

Fermilab Recovery Act funding uses

The U.S. Department of Energy provides Fermi National Accelerator Laboratory with \$103.1 million in American Recovery and Reinvestment Act funds.

Fermilab will invest the funds in critical scientific infrastructure to strengthen the nation's global scientific leadership as well as to provide immediate economic relief to local communities. The funds will generate jobs in architecture and design, engineering and construction, as well as in manufacturing, industry and high-tech equipment supply companies.

The money supports the following projects:

- **General Infrastructure Projects, \$25 million:** Construction, expansion and upgrades to buildings to improve research area energy efficiency, support the development of superconducting technologies and materials for next-generation accelerators. These projects will also improve the reliability and efficiency of computing, preventing costly downtime. Fermilab estimates that these projects will create 125 construction jobs during the next four years. For more information, see: <http://www.fnal.gov/recovery/projects/GIP.html>.
- **NOvA, \$14.9 million:** The world's most advanced neutrino experiment, NOvA will address the question, "What happened to the antimatter in the universe?" Fermilab will send an intense neutrino beam from Illinois to a detector in Ash River, Minnesota. Construction of the facility, supported under a \$40.1 million cooperative agreement for research between the U.S. Department of Energy and the University of Minnesota, is expected to generate 60 to 80 jobs plus purchases of materials and services from US companies. For more information, see: <http://www-nova.fnal.gov>.
- **High-field magnets, \$1.5 million:** Research and development to create superconducting magnets more than twice the strength of existing magnets that steer particle beams in accelerators. Fermilab's development of superconducting accelerator magnets 30 years ago led to industrial fabrication, resulting in such applications as medical MRI systems. High-field magnets may yield even more applications for industry and medicine.
- **Long Baseline Neutrino Research, \$9 million:** Research and development to create the beamline, detectors and associated technology for advanced neutrino research at the intensity frontier, key to Fermilab's long-term future.
- **Superconducting Radio Frequency technology, \$52.7 million:** Superconducting radio frequency technology provides a highly efficient way to accelerate beams of particles. Scientists consider it crucial for building next-generation particle accelerators. The technology also holds significant promise for applications in medicine, energy, material science and national security. Funds will be used to develop US industrial capabilities, purchase high-tech components from US vendors and build infrastructure necessary to move future laboratory projects forward.