

# The Economic Impact of FHSU on the Local Economy: FY 2022

Emily Breit, Thomas Johansen & Samuel Schreyer, Fort Hays State University

## Abstract

We evaluate the economic impact Fort Hays State University has on the local economy during fiscal year 2022 by utilizing two estimation methods. These methods focus on the total spending from the institution, the faculty and staff, the students, and the visitors. The results of the analysis estimate the economic impact of the university ranges between \$167,862,253 and \$239,200,242.

## Introduction

Fort Hays State University is an economic driver for Western Kansas. The university employs hundreds of workers, purchases goods and services from local vendors, and educates the regional workforce. The purpose of this study is to provide an analysis on the university's economic contribution to the local economy for fiscal year 2022.

To obtain the economic impact we estimate the impact of spending from the university. The direct impact represents the spending by the university, the indirect impacts are the effects felt in the chain of suppliers, and the induced impacts are changes that occur in the consumers spending behavior (Carr and Roessner, 2002). The sum of these three obtained values is the total economic impact of FHSU in the region.

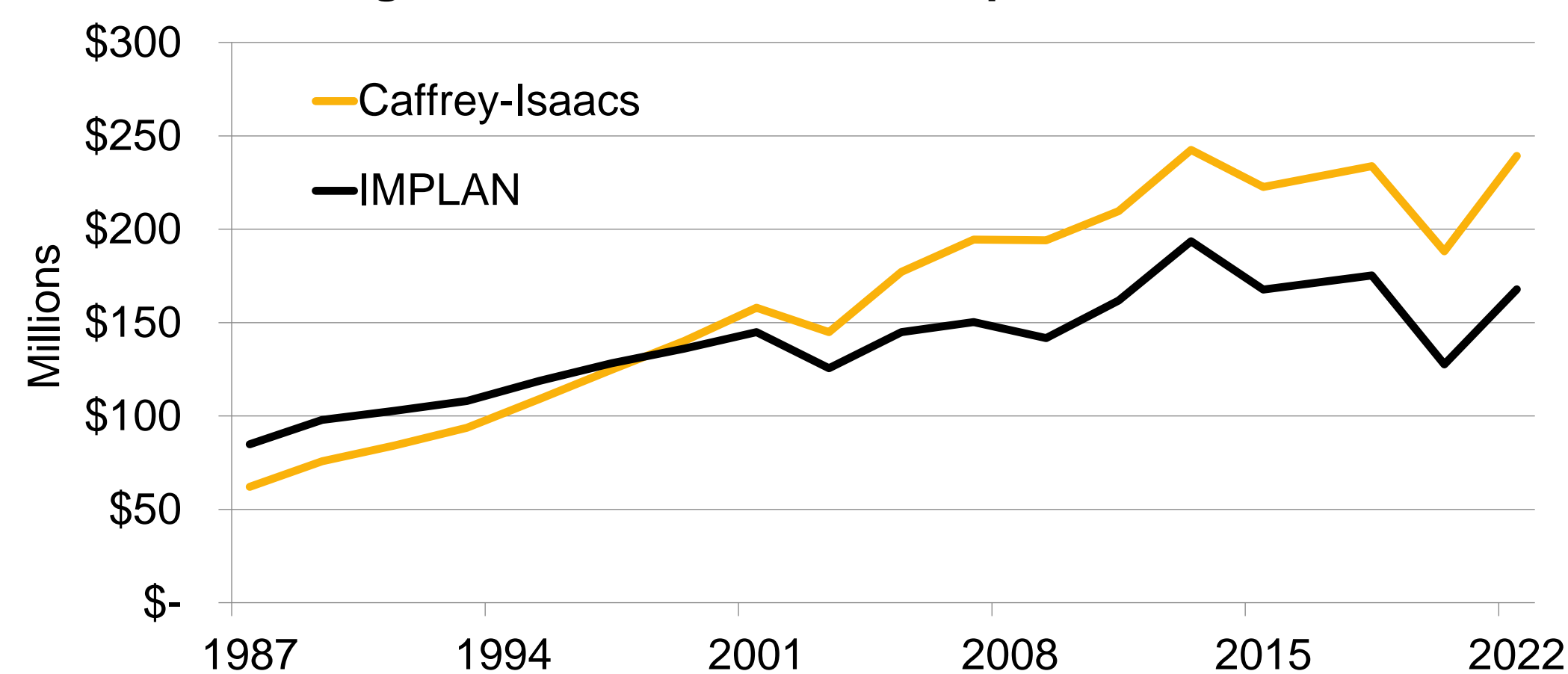
## Data

Data requests were made to Fort Hays State University to obtain information on employment, salaries, and operating expenditures. A survey was conducted during Fall 2022 to assess FHSU student and faculty spending and to assess visitor patterns for FY2022. Additional information was obtained from local agencies regarding visitors to the area. Employment, salary, and student and faculty spending data were provided by zip code, allowing for the allocation of spending to be assessed at the county level.

## Historical Impact

Fort Hays State University has had a positive economic impact on the local economy for many years. Figure 1 graphically summarizes the economic impact of FHSU since 1987. As the economy has grown, so has the impact of FHSU.

Figure 1: FHSU Economic Impact: 1987-2022



## Methodology & Model

FHSU's economic impact is the difference between the economic activity in the local economy given the presence of the university and the level that would have been present if the university did not exist. Two methods often used to assess the economic impact of colleges and universities are the Caffrey-Isaacs approach and the IMPLAN approach. A summary of these methods is provided by Stokes and Coomes (1998).

The Caffrey-Isaacs approach was developed in 1971 to provide a framework for estimating the economic impact of universities. Economic information required by this model includes spending by faculty, staff, students, the university and constituents and other economic activities occurring because of the university. A spending multiplier is estimated to show how dollars "ripple" through the regional economy. For example, if this total effect multiplier is estimated to be 2, then for every dollar that FHSU spends in Ellis County, an additional \$2.00 of spending is produced in Ellis County, effectively growing the economy. Multipliers can be divided into a direct effect, an indirect effect, and an induced effect. The direct effect is the amount of money that FHSU spends in the regional economy. The amount of spending by businesses that receive income, as a result of FHSU spending, is the indirect effect. Employees of FHSU and employees of FHSU vendors also spend a portion of their wages and salaries locally, the induced effect.

The IMPLAN approach utilizes the Input-Output (I-O) analysis originally developed by Wassily Leontief in 1936. I-O models estimate inter-industry relationships in a region by measuring the distribution of inputs purchased and outputs sold by each industry. IMPLAN was utilized to quantify the economic interaction between FHSU and various industries, businesses, and other institutions in the Ellis County economy. IMPLAN total effect multipliers measure changes in output, employment, and labor income on the regional economy.

## Selected Results

For FY2022, the direct impact of FHSU on the local economy as a result of direct spending by the university, its employees, students and visitors results in a direct expenditure of \$132,889,023. This direct impact produces an indirect impact as local business establishments purchase materials and supplies from other local enterprises to support their sales. The indirect impact is estimated to be 20% of the direct impact, or \$26,577,805. The income received by local residents from the initial dollars spent is partially spent within the local economy, thus creating additional sales. This induced impact is estimated to be 60% of the direct impact, or \$79,733,414. Using the Caffrey-Isaacs approach, the total economic impact of Fort Hays State University on the local economic region is \$239,200,242. These impacts are summarized in Table 1.

Table 1: FHSU Economic Impact (Caffrey-Isaacs)

Impact Type	Expenditures
Direct Impact	\$132,889,023
Indirect Impact	\$26,577,805
Induced Impact	\$79,733,414
<b>Total Economic Impact</b>	<b>\$239,200,242</b>

This study calibrated the IMPLAN model for FHSU spending. The impacts of FHSU operating costs and employee compensation were estimated using Institutional Spending Patterns for State and Local Government, Education sector. The impacts of all the other categories of expenditures were examined using Industry Spending Patterns. Table 2 shows three categories of impacts which reflect the contribution of FHSU to the region: *output* (overall economic contribution), *employment* (jobs created due to the presence of the university) and *labor income* (contribution to earnings).

Table 2: FHSU Economic Impact (IMPLAN)

Impact Type	Output	Employment	Labor Income
Direct Impact	\$114,757,410	1,915	\$87,840,374
Indirect Impact	\$2,634,147	14	\$688,159
Induced Impact	\$50,470,697	358	\$14,226,286
<b>Total Economic Impact</b>	<b>\$167,862,253</b>	<b>2,287</b>	<b>\$102,734,819</b>

## Conclusion

The estimates in this study indicate FHSU has a significant contribution to the local economy. For perspective, FHSU's total economic impact is approximately 11% to 16% of Ellis County's gross domestic product. Similarly, FHSU's impact on employment is approximately 13% of Ellis County's entire labor force.

The actual economic impact of Fort Hays State University is likely larger than the estimates presented here due to conservative assumptions used in our models and the short-run focus. Long-term benefits not factored into our estimates include FHSU's impact on increased productivity and earnings via a better educated work force. Indeed, the primary impact of FHSU in the long-run is the large number of job-ready graduates produced each year who make life-long contributions to the economy of the Ellis County region and the state of Kansas.

Fort Hays State University is a driving force in the economy of Western Kansas through educational, operational, research and other activities. This study analyzes the direct, indirect, and induced impact that FHSU has on Ellis County. The results indicate that in FY2022, the economic impact of FHSU on the local economy is estimated to be between \$167,862,253 and \$239,200,242.

## Selected References

- Caffrey, J.; Isaacs, H. (1971). *Estimating the Impact of a College or University on the Local Economy*. Washington, DC: American Council on Education, ERIC ED252100, p. 12.
- Carr, R.; Roessner, D. (2002). *The Economic Impact of Michigan's Public Universities*. SRI Project: PDH 02-019, p. 13.
- Stokes, K; Coomes, P. (1998). *The Local Economic Impact of Higher Education: An Overview of Methods and Practice*. AIR Professional File, 67. pp. 1-14.