Strategic Economic Research, LLC

ECONOMIC IMPACT ANALYSIS OF THE CIMARRON STORAGE PROJECT

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About Strategic Economic Research

Strategic Economic Research, LLC (SER) specializes in economic impact and local tax analyses for energy projects throughout the United States. Our reports show the jobs, earnings, output, and tax revenues that these projects bring to local communities. We have analyzed over 700 projects (over 132 gigawatts of power) in 40 states. Primarily working on renewable energy projects, including wind, solar, and storage, we also produce analyses for other projects, including transmission, natural gas, nuclear, data centers, and more. In addition to written reports, the SER team combines years of experience to provide expert testimony for permitting of energy projects. Dr. David G. Loomis, the founder and President of SER, is a widely-recognized expert in energy economics.

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Table of Contents

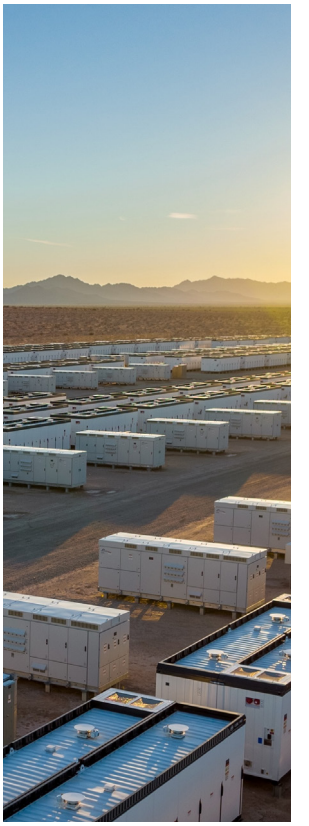


Table of Contents - Figures

Table of Contents - Tables

I. Executive Summary

NextEra Energy is developing the Cimarron Storage Project (the Project) in Gray County, Kansas. The purpose of this report is to aid decision makers in evaluating the economic impacts of this Project on Gray County and the State of Kansas. The basis of this analysis is to study the direct, indirect, and induced impacts on job creation, wages, and total economic output.

Cimarron Storage | 165.5 MW

The Cimarron Storage Project is a 165.5-megawatt (MW) Battery Energy Storage System (BESS). The total Project represents an investment in excess of $214 million. The total development is anticipated to result in the following:

Jobs[1]

- 21.6 new local jobs during construction for Gray County
- 112 new local jobs during construction for the State of Kansas
- 9.5 new local long-term jobs for Gray County
- 12.7 new local long-term jobs for the State of Kansas

Earnings[2]

- Over $2.0 million in new local earnings during construction for Gray County
- Over $10.3 million in new local earnings during construction for the State of Kansas
- Over $706 thousand in new local long-term earnings for Gray County annually
- Over $1.0 million in new local long-term earnings for the State of Kansas annually

[1] All jobs values are full-time equivalents (FTEs) and are the sum of the direct, indirect, and induced jobs during construction and annual operations which can be found in the Economic Impact Results section.

[2] Earnings are a measurement in dollars of the total wages and benefits produced by the jobs found by the analysis. These earnings are categorized by construction impacts and operations impacts.

Output[3]

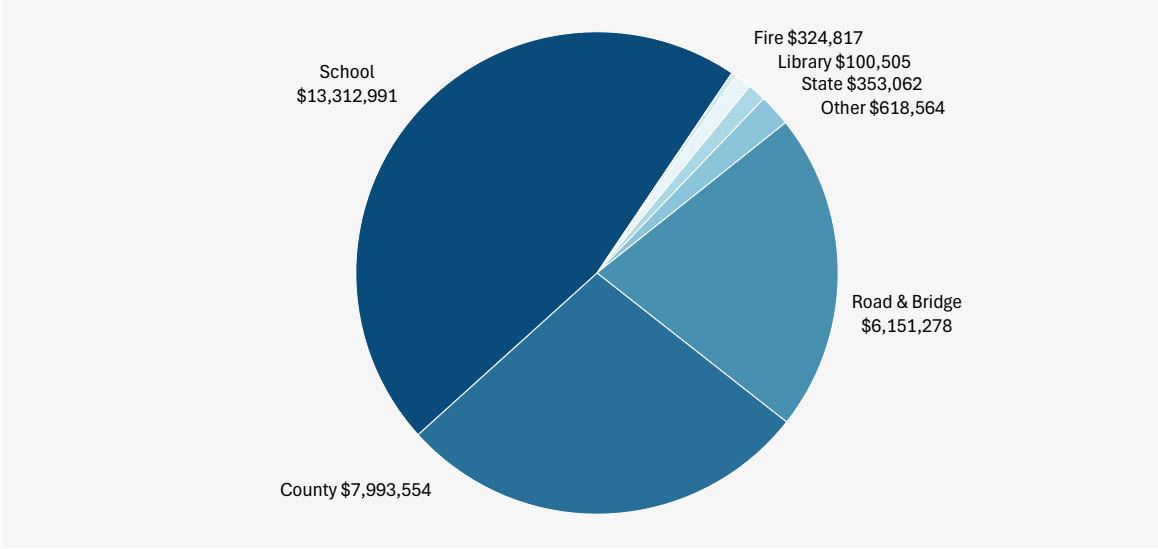
- Over $6.3 million in new local output during construction for Gray County
- Over $27.7 million in new local output during construction for the State of Kansas
- Over $1.1 million in new local long-term output for Gray County annually
- Over $1.7 million in new local long-term output for the State of Kansas annually

Local Taxes

- Over $13.3 million in total school district taxes over the life of the Project
- Over $7.9 million in total county taxes for Gray County over the life of the Project
- Over $28.8 million in total local taxes for all taxing districts over the life of the Project
- A 37.27% increase to the county's total taxable value in its first year of operations
- A 5.38% increase in the county's annual tax collections

Over $28.8 Million in Total Local Taxes

Figure 1.1 – Total Local Taxes Paid by the Cimarron Storage Project



[3] The value of production in the state or local economy. It is an equivalent measure to the Gross Domestic Product (GDP).

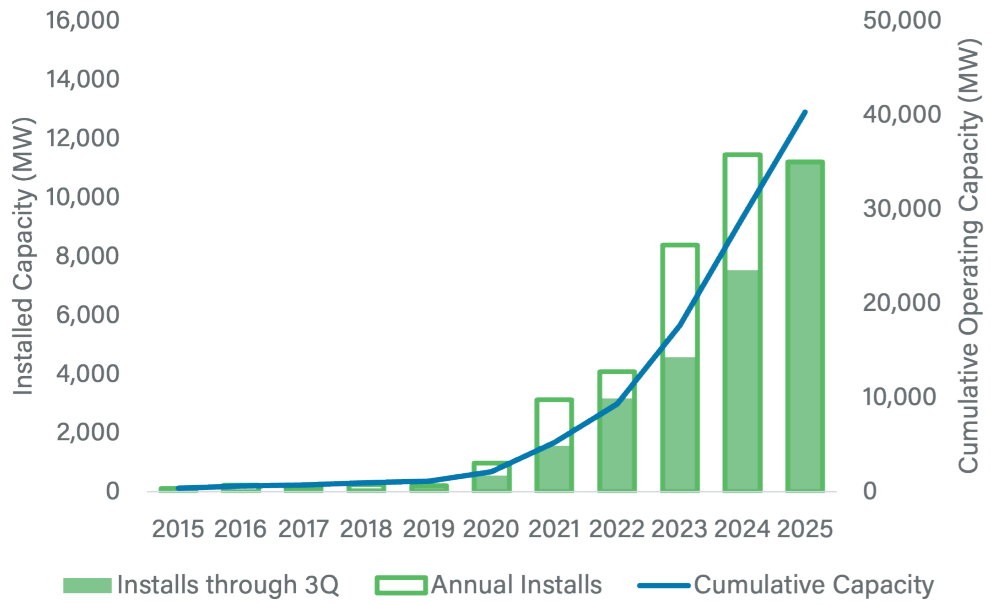
II. Energy Industry Growth & Economic Development

a. U.S. Energy Storage Industry Growth

The U.S. energy storage industry is composed primarily of large-scale battery energy storage systems (BESS) and is a recent addition to the electrical grid system. As shown in Figure 2.1, the large-scale battery capacity has grown rapidly since 2020. The U.S. Energy Information Administration (U.S. EIA) expects the installation of 10,000 megawatts of BESS in the next few years – 10 times the capacity installed in 2019 (U.S. EIA, 2021). The primary driver of this overall sharp pace of growth is large price declines in BESS equipment.

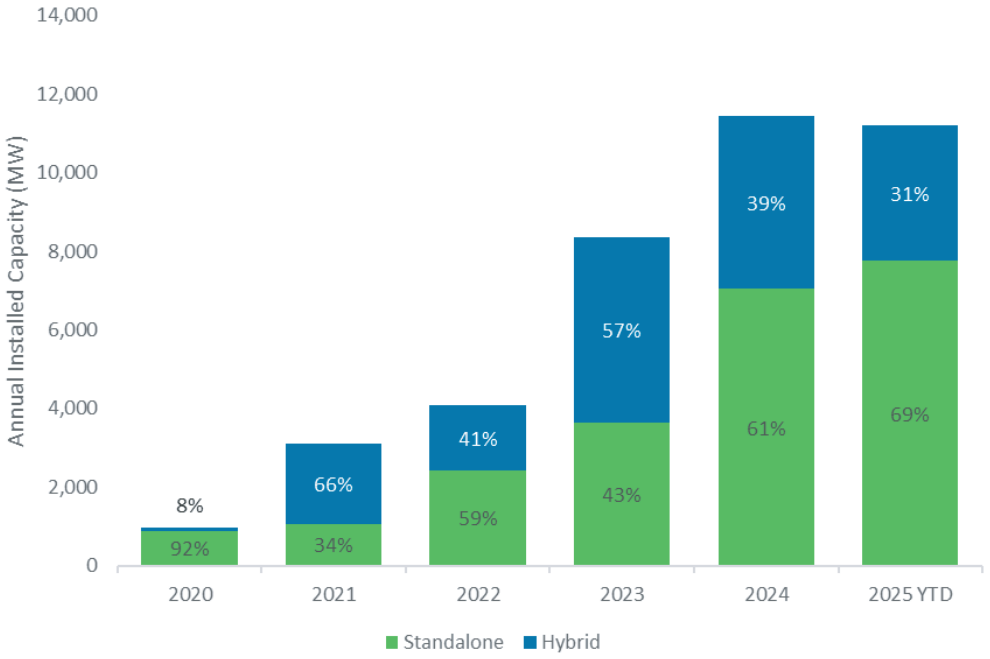
Battery systems are used for price arbitrage, to store electricity when prices are low, and discharge electricity when prices are high. Batteries also maintain grid reliability through frequency regulation, ramp generation, spinning reserves, absorbing excess generation, and in some cases, black start capabilities.

Figure 2.1 – Large-Scale Battery Storage Cumulative Power Capacity, 2015 – Q3, 2025



Source: ACP, Clean Power Market Report, Q3 2025

Figure 2.2 – U.S. Hybrid vs. Standalone Battery Storage Additions

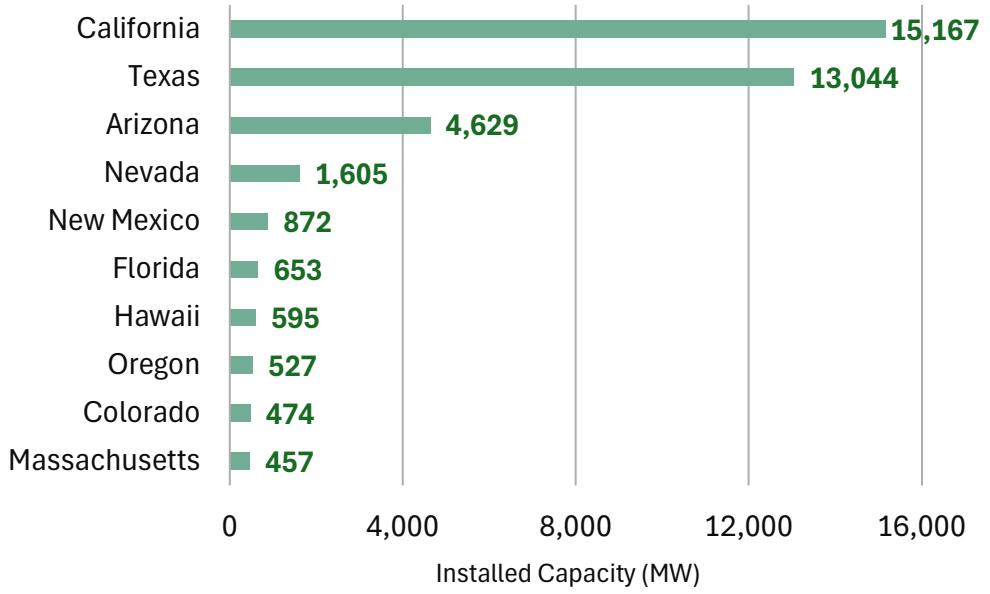


Some battery storage systems are paired with solar energy generators, wind energy generators, or fossil fuel generators. Standalone battery storage systems are increasingly common according to Figure 2.2.

Source: ACP, Clean Power Market Report, Q3 2025

b. Kansas Energy Storage Industry

Figure 2.3 – Operational Energy Storage Capacity for Top Ten States



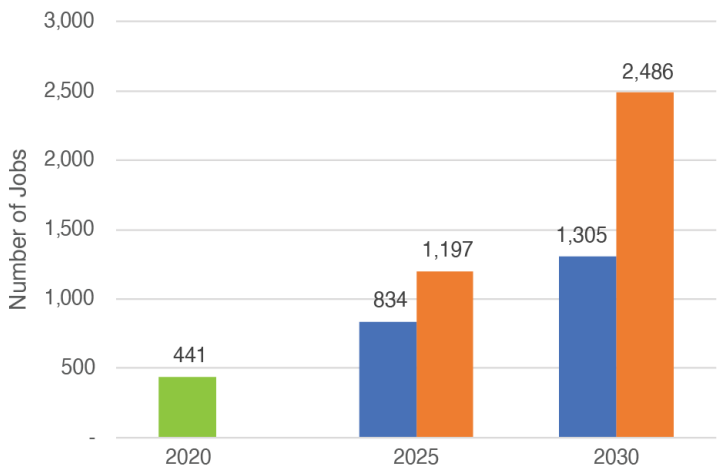
According to ACP, Kansas is ranked 41st in the U.S. in cumulative installations of battery storage systems. As shown in Figure 2.3, California, Texas, and Arizona are the top three states for battery storage (ACP, 2025).

Source: ACP, Battery Storage by State, 2025

Kansas has great potential to expand its battery storage installations. Kansas has one utility-scale battery storage in operation: Solomon Energy Storage Project (1 MW) in Franklin County. The 165.5-MW Cimarron Storage Project will be amongst the largest installations in Kansas to date.

Battery storage is expected to increase substantially over the next several years. "One of the most critical factors is the ability to store energy as it is generated and then redistribute it when needed, rather than as it is produced. This ability reduces the need to curtail renewable generation and allows the energy to be deployed during periods of high electricity demand" (Energy Information Administration (EIA), 2020). In addition to storage, batteries can also provide frequency regulation, transmission and distribution support, and other ancillary services.

Figure 2.4 – Battery Storage Job Estimates in Kansas, 2020-2030



**stationary, grid-connected*

Source: NREL, Kansas Clean Energy Jobs Potential through 2030, March 2022

NREL (Truitt et al., 2022) made projections of the employment increases due to the battery storage sector. Figure 2.4 shows projections of 834 to 1,197 jobs by 2025 and 1,305 to 2,486 jobs by 2030 for the State of Kansas. They find that 441 jobs exist in the industry as of 2020.

c. Economic Benefits of Energy Storage

Battery storage facilities have numerous economic benefits. BESS installations create local area job opportunities during both the construction phase and the operational phase. In addition to the workers directly involved in the construction and maintenance of the project, numerous other jobs are supported through indirect supply chain purchases and worker spending. Battery storage projects strengthen the local tax base and help improve county services and local infrastructure, such as public roads.

Several studies have quantified the economic benefits of battery storage projects across the United States. Gorman et al. (2020) demonstrate the economic value that battery storage brings to the electric grid. Using wholesale market prices, they find that the additional revenues earned after adding batteries to solar projects are higher than the additional costs these projects require. They do not quantify the economic impact that battery storage will make.

In a 2022 study for the NREL, Truitt et al. make state-level employment projections for battery storage (along with wind, solar, and energy storage). According to this source — which uses the same IMPLAN (IMpact analysis for PLANning) model multipliers as this present study — 66,751 people were employed in the United States battery storage sector in 2020. 126,000-181,000 further jobs will be in the sector by 2025, and 197,000-376,000 jobs will be in the sector by 2030 (Truitt, 2022, p. vi).

The Energy Storage Association (ESA) (2020) predicted that energy storage will create at least 200,000 jobs by 2030. They cite a 2017 Navigant analysis which "assumed that industry jobs per new MW of storage capacity installed would decline from 50 per MW in 2021 to 34 per MW by 2025. The attainment of 100 GW by 2030 would involve rapidly growing annual installations between 2025 and 2030, but a continued decline in jobs/MW as the industry continues to refine construction techniques and management" (ESA, 2020, pp. 8-9). We avoid such projections by analyzing the company's construction and operating costs instead of using broad industry assumptions.

Although not directly aimed at battery storage impacts, Jenniches (2018) performed a literature review to assess the regional economic impacts of renewable energy sources. After reviewing all of the different techniques for analyzing those economic impacts, he concludes "for assessment of current renewable energy developments, beyond employment in larger regions, IO [Input-Output] tables are the most suitable approach" (Jenniches, 2018, p. 48). Input-Output analysis is the basis for the methodology used in the economic impact analysis of this report.

III. Project Description and Location

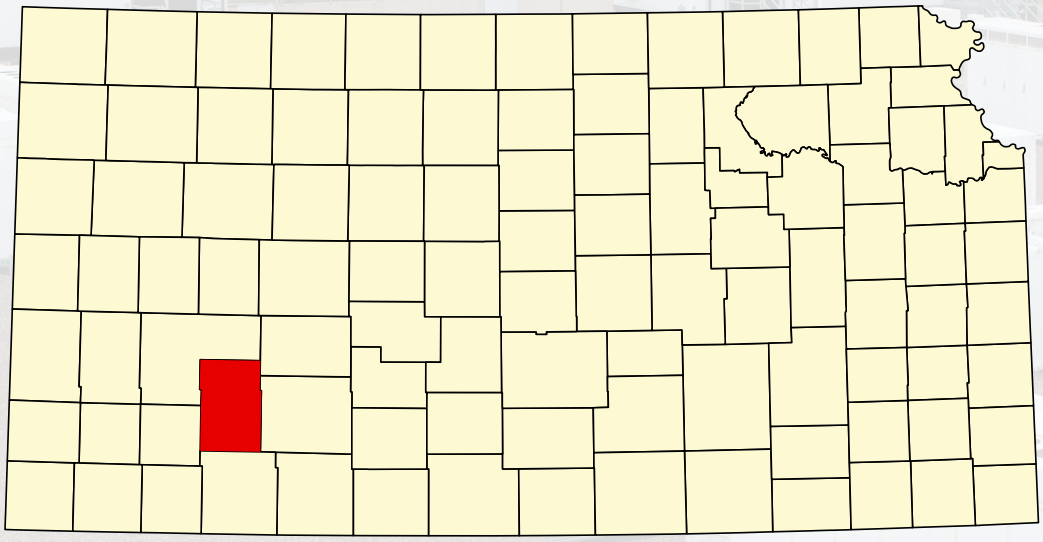
a. Cimarron Storage Project

NextEra Energy is developing the Cimarron Storage Project in Gray County, Kansas. The Project consists of an estimated 165.5-MW BESS. The total Project represents an investment in excess of $214 million.

b. Gray County Economic and Demographic Statistics

Gray County is located in the southern part of Kansas (see Figure 3.1). It has a total area of 869 square miles, and the U.S. Census estimates that the population was 5,730 with 2,375 housing units in 2024. The county has a population density of 6.5 (persons per square mile) compared to 35.9 for the State of Kansas (2020). Median household income in the county was $79,122 in 2024 (U.S. Census Bureau, 2024).

Figure 3.1 – Location of Gray County, Kansas



Source: Wikipedia, 2024. Data from nationalatlas.gov

Table 3.1 – Employment by Industry in Gray County

Industry	Number	Percent
Agriculture, Forestry, Fishing and Hunting	1,328	25.9%
Administrative Government	816	15.9%
Construction	386	7.5%
Finance and Insurance	371	7.2%
Retail Trade	319	6.2%
Wholesale Trade	275	5.4%
Professional, Scientific, and Technical Services	273	5.3%
Other Services (except Public Administration)	210	4.1%
Transportation and Warehousing	209	4.1%
Health Care and Social Assistance	204	4.0%
Real Estate and Rental and Leasing	152	3.0%
Accommodation and Food Services	140	2.7%
Administrative and Support and Waste Management and Remediation Services	101	2.0%
Manufacturing	97	1.9%
Mining, Quarrying, and Oil and Gas Extraction	86	1.7%
Information	51	1.0%
Arts, Entertainment, and Recreation	43	0.8%
Management of Companies and Enterprises	20	0.4%
Educational Services	18	0.3%
Government Enterprises	13	0.3%
Utilities	7	0.1%

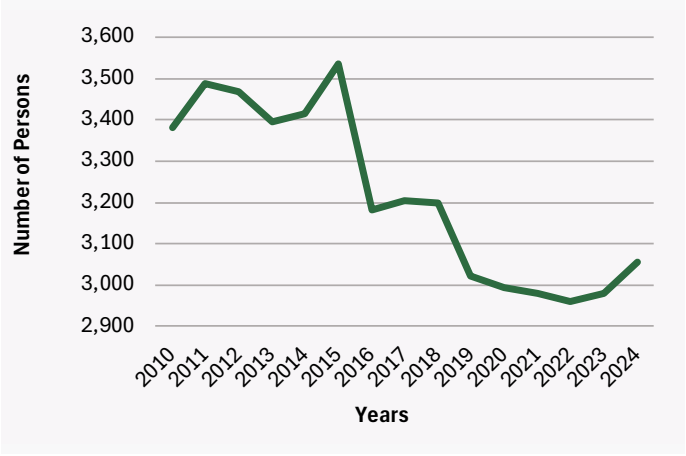
Source: IMPLAN, County Employment by Industry, 2024

As shown in Table 3.1, the largest industries in the county are "Agriculture, Forestry, Fishing and Hunting," "Administrative Government," and "Construction." These data for Table 3.1 come from IMPLAN covering the year 2024 (the latest year available).

Table 3.1 provides the most recent snapshot of total employment but does not examine the historical trends within the county.

Figure 3.2 shows the number of employed persons in Gray County from 2010 to 2024. The total number of employed persons was at its highest at 3,537 in 2015 and its lowest at 2,960 in 2022 (FRED, 2025).

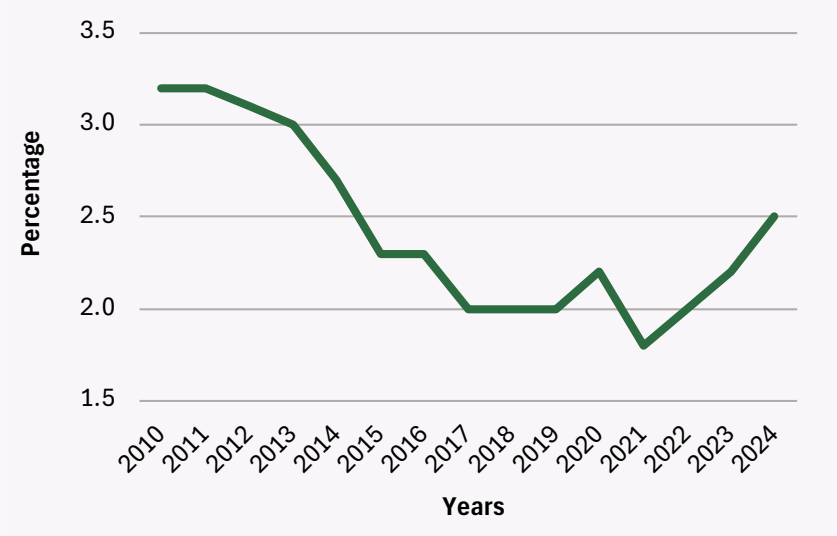
Figure 3.2 – Total Employed Persons in Gray County from 2010 to 2024



Source: FRED, U.S. Census Bureau, Employed Persons, 2010-2024

The unemployment rate signifies the percentage of the labor force without employment in the county. Figure 3.3 shows the unemployment rates from 2010 to 2024. Unemployment in Gray County was at its highest at 3.2% in 2010 and its lowest at 1.8% in 2021 (FRED, 2025). The unemployment rate spiked to 2.2% in 2020 then normalized.

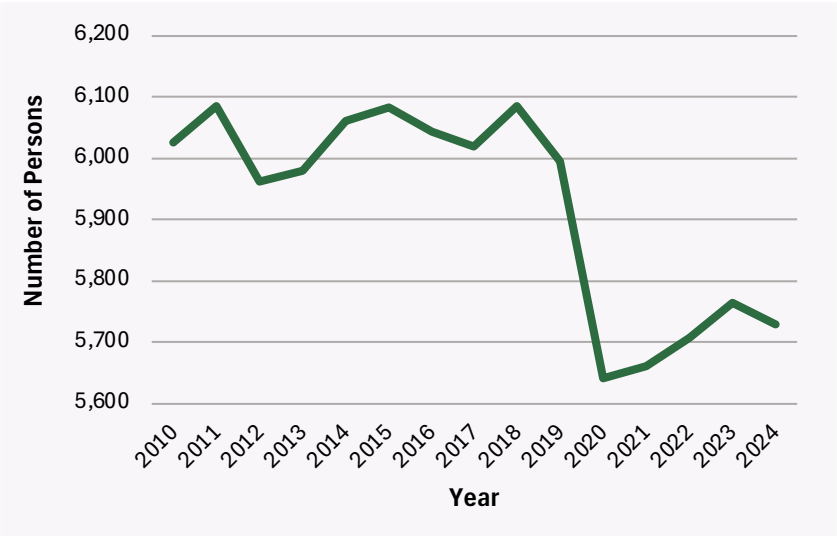
Figure 3.3 – Unemployment Rate in Gray County from 2010 to 2024



Source: FRED, U.S. Census Bureau, Unemployment Rates, 2010-2024

The overall population in the county has fluctuated, as shown in Figure 3.4. Gray County's population was 6,026 in 2010 and 5,730 in 2024, a loss of 296 people (FRED, 2025). The average annual population decrease over this time period was 21 people.

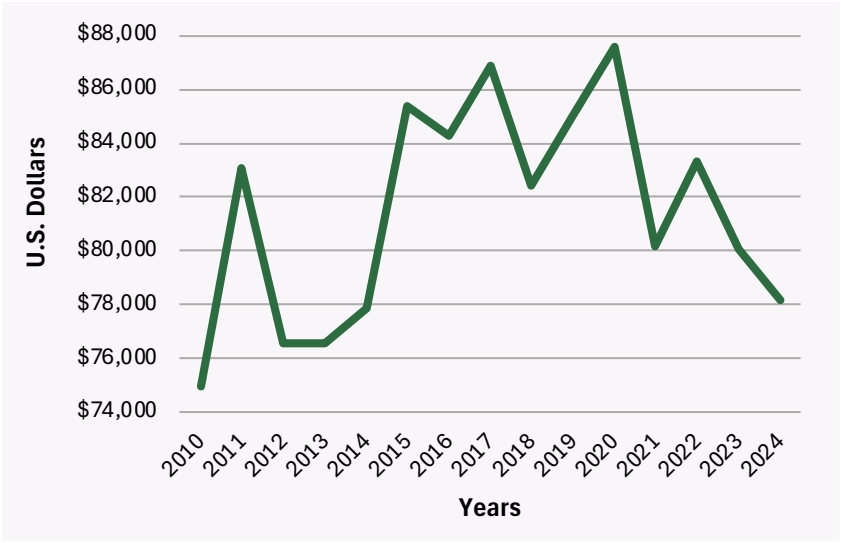
Figure 3.4 – Population in Gray County from 2010 to 2024



Source: FRED, U.S. Census Bureau, Population Estimates, 2010-2024

Household income has fluctuated in the county. Figure 3.5 shows the real median household income in Gray County from 2010 to 2024. Using the national Consumer Price Index (CPI), the nominal median household income for each year was adjusted to 2024 dollars. Household income was at its lowest at $74,955 in 2010 and its highest at $87,563 in 2020 (FRED, 2025).

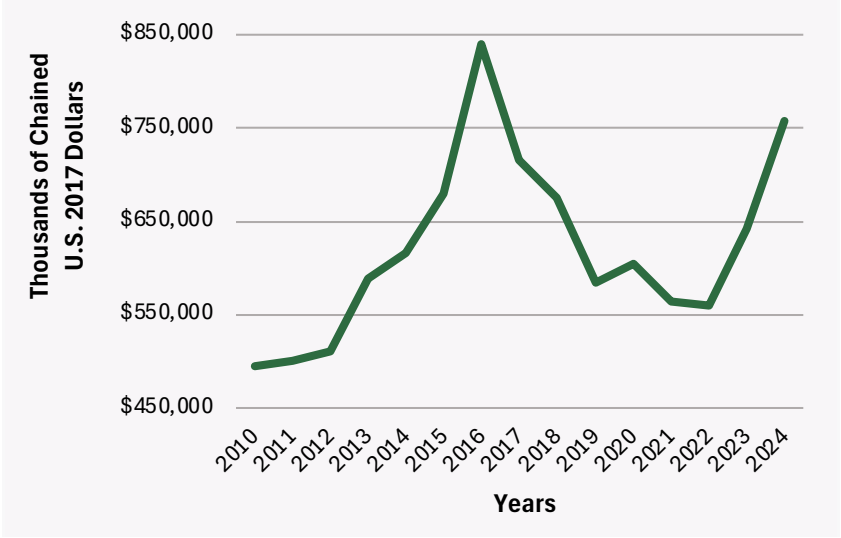
Figure 3.5 – Real Median Household Income in Gray County from 2010 to 2024



Source: FRED, U.S. Census Bureau, Estimate of Median Household Income, 2010-2024

Real Gross Domestic Product (GDP) is a measure of the value of goods and services produced in an area and adjusted for inflation over time. The Real GDP for Gray County has fluctuated since hitting a high in 2016, as shown in Figure 3.6 (FRED, 2025).

Figure 3.6 – Real GDP in Gray County from 2010 to 2024



Source: FRED, U.S. Census Bureau, Real GDP, 2010-2024

IV. Economic Impact Methodology

The economic analysis of the Project was created using IMPLAN. IMPLAN software and parameters are based on government data collected at federal, state, and local levels. IMPLAN is a leading provider of economic development software that is widely used by economists and economic development professionals. More information about IMPLAN can be found at implan.com.

IMPLAN is an input-output model that measures the spending patterns and location-specific economic structures that reflect expenditures supporting varying levels of employment, income, and output. IMPLAN shows that one industry's output can be used as input for another. For example, when a storage system is installed, there are both soft costs — consisting of permitting, installation, and customer acquisition costs — and hardware costs, of which the battery modules are the largest component. The purchase of a module not only increases demand for manufactured components and raw materials, but it also supports the labor required to build and install the module. When a module is purchased from a manufacturing facility, the manufacturer uses some of that money to pay its employees, who then spend that money on goods and services within their community. Likewise, when a developer pays installation workers, those workers spend money in the local economy which boosts economic activity and supports employment in other sectors. The goal of an economic impact analysis is to quantify all reverberations throughout the county and state economies.

IMPLAN modeling uses construction cost data, operations cost data, and data relating to the percentage of goods and services acquired in the county and state to calculate the jobs, earnings, and economic output associated with this information. The results are split into the construction period and the annual operations period of a storage project. Within each period, impacts are further categorized into direct, indirect, and induced impacts.

Direct Impacts

Direct impacts during the construction period refer to the changes that occur in the on-site construction industries in which the direct final demand (i.e., spending on construction labor and services) change is made. On-site construction-related services include installation labor, engineering, design, and other professional services. **Direct impacts during operating years** refer to the final demand changes in on-site spending required for operations and maintenance workers, their managers, and administrative staff.

Indirect Impacts

The initial spending for a project's construction and operation will create a second layer of impacts, referred to as "supply chain impacts" or "indirect impacts." **Indirect impacts during the construction period** consist of changes in inter-industry purchases resulting from the direct final demand changes. These impacts stem from construction spending on BESS materials (battery modules, inverters, interconnection costs, substations, electrical cabling, foundations, etc.) as well as purchases of offsite services like materials transportation, road repair, accounting, legal guidance, etc. **Indirect impacts during the operations period** also consist of changes in inter-industry purchases resulting from the direct final demand changes, but these impacts result from spending on equipment/materials pertaining to a storage project's annual operations and maintenance. Tax payments during annual operations create indirect impacts in the county and state that show up in the operations portion of the results. These payments do not support the day-to-day operations and maintenance of a storage project; they are more of a latent effect resulting from a storage project's presence.

Induced Impacts

Induced impacts during construction refer to the changes that occur in consumer spending as household income increases or decreases as a result of the direct and indirect effects of final demand changes during construction. Local employees (working directly or indirectly on a project), who spend their paychecks in the community, support additional local jobs and economic activity. For example, in-county and in-state construction workers constructing the storage system will spend a portion of their wages in the local economy at restaurants, grocery and retail stores, entertainment, hospitals, medical offices, etc. **Induced impacts during operating years** refer to the changes that occur in consumer spending as household income increases or decreases as a result of the direct and indirect effects from final demand changes during annual operations and maintenance work. For example, when on-site BESS technicians and contracted landscapers residing in-county and in-state are paid for their work on the storage system, they can then spend their wages at local establishments which spurs more local economic activity.

To estimate the economic impacts of a project, SER uses two separate Multi-Regional Input-Output (MRIO) IMPLAN models with 2024 economic data, the most recent data year available at the time of analysis. The first IMPLAN model calculates construction period impacts using project-specific county economic data in conjunction with aggregated economic data that is combined from every other county in the state. Costs are then assigned to either region according to client-provided expected spending patterns, SER industry knowledge honed from over 500 previous analyses, and IMPLAN data related to the availability of relevant goods and services within the county and state economies. When results for the two regions are combined, they create the state's total construction period impacts. This method allows for more precise assignment of construction spending within a project's county and/or state.

The second model calculates impacts stemming from the annual operations and maintenance of a storage project. Like the construction period model, the operations period model also utilizes economic data from both a project's county and a region comprised of every other county in the state combined. Results from these two regions create the state's total annual operations period economic impacts.

The majority of project employees needed during the construction phase are construction workers, but other occupations are contributing as well. In addition, occupations other than BESS technicians are involved during a project's operations phase. A sample of those occupations, the education/training they require, and wage percentiles are contained in Table 7.1 in the Appendix. A larger description of those occupations, including their work environment and future growth potential, is located in Table 7.2 in the Appendix.

SER analyzes the gross number of jobs a new storage project development supports but not the potential loss of jobs due to declines in other forms of electricity generation. Impacts are determined by the robustness and applicability of the county and state economies, the client's intended spending in those geographic areas, and relevant labor levels.

V. Economic Impact Results

The economic impact results[4] were derived from detailed project cost estimates supplied by NextEra Energy. In addition, NextEra Energy and SER estimated the percentages of project materials and labor that will be coming from within Gray County and the State of Kansas.

The results from these models are shown in Tables 5.1 to 5.3. Table 5.1 lists the Project's total employment impacts for Gray County and the State of Kansas. Table 5.2 shows the total earnings impacts, and Table 5.3 contains the total output impacts. The results are divided into one-time construction impacts and ongoing annually recurring operations impacts that are expected to last the Project's lifetime. Project Development and On-site Labor Impacts correspond to direct impacts as defined in the methodology section. Supply Chain Impacts are the indirect impacts during construction, and Local Revenue and Supply Chain Impacts are indirect impacts during operations.

Table 5.1 – Total Employment Impacts from the Cimarron Storage Project

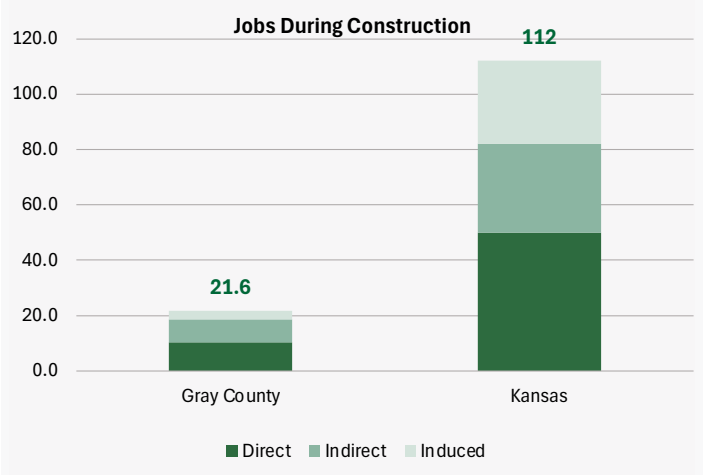
	Gray County Jobs	State of Kansas Jobs
Construction		
Project Development and On-site Labor Impacts	10.4	50
Supply Chain Impacts	8.3	32
Induced Impacts	2.9	30
Local Jobs during Construction	21.6	112
Operations (Annual/Ongoing)		
On-site Direct Impacts	1.3	2.7
Local Revenue and Supply Chain Impacts	7.4	7.7
Induced Impacts	0.8	2.3
Local Long-Term Jobs	9.5	12.7

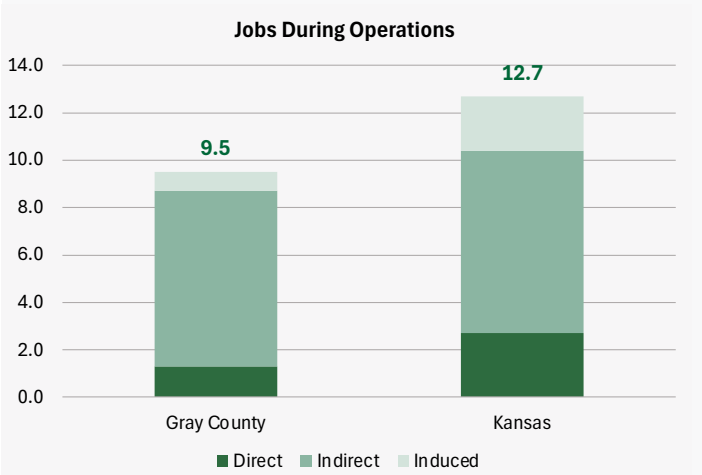
[4] Results are not intended to be a precise forecast; they are an estimate of potential activity resulting from a specific set of intended costs and assumed spending in-county and in-state.

The results from the IMPLAN model show significant employment impacts from the Cimarron Storage Project. Direct jobs created during the construction phase typically last anywhere from 12 to 18 months depending on the size of the project; however, the direct job numbers present in Table 5.1 from the IMPLAN model are based on a full-time equivalent (FTE) basis for a year. In other words, 1 job = 1 FTE = 2,080 hours worked in a year. A part-time or temporary job would constitute only a fraction of a job according to the model. For example, the IMPLAN model results show 10.4 new direct jobs during construction in Gray County, though the construction of the Project could involve closer to 20.8 workers working half-time for a year. Thus, due to the short-term nature of construction projects, IMPLAN often significantly understates the actual number of people, i.e. "boots on the ground," hired to work on the project. Conversely, if the construction period lasts for two years, the job numbers from Table 5.1 would mean that the actual number of workers at any given time would be half of the reported number. It is important to keep this fact in mind when viewing or reporting the numbers.

As shown in Table 5.1, new local jobs created or retained during construction total 21.6 for Gray County and 112 for the State of Kansas. New local long-term jobs created from the Cimarron Storage Project total 9.5 for Gray County and 12.7 for the State of Kansas.

Figure 5.1 – Total Employment Impacts from the Cimarron Storage Project





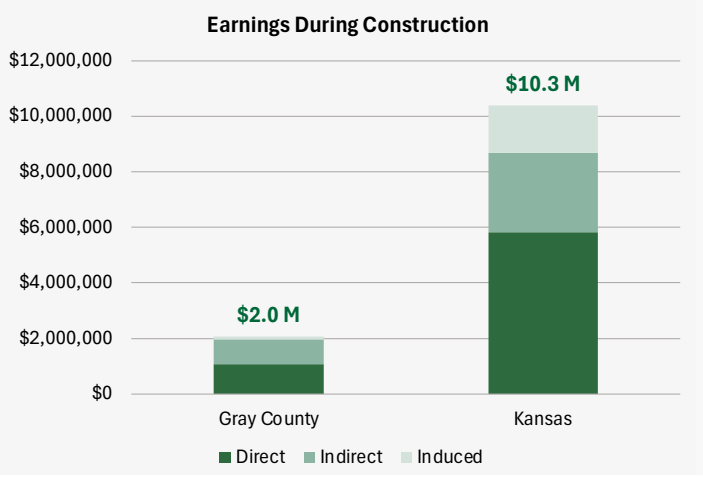
Direct jobs created during the operational phase last the life of the project, typically 20-30 years. Direct construction jobs and operations and maintenance jobs both require highly skilled workers in the fields of construction, management, and engineering. These well-paid professionals can boost economic development in communities that have experienced economic downturns. For a list of occupations expected to be employed, their wages, benefits, total compensation, and hours worked, please see Tables 7.3 and 7.4 in the Appendix.

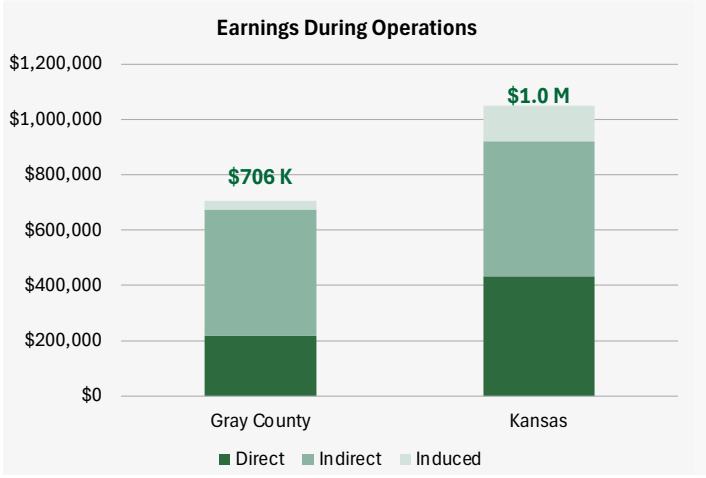
Accordingly, it is important to look at both the number of jobs and the earnings they produce. Table 5.2 shows the earnings impacts from the Cimarron Storage Project, which are categorized by construction impacts and annual operations impacts. The new local earnings during construction total over $2.0 million for Gray County and over $10.3 million for the State of Kansas. The new local long-term earnings total over $706 thousand for Gray County and over $1.0 million for the State of Kansas.

Table 5.2 – Total Earnings Impacts from the Cimarron Storage Project

	Gray County	State of Kansas
Construction		
Project Development and On-site Labor Earnings Impacts	$1,079,105	$5,813,415
Supply Chain Impacts	$886,255	$2,864,505
Induced Impacts	$109,388	$1,717,766
Local Earnings during Construction	$2,074,748	$10,395,686
Operations (Annual/Ongoing)		
On-site Labor Earnings Impacts	$216,177	$432,353
Local Revenue and Supply Chain Impacts	$456,850	$487,475
Induced Impacts	$33,237	$129,570
Local Long-Term Earnings	$706,264	$1,049,398

Figure 5.2 – Total Earnings Impacts from the Cimarron Storage Project





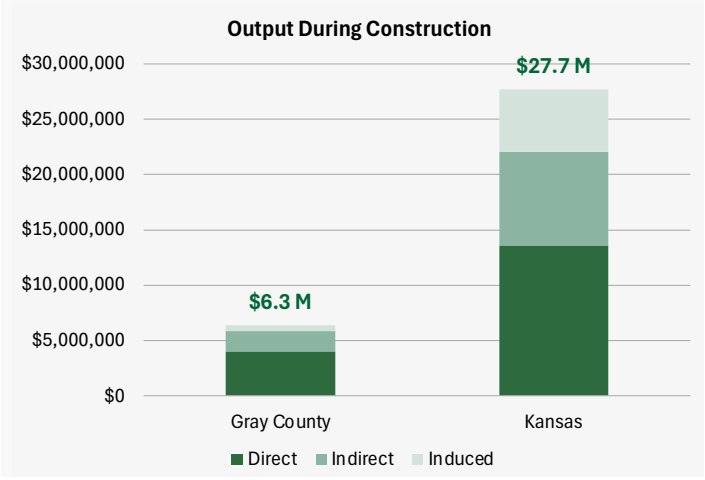
Output is akin to GDP and refers to economic activity or the value of production in the state or county economy. Economic output includes the earnings reported in Table 5.2 but also measures other factors, such as landowner payments, property taxes, and other economic activity that are neither earnings nor benefits from employment.

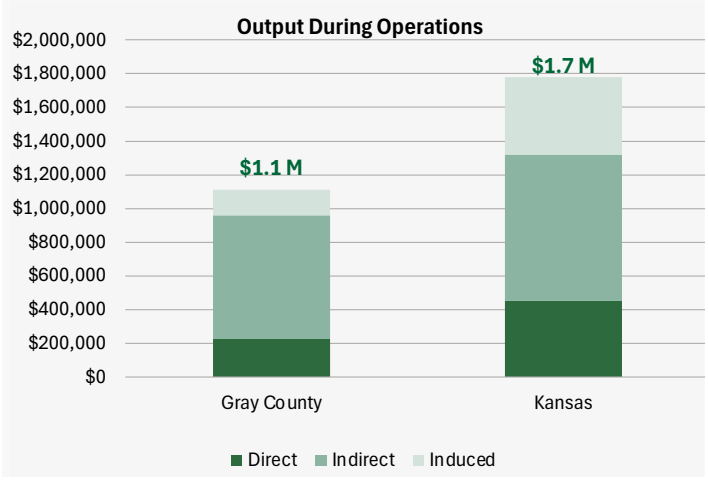
According to Table 5.3, the new local output during construction totals over $6.3 million for Gray County and over $27.7 million for the State of Kansas. The new local long-term output totals over $1.1 million for Gray County and over $1.7 million for the State of Kansas.

Table 5.3 – Total Output Impacts from the Cimarron Storage Project

	Gray County	State of Kansas
Construction		
Project Development and On-site Labor Impacts on Output	$4,039,010	$13,571,340
Supply Chain Impacts	$1,830,841	$8,471,638
Induced Impacts	$499,637	$5,682,875
Local Output during Construction	$6,369,488	$27,725,853
Operations (Annual/Ongoing)		
On-site Labor Impacts on Output	$227,552	$454,239
Local Revenue and Supply Chain Impacts	$730,586	$864,723
Induced Impacts	$151,904	$462,353
Local Long-Term Output	$1,110,042	$1,781,315

Figure 5.3 – Total Output Impacts from the Cimarron Storage Project



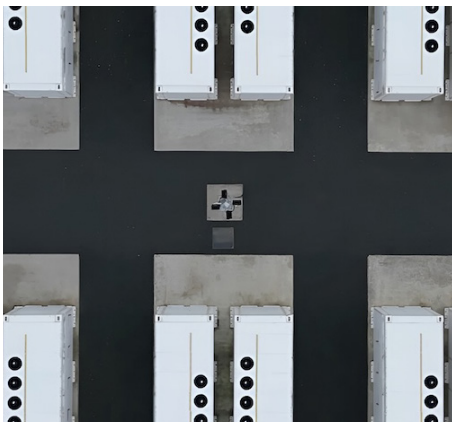


VI. Local Taxes

Under current Kansas law, depending on classification, standalone BESS equipment may receive the Commercial & Industrial Machinery & Equipment (CIME) exemption (K.S.A. 79-223) if determined to be personal property distinct from renewable generation. This decision is determined by the county appraiser and, if appealed, the Board of Tax Appeals (BOTA), applying the fixture test (K.S.A. 79-261). In 2025, HB 2083 advanced to create a 10-year BESS exemption for new systems and to exclude them from CIME prospectively. Given the policy risk and taking a conservative position, a 10-year exemption assumption is applied in this economic impact analysis while noting that current Kansas law could support CIME treatment. According to the Kansas Department of Revenue, Gray County's total taxable value in 2024 was $127,464,298. The Project is expected to have a taxable value of approximately $47,500,000 in its first year of operations, representing a 37.27% increase to the County's total taxable value. In 2024, Gray County collected $17,297,150 in total ad valorem taxes. The Project is projected to generate an average annual tax revenue of approximately $930,799, representing a 5.38% increase in the County's annual tax collections.

Tables 6.1 to 6.4 detail the property tax and economic development payment projections of the Cimarron Storage Project. Several important assumptions are built into the analysis, as follows:

- The analysis assumes that over $171 million of the Project's costs will be classified as personal property and over $18.3 million of the Project's costs will be classified as real property.
- The assessment ratio is 25%.
- The Project will be exempt from property tax for a period of 10 years.
- The personal property associated with the Project is subject to a 7-year depreciation schedule and the real property associated with the Project is subject to a 13-year depreciation schedule, with a minimum value floor of 20% of original cost for all property.
- All tax (millage) rates are assumed to stay constant at their 2025 rates. Assumed rates are 27.702 for County Other, 1.062 for Waste Disposal (Landfill), 0.325 for County Mental Health, 0.238 for County Intellectual Disability, 0.974 for County Council on Aging, 3.66 for County Ambulance, 26.134 for County Road & Bridge, 1.38 for County Fire District No. 1, 0.427 for County Library District, 2.628 for Pawnee Watershed No. 81, 1 for Kansas Educational Building Fund, 0.5 for State Institutions Building Fund, 41.481 for Cimarron-Ensign USD 102 - Other, and 4.501 for Cimarron-Ensign USD 102 - Bond & Interest.



- The Project is placed in service in advance of the lien date for tax year 2028. All tax amounts are listed next to the tax year that they are due, payable the following year.
- The Project is decommissioned in 30 years and pays no more taxes after decommissioning.
- The Project pays economic development payments of $3,000 per megawatt of nameplate capacity, with no annual escalation, for the first 10 years of the Project's operating period.
- The Project will pay a tax payment of $1,500 per megawatt of nameplate capacity for the first 10 years of the Project. This payment will be compounded into a one-time payment in the year prior (2026) to project operations to the tax district Cimarron-Ensign USD 102.
- The economic development payments are distributed to the taxing bodies according to their relative millage rates.
- The names of the taxing bodies used in this section come from the county and state tax websites.
- The comprehensiveness and accuracy of the analysis below is dependent upon the assumptions listed above. The analysis is to serve as a projection of local tax benefits to the community and is not a guarantee of local tax revenue.
- If the inputs received from NextEra Energy, the laws surrounding renewable energy taxation in Kansas, or the tax rates in Gray County change in a material way after the completion of this report, this analysis may no longer accurately reflect the local taxes to be paid by the Cimarron Storage Project.
- No comprehensive tax payment was calculated, and these calculations are only to be used to illustrate the economic impact of the Project.

Figure 6.1 – Percentages of Local Taxes Paid to Taxing Jurisdictions

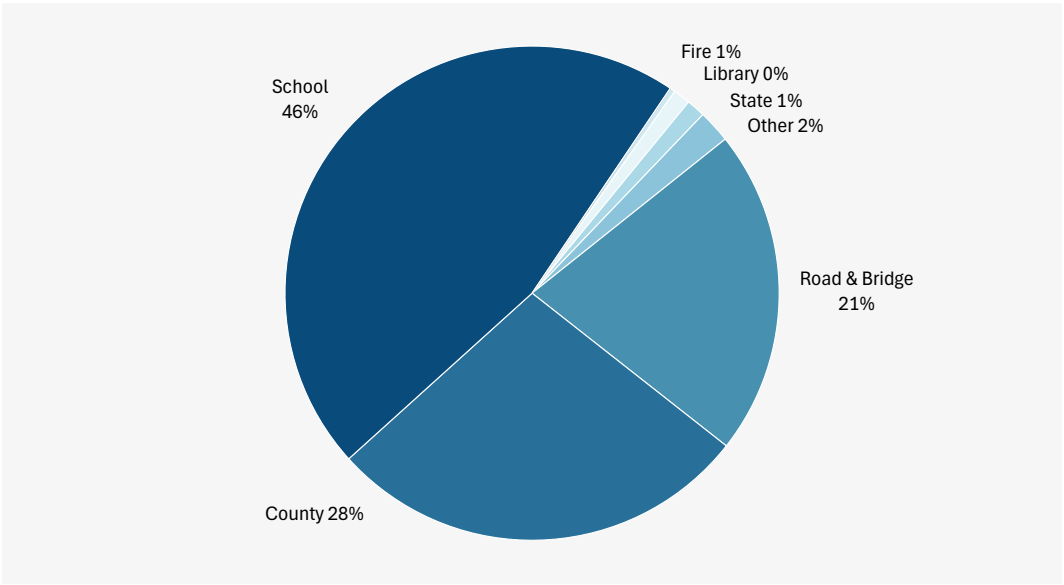


Table 6.1 – Total Local Taxes Paid by the Cimarron Storage Project

Tax Year	Total Paid
2027	$2,490,000
2028	$498,000
…	$498,000
2037	$498,000
2038	$1,132,441
2039	$1,098,278
2040	$1,064,114
…	$1,064,114
2057	$1,064,114
TOTAL	$28,854,771
AVG ANNUAL	$930,799

As shown in Table 6.1, a conservative estimate of the total local taxes for the Project starts out at $498 thousand in 2028 while the 10-year abatement is active. A one-time payment of $2.49 million will be paid to the school district prior to the operational start year. In year 11, taxes rise to over $1.1 million once the abatement has ended. The expected total local taxes paid over the 30-year lifetime of the Project are over $28.8 million, and the average annual local taxes paid will be over $930 thousand.

According to Table 6.2, the total amounts paid over 30 years are over $6.5 million for Gray County Other, over $249 thousand for Gray County Waste Disposal (Landfill), over $76.4 thousand for Gray County Mental Health, over $56.0 thousand for Gray County Intellectual Disability, over $229 thousand for the Gray County Council on Aging, and over $861 thousand for Gray County Ambulance over the Project's lifetime.

Table 6.2 – Local Taxes from the Cimarron Storage Project for the County

Tax Year	Gray County Other	Gray County Waste Disposal (Landfill)	Gray County Mental Health	Gray County Intellectual Disability	Gray County Council on Aging	Gray County Ambulance
2027	$0	$0	$0	$0	$0	$0
2028	$123,162	$4,722	$1,445	$1,058	$4,330	$16,272
…	$123,162	$4,722	$1,445	$1,058	$4,330	$16,272
2037	$123,162	$4,722	$1,445	$1,058	$4,330	$16,272
2038	$280,067	$10,737	$3,286	$2,406	$9,847	$37,003
2039	$271,618	$10,413	$3,187	$2,334	$9,550	$35,886
2040	$263,169	$10,089	$3,088	$2,261	$9,253	$34,770
…	$263,169	$10,089	$3,088	$2,261	$9,253	$34,770
2057	$263,169	$10,089	$3,088	$2,261	$9,253	$34,770
TOTAL	$6,520,345	$249,968	$76,497	$56,019	$229,255	$861,471
AVG ANNUAL	$210,334	$8,063	$2,468	$1,807	$7,395	$27,789

According to Table 6.3, the total amounts paid over 30 years are over $6.1 million for Gray County Road & Bridge, over $324 thousand for Gray County Fire District No. 1, over $100 thousand for the Gray County Library District, over $618 thousand for Pawnee Watershed No. 81, over $235 thousand for the Kansas Educational Building Fund, and over $117 thousand for the State Institutions Building Fund over the Project's lifetime.

Table 6.3 – Local Taxes from the Cimarron Storage Project for Other Taxing Bodies

Tax Year	Gray County Road & Bridge	Gray County Fire District No. 1	Gray County Library District	Pawnee Watershed No. 81	Kansas Educational Building Fund	State Institutions Building Fund
2027	$0	$0	$0	$0	$0	$0
2028	$116,191	$6,135	$1,898	$11,684	$4,446	$2,223
…	$116,191	$6,135	$1,898	$11,684	$4,446	$2,223
2037	$116,191	$6,135	$1,898	$11,684	$4,446	$2,223
2038	$264,215	$13,952	$4,317	$26,569	$10,110	$5,055
2039	$256,244	$13,531	$4,187	$25,768	$9,805	$4,903
2040	$248,273	$13,110	$4,057	$24,966	$9,500	$4,750
…	$248,273	$13,110	$4,057	$24,966	$9,500	$4,750
2057	$248,273	$13,110	$4,057	$24,966	$9,500	$4,750
TOTAL	$6,151,278	$324,817	$100,505	$618,564	$235,375	$117,687
AVG ANNUAL	$198,428	$10,478	$3,242	$19,954	$7,593	$3,796

The largest taxing jurisdictions for local taxes are local school districts. However, the tax implications for school districts are more complicated than for other taxing bodies. School districts receive state aid based on the assessed value of the taxable property within their district. As assessed value increases, the state aid to the school district is decreased.

Although the exact amount of the reduction in state aid to the school districts is uncertain, local project tax revenue is superior to relying on state aid for the following reasons: (1) a storage project can't relocate – it is a permanent structure that will be within the school district's footprint for the life of the Project; (2) the school district can raise the tax rate and increase its revenues as needed; (3) the school district does not have to deal with the year-to-year uncertainty of state aid amounts; (4) the school district does not have to wait for months (or even into the next Fiscal Year) for payment; (5) the Project does not increase the overall cost of education in the way that a new residential development would.

Table 6.4 shows the direct local tax revenue coming from the Project to Cimarron-Ensign USD 102. This tax revenue uses the assumptions outlined earlier to calculate the other tax revenue and assumes that 100% of the Project area is in Cimarron-Ensign USD 102. Over the 30-year life of the Project, the school district is expected to receive over $13.3 million in tax revenue.

Table 6.4 – Local Taxes from the Cimarron Storage Project for the School District

Tax Year	Cimarron-Ensign USD 102 - Other	Cimarron-Ensign USD 102 - Bond & Interest
2027	$2,246,264	$243,736
2028	$184,423	$20,011
…	$184,423	$20,011
2037	$184,423	$20,011
2038	$419,373	$45,505
2039	$406,721	$44,132
2040	$394,070	$42,760
…	$394,070	$42,760
2057	$394,070	$42,760
TOTAL	$12,009,834	$1,303,157
AVG ANNUAL	$387,414	$42,037

VII. Appendix

Table 7.1 – Local and Statewide Compensation by Occupation

BLS Occupation Code	Job Type	Education/ Training Required	Kansas 10th Percentile of Wages	Kansas 90th Percentile of Wages	Kansas Mean Wages	Wichita, KS Metro Area 10th Percentile of Wages	Wichita, KS Metro Area 90th Percentile of Wages	Wichita, KS Metro Area Mean Wages	U.S. Fringe Benefits Median	Total Compensation Local Mean Wages plus U.S. Fringe
	Jobs During Construction									
47-3013	Helpers – Electricians	High school diploma or equivalent	$23,680	$49,600	$35,140	$27,010	$49,750	$36,030	$27,394	$63,424
47-2111	Electricians	High school diploma or equivalent	$37,000	$89,400	$59,750	$38,000	$82,810	$59,430	$27,394	$86,824
47-2061	Construction Laborers	No formal educational credential	$28,020	$52,320	$39,400	$28,020	$48,320	$37,710	$27,394	$65,104
47-2073	Operating Engineers and Other Construction Equipment Operators	High school diploma or equivalent	$34,440	$71,360	$48,960	$34,440	$68,350	$49,120	$27,394	$76,514
47-1011	First-Line Supervisors of Construction Trades	High school diploma or equivalent	$46,840	$99,780	$71,040	$46,580	$98,330	$70,050	$27,394	$97,444
13-1082	Project Management Specialists and Business Operations Specialists		$49,580	$128,290	$90,240	$42,500	$127,670	$85,420	$27,394	$112,814
49-9071	Maintenance and Repair Workers, General (Operations)	High school diploma or equivalent	$27,790	$62,350	$42,910	$24,200	$62,830	$41,580	$27,394	$68,974
13-1111	Management Analysts	Bachelor's degree	$42,870	$124,220	$80,940	$41,000	$122,680	$78,550	$27,394	$105,944
11-1021	General and Operations Managers	Bachelor's degree	$43,960	$168,380	$98,580	$43,180	$166,010	$97,300	$27,394	$124,694
17-2071	Electrical Engineers		$64,390	$139,400	$98,630	$60,580	$129,450	$89,760	$27,394	$117,154
41-3091	Sales Representatives of Services		$30,380	$147,250	$76,130	$29,530	$132,400	$70,250	$27,394	$97,644
53-7062	Laborers and Freight, Stock and Material Movers	No formal educational credential	$27,980	$48,060	$37,970	$24,860	$46,340	$35,200	$27,394	$62,594
43-3031	Bookkeeping, Accounting and Auditing	Some college, no degree	$26,100	$56,950	$40,960	$28,150	$55,550	$40,490	$27,394	$67,884

Source: U.S. Bureau of Labor Statistics (2024), Occupational Employment and Wage Statistics (OEWS) Tables

Table 7.1 – Local and Statewide Compensation by Occupation (Cont.)

BLS Occupation Code	Job Type	Education/ Training Required	Kansas 10th Percentile of Wages	Kansas 90th Percentile of Wages	Kansas Mean Wages	Wichita, KS Metro Area 10th Percentile of Wages	Wichita, KS Metro Area 90th Percentile of Wages	Wichita, KS Metro Area Mean Wages	U.S. Fringe Benefits Median	Total Compensation Local Mean Wages plus U.S. Fringe
	Jobs During Operations									
51-8013	Power Plant Operators	High school diploma or equivalent	$38,860	$124,740	$82,390	#N/A	#N/A	#N/A	$27,394	#N/A
37-3011	Landscaping and Groundskeeping	No formal educational credential	$22,060	$44,700	$33,580	$22,480	$42,060	$32,830	$27,394	$60,224
51-1011	First-Line Supervisors of Production and Operating Workers	High school diploma or equivalent	$43,850	$99,610	$68,460	$43,990	$102,970	$69,960	$27,394	$97,354

Table 7.2 – Occupational Description and Future Outlook

Occupation Code	Occupation Title	Description	Work Environment	Current Employment	Job Growth, 2024-2034 (percent)
11-1021	General and Operations Managers	Plan, direct, or coordinate the operations of public or private sector organizations, overseeing multiple departments or locations. Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources, but are too diverse and general in nature to be classified in any one functional area of management or administration, such as personnel, purchasing, or administrative services. Usually manage through subordinate supervisors. Excludes First-Line Supervisors.	Top executives work in nearly every industry, for both small and large organizations. They often have irregular schedules, which may include working evenings and weekends. Travel is common, particularly for chief executives.	3,584,420	164,000 (4.4%)
13-1082	Project Management Specialists and Business Operations Specialists	Analyze and coordinate the schedule, timeline, procurement, staffing, and budget of a product or service on a per project basis. Lead and guide the work of technical staff. May serve as a point of contact for the client or customer. Excludes "Management Occupations" (11-0000), "Logisticians" (13-1081), "Meeting, Convention, and Event Planners" (13-1121), and "Production, Planning, and Expediting Clerks" (43-5061).	Project management specialists usually work in an office setting. Although project management specialists may collaborate on teams, some work independently. Project management specialists also may travel to their clients' places of business.	1,006,160	58,700 (5.6%)
13-1111	Management Analysts	Conduct organizational studies and evaluations, design systems and procedures, conduct work simplification and measurement studies, and prepare operations and procedures manuals to assist management in operating more efficiently and effectively. Includes program analysts and management consultants. Excludes "Computer Systems Analysts" (15-1211) and "Operations Research Analysts" (15-2031).	Management analysts may travel frequently to meet with clients. Some work more than 40 hours per week.	893,900	94,500 (8.8%)
17-2071	Electrical Engineers	Research, design, develop, test, or supervise the manufacturing and installation of electrical equipment, components, or systems for commercial, industrial, military, or scientific use. Excludes "Computer Hardware Engineers" (17-2061).	Electrical and electronics engineers work in industries including research and development, engineering services, manufacturing, telecommunications, and the federal government. Electrical and electronics engineers generally work indoors in offices. However, they may have to visit sites to observe a problem or a piece of complex equipment.	188,790	13,800 (7.2%)
37-3011	Landscaping and Groundskeeping	Landscape or maintain grounds of property using hand or power tools or equipment. Workers typically perform a variety of tasks, which may include any combination of the following: sod laying, mowing, trimming, planting, watering, fertilizing, digging, raking, sprinkler installation, and installation of mortarless segmental concrete masonry wall units. Excludes "Farmworkers and Laborers, Crop, Nursery, and Greenhouse" (45-2092).	Most grounds maintenance work is done outdoors in all weather conditions. Some work is seasonal, available mainly in the spring, summer, and fall. The work may be repetitive and physically demanding, requiring frequent bending, kneeling, lifting, or shoveling.	943,430	42,400 (3.6%)
41-3091	Sales Representatives of Services	Sell services to individuals or businesses. May describe options or resolve client problems. Excludes "Advertising Sales Agents" (41-3011), "Insurance Sales Agents" (41-3021), "Securities, Commodities, and Financial Services Sales Agents" (41-3031), "Travel Agents" (41-3041), "Sales Representatives, Wholesale and Manufacturing" (41-4010), and "Telemarketers" (41-9041).	Wholesale and manufacturing sales representatives work under pressure because their income and job security depend on the amount of merchandise they sell. Some sales representatives travel frequently.	1,189,330	37,900 (3.1%)
43-3031	Bookkeeping, Accounting and Auditing	Compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. May also check the accuracy of figures, calculations, and postings pertaining to business transactions recorded by other workers. Excludes "Payroll and Timekeeping Clerks" (43-3051).	Most accountants and auditors work full-time. Overtime hours are typical at certain periods of the year, such as for quarterly audits or during tax season.	1,455,770	-94,300 (-5.8%)
47-1011	First-Line Supervisors of Construction Trades	Directly supervise and coordinate activities of construction or extraction workers.	N/A	806,080	49,000 (5.3%)

Sources: U.S. Bureau of Labor Statistics, OEWS (2024); Employment Projections, Occupational Projections Data [Data set] (2024); Occupational Outlook Handbook (OOH) (2025)

Table 7.2 – Occupational Description and Future Outlook (Cont.)

47-2061	Construction Laborers	Perform tasks involving physical labor at construction sites. May operate hand and power tools of all types: air hammers, earth tampers, cement mixers, small mechanical hoists, surveying and measuring equipment, and a variety of other equipment and instruments. May clean and prepare sites, dig trenches, set braces to support the sides of excavations, erect scaffolding, and clean up rubble, debris, and other waste materials. May assist other craft workers. Construction laborers who primarily assist a particular craft worker are classified under "Helpers, Construction Trades" (47-3010). Excludes "Hazardous Materials Removal Workers" (47-4041).	Most construction laborers and helpers typically work full-time and do physically demanding work. Some work at great heights or outdoors in all weather conditions. Construction laborers have one of the highest rates of injuries and illnesses of all occupations.	1,057,660	106,500 (7.3%)
47-2073	Operating Engineers and Other Construction Equipment Operators	Operate one or several types of power construction equipment, such as motor graders, bulldozers, scrapers, compressors, pumps, derricks, shovels, tractors, or front-end loaders to excavate, move, and grade earth, erect structures, or pour concrete or other hard surface pavement. May repair and maintain equipment in addition to other duties. Excludes "Extraction Workers" (47-5000) and "Crane and Tower Operators" (53-7021).	Construction equipment operators may work even in unpleasant weather. Most operators work full-time, and some have irregular work schedules that include nights.	469,270	17,800 (3.6%)
47-2111	Electricians	Install, maintain, and repair electrical wiring, equipment, and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems, or electrical control systems. Excludes "Security and Fire Alarm Systems Installers" (49-2098).	Almost all electricians work full-time. Work schedules may include evenings and weekends. Overtime is common.	742,580	77,400 (9.5%)
47-3013	Helpers – Electricians	Help electricians by performing duties requiring less skill. Duties include using, supplying, or holding materials or tools, and cleaning work area and equipment. Construction laborers who do not primarily assist electricians are classified under "Construction Laborers" (47-2061). Apprentice workers are classified with the appropriate skilled construction trade occupation (47-2011 through 47-2231).	Most construction laborers and helpers typically work full-time and do physically demanding work. Some work at great heights or outdoors in all weather conditions. Construction laborers have one of the highest rates of injuries and illnesses of all occupations.	64,440	100 (0.2%)
49-9071	Maintenance and Repair Workers, General (Operations)	Perform work involving the skills of two or more maintenance or craft occupations to keep machines, mechanical equipment, or the structure of a building in repair. Duties may involve pipe fitting; HVAC maintenance; insulating; welding; machining; carpentry; repairing electrical or mechanical equipment; installing, aligning, and balancing new equipment; and repairing buildings, floors, or stairs. Excludes "Facilities Managers" (11-3013) and "Maintenance Workers, Machinery" (49-9043).	General maintenance and repair workers often carry out many different tasks in a single day. They could work at any number of indoor or outdoor locations. They may work inside a single building, such as a hotel or hospital, or be responsible for the maintenance of many buildings, such as those in an apartment complex or on a college campus.	1,531,700	62,400 (3.8%)
51-1011	First-Line Supervisors of Production and Operating Workers	Directly supervise and coordinate the activities of production and operating workers, such as inspectors, precision workers, machine setters and operators, assemblers, fabricators, and plant and system operators. Excludes team or work leaders.	N/A	685,140	8,300 (1.2%)
51-8013	Power Plant Operators	Control, operate, or maintain machinery to generate electric power. Includes auxiliary equipment operators. Excludes "Nuclear Power Reactor Operators" (51-8011).	Most power plant operators, distributors, and dispatchers work full-time. Many work rotating 8- or 12-hour shifts.	30,720	-3,500 (-11.2%)
53-7062	Laborers and Freight, Stock and Material Movers	Manually move freight, stock, luggage, or other materials, or perform other general labor. Includes all manual laborers not elsewhere classified. Excludes "Construction Laborers" (47-2061) and "Helpers, Construction Trades" (47-3011 through 47-3019). Excludes "Material Moving Workers" (53-7011 through 53-7199) who use power equipment.	Most hand laborers and material movers work full-time. Because materials are shipped around the clock, some workers, especially those in warehousing, work overnight shifts.	2,982,530	44,300 (1.5%)

Table 7.3 – Occupational Output from IMPLAN Construction Model, Direct Jobs, Employment Greater than 1.0

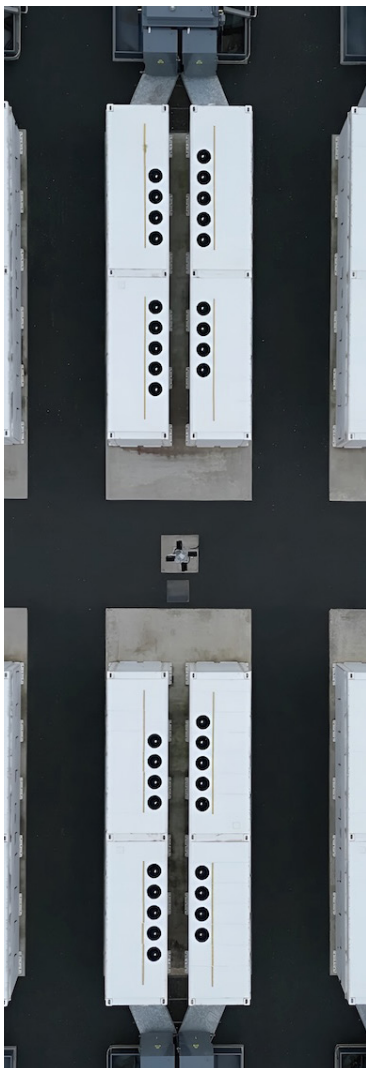
This table is directly modeled for this project.

Occ Code	Occupation	Wage and Salary Employment	Wage and Salary Income	Supplements to Wages and Salaries	Employee Compensation	Hours Worked
47-2000	Construction Trades Workers	3.03	$211,323.90	$36,451.40	$247,775.30	5,778.08
49-9000	Other Installation, Maintenance, and Repair Occupations	2.56	$212,570.81	$36,666.48	$249,237.29	5,361.89

Table 7.4 – Occupational Output from IMPLAN Construction Model, Indirect Jobs, Employment Greater than 1.0

This table is directly modeled for this project.

Occ Code	Occupation	Wage and Salary Employment	Wage and Salary Income	Supplements to Wages and Salaries	Employee Compensation	Hours Worked
47-2000	Construction Trades Workers	2.32	$157,637.80	$27,199.50	$184,837.30	4,398.20



VIII. Glossary

Bb

Battery Energy Storage Systems (BESS)

An array of hundreds or thousands of small batteries that enable energy from renewables, like solar and wind, to be stored and released at a later time.

Cc

Consumer Price Index (CPI)

An index of the changes in the cost of goods and services to a typical consumer, based on the costs of the same goods and services at a base period.

Dd

Direct impacts

During the construction period: the changes that occur in the on-site construction industries in which the direct final demand change is made.

During operating years: the final demand changes that occur in the on-site spending for the BESS operations and maintenance workers.

Ee

Equalized Assessed Value (EAV)

The product of the assessed value of property and the state equalization factor. This is typically used as the basis for the value of property in a property tax calculation.

Ff

Full-time equivalent (FTE)

A unit that indicates the workload of an employed person. One FTE is equivalent to one worker working 2,080 hours in a year. One half FTE is equivalent to a half-time worker or someone working 1,040 hours in a year.

Hh

HV line extension

High-voltage electric power transmission links used to connect generators to the electric transmission grid.

Ii

IMPLAN (IMpact analysis for PLANning)

A business that is the leading provider of economic impact data and analytic applications. IMPLAN data is collected at the federal, state, and local levels and used to create state-specific and county-specific industry multipliers.

Indirect impacts

Impacts that occur in industries that make up the supply chain for that industry.

During the construction period: the changes in inter-industry purchases resulting from the direct final demand changes, including construction spending on materials and equipment and other purchases of goods and off-site services.

During operating years: the changes in inter-industry purchases resulting from the direct final demand changes.

Induced impacts

The changes that occur in household spending as household income increases or decreases as a result of the direct and indirect effects of final demand changes.

Inflation

A persistent rise in the general level of prices related to an increase in the volume of money and resulting in the loss of value of currency. Inflation is typically measured by the CPI.

Mm

Median Household Income (MHI)

The income amount that divides a population into two equal groups; half having an income above that amount and half having an income below that amount.

Millage rate

The tax rate, as for property, assessed in mills per dollar.

Multiplier

A factor of proportionality that measures how much a variable changes in response to a change in another variable.

MW

A unit of power, equal to one million watts or one thousand kilowatts.

MWac (megawatt alternating current)

The power capacity of a BESS *after* its direct current output has been fed through an inverter to create an alternating current (AC). A BESS rated MWac will always be lower than its rated MWdc due to inverter losses. AC is the form in which electric energy is delivered to businesses and residences and that consumers typically use when plugging electric appliances into a wall socket.

MWdc (megawatt direct current)

The power capacity of a BESS *before* its direct current output has been fed through an inverter to create an alternating current. A BESS rated MWdc will always be higher than its rated MWac.

Nn

Net economic impact

Total change in economic activity in a specific region, caused by a specific economic event.

Oo

Output

Economic output measures the value of goods and services produced in a given area. Gross Domestic Product is the economic output of the United States as a whole.

Rr

Real Gross Domestic Product (GDP)

A measure of the value of goods and services produced in an area and adjusted for inflation over time.

Tt

Tax rate

The percentage (or millage) of the value of a property to be paid as a tax.

Total economic output

The quantity of goods or services produced in a given time period by a firm, industry, county, or country.

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X. Curriculum Vitae (Abbreviated)

DAVID G. LOOMIS

Strategic Economic Research, LLC

President

Education

Doctor of Philosophy (PhD), Economics, Temple University, Philadelphia, Pennsylvania, May 1995

Bachelor of Arts (BA), Mathematics and Honors Economics, Temple University, Magna Cum Laude, May 1985

Experience

2011 – present, Strategic Economic Research, LLC

- Supervises all aspects of analysis and report creation
- Performed over 500 economic impact analyses on policy initiatives and energy projects, such as wind energy, solar energy, natural gas plants, and transmission lines, at the county and state levels
- Provided expert testimony more than 100 times in formal proceedings before state legislative bodies, state public utility commissions, and county boards regarding wind, solar, and transmission projects
- Grew the company from a single employee to over 25 team members

1996 – 2023, Department of Economics at Illinois State University, Normal, IL

Professor Emeritus – (2023 - present)

Full Professor – (2010 - 2023)

Associate Professor – (2002 - 2009)

Assistant Professor – (1996 - 2002)

- Taught Regulatory Economics; Telecommunications Economics and Public Policy; Industrial Organization and Pricing; Individual and Social Choice; Economics of Energy and Public Policy; and a Graduate Seminar Course in Electricity, Natural Gas, and Telecommunications Issues
- Supervised up to five graduate students in research projects each semester and served on numerous departmental committees

1997 – 2023, Institute for Regulatory Policy Studies, Normal, IL

Executive Director (2005 - 2023)

Co-Director (1997 - 2005)

- Grew contributing membership from five companies to 16 organizations
- Doubled the number of workshop/training events annually
- Supervised two directors, administrative staff, and the internship program
- Developed and implemented state-level workshops concerning regulatory issues related to the electric, natural gas, and telecommunications industries

2006 – 2018, Illinois Wind Working Group, Normal, IL

Director

- Founded the organization and grew the organizing committee to over 200 key wind stakeholders
- Organized an annual wind energy conference with over 400 attendees
- Organized strategic conferences to address critical wind energy issues
- Initiated monthly conference calls to stakeholders
- Devised organizational structure and by-laws

2007 – 2018, Center for Renewable Energy, Normal, IL

Director

- Created founding document approved by the Illinois State University Board of Trustees and Illinois Board of Higher Education
- Secured over $150,000 in funding from private companies
- Hired and supervised four professional staff members and supervised three faculty members as Associate Directors
- Reviewed renewable energy manufacturing grant applications for the Illinois Department of Commerce and Economic Opportunity for a $30 million program
- Created technical "Due Diligence" documents for the Illinois Finance Authority loan program for wind farm projects in Illinois
- Published 40 articles in leading journals, such as *AIMS Energy*, *Renewable Energy*, *National Renewable Energy Laboratory Technical Report*, *Electricity Journal*, *Energy Economics*, *Energy Policy*, and many others
- Raised over $7.7 million in grants and over $2.7 million in external funding

BRYAN A. LOOMIS

Strategic Economic Research, LLC

Vice President

Education

Master of Business Administration (MBA), Belmont University, Nashville, Tennessee, 2017

Experience

2019 – present, Strategic Economic Research, LLC

- Serves as lead analyst on economic impact reports, overseeing all aspects of analysis and report creation
- Communicates with developers about economic impact, property tax, and land use analyses
- Conducts non-standard analyses and memos for unique energy-related projects, such as statewide legislation, property tax impacts on school district state aid, and analyzing eligibility for energy community bonus adders to tax credits
- Oversees improvements to both reports and team processes

Expert Testimony

- Provides third-party expert testimony on behalf of developers for special-use permitting hearings, county board proceedings, and boards of zoning appeals (in seven states thus far)

Property Tax Analysis and Land Use Director (2019 - 2021)

- Directed the property tax analysis by training other associates on the methodology and overseeing the process for over twenty states
- Improved the property tax analysis methodology by researching various state taxing laws and implementing depreciation, taxing jurisdiction millage rates, and other factors into the tax analysis tool
- Executed land use analyses by running Monte Carlo simulations of expected future profits from farming and comparing that to the solar lease
- Performed economic impact modeling using JEDI and IMPLAN tools
- Improved workflow processes by capturing all tasks associated with economic modeling and report-writing, and created automated templates in Asana workplace management software

2019 – 2021, Viral Healthcare Founders LLC, Nashville, TN

CEO and Founder

CHRISTOPHER THANKAN

Strategic Economic Research, LLC

Director of Economic Impact Analysis

Education

Bachelor of Science in Sustainable & Renewable Energy (BS), Minor in Economics, Illinois State University, Summa Cum Laude, Normal, IL, 2021

Experience

2021 – present, Strategic Economic Research, LLC

- Creates economic impact results for hundreds of renewable energy projects
- Utilizes IMPLAN software and Excel for analyses and update models, procedures, methodologies, etc.
- Quality checks internal team members' analysis and project cost information from clients
- Addresses client questions and concerns about analysis and reports
- Developed SER's proprietary economic impact analysis model
- Improved property tax analysis methodology and conducted property tax analysis for different U.S. states
- Researched taxation in states outside research portfolio
- Researched school funding and the impact of renewable energy on state aid to school districts and completed ad hoc research requests given by the company president

Expert Testimony

- Provided expert testimony in formal proceedings before county boards and boards of zoning appeals in Kansas, Illinois, and South Dakota
- Served as an economic impact expert for open house meetings in Colorado and New Mexico
- Presented on economic impacts of renewable energy projects in Missouri for the 2024 Midwest Energy Policy Series Renewables & Efficiency Conference in Columbia, MO
- Hosted and presented on numerous SER webinars discussing economic impacts and successful permitting

DEBORAH DINGESS

Strategic Economic Research, LLC

Director of Tax Research

Education

Master of Science in Taxation (MST), University of Cincinnati - Carl H. Lindner College of Business, Cincinnati, OH, August 2021

Bachelor of Arts in Financial Economics and Business Management (BA), Capital University, Columbus, OH, August 2012

Experience

2025 – present, Strategic Economic Research, LLC

- Leads local tax research for utility-scale renewable energy projects across all 50 states
- Analyzes state and local tax codes, regulations, and case law related to renewable energy projects
- Develops and refines standardized local tax research templates, process documentation, and modeling tools
- Delivers local tax guidance to clients, permitting teams, zoning boards, and local government stakeholders
- Provides third-party expert testimony on tax methodology in local permitting proceedings on behalf of developers

Expert Testimony

- Provided expert testimony in formal proceedings before county boards and boards of zoning appeals in Ohio

2024 – 2025, Lumen Technologies, Denver, CO

Senior Tax Analyst, Transaction Tax and Compliance

- Prepared U.S. and Canadian transaction tax filings (sales/gross receipts/excise; GST/HST/PST); leveraged SAP and Alteryx
- Streamlined SOPs and training; researched U.S./international tax changes; resolved jurisdictional notices and exams

2019 – 2024, IGS Energy, Dublin, OH

Senior Tax Analyst (2023 - 2024)

Tax Analyst (2019 - 2023)

- Filed multi-state sales, property, and excise taxes across entities
- Established automations and tax reporting improvements
- Partnered with Finance and cross-functional teams on tax-sensitive initiatives

2016 – 2019, OhioHealth, Columbus, OH

Tax Analyst (2018 - 2019)

Senior Accountant (2017 - 2018)

Accountant (2016 - 2017)

- Managed CAT, local, and multi-state tax filings; coordinated with external firms on tax return preparation; supported month-end close

2014 – 2015, Penn National Gaming, Columbus, OH

Accountant (2015)

Revenue Auditor (2014)

2013, American Electric Power, Columbus, OH

Cost Coordinator (2013)

SAWYER KEITHLEY

Strategic Economic Research, LLC

Manager of Research & Analysis
Front Matter Team Lead

Education

Master of Science in Applied Economics (MS), Sequence in Electricity, Natural Gas, and Telecommunications, Illinois State University, Normal, IL, 2024

Bachelor of Science in Managerial Economics (BS), Minor in Business Administration, Magna Cum Laude, Illinois State University, Normal, IL, 2022

Experience

2021 – present, Strategic Economic Research, LLC

- Uses cost inputs from customers to forecast potential new employment, output, and earnings impacts created by the proposed energy project
- Leads a team to gather data, write, and edit narratives for county-specific or state-specific tables and graphs
- Compiles project-specific information and researches property tax information for the county of interest
- Designed and implemented a standardized land use reporting framework for project analysis, successfully quantifying and highlighting the net land use impacts of solar projects across agricultural and forestry sectors (cropland, pastureland, and timberland)

Expert Testimony

- Provided expert testimony in formal proceedings before a county board and board of zoning appeals in Iroquois County, Illinois

June 2023 – August 2023, Nicor Gas, Rates Department

Rates Intern

- Conducted independent research to update the cost factors used by the company for feasibility studies and wrote a summary report for project findings
- Gathered historical and current information about the natural gas industry and analyzed patterns in legislation surrounding the future of natural gas

TIMOTHY ROBERTS

Strategic Economic Research, LLC

Manager of Data Analysis
Tax Team Lead

Education

Institute for Professionals in Taxation (IPT) – Property Tax School, Certificate of Completion (2025)

Experience

2022 – present, Strategic Economic Research, LLC

- Oversees the company's tax team, manages a group of analysts, and ensures accuracy and consistency across deliverables
- Leads client communication by reviewing project inputs, addresses technical questions, and provides explanations of tax law and research
- Researches state and county local tax policies and develops state-specific valuation templates across multiple renewable energy technologies
- Designs, manages, and maintains the company's internal database, ensuring data accuracy across projects
- Develops custom programs and applications using Python and other programming tools to streamline workflows, automate repetitive tasks, and improve data quality
- Creates external-facing websites to support company projects
- Provides training, mentorship, and oversight to analysts
- Conducted and reviewed over 300 local tax analyses, as well as economic impact analyses, land use analyses, and county-level economic analyses for renewable energy projects nationwide
- Contributed to company recognition, including a prestigious award from Google for Renewable Energy Leadership

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