

## **II.I. Major Capital Projects Underway in Fiscal Year 2010**

The NJIT campus consists of 2.9 million gross square feet of built environment on a 48 acre campus. With the recently completed construction and major rehabilitation, the average age of campus facilities is about 22 years. This is in spite of the original building dates of the 1964-1967 expansion campus, Eberhardt Hall built in 1897, Colton Hall in 1911 and Campbell Hall in 1930.

In concert with the development of University Heights Science Park, NJIT was able to consolidate a whole block just west of the major portion of the campus, but contiguous to the land acquired for its Enterprise Development Center II, in a “land swap” with the NJ Economic Development Agency of several disparate parcels that NJIT had acquired over time with land the EDA was acquiring on behalf of Science Park. The third building in Science Park Newark, a 170,000 square foot laboratory building and an addition have been completed.

NJIT completed EDCIII, an 80,000 gross square for incubating businesses as well as next stage companies which have graduated from the incubator spaces.

NJIT, with active participation of area stakeholders, has recently embarked on a major project to lead a redevelopment effort in a portion of the historic James Street section of Newark adjacent to campus. This project will involve repurposing some facilities from NJIT, Saint Michael's Hospital, the relocation of Greek housing to campus land along Warren Street, and the systematic creation of a model residential and small business zone within walking distance of Newark's central business district. NJIT has been selected and the work plan was submitted to the city for the selection of a planner / developer of this project. The Newark City Council recently adopted a redevelopment plan for the Broad Street Station Area which includes the NJIT gateway plan. The Council also confirmed NJIT as the redeveloper for the Gateway Project. The City Council approved the Redevelopment Agreement naming NJIT as the sole developer for the land within the footprint of the Gate Way Area. With respect to the Greek Village portion of the project, responses from potential developers are now being reviewed. It is expected that the developer will be under contract shortly. With respect to the multi-functional building, progress is being made on assembling the land.

### **II.J.1. Planning, the NEXT STEP**

In 2005 the previous building phase was completed and NJIT has embarked on a comprehensive facilities planning project to identify facilities needs for the next five to ten years. This effort will take a comprehensive look at the curriculum and instructional needs for a growing campus in addition to the student service infrastructure that growing campus will require. The Facilities Master Plan was completed and is available on the university's web site.

The Plan provides plans for the orderly growth to accommodate up to 12,000 students. The Plan and an Executive Summary have been placed on the Web.

With all the expansion and new facilities, can there be further needs? In a growing technological university the answer is a firm yes. As NJIT continues to place greater emphasis on the use of technology in the life sciences, new spaces will be needed. Further, as new research oriented faculty join NJIT, more laboratory space will be necessary. The overall enrollment is projected to have modest growth in the next 5 to 10 years. The new Master Plan addresses these issues in more detail. NJIT has utilized almost all of the available land as building sites. Further, the Facilities Master Plan does not expand the general campus footprint beyond the four blocks that currently surround the campus.

To meet the challenge of limited building sites, NJIT will continue to pursue multiple paths. Limitations on funding and available land make it imperative that alternative solutions be found. As a critical element of its planning process, NJIT has developed and strengthened strategic alliances with its university neighbors. The Council for Higher Education in Newark (CHEN) consists, in addition to NJIT, of the Newark campus of Rutgers University, the University of Medicine and Dentistry of New Jersey and Essex County College. This consortium has developed both joint academic and administrative programs. For example, a researcher in the College of Computing Sciences may test computer models on learning curves in laboratory animals by using the animal facilities just across the street. There are several federated departments at NJIT and Rutgers University, which permit NJIT to have a faculty of critical mass without the full facilities burden.

The Master Plan also calls for “re-using” land by replacing low density structures with larger/taller structures. This would continue the program started with the expansion of the Campus Center

In addition, NJIT and the Newark Public Schools have executed a purchase agreement for NJIT to acquire the adjacent public Central High School which will not be needed by the School system. The sale has been completed and NJIT took title in June 2010

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Central High School, now referred to as the Central King Building has approximately 236,000 square feet of space. While it is in need of substantial rehabilitation, the lower floors could provide future classroom space; relieve a growing demand on physical education facilities as well as space for our math, science teacher education efforts.

At this time, Phase I renovations are underway. A portion of the first floor (approximately 8,000 square feet) and the second floor (approximately 30,000 square feet) are being rehabilitated and will provide additional classrooms for 550 students.

Another major focus is to secure the building envelope and bring the building up to code by installing sprinkler systems in all occupied areas and fire alarm systems throughout. Finally technological enhancements such as smart classrooms and network access will transform the space into that which is more suitable for higher education.

Future phases include upgrading the gym and the pool both for recreational purposes and for athletic team practice; a 930 seat auditorium will also be renovated which will be used for lectures, performances and lecture series presentations. Additional classrooms will be renovated to lighten scheduling pressures on other facilities as enrollment increases.

### **II.J.2. Deferred Maintenance**

Another critical element of the facilities plan addresses the outstanding major items of deferred maintenance. To this end, a significant allocation of resources has been made. It should be noted that NJIT has, on an annual basis, continually made progress on this important issue. Even in these difficult economic times, funds have been allocated to major system, e.g., HVAC upgrades as well as refurbishing well used areas.

### **II.J.3. Sustainability**

NJIT sustainability efforts include environmental pollution control, recycling, water conservation, energy efficient equipment installation ,demand limiting strategies roof top vegetation systems, a solar voltaic grid for production of 50 megawatt hours of electricity per year, solar heating for domestic hot water needs, use of synthetic turf, compressed summer schedule, building shading and occupancy sensors. NJIT is among the leaders in producing the fewest tons of emissions per square foot of campus area in New Jersey.

With financial support from the American Recovery and Reinvestment Act, \$1.7 million was provided for Oak Hall through a NJ Board of Public Utilities Grant for innovations in engineering efficiencies and renewable energy. This nearly complete retrofit of Oak Hall includes use of roof mounted photovoltaic cells to generate power; demand-based controls for heating ventilation and air conditioning; new energy efficient and environmentally safe equipment; high efficiency boilers; energy conserving variable speed drives; solar water heating to displace gas as the primary source of heating water; regenerative elevator technology, and high efficiency lighting in residence and common areas utilizing the most advanced fluorescent technology.

### **II.J.4. Financing**

The financing for the recent projects came from several sources. Several of the projects have multiple sources of funding reflective of certain restrictions on funds. For example, the US Economic Development funds could only be used for Enterprise Development III. While the overall debt of the university has risen owing to this construction, the annual debt service is covered from operating revenues, including student fees, residence hall rentals and tenant income from EDCIII. The university issued general obligation bonds

through the NJ Educational Facilities Authority. At the time of issuance, Moody's Investors Service and Standard and Poor's Ratings Group have assigned bond ratings of "Aaa" and "AAA," respectively to our insured issues. Moody's Investors Service and Standard and Poor's Ratings Group have recently reaffirmed the university's ratings of "A1" and "A+," respectively.