

NSEL POLICY

The Newmark Structural Engineering Laboratory (NSEL) of the Department of Civil and Environmental Engineering has a long history of excellence in large-scale, experimental structural research and over the years has contributed greatly to the state-of-the-art in civil engineering. Completed in 1967 and extended in 1971, the structural testing section of the laboratory is a versatile area with a three-story clear height that can be used to carry out a wide range of tests of building materials, components, structural assemblies, and models. The testing equipment was upgraded in 1994. New controllers and instrumentation were purchased. This acquisition increased laboratory's performance in terms of quality of test control and experimental data generated during testing. Twenty eight foot tall, L-shaped reaction wall was added in 2004. Also, 3 Loading Boundary Condition Boxes (LBCBs) for seismic related experimental research were added to testing facility of NSEL. Both reaction wall and multi-axial loading units were sponsored by Network for Earthquake Engineering Simulation (NEES). This upgrade was followed by new instrumentation, primarily for strain measurements of structures tested.

NSEL has been actively interacting with highly respected faculty members primarily from the Department of Civil and Environmental Engineering as well as some faculty members from other departments from the College of Engineering. Also, the NSEL contributes to the teaching activities of our department. The laboratory sections of classes CEE-300, CEE-400, CEE-401, CEE-410, CEE-575, and CEE-498 are carried out in the NSEL using our universal testing frames. Both undergraduate and graduate students are involved in the experimental research programs carried out in the laboratory.

NSEL belongs to the faculty of Department of Civil and Environmental Engineering. The NSEL Director is responsible for all its activity. The department head formed the NSEL Working Committee which advises the lab director about the future development of the lab, policy and regulations, equipment and instrumentation, etc. The NSEL Operations Director coordinates all testing projects carried out in the lab; e.g. helps users in design of testing arrangements, schedules testing projects, assigns space in NSEL and coordinates effort of principal investigators, students, and staff in the laboratory. The NSEL Manager overlooks every day activity in the lab. He dedicates testing equipment, instrumentation, maintains hydraulic equipment and lifting hardware; cranes, fork, scissor, and boom lifts. The CEE Machine Shop supports NSEL by assisting principal investigators and graduate students in construction and setup of experiments. It also provides service in moving heavy equipment and specimens.