RED BRANCH SOLAR

ECONOMIC & FISCAL CONTRIBUTION TO BURKE COUNTY, GEORGIA

Prepared for

aes

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:

- **Economic Development and Special Projects:** 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.
- **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 projects 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.
- **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.

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Executive Summary

This report assesses the economic and fiscal contribution that the proposed Red Branch Solar project would make to Burke County, Georgia.

Red Branch Solar is a proposed 200-megawatt (MW) alternating current (AC) solar photovoltaic power generating facility. The project would be located in Burke County, Georgia north of Highway 23 and south of Hancock Road and directly adjacent to the county's Energy Production District as defined in the county's comprehensive plan. The project would encompass approximately 1,915 acres of leased land. The estimated actively used, fenced-in acreage would be approximately 1,120 acres of land.

The primary findings from the assessment are as follows:

1) **The proposed Red Branch Solar project would provide a significant economic contribution to Burke County.**
   - The proposed Red Branch Solar project would employ approximately 380 full-time equivalent local and non-local construction workers during a representative 12-month period (380 job years).
   - The proposed Red Branch Solar project would provide an estimated one-time pulse of economic activity to Burke County during its construction phase supporting approximately:[1,2]
     - 102 direct and 81 indirect and induced local job years.
     - $8.6 million in associated local wages and benefits.
     - $49.0 million in local economic output (in 2024 dollars).
   - The proposed Red Branch Solar project would on average provide an estimated annual economic impact to Burke County during its ongoing operational phase supporting approximately:
     - 3 direct and 4 indirect and induced local jobs.
     - $0.5 million in associated local wages and benefits.
     - $2.0 million in local economic output (in 2024 dollars).
2) **The proposed Red Branch Solar project would make a significant fiscal contribution to Burke County. The proposed project would generate approximately:**
   - $1.6 million in one-time state and local tax revenue associated with the construction of the project (in 2024 dollars).

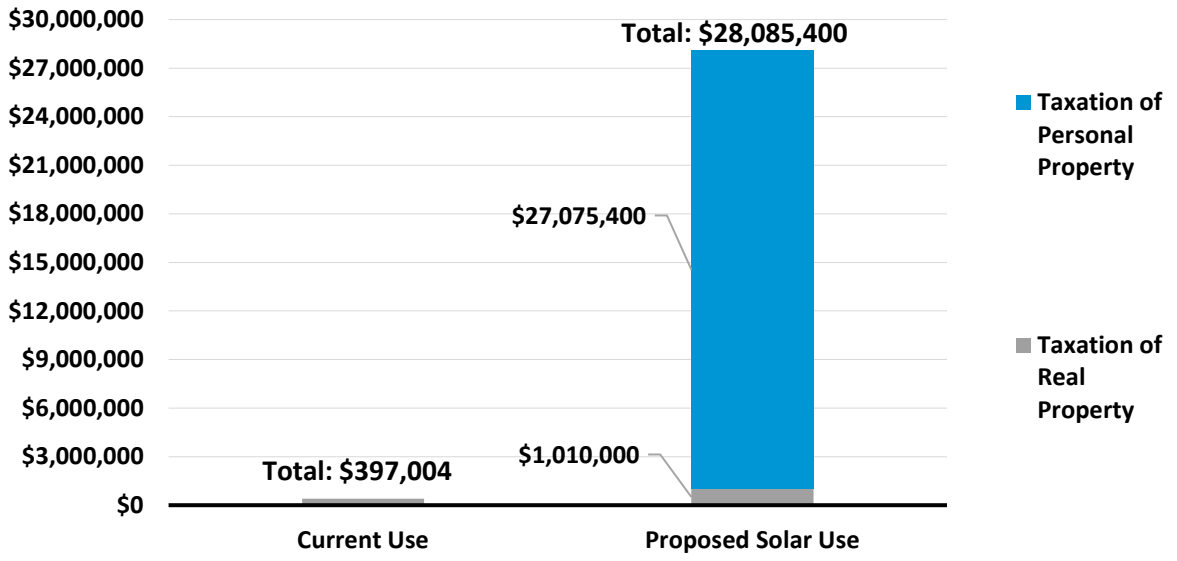
[1] It is important to note that construction sector jobs are not necessarily new jobs, but the investments made can also support a job during the construction of the project. Despite the relatively large size of the county's construction sector, it is not possible to know with certainty what proportion of these jobs would go to county construction contractors or be filled by county residents.
[2] 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.

- $28.1 million in cumulative local revenue over the facility's anticipated 35-year operational life assuming revenues are generated from the reassessment of the real property and taxes levied on capital investment in personal property (in 2024 dollars).

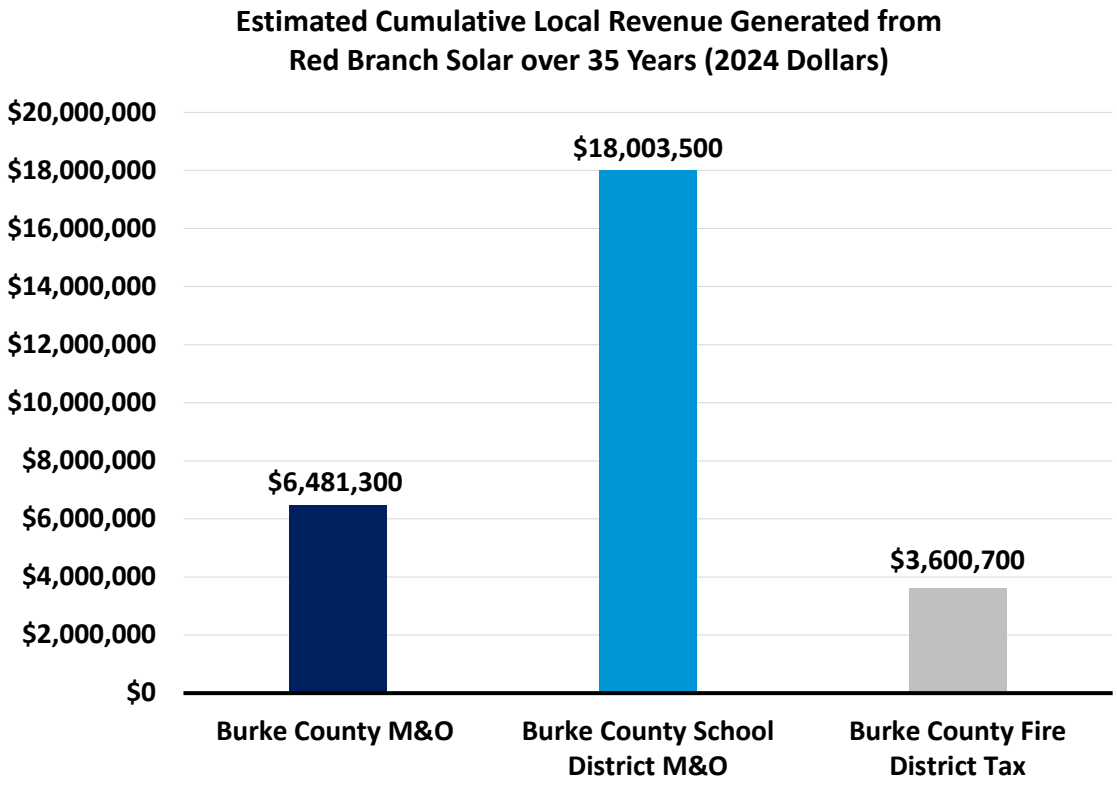
3) The proposed Red Branch Solar project would have a significantly greater fiscal impact on Burke County than the property generates in its current use.

- The proposed Red Branch Solar project would generate approximately $28.1 million in cumulative local revenue over the facility's anticipated 35-year operational life, as compared to approximately $0.4 million in cumulative local revenue in the property's current use – this constitutes a 71-fold increase over the current use (in 2024 dollars).

Estimated Cumulative Burke County Tax Revenue from Red Branch Solar over 35 Years (2024 Dollars)



- Over a 35-year period, the proposed Red Branch Solar project would generate approximately:
  - $6.5 million in cumulative Burke County M&O tax revenue,
  - $18.0 million in cumulative Burke County School District M&O tax revenue, and
  - $3.6 million in cumulative Burke County Fire District tax revenue (in 2024 dollars).



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.

Introduction

This report assesses the economic and fiscal contribution that the proposed Red Branch Solar project would make to Burke County, Georgia. This report was commissioned by AES and produced by Mangum Economics.

The Project

Red Branch Solar is a proposed 200-megawatt (MW) alternating current (AC) solar photovoltaic power generating facility. The project would be located in Burke County, Georgia north of Highway 23 and south of Hancock Road and directly adjacent to the county's Energy Production District as defined in the county's comprehensive plan. The project would encompass approximately 1,915 acres of leased land. The estimated actively used, fenced-in acreage would be approximately 1,120 acres of land.

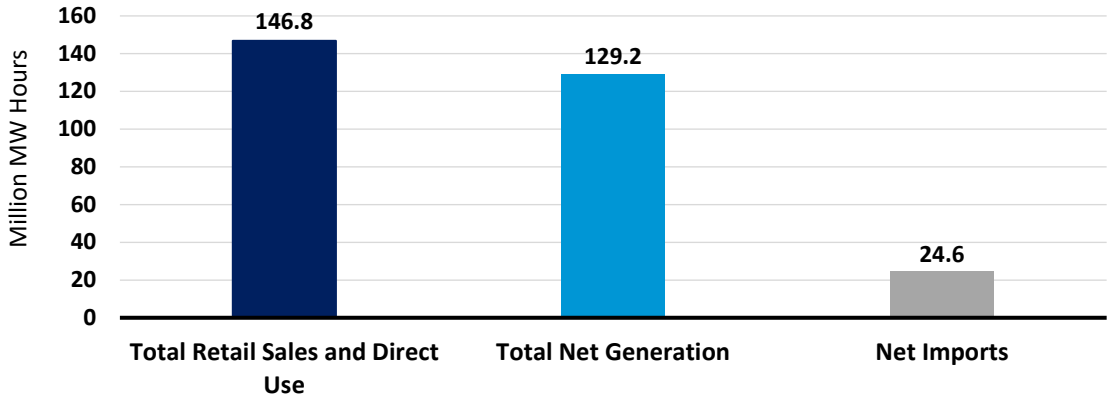
Electricity Production in Georgia

This section provides a backdrop for the proposed Red Branch Solar project by profiling Georgia'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 Georgia totaled 146.8 million megawatt hours. However, only 88 percent of that demand was met by in-state utilities, independent producers, and other sources. As a result, Georgia had to import the remaining electricity it consumed from producers in other states. As with all imports, this means that the jobs, wages, and economic output created by that production went to localities in those states, not to localities in Georgia.

Figure 1: Demand and Supply of Electricity in Georgia in 2023 (in millions of megawatt-hours)[3]



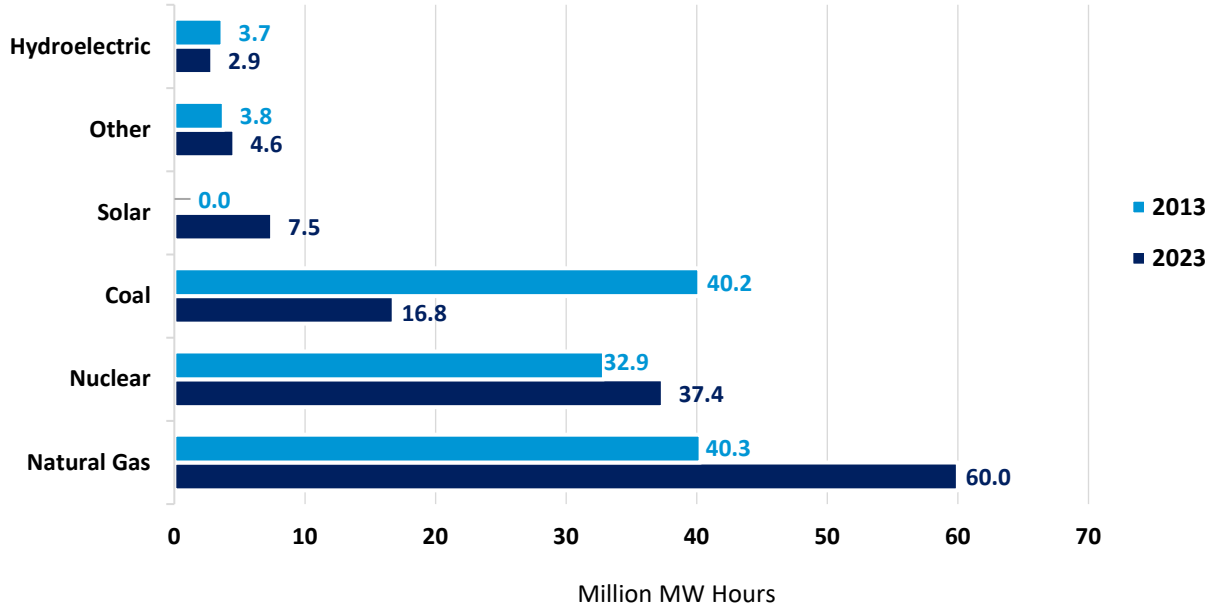
[3] Data Source: U.S. Energy Information Administration. In this chart, "Net Imports" also takes into account losses during transmission. As a result, it does not directly equal the residual of "Total Net Generation" minus "Total Retail Sales and Direct Use."

Sources of Production

Between 2013 and 2023, the total amount of electricity produced in Georgia increased from 121.0 to 129.2 million megawatt hours, while retail and direct consumption of electricity increased from 135.3 to 146.8 million megawatt hours. Consequently, imports of electricity increased by 1.2 million megawatt hours (or 5 percent) during this time.[4] Figure 2 provides a comparison of the energy sources that were used to produce electricity in Georgia 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 second largest source of electricity in 2013, accounting for 40.2 million megawatt hours (or 33 percent) of production, by 2023 production had fallen by 23.5 million megawatt hours, making coal a third-place source of electricity with only 13 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 40.3 million megawatt hours (or 33 percent) of Georgia's electricity production in 2013, by 2023 that proportion had increased to 60.0 million megawatt hours (or 47 percent of production), maintaining natural gas as the state's largest source of electricity. In addition, solar, which entered the Georgia electricity production market in 2012, increased its share to 7.5 million megawatt hours in 2023.

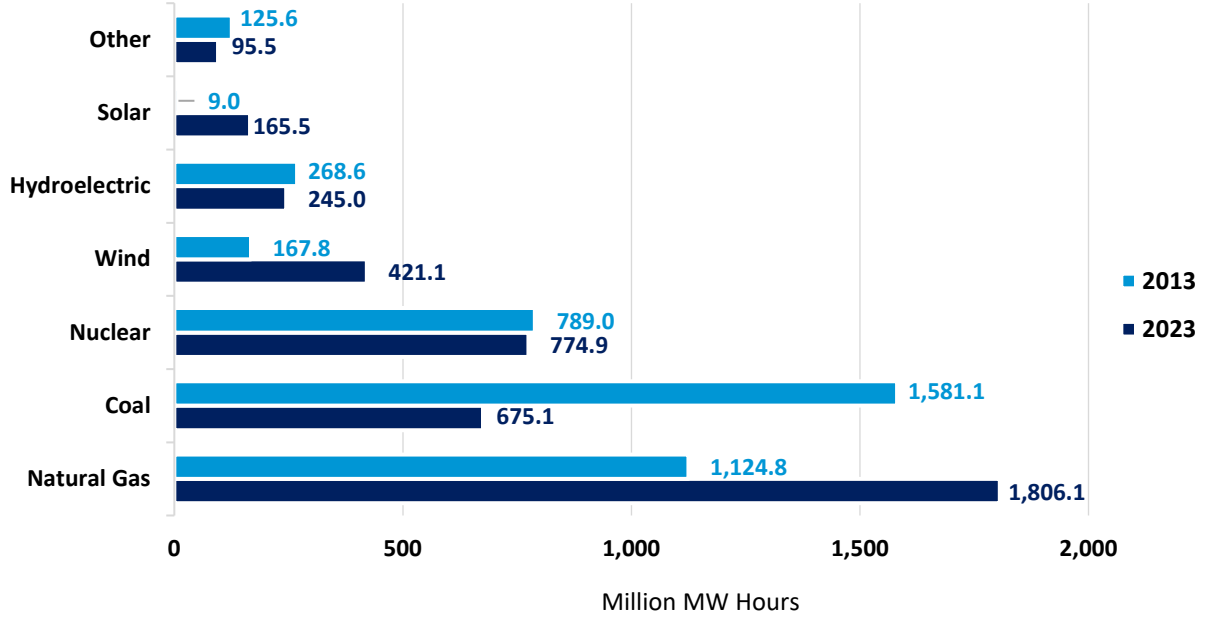
Figure 2: Electricity Generation in Georgia by Energy Source in 2013 and 2023 (in millions of megawatt-hours)[5]



[4] Imports also takes into account losses during transmission. As a result, totals do not equal sum of components.
[5] Data Source: U.S. Energy Information Administration. The "Other" category includes battery, wood, petroleum, other biomass, "other", 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 although the degree of reliance on specific energy sources for electricity production is quite different between the U.S. and Georgia, the trend toward lower-emissions energy sources is the same. 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 681.2 million megawatt hours from 28 to 43 percent of production. Nationwide, as in Georgia, the reliance on renewable energy sources such as solar increased during this time but at a slower pace than in Georgia. 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 6 percent of total electricity production in Georgia.

Figure 3: Electricity Generation in the United States by Energy Source in 2013 and 2023 (in millions of megawatt-hours)[6]

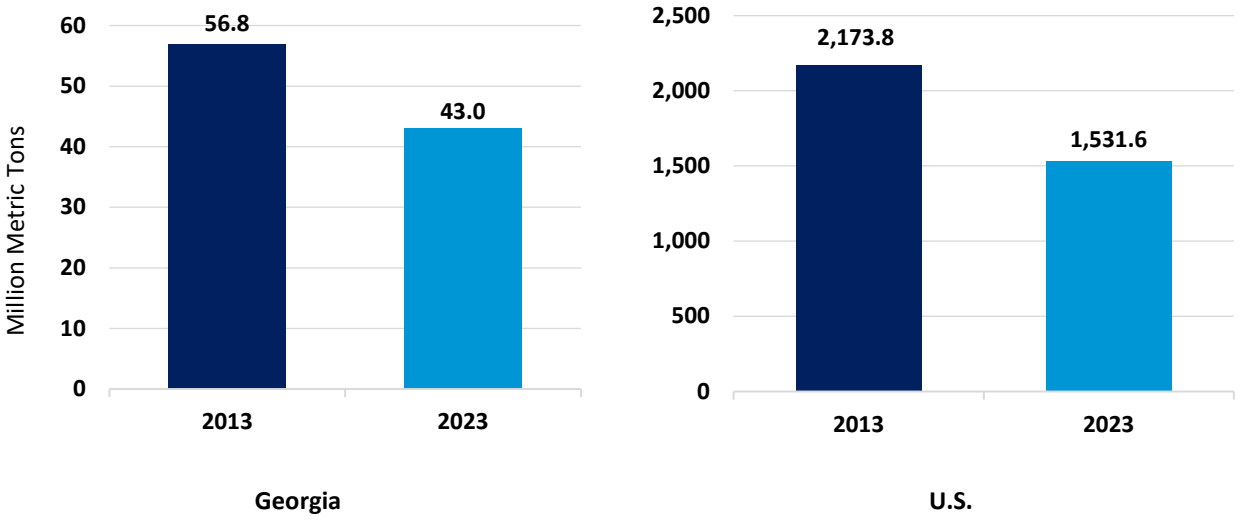


Impact on the Environment

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 Georgia and the U.S. As these data indicate, between 2013 and 2023, as the share of electricity produced in Georgia by coal fell from 33 to 13 percent, carbon dioxide emissions from electricity production fell from 56.8 to 43.0 million metric tons (a 24 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).

[6] 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)[7]

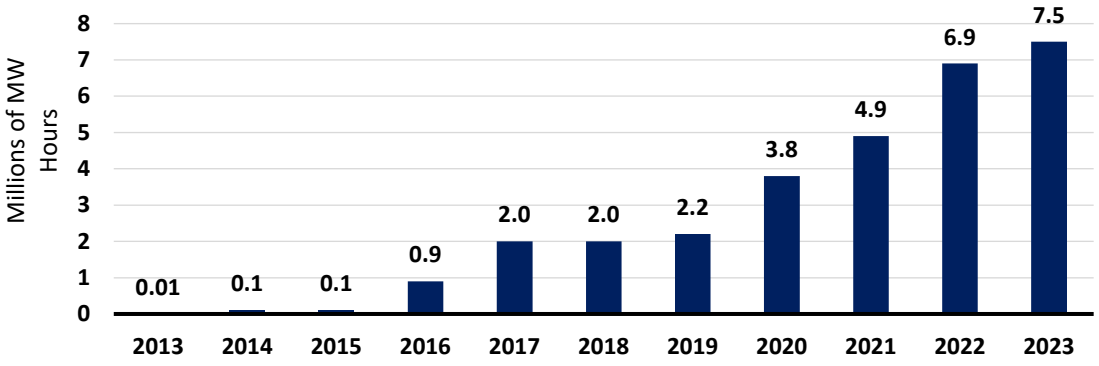


Georgia Solar Industry Trends

Georgia ranks 11th in the nation in terms of proposed solar capacity. With a total of 18 projects expected to begin commercial operation within the next five years totaling a combined 2,446 megawatts of capacity, these proposed projects would add a significant amount of renewable energy to the state's grid.[8] Total investment into the solar industry in Georgia as of the third quarter of 2024 amounts to $8.1 billion.[9]

Figure 5 shows a rising trend in solar energy generation in Georgia from 2013 to 2023 expressed in millions of megawatt-hours. Solar first entered the electricity market in Georgia in 2012. Generation experienced a sharp escalation in growth starting in 2019, and reaching its peak, so far, with solar generation totaling 7.5 million megawatt-hours in 2023.

Figure 5: Solar Generation in Georgia (in millions of megawatt-hours) – 2013 to 2023[10]



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

Growing Energy Demand in Georgia

Projected energy demand in Georgia over the next seven years has increased drastically between 2022 and 2023. Georgia Power projected less than 400 MW of customer load growth through the winter of 2031 in their 2022 Integrated Resource Plan (IRP). In 2023, that estimate was updated to 6,600 MW of projected customer load growth through the winter of 2031. This 17-fold increase in energy demand can be linked to the state's continued economic development expansions.[11]

Many of the new businesses locating in Georgia are large projects like manufacturers, data centers, and others. In the beginning of 2025, Amazon Web Services announced its plans to expand its presence in the state to support cloud computing and AI technologies with an investment of approximately $11 billion.[12] A large increase in projected load growth leads to a rise in capacity needs. Georgia Power's projected total capacity needs through the winter of 2031 are estimated to be approximately 8,500 MW.[13]

[11] Data Source: Georgia Power's 2023 Integrated Resource Plan Update.
[12] Data Source: Amazon Web Services. https://www.aboutamazon.com/news/aws/aws-investment-georgia-ai-cloud-infrastructure
[13] Data Source: Georgia Power's 2023 Integrated Resource Plan Update.

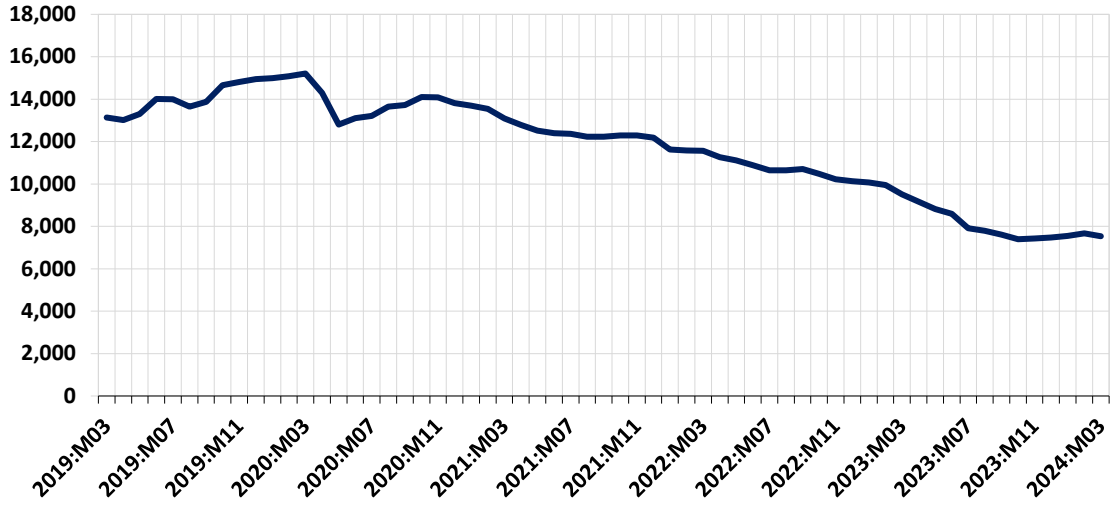
Local Economic Profile

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

Total Employment

Figure 6 depicts the trend in total employment in Burke County during the five-year period from March 2019 through March 2024. Employment in the county generally increased through 2019. Then, in April 2020, employment declined significantly in response to a decrease in economic activity associated with the COVID-19 pandemic. Total employment has since continued to decline throughout the remainder of the period. As of March 2024, total employment in the county stood at 7,532 jobs, which represents an overall decrease in employment of 42.7 percent (or 5,606 jobs) over the five-year period. To put this number in perspective, over this same period, total statewide employment in Georgia increased by 8.0 percent.[14]

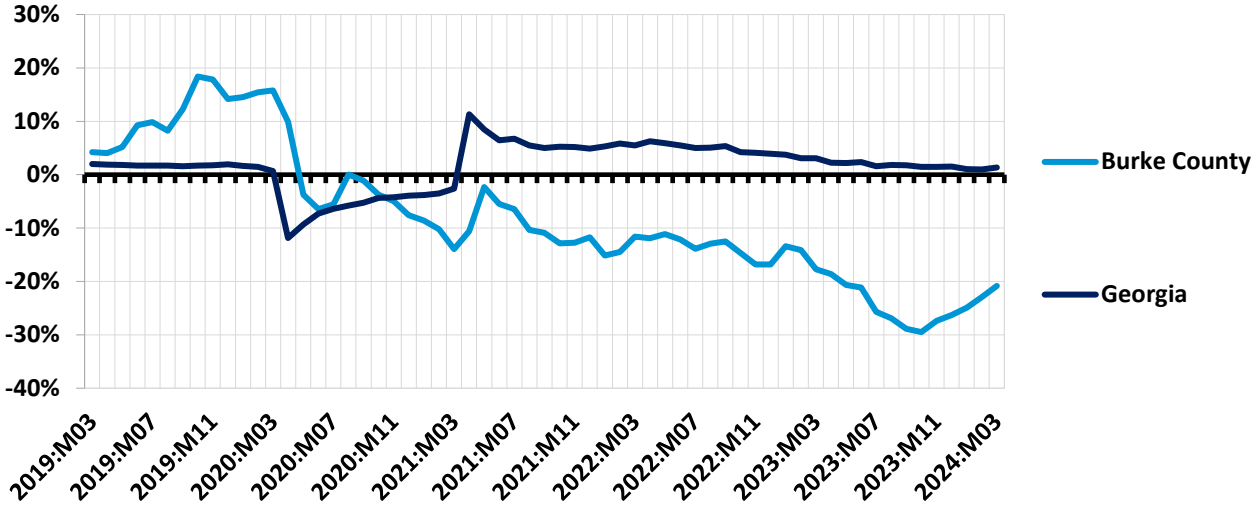
Figure 6: Total Employment in Burke County – March 2019 to March 2024[15]



To control for seasonality and provide a point of reference, Figure 7 compares the year-over-year change in total employment in Burke County to that of the state of Georgia 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, year-over-year change in employment in Burke County outperformed the statewide trend through 2020 but has significantly underperformed the statewide average since then. As of September 2024, the year-over-year change in total employment in Burke County was minus 20.8 percent as compared to 1.3 percent statewide in Georgia.

[14] Data Source: U.S. Bureau of Labor Statistics.
[15] Data Source: U.S. Bureau of Labor Statistics. *The general decline in total employment in Burke County over the five-year period was largely due to variations in Construction sector employment (See Figure 11).*

Figure 7: Year-Over-Year Change in Total Employment – March 2019 to March 2024[16]



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 Burke County by industry supersector.[17]

Figure 8 provides an indication of the distribution of private sector employment across industry supersectors in Burke County in 2023. As these data indicate, the county's largest industry sectors that year were Trade, Transportation and Utilities (3,198 jobs), followed by Construction (1,279 jobs), and Education and Health Services (725 jobs).

Figure 9 provides a similar ranking for average private sector weekly wages by industry supersector in Burke County in 2023. As these data show, the highest paying industry sectors that year were Construction ($2,817 per week), Professional and Business Services ($2,677 per week), and Manufacturing ($1,268 per week). To provide a point of reference, the average private sector weekly wage across all industry sectors in Burke County that year was $1,869 per week.

[16] Data Source: U.S. Bureau of Labor Statistics. *The trend of negative year-over-year change in employment in Burke County over the five-year period was largely due to variations in Construction sector employment (See Figure 11).*

[17] 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 Burke County – 2023[18]

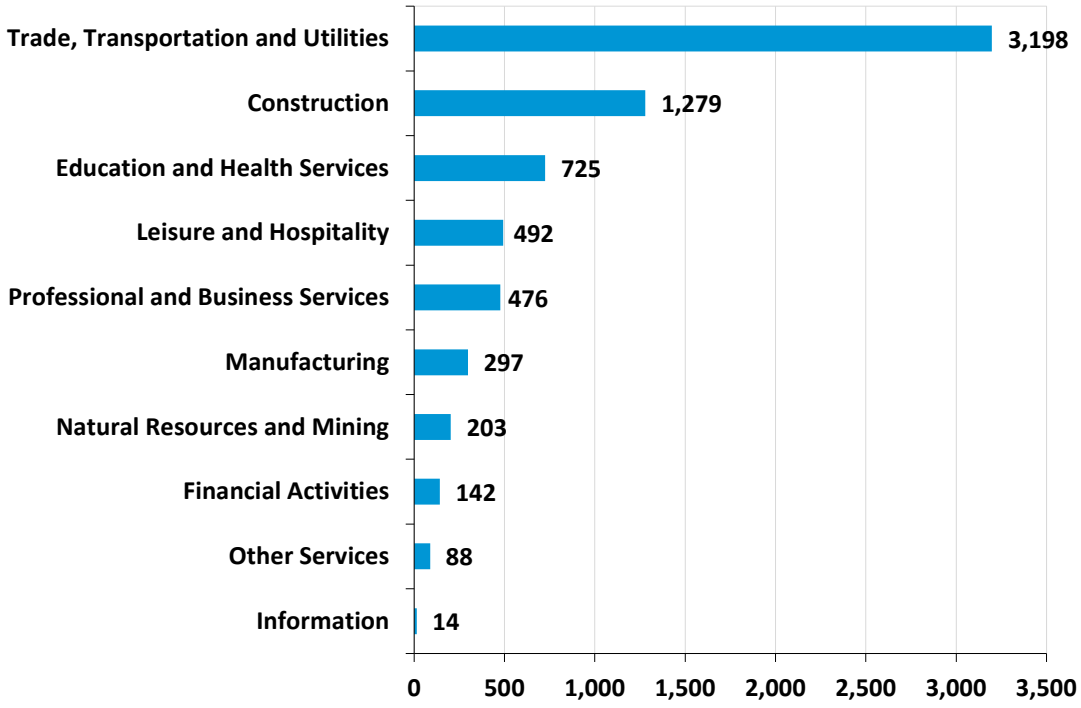
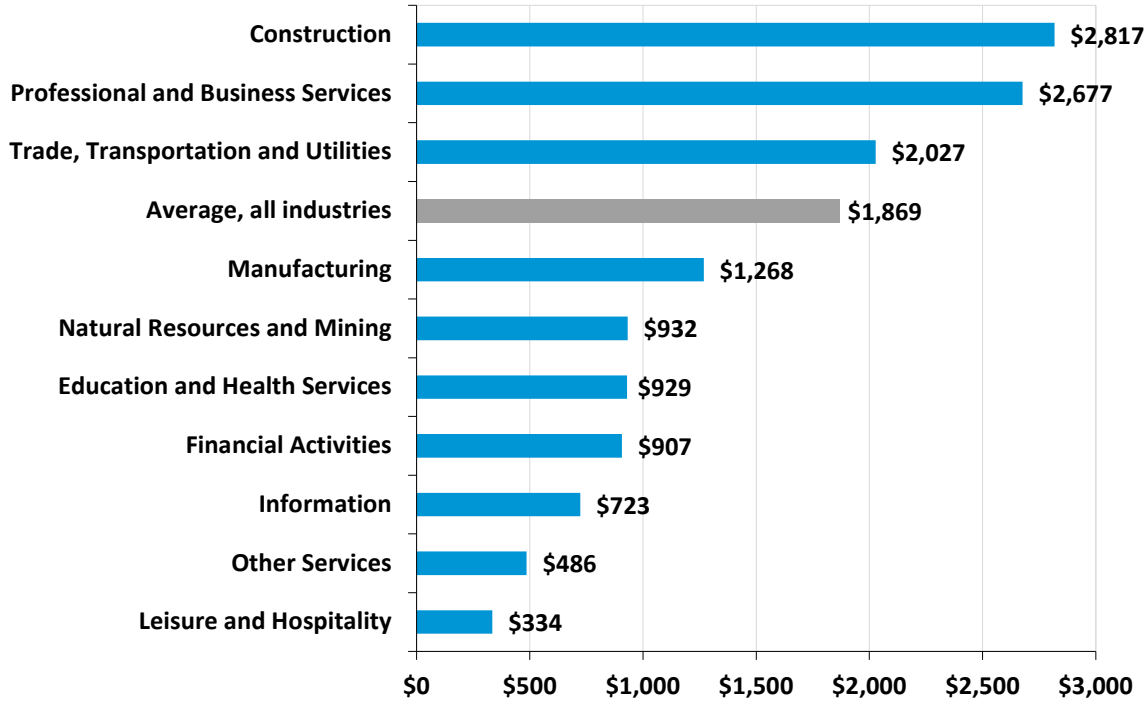


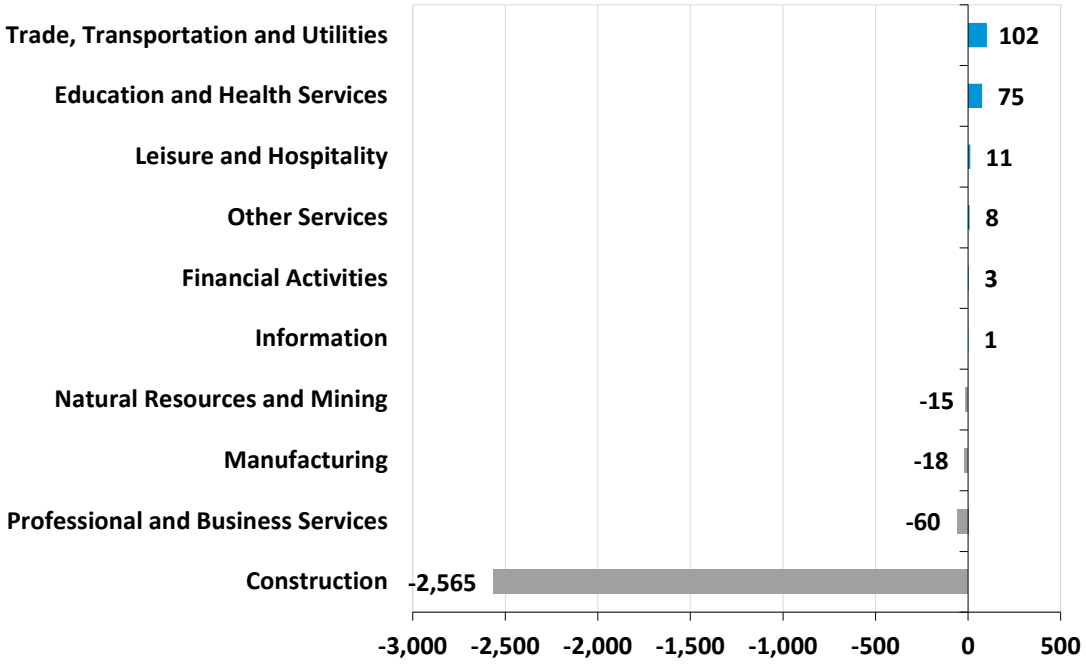
Figure 9: Average Private Weekly Wages by Industry Supersector in Burke County – 2023[19]



[18] Data Source: U.S. Bureau of Labor Statistics.
[19] 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 Burke County by industry supersector. Over this period, the largest employment gains occurred in the Trade, Transportation, and Utilities (up 102 jobs), Education and Health Services (up 75 jobs), and Leisure and Hospitality (up 11 jobs) sectors. The largest employment losses occurred in the Construction (down 2,565 jobs), Professional Business and Services (down 60 jobs), and Manufacturing (down 18 jobs) sectors.

Figure 10: Change in Private Employment by Industry Supersector in Burke County from 2022 to 2023[20]

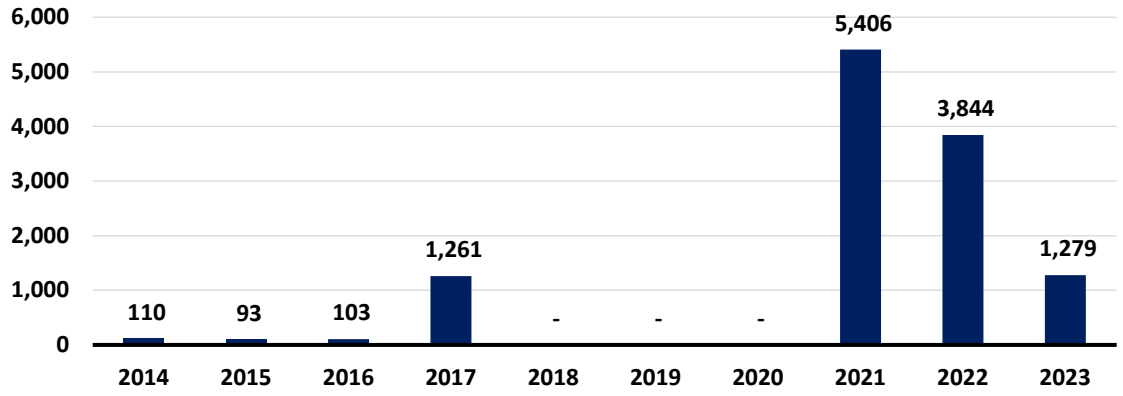


Construction Employment

Figure 11 shows total private employment in the Construction sector from 2014 to 2023 in Burke County. As shown in Figure 11, total Construction sector private employment in the county significantly fluctuated over the last ten years. Construction employment stood at around 100 employees through 2016, then increased to 1,261 in 2017. This indicates that the sector can quickly expand to accommodate new construction projects in the county. For example, construction of nuclear reactor units 3 and 4 of the Plant Vogtle project in the county was completed in 2023 and 2024 respectively. This is reflected in the county's Construction sector which experienced peak employment in 2021 at 5,406 and has since declined to 1,279 as of 2023.[21]

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

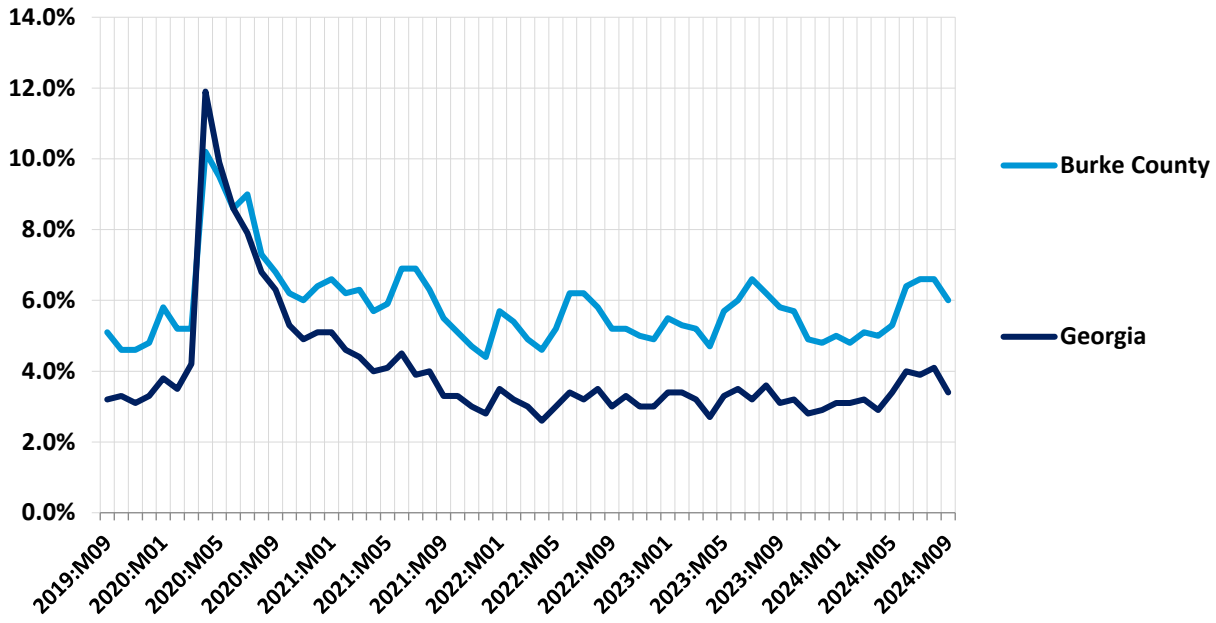
Figure 11: Total Private Construction Sector Employment in Burke County – 2014 to 2023[22]



Unemployment

Figure 12 illustrates the trend in Burke County's unemployment rate over the five-year period from September 2019 through September 2024 and benchmarks those data against the statewide trend for Georgia. As these data show, unemployment rates in Burke County tracked above the statewide trend throughout 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 6.0 percent in Burke County compared to 3.4 percent in Georgia as a whole.

Figure 12: Unemployment Rate – September 2019 through September 2024[23]



[22] Data Source: U.S. Bureau of Labor Statistics. *Construction sector private employment in years 2018 through 2020 has been suppressed due to data confidentiality.*
[23] Data Source: U.S. Bureau of Labor Statistics.

Economic Impact

This section quantifies the economic and fiscal contribution that the proposed Red Branch Solar project would make to Burke County.

Method

To empirically evaluate the likely local economic impact attributable to the proposed Red Branch Solar project, the analysis employs a regional economic impact model called IMPLAN.[24] The IMPLAN model is one of the most commonly used economic impact simulation models in the U.S., and it is used by many 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 Red Branch Solar project 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 Red Branch Solar project). 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).

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

Construction Phase

This portion of the section assesses the economic and fiscal impact that the one-time pulse of activity associated with construction of the proposed Red Branch Solar project would have on Burke County.

Economic Impact Assumptions

The analysis is based on the following assumptions:

- Total capital investment in Red Branch Solar is estimated to be approximately $311.8 million.[25]
- Of that total:
    - Architecture, engineering, site preparation, and other construction and development costs are estimated to be approximately $172.7 million.[26]
    - Capital equipment costs are estimated to be approximately $139.1 million.[27] To be conservative, it is assumed that no capital equipment would be purchased from vendors in Burke County.
- For ease of explanation, all construction expenditures are assumed to take place during a 12-month period.

Economic Impact

Applying these inputs in the IMPLAN model results in the following estimates of one-time local economic impact. As shown in Table 1, construction of the proposed Red Branch Solar project would directly provide a one-time pulse of activity supporting approximately: 1) 102 job years, 2) $5.4 million in wages and benefits, and 3) $38.1 million in economic output to Burke County (in 2024 dollars).

Taking into account the economic ripple effects that direct investment would generate, the total estimated one-time impact on the Burke County would support approximately: 1) 183 job years, 2) $8.6 million in wages and benefits, 3) $49.0 million in economic output, and 4) $1.6 million in state and local tax revenue. (in 2024 dollars).

[25] Data Source: AES. Subject to change based on final design and vendor contracts.
[26] Data Source: AES. Subject to change based on final design and vendor contracts.
[27] Data Source: AES. Subject to change based on final design and vendor contracts.

Table 1: Estimated One-Time Economic and Fiscal Impact on Burke County from Construction of the Red Branch Solar Project (2024 Dollars) [28,29]

Economic Impact	Employment – Job Years	Wages and Benefits	Output
1st Round Direct Economic Activity	102	$5,374,900	$38,132,000
2nd Round Indirect and Induced Economic Activity	81	$3,176,500	$10,916,300
Total Economic Activity	**183**	**$8,551,400**	**$49,048,300**
Fiscal Impact			
State and Local Tax Revenue			**$1,565,100**

**Totals may not sum due to rounding.*

Ongoing Operations Phase

This portion of the section assesses the annual economic impact that the proposed Red Branch Solar project would have on Burke County during its anticipated 35-year operational phase.

Economic Impact Assumptions

The analysis is based on the following assumptions:

- Red Branch Solar would employ approximately 3 full-time employees and would source locally available services and materials for additional maintenance of the facility.[30]
- Red Branch Solar would make confidential lease payments to local landowners.[31]

Economic Impact

Applying these assumptions in the IMPLAN model results in the following estimates of annual economic impact. As shown in Table 2, annual operation of the proposed Red Branch Solar project would directly support approximately: 1) 3 jobs, 2) $0.3 million in wages and benefits, and 3) $1.4 million in economic output to Burke County (in 2024 dollars).

Taking into account the economic ripple effects that direct impact would generate, the total estimated annually supported impact on the Burke County would be approximately: 1) 8 jobs, 2) $0.5 million in wages and benefits, and 3) $2.0 million in economic output (in 2024 dollars).

[28] It is important to note that construction sector jobs are not necessarily new jobs, but the investments made can also support a job during the construction of the project. Despite the relatively large size of the county's construction sector, it is not possible to know with certainty what proportion of these jobs would go to county construction contractors or be filled by county residents.
[29] 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.
[30] Data Source: AES. Subject to change based on final design and vendor contracts.
[31] Data Source: AES.

Table 2: Estimated Annual Economic Impact on Burke County from the Ongoing Operation of the Red Branch Solar Project (2024 Dollars)

Economic Impact	Employment	Wages and Benefits	Output
1st Round Direct Economic Activity	3	$348,800	$1,430,700
2nd Round Indirect and Induced Economic Activity	4	$196,200	$594,800
Total Economic Activity	**8**	**$545,000**	**$2,025,500**

**Totals may not sum due to rounding.*

Fiscal Impact

This section quantifies the direct fiscal contribution that the proposed Red Branch Solar project would make to Burke County. It should be noted at the outset, however, that the analysis that follows likely understates the actual fiscal impact that Red Branch Solar would have on Burke County and the Burke County School District as it only accounts for the direct fiscal impact that Red Branch Solar would have on the county. 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 Red Branch Solar.

The analysis on the following pages considers the additional revenue that the Red Branch Solar project would generate for Burke County and the Burke County School District from the property tax revenue over a 35-year period generated from the increased property assessments associated with reassessing the site as solar use property as well as the additional revenue Red Branch Solar would generate from taxes levied on the personal property.

Fiscal Impact Assumptions

The analysis is based on the following assumptions:

- Red Branch Solar would involve a total capital investment of approximately $258.7 million in taxable personal property.[32]
- Red Branch Solar would be privately owned.
- Red Branch Solar would be situated on approximately 1,120 actively used, fenced-in acres.[33]
- The affected acreage would be removed from the conservation use program and the actively used fenced-in acreage would be reappraised at approximately $3,300 per acre.[34]
- Tax rates remain constant throughout the analysis.

[32] Data Source: AES.
[33] Data Source: AES.
[34] Data Source: Burke County property records. Derived from the value of existing solar facilities in the county. Please note that actual future assessment values may vary.

- Red Branch Solar's operational life expectancy would be approximately 35 years.[35]

Reassessment of Property

Table 3 details the increased tax revenue associated with reappraising the 1,120-acre solar site. As the data in Table 3 indicate, the total local real property tax revenue from the project site is estimated to be approximately $28,800 per year, for a cumulative total of approximately $1.0 million over the project's anticipated 35-year operational life, including the one-time penalty of approximately $1,000 associated with removing the affected acreage from the conservation use program. This consists of approximately $0.2 million in county M&O tax revenue, approximately $0.6 million in school district M&O tax revenue, and approximately $0.1 million in county fire district tax revenue (in 2024 dollars).

Table 3: Estimated Local Real Property Tax Revenue Generated by the Proposed Red Branch Solar Project over 35 Years (2024 Dollars)

	County M&O	School M&O	Fire District	Total
Estimated Increased Assessed Value of Property				$1,478,400
Millage Rate (per $1,000)[36]	4.5	12.5	2.5	19.5
Annual Real Property Tax	$6,700	$18,500	$3,700	$28,800
Cumulative Tax Revenue over 35 Years	**$232,800**	**$646,800**	**$129,400**	**$1,009,000**
One-time Penalty[37]	$230	$640	$130	$1,000
Total Cumulative Tax Revenue over 35 Years	**$233,100**	**$647,400**	**$129,500**	**$1,010,000**

**Totals may not sum due to rounding.*

Taxation of Capital Investment

Table 4 details the personal property tax revenue that the proposed Red Branch Solar project would generate for Burke County and the Burke County School District over a 35-year period from taxes levied on capital investment in personal property. This estimate is calculated as: 1) the taxable portion of capital investments, times 2) the applicable composite factor according to Rules of the Georgia Department of Revenue, times 3) the applicable property millage rate.

As the data in Table 4 indicate, the total local personal property tax revenue from the investment is estimated to be approximately $1.9 million in year 1 of the project, then decreasing to approximately $0.4 million in year 17 and thereafter as the property is further depreciated, for a cumulative total of

[35] Data Source: AES.
[36] Data Source: Georgia Department of Revenue 2023 County Ad Valorem Tax Digest Millage Rates. Assumes rates will remain constant throughout analysis.
[37] The estimated one-time penalty associated with removing the land from the preservation program for solar use is computed as the difference between the current taxable value tax and the assessed value tax for the affected acreage for one complete tax year.

approximately $27.1 million over 35 years. This consists of approximately $6.2 million in county M&O tax revenue, approximately $17.4 million in school district M&O tax revenue, and approximately $3.5 million in county fire district tax revenue over 35 years (in 2024 dollars).

Table 4: Estimated Local Tax Revenue Generated by the Proposed Red Branch Solar Investment in Personal Property Over 35 Years (in 2024 Dollars)

Year	Assessed Taxable Value[38]	County M&O	School District M&O	County Fire District	Total Local Tax Revenue
Total Capital Investment in Personal Property[39]					**$258,659,400**
Millage Rate (per $1,000)[40]		**4.5**	**12.5**	**2.5**	**19.5**
1	$98,290,600	$442,300	$1,228,600	$245,700	$1,916,700
2	$94,152,000	$423,700	$1,176,900	$235,400	$1,836,000
3	$90,013,500	$405,100	$1,125,200	$225,000	$1,755,300
4	$84,840,300	$381,800	$1,060,500	$212,100	$1,654,400
5	$81,736,400	$367,800	$1,021,700	$204,300	$1,593,900
6	$77,597,800	$349,200	$970,000	$194,000	$1,513,200
7	$72,424,600	$325,900	$905,300	$181,100	$1,412,300
8	$65,182,200	$293,300	$814,800	$163,000	$1,271,100
9	$58,974,300	$265,400	$737,200	$147,400	$1,150,000
10	$53,801,200	$242,100	$672,500	$134,500	$1,049,100
11	$48,628,000	$218,800	$607,800	$121,600	$948,200
12	$42,420,100	$190,900	$530,300	$106,100	$827,200
13	$36,212,300	$163,000	$452,700	$90,500	$706,100
14	$32,073,800	$144,300	$400,900	$80,200	$625,400
15	$30,004,500	$135,000	$375,100	$75,000	$585,100
16	$28,969,900	$130,400	$362,100	$72,400	$564,900
17	$20,692,800	$93,100	$258,700	$51,700	$403,500
18	$20,692,800	$93,100	$258,700	$51,700	$403,500
19	$20,692,800	$93,100	$258,700	$51,700	$403,500
20	$20,692,800	$93,100	$258,700	$51,700	$403,500
21	$20,692,800	$93,100	$258,700	$51,700	$403,500
22	$20,692,800	$93,100	$258,700	$51,700	$403,500
23	$20,692,800	$93,100	$258,700	$51,700	$403,500
24	$20,692,800	$93,100	$258,700	$51,700	$403,500
25	$20,692,800	$93,100	$258,700	$51,700	$403,500
26	$20,692,800	$93,100	$258,700	$51,700	$403,500
27	$20,692,800	$93,100	$258,700	$51,700	$403,500

[38] Calculated as capital investment in personal property, times 40 percent assessment, times the applicable composite factors according to Rules of the Georgia Department of Revenue.
[39] Data Source: AES. Subject to change based on final design and vendor contracts.
[40] Data Source: Georgia Department of Revenue 2023 County Ad Valorem Tax Digest Millage Rates. Assumes rates will remain constant throughout analysis.

Year	Assessed Taxable Value[38]	County M&O	School District M&O	County Fire District	Total Local Tax Revenue
28	$20,692,800	$93,100	$258,700	$51,700	$403,500
29	$20,692,800	$93,100	$258,700	$51,700	$403,500
30	$20,692,800	$93,100	$258,700	$51,700	$403,500
31	$20,692,800	$93,100	$258,700	$51,700	$403,500
32	$20,692,800	$93,100	$258,700	$51,700	$403,500
33	$20,692,800	$93,100	$258,700	$51,700	$403,500
34	$20,692,800	$93,100	$258,700	$51,700	$403,500
35	$20,692,800	$93,100	$258,700	$51,700	$403,500
Cumulative Total		**$6,248,200**	**$17,356,000**	**$3,471,200**	**$27,075,400**

**Totals may not sum due to rounding.*

Total Fiscal Impact

Table 5 combines the results from the calculations depicted in Tables 3 and 4 to provide an estimate of the cumulative fiscal contribution that the proposed Red Branch Solar project would make to Burke County and the Burke County School District over its 35-year anticipated operational life. As these data indicate, that cumulative total is approximately $28.1 million. This consists of approximately $6.5 million in county M&O tax revenue, approximately $18.0 million in school district M&O revenue, and approximately $3.6 million in county fire district tax revenue (in 2024 dollars).

Table 5: Estimated Cumulative Tax Revenue from the Proposed Red Branch Solar Project over 35 Years (2024 Dollars)

	County M&O	School District M&O	County Fire District	Total Local
Real Property Tax Revenue	$233,100	$647,400	$129,500	$1,010,000
Personal Property Tax Revenue	$6,248,200	$17,356,000	$3,471,200	$27,075,400
Cumulative Revenue over 35 Years	**$6,481,300**	**$18,003,500**	**$3,600,700**	**$28,085,400**

**Totals may not sum due to rounding.*

Current Use

This section provides a benchmark for the previous estimates of the economic and fiscal contribution that the proposed Red Branch Solar project would make to Burke County by estimating the economic and fiscal contribution that the site makes to the county in its current use.

Economic Impact Assumptions

The analysis is based on the following assumptions:

- Red Branch Solar would be situated on approximately 1,120 acres of predominantly timberland with portions used for cattle grazing land and agricultural land.[41]

Economic Impact

Applying these assumptions in the IMPLAN model results in the following estimates of annual economic impact. As shown in Table 6, in its current use, the proposed Red Branch Solar project site directly supports approximately: 1) 2 jobs, 2) $0.1 million in wages and benefits, and 3) $0.4 million in economic output to Burke County.

Taking into account the economic ripple effects that direct impact generates, on average, the total annually supported impact on Burke County is approximately: 1) 3 jobs, 2) $0.2 million in wages and benefits, and 3) $0.5 million in economic output.

Table 6: Total Estimated Annual Economic Impact of the Red Branch Solar Project Site on Burke County – Current Use[42]

Economic Impact	Employment	Wages and Benefits	Output
1st Round Direct Economic Activity	2	$135,600	$403,100
2nd Round Indirect and Induced Economic Activity	1	$47,000	$139,700
Total Economic Activity	**3**	**$182,600**	**$542,800**

**Totals may not sum due to rounding.*

Fiscal Impact Assumptions

The analysis is based on the following assumptions:

- The current taxable value of the affected acreage is approximately $0.6 million.[43]

[41] Data Source: AES.
[42] Calculations based data from the U.S. Department of Agriculture and IMPLAN Group, LLC for Georgia and Burke County.
[43] Derived from Burke County property records.

Fiscal Impact

Table 7 details the estimated tax revenue that the proposed Red Branch Solar project site generates for Burke County and the Burke County School District in its current use. As the data in Table 7 indicate, the current local real property tax revenue from the project site is estimated to be approximately $11,300 per year, for a cumulative total of approximately $0.4 million over 35 years. This consists of approximately $0.1 million in county M&O tax revenue, approximately $0.3 million in school district M&O tax revenue, and approximately $50,900 in county fire district tax revenue over 35 years (in 2024 dollars).

Table 7: Estimated Local Real Property Tax Revenue Generated by the Proposed Red Branch Solar Project over 35 Years– Current Use (in 2024 Dollars)

	County M&O	School M&O	Fire District	Total
Estimated Assessed Value of Property – Current Use				$581,700
Millage Rate (per $1,000)[44]	4.5	12.5	2.5	19.5
Annual Real Property Tax – Current Use	$2,600	$7,300	$1,500	$11,300
Cumulative Tax Revenue over 35 Years	**$91,600**	**$254,500**	**$50,900**	**$397,000**

**Totals may not sum due to rounding.*

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.

[44] Data Source: Georgia Department of Revenue 2023 County Ad Valorem Tax Digest Millage Rates. Assumes rates will remain constant throughout analysis.