February 2023

Cleveland University
KANSAS CITY
Chiropractic and Health Sciences

Next Level Impact
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For more than a century Cleveland University-Kansas City (CUKC), with its College of Chiropractic and College of Health Sciences has been educating students who have a passion for helping people enjoy healthier lives. CUKC degree programs attract individuals from across the country and around the globe to its Overland Park, Kansas campus combining the highest standards of academic rigor with the latest in educational technology for Next Level Learning.

The CUKC College of Health Sciences is helping to promote health by preparing a new generation of healthcare professionals through various degree programs and certifications that meet the needs of today’s healthcare delivery system. These academic programs include associate, bachelor’s, and master’s degree level offerings, all designed with the objective of addressing the healthcare workforce demand.

Graduates of the CUKC Doctor of Chiropractic Program are practicing in all 50 states and in 20 countries internationally. Today more than one out of every 10 doctors of chiropractic practicing in North America is a Cleveland graduate.

Contributing to the Economy

The combined economic contribution of CUKC in 2021 was $55.7 million. This includes a direct impact of $34.8 million and indirect/induced impact of $20.9 million. Operational and capital spending in Kansas generated $35.8 million of the total impact, and $19.9 million in impact was generated from student and visitor spending in 2021.

Supports and Sustains Jobs

As a result of operations, student and visitor spending, CUKC supports 392 jobs (direct and indirect/induced). CUKC employs 143 people.

Contributes to the State and Local Tax Base

In 2021, CUKC, its suppliers, students and visitors contributed an estimated $4.1 million in state and local taxes through spending in the local and statewide economy. Of this $4.1 million, $1.8 million was generated in local taxes.
Alumni Continue to Contribute to Kansas

More than 11,500 CUKC graduates in the U.S. and other countries are helping people live healthier lives through direct patient care, research, and health promotion education, and they are positively affecting the economy as consumers, employers, healthcare providers, and small business owners in their communities. The average salary of a chiropractor in the state of Kansas is $151,582 annually. In the state of Kansas alone, more than 1,400 alumni serve as an integral part of the workforce, contributing to the economy through their spending and the enhanced earning potential for those with a CUKC degree. Each year, CUKC alumni generate an estimated $183.1 million in economic output for the Kansas community, support and sustain 1,041 jobs, and contribute $12.2 million in state and local taxes. These impacts are based on the added value of earning a degree or credential from CUKC and the median salary of alumni in the chiropractic field.

Mission to Serve and Give Back

The CUKC College of Chiropractic maintains an on-site Chiropractic Health Center in Overland Park, as well as partnering with area organizations providing healthcare in underserved communities. The on-campus Health Center at CUKC routinely provides care for those in need at no cost. The CUKC outreach clinics include: KC Veterans Administration Hospital and KC CARE Health Center in Jackson County, MO; Saint Vincent Clinic – Caritas in Leavenworth County, KS, and Duchesne Clinic – Caritas in Wyandotte County, KS. CUKC students, faculty, and graduates actively participate in partnerships with area hospitals and clinics providing patient care and promoting health and wellness.

The University’s robust employee volunteer service program includes: 12 hours of paid leave for employees to volunteer at the organization of their choice, the annual Gratitude Month of scheduled community services, blood and food drives, and fundraising campaigns for area organizations.

Based upon assumptions derived from the U.S. Census Bureau and the Points of Light Foundation regarding donation amounts and volunteerism rates by age, income level, and employment status, it is estimated that CUKC staff, faculty, and students give $106,696 annually in charitable donations and volunteer for an estimated 18,992 hours, valued at $202,039. In 2021, the combined impact of charitable giving and volunteerism totaled $308,735. These benefits were in addition to the $55.7 million in annual economic impact.
“Building on the values of its founders, the CUKC vision is to be a leader in health promotion education. From simple beginnings and three students in 1922, to now more than 11,000 graduates across all of North America and internationally, each relishing the priceless reward of the genuine gratitude from the lives they touch by helping others enjoy healthier lives.”

— Dr. Carl Cleveland III
President, Professor CUKC
About the Study

In January 2022, the Kansas Independent College Association (KICA) engaged Parker Philips, Inc. to measure the economic contribution of private, independent, colleges and universities in Kansas. CUKC then requested a more intensive review of its economic impact in the state. The goal of this analysis, specific to CUKC, is to tell its story from a numbers and narrative perspective. To develop this report, Parker Philips gathered student, financial, and employment data about CUKC. This was followed by a tour of the campus where they met with key faculty, staff and leadership, and researched secondary data to prepare the text and key messages.

The primary tool used in the performance of this study is the Input-Output model and data set developed by IMPLAN Group LLC. Financial data used in this study were obtained from KICA and included the following data points: operational expenditures, capital expenditures, and payroll and benefits for employees for FY 21. Secondary data were used to estimate spending by visitors (day and overnight) and students (undergraduate and graduate) exclusive of tuition and fees. Additional information on the methodology and assumptions used to complete this study can be found in Appendix B.

The impact presented in this analysis is divided into three categories: direct impact, indirect impact and induced impact. The indirect and induced impacts are commonly referred to as the “multiplier effect.” The graphic below provides an overview of the types of impact detailed in this report.
**DIRECT**
Investment in construction and expenditures for operations

**INDIRECT**
Purchases from local suppliers

**INDUCED**
Household spending from earnings of direct and indirect expenditures

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**CLEVELAND UNIVERSITY-KANSAS CITY COLLEGE STUDY PROFILE**

Data Source: CUKC and Kansas Independent College Association
Study Type: Economic Contribution Analysis
Geography: Kansas
Study Year: Fiscal Year 2021
Methodology: IMPLAN
CUKC contributes to the local and state economy through its expenditures on operations, capital projects, wages, student spending off-campus, and the spending of visitors to campus. The direct, day-to-day expenditures of CUKC, combined with the student and visitor spending, cause a ripple effect throughout the statewide economy.

The total economic impact of CUKC in 2021 totaled $55.7 million. This contribution to the local and statewide economy is a point-in-time snapshot depicting how the expenditures of CUKC and its faculty, staff, students, and visitors make an impact.

**OPERATIONS CONTRIBUTION**
CUKC operations and capital spending in 2021 contributed a total of $35.8 million. CUKC’s operations generated $21.2 million in direct economic impact, $7.1 million in indirect economic impact, and $7.4 million in induced economic impact.

**STUDENT SPENDING CONTRIBUTION**
CUKC students contributed a total of $17.9 million to the state’s economy in 2021 as a result of their spending. They generated $12.4 million in direct economic impact, $3.0 million in indirect economic impact, and $2.5 million in induced economic impact.

**VISITOR SPENDING CONTRIBUTION**
Visitor spending at CUKC in 2021 contributed a total of $2.0 million. Visitors to CUKC generated $1.2 million in direct economic impact, $458,285 in indirect economic impact, and $361,346 in induced economic impact.

### CUKC COMBINED ECONOMIC IMPACT (FY 21)

<table>
<thead>
<tr>
<th>Category</th>
<th>Direct</th>
<th>Indirect</th>
<th>Induced</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operations</strong></td>
<td>$21,246,824</td>
<td>$7,124,989</td>
<td>$7,413,115</td>
<td>$35,784,928</td>
</tr>
<tr>
<td><strong>Student Spending</strong></td>
<td>$12,373,401</td>
<td>$3,010,626</td>
<td>$2,537,194</td>
<td>$17,921,221</td>
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<tr>
<td><strong>Visitor Spending</strong></td>
<td>$1,214,362</td>
<td>$458,285</td>
<td>$361,346</td>
<td>$2,033,993</td>
</tr>
<tr>
<td><strong>Combined Impact</strong></td>
<td>$34,834,587</td>
<td>$10,593,900</td>
<td>$10,311,655</td>
<td>$55,740,142</td>
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</tbody>
</table>

Source: Parker Philips using IMPLAN with data from KICA and CUKC
Creating and Sustaining Jobs Throughout Kansas

CUKC supports a total of 392 full- and part-time jobs throughout the state. Beyond the direct jobs at the university, indirect and induced jobs include construction for campus projects, retail, restaurants, daycare, real estate, and banking – to name a few.

OPERATIONS
CUKC operations supported and sustained a total of 203 jobs: 118 direct jobs, 38 indirect jobs, and 47 induced jobs.

STUDENT SPENDING
Students from CUKC supported and sustained a total of 168 jobs as a result of student spending: 136 direct jobs, 16 indirect jobs and 16 induced jobs.

VISITOR SPENDING
Visitors to CUKC supported and sustained a total of 21 jobs as a result of their spending: 16 direct jobs, 3 indirect jobs and 2 induced jobs.

Based on analysis by industry sectors, other jobs supported by CUKC outside of the higher-education and health-care sectors include jobs in real estate, retail and services (e.g., restaurants, child-care centers and entertainment).

CUKC EMPLOYMENT CONTRIBUTION (JOBS, FY 21)

<table>
<thead>
<tr>
<th></th>
<th>Direct</th>
<th>Indirect</th>
<th>Induced</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operations</strong></td>
<td>118</td>
<td>38</td>
<td>47</td>
</tr>
<tr>
<td><strong>Total Jobs</strong></td>
<td>203</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Student Spending</strong></td>
<td>136</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total Jobs</strong></td>
<td>168</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Visitor Spending</strong></td>
<td>16</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Jobs</strong></td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Combined Employment Impact</strong></td>
<td>270</td>
<td>57</td>
<td>65</td>
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<tr>
<td><strong>Total Jobs</strong></td>
<td>392</td>
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<td></td>
</tr>
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</table>

Source: Parker Philips using IMPLAN with data from KICA and CUKC
CUKC’s employees, suppliers and related constituencies contribute to the local and statewide tax bases. In FY 21, CUKC contributed an estimated $4.1 million ($2.8 million direct and $1.3 million indirect and induced) through local spending (operational, capital, students and visitors) as well as direct and indirect support of jobs. At the state and local levels, CUKC contributes to the tax bases through its purchasing. Specific taxes include employee and employer contributions to state and local social-insurance funds, sales and use taxes, personal property taxes, taxes paid on motor-vehicle licenses, and payments of fines and fees.

## Generating Local and State Tax Revenues

<table>
<thead>
<tr>
<th>Sub County General</th>
<th>Direct</th>
<th>Indirect</th>
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<tbody>
<tr>
<td></td>
<td>$443,563</td>
<td>$66,541</td>
<td>$137,734</td>
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<table>
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<tr>
<th>Sub County Special Districts</th>
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<tr>
<td></td>
<td>$351,998</td>
<td>$52,917</td>
<td>$109,174</td>
<td>$514,089</td>
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</table>

<table>
<thead>
<tr>
<th>County</th>
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<th>Induced</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>$455,448</td>
<td>$68,432</td>
<td>$141,285</td>
<td>$665,165</td>
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<table>
<thead>
<tr>
<th>State</th>
<th>Direct</th>
<th>Indirect</th>
<th>Induced</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$1,527,990</td>
<td>$254,161</td>
<td>$452,538</td>
<td>$2,234,689</td>
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</table>

<table>
<thead>
<tr>
<th>Total</th>
<th>Direct</th>
<th>Indirect</th>
<th>Induced</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$2,778,999</td>
<td>$442,051</td>
<td>$840,731</td>
<td>$4,061,781</td>
</tr>
</tbody>
</table>

Source: Parker Philips using IMPLAN with data from KICA and CUKC
The CUKC College of Chiropractic

Doctors of Chiropractic (DCs) are healthcare professionals focused on the diagnosis, care and prevention of functional disorders of the spine, as well as other parts of the musculoskeletal system. Considering that back pain and musculoskeletal disorders now lead among the disabling conditions in the nation, DCs fill a central role as part of healthcare reform. Strengthened with the evidence gained through research and outcome-effectiveness studies, chiropractors today are steadfast in their role in restoring joint function, returning the patient’s activities of daily living, and improving quality of health. These outcomes, along with the potential cost savings of integrating chiropractic services as part of today’s healthcare system, have important implications for healthcare institutions and the patients they serve, as well as for policy decision makers and other health stakeholders.

Next Level Impact in Practice

“Yes, doctors of chiropractic are well known for addressing back and neck pain and eliminating headaches. For me, it’s more about our patients regaining their activities of daily living, to perform their best at work, to be able to lift up their young grandchild, and enjoy life on a new level because they are pain free… that’s why I love what I do. I was inspired to be a chiropractor from a life-changing chiropractic experience, and every day I walk into my practice with the mindset that my next spinal adjustment may inspire someone else just the same.”

— Dr. Joshua Whitmore
CUKC Class of 2019
For those pursuing bachelor’s or associate degrees, the CUKC College of Health Sciences offers prerequisite science courses and degree completion programs in accelerated, eight-week intervals, on-campus and online. Many Occupational Therapy Assistant and Radiologic Technology Associate Degree graduates go directly into careers in hospitals, geriatric centers and related clinical facilities. The Bachelor’s in Exercise Science and Master’s in Exercise Physiology graduates take advantage of a growing job market in the fitness and sports health industry, and in corporate workplace wellness. The Bachelor’s in Human Biology prepares the student for graduate-level training in medicine, dentistry, physical or occupational therapy, veterinary medicine, and chiropractic, among various other health professions. The College of Health Sciences programs preparing graduates to be workforce ready include:

- Master of Science in Health Education and Promotion
- Master of Science in Exercise Physiology
- Bachelor of Science in Human Biology
- Bachelor of Science in Exercise Science
- Associate of Arts in Biological Sciences
- Associate of Applied Science in Occupational Therapy Assistant
- Associate of Applied Science in Radiologic Technology
- Workplace Health Promotion Certificate

Conclusion

CUKC’s annual combined economic impact from operations and student and visitor spending ($55.7 million) plus the impact of Kansas-based alumni ($23.9 million) total nearly $79.6 million. However, the impact of CUKC is felt far beyond what economic measurement can capture. Through its ongoing focus on empowered health and wellness, rigorous academic and clinical training programs, and commitment to community care and excellence, CUKC graduates, faculty and staff are making a critical difference in the lives of people every day.
Direct Economic Impact — All direct expenditures made by an organization due to its operating expenditures. These include operating expenditures, capital expenditures, and pay and benefits expenditures.

Direct Employment — Total number of employees, both full-time and part-time, at the organization based on total jobs, not FTEs.

Dollar Year — Presented in 2021 dollars.

Government Revenue/State and Local Tax Impact — Government revenue or tax revenue that is collected by governmental units at the state and local levels in addition to those paid directly by an organization. This impact includes taxes paid directly by the organization itself, employees of the organization and vendors who sell products to the organization, and at the household level.

IMPLAN Data Year — 2020

Indirect Economic Impact — The indirect impact includes the impact of local industries buying goods and services from other local industries. The cycle of spending works its way backward through the supply chain until all money is spent outside of the local economy, either through imports or by payments to value added (multiplier effect).

Indirect Employment — Additional jobs created as a result of an organization’s economic impact. Local companies or vendors that provide goods and services to an organization increase their number of employees as purchasing increases, thus creating an employment multiplier.

Induced Economic Impact — The response by an economy to an initial change (direct effect) that occurs through re-spending of income received by a component of value added. IMPLAN’s default multiplier recognizes that labor income (employee compensation and proprietor income components of value added) is not lost to the regional economy. This money is recirculated through household spending patterns causing further local economic activity (multiplier effect).

Induced Employment — Additional jobs created as a result of household spending by employees of an organization and the employees of vendors. This is another wave of the employment multiplier.

Multiplier Effect — The multiplier effect is the additional economic impact created as a result of the organization’s direct economic impact. Local companies that provide goods and services to an organization increase their purchasing by creating a multiplier (indirect/supply-chain impacts). Household spending generated by employees of the organization and the organization’s suppliers create a third wave of multiplier impact (induced/household-spending impacts).

Study Year — FY 2021

Total Economic Output/Economic Impact — Includes organizational spending on operations, capital expenditures, labor income expenditures, and value added to the economy as a result of expenditures made by an organization. It is the combined impact of direct, indirect, and induced impacts.
Kansas Independent College Association (KICA) provided the primary economic data used to complete the contribution analysis. Data supplied included operating expenditures, capital spending (three year average), pay and benefits, and total employees. Primary and secondary data were used to complete the input-output models in IMPLAN. The study approach and economic-impact findings are a conservative estimate of impact and are based on actual financial information. The study is a snapshot in time of Kansas’ independent colleges and universities.

OVERVIEW AND THE IMPLAN MODEL

The most common and widely accepted methodology for measuring the economic impacts of economic sectors is input-output (I-O) analysis. At its core, an I-O analysis is a table that records the flow of resources to and from companies/organizations and individuals within a region at a given time. For a specified region such as a state, the I-O table accounts for all dollar flows among different sectors of the economy in a given period. With this information, a model can then follow how a dollar added into one sector is spent and represented in other sectors of the economy, generating outgoing ripples of subsequent economic activity. This chain of economic activity created by one event is called the “economic multiplier” effect.

The primary tool used in the performance of this study is the I-O model and data set developed and maintained by IMPLAN Group LLC (formerly Minnesota IMPLAN Group Inc.). IMPLAN is a widely accepted and used software model first developed by the U.S. Forest Service in 1972. Data used in the baseline IMPLAN model and data set come largely from federal-government databases. The I-O tables themselves come from the Bureau of Economic Analysis. Much of the annual data on labor, wages, final demand, and other market data come from the Bureau of Labor Statistics, the U.S. Census Bureau, and other government sources.

Government agencies, companies, and researchers use IMPLAN to estimate the economic activities associated with spending in a particular industry or on a particular project. The IMPLAN model extends conventional I-O modeling to include the economic relationships among government, industry, and household sectors, allowing IMPLAN to model transfer payments such as taxes.

Producers of goods and services must secure labor, raw materials and other services to produce their product. The resources transferred to the owners of that labor or those raw materials, and services are then used to secure additional goods and services or inputs to the products they sell. For example, an organization in a region may develop a company that produces tractors with a value of $1 million. However, to produce that product, they may be required to spend $500,000 in wages and benefits, $200,000 to suppliers of tractor parts, $100,000 for electricity, $50,000 for transportation of goods and raw materials to and from the plant, and $50,000 in various professional services fees associated with operating a business (e.g., attorneys and accountants). The suppliers will, in turn, spend those resources on labor and raw materials necessary to produce tractors. Workers and the owners of the company will buy goods and services from other firms in the area (e.g., restaurants and gas stations) and pay taxes. The suppliers, employees, and owners of this second tier will, in turn, spend those resources on other goods and services whether within the study region or elsewhere. The cycle continues until all of the money leaves the region.

IMPLAN METHODOLOGY

The model uses national production functions for more than 536 industries to determine how an industry spends its operating receipts to produce its commodities. These production functions are derived from U.S. Census Bureau data. IMPLAN couples the national production functions with a variety of county-level economic data to determine the impacts at
a state and congressional-district level. IMPLAN collects data from a variety of economic data sources to generate average output, employment, and productivity for each industry in a given county. IMPLAN combines this data to generate a series of economic multipliers for the study area. The multiplier measures the amount of total economic activity generated by a specific industry’s spending an additional dollar in the study area. Based on these multipliers, IMPLAN generates a series of tables to show the economic event’s direct, indirect, and induced impacts to gross receipts, or output, within each of the model’s more than 536 industries. The model calculates three types of effects: direct, indirect, and induced. The economic impact of Kansas’ independent colleges and universities is the sum of these three effects.

CONSIDERATIONS CONCERNING IMPLAN

There are three important points about the use of IMPLAN (or any other I-O model):

It is a fixed-price model. The model assumes that changes in consumption are not limited by capacity and do not affect prices. This assumption does not cause a problem for the analysis presented here, because we are taking a snapshot of Kansas’ independent colleges and universities in a specific year. As in many studies using this type of model, the direct impacts are not calculated by the model; they reflect actual spending levels and patterns created by each college or university. Changing the level of direct spending allows us to calculate the magnitude of the indirect and induced effects associated with the initial level of spending.

Because the model continues to calculate additional spending until all of the money leaves the region (i.e., “leakage”), the larger and more economically diverse the region, the longer it will take for spending to leave the region and the larger the impact is likely to be. For example, an employee of a college or university may spend some amount of their income on buying a car. If there are no car manufacturers in the state or county, this spending will leave the region and the multiplier effect will stop. At the national level, a portion of that same spending by that same individual may go to a national auto producer. That spending would lead to more spending at the national level than would be captured by a more regional model. The national impact will be larger than the sum in the individual states, and the individual state impact will be larger than the sum of the impacts in its congressional districts.