

**THE POTENTIAL ECONOMIC IMPACTS OF THE PROPOSED
KARIS CRITICAL DATA CENTER DEVELOPMENT IN NAPERVILLE**

A Report to

KARIS CRITICAL, LLC

From

GRUEN GRUEN + ASSOCIATES

Urban Economists, Market Strategists & Land Use/Public Policy Analysts

July 2025

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*APPLYING KNOWLEDGE
CREATING RESULTS
ADDING VALUE*

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION.....	1
SUMMARY OF FINDINGS – ECONOMIC IMPACT ESTIMATES	1
ECONOMIC IMPACTS ON THE NAPERVILLE AND DUPAGE COUNTY ECONOMIES ..	3
Introduction	3
Data Sources	4
ONE-TIME CONSTRUCTION IMPACTS	4
ON-GOING ECONOMIC IMPACTS	7
Base Case Scenario	7
High Case Scenario	9
APPENDIX A: RIMS II MULTIPLIERS	12
APPENDIX B: KARIS CRITICAL JOB ESTIMATES	15

LIST OF TABLES

Table 1: Annual One-Time and On-Going Economic Impacts of the Proposed Karis Critical Data Center Development on the DuPage County Economy.....	1
Table 2: Annual One-Time and On-Going Economic Impacts of the Proposed Karis Critical Data Center Development on the Naperville Economy.....	2
Table 3: One-Time Economic Impacts of Construction on DuPage County Economy	5
Table 4: One-Time Economic Impacts of Construction on Naperville Economy	6
Table 5: On-Going Annual Economic Impacts of Operations on DuPage County Economy (Base Case Scenario)	7
Table 6: On-Going Annual Economic Impacts of Operations on Naperville Economy (Base Case Scenario)	8
Table 7: On-Going Annual Economic Impacts of Operations on DuPage County Economy (High Case Scenario)	9
Table 8: On-Going Annual Economic Impacts of Operations on Naperville Economy (High Case Scenario)	10

INTRODUCTION

Karis Critical proposes to develop two buildings - a 145,000-square-foot data center (in a Phase “1A” of building construction) with an anticipated 67,000-square-foot expansion (in Phase “1B”) of the building construction and a 212,000-square-foot data center (in a Phase “2”) of the development at 1960 Lucent Lane in Naperville. The two buildings totaling 424,000 square feet of space are estimated to generate 72 megawatts of capacity at full build-out.

Gruen Gruen + Associates (“GG+A”) was asked to evaluate and describe the economic impact that the Karis Critical data center development is estimated to generate within the city of Naperville and DuPage County.

This report summarizes the economic impact estimates associated with the development and operation of the Karis Critical data center development by construction phase and as complete. The figures presented in this report are expressed in constant 2025 dollars. That is, the possible effects of inflation or deflation on future economic activities are not quantified.

SUMMARY OF FINDINGS - ECONOMIC IMPACT ESTIMATES

Table 1 summarizes the estimated annual one-time construction and on-going economic impacts of the proposed Karis Critical data center development on the DuPage County economy.

TABLE 1					
Annual One-Time and On-Going Economic Impacts of the Proposed Karis Critical Data Center on DuPage County Economy¹					
		Phase 1A	Phase 1B	Phase 2	Total
<i>One-Time Impacts of Construction (Average Annual)²</i>	Jobs ³	149	80	217	152
	Labor Income ⁴	\$9.4	\$5.0	\$13.7	\$9.6
	Output ⁵	\$59.9	\$32.1	\$87.4	\$61.2
<i>On-Going Annual Impacts at Full Build-Out</i>	Jobs ³	149 – 273	16 - 68	109 - 265	273 – 607
	Labor Income ⁴	\$11.7 - \$21.4	\$1.3 - \$5.4	\$8.5 - \$20.8	\$21.4 - \$47.6
	Output ⁵	\$103.6 - \$190.5	\$11.2 - \$47.6	\$75.6 - \$184.9	\$190.5 - \$423
¹ Total gross impact includes direct, indirect, and induced effects. Income and output presented in millions of current dollars. Figures are rounded. ² Total average annual construction impact is not cumulative or the sum of Phases 1A, 1B, and 2. Total for construction is the average annual over the 60-month construction process. Phase 1A is estimated to be constructed in 21 months; Phase 1B is estimated to be constructed in 18 months; and Phase 2 is estimated to be constructed in 21 months. ³ Full- and part-time employment (jobs). ⁴ Wages, salaries, benefits, and proprietor income. ⁵ Local value of goods and services produced or sold.					
Sources: RIMS II, Regional Production Division, Bureau of Economic Analysis; Gruen Gruen + Associates.					

Initial one-time construction of the Karis Critical data center development is estimated to create 152 construction-related jobs (average annual for a period of one year) within the DuPage County

Karis Critical Naperville Data Center Economic Impact Analysis

economy. The total annual labor income impact related to construction is estimated at approximately \$9.6 million. The construction of the Karis Critical data center development is estimated to generate nearly \$61.2 million in annual economic output within DuPage County for a period of five years. Phase 1A construction is estimated to create 149 annual jobs with annual labor income impact of nearly \$9.4 million. Phase 1B construction is estimated to create 80 annual jobs with annual labor income impact of \$5.0 million. Phase 2 construction is estimated to create 217 annual jobs with annual labor income impact of \$13.7 million.

On-going operations of the Karis Critical data center development at build-out are estimated to support at least 273 permanent jobs within the DuPage County economy, and potentially as many as 607 permanent jobs if data center tenant requirements are intensive (with respect to Information Technology support). The total annual labor income impact is estimated to range from approximately \$21.4 million to \$47.6 million, or about \$78,000 per job. Data center operations are estimated to generate total annual output within DuPage County ranging from approximately \$190.5 million to \$423.0 million.

Table 2 summarizes the estimated annual one-time construction and on-going economic impacts of the Karis Critical data center development on the Naperville economy.

TABLE 2 Annual One-Time and On-Going Economic Impacts of the Proposed Karis Critical Data Center on Naperville Economy¹					
		Phase 1A	Phase 1B	Phase 2	Total
<i>One-Time Impacts of Construction (Average Annual)²</i>	Jobs ³	112	60	163	114
	Labor Income ⁴	\$7.3	\$3.9	\$10.6	\$7.4
	Output ⁵	\$44.3	\$23.7	\$64.6	\$45.2
<i>On-Going Annual Impacts at Full Build-Out</i>	Jobs ³	74 – 136	8 - 34	54 - 132	136 – 303
	Labor Income ⁴	\$7.3 - \$13.3	\$0.8 - \$3.3	\$5.3 - \$12.9	\$13.3 - \$29.6
	Output ⁵	\$75.9 - \$139.5	\$8.2 - \$34.9	\$55.4 - \$135.4	\$139.5 - \$309.7
¹ Total gross impact include direct, indirect, and induced effects. Income and output presented in millions of current dollars. Figures are rounded. ² Total average annual construction impact is not cumulative or the sum of Phases 1A, 1B, and 2. Total for construction is the average annual over the 60-month construction process. Phase 1A is estimated to be constructed in 21 months; Phase 1B is estimated to be constructed in 18 months; and Phase 2 is estimated to be constructed in 21 months. ³ Full- and part-time employment (jobs). ⁴ Wages, salaries, benefits, and proprietor income. ⁵ Local value of goods and services produced or sold.					
Sources: RIMS II, Regional Production Division, Bureau of Economic Analysis; Gruen Gruen + Associates.					

About 75 percent of the construction-related economic impacts are estimated to occur within Naperville, or 114 jobs with annual labor income of about \$7.4 million.

About 50 percent of the permanent jobs and 62 percent of the annual labor income are estimated to occur within Naperville. On-going operations of the Karis Critical data center development at build-out are estimated to support 136 to 303 permanent jobs within the Naperville economy. The total

annual labor income impact is estimated to range from \$13.3 million to \$29.6 million, or approximately \$98,000 per total job. Direct on-site employment at the data center is estimated to have an average income of \$136,300 per job. Karis Critical data center operations are estimated to generate total annual output within the Naperville economy of \$139.5 million to \$309.7 million.

ECONOMIC IMPACTS ON THE NAPERVILLE AND DUPAGE COUNTY ECONOMIES

Introduction

Three kinds of economic impact will be associated with the proposed Karis Critical data center development and operations: (1) employment; (2) income (the sum of wages and salaries); and (3) output, or the volume of goods and services produced.

These three types of economic impacts are defined and estimated in terms of:

- **Direct Effects** – The number of jobs, income, and economic output supported by the expenditures made on the initial development and by the operations of the Karis Critical data center; and
- **Indirect and Induced Effects** – The changes in the number of jobs, income, and output produced, based on interindustry transactions and interdependencies among industries. In addition to these indirect or spillover effects, indirect effects also include what are sometimes referred to as “induced effects” which occur as wages paid to employees get spent and recirculated within the local economy.

The initial development and construction activity will generate temporary or “one-time” impacts within the local economy. Once completed and occupied, the operations of the Karis Critical data center development will generate an “on-going” or recurring economic impact on the local and regional economy as the data center produces sales, pays wages to employees, and purchases goods and services from other vendors or contractors in the local economy.

Data Sources

The economic impact analysis is based on anticipated characteristics of the proposed data center development, provided by representatives of Karis Critical, and RIMS II input-output multipliers obtained from the United States Bureau of Economic Analysis (BEA), a provider of custom input-output data.¹

The RIMS II multipliers quantify how a change in one economic sector will affect other industries within a specific local area – in this case, DuPage County. The on-going impact of data center operations is based on multipliers estimated by the BEA for the “Data Processing, Hosting, and Other Information Services” industry in DuPage County. This sector is estimated to have the highest direct-effect employment multiplier of any industry within DuPage County at 4.02 (indicating that slightly more than four total jobs are created for each new “direct” job). Appendix A contains a copy of the 2021 RIMS II multipliers used for this economic impact analysis.

ONE-TIME CONSTRUCTION IMPACTS

Construction of the Karis Critical data center development is expected to occur over a 60-month period. According to Karis Critical, the total construction hard (core and shell) costs and sitework costs to construct the two buildings for Phases 1A, 1B, and 2 totaling about 424,000 square feet of space is estimated at \$439 per square foot or \$186.1 million. This cost estimate excludes expenditures related to land acquisition, soft costs (e.g., architectural and engineering fees), and critical mechanical, engineering, and plumbing fixtures and equipment and IT equipment (which may be purchased from outside of DuPage County).

¹ Since GG+A originally completed the economic impact analysis summarized in this report and earlier versions, the Bureau of Economic Analysis has released a new (as of 2023, updated from 2021) RIMS II multiplier dataset for DuPage County. The analysis reflected in this report uses the prior 2021 dataset. 2022-2023 economic conditions were distorted (inflated) by pandemic-related volatility. The fiscal stimulus, emergency spending (e.g., ARPA funds), high inflation, and supply chain disruptions captured in the most recent dataset may skew typical economic relationships and interactions between industries. For modeling long-term impacts, the 2021 multipliers may provide a less distorted, more stable economic picture. Using the 2023 dataset results in an estimate of ongoing Naperville jobs which are 18 percent lower than the estimate using the 2021 dataset (equating to 18 jobs under the base case scenario) but the average annual income per local job created would increase by about seven percent to nearly \$105,000. In the context of the Naperville and DuPage economy, the differences are immaterial. Under either the 2021 or 2023 RIMS II dataset, the impacts are of the same magnitude of about 100-150 jobs with average labor income of about \$100,000 per job.

Karis Critical Naperville Data Center Economic Impact Analysis

Table 3 summarizes the estimated one-time construction (direct, indirect, and induced) economic impact on the DuPage County economy.

TABLE 3			
One-Time Economic Impacts of Construction on DuPage County Economy			
Average Annual over Construction Period¹	Employment¹ # Jobs	Annual Income² \$	Annual Output³ \$
Phase 1A			
Direct	92.9	6,195,190	36,457,143
Indirect & Induced	56.2	3,199,816	23,482,046
Total	149.1	9,395,006	59,939,189
<i>Multiplier</i>	<i>1.61</i>	<i>1.52</i>	<i>1.64</i>
Phase 1B			
Direct	49.8	3,319,314	19,533,333
Indirect & Induced	30.1	1,714,426	12,581,420
Total	79.9	5,033,740	32,114,753
<i>Multiplier</i>	<i>1.61</i>	<i>1.52</i>	<i>1.64</i>
Phase 2			
Direct	135.4	9,030,606	53,142,857
Indirect & Induced	81.9	4,664,308	34,229,314
Total	217.3	13,694,914	87,372,171
<i>Multiplier</i>	<i>1.61</i>	<i>1.52</i>	<i>1.64</i>
¹ Total full- and part-time jobs created for a period of one year.			
² Total labor income associated with additional jobs.			
³ Total volume of added economic activity.			
Sources: RIMS II, Regional Production Division, Bureau of Economic Analysis; Gruen Gruen + Associates.			

Based upon Regional Input-Output Modeling System (RIMS II) multipliers obtained from the Bureau of Economic Analysis for DuPage County, GG+A estimates that construction of the Karis Critical data center development will generate an annual employment impact within DuPage County totaling about 149 jobs for Phase 1A of the development comprising 145,000 square feet of space, 80 jobs for Phase 1B of the development comprising 67,000 square feet of an expansion of the first building, and 217 jobs for Phase 2 of the development comprising 212,000 square feet of building space. The total annual earnings impact within DuPage County is estimated at approximately \$9.4 million (or the equivalent of about \$63,000 per job) for Phase 1A, \$5.0 million for Phase 1B, and \$13.7 million for Phase 2. The total annual economic output impact on DuPage County is estimated at \$59.9 million for Phase 1A, \$32.1 million for Phase 1B, and \$87.4 million for Phase 2.

As indicated above in Table 3, multipliers associated with the construction activity are estimated to range from 1.52 to 1.64 in DuPage County. The employment multiplier of 1.61 indicates that for every 10 jobs created directly on-site, an additional six jobs will be indirectly supported elsewhere in DuPage County from construction activity. The income multiplier of 1.52 indicates for every dollar of income,

Karis Critical Naperville Data Center Economic Impact Analysis

an additional \$0.52 will be indirectly created elsewhere in DuPage County. The output multiplier of \$1.64 indicates for every dollar of output directly generated by the development an additional \$0.64 will be indirectly generated throughout DuPage County.

Table 4 summarizes the estimated one-time construction (direct, indirect, and induced) economic impact on Naperville economy.

TABLE 4			
One-Time Economic Impacts of Construction on Naperville Economy¹			
	Employment ² # Jobs	Annual Income ³ \$	Annual Output ⁴ \$
Phase 1A			
Direct	92.9	6,195,190	36,457,143
Indirect & Induced	18.7	1,066,605	7,827,349
Total	111.6	7,261,295	44,284,491
<i>Multiplier</i>	<i>1.20</i>	<i>1.17</i>	<i>1.21</i>
Phase 1B			
Direct	49.8	3,319,314	19,533,333
Indirect & Induced	10.0	571,475	4,193,807
Total	59.8	3,890,789	23,727,140
<i>Multiplier</i>	<i>1.20</i>	<i>1.17</i>	<i>1.21</i>
Phase 2			
Direct	135.4	9,030,606	53,142,857
Indirect & Induced	27.3	1,554,769	11,409,771
Total	162.7	10,585,376	64,552,629
<i>Multiplier</i>	<i>1.20</i>	<i>1.17</i>	<i>1.21</i>
¹ Local estimates assume that thirty-three percent (33%) of indirect and induced activity occurs within the city of Naperville. City estimates are included within DuPage County (i.e., not additive). ² Total full- and part-time jobs created for a period of one year. ³ Total labor income associated with additional jobs. ⁴ Total volume of added economic activity.			
Sources: RIMS II, Regional Production Division, Bureau of Economic Analysis; Gruen Gruen + Associates.			

Approximately 75 percent of the estimated one-time construction impacts within DuPage County are estimated to occur within the city of Naperville. GG+A estimates that construction of the Karis Critical data center development will generate an annual employment impact within Naperville totaling about 112 jobs for Phase 1A of the development, 60 jobs for Phase 1B of the development, and 163 jobs for Phase 2 of the development. The total annual earnings impact within Naperville is estimated at approximately \$7.3 million (or the equivalent of about \$65,000 per job) for Phase 1A, \$571,500 for Phase 1B, and \$10.6 million for Phase 2. The total annual economic output impact on Naperville is estimated at \$44.3 million for Phase 1A, \$23.7 million for Phase 1B, and \$64.6 million for Phase 2.

ON-GOING ECONOMIC IMPACTS

The projected economic impact of on-going data center operations is based on estimates provided by Karis Critical, which include detailed staffing projections under two operating scenarios: a “Base Case” and a “High Case.” The Base Case assumes a single-tenant user with minimal IT support needs, while the High Case envisions a multi-tenant facility with more intensive IT support requirements. Appendix B summarizes the employment assumptions and job estimates provided by Karis Critical.

Base Case Scenario

Table 5 summarizes the estimated annual economic impact associated with the occupancy and operations of the proposed Karis Critical data center on the DuPage County economy under the Base Case operating scenario. According to Karis Critical, approximately 68 employees will be based on-site at the two data center buildings in Naperville.

TABLE 5 On-Going Annual Economic Impacts of Operations on DuPage County Economy (Base Case Scenario)			
	Employment ¹ # Jobs	Annual Income ² \$	Annual Output ³ \$
Phase 1A			
Direct	37.0	5,043,285	62,023,558
Indirect & Induced	111.8	6,623,346	41,624,010
Total	148.8	11,666,631	103,647,568
<i>Multiplier</i>	<i>4.02</i>	<i>2.31</i>	<i>1.67</i>
Phase 1B			
Direct	4.0	545,220	6,705,250
Indirect & Induced	12.1	716,037	4,499,893
Total	16.1	1,261,257	11,205,143
<i>Multiplier</i>	<i>4.02</i>	<i>2.31</i>	<i>1.67</i>
Phase 2			
Direct	27.0	3,680,235	45,260,434
Indirect & Induced	81.5	4,833,253	30,374,278
Total	108.5	8,513,488	75,634,712
<i>Multiplier</i>	<i>4.02</i>	<i>2.31</i>	<i>1.67</i>
¹ Total full- and part-time jobs created for a period of one year. ² Total labor income associated with additional jobs. ³ Total volume of added economic activity.			
Sources: RIMS II, Regional Production Division, Bureau of Economic Analysis; Gruen Gruen + Associates.			

GG+A estimates that operations of the Karis Critical data center development will generate an annual employment impact within DuPage County totaling about 149 jobs for Phase 1A, 16 jobs for Phase 1B, and 109 jobs for Phase 2 of the development. The total annual earnings impact within DuPage

Karis Critical Naperville Data Center Economic Impact Analysis

County is estimated at approximately \$11.7 million (or the equivalent of about \$78,000 per job) for Phase 1A, \$1.3 million for Phase 1B, and \$8.5 million for Phase 2. The total annual economic output impact on DuPage County is estimated at \$103.6 million for Phase 1A, \$11.2 million for Phase 1B, and \$75.6 million for Phase 2.

As indicated above in Table 5, multipliers associated with the operations of the data center are estimated to range from 1.67 to 4.02 in DuPage County. The employment multiplier of 4.02 indicates that for every 10 jobs created directly on-site, an additional 30 jobs will be supported indirectly in DuPage County from operations activity. The labor income multiplier of 2.31 indicates for every \$1.00 directly generated, an additional \$1.31 of income is generated elsewhere in DuPage County. The output multiplier of 1.67 indicates for every \$1.00 of output directly generated that an additional \$0.67 is estimated to be generated throughout DuPage County.

Table 6 summarizes the estimated annual economic impact associated with the occupancy and operations of the proposed Karis Critical data center on the Naperville economy.

TABLE 6 On-Going Annual Economic Impacts of Operations on Naperville Economy (Base Case Scenario)¹			
	Employment ² # Jobs	Annual Income ³ \$	Annual Output ⁴ \$
Phase 1A			
Direct	37.0	5,043,285	62,023,558
Indirect & Induced	37.3	2,207,782	13,874,670
Total	74.3	7,251,067	75,898,228
<i>Multiplier</i>	<i>2.01</i>	<i>1.44</i>	<i>1.22</i>
Phase 1B			
Direct	4.0	545,220	6,705,250
Indirect & Induced	4.0	238,679	1,499,964
Total	8.0	783,899	8,205,214
<i>Multiplier</i>	<i>2.01</i>	<i>1.44</i>	<i>1.22</i>
Phase 2			
Direct	27.0	3,680,235	45,260,434
Indirect & Induced	27.2	1,611,084	10,124,759
Total	54.2	5,291,319	55,385,194
<i>Multiplier</i>	<i>2.01</i>	<i>1.44</i>	<i>1.22</i>
¹ Local estimates assume that thirty-three percent (33%) of indirect and induced activity occurs within the city of Naperville. City estimates are included within DuPage County (i.e., not additive). ² Total full- and part-time jobs created for a period of one year. ³ Total labor income associated with additional jobs. ⁴ Total volume of added economic activity.			
Sources: RIMS II, Regional Production Division, Bureau of Economic Analysis; Gruen Gruen + Associates.			

Karis Critical Naperville Data Center Economic Impact Analysis

Approximately 50 percent of the permanent jobs and 62 percent of the annual labor income impacts within DuPage County are estimated to occur within the city of Naperville. Under the Base Case scenario, GG+A estimates that operations of the Karis Critical data center development will generate an annual employment impact within Naperville totaling about 74 jobs for Phase 1A, eight (8) jobs for Phase 1B, and 54 jobs for Phase 2 of the development. The total annual earnings impact within Naperville is estimated at approximately \$7.3 million (or the equivalent of about \$98,000 per job) for Phase 1A, less than \$1 million for Phase 1B, and \$5.3 million for Phase 2 of the development. The total annual economic output impact on Naperville is estimated at \$139.5 million upon full build-out of the development.

High Case Scenario

Table 7 summarizes the estimated annual economic impact associated with the occupancy and operations of the proposed Karis Critical data center on the DuPage County economy under the High Case operating scenario. According to Karis Critical, approximately 151 employees could be based on-site at the two data center buildings in Naperville if occupied by multiple tenants with high IT support requirements.

TABLE 7 On-Going Annual Economic Impacts of Operations on DuPage County Economy (High Scenario)			
	Employment ¹ # Jobs	Annual Income ² \$	Annual Output ³ \$
Phase 1A			
Direct	68.0	9,268,740	113,989,242
Indirect & Induced	205.4	12,172,636	76,498,181
Total	273.4	21,441,376	190,487,423
<i>Multiplier</i>	<i>4.02</i>	<i>2.31</i>	<i>1.67</i>
Phase 1B			
Direct	17.0	2,317,185	28,497,311
Indirect & Induced	51.3	3,043,159	19,124,545
Total	68.3	5,360,344	47,621,856
<i>Multiplier</i>	<i>4.02</i>	<i>2.31</i>	<i>1.67</i>
Phase 2			
Direct	66.0	8,996,130	110,636,618
Indirect & Induced	199.3	11,814,618	74,248,234
Total	265.3	20,810,748	184,884,852
<i>Multiplier</i>	<i>4.02</i>	<i>2.31</i>	<i>1.67</i>
¹ Total full- and part-time jobs created for a period of one year. ² Total labor income associated with additional jobs. ³ Total volume of added economic activity.			
Sources: RIMS II, Regional Production Division, Bureau of Economic Analysis; Gruen Gruen + Associates.			

Karis Critical Naperville Data Center Economic Impact Analysis

GG+A estimates that operations of the Karis Critical data center development will generate an annual employment impact within DuPage County totaling about 273 jobs for Phase 1A, 68 jobs for Phase 1B, and 265 jobs for Phase 2 of the development. The total annual earnings impact within DuPage County is estimated at approximately \$21.4 million (or the equivalent of about \$78,000 per job) for Phase 1A, \$5.4 million for Phase 1B, and \$20.8 million for Phase 2. The total annual economic output impact on DuPage County is estimated at \$190.5 million for Phase 1A, \$47.6 million for Phase 1B, and \$184.9 million for Phase 2.

Table 8 summarizes the estimated annual economic impact associated with the occupancy and operations of the proposed Karis Critical data center on the Naperville economy under the High Case scenario.

TABLE 8 On-Going Annual Economic Impacts of Operations on Naperville Economy (High Scenario)¹			
	Employment ² # Jobs	Annual Income ³ \$	Annual Output ⁴ \$
Phase 1A			
Direct	68.0	9,268,740	113,989,242
Indirect & Induced	68.5	4,057,545	25,499,394
Total	136.5	13,326,286	139,488,636
<i>Multiplier</i>	<i>2.01</i>	<i>1.44</i>	<i>1.22</i>
Phase 1B			
Direct	17.0	2,317,185	28,497,311
Indirect & Induced	17.1	1,014,386	6,374,848
Total	34.1	3,331,571	34,872,159
<i>Multiplier</i>	<i>2.01</i>	<i>1.44</i>	<i>1.22</i>
Phase 2			
Direct	66.0	8,996,130	110,636,618
Indirect & Induced	66.4	3,938,206	24,749,411
Total	132.4	12,934,336	135,386,029
<i>Multiplier</i>	<i>2.01</i>	<i>1.44</i>	<i>1.22</i>
¹ Local estimates assume that thirty-three percent (33%) of indirect and induced activity occurs within the city of Naperville. City estimates are included within DuPage County (i.e., not additive). ² Total full- and part-time jobs created for a period of one year. ³ Total labor income associated with additional jobs. ⁴ Total volume of added economic activity.			
Sources: RIMS II, Regional Production Division, Bureau of Economic Analysis; Gruen Gruen + Associates.			

Approximately 50 percent of the permanent jobs and 62 percent of the annual labor income impacts within DuPage County are estimated to occur within the city of Naperville. Under the High Case scenario, GG+A estimates that operations of the Karis Critical data center development will generate

Karis Critical Naperville Data Center Economic Impact Analysis

an annual employment impact within Naperville totaling about 137 jobs for Phase 1A, 34 jobs for Phase 1B, and 132 jobs for Phase 2 of the development.

The total annual earnings impact within Naperville is estimated at approximately \$29.6 million for all three phases of development, or the equivalent of about \$98,000 per job. The total annual economic output impact on Naperville is estimated at nearly \$310 million for the overall development.

APPENDIX A

RIMS II MULTIPLIERS (2021)

**Table 2.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Industry Aggregation
DuPage County (Type II)**

INDUSTRY	Multiplier					
	Final Demand				Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
1. Farms	1.5538	0.2938	5.6348	0.6870	1.3134	1.2748
2. Forestry, fishing, and related activities	1.4636	0.3195	8.3824	0.9194	1.2559	1.1531
3. Oil and gas extraction	1.4190	0.1950	2.8326	0.8596	1.4547	1.4697
4. Mining (except oil and gas)	1.5771	0.1690	2.1751	0.8638	1.9157	2.2158
5. Support activities for mining	1.6100	0.2267	3.6926	0.8954	1.6898	1.6326
6. Utilities*	1.3465	0.0938	1.1130	0.7920	2.2506	3.8742
7. Construction	1.6441	0.2577	4.0894	0.8748	1.5165	1.6053
8. Wood product manufacturing	1.5419	0.1539	2.4819	0.6140	1.8269	1.7972
9. Nonmetallic mineral product manufacturing	1.5879	0.1515	2.2218	0.7464	1.9402	2.0135
10. Primary metal manufacturing	1.5726	0.1373	1.9298	0.5334	1.9973	2.2039
11. Fabricated metal product manufacturing	1.6322	0.1663	2.5216	0.7282	1.8861	1.9120
12. Machinery manufacturing	1.6656	0.1698	2.3595	0.7256	1.9521	2.0717
13. Computer and electronic product manufacturing	1.5539	0.2211	2.6370	1.0004	1.5468	1.7694
14. Electrical equipment, appliance, and component manufacturing	1.6014	0.1510	2.0645	0.7306	1.8782	2.0486
15. Motor vehicles, bodies and trailers, and parts manufacturing	1.7417	0.1491	2.2789	0.5803	2.2946	2.2253
16. Other transportation equipment manufacturing	1.6716	0.1549	2.2073	0.7769	2.0178	2.1397
17. Furniture and related product manufacturing	1.6620	0.1872	3.3024	0.6900	1.7874	1.6543
18. Miscellaneous manufacturing	1.6189	0.1778	2.4579	0.8543	1.8061	1.9661
19. Food and beverage and tobacco product manufacturing	1.6046	0.1363	2.1280	0.5432	2.0838	2.0039
20. Textile mills and textile product mills	1.5993	0.1621	3.0680	0.6322	1.8754	1.6816
21. Apparel, leather, and allied product manufacturing	1.5087	0.2609	5.6388	0.8175	1.4000	1.2841
22. Paper manufacturing	1.6452	0.1377	1.9683	0.6188	2.1201	2.2770
23. Printing and related support activities	1.6895	0.1929	3.3450	0.8304	1.8370	1.8127
24. Petroleum and coal products manufacturing	1.3896	0.1082	1.1970	0.3987	1.7950	2.5067
25. Chemical manufacturing	1.5935	0.1297	1.5384	0.6899	2.0778	2.6861
26. Plastics and rubber products manufacturing	1.8573	0.1524	2.2452	0.7314	2.4479	2.3573
27. Wholesale trade	1.6184	0.1976	2.6031	0.9697	1.8753	2.3996
28. Motor vehicle and parts dealers	1.5095	0.2630	4.0335	1.0228	1.3734	1.4599
29. Food and beverage stores	1.6113	0.2596	6.6099	0.9932	1.4599	1.2808
30. General merchandise stores	1.6319	0.2453	6.6511	1.0080	1.5810	1.2795
31. Other retail	1.6169	0.2561	6.6633	1.0036	1.5044	1.2890
32. Air transportation	1.4781	0.1418	2.0811	0.7207	2.0211	2.9164
33. Rail transportation	1.5962	0.1723	2.1748	0.8556	2.0357	2.6414
34. Water transportation	1.7870	0.1819	3.0350	0.7260	2.9843	3.7024
35. Truck transportation	1.6938	0.2331	3.9878	0.8299	1.7797	1.8748
36. Transit and ground passenger transportation*	1.6064	0.2302	9.7860	0.7255	1.5847	1.1606
37. Pipeline transportation	1.6147	0.3153	3.2951	1.0533	1.4208	1.9716

(Continued)

Region Definition: DuPage, IL

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2021 data, the output delivered to final demand should be in 2021 dollars.

4. Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 2012 Benchmark Input-Output Table for the Nation and 2021 regional data. Industry List B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Bureau of Economic Analysis.

**Table 2.5 Total Multipliers for Output, Earnings, Employment, and Value Added by Industry Aggregation
DuPage County (Type II)**

INDUSTRY	Multiplier					
	Final Demand				Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Value-added/4/ (dollars)	Earnings/5/ (dollars)	Employment/6/ (jobs)
38. Other transportation and support activities*	1.7310	0.2657	5.5486	0.9399	1.6761	1.5500
39. Warehousing and storage	1.8443	0.2119	4.1813	0.9230	1.9105	1.7742
40. Publishing industries (except Internet)	1.5788	0.1986	2.4747	1.0243	1.8128	2.3999
41. Motion picture and sound recording industries	1.3621	0.1601	2.7648	0.8470	1.5212	1.5079
42. Broadcasting (except Internet) and telecommunications	1.4976	0.1456	1.9628	0.7971	1.9258	2.4070
43. Data processing, hosting, and other information services	1.6711	0.1881	2.3983	0.8756	2.3133	4.0203
44. Monetary Authorities-central bank, credit intermediation, and related services	1.5062	0.2022	2.4707	0.9916	1.6486	2.1098
45. Securities, commodity contracts, and other financial investments and related activities	1.7817	0.3089	4.9224	0.9600	1.6585	1.6609
46. Insurance carriers and related activities	1.8719	0.2181	2.7944	0.9838	2.0140	2.3282
47. Funds, trusts, and other financial vehicles	2.3965	0.2950	8.6276	0.8709	4.2193	1.7396
48. Real estate	1.4192	0.1388	3.1074	0.9955	1.7628	1.4867
49. Rental and leasing services and lessors of nonfinancial intangible assets	1.6799	0.2229	3.2925	0.9837	1.7857	2.0013
50. Professional, scientific, and technical services	1.6114	0.3387	4.3014	1.0367	1.4020	1.6393
51. Management of companies and enterprises	1.5754	0.2602	2.7455	0.9847	1.5214	2.1011
52. Administrative and support services	1.6015	0.3111	6.5915	1.0112	1.4312	1.3246
53. Waste management and remediation services	1.6118	0.1936	2.8815	0.8592	1.8037	1.9784
54. Educational services	1.5820	0.3338	7.1992	1.0468	1.3167	1.2554
55. Ambulatory health care services	1.6317	0.3528	5.3305	1.0399	1.3644	1.4461
56. Hospitals	1.7215	0.3131	4.5964	0.9896	1.5389	1.6899
57. Nursing and residential care facilities	1.6684	0.3284	7.4843	1.0079	1.4121	1.3085
58. Social assistance	1.6688	0.3191	9.4572	0.9616	1.4047	1.2111
59. Performing arts, spectator sports, museums, and related activities	1.5488	0.2827	7.6441	1.0353	1.3917	1.2415
60. Amusement, gambling, and recreation industries	1.5936	0.2521	6.1745	0.9392	1.5204	1.3142
61. Accommodation	1.5937	0.2382	4.8385	0.9504	1.5893	1.4267
62. Food services and drinking places	1.6924	0.2671	7.2205	0.9326	1.5618	1.2807
63. Other services*	1.6719	0.3348	7.3213	0.9500	1.4047	1.2984
64. Households	0.8841	0.1321	2.5892	0.5295	0.0000	0.0000

Region Definition: DuPage, IL

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2021 data, the output delivered to final demand should be in 2021 dollars.

4. Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 2012 Benchmark Input-Output Table for the Nation and 2021 regional data. Industry List B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Bureau of Economic Analysis.

APPENDIX B

KARIS CRITICAL JOB ESTIMATES

		Building 1, Phase 1 Baseline (24 MWs)			Building 1, Phase 2 Impact (36 MW)		Building 2 Impact (72 MW)		
		Headcount/ Shift	Shifts/Week	FTE	Additional HC	Total FTE	Additional HC	Total FTE	
General Manager	No	These are base case jobs with little variability irregardless of end tenant mix and workloads run in the facility	1	5	1	0	1	0	1
Facility Manager	No		1	5	1	0	1	0	1
Head of Security	No		1	5	1	0	1	0	1
IT/Technology Manager	No		1	5	1	0	1	0	1
Building Admininstration	No		2	5	2	0	2	0	2
Electrical Technicians	Yes		2 Primary/1 Off	26	5.2	0	5.2	1 Primary/1 Off	9.4
Mechanical Technicians	Yes		2 Primary/1 Off	26	5.2	0	5.2	1 Primary/1 Off	9.4
Controls Specialist	Yes		1	21	4.2	0	4.2	0	4.2
Security Staffing	Yes		3 Primary/2 Off	31	6.2	0	6.2	2 Primary/1 Off	11.4
				26.8	26.8		40.4		
Network Technician	Yes	Base Case- This is modeled based on a single tenant occupant with light IT support.	2 Primary/1 Off	26	5.2	0	5.2	1 Off	9
Server Technicians	Yes		2 Primary/1 Off	26	5.2	1 Primary/1 Off	9.4	3 Primary/2 Off	18.8
				10.4	14.6		27.8		
Network Technician	Yes	High Case- This is modeled based on multi tenant occupant with high IT support.	2 Primary/1 Off	104	20.8	0	20.8	1 Off	36
Server Technicians	Yes		2 Primary/1 Off	104	20.8	1 Primary/1 Off	37.6	3 Primary/2 Off	75.2
				41.6	58.4		111.2		
Total Jobs		37-68			41-85		68-151		

Source: Karis Critical LLC



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