The Economic and Fiscal Impacts of the Strategic Ohio Council for Higher Education and Its Member Institutions

April 2023 *Final Report*



Table of Contents

Executive Summary	2
Introduction	
Methodology	6
Enrollment	
Economic Impact	9
Operations Expenditures	9
Capital Expenditures	10
Student Expenditures	
Total	12
Fiscal Impact	12
Conclusion	
References	

List of Tables

Table 1: Total Economic Impact on the SOCHE Region, FY 2019 (2022\$)	2
Table 2: Total Fiscal Impact, FY 2019 (2022\$)	3
Table 3: Economic Impact of Operations Expenditures on the SOCHE Region, FY 2019 (2022\$)	10
Table 4: Economic Impact of Capital Expenditures on the SOCHE Region, Annual Average FY 2015-	
2019 (2022\$)	10
Table 5: Economic Impact of Local Student Spending on the SOCHE Region, FY 2019 (2022\$)	11
Table 6: Economic Impact of Non-Local Student Spending on the SOCHE Region, FY 2019 (2022\$)	11
Table 7: Total Economic Impact on the SOCHE Region, FY 2019 (2022\$)	12
Table 8: Total Fiscal Impact, FY 2019 (2022\$)	13

List of Figures

Figure 1: SOCHE Region	5
Figure 2: Total Enrollment of SOCHE Member Institutions by Institution Type and Enrollment Status,	
Academic Years 2015-16 and 2018-19	8
Figure 3: Direct Operations Expenditures, FY 2019 (2022\$)	9



Executive Summary

Formed in 1967, the Strategic Ohio Council for Higher Education (SOCHE) is a consortium of 22 colleges and universities and one non-profit research foundation in Ohio, as of fiscal year 2019. SOCHE is a "leader for higher collaboration, engaging with colleges, universities, and industry to transform the economy through education and employment."¹ This report demonstrates the economic and fiscal impacts of SOCHE, its member institutions, and students during fiscal year 2019.² SOCHE, its member institutions, and students impact a 21-county regional economy in Ohio, referred to as the SOCHE Region, through day-to-day expenditures on operations, through capital expenditures on construction and capital equipment, and through the spending of students.³ These expenditures generate economic impacts in the form of economic output, jobs, and earnings and generate fiscal impacts in the form of tax revenues for federal, state, and local governments.

Table 1 details the total impact on economic output, jobs, and earnings generated by SOCHE, its member institutions, and students in the SOCHE Region.⁴ During fiscal year 2019, the operations, capital, and student spending of SOCHE and its member institutions generated \$4.0 billion in direct economic output in the SOCHE Region, after accounting for economic leakage. This led to further indirect economic output of \$3.5 billion as a result of the inter-industry linkages. A total of \$7.5 billion in economic output was generated in the SOCHE Region during fiscal year 2019. Of the total economic impact, ongoing operations comprised 64.4 percent, one-time capital expenditures comprised 4.8 percent, and student spending comprised 30.9 percent.

The operations, capital, and student spending of SOCHE and its member institutions directly supported 30,608 jobs with earnings of \$1.9 billion during fiscal year 2019. An additional 16,086 jobs with earnings of \$1.2 billion were indirectly supported in the SOCHE Region. Collectively, a total of 46,694 jobs with earnings of \$3.1 billion were supported in the SOCHE Region during fiscal year 2019 by the operations, capital, and student spending of SOCHE and its member institutions.

Impact Type	Output	Employment	Earnings
Direct	\$4,021,038,183	30,608	\$1,854,891,139
Indirect	\$3,494,070,188	16,086	\$1,216,098,149
Total	\$7,515,108,371	46,694	\$3,070,989,288

Table 1: Total Economic Impact on the SOCHE Region, FY 2019 (2022\$)

Source: Economics Center analysis using Lightcast multipliers, the U.S. Bureau of Labor Statistics' Consumer Expenditure Survey, and data provided by SOCHE member institutions and/or retrieved from IPEDS.

⁴ The SOCHE member institutions included in this analysis are Antioch College, Cedarville University, Central State University, Cincinnati State Technical and Community College, Clark State College, Edison State Community College, Miami University Regionals, Sinclair College, Southern State Community College, University of Cincinnati, University of Dayton, Wilberforce University, Wittenberg University, and Wright State University.



¹ (Strategic Ohio Council for Higher Education n.d.)

² Operations and student spending data reflect fiscal year 2019, whereas capital expenditure data reflect an average of fiscal years 2015 through 2019.

³ The SOCHE Region is defined as Adams, Brown, Butler, Champaign, Clark, Clermont, Clinton, Darke, Fayette, Greene, Hamilton, Highland, Logan, Madison, Mercer, Miami, Montgomery, Preble, Shelby, Union, and Warren Counties in the State of Ohio.

In addition to the economic impact on output, jobs, and earnings, SOCHE, its member institutions, and students generate fiscal impacts for federal, state, and local governments. The fiscal impact comprises federal, state, and municipal earnings tax revenue, state and county sales tax revenue, real estate tax revenue, and corporate income tax revenue. Table 2 details the fiscal impact of the operations, capital, and student spending of SOCHE and its member institutions during fiscal year 2019. The federal government received \$520.1 million in earnings tax revenue. The State of Ohio benefited from \$75.9 million in earnings tax revenue, while municipalities in the SOCHE Region benefited from \$9.6 million in sales tax revenue, while municipalities in the SOCHE Region received \$62.1 million in earnings tax revenue. Additionally, SOCHE and its member institutions paid \$2.3 million in real estate taxes and \$108,615 in corporate income taxes. In total, the operations, capital, and student spending of SOCHE and its member institutions generated \$716.8 million in tax revenue for government entities during fiscal year 2019.

Government Entity	Earnings Tax Revenue	Sales Tax Revenue	Other Tax Revenue⁵	Total Tax Revenue
Municipalities	\$62,085,344	N/A	N/A	\$62,085,344
Counties	N/A	\$9,568,506	\$2,325,594	\$11,894,100
State of Ohio	\$75,896,330	\$46,742,979	\$108,615	\$122,747,924
Federal	\$520,054,933	N/A	N/A	\$520,054,933
Total Tax Revenue	\$658,036,607	\$56,311,485	\$2,434,209	\$716,782,301

Table 2: Total Fiscal Impact, FY 2019 (2022\$)

Source: Economics Center analysis using historical tax rates and data provided by SOCHE member institutions and/or retrieved from IPEDS.

⁵ Includes real estate taxes and corporate income taxes.



Introduction

The Strategic Ohio Council for Higher Education (SOCHE) is a consortium of 22 colleges and universities and one non-profit research foundation in Ohio, as of fiscal year 2019. Formed in 1967, SOCHE is a "leader for higher collaboration, engaging with colleges, universities, and industry to transform the economy through education and employment."⁶ SOCHE and its member institutions promote educated, employed, and engaged citizens. SOCHE member institutions include⁷:

- Air Force Institute of Technology⁸
- Antioch College
- Antioch University
- Cedarville University
- Central Michigan University (Wright Patterson Air Force Base Center)
- Central State University
- Cincinnati State Technical and Community College
- Clark State College
- Edison State Community College
- Franklin University
- Kettering College
- Kettering Foundation⁹

- Miami University Regionals (Hamilton Campus and Middletown Campus)
- Ohio University
- Sinclair College
- Southern State Community College
- Union Institute & University
- University of Cincinnati (Main Campus, Blue Ash Campus, and Clermont Campus)
- University of Dayton
- Wilberforce University
- Wilmington College
- Wittenberg University
- Wright State University (Main Campus and Lake Campus)

SOCHE represents a diverse group of colleges and universities. During the 2018-19 academic year, 10 member institutions were private four-year degree granting institutions and 12 were publicly funded institutions. Of the 12 publicly funded institutions, nine offered four-year degree programs and three offered two-year degree programs. Three institutions awarded medical degrees, and two were historically black universities. All SOCHE member institutions were not-for-profit institutions.

The size of SOCHE member institutions also varied greatly. The majority of institutions (14 out of 22) had enrollment of less than 5,000 students during the 2018-19 academic year. Three institutions had enrollment of between 5,000 and 9,999 students, three institutions had enrollment of between 10,000 and 19,999 students, and two institutions had enrollment of more than 20,000 students.

For more than 50 years, SOCHE and its member institutions have increased the education and training among individuals in Ohio. The member institutions of SOCHE have provided Ohio with the talent and skills necessary for the economy to thrive through focused efforts to ensure students attain skills from coursework, internships, and co-ops. The research undertaken by SOCHE member institutions also benefits Ohio and the broader community as the technological advances created by member colleges and universities proliferate and improve the respective fields of research. Additionally, Ohio has also

⁹ The Kettering Foundation is a non-profit research foundation focused on the role of citizens in a democracy. Its impact was not analyzed as part of this study.



⁶ (Strategic Ohio Council for Higher Education n.d.)

⁷ There have been changes to the member institutions of SOCHE between the completion of this report and the prior report completed in 2017. Urbana University is no longer a member of SOCHE. Central Michigan University at Wright Patterson Air Force Base Center was a member of SOCHE during the study period but is no longer a member. However, Franklin University and Ohio University became members of SOCHE since the completion the prior report in 2017.

⁸ The Air Force Institute of Technology (AFIT) is an ex officio member of SOCHE. Therefore, its impact was not analyzed as part of this study.

benefitted from the operations and capital expenditures made by SOCHE and its member institutions as well as the spending of students.

This report analyzes the economic and fiscal impacts of SOCHE and 14 of the 23 SOCHE member institutions during the 2019 fiscal year on a 21-county region in Ohio, referred to as the SOCHE Region.¹⁰ Fiscal year 2019 was chosen to reflect conditions prior to the onset of the COVID-19 pandemic. As illustrated in Figure 1, the SOCHE Region is defined as Adams, Brown, Butler, Champaign, Clark, Clermont, Clinton, Darke, Fayette, Greene, Hamilton, Highland, Logan, Madison, Mercer, Miami, Montgomery, Preble, Shelby, Union, and Warren Counties in the State of Ohio. Due to differences in the participating SOCHE member institutions and geography of analysis, this report should not be compared to the prior report completed in 2017.



Figure 1: SOCHE Region

Source: Economics Center visualization.

¹⁰ The Air Force Institute of Technology, Antioch University, Central Michigan University at Wright Patterson Air Force Base Center, Franklin University, Kettering College, the Kettering Foundation, Ohio University, Union Institute and University, and Wilmington College did not participate in this study.



Methodology

Economic Impact

An economic impact analysis measures the effect of an organization's expenditures on its surrounding community. The total economic impact is the sum of the direct and indirect impact. The direct impact is the amount spent directly by SOCHE, its member institutions, and students that is retained within the regional economy. The indirect impact is the additional economic impact resulting from increased demand, income, and jobs within other industries, or the inter-industry linkages. The direct impact has ripple effects due to increased household income and spending, which is referred to as induced impacts. Induced impacts are reported within indirect impacts for the entirety of this report.

Data on operations expenditures were retrieved from the Integrated Postsecondary Education Data System (IPEDS) of the National Center for Education Statistics, whereas data on capital expenditures were provided by SOCHE and its member institutions. Student spending was estimated using the Bureau of Labor Statistics' Consumer Expenditure Survey for those under 25 years and enrollment data provided by SOCHE member institutions.¹¹ The Economics Center categorized expenditure categories and classified them according to the respective North American Classification System (NAICS) industry code(s). All expenditures were adjusted to Ohio using the Bureau of Economic Analysis' Regional Price Parities to account for regional differences in the price of goods, rent, and other services.

For students with a permanent residence outside of the SOCHE Region, the Economics Center excluded expenditure categories that would have occurred outside of the regional economy including telephone services; vehicle purchases and finance charges; vehicle insurance; vehicle rentals, leases, licenses, and other charges; health insurance; personal insurance and pensions; and cash contributions. For students residing in the SOCHE Region, vehicle finance charges and cash contributions were excluded due to insufficient information necessary to match with an associated industry code(s). Additionally, reading and education expenditure categories were excluded from all student spending estimates to avoid double counting. Expenditures were then reduced by one-third to remove expenditures that occur during school breaks and during the summer semester when active enrollment typically decreases. For students residing on campus, the Economics Center also excluded food at home, shelter, utilities, and household related expenditure categories. The Economics Center also reduced the estimated student spending of part-time students by a ratio of the course load of part-time students relative to the course load of full-time students. A ratio was able to be calculated for eight of the 14 member institutions participating in this study. The ratio of the course load of part-time students relative to the course load of full-time students ranged from 12.9 percent to 74.1 percent for the member institutions for which a ratio could be calculated. For member institutions in which a ratio was unable to be estimated, the Economics Center calculated the weighted ratio of the course load of part-time students to full-time students for the member institutions for which a ratio was able to be calculated. The weighted ratio was 52.2 percent.

Operations and student spending expenditure data reflect fiscal year 2019, whereas capital expenditure data reflect an average of fiscal years 2015 through 2019. Because capital expenditures can vary drastically from year to year, a five-year average was used to account for these fluctuations. Operations, capital, and student expenditure data were adjusted for inflation and converted to 2022 dollars using the Consumer Price Index. Expenditure data were then factored for economic leakage to represent only the economic impact of money retained in the SOCHE Region. Economic leakage refers to the percentage

¹¹ Enrollment data provided by the University of Dayton was incomplete. Therefore, the Economics Center estimated student spending for the University of Dayton using enrollment data retrieved from IPEDS.



of purchases for products and services that must be imported from outside the regional economy. Leakage estimates were obtained from Lightcast, a propriety data provider. Lightcast is a leading provider of labor market data, which is pulled from multiple sources to give a complete and current view of the labor market.

The post-leakage expenditures were used in an input-output model that uses multipliers to represent the inter-industry linkages and household economic relationships. Multipliers are used to determine the total economic impact when applied to the direct impact. These multipliers are location, industry, and time specific and were obtained from Lightcast.

Fiscal Impact

The fiscal impact of operations, capital, and student expenditures represents the tax revenue generated for federal, state, and local governments by SOCHE and its member institutions. The fiscal impact includes the earnings tax revenue resulting from the earnings, directly and indirectly, supported as well as the sales tax revenue resulting from the spending of those earnings and the direct spending of students. Additionally, some SOCHE member institutions paid real estate taxes and/or corporate income taxes. The fiscal impact comprises federal, state, and municipal earnings tax revenue, state and county sales tax revenue, real estate tax revenue, and corporate income tax revenue. All state and local tax rates were obtained from the Ohio Department of Taxation for calendar year 2019, while federal tax rates were obtained from the Internal Revenue Service for calendar year 2019.

SOCHE and its member institutions provided the federal, state, and municipal earnings tax withholdings of their direct employees as well as any real estate and/or corporate income tax payments.¹² The earnings tax withholdings provided by SOCHE and its member institutions include withholdings for all employees, regardless of state of residence. The federal, state, and municipal earnings tax revenues for the indirect jobs supported by operations expenditures and the direct and indirect jobs supported by capital and student expenditures were calculated using historical tax rates and average annual earnings per job. Based on commuting patterns obtained from Lightcast, it was assumed that approximately 96.2 percent of the indirect jobs supported by operations expenditures and the direct and indirect jobs supported by capital and student expenditures live in the State of Ohio. Due to data limitations, federal income tax revenues were calculated assuming single taxpayer rates. State income tax revenues were calculated by using a blended local income tax rate for the SOCHE Region using applicable tax rates and weighted by employment.

To estimate the sales tax revenue generated, the Bureau of Labor Statistics' Consumer Expenditure Survey for the Midwest was utilized to determine what portion of average annual earnings were used to make taxable purchases. Based on commuting patterns obtained from Lightcast, it was assumed that approximately 96.2 percent of the jobs, directly, and indirectly, supported by SOCHE, its member institutions, and students live in the State of Ohio. Any individuals residing outside of the State of Ohio were excluded from the sales tax analysis. Taxable spending was factored for economic leakage, and historical tax rates were applied. A blended county sales tax rate was calculated for the SOCHE Region using applicable tax rates and weighted by the sales of retail establishments and food service and drinking establishments, retrieved from Lightcast.

¹² Wright State University did not provide the state tax withholdings of direct employees. Therefore, the Economics Center estimated the earnings tax revenue generated.



Enrollment

During the 2018-19 academic year, 157,078 students were enrolled in SOCHE member colleges and universities. Approximately 51.4 percent were enrolled as full-time students and 48.6 percent were enrolled as part-time students. Figure 2 shows the changes in enrollment at SOCHE member institutions between the 2015-16 academic year and the 2018-19 academic year.

- Public two-year colleges, which are primarily community and technical colleges, experienced an increase in enrollment of 7.1 percent over the three-year period. Part-time enrollment increased by 16.0 percent, whereas full-time enrollment declined by 15.4 percent.
- Enrollment in public four-year colleges and universities increased by 12.8 percent over the three-year period. Full-time enrollment increased by 4.5 percent, while part-time enrollment increased by 22.2 percent.
- Private four-year colleges and universities experienced an increase in part-time enrollment of 10.1 percent and an increase in full-time enrollment of 7.4 percent. Overall, enrollment in private four-year colleges and universities increased by 7.7 percent over the three-year period.



Figure 2: Total Enrollment of SOCHE Member Institutions¹³ by Institution Type and Enrollment Status, Academic Years 2015-16 and 2018-19

Source: Economics Center analysis using data provided by SOCHE member institutions and/or retrieved from IPEDS.

¹³ Includes only SOCHE member institutions that participated in this study.



Economic Impact

The expenditures made by SOCHE and its member institutions on operations and capital as well as the spending of students generate economic impacts in the form of economic output, jobs, and earnings in the SOCHE Region. These expenditures in turn stimulate additional economic impact resulting from increased demand, income, and jobs within other industries as well as the increases in household income and spending.

Operations Expenditures

Operations expenditures represent the day-to-day expenses incurred by SOCHE and its member institutions. This includes expenses related to instruction, research, academic support, institutional support, and public service, among other things. During fiscal year 2019, SOCHE and its member institutions made a total of \$3.2 billion in operations expenditures. As illustrated in Figure 3, SOCHE and its member institutions dedicated nearly \$1.1 billion of operations expenditures to instruction, \$464.3 million to research, \$382.3 million to auxiliary enterprises, \$379.9 million to institutional support, \$333.0 million to academic support, \$220.9 million to student services, \$145.1 million to public service, \$94.0 million on scholarships, fellowships, and net grant aid, and the remaining \$110.1 million to other areas. Salaries and wages paid to employees represented 43.1 percent, or \$1.4 billion, of the total operations expenditures of SOCHE and its member institutions during fiscal year 2019.



Figure 3: Direct Operations Expenditures, FY 2019 (2022\$)

Source: Economics Center analysis using data provided by SOCHE member institutions and/or retrieved from IPEDS.

Table 3 summarizes the economic impact of the operations expenditures of SOCHE and its member institutions on the SOCHE Region during fiscal year 2019. After accounting for economic leakage, \$2.6 billion in economic output was directly generated by the operations expenditures of SOCHE and its member institutions. This led to further indirect economic output of \$2.2 billion as a result of the interindustry linkages. SOCHE and its member institutions directly employed 21,114 individuals with earnings of \$1.4 billion. Indirectly, an additional 8,587 jobs with earnings of \$772.8 million were supported throughout the SOCHE Region by the operations expenditures of SOCHE and its member institutions. In total, the operations expenditures of SOCHE and its member institutions in economic output, supported 29,701 jobs, and generated \$2.2 billion in earnings in the SOCHE Region during fiscal year 2019.



Impact Type	Output	Employment	Earnings
Direct	\$2,592,336,534	21,114	\$1,380,989,950
Indirect	\$2,244,744,402	8,587	\$772,783,754
Total	\$4,837,080,936	29,701	\$2,153,773,704

Table 3: Economic Impact of Operations Expenditures on the SOCHE Region,FY 2019 (2022\$)

Source: Economics Center analysis using Lightcast multipliers and data provided by SOCHE member institutions and/or retrieved from IPEDS.

Capital Expenditures

SOCHE and its member institutions incur expenses related to capital projects such as new construction, building expansion and renovation, equipment, and/or information technology upgrades. These expenditures are associated with a specific project and are generally one-time expenditures, as opposed to ongoing. Because capital expenditures can vary drastically from year to year, an average of the annual capital expenditures between fiscal years 2015 and 2019 was utilized to account for these fluctuations. Between fiscal years 2015 and 2019, the capital expenditures of SOCHE and its member institutions averaged \$383.8 million annually. New construction as well as building expansion and renovation accounted for 80.1 percent of the total capital expenditures with all other capital expenditures accounting for the remaining 19.9 percent.

Table 4 details the average annual economic impact of the capital expenditures made by SOCHE and its member institutions. Of the \$383.8 million in capital expenditures by made SOCHE and its member institutions annually, approximately \$206.3 million was retained in the SOCHE Region after accounting for economic leakage. This represents the direct impact of capital expenditures on economic output. This spending led to further indirect economic output of \$153.2 million. In total, the capital expenditures of SOCHE and its member institutions generated an average of \$359.5 million in annual economic output in the SOCHE Region. The capital expenditures of SOCHE and its member institutions directly supported 862 jobs with earnings of \$77.1 million annually. Indirectly, the capital expenditures of SOCHE and its member institutions supported 876 jobs with earnings of \$53.0 million annually. On average, a total of 1,738 jobs with total earnings of \$130.1 million were supported annually in the SOCHE region by the capital expenditures of SOCHE and its member institutions of \$00.1 million were supported annually in the SOCHE region by the capital expenditures of SOCHE and its member institutions.

Impact Type	Output	Employment	Earnings
Direct	\$206,339,197	862	\$77,054,288
Indirect	\$153,205,028	876	\$53,023,948
Total	\$359,544,225	1,738	\$130,078,236

Table 4: Economic Impact of Capital Expenditures on the SOCHE Region,Annual Average FY 2015-2019 (2022\$)

Source: Economics Center analysis using Lightcast multipliers and data provided by SOCHE member institutions and/or retrieved from IPEDS.

Student Expenditures

Students contribute economically to the area in which they study by purchasing goods and services while attending school. Students spend money on housing, groceries, restaurants, apparel, fuel, vehicle repairs, public transportation, health care, entertainment, and personal care products, among other purchases. The spending of students with a permanent residence inside of the SOCHE Region represents



retained spending that may have otherwise left the regional economy if not for SOCHE member institutions. However, the spending of students with a permanent residence outside of the SOCHE Region represents new spending that would not occur in the regional economy if the students were not enrolled at SOCHE member institutions.

The economic impact of local student spending represents the impact of retained student spending that remains in the SOCHE Region as a result of local students attending SOCHE member institutions. As detailed in Table 5, the spending of local students generated a total of \$1.8 billion in economic output in the SOCHE Region, of which \$942.5 million was the direct impact and \$845.3 million was the indirect impact. The spending of local students directly supported 6,285 jobs with earnings of \$303.3 million. Indirectly, the spending of local students supported 5,078 jobs with earnings of \$300.3 million. A total of 11,363 jobs with total earnings of \$603.6 million were, directly and indirectly, supported by the spending of local students during fiscal year 2019.

Table 5: Economic Impact of Local Student Spending on the SOCHE Region,FY 2019 (2022\$)

Impact Type	Output	Employment	Earnings
Direct	\$942,470,043	6,285	\$303,337,789
Indirect	\$845,274,185	5,078	\$300,265,858
Total	\$1,787,744,228	11,363	\$603,603,647

Source: Economics Center analysis using Lightcast multipliers, the U.S. Bureau of Labor Statistics' Consumer Expenditure Survey, and data provided by SOCHE member institutions and/or retrieved from IPEDS.

Table 6 details the economic impact of non-local student spending, which represents the impact of new money circulating in the regional economy due to non-local students attending SOCHE member institutions. The spending of non-local students generated nearly \$279.9 million in direct economic output, after factoring for economic leakage. This spending led to further indirect economic output of \$250.8 million. The spending of non-local students directly supported 2,347 jobs with earnings of \$93.5 million. Indirectly, non-local student spending supported 1,545 jobs with \$90.0 million in earnings. In total, the spending of non-local students had an economic impact of approximately \$530.7 million, an employment impact of 3,892 jobs, and an earnings impact of \$183.5 million in the SOCHE Region during fiscal year 2019.

Table 6: Economic Impact of Non-Local Student Spending on the SOCHE Region,FY 2019 (2022\$)

Impact Type	Output	Employment	Earnings
Direct	\$279,892,409	2,347	\$93,509,112
Indirect	\$250,846,573	1,545	\$90,024,589
Total	\$530,738,982	3,892	\$183,533,701

Source: Economics Center analysis using Lightcast multipliers, the U.S. Bureau of Labor Statistics' Consumer Expenditure Survey, and data provided by SOCHE member institutions and/or retrieved from IPEDS.



Total

The total economic impact of SOCHE and its member institutions includes the impact resulting from the operations and capital expenditures of SOCHE and its member institutions as well as the impact resulting from the spending of students attending SOCHE colleges and universities. As detailed in Table 7, SOCHE, its member institutions, and students had a direct impact of \$4.0 billion in economic output during fiscal year 2019. This spending led to further indirect economic output of \$3.5 billion in the SOCHE Region. The spending of SOCHE, its member institutions, and students directly supported 30,608 jobs and indirectly supported an additional 16,086 jobs. The direct jobs supported resulted in nearly \$1.9 billion in earnings, while the indirect jobs supported resulted in \$1.2 billion in earnings. During fiscal year 2019, SOCHE, its member institutions, and students had a total economic impact of \$7.5 billion, an employment impact of 46,694 jobs, and an earnings impact of \$3.1 billion on the SOCHE Region. Of the total economic impact generated, operations expenditures accounted for 64.4 percent, capital expenditures accounted for 4.8 percent, and student spending accounted for the remaining 30.9 percent.

Impact Type	Output	Employment	Earnings
Direct	\$4,021,038,183	30,608	\$1,854,891,139
Indirect	\$3,494,070,188	16,086	\$1,216,098,149
Total	\$7,515,108,371	46,694	\$3,070,989,288

Table 7: Total Economic Impact on the SOCHE Region, FY 2019 (2022\$)

Source: Economics Center analysis using Lightcast multipliers, the U.S. Bureau of Labor Statistics' Consumer Expenditure Survey, and data provided by SOCHE member institutions and/or retrieved from IPEDS.

Fiscal Impact

In addition to the economic impact on output, jobs, and earnings, SOCHE, its member institutions, and students generate fiscal impacts for federal, state, and local governments. The earnings, directly and indirectly, supported by SOCHE, its member institutions, and students generate earnings tax revenue for the federal government, the State of Ohio, and municipalities in the SOCHE Region. Sales tax revenue was generated for the State of Ohio and counties in the SOCHE Region through the spending of the earnings, directly and indirectly, supported by SOCHE and its member institutions as well as through the direct spending of students. Additionally, some SOCHE member institutions paid real estate taxes, made payments in lieu of taxes to local jurisdictions, and paid corporate income taxes.

SOCHE, its member institutions, and students had a total fiscal impact of \$716.8 million during fiscal year 2019, as detailed in Table 8. The federal government received \$520.1 million in earnings tax revenue. The State of Ohio benefited from approximately \$75.9 million in earnings tax revenue and \$46.7 million in sales tax revenue. Counties in the SOCHE Region benefited from \$9.6 million in sales tax revenue, while municipalities in the SOCHE Region received \$62.1 million in earnings tax revenue. Additionally, SOCHE and its member institutions paid \$2.3 million in real estate taxes and \$108,615 in corporate income taxes. These impacts do not include the additional fiscal impacts resulting from other economic activity generated as a result of the SOCHE and its member institutions' presence in the regional economy.



Government Entity	Earnings Tax Revenue	Sales Tax Revenue	Other Tax Revenue ¹⁴	Total Tax Revenue
Municipalities	\$62,085,344	N/A	N/A	\$62,085,344
Counties	N/A	\$9,568,506	\$2,325,594	\$11,894,100
State of Ohio	\$75,896,330	\$46,742,979	\$108,615	\$122,747,924
Federal	\$520,054,933	N/A	N/A	\$520,054,933
Total Tax Revenue	\$658,036,607	\$56,311,485	\$2,434,209	\$716,782,301

Table 8: Total Fiscal Impact, FY 2019 (2022\$)

Source: Economics Center analysis using historical tax rates and data provided by SOCHE member institutions and/or retrieved from IPEDS.

Conclusion

SOCHE and its member institutions are a cornerstone of Ohio and contribute to the development of the talent necessary for the regional economy to thrive. While their main function is to educate students, SOCHE and its member institutions, directly and indirectly, contribute to the regional economy through their purchases and ability to attract students and workers.

In fiscal year 2019, SOCHE, its member institutions, and students generated a total of \$7.5 billion in economic output, supported 46,694 jobs, and generated \$3.1 billion in earnings in the SOCHE Region through their operations and capital expenditures as well as through the spending of students. Additionally, SOCHE, its member institutions, and students created a total fiscal impact of \$716.8 million in the form of earnings, sales, real estate, and corporate income tax revenue for federal, state, and local governments. SOCHE and its member institutions benefit Ohio in numerous ways and will continue to impact the Region through the work of member institutions, employees, and students.

¹⁴ Includes real estate taxes and corporate income taxes.



References

Strategic Ohio Council for Higher Education. n.d. *About SOCHE.* Accessed February 2023. https://www.soche.org/about-us/.

