

# Fermilab and the American Recovery and Reinvestment Act

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

## **General Infrastructure Projects**



#### **High Availability Computing Center**

The Computing Division provides administrative, technical and physical support of central computing, storage and networking equipment critical to the success of the lab's scientific mission. Currently, Feynman Computing Center houses the only high availability computing center on the Fermilab campus, which is now operating at its electrical capacity. This project will provide an additional high availability computing center facility within Feynman. It will also increase the electrical capacity and associated support functions for the computing center in order to support high availability computing operations.



#### **Feynman Computing Center Cooling Upgrades**

The Feynman Computing Center was constructed in the late-1980's to provide computing support of high-energy physics programs. In order to provide reliable, effective cooling to support computing operations within Feynman, the facility requires modern data center cooling equipment. This project will replace original water source and chilled water computer room air conditioning units with appropriate state-of-the-art cooling equipment for computing spaces.



#### **Industrial Building-3 Addition**

This project will construct a two-story addition to the existing Industrial Building 3 to add 5,800 square feet of office space on the second floor and 7,700 square feet of low-bay laboratory and fabrication space on the first floor. Fermilab will use the space to consolidate material development, processing and testing of components for future accelerators.



#### Main Injector-8 Service Building Expansion

This project will construct a new high-bay addition to the existing Main Injector-8 Service Building, which functions as the access and support building for the Main Injector underground enclosure at the 8 GeV injection point. The expansion is needed to consolidate two Accelerator Division Target Hall Operations Groups into one support facility. The expansion will result in added functionality, will reduce risk to personnel and equipment and provide an overall increase in productivity and quality assurance. The consolidation will also facilitate the cross-training of personnel, providing a larger staff for crisis situations.



#### **New Muon Laboratory Expansion**

Superconducting radio frequency technology has many applications for future accelerator projects crucial to Fermilab's future. The project will construct an underground enclosure and support housings for the superconducting radio frequency cryomodules and test beam lines at Fermilab. Technical beamline equipment will occupy the length of the existing facility and the 202-foot extension.



### Wilson Hall Emergency Generator

The two combustion turbine-generators in the basement of Wilson Hall are the key components in the building's emergency power system. A new diesel engine-generator will be located at grade adjacent to the existing generator room. Visual screening will be installed and adjacent areas landscaped. The existing generator room will continue to house the automatic switchgear and power panels.