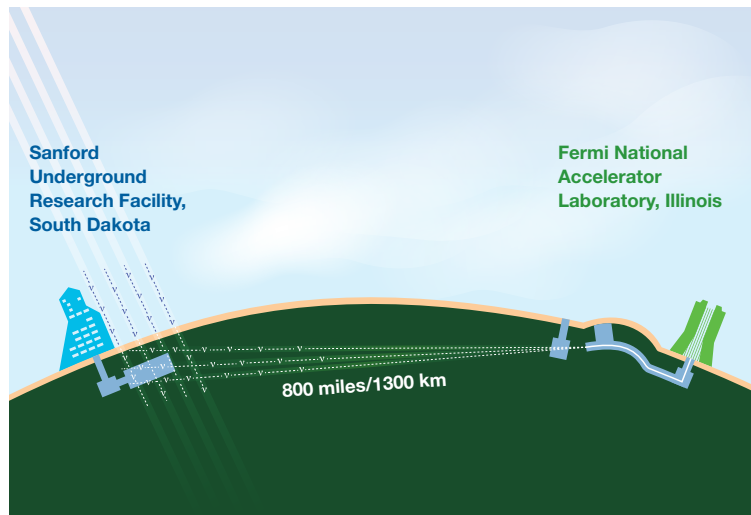


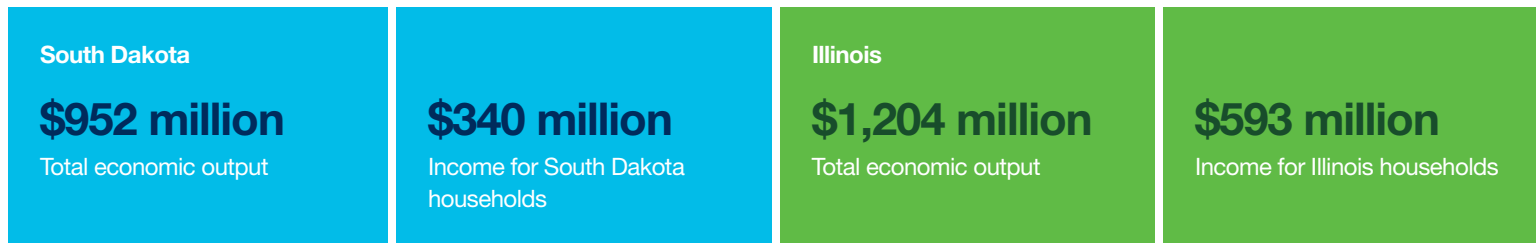
The Long-Baseline Neutrino Facility: Building the Future

The **Long-Baseline Neutrino Facility (LBNF)** will be the world's flagship science project to unlock the mysteries of neutrinos, the particles that could be the key to explaining why matter exists in our universe. It will house the infrastructure and particle detectors for the **Deep Underground Neutrino Experiment (DUNE)** and will use the world's most intense neutrino beam. LBNF will be hosted at the U.S. Department of Energy's Fermi National Accelerator Laboratory in Illinois and the Sanford Underground Research Facility in South Dakota. About 1,000 scientists from more than 160 laboratories and universities in 30 countries are contributing to this international mega-science project. In addition to direct economic benefits to the states of Illinois and South Dakota, LBNF will foster STEM education nationwide and keep the United States at the leading edge of global science and innovation.

[Learn more about the project and read the full economic impact report at \[lbnf.fnal.gov\]\(http://lbnf.fnal.gov\)](#)



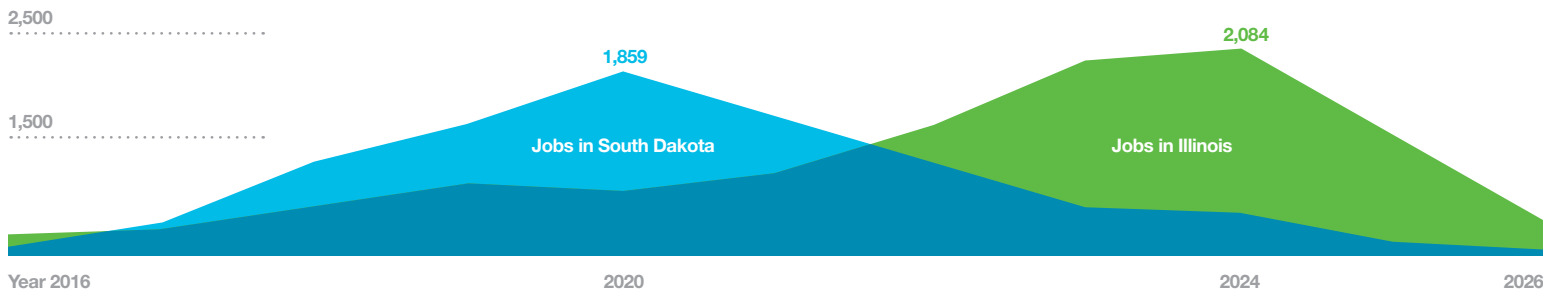
Economic impact, 2016-2026*



90% of economic output is in the 13-county western South Dakota region

94% of economic output is in the 9-county Chicago metro region

Jobs created, 2016-2026*



*As each dollar spent on LBNF and DUNE enters the economy, it supports additional business activity, jobs and payroll. These numbers reflect these multipliers. Calculations include LBNF and associated projects DUNE, PIP-II and IERC, and are based on the budget profiles presented to the U.S. Department of Energy in 2015. Source: Anderson Economic Group, LLC

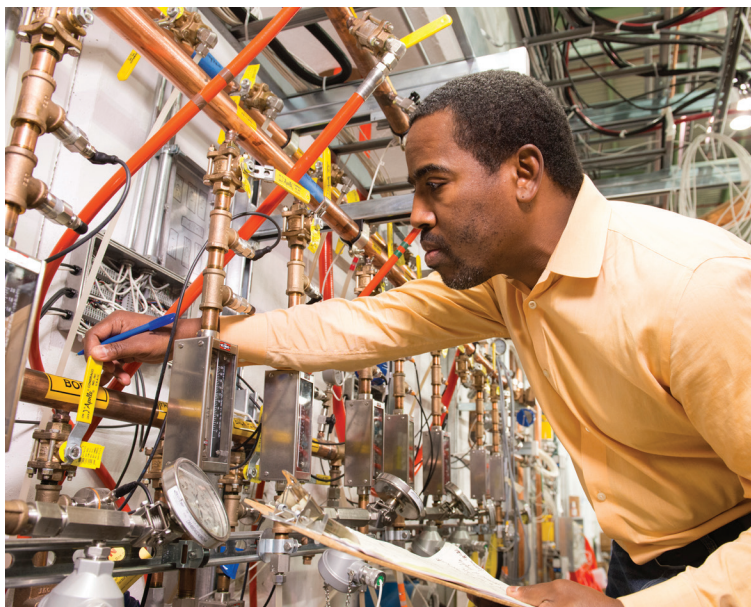


The Long-Baseline Neutrino Facility: Building the Future



Education and Training

The Long-Baseline Neutrino Facility and the Deep Underground Neutrino Experiment will help build the STEM workforce needed for tomorrow's high-tech global economy. Locally and regionally, Fermilab in Illinois and the Sanford Underground Research Facility in South Dakota will transform LBNF and DUNE's science and technology into STEM education opportunities for tens of thousands of K-12 students. Nationally and internationally, hundreds of college and university students from the United States and DUNE's 30 partner countries will perform research and receive unparalleled training opportunities in cutting-edge scientific environments.



Technology

Particle physics pushes the boundaries of technology, improving everyone's quality of life. Tools and technologies developed for particle physics experiments power next-generation medical imaging devices, enable advanced cargo screening, simulate radiation exposure in spacecraft, manufacture customized medical implants and produce heat-shrinkable film for the food industry. Advances in particle accelerator, particle detector and computing technologies for LBNF and DUNE may revolutionize tomorrow's energy, environment, medical or industrial processes.

Expanding our Understanding

Particle physics research is a global endeavor, requiring the combined work of thousands of people from dozens of countries to build and use the tools of discovery. Over its decades-long lifetime, LBNF and DUNE will engage thousands of physicists, engineers, technicians and students in cutting-edge research, from R&D, to the handling and analysis of massive data sets, to the discoveries that will transform humankind's understanding of the universe.