HIGH BRIDGE SOLAR, LLC

ECONOMIC & FISCAL CONTRIBUTION TO THE TOWN OF FARMVILLE, VIRGINIA

Prepared for

High Bridge Solar, LLC

MANGUM economics

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About Mangum Economics, LLC

Mangum Economics is a Glen Allen, Virginia based firm that was founded in 2003. 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:

- **Information Technology:** Working with some of the largest names in the industry, to date the Mangum Team has produced analyses of the economic and fiscal impact of data centers at the state and local level across the country.
- **Energy:** The Mangum Team has produced analyses of the economic and fiscal impact of over 23 GW of proposed solar, wind, battery energy storage, and hydro projects spanning twenty states. Among those projects was Dominion Energy'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 Projects:** The Mangum Team has performed hundreds of analyses of proposed economic development projects. Most recently, we were called upon by Henrico County to provide 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 industries that were likely recruitment targets because of the high-speed MAREA and BRUSA sub-sea cable landings in Virginia Beach.
- **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 High Bridge Solar project would make to the Town of Farmville and to Prince Edward County, Virginia. The primary findings from that assessment are as follows:

1) **High Bridge Solar is a proposed 12-megawatt (MW) alternating current (AC) solar photovoltaic power generating facility. The project would be located off of Cedar Avenue in the town of Farmville in Prince Edward County, Virginia. The total acreage for the project encompasses approximately 125 acres of leased land. The actively used, fenced-in solar site would be approximately 58.8 acres.**

2) **The proposed High Bridge Solar project would make an economic contribution to the town of Farmville and to Prince Edward County:**

   - The proposed High Bridge Solar project would employ approximately 26 full-time equivalent construction workers.[1]
   - The proposed High Bridge Solar project would provide an estimated one-time pulse of economic activity to the town of Farmville and Prince Edward County during its construction phase supporting approximately:
     - 19 direct, indirect, and induced job years.
     - $0.9 million in associated wages and benefits.
     - $3.6 million in economic output.
   - The proposed High Bridge Solar project would provide an estimated annual economic impact to the town of Farmville and Prince Edward County during its ongoing operational phase supporting approximately:
     - 1 direct, indirect, and induced job.
     - $49,700 in associated wages and benefits.
     - $0.2 million in economic output.

3) **The proposed High Bridge Solar would also make a fiscal contribution to the town of Farmville. The proposed project would generate approximately:**

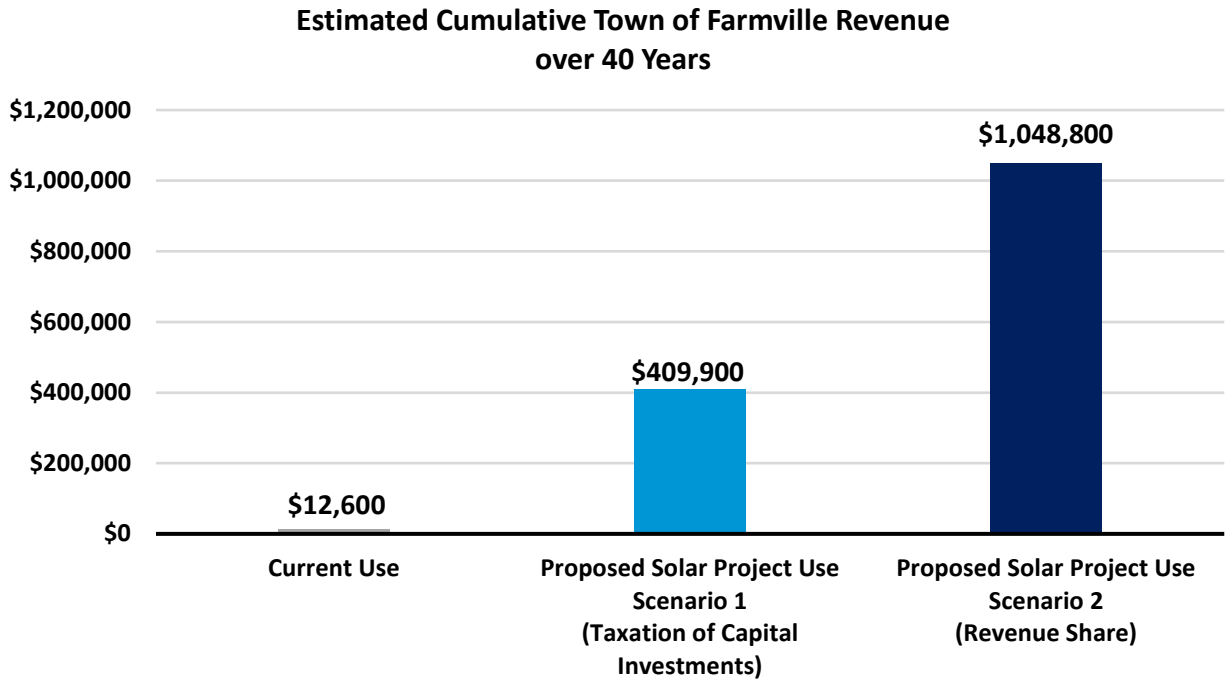
   - $0.2 million in state, county, and town tax revenue from the one-time pulse of economic activity associated with the project's construction.
   - $0.4 million in cumulative town revenue over the facility's anticipated 40-year operational life assuming revenues are generated from the reassessment of the real property and from taxation of the capital investments in machinery and tools (Scenario 1); or

[1] Please note that for ease of explication the analysis is modeled based on full-time equivalent jobs over a 12-month period. Actual construction is anticipated to take approximately five months with approximately 63 construction workers, which is equivalent to 26 full-time workers.

- $1.0 million in cumulative town revenue over the facility's anticipated 40-year operational life assuming revenues are generated from the reassessment of the real property and payments associated with a locally adopted revenue share ordinance. The payments would be based on the project's generation capacity and include a 10 percent escalator every five years (Scenario 2).

4) **The proposed High Bridge Solar would have a significantly greater fiscal impact on the town of Farmville than the property generates in its current use:**

    - The proposed High Bridge Solar would generate approximately between $0.4 million in cumulative town revenue under Scenario 1 and approximately $1.0 million in cumulative town revenue under Scenario 2 over the facility's anticipated 40-year operational life, as compared to approximately $12,600 in cumulative town revenue in the property's current use – this constitutes a 33- to 83-fold increase respectively over current revenues.



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 High Bridge Solar project would make to the town of Farmville and to Prince Edward County, Virginia. This report was commissioned by High Bridge Solar, LLC and produced by Mangum Economics.

The Project

High Bridge Solar is a proposed 12-megawatt (MW) alternating current (AC) solar photovoltaic power generating facility. The project would be located off of Cedar Avenue in the town of Farmville in Prince Edward County, Virginia. The total acreage for the project encompasses approximately 125 acres of leased land. The actively used, fenced-in solar site would be approximately 58.8 acres.

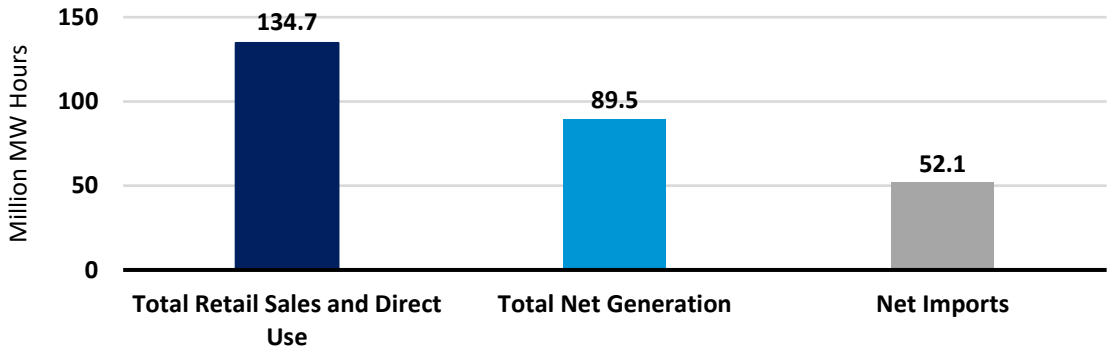
Electricity Production in Virginia

This section provides a backdrop for the proposed High Bridge Solar project by profiling Virginia's electricity production sector and the role that solar energy could play in that sector.

Overall Market

As shown in Figure 1, in 2022 electricity sales and direct use in Virginia totaled 134.7 million megawatt hours. However, only 66 percent of that demand was met by in-state utilities, independent producers, and other sources. As a result, Virginia 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 Virginia.

Figure 1: Demand and Supply of Electricity in Virginia in 2022 (in millions of megawatt-hours)[2]



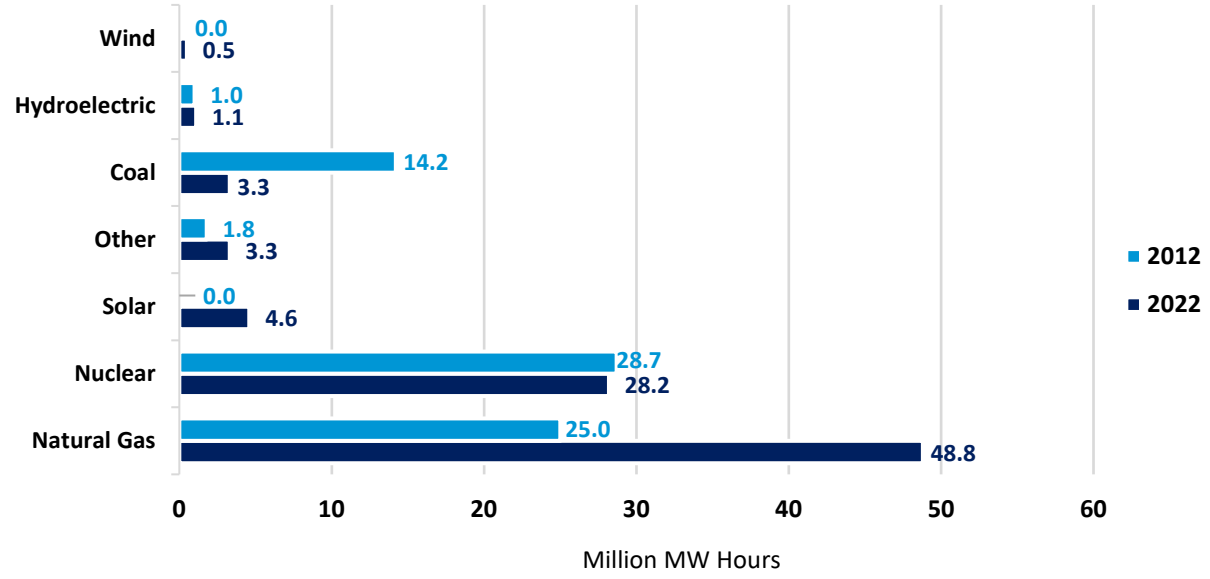
[2] Data Source: U.S. Energy Information Administration. In this chart, "Net Imports" also takes into account losses during transmission. As a result, it does not directly equal the residual of "Total Net Generation" minus "Total Retail Sales and Direct Use."

Sources of Production

Between 2012 and 2022, the total amount of electricity produced in Virginia increased from 70.7 to 89.5 million megawatt hours, while retail and direct consumption of electricity increased from 109.9 to 134.7 million megawatt hours. Consequently, imports of electricity increased by 5.3 million megawatt hours (or 11.3 percent) during this time.[3] Figure 2 provides a comparison of the energy sources that were used to produce electricity in Virginia in each of those years. As these data show, the most significant change between 2012 and 2022 was a decrease in the use of coal and an increase in the use of natural gas. Where coal was the state's third largest source of electricity in 2012, accounting for 14.2 million megawatt hours (or 20.0 percent) of production, by 2022 production had fallen by 10.8 million megawatt hours, making coal a fourth-place source of electricity with only 3.7 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 25.0 million megawatt hours (or 35.4 percent) of Virginia's electricity production in 2012, by 2022 that proportion had increased to 48.8 million megawatt hours (or 54.5 percent of production), making natural gas the state's largest source of electricity. In addition, solar, which entered the Virginia electricity production market in 2016, increased its share to 4.6 million megawatt hours in 2022.

Figure 2: Electricity Generation in Virginia by Energy Source in 2012 and 2022 (in millions of megawatt-hours)[4]

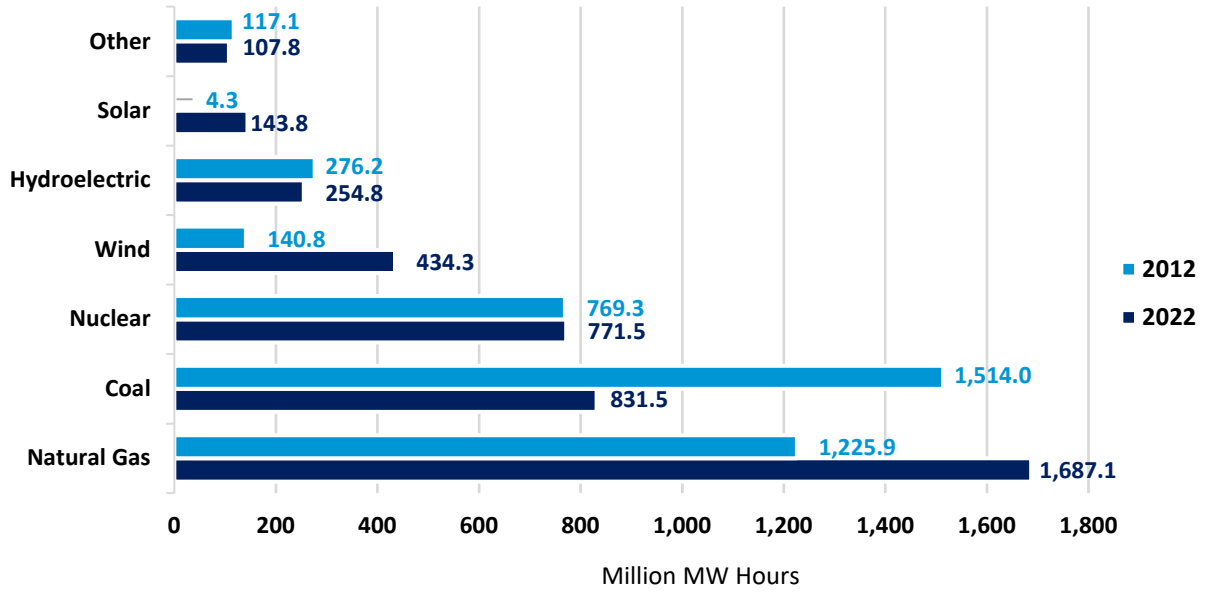


[3] Imports also takes into account losses during transmission. As a result, totals do not equal sum of components.

[4] 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 Virginia, the trend toward lower-emissions energy sources is the same. Nationally, between 2012 and 2022 the amount of electricity produced using coal declined by 682.5 million megawatt hours from 37.4 to 19.7 percent of production, while in contrast the amount of electricity produced using natural gas increased by 461.2 million megawatt hours from 30.3 to 39.9 percent of production. Nationwide, as in Virginia, the reliance on renewable energy sources such as solar increased during this time but at a slower pace than in Virginia. Between 2012 and 2022, the amount of electricity produced using solar increased by 139.5 million megawatt hours to 3.4 percent of total electricity production in the nation compared to 5.2 percent of total electricity production in Virginia.

Figure 3: Electricity Generation in the United States by Energy Source in 2012 and 2022 (in millions of megawatt-hours)[5]

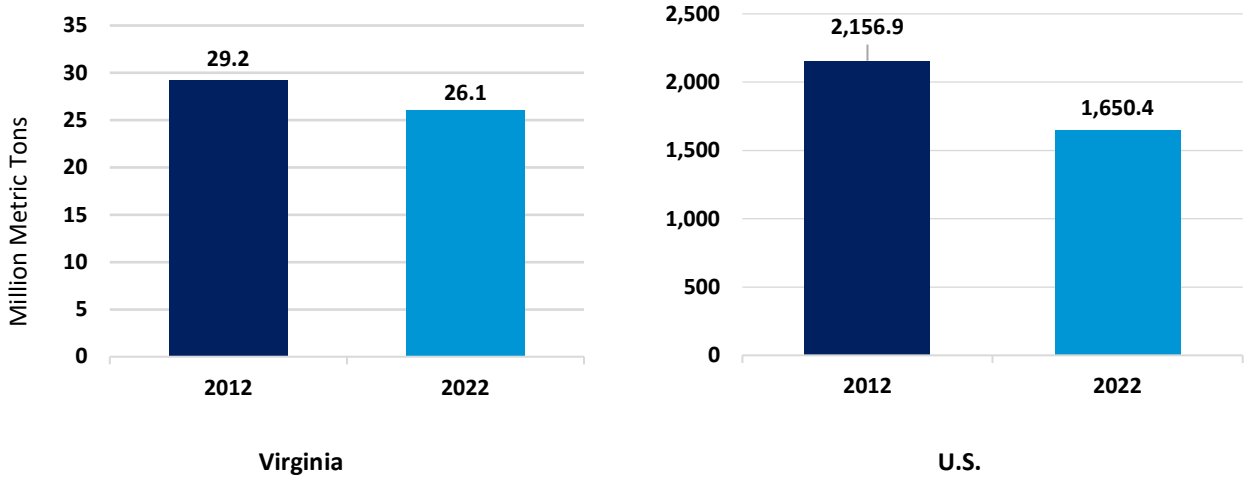


Impact on the Environment

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 2012 and 2022 for both Virginia and the U.S. As these data indicate, between 2012 and 2022, as the share of electricity produced in Virginia by coal fell from 20.0 to 3.7 percent, carbon dioxide emissions from electricity production fell from 29.2 to 26.1 million metric tons. Where at the national level, as the share of electricity produced by coal fell from 37.4 to 19.7 percent, carbon dioxide emissions from electricity production fell from 2,156.9 to 1,650.4 million metric tons.

[5] 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)[6]

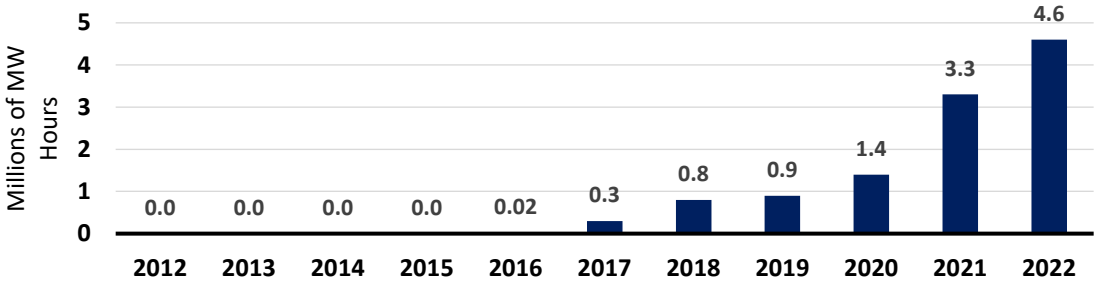


Virginia Solar Industry Trends

As of the second quarter of 2023, Virginia was ranked 10th in the nation for its total installed solar capacity. Over the next five years**,** Virginia is projected to add almost seven thousand megawatts of solar to its portfolio**,** ranking it 9th in the nation for projected growth. Total investment into the solar industry in Virginia as of the second quarter of 2023 amounts to $5.1 billion.[7]

Figure 5 depicts the progression of solar energy generation in Virginia from 2012 to 2022 expressed in millions of megawatt-hours. Solar entered the electricity market in Virginia in 2016 with 0.02 million megawatt hours. Generation has continued to grow throughout the period, reaching its peak, so far, in 2022, with solar generation totaling 4.6 million megawatt-hours. This chart demonstrates Virginia's growing engagement with solar energy, culminating in a noteworthy expansion by the end of the period shown.[8]

Figure 5: Solar Generation in Virginia (in millions of megawatt-hours) – 2012 to 2022[9]



[6] Data Source: U.S. Energy Information Administration.
[7] Data Source: Solar Energy Industries Association.
[8] Data Source: Solar Energy Industries Association.
[9] Data Source: U.S. Energy Information Administration.

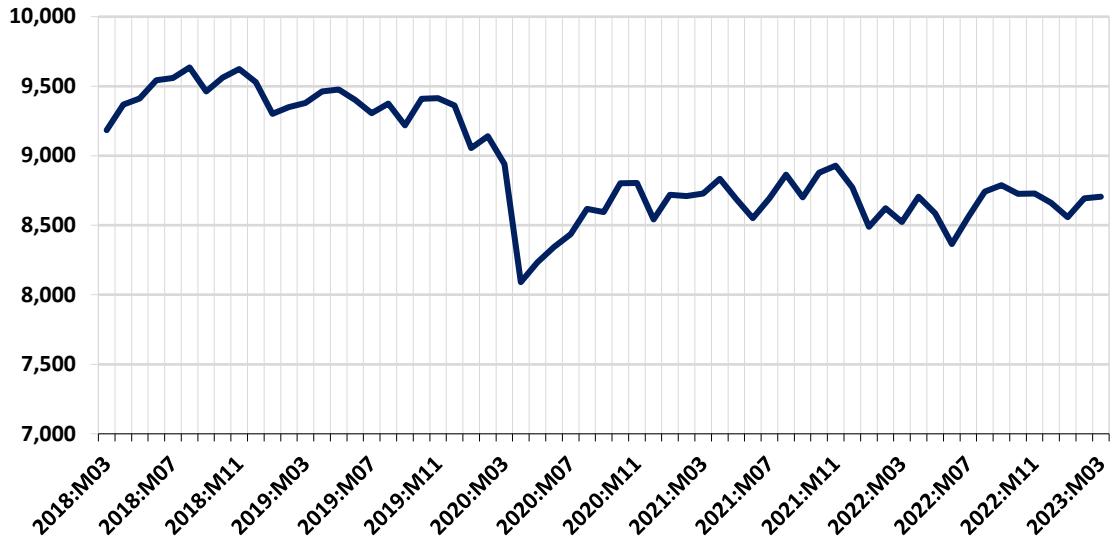
Local Economic Profile

This section provides context for the economic and fiscal impact assessments to follow by profiling the local economy of Prince Edward County.[10]

Total Employment

Figure 6 depicts the trend in total employment in Prince Edward County during the five-year period from March 2018 through March 2023. Aside from seasonal fluctuations, employment in the county was generally stable throughout the period until April 2020, when employment declined significantly in response to a decrease in economic activity associated with the COVID-19 pandemic. Total employment has rebounded but has not reached pre-pandemic levels. As of March 2023, total employment in the county stood at 8,705 jobs, which represents an overall decrease in employment of 5.2 percent (or 480 jobs) over the five-year period. To put this number in perspective, over this same period, total statewide employment in Virginia increased by 3.9 percent.[11]

Figure 6: Total Employment in Prince Edward County – March 2018 to March 2023[12]

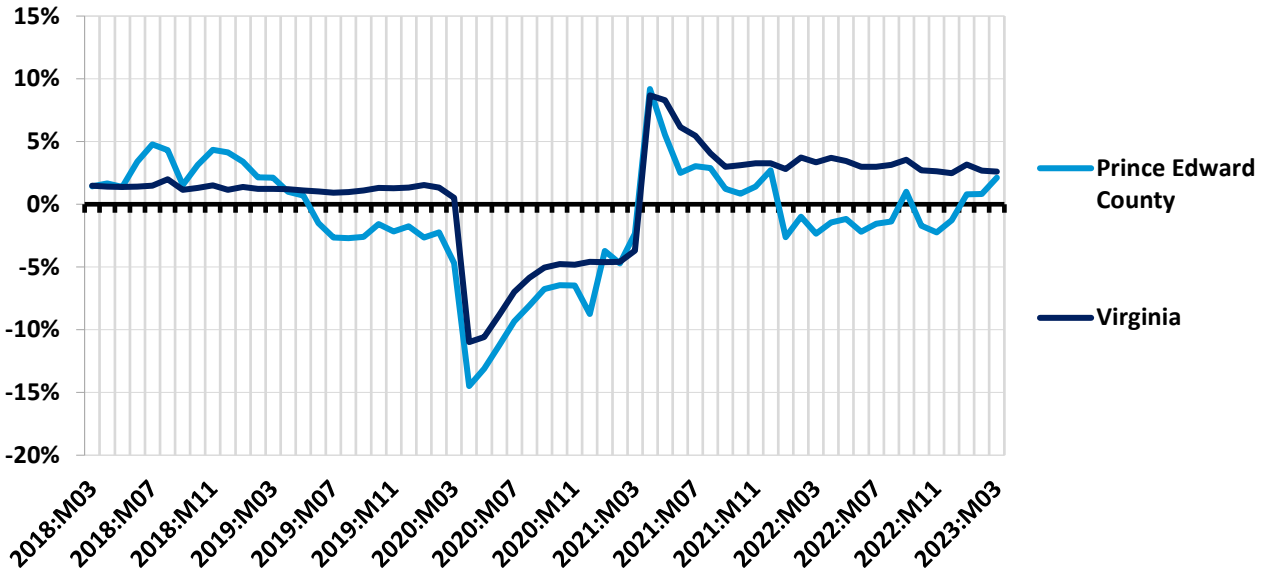


To control for seasonality and provide a point of reference, Figure 7 compares the year-over-year change in total employment in Prince Edward County to that of the state of Virginia over the same five-year period. Any point above the zero line in this graph indicates an increase in employment, while any point below the zero line indicates a decline in employment. As these data show, Prince Edward County underperformed the statewide average for most of the period. As of March 2023, the year-over-year

[10] Because the town of Farmville is not an independent city, its employment and wage data is not reported separately by the U.S. Bureau of Labor Statistics. Instead, they are included in data reported for Prince Edward County.
[11] Data Source: U.S. Bureau of Labor Statistics.
[12] Data Source: U.S. Bureau of Labor Statistics.

change in total employment in Prince Edward County was 2.1 percent as compared to 2.6 percent statewide in Virginia.

Figure 7: Year-Over-Year Change in Total Employment – March 2018 to March 2023[13]



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 Prince Edward County by industry supersector.[14]

Figure 8 provides an indication of the distribution of private sector employment across industry supersectors in Prince Edward County in the first quarter of 2023. As these data indicate, the county's largest industry sectors that quarter were Education and Health Services (2,274 jobs), followed by Trade, Transportation and Utilities (1,603 jobs), and Leisure and Hospitality (1,118 jobs).

Figure 9 provides a similar ranking for average private sector weekly wages by industry supersector in Prince Edward County in the first quarter of 2023. As these data show, the highest paying industry sectors that quarter were Construction ($1,341 per week), Financial Activities ($1,112 per week), and Natural Resources and Mining ($1,037 per week). To provide a point of reference, the average private sector weekly wage across all industry sectors in Prince Edward County that quarter was $848 per week.

[13] Data Source: U.S. Bureau of Labor Statistics.
[14] 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 Prince Edward County – Q1 2023[15]

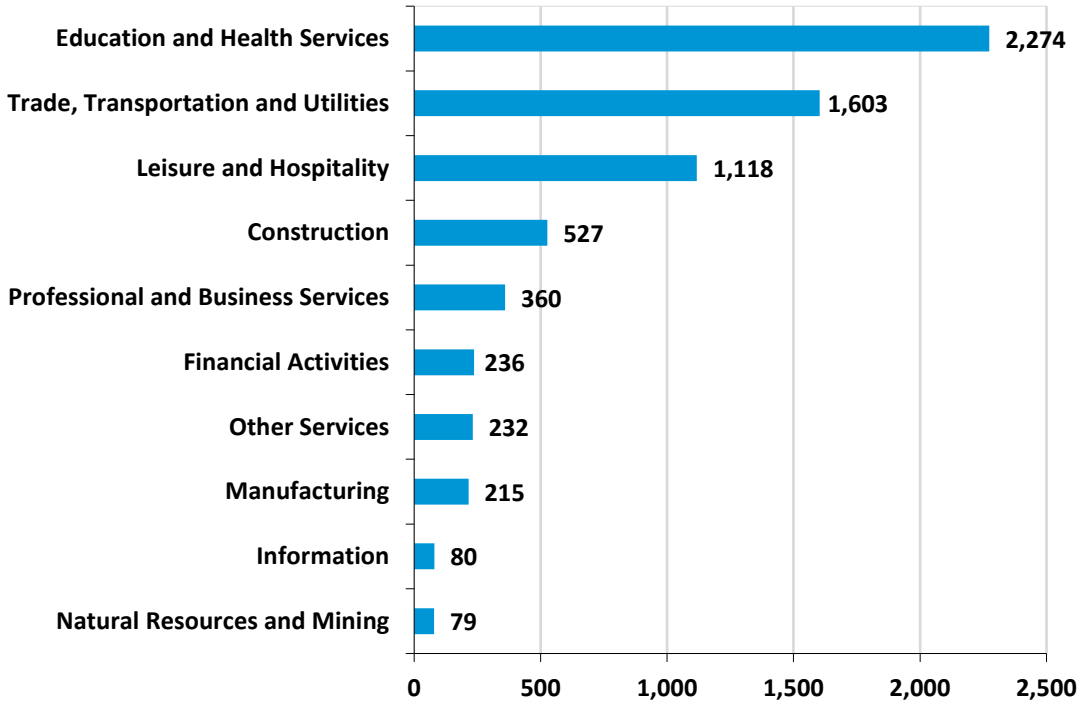
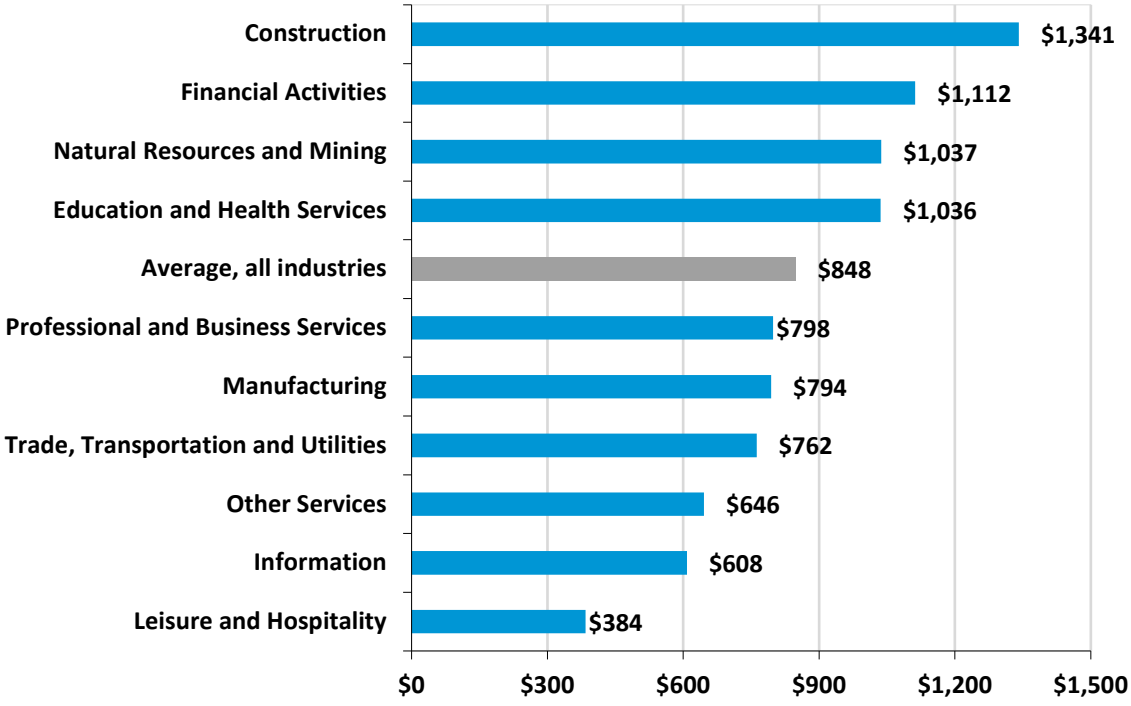


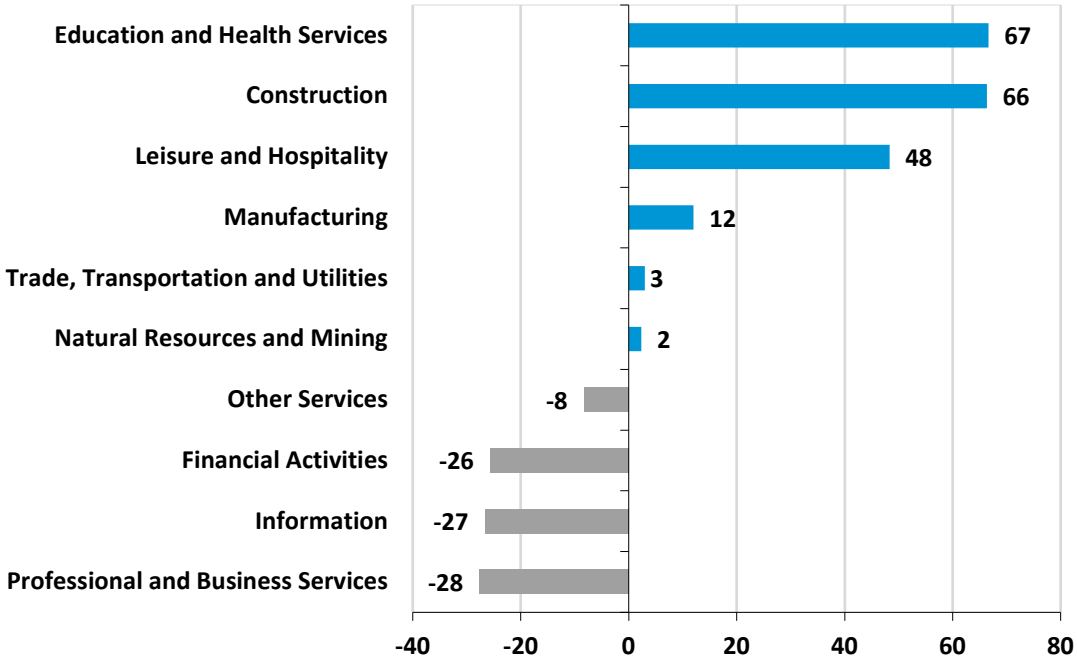
Figure 9: Average Private Weekly Wages by Industry Supersector in Prince Edward County – Q1 2023[16]



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

Figure 10 details the year-over-year change in private sector employment from the first quarter of 2022 to the first quarter of 2023 in Prince Edward County by industry supersector. Over this period, the largest employment gains occurred in the Education and Health Services (up 67 jobs), Construction (up 66 jobs), and Leisure and Hospitality (up 48 jobs) sectors. The largest employment losses occurred in the Professional and Business Services (down 28 jobs), Information (down 27 jobs), and Financial Activities (down 26 jobs) sectors.

Figure 10: Change in Private Employment by Industry Supersector in Prince Edward County from Q1 2022 to Q1 2023[17]

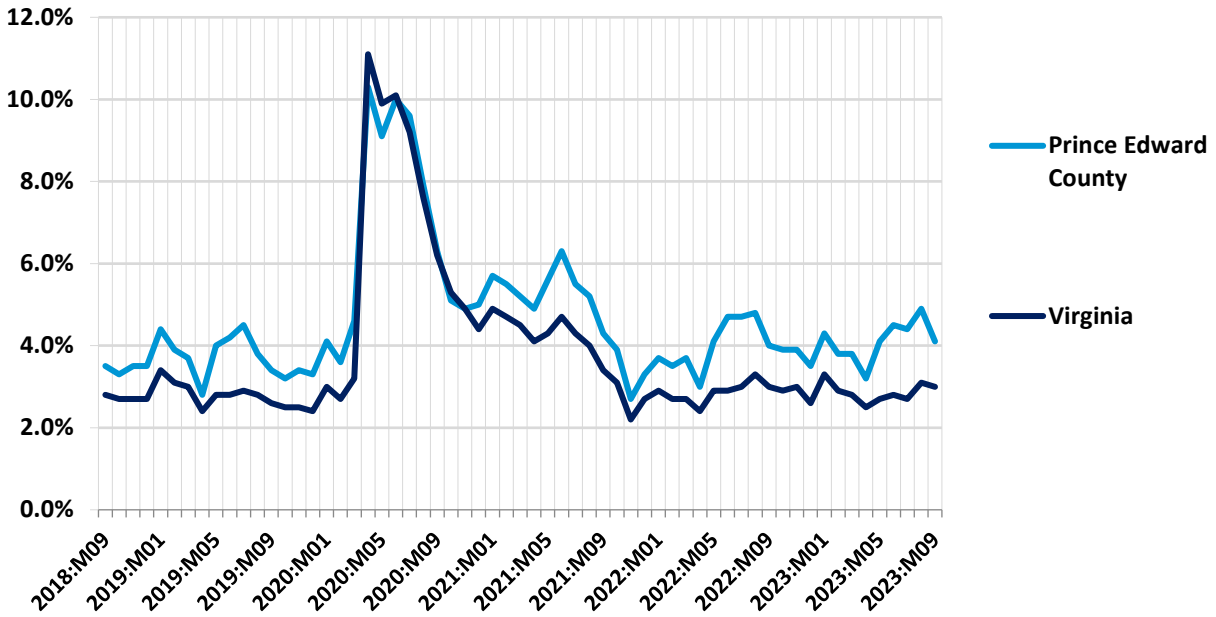


Unemployment

Figure 11 illustrates the trend in Prince Edward County's unemployment rate over the five-year period from September 2018 through September 2023 and benchmarks those data against the statewide trend for Virginia. As these data show, unemployment rates in Prince Edward County tracked closely with the statewide trend throughout the period but at rates above the statewide average. 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 2023, unemployment stood at 4.1 percent in Prince Edward County compared to 3.0 percent in Virginia as a whole.

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

Figure 11: Unemployment Rate – September 2018 to September 2023[18]



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

Economic and Fiscal Impact

This section quantifies the economic and fiscal contribution that the proposed High Bridge Solar project would make to the town of Farmville and to Prince Edward County. 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 High Bridge Solar project, the analysis employs a regional economic impact model called IMPLAN.[19] The IMPLAN model is one of the most commonly used economic impact simulation models in the U.S., and in Virginia is used by UVA's Weldon Cooper Center, the Virginia Department of Planning and Budget, the Virginia Employment Commission, and other 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 High Bridge 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 High Bridge 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).

[19] 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 High Bridge Solar project would have on the town of Farmville and on Prince Edward County.

Economic Impact Assumptions

The analysis is based on the following assumptions:

- Total capital investment associated with the High Bridge Solar is estimated to be approximately $20.2 million.[20]
- Of that total:
    - Architecture, engineering, site preparation, and other construction and development costs are estimated to be approximately $9.8 million.[21]
    - Capital equipment costs are estimated to be approximately $10.4 million.[22] It is anticipated that no capital equipment would be purchased from vendors in Prince Edward County.[23]
- High Bridge Solar would employ approximately 26 full-time equivalent construction workers.[24]
- For ease of explication, all construction expenditures are assumed to take place during a twelve-month period.

Economic Impact

Applying these assumptions in the IMPLAN model results in the following estimates of one-time economic and fiscal impact. As shown in Table 1, construction of the proposed High Bridge Solar would directly provide a one-time pulse supporting approximately: 1) 8 job years, 2) $0.5 million in wages and benefits, and 3) $2.1 million in economic output to Prince Edward County.

Taking into account the economic ripple effects that direct investment would generate, the total estimated one-time impact on Prince Edward County would support approximately: 1) 19 job years, 2) $0.9 million in wages and benefits, 3) $3.6 million in economic output, and 4) $0.2 million in state and local tax revenue.

[20] Data Source: High Bridge Solar, LLC. Investment estimate subject to change based on final design and vendor contracts.
[21] Data Source: High Bridge Solar, LLC.
[22] Data Source: High Bridge Solar, LLC.
[23] Data Source: IMPLAN Group LLC.
[24] Please note that for ease of explication the analysis is modeled based on full-time equivalent jobs over a 12-month period. Actual construction is anticipated to take approximately five months with approximately 63 construction workers, which is equivalent to 26 full-time workers.

Table 1: Estimated One-Time Economic and Fiscal Impact on Prince Edward County from Construction of the High Bridge Solar Project[25,26]

Economic Impact	Employment (Job Years)	Wages and Benefits	Output
1st Round Direct Economic Activity	8	$523,000	$2,104,100
2nd Round Indirect and Induced Economic Activity	11	$408,200	$1,497,400
Total Economic Activity	**19**	**$931,200**	**$3,601,500**
Fiscal Impact			
State and Local Tax Revenue			**$174,200**

**Totals may not sum due to rounding.*

Ongoing Operations Phase

This portion of the section assesses the annual economic and fiscal impact that the proposed High Bridge Solar project would have on the town of Farmville and on Prince Edward County during its anticipated 40-year operational phase.

Economic Impact Assumptions

The analysis is based on the following assumptions:

- High Bridge Solar would spend approximately $0.2 million each year for maintenance and repair, vegetative control, and other operational expenditures.[27]

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 High Bridge Solar would on average directly support approximately: 1) 1 job, 2) $37,800 in wages and benefits, and 3) $0.1 million in economic output to Prince Edward County.

Taking into account the economic ripple effects that direct impact would generate, the total estimated annually supported impact on Prince Edward County would be approximately: 1) 1 job, 2) $49,700 in wages and benefits, and 3) $0.2 million in economic output.

[25] Please 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. Additionally, it is important to note that it is not possible to know with certainty what proportion of jobs would go to county construction contractors or be filled by county residents. 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 where the construction schedule is not exactly one year and to account for the fact that actual on-site employment may vary over the period.

[26] Impacts from per diem spending of non-local construction workers included.

[27] Data Source: High Bridge Solar, LLC.

Table 2: Estimated Annual Economic Impact on Prince Edward County from the Ongoing Operation of the High Bridge Solar Project

Economic Impact	Employment	Wages and Benefits	Output
1st Round Direct Economic Activity	1	$37,800	$140,400
2nd Round Indirect and Induced Economic Activity	0	$11,900	$49,700
Total Economic Activity	**1**	**$49,700**	**$190,100**

Fiscal Impact Assumptions

The analysis is based on the following assumptions:

- Total capitalized investment in taxable machinery and tools in the High Bridge Solar is estimated to be approximately $17.4 million.[28]
- The approximately 58.8 fenced-in acres would be removed from the land use program and reassessed at a solar use assessment value of $10,000 per acre.[29]
- The initial interconnection request for High Bridge Solar was filed in October 2020.[30]
- Tax rates and the depreciation schedule are assumed to remain constant throughout the analysis.
- High Bridge Solar's total generation capacity would be 12 MW AC.[31]
- High Bridge Solar would become operational in 2024 and would be privately owned.[32]
- High Bridge Solar would have an operational life of 40 years.[33]

Fiscal Impact

This portion of the section quantifies the direct fiscal contribution that the proposed High Bridge Solar would make to the town of Farmville. The analysis considers two scenarios. Both scenarios include the additional revenue that High Bridge Solar would generate for the town of Farmville over a 40-year period from the increased property assessments associated with reassessing the site as solar use property. Scenario 1 then describes the additional revenue High Bridge Solar would generate for the town of Farmville from taxes levied on the capital investment in machinery and tools, while Scenario 2 assumes tax revenue generated from capital investment will be replaced with revenue associated with a locally adopted revenue share ordinance and based on the project's total generation capacity.

[28] Data Source: High Bridge Solar, LLC.
[29] Data Source: Actual future assessment value for solar projects in Prince Edward County is currently unknown. The potential future assessment value is based on experience with comparable solar projects in Virginia.
[30] Data Source: High Bridge Solar, LLC.
[31] Data Source: High Bridge Solar, LLC.
[32] Data Source: High Bridge Solar, LLC.
[33] Data Source: High Bridge Solar, LLC.

Reassessment of Property

Table 3 details the increased tax revenue associated with reassessing the 58.8-acre solar site as solar use property. The town's real estate tax revenue from the fenced-in acreage after reassessment is estimated to be approximately $770 per year, for a cumulative total of approximately $30,600 over the project's anticipated 40-year operational life expectancy. In contrast, the property currently generates approximately $320 per year for the town, for a cumulative total of approximately $12,600 over 40 years.

Table 3: Estimated Town Revenue Generated by the Proposed High Bridge Solar Project over 40 Years from Real Estate Taxes

Estimated Increased Appraised Value of Property[34]	$588,200
Town of Farmville Real Estate Tax Rate[35]	0.0013
Annual Town Real Estate Tax – Solar Use	$770
Cumulative Revenue over 40 Years	**$30,600**

**Totals may not sum due to rounding.*

Scenario 1: Taxation of Capital Investment in Machinery and Tools

Table 4 separately details the additional annual revenue that the proposed High Bridge Solar project would generate for the town of Farmville over a 40-year period from taxes levied on capital investment in machinery and tools. This estimate is calculated as: 1) the taxable portion of capital investments based on the stepdown local tax exemption pursuant to Virginia Code §58.1-3660[36], times 2) Prince Edward County's depreciation guidelines for machinery and tools[37], times 3) Town of Farmville's machinery and tools tax / personal property rate of $1.50 per $100 of assessed value.[38]

As the data in Table 4 indicate, based on these calculations the estimated additional town revenue from taxation of capital investments associated with the proposed High Bridge Solar would be approximately $5,230 in the project's first year of operation, with that figure projected to fluctuate thereafter as the equipment is depreciated and the value of the exemption reduced. The annual tax revenue is estimated

[34] Calculated as 58.82 acres times $10,000 per acre.
[35] Data Source: Town of Farmville website.
[36] Virginia Code §58.1-3660 stipulates that solar facilities over 5 MW and under 150 MW with an interconnection request on or after January 1, 2019 are subject to a stepdown exemption from local property taxes. The amount of the exemption is 80 percent in the first five years, 70 percent in years six through ten, and 60 percent thereafter.
[37] Because the High Bridge Solar would be independently owned and does not meet the definition of an "Electric Supplier" because it is under 25 MW, it would be assessed locally. Although the actual potential local assessment methodology is not known, the analysis presented is based on the assumption that the investment would be assessed as machinery and tools because of the Virginia Department of Taxation Tax Ruling 14-37, which determined that production of electricity for sale or resale by a private entity is eligible for the industrial manufacturing processing exemption from sales and use taxes.
[38] Data Source: Town of Farmville website.

to increase to approximately $10,500 in year 11 of the project and thereafter for a cumulative total of approximately $379,400 over 40 years.

Table 4: Estimated Town Revenue by Proposed High Bridge Solar Investment Over 40 Years

Year	Total Capital Investment Subject to Exemption[39]	Depreciated Value of Taxable Capital Investment[40]	Additional Annual Town Tax Revenue Solar Investment[41]
1	$17,441,900	$348,800	$5,230
2	$17,441,900	$348,800	$5,230
3	$17,441,900	$348,800	$5,230
4	$17,441,900	$348,800	$5,230
5	$17,441,900	$348,800	$5,230
6	$17,441,900	$523,300	$7,850
7	$17,441,900	$523,300	$7,850
8	$17,441,900	$523,300	$7,850
9	$17,441,900	$523,300	$7,850
10	$17,441,900	$523,300	$7,850
11	$17,441,900	$697,700	$10,500
12	$17,441,900	$697,700	$10,500
13	$17,441,900	$697,700	$10,500
14	$17,441,900	$697,700	$10,500
15	$17,441,900	$697,700	$10,500
16	$17,441,900	$697,700	$10,500
17	$17,441,900	$697,700	$10,500
18	$17,441,900	$697,700	$10,500
19	$17,441,900	$697,700	$10,500
20	$17,441,900	$697,700	$10,500
21	$17,441,900	$697,700	$10,500
22	$17,441,900	$697,700	$10,500
23	$17,441,900	$697,700	$10,500
24	$17,441,900	$697,700	$10,500
25	$17,441,900	$697,700	$10,500
26	$17,441,900	$697,700	$10,500
27	$17,441,900	$697,700	$10,500
28	$17,441,900	$697,700	$10,500
29	$17,441,900	$697,700	$10,500

[39] Data Source: High Bridge Solar, LLC.

[40] Accounts for Prince Edward County's depreciation guidelines for Machinery and Tools. Also accounts for the stepdown exemption from local property taxes pursuant to Virginia Code §58.1-3660 for projects over 5 MW and under 150 MW with an interconnect request after January 1, 2019. The exemption is 80 percent in the first five years, 70 percent in years six through ten, and 60 percent thereafter.

[41] Calculated pursuant to Virginia Code §58.1-2600. Because High Bridge Solar would be independently owned and does not meet the definition of an "Electric Supplier" because it is under 25 MW, it would be taxed at the Machinery and Tools / Personal Property tax rate of $1.50 per $100.

Year	Total Capital Investment Subject to Exemption[39]	Depreciated Value of Taxable Capital Investment[40]	Additional Annual Town Tax Revenue Solar Investment[41]
30	$17,441,900	$697,700	$10,500
31	$17,441,900	$697,700	$10,500
32	$17,441,900	$697,700	$10,500
33	$17,441,900	$697,700	$10,500
34	$17,441,900	$697,700	$10,500
35	$17,441,900	$697,700	$10,500
36	$17,441,900	$697,700	$10,500
37	$17,441,900	$697,700	$10,500
38	$17,441,900	$697,700	$10,500
39	$17,441,900	$697,700	$10,500
40	$17,441,900	$697,700	$10,500
CUMULATIVE TOTAL			**$379,400**

**Totals may not sum due to rounding.*

Scenario 1: 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 High Bridge Solar would make to the town of Farmville over its 40-year anticipated operational life under Scenario 1. As these data indicate, that cumulative total is approximately $0.4 million.

Table 5: Estimated Cumulative Town Tax Revenue from the Proposed High Bridge Solar over 40 Years under Scenario 1[42]

Town Real Estate Tax Revenue	$30,600
Town Revenue from Taxation of Capital Investments	$379,400
TOTAL Cumulative Revenue over 40 Years	**$409,900**

**Totals may not sum due to rounding.*

Scenario 2: Revenue Share Ordinance

The following section describes the additional annual revenue that the proposed High Bridge Solar project would generate for the town of Farmville assuming the town adopts an energy revenue share ordinance under Virginia Code §58.1-2636. The Virginia Code currently stipulates that a locality may assess an annual revenue share of up to $1,400 per megawatt (MW) alternating current (AC) generation capacity of a solar facility. However, legislation that was passed in the 2021 General Assembly (SB 1201/HB 2006) and went into effect on July 1, 2021, allows a 10 percent escalator to be applied to the

[42] Total does not include the value of a potential siting agreement which is subject to negotiation between High Bridge Solar and the town of Farmville.

$1,400 per MW revenue share every five years, beginning in 2026. Section 58.1-3660 further stipulates that capital investment associated with the solar project will be exempt from taxation if the town adopts an energy revenue share ordinance.

Table 6 details the revenue generated from a revenue share ordinance between High Bridge Solar and town of Farmville with the 10 percent escalator. Based on a total generation capacity of 12 MW AC and an assumed commissioning date of 2024, a revenue share ordinance would generate approximately $1.0 million over the anticipated 40-year operational life of the project.

Table 6: Estimated Town Revenue Generated from a Revenue Share Ordinance over 40 Years

Year	MW	Revenue Share per MW with Escalator	Annual Town Revenue
1	12	$1,400	$16,800
2	12	$1,400	$16,800
3	12	$1,540	$18,500
4	12	$1,540	$18,500
5	12	$1,540	$18,500
6	12	$1,540	$18,500
7	12	$1,540	$18,500
8	12	$1,694	$20,300
9	12	$1,694	$20,300
10	12	$1,694	$20,300
11	12	$1,694	$20,300
12	12	$1,694	$20,300
13	12	$1,863	$22,400
14	12	$1,863	$22,400
15	12	$1,863	$22,400
16	12	$1,863	$22,400
17	12	$1,863	$22,400
18	12	$2,050	$24,600
19	12	$2,050	$24,600
20	12	$2,050	$24,600
21	12	$2,050	$24,600
22	12	$2,050	$24,600
23	12	$2,255	$27,100
24	12	$2,255	$27,100
25	12	$2,255	$27,100
26	12	$2,255	$27,100
27	12	$2,255	$27,100
28	12	$2,480	$29,800
29	12	$2,480	$29,800
30	12	$2,480	$29,800
31	12	$2,480	$29,800
32	12	$2,480	$29,800
33	12	$2,728	$32,700

Year	MW	Revenue Share per MW with Escalator	Annual Town Revenue
34	12	$2,728	$32,700
35	12	$2,728	$32,700
36	12	$2,728	$32,700
37	12	$2,728	$32,700
38	12	$3,001	$36,000
39	12	$3,001	$36,000
40	12	$3,001	$36,000
Cumulative Total			**$1,018,300**

**Totals may not sum due to rounding.*

Scenario 2: Total Fiscal Impact

Table 7 combines the results from the calculations depicted in Tables 3 and 6 to provide an estimate of the cumulative fiscal contribution that the proposed High Bridge Solar would make to the town of Farmville over its 40-year anticipated operational life under Scenario 2. As these data indicate, that cumulative total is approximately $1.0 million.

Table 7: Estimated Cumulative Town Revenue from the Proposed High Bridge Solar over 40 Years under Scenario 2[43]

Town Revenue from Real Estate Tax	$30,600
Town Revenue from Revenue Share Ordinance	$1,018,300
TOTAL Cumulative Revenue over 40 Years	**$1,048,800**

**Totals may not sum due to rounding.*

Siting Agreement

Siting agreements add significant value to the total fiscal impact of solar projects on their host localities. The Code of Virginia §15.2-2316.7 stipulates that a solar project is required to request a meeting with its potential host locality to discuss a voluntary siting agreement. The terms and conditions of a siting agreement vary by locality and project and can include the mitigation of any impact of the solar facility, payments for capital improvements, payments to address fiscal needs, and assistance with the local deployment of broadband.

Due to the variation in the value and payment schedule of siting agreements negotiated between localities and solar projects in Virginia, as well as the fact that these agreements can be subject to change until approved, the study does not include the siting agreement details for High Bridge Solar.

[43] Total does not include the value of a potential siting agreement which is subject to negotiation between High Bridge Solar and the town of Farmville.

Current Use

This section provides a benchmark for the previous estimates of the fiscal contribution that the proposed High Bridge Solar project would make to the town of Farmville by estimating the fiscal contribution that the site makes to the town in its current use.

Economic Impact

The actively used, fenced-in solar site would be approximately 58.8 acres of wooded land that currently does not provide any economic benefit to the town.[44]

Fiscal Impact Assumptions

- The current assessment value of the affected acreage is approximately $242,400.[45]

Fiscal Impact

Table 8 details the estimated tax revenue that the proposed High Bridge Solar site generates for the town of Farmville in its current use. As the data in Table 8 indicate, the current town real estate tax revenue from the project site is estimated to be approximately $320 per year, for a cumulative total of approximately $12,600 over 40 years.

Table 8: Estimated Town Revenue Generated by the Proposed High Bridge Solar Project Site over 40 Years from Real Estate Taxes – Current Use

Estimated Assessed Value of Property – Current Use[46]	$242,400
Town of Farmville Current Real Estate Tax Rate	0.0013
Estimated Annual Town Real Estate Tax – Current Use	$320
Total Cumulative Revenue over 40 years	**$12,600**

**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 that information. However, because these estimates attempt to foresee circumstances that have not yet occurred, it is not possible to provide any assurance that they will be representative of actual events. These estimates are intended to provide a general indication of likely future outcomes and should not be construed to represent a precise measure of those outcomes.

[44] Data Source: High Bridge Solar, LLC.
[45] Data Source: Derived from Prince Edward County's property assessment database. Includes the value of a potentially affected structure.
[46] Data Source: Derived from Prince Edward County's property assessment database.