### Fermilab Science Office of Science



### Fiscal Year 2022 – Economic Impact Assessment

Andrew Hime Community Advisory Board Meeting 28 March 2024

### Introduction

### Overview

- Background
- Methodology
- Key Findings
- Illinois Based Impact
- Accessing Data
- Questions

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### **Economic Impact Assessment Background**

- National laboratories are recognized as significant contributors to local economies
- Many labs create annual economic analyses
- Updates our previous economic impact with improved methodology and recent budget and expenditures

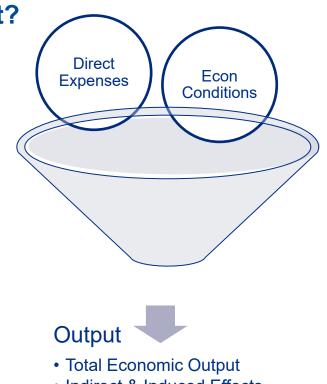


U.S. National labs map\_0.jpg (1024×791) (energy.gov)



### What is an Economic Impact Assessment?

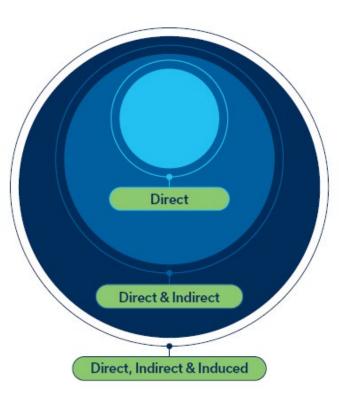
- The study of the impact on the economy of any type of project, event, program, or policy.
- A point-in-time measurement.
- Relies on mathematical tools to quantify changes in the economy.



- Indirect & Induced Effects
- Value Add (GDP)
- Labor Income
- Jobs Created/Sustained



### **Economic Impact Assessment Methodology**



### DIRECT

The direct labor, procurement and operating expenses that were incurred (the economic impact of FY22 operations)

### INDIRECT

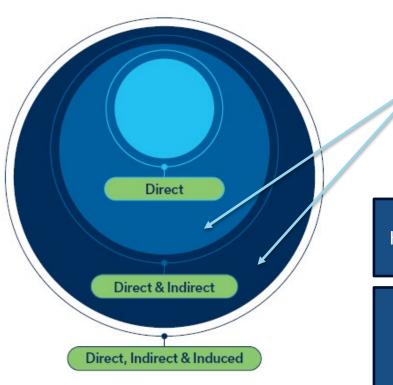
Impacts that are generated as the result of business-to-business transaction (the impact of transactions with subcontractors and suppliers within the region)

### INDUCED

Impacts that are generated as a result of business-to-consumer spending (the impact of paychecks spent by employees within the economy)



### **Methodology Important Components**



Household income and value-added are significant metrics that appear in both indirect and induced output

Household Income = all forms of employment compensation

Value-added = a measure of GDP. Everything (except raw materials) in producing a good or service



# **Key Findings**

# Fermi National Accelerator Laboratory's

Fiscal Year 2022

\$1.6 billion

total economic output

\$1.3 billion Illinois \$275 million South Dakota

# 🛟 Fermilab

7



7,242 jobs created/sustained

Fermilab worked with





# \$70 million+

spent with small businesses across America

Future economic impact projections for DOE flagship projects:

LBNF/DUNE (estimated through FY30)

\$4.3 billion

2,750 jobs sustained/year

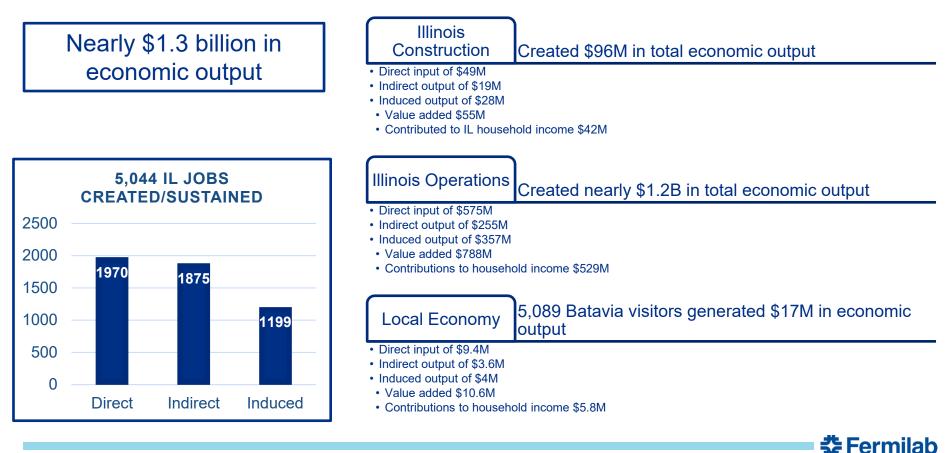
PIP-II (estimated through FY28)

\$1.26 billion

**466** jobs sustained/year



# **Key Findings - Illinois Economic Modeling**



### **Key Findings - Illinois Transaction Information**

For every 100 Fermilab jobs created an additional 156 jobs are created or sustained through Illinois

# **Illinois Local Impact**

\$93.4 million in procurement awards

\$41 million to small businesses

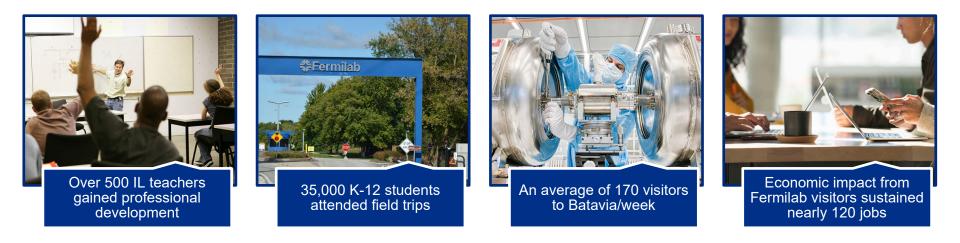
496 of 2,400 students and postdocs from IL

400 of the 900 small businesses were in Illinois



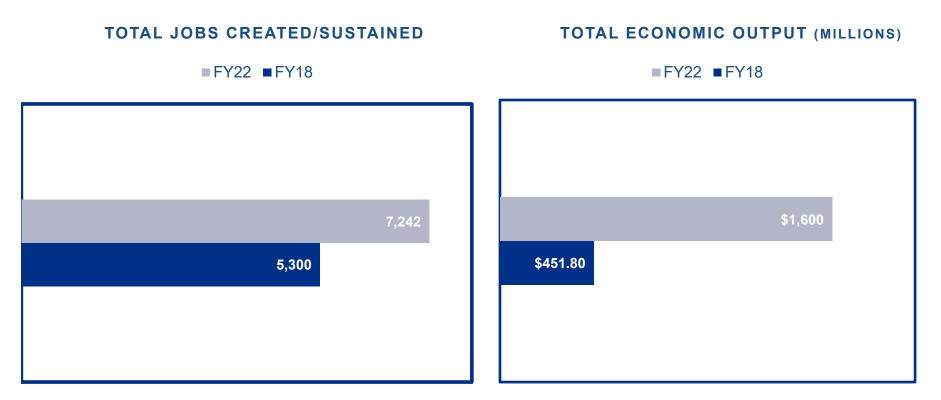
## **Key Findings - Other Illinois Economic Highlights**

### Economic impact expands beyond the mathematical models





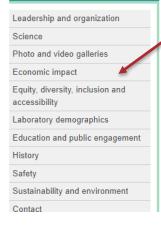
### **Measuring Progress (FY18 – FY22)**







#### About



#### Fermilab is America's particle physics and accelerator laboratory.

What are we made of? How did the universe begin? What secrets do the smallest, most elemental particles of matter hold, and how can they help us understand the intricacies of space and time?

Since 1967, Fermilab has worked to answer these and other fundamental questions and enhance our understanding of everything we see around us. As the United States' premier particle physics laboratory, we do science that matters. We work on the world's most advanced particle accelerators and dig down to the smallest building blocks of matter. We also probe the farthest reaches of the universe, seeking out the nature of dark matter and dark energy.

Fermilab's 2,160 employees include scientists and engineers from all around the world. Fermilab collaborates with more than 50 countries on physics experiments based in the United States and elsewhere.

Fermilab's 6,800-acre site is located in Batavia, Illinois, and is managed by the Fermi Research Alliance LLC for the U.S. Department of Energy Office of Science. FRA is a partnership of the University of Chicago and Universities Research Association Inc., a consortium of 89 research universities.

For more about who we are and what we do, follow the links below. Contact us at fermilab@fnal.gov or by calling 630-840-3351.

### https://economicimpact.fnal.gov



### Thank you & questions



### Please feel free to contact me if you have any additional questions <u>ahime@fnal.gov</u>

