Fermilab and the American Recovery and Reinvestment Act

http://www.fnal.gov/recovery/

Fermilab Recovery Act funding uses

The U.S. Department of Energy has provided 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 construction, engineering, architecture and research jobs as well as support service and manufacturing industries through the purchases.

The money supports the following projects:

- **General Infrastructure Projects, $25 million:** Construction, expansion and upgrade of buildings to improve research area energy efficiency, support the development of superconducting technologies and materials that could be used in the next-generation linear collider, improve reliability and efficiency of neutrino and computing research, and increase the quality and delivery time of experiment parts, preventing costly experiment downtime. More information available at: http://www.fnal.gov/recovery/GIP.html.

- **Superconducting Radio Frequency Technology, $52.7 million:** Build a test area for components needed for a next-generation particle accelerator. Superconducting radiofrequency technology aims to increase the efficiency of transferring particle energy and the amount of energy, speed and mass the particles can acquire.

- **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.

- **High-Field Magnets, $1.5 million:** Research and development to create magnets with fields more than twice as strong as existing magnets used to steer particle beams.

- **NOvA, $14.9 million:** The world's most advanced neutrino experiment will shoot a beam of particles underground to a detector in Ash River, Minn., near the Canadian border. The experiment will delve into the mystery of how matter came to dominate antimatter in the universe, allowing for the existence of all solid objects. More than 180 scientists from about 28 institutions will work on the project. NOvA construction, funded through stimulus money given to the University of Minnesota and Fermilab, is expected to generate 60 to 80 jobs. For more information, see: http://www-nova.fnal.gov/.