private sector weekly wages by industry supersector in Lenawee County in 2023. As these data show, the highest paying industry sectors that year were Information ($1,611 per week), Manufacturing ($1,482 per week), and Financial Activities ($1,469 per week). To provide a point of reference, the average private sector weekly wage across all industry sectors in Lenawee County that year was $965 per week.

[15] Data Source: U.S. Bureau of Labor Statistics.
[16] A "supersector" is the highest level of aggregation in the coding system that the Bureau of Labor Statistics uses to classify industries.

Figure 8: Private Employment by Industry Supersector in Lenawee County – 2023[17]

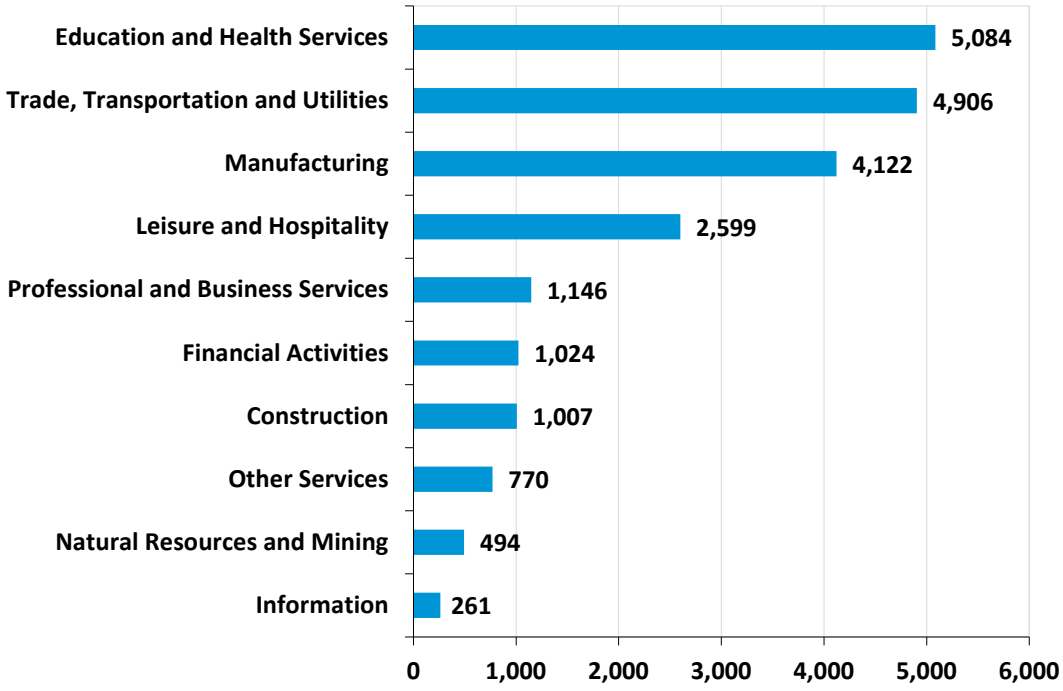
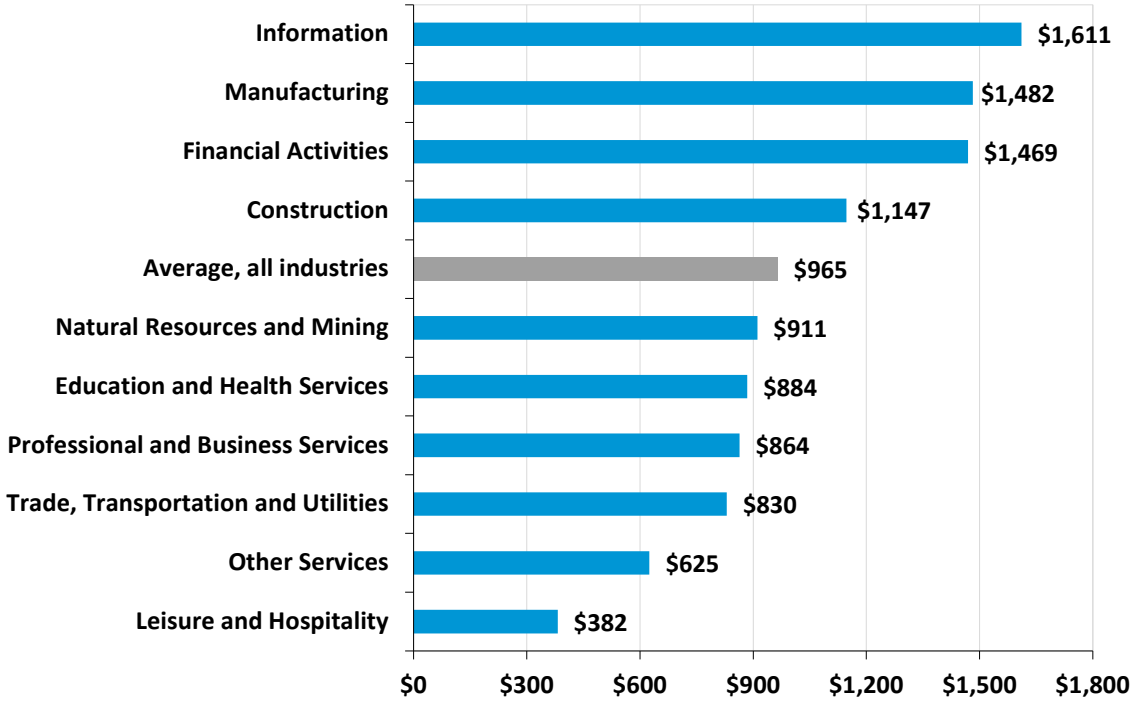


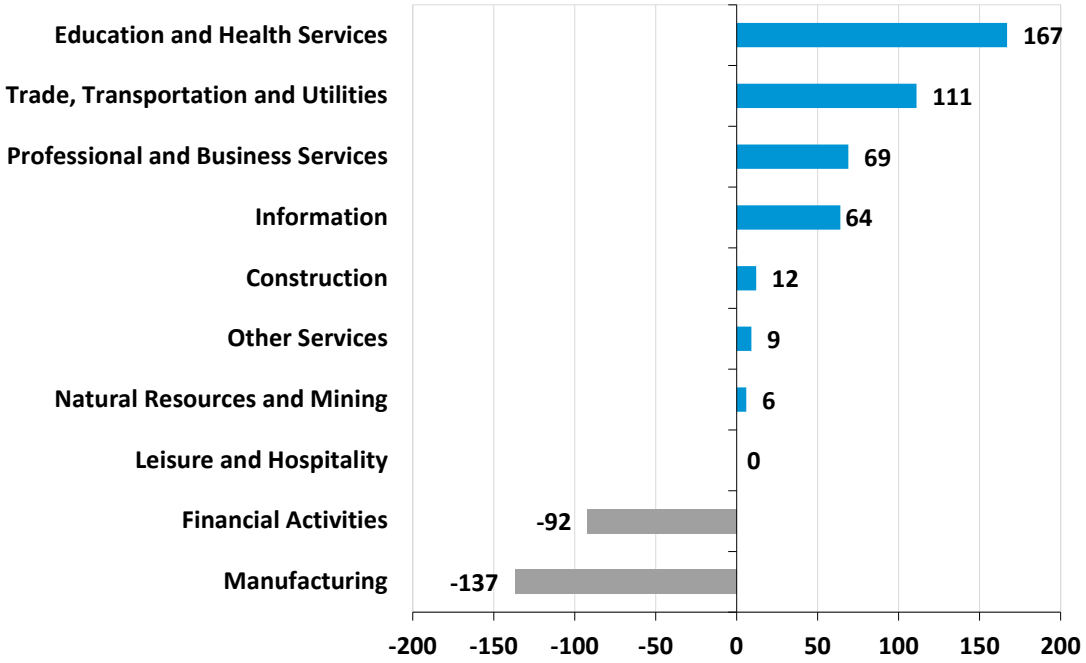
Figure 9: Average Private Weekly Wages by Industry Supersector in Lenawee County – 2023[18]



[17] Data Source: U.S. Bureau of Labor Statistics.
[18] Data Source: U.S. Bureau of Labor Statistics.

Figure 10 details the year-over-year change in private sector employment from 2022 to 2023 in Lenawee County by industry supersector. Over this period, the largest employment gains occurred in the Education and Health Services (up 167 jobs), Trade, Transportation and Utilities (up 111 jobs), and Professional and Business Services (up 69 jobs) sectors. The only employment losses occurred in the Manufacturing (down 137 jobs) and Financial Activities (down 92 jobs) sectors.

Figure 10: Change in Private Employment by Industry Supersector in Lenawee County from 2022 to 2023[19]

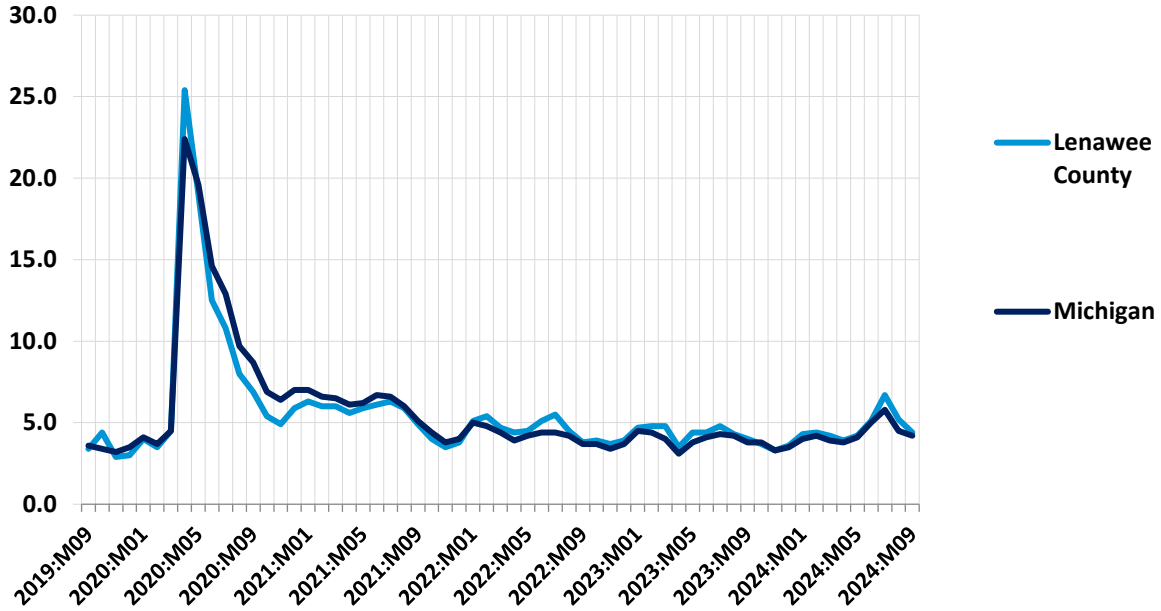


Unemployment

Figure 11 illustrates the trend in Lenawee County's unemployment rate over the five-year period from September 2019 through September 2024 and benchmarks those data against the statewide trend for Michigan. As these data show, unemployment rates in Lenawee County tracked closely with the statewide trend for most of the period. In April 2020 unemployment in the county and state significantly rose as a result of the labor dislocations caused by the COVID-19 pandemic. As of September 2024, unemployment stood at 4.4 percent in Lenawee County and at 4.2 percent in Michigan.

[19] Data Source: U.S. Bureau of Labor Statistics.

Figure 11: Unemployment Rate – September 2019 to September 2024[20]



[20] Data Source: U.S. Bureau of Labor Statistics.

Economic Impact

The analysis provided in this section quantifies the economic and fiscal contribution that the proposed Rouget Road Solar Farm would make to Lenawee County, Michigan. The analysis separately evaluates the one-time pulse of economic activity that would occur during the construction phase of the project, as well as the annual economic activity that the project would generate during its ongoing operations phase.

Method

To empirically evaluate the likely local economic impact attributable to the proposed Rouget Road Solar Farm, the analysis employs a regional economic impact model called IMPLAN.[21] The IMPLAN model is one of the most commonly used economic impact simulation models in the U.S. and is commonly employed by universities, state agencies, and research institutes. Like all economic impact models, the IMPLAN model uses economic multipliers to quantify economic impact.

Economic multipliers measure the ripple effects that an expenditure generates as it makes its way through the economy. For example, as when the Rouget Road Solar Farm purchases goods and services – or when contractors hired by the facility use their salaries and wages to make household purchases – thereby generating income for someone else, which is in turn spent, thereby becoming income for yet someone else, and so on, and so on. Through this process, one dollar in expenditures generates multiple dollars of income. The mathematical relationship between the initial expenditure and the total income generated is the economic multiplier.

One of the primary advantages of the IMPLAN model is that it uses regional and national production and trade flow data to construct region-specific and industry-specific economic multipliers, which are then further adjusted to reflect anticipated actual spending patterns within the specific geographic study area that is being evaluated. As a result, the economic impact estimates produced by IMPLAN are not generic. They reflect as precisely as possible the economic realities of the specific industry, and the specific study area, being evaluated.

In the analysis that follows, these impact estimates are divided into three categories. First round direct impact measures the direct economic contribution of the entity being evaluated (e.g., own employment, wages paid, goods and services purchased by the Rouget Road Solar Farm). Second round indirect and induced impact measures the economic ripple effects of this direct impact in terms of business to business, and household (employee) to business, transactions. Total impact is simply the sum of the preceding two. These categories of impact are then further defined in terms of employment (the jobs that are created), labor income (the wages and benefits associated with those jobs), and economic output (the total amount of economic activity that is created in the economy).

[21] IMPLAN is produced by IMPLAN Group, LLC.

Construction Phase

This portion of the section assesses the economic and fiscal contribution that the one-time pulse of activity associated with construction of the proposed Rouget Road Solar Farm would provide to Lenawee County.

Economic Impact Assumptions

The analysis is based on the following assumptions:

- Total capitalized investment in the Rouget Road Solar Farm project is estimated to be approximately $276.8 million.[22]
- Of that total:
    - Architecture, engineering, site preparation, and other construction and development costs are estimated to be approximately $122.1 million.[23]
    - Capital equipment costs are estimated to be approximately $154.7 million.[24] It is anticipated that no capital equipment would be purchased from vendors in Lenawee County.
- For ease of explanation, all construction expenditures are assumed to take place during a representative 12-month period.

Economic Impact on Lenawee County

Applying these assumptions in the IMPLAN model results in the following estimates of one-time economic impact on the county. As shown in Table 1, construction of the proposed Rouget Road Solar Farm would directly provide a one-time pulse supporting approximately: 1) 37 job years, 2) $4.0 million in wages and benefits, and 3) $13.5 million in economic output to the county (in 2025 dollars).

Taking into account the economic ripple effects that direct investment would generate, the estimated total one-time impact on the county would support approximately: 1) 101 job years, 2) $6.5 million in wages and benefits, 3) $22.7 million in economic output, and 4) $1.2 million in state and local tax revenue (in 2025 dollars).

[22] Data Source: RWE Clean Energy. Investment estimate is subject to change based on final design and vendor contracts.
[23] Data Source: RWE Clean Energy.
[24] Data Source: RWE Clean Energy.

Table 1: Estimated One-Time Economic and Fiscal Impact on Lenawee County from Construction of Rouget Road Solar Farm (2025 Dollars)[25,26]

Economic Impact	Employment – Job Years	Wages and Benefits	Output
1st Round Direct Economic Activity	37	$3,956,500	$13,549,700
2nd Round Indirect and Induced Economic Activity	64	$2,508,200	$9,137,500
Total Economic Activity	**101**	**$6,464,800**	**$22,687,200**
Fiscal Impact			
State and Local Tax Revenue			**$1,209,900**

**Totals may not sum due to rounding.*

Ongoing Operations Phase

This portion of the section assesses the annual economic contribution that the proposed Rouget Road Solar Farm would provide to Lenawee County during its anticipated 35-year operational phase.

Economic Impact Assumptions

The analysis is based on the following assumptions:

- Rouget Road Solar Farm would employ approximately four full-time technicians and would source locally available services and materials for additional maintenance and repair of the facility.[27]
- Rouget Road Solar Farm would make confidential lease payments to local landowners.[28]

Economic Impact on Lenawee County

Applying these assumptions in the IMPLAN model results in the following estimates of annual economic impact on Lenawee County. As shown in Table 2, annual operation of the proposed Rouget Road Solar Farm would directly support approximately: 1) 4 jobs, 2) $0.5 million in wages and benefits, and 3) $1.6 million in economic output to Lenawee County (in 2025 dollars).

Taking into account the economic ripple effects that direct impact would likely generate, the total estimated annually supported impact on Lenawee County would be approximately: 1) 14 jobs, 2) $1.0 million in wages and benefits, and 3) $3.0 million in economic output (in 2025 dollars).

[25] It is important to note that construction sector jobs are not necessarily new jobs, but the investments made can also support an existing job during the construction of the project. Please note it is not possible to know with certainty what proportion of these jobs would go to county construction contractors or be filled by Lenawee County residents.
[26] A construction sector job, also referred to as a job year, is equal to one job over one year. It is used to denote employment on construction projects to account for the fact that actual on-site employment may vary over the period.
[27] Data Source: RWE Clean Energy.
[28] Data Source: RWE Clean Energy.

Table 2: Estimated Annual Economic Impact on Lenawee County from the Ongoing Operation of Rouget Road Solar Farm (2025 Dollars)

Economic Impact	Employment	Wages and Benefits	Output
1st Round Direct Economic Activity	4	$516,300	$1,564,700
2nd Round Indirect and Induced Economic Activity	10	$446,400	$1,473,500
Total Economic Activity	**14**	**$962,800**	**$3,038,200**

**Totals may not sum due to rounding.*

Fiscal Impact

This section quantifies the direct fiscal contribution that the proposed Rouget Road Solar Farm would make to Lenawee County and to its local taxing jurisdictions. It should be noted at the outset, however, that the analysis that follows likely understates the actual fiscal impact that Rouget Road Solar Farm would have on the county as it only accounts for the direct fiscal impact that Rouget Road Solar Farm would generate. It does not take into account any additional tax revenue that would be generated as a result of the indirect economic activity attributable to the ongoing operation of Rouget Road Solar Farm.

Fiscal Impact Assumptions

The analysis is based on the following assumptions:

Scenarios 1 and 2

- The proposed Rouget Road Solar Farm would lease and purchase approximately 2,150 acres of agricultural land in Palmyra Township in Lenawee County. The actively used, fenced-in acreage would be approximately 1,400 acres.[29]
- Rouget Road Solar Farm would have a total capacity of 175 MW AC of solar generation.[30]
- Approximately 50 percent of the project's acreage, capitalized investment, and generation would be located in Blissfield School District and 50 percent in Adrian City School District.[31]
- The parcels to be leased by the Rouget Road Solar Farm project currently qualify for and are taxed at the "Agricultural Property Exemption" tax rate. Once the parcels are under solar use, they would be taxed at the "Non-Principal Resident's" tax rate.[32]
- Rouget Road Solar Farm would have an operational life of 35 years.[33]
- Tax rates remain constant throughout the analysis.

[29] Data Source: RWE Clean Energy.
[30] Data Source: RWE Clean Energy.
[31] Data Source: RWE Clean Energy. Subject to change based on final design.
[32] Data Source: Michigan Department of Treasury. Assumes less than 50 percent of each parcel would be used for an agricultural purpose.
[33] Data Source: RWE Clean Energy.

Taxation of Capital Investments – Scenario 1

- Total taxable capital investment in the Rouget Road Solar Farm project is estimated to be approximately $259.8 million.[34]

Payments in Lieu of Taxes (PILT) – Scenario 2

- Rouget Road Solar Farm would qualify for and receive a Solar Energy Facility Exemption Certificate (SEFEC) and would be exempt from ad valorem property taxes for a term of 20 years but subject to an annual solar energy facilities tax of $7,000 per MW ("PILT").[35]
- The PILT revenue would be distributed among all local taxing jurisdictions based on the project's generation capacity located in each jurisdiction and the current local taxing jurisdictions' proportion of the current total local millage rate. Assumes all taxing jurisdictions receive PILT payments.

Fiscal Impact Results

Taxation of Land

The following section summarizes the revenue generated from taxation of the land that would be taken out of the Agricultural Property Exemption status.

Table 3 details the increased real property tax revenue associated with taxation of the actively used acreage under solar use. The total real property tax revenue is estimated to be approximately $0.1 million per year, for a cumulative total of approximately $3.2 million over the project's anticipated 35-year operational life. This consists of approximately: $0.4 million for Lenawee County, $0.2 million for Palmyra Township, $1.1 million for Blissfield Community School District, $0.9 million for Adrian City School District, $0.5 million for the Lenawee Intermediate School District, and $0.1 million for the Library District (in 2025 dollars).

[34] Data Source: RWE Clean Energy. Subject to change based on final design and vendor contracts.
[35] Data Source: Pursuant to Solar Energy Facilities Taxation Act No 108 of 2023 (MCL 211.1151 et. Seq.). Assumes PILT is also applicable to battery storage based on the MW storage capacity.

Table 3: Estimated Tax Revenue Generated by the Proposed Rouget Road Solar Farm over 35 Years from Real Property Taxes (2025 Dollars)

	Lenawee County	Palmyra Township	Blissfield Community School District	Adrian City School District	Lenawee Intermediate School District	Library District[36]	Total
Millage Rate[37]	**6.3524**	**2.991**	**29.00**	**29.10**	**7.2922**	**1.25/0.5998**	
Taxable Value of Actively Used Acreage[38]	$1,967,200	$1,967,200	$1,057,900	$909,300	$1,967,200	$1,967,200	
Annual Real Estate Tax – Solar Use	$12,500	$5,900	$30,700	$26,500	$14,300	$1,900	**$91,700**
Cumulative Revenue over 35 Years[39]	**$437,400**	**$205,900**	**$1,073,800**	**$926,100**	**$502,100**	**$65,400**	**$3,210,600**

**Totals may not sum due to rounding.*

[36] Library District includes the Blissfield Community School district Library mill levy (1.25) and the Adrian City Community School district Library mill levy (0.5998).
[37] Data Source: Michigan Department of Treasury, 2024 Millage Rate Review Reports. Analysis assumes millage rates remain constant.
[38] Data Source: RWE Clean Energy. Based on current proposed design and average per acre parcel values derived from property tax cards. Subject to change.
[39] The additional real property tax revenue collected under solar use is due to the additional 18 mills local school district operating millage, which the property is exempt from under the agricultural exemption status. This revenue goes directly to the local school district operating budget.

Taxation of Capital Investment – Scenario 1

Table 4 details the estimated annual property tax revenue associated with taxation of the capital investments in the Rouget Road Solar Farm project. The calculations are based on: 1) the assessed taxable value of the capitalized investment cost of the project[40], times 2) the Michigan Department of Treasury's personal property multiplier for solar energy systems, times 3) the assumed proportion located in the jurisdiction, times 4) the applicable millage rate.

As the data in Table 4 indicate, the total local tax revenue associated with the investments in year 1 of the project is estimated to be approximately $2.9 million. Estimated annual revenues are projected to fluctuate during the following four years[41], and then begin to decline as the multiplier declines. Estimated annual revenues level out at approximately $0.4 million in year 13 and thereafter, for a cumulative total of approximately $33.8 million over 35 years (in 2025 dollars). This consists of approximately: $9.5 million for Lenawee County, $4.5 million for Palmyra Township, $3.7 million for Blissfield Community School District, $3.8 million for Adrian City School District, $10.9 million for the Lenawee Intermediate School District, and $1.4 million for the Lenawee Library District (in 2025 dollars).

[40] Pursuant to the Michigan Constitution of 1963 and the General Property Tax Act.
[41] Please note that the analysis is based on the 2025 multiplier schedule. Future year multiplier schedules may depreciate faster, resulting in lower annual tax projections.

Table 4: Estimated Tax Revenue Generated by the Proposed Rouget Road Solar Farm over 35 Years from Taxation of Capital Investments – Scenario 1 (2025 Dollars)

Year	Taxable Value[42]	Lenawee County	Palmyra Township	Blissfield Community School District	Adrian City School District	Lenawee Intermediate School District	Lenawee Library District[43]	Total
Total Taxable Capital Investment: $259,792,700[44]								
% of Investment		**100%**	**100%**	**50%**	**50%**	**100%**	**50%/50%**	
Millage Rate[45]		**6.3524**	**2.991**	**5.00**	**5.10**	**7.2922**	**1.25/0.5998**	
1	$127,298,400	$808,700	$380,700	$318,200	$324,600	$928,300	$117,700	$2,878,300
2	$96,123,300	$610,600	$287,500	$240,300	$245,100	$701,000	$88,900	$2,173,400
3	$119,504,600	$759,100	$357,400	$298,800	$304,700	$871,500	$110,500	$2,702,100
4	$144,184,900	$915,900	$431,300	$360,500	$367,700	$1,051,400	$133,400	$3,260,100
5	$137,690,100	$874,700	$411,800	$344,200	$351,100	$1,004,100	$127,300	$3,113,200
6	$138,989,100	$882,900	$415,700	$347,500	$354,400	$1,013,500	$128,600	$3,142,600
7	$110,411,900	$701,400	$330,200	$276,000	$281,600	$805,100	$102,100	$2,496,500
8	$77,937,800	$495,100	$233,100	$194,800	$198,700	$568,300	$72,100	$1,762,200
9	$66,247,100	$420,800	$198,100	$165,600	$168,900	$483,100	$61,300	$1,497,900
10	$49,360,600	$313,600	$147,600	$123,400	$125,900	$359,900	$45,700	$1,116,100
11	$37,669,900	$239,300	$112,700	$94,200	$96,100	$274,700	$34,800	$851,700
12	$29,876,200	$189,800	$89,400	$74,700	$76,200	$217,900	$27,600	$675,500
13	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
14	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400

[42] Accounts for Michigan Department of Treasury's 2025 property multiplier for solar energy systems and the statewide assessment level pursuant to the Michigan Constitution of 1963 and the General Property Tax Act. Please note that the multiplier schedule changes annually and that the current schedule was applied for illustrative purposes. Actual annual taxable value may vary.

[43] Library District includes the Blissfield Community School district Library mill levy (1.25) and the Adrian City Community School district Library mill levy (0.5998).

[44] Data Source: RWE Clean Energy.

[45] Data Source: Michigan Department of Treasury, 2024 Millage Rate Review Reports. Analysis assumes millage rates remain constant.

Year	Taxable Value[42]	Lenawee County	Palmyra Township	Blissfield Community School District	Adrian City School District	Lenawee Intermediate School District	Lenawee Library District[43]	Total
Total Taxable Capital Investment: $259,792,700[44]								
% of Investment		**100%**	**100%**	**50%**	**50%**	**100%**	**50%/50%**	
15	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
16	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
17	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
18	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
19	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
20	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
21	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
22	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
23	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
24	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
25	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
26	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
27	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
28	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
29	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
30	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
31	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
32	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
33	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
34	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
35	$15,587,600	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
Cumulative Revenue over 35 Years		**$9,489,300**	**$4,468,000**	**$3,734,500**	**$3,809,200**	**$10,893,100**	**$1,381,600**	**$33,775,700**

**Totals may not sum due to rounding.*

Total Fiscal Impact – Scenario 1

Table 5 takes the results depicted in Tables 3 and 4 to summarize the total fiscal contribution that the proposed Rouget Road Solar Farm would make to Lenawee County and its local taxing jurisdictions under Scenario 1.

As shown in Table 5, the cumulative revenue would be approximately $37.0 million over 35 years (in 2025 dollars). This consists of approximately: $9.9 million for Lenawee County, $4.7 million for Palmyra Township, $4.8 million for Blissfield Community School District, $4.7 million for Adrian City School District, $11.4 million for the Lenawee Intermediate School District, and $1.4 million for the Library District (in 2025 dollars).

Table 5: Estimated Total Tax Revenue Generated by the Proposed Rouget Road Solar Farm over 35 Years – Scenario 1 (2025 Dollars)

	Lenawee County	Palmyra Township	Blissfield Community School District	Adrian City School District	Lenawee Intermediate School District	Lenawee Library District[46]	Total
Tax Revenue – Land	$437,400	$205,900	$1,073,800	$926,100	$502,100	$65,400	**$3,210,600**
Tax Revenue – Capital Investments	$9,489,300	$4,468,000	$3,734,500	$3,809,200	$10,893,100	$1,381,600	**$33,775,700**
Cumulative Revenue over 35 Years	**$9,926,600**	**$4,673,900**	**$4,808,300**	**$4,735,300**	**$11,395,200**	**$1,447,000**	**$36,986,400**

**Totals may not sum due to rounding.*

[46] Library District includes the Blissfield Community School district Library mill levy (1.25) and the Adrian City Community School district Library mill levy (0.5998).

Payments in Lieu of Taxes – Scenario 2

Table 6 portrays the estimated revenue associated with Rouget Road Solar Farm assuming the project qualifies for and receives a Solar Energy Facility Exemption Certificate (SEFEC), resulting in the exemption of the ad valorem property taxes associated with the taxation of the capital investments in the project for a term of 20 years. Rouget Road Solar Farm would instead be subject to an annual solar energy facilities tax of $7,000 per MW nameplate capacity pursuant to the Solar Energies Facilities Taxation Act 108 of 2023, referred to as a PILT in this report.

As shown in Table 6, the total local revenue associated with a 20-year PILT term and an additional 15-year term based on taxation of the depreciated capital investments is estimated to be approximately $29.8 million over 35 years. This consists of annual payments of approximately $1.2 million for the first 20 years of the project's operation followed by an estimated annual tax revenue of approximately of approximately $0.4 million for the remainder of the project's 35-year operational life (in 2025 dollars).

The cumulative total revenue over 35 years consists of approximately: $8.4 million for Lenawee County, $3.9 million for Palmyra Township, $3.3 million for Blissfield Community School District, $3.4 million for Adrian City School District, $9.6 million for the Lenawee Intermediate School District, and $1.2 million for the Lenawee Library District (in 2025 dollars).

Table 6: Estimated Solar Energy Facilities Tax / PILT and Tax Revenue Generated by the Proposed Rouget Road Solar Farm over 35 Years – Scenario 2 (2025 Dollars)[47,48]

Year	Lenawee County	Palmyra Township	Blissfield Community School District	Adrian City School District	Lenawee Intermediate School District	Lenawee Library District[49]	Total
1	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
2	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
3	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
4	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
5	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
6	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
7	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
8	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
9	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
10	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
11	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
12	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
13	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
14	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
15	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
16	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
17	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
18	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
19	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000

[47] Total annual PILT payments calculated as $7,000 per MW times 235 MW. Assumes PILT would be distributed among all local taxing jurisdictions based on the project's generation and storage capacity located in each jurisdiction and the current local taxing jurisdictions' proportion of the current total local millage rate. Assumes all jurisdictions receive PILT payments.

[48] Please refer to Table 4 for details on the tax revenue calculations in years 21 through 35.

[49] Library District includes the Blissfield Community School district Library mill levy (1.25) and the Adrian City Community School district Library mill levy (0.5998).

Year	Lenawee County	Palmyra Township	Blissfield Community School District	Adrian City School District	Lenawee Intermediate School District	Lenawee Library District[49]	Total
20	$344,200	$162,100	$133,800	$139,900	$395,100	$49,900	$1,225,000
21	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
22	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
23	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
24	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
25	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
26	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
27	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
28	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
29	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
30	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
31	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
32	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
33	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
34	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
35	$99,000	$46,600	$39,000	$39,700	$113,700	$14,400	$352,400
Cumulative Revenue over 35 Years	**$8,369,500**	**$3,940,800**	**$3,260,900**	**$3,393,400**	**$9,607,800**	**$1,214,300**	**$29,786,600**

**Totals may not sum due to rounding.*

Total Fiscal Impact – Scenario 2

Table 7 takes the results depicted in Tables 3 and 6 to summarize the total fiscal contribution that the proposed Rouget Road Solar Farm would make to Lenawee County and its local taxing jurisdictions under Scenario 2.

As shown in Table 7, the cumulative total revenue would be approximately $33.0 million over 35 years (in 2025 dollars). This consists of approximately: $8.8 million for Lenawee County, $4.1 million for Palmyra Township, $4.3 million for Blissfield Community School District, $4.3 million for Adrian City School District, $10.1 million for the Lenawee Intermediate School District, and $1.3 million for the Lenawee Library District (in 2025 dollars).

Table 7: Estimated Total Revenue Generated by the Proposed Rouget Road Solar Farm over 35 Years – Scenario 2 (2025 Dollars)

	Lenawee County	Palmyra Township	Blissfield Community School District	Adrian City School District	Lenawee Intermediate School District	Lenawee Library District[50]	Total
Tax Revenue – Land	$437,400	$205,900	$1,073,800	$926,100	$502,100	$65,400	**$3,210,600**
PILT Scenario Revenue	$8,369,500	$3,940,800	$3,260,900	$3,393,400	$9,607,800	$1,214,300	**$29,786,600**
Cumulative Revenue over 35 Years	**$8,806,900**	**$4,146,700**	**$4,334,600**	**$4,319,500**	**$10,109,900**	**$1,279,700**	**$32,997,300**

**Totals may not sum due to rounding.*

[50] Library District includes the Blissfield Community School district Library mill levy (1.25) and the Adrian City Community School district Library mill levy (0.5998).

Current Agricultural Use

This section provides a benchmark for the previous estimates of the economic and fiscal contribution that the proposed Rouget Road Solar Farm would make to Lenawee County by estimating the economic and fiscal contribution that the site makes to the county in its current agricultural use.

Economic Impact Assumptions

The analysis is based on the following assumptions:

- The proposed Rouget Road Solar Farm would be situated on an approximate 1,400-acre tract of agricultural land, of which a portion is used to produce corn and soybeans.[51]

Economic Impact

Applying these assumptions in the IMPLAN model results in the following estimates of annual economic impact. As shown in Table 8, in its current agricultural use the proposed Rouget Road Solar Farm project site on average directly supports approximately: 1) 3 jobs, 2) $0.2 million in wages and benefits, and 3) $1.0 million in economic output to Lenawee County (in 2025 dollars).

Taking into account the economic ripple effects that direct impact generates, on average, the total annually supported impact on Lenawee County is approximately: 1) 6 jobs, 2) $0.3 million in wages and benefits, and 3) $1.4 million in economic output (in 2025 dollars).

Table 8: Total Estimated Annual Economic Impact of the Rouget Road Solar Farm Site on Lenawee County – Current Agricultural Use (2025 Dollars)[52]

Economic Impact	Employment	Wages and Benefits	Output
1st Round Direct Economic Activity	3	$154,800	$1,013,800
2nd Round Indirect and Induced Economic Activity	3	$111,100	$366,700
Total Economic Activity	**6**	**$266,000**	**$1,380,500**

**Totals may not sum due to rounding.*

Fiscal Impact Assumptions

The analysis is based on the following assumptions:

- The current taxable value of the acreage to be used for the project is approximately $2.0 million.[53]

[51] Data Source: RWE Clean Energy.
[52] Calculations based on data from the U.S. Department of Agriculture and IMPLAN Group, LLC for Lenawee County.
[53] Data Source: RWE Clean Energy. Based on current proposed design and average per acre parcel values derived from property tax cards. Subject to change.

Fiscal Impact

Table 9 details the estimated tax revenue that acreage associated with the proposed Rouget Road Solar Farm generates for Lenawee County in its current agricultural use. As the data in Table 9 indicate, the current total local real estate tax revenue from the acreage associated with the project is estimated to be approximately $56,300 per year, for a cumulative total of approximately $2.0 million over 35 years (in 2025 dollars).

This consists of approximately: $0.4 million for Lenawee County, $0.2 million for Palmyra Township, $0.4 million for Blissfield Community School District, $0.4 million for Adrian City School District, $0.5 million for the Lenawee Intermediate School District, and $65,400 for the Lenawee Library District (in 2025 dollars).

Table 9: Estimated Tax Revenue Generated by the Parcels Associated with the Rouget Road Solar Farm 35 Years – Current Agricultural Use (2025 Dollars)

	Lenawee County	Palmyra Township	Blissfield Community School District	Adrian City School District	Lenawee Intermediate School District	Lenawee Library District[54]	Total
Millage Rate[55]	6.3524	2.991	11.00	11.1	7.2922	1.25/0.5998	
Taxable Value[56]	$1,967,200	$1,967,200	$1,057,900	$909,300	$1,967,200	$1,967,200	
Annual Real Estate Tax – Current Use	$12,500	$5,900	$11,600	$10,100	$14,300	$1,900	**$56,300**
Cumulative Revenue over 35 Years	**$437,400**	**$205,900**	**$407,300**	**$353,300**	**$502,100**	**$65,400**	**$1,971,300**

**Totals may not sum due to rounding.*

[54] Library District includes the Blissfield Community School district Library mill levy (1.25) and the Adrian City Community School district Library mill levy (0.5998).
[55] Data Source: Michigan Department of Treasury, 2024 Millage Rate Review Reports. Analysis assumes millage rates remain constant.
[56] Data Source: RWE Clean Energy. Based on current proposed design and average per acre parcel values derived from property tax cards. Subject to change.

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The estimates provided in this report are based on the best information available and all reasonable care has been taken in assessing the quality of that information. However, because these estimates attempt to foresee the consequences of circumstances that have not yet occurred, it is not possible to be certain that they will be representative of actual events. These estimates are intended to provide a good indication of likely future outcomes and should not be construed to represent a precise measure of those outcomes.