UNION COUNTY COLLEGE
FACILITIES MASTER PLAN

2013-2018

Facilities Master Plan

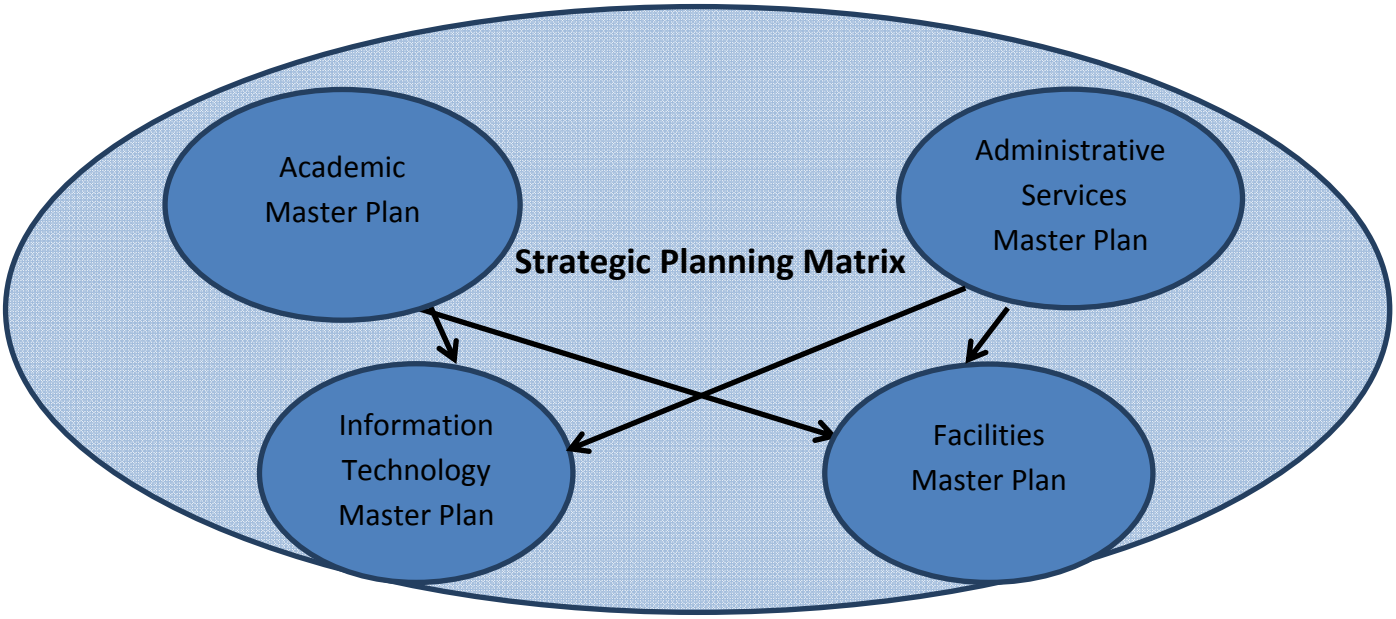
Union County College is an inclusive, public, comprehensive community college with the three-prong mission to provide access to high quality and affordable higher education.

Essential components aimed toward achieving this mission is envisaged by a four-legged table: one leg represents career programs; another leg represents transfer programs; another represents developmental education, and the last leg corresponds to lifelong learning often called continuing education or non-credit.

This Facilities Master Plan is in alignment with these goals. It is designed to provide strategic and operational direction for facilities planning through 2018. Recognizing that increasing the number of degree holders in our country is essential to a thriving economy, Union County College seeks to provide students with a learning environment that supports contemporary and innovative pedagogical practices. That is, the 21st century classroom needs to recognize the student as both a learner and customer.

Furthermore, our facilities need to accommodate faculty and staff in the delivery of high-quality educational services in value-based education that affirms our commitment to C*aring, Courage, and Community.*

The Facilities Master Plan and Information Technology Strategic Plan flow directly from the Academic Master Plan and Administrative Services Master Plan. The Union County College Strategic Planning Matrix represents a synthesis of these plans.



The central theme of this document is *Students are #1*. The philosophical vision for the FMP is the creation of facilities that provide first-class academic support, student services, administrative support, and technology. The College president together with the Union County College Board of Trustees and senior staff have engaged in a collaborative process designed to outline the College's facility needs over the next five years. This document will direct facilities construction and support the further development of strategic initiatives.

Chapters

Chapter 1: College Overview

Union County College is a public comprehensive community college. It is the oldest of New Jersey's associate degree colleges, founded in 1933. The College operates major campuses in Cranford, Elizabeth, Plainfield and Scotch Plains. Union enrolls almost 30,000 credit, non-credit, and continuing education students and is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools. Union has had the largest non-credit enrollment among the nineteen New Jersey County Colleges.

Known for excellence among regional colleges and universities, programs at Union lead to the Associate in Arts, Associate in Science, Associate in Applied Science degrees, and Certificates and Diplomas. Students who complete two-year programs may transfer to four-year institutions for their junior and senior years or seek employment in their fields of study. Union is one of the most racially and ethnically diverse county college in New Jersey. The Institute for Intensive English is a National model for teaching English as a Second Language. Each year over 2,000 students representing over 80 countries and speaking 40 different languages enroll in ESL classes on the Elizabeth campus. The Professor Elmer Wolf Engineering Program has been preparing students for transfer to prestigious colleges and universities throughout the country for decades. Graduates of Union's renowned American Sign Language Program are sought after for employment and transfer to baccalaureate programs.

Union County College is the largest educator of undergraduate allied healthcare professionals in New Jersey, offering degrees and certificates in nursing and licensed practical nursing, physical therapy, emergency medical services, radiography, and nuclear medicine technology. Union County College is the partner in cooperative programs with the Trinitas School of Nursing, Elizabeth, New Jersey, the Muhlenberg School of Nursing, Plainfield, and the University of Medicine & Dentistry of New Jersey in Scotch Plains.

Union County College has set forth an aggressive agenda centering on improving student success outcomes. The College is focused on revitalizing student services, strengthening advising and counseling, improving teaching and learning, and engaging the entire campus community in the process of mission review to renew the institutional commitment to student success. For a more detailed description of Union County College, please see the most recent Annual

Institutional Profile at:
http://admissions.ucc.edu/Media/Website%20Resources/documents/Administration/InstitutionalResearch/ExcellenceAndAccountability/Annual%20Institutional%20Profile_2012.pdf

For information about how Union County College measures against other comparable institutions, please see the most recent Integrated Postsecondary Education Data System (IPEDS) report at:
http://www.ucc.edu/Media/Website%20Resources/documents/Administration/InstitutionalResearch/PRR2012/Exhibit%20169.pdf

Chapter 2: Overview of Campuses

Location

The College's principal campus is its Cranford campus. It also maintains major branch campuses in Elizabeth and Plainfield as well as Scotch Plains, New Jersey.

The Cranford Campus of Union County College is situated on 48 acres on the border between the suburban communities of Cranford and Westfield on Springfield Avenue, opposite Union County's 200-acre Nomahegan Park. The campus is convenient to the Garden State Parkway, Routes 28, 27and 1; is served by three bus routes of New Jersey Transit and is within a mile of the Cranford Station of New Jersey Transit's Raritan Valley Railroad line. The campus has onsite parking sufficient for 1,497 vehicles.

The Elizabeth Campus is situated on two sites, both within the major business district of Elizabeth, New Jersey. The first, in the Sidney F. Lessner Building, is located at 12 West Jersey Street, on a one-acre site a half block from the city's major thoroughfare. The second, in the Elizabeth I. Kellogg Building, is located at 40 West Jersey Street on 1.4 acres approximately one block west of the Lessner Building.

Both buildings on the Elizabeth Campus are within steps of the Elizabeth rail station of NJ Transit's Northeast Corridor Railroad line, and are served by multiple bus routes serving Elizabeth, which is the county seat of Union County. The College leases 600 parking spaces under a long term arrangement with the city of Elizabeth in the J. Christian Bollwage garage, which is adjacent to the Lessner Building, and leases 500 spaces under a short-term arrangement in another garage at 30 West Grand Street, a block away from both buildings.

The Plainfield Campus is located at 232 East Second Street on most of a city block between East Second and East Third Streets and Church Street and Roosevelt Avenue in Plainfield, New Jersey. It consists of three buildings and two parking lots that accommodate 189 vehicles. The Campus is convenient to Routes 22 and 28; is served by three bus routes, and is two blocks from the Plainfield Station of New Jersey Transit's Raritan Valley Railroad Line.

The Scotch Plains Campus is situated on 40 acres at 1776 Raritan Road Scotch Plains, New Jersey. It consists of two buildings. The Campus is not served by any form of mass transportation but is convenient to Route 22 and major State routes.

Building Inventory

Cranford Campus

There are eight major buildings on the Cranford Campus at 1033 Springfield Avenue, Cranford: Kenneth Campbell MacKay Library, Academic Learning Center, and the Center for Visual Arts and Communication; the Humanities, Science and Nomahegan Buildings with classrooms, lecture halls, seminar rooms, science and computing laboratories, counseling and faculty offices, lounges, cafeteria and faculty dining room; the Campus Center with the Roy W. Smith Theater, gymnasium, fitness center, Executive Education (teleconferencing) Center, other facilities for student activities, and bookstore; the Victor M. Richel Commons, a student life/student lounge facility, featuring an atrium and multilevel floor providing a variety of lounge and meeting spaces; James R. MacDonald Hall, which contains administrative offices; and the William Miller Sperry Observatory, which houses 24-inch reflector and 10-inch refractor telescopes, a lecture room, optical shop, computer center, and an astronomy library.

Elizabeth Campus

The Elizabeth Campus is housed in the seven-story Sidney F. Lessner Building and the five-story Elizabeth I. Kellogg Building at 40 West Jersey Street, Elizabeth. The buildings, including their lower levels, provide classrooms, a theater, lecture halls, seminar and conference rooms, allied health, computer and science laboratories, Kellogg Library and Academic Learning Center, faculty and administrative offices, faculty and student lounges, dining room, bookstore and a Student Services Center and a Career Services Center. Trinitas School of Nursing is also located on Union's Elizabeth Campus.

Plainfield Campus

The Plainfield Campus is comprised of most of a city block between East Second and East Third Streets and Church Street and Roosevelt Avenue. The three-story, 28,000 sq. ft. building contains classrooms, lecture hall, allied health, computing and science laboratories, seminar and conference rooms, Library and Academic Learning Center, faculty and administrative offices. An adjacent building on the site houses instructional space for Emergency Medical

Technician/Paramedic training and a state-of-the-art laboratory for American Sign Language and Deaf Studies, a student lounge, faculty offices, faculty lounge, bookstore, and cafeteria.

Scotch Plains Campus

The College shares a 40-acre campus in Scotch Plains at 1776 Raritan Road, Scotch Plains with the Union County Vocational Technical Schools and the John H. Stamler Police Academy. Union County College and the University of Medicine and Dentistry of New Jersey jointly operate the Regional Health Education Center in the College's 65,000 sq. ft. Health Technologies Building and it has also been designated as the fifth campus of UMDNJ. It provides classrooms, lecture hall, seminar and conference rooms, allied health and science laboratories, library, faculty and administrative offices, dining room and Campus Center.

Sustainability, Recycling, and Energy Efficiency

Building energy efficiency is the first step toward achieving sustainability in buildings. The College seeks to continue moving to sustainable energy, while using it efficiently, to ensure the responsible use of energy. Toward that end, the College installed a complete set of solar panel arrays on the roof of each building on the Cranford Campus in May 2011. These arrays allow for clean, green sustainable energy production that lessens the college's ecological footprint through a 173.43 KW Photovoltaic system.

Union seeks to be energy efficient through programs such as energy and water saving touch free faucets and automatic flushometers installed in restrooms in Plainfield, Elizabeth and Cranford campuses. In addition, energy efficient fluorescent lighting fixtures and automated light and HVAC controls have been installed throughout the College. Utilization of a web-based utility that monitors energy usage help budget energy usage and indicate buildings and areas targeted for energy savings.

The College also seeks to lessen its environmental impact through efforts reflected in programs such as its commitment to maintain its buildings and grounds using environmentally responsible products. Further, Union’s Facilities Department purchases, and trains its staff in the use of, green sealed chemical cleaning products. The College continues to work on devising environmentally friendly strategies for maintenance of the buildings and grounds. Another

endeavor is the College's recycling effort, which is through a master recycling plan under which the maximum amount of recyclable material is collected and processed. Recycling collection receptacles have been strategically located throughout all three campuses. The College's contracted hauler is required to document the proper handling and transporting of these sorted materials to appropriate processing and transfer centers. Yet another effort is its storm water management plans, which have been implemented to assure the College is doing its part in protecting the waterways from contaminated run off from parking lots and buildings.

Parking

Parking on the Cranford Campus is available in five student/faculty lots which can accommodate 1,497 vehicles.

At the Elizabeth Campus, there are 30 parking spaces to the rear of the Lessner Building and 27 parking spaces to the rear of Kellogg. The College also leases 1,100 parking spaces for student, faculty and staff use in two Elizabeth garage facilities, each proximate to the Elizabeth campus. The College anticipates reducing the number of parking spaces to 850 in Fiscal year 2014.

At the Plainfield Campus, there are two parking lots that accommodate 189 vehicles for student, faculty and staff use.

Parking at the Scotch Plains Campus, is available in three parking lots that accommodate 327 vehicles.

Outdoor Recreational Facilities

The College owned outdoor recreational facilities consist of four hard surface tennis courts on the Cranford Campus. However, the College makes use of softball and baseball athletic fields in Union County's Nomahegan Park opposite the Cranford Campus and busses student-athletes to a county owned field nearly 12 miles away from Cranford in Berkeley Heights for practices and games.

Summary of Campus Space

	Square Feet	
	Building	Campus
Cranford Campus		
MacKay Library	75,668	
Nomahegan Building	47,932	
Campus Center (Theater, Gymnasium, Athletic Rooms, Fitness Center, Staff and Faculty Offices)	47,822	
Victor M. Richel Student Commons	28,797	
Science Building	28,605	
Humanities Building	26,273	
MacDonald Hall	16,596	
Observatory	2,834	
Garage	2,764	277,291
Elizabeth Campus		
Kellogg Building	132,607	
Lessner Building	102,496	235,103
Plainfield Campus		
Logos Building	28,314	
Annex Building	11,724	
Garage	2,190	42,228
Scotch Plains Campus		
Health Technologies Building	66,546	
Business & Engineering (utilized by Union County Vocational Technical Schools)	56,559	123,105
Total		677,727

Chapter 3: Project Development and Schedule

New construction projects are planned throughout the College.

Cranford Campus

The Cranford Campus requires additional classroom space, improved student services facilities, improved parking, and athletic fields to assure the quality and services consistent with a well-respected institution of higher education. Student enrollment at the Cranford Campus has increased over 30% since 2008. In addition, major buildings on the Cranford campus were constructed between 1959 and 1969, during which time the student population and the regulatory demands of servicing students were significantly less. Furthermore, our growth in enrollments has exacerbated an already difficult parking situation. The College has responded by adding spot overflow parking and made parking arrangements with a local church. However, the demand still exceeds the capacity. Finally, while our student retention efforts have focused on teaching and learning, the College is also committed to improving student engagement through enhancing college life, activities, and athletics. Currently, the College does not own any athletic fields to support intercollegiate teams in men's and women's soccer and men's lacrosse.

Project #1:

The College plans a 30,000 + square foot Student Services Center and renovation to a 6,000-square foot existing space in order to provide additional classroom, student support and auxiliary services facilities through which enhanced efforts to increase student success outcomes, retention and graduation rates may be conducted.

There is an urgent need to serve a large and diverse student population more efficiently, more effectively, and in a more comprehensive manner with a variety of services tailored to student needs. Current student services facilities were designed decades ago to serve a smaller student population with a limited range of services. The new Student Services Center is designed to be "**student success**" driven through a holistic approach to student services. Staff will be trained to identify and coordinate all services that individual students need to be successful. There will be an extensive use of technology to serve students efficiently and comprehensively. The Center will provide a wide use of open space where students are the focus. Students will be

assisted by a cross trained student services staff who will provide intake services, identify resources needed, and coordinate the provision of services.

The Student Services Center will be both "**high tech**" and **"high touch."** It is designed to treat students as valuable customers through the use of individual intake by Student Services Center Staff and through a coordination of services to address individual student needs. The "high tech" will include the use of **technology pods** to provide individualized, comprehensive and timely service. "High Tech" will also include the use of **portable technology** by Student Services Center staff to bring services to the student, to coordinate services for individual students, and to maintain digital records. Technology pods will allow students to complete admission, registration, and other functions as well as obtain personalized information with assistance from Student Services Center Staff. The "high touch" services will include an individualized approach to respond to student needs. These "high touch" services will provide a comprehensive approach to serving students by identifying all of a student's needs, by monitoring individual student's progress, and by integrating the services from various specialists to serve the individual student. The building will also provide additional classrooms urgently needed in Cranford to meet student needs.

Project #2:

Union County College will construct the College's NJ Global Education Center, a 41,827-square-foot, three-floor class space to replace the current court yard area bordered by the existing Science, Nomahegan and Campus Center buildings. The **NJ Global Education Center** is designed around an education model that creates the classroom as a collaborative site with students engaged in numerous activities within the space from both local and global perspectives. Union County College has one of the most diverse populations in the state with one third of its student body African American, one third Hispanic, and one third Caucasian. The NJ Global Education Center is designed to foster the collaboration of its diverse students, maximize global viewpoints, and produce graduates that will bring jobs and growth to the state of New Jersey. With close proximity to such prestigious institutions as NJIT, Rutgers, and Kean University, the Union County College NJ Global Education Center has the potential to provide **job ready** educational opportunities as well as clear **articulation pathways to four-year institutions**. In addition, the Center has propinquity to businesses that are focusing on emerging technologies.

The classroom in the Global Education Center is "hackable," that is, rooms that can be re-structured so that faculty and students can break up into teams and engage in a variety of activities. In this model, the traditional classroom is "flipped." As most content will live in the cloud, students have access to information anywhere, anytime, anyway. With information so ubiquitous, students will gather with faculty, not to receive information, but rather to share ideas, problem solve, and explore local, state, and global issues. Through the use of **inventive architecture and innovative pedagogy**, the NJ Global Education Center will provide classrooms that can meet the needs of a number of discipline areas. Thus we will not be bound to STEM (science, technology, engineering, mathematics), or technical studies or computer technology, but will rather be able to offer any of these disciplines through "hackable" space that uses cost effective design, and provides the ability to be both local and global. The NJ Global Education Center will move us from traditional space to a classroom design that helps students to achieve a deeper understanding of the material through interactive problem solving approaches. Students will be prepared for success, not only in their major, but more importantly prepared to creatively address emerging issues and concepts.

With an increasingly global approach to industry and jobs, the employee in New Jersey will be designing and working from a perspective that is not place bound, **bringing jobs to New Jersey that transcend traditional boundaries.** Technological innovations such as the 3D-Printer will enable New Jersey workers to make products for a global customer. The NJ Global Education Center will prepare students to be competitive in the world marketplace. Rather than being dedicated to a specific area, this Center will focus on facilitating learning in multiple areas including STEM and technical studies through an architecture that encourages collaboration and through innovative pedagogy that promotes student engagement. The classrooms in the Global Education Center will fall into four categories: multi-activity/flipped classrooms, science and technology laboratories, computer classrooms, and technology enhanced classrooms.

- In **the Multi-activity/Flipped Classroom**, students will be working in small groups around carefully designed activities with the instructor facilitating discussion and promoting problem solving. These spaces which are larger than the traditional classroom, allow for multiple activities such as the use of collaborative learning experiences, problem solving through touch screens and holographic screens; student prepared micro-lectures, and students communicating with students in distant locations who share the same creative impulses. The primary concept behind the multi-activity/flipped classroom is the flipping of the teacher's role. Students study content outside of the classroom through assignments

that are often short video presentations, and the faculty member engages the student in the classroom in the exploration of difficult concepts. (Percentage of total classrooms: 40%)

- **Science and Technology Labs** will support the growth of emerging technologies such as sustainability science, green technology, cyber security, robotics, 3D Printing, and nanotechnology which support the Choose NJ economic development initiatives. Laboratory experiences are an integral part of education, but they are resource-intensive. The labs in the Global Education Center will be designed as multipurpose labs through the use of new web based platforms that offer opportunities to engage learners in computer supported collaborative learning activities with both onsite and remote learners. (Percentage of total classrooms: 25%)

- Students will use **Computer Classrooms** not only for the instant retrieval of information for projects but to develop information and technological literacy skills that are critical to 21st century jobs. These classrooms will have computers arranged around the periphery with tables in the middle of the room. Such an arrangement allows students to move quickly from information retrieval to small group discussions focused on the analysis and synthesis of information, placing ideas in context and mastering concepts. In addition, computer classrooms will allow every student to have an individual tutor through the use of computer simulations that provide content and tutorial support. Using the emporium model, students may be in a classroom with several courses being taught at the same time. (Percentage of total classrooms: 15%)

- In **Technology Enhanced Wireless BYOD Classrooms**, students will use the more traditional classroom but with movable furniture that allows the professor to rapidly transform the space into discussion clusters, discrete learning areas, or tutorial groups. Moveable furniture offers students personal space, as it is designed to house all of the students' educational possessions, within a completely portable seat. The classroom will be equipped with a computer, projector, and screen. The Technology Enhanced Wireless Classrooms are BYOD (bring your own device); students will be using tablets, iPads or mobile devices of their choice. These classrooms will be ideal for course re-design in which acceleration and self-paced tutorial approaches will improve student success outcomes. (Percentage of total classrooms: 20%)

Project #3:

The College plans a two deck parking structure over existing parking spaces that will yield 470 additional spaces.

Project #4:

The College intends to convert some existing unused grounds on campus to a multi-purpose soccer and lacrosse field.

Elizabeth Campus

The Elizabeth Campus currently houses the two largest academic programs at Union, i.e., the Institute for Intensive English and the Cooperative Program in Professional Nursing with the Trinitas School of Nursing as well as the Center for Economic and Workforce Development (CEWD) and Continuing Education offerings. The Lessner building was built in 1965 and renovated for College use in 1992. Now, nearly twenty five years later, the building needs renovation to allow College personnel to better serve and connect with students.

Project #1:

The College plans to transform the ground floor and lower level to a full service student advising, testing, registration, financial aid and payment area. The reconfigured ground and lower levels will serve as a one-stop-shop destination for students with architectural improvements that will create a gateway function and appearance. At the present time, the layout of this space limits our ability to serve students efficiently and effectively. An Information Commons will anchor an open space concept that will welcome students, provide extensive computer access, and offer informal seating that will promote student engagement. As part of the design, a one-stop-shop approach to student services will provide students with flexible and immediate access to counselors, admission, registration, and financial aid. Individual offices will be reduced to a minimum and will house back office functions.

The Information Commons will serve as an extension to the state of the art library housed in the adjacent Kellogg building. With computer terminals and study spaces, it will provide social and gathering spaces and facilitate students' access to information retrieval.

Providing seamless student services, the one-stop-shop decreases organizational silos, offers cross-trained staff, and deconstructs the service processes into manageable holistic experiences. It will connect students more immediately to the portal services essential to student success.

The renovation of the Lessner building will create a dramatic change in the appearance and function of this structure, enhancing the entire student services continuum of activities. It has the potential to increase enrollment as well as contribute to improved student outcomes as services integral to the educational process will be housed in one accessible location. The one-stop-

approach integrates student services within a model that embraces the student life cycle and values the entire educational experience.

Project #2:

The College plans to meet an increasing demand for science classes through construction of two new wet-Chemistry Science laboratories and upgrading of two existing Science laboratories, all on the 7th floor of the Lessner Building. The new laboratories approximate 2,983 square feet, will replace existing office and classrooms and consist of demolishing existing space, constructing new walls and ceilings and installing new wet-Chemistry science equipment and hoods with appropriate ventilation. Upgrading of the 2,712 square foot existing science laboratories includes new science equipment with additional ventilation and electrical work.

Plainfield Campus

The principal buildings on the Campus date from 1925. Expansion of the Campus is planned to support the growth in four popular academic programs, American Sign Language, Paramedicine, Emergency Health Science, and Licensed Practical Nursing and to provide for greater access to higher education for residents of the western end of Union County. In addition, the Annex building within the Campus was substantially destroyed by fire in September 2011. Consequently, the College has two initiatives planned. One project has begun. The College is restoring and rehabilitating the fire-damaged Annex building on the Campus. As part of that rehabilitation, it intends to remodel the lower level of the Campus' Logos building to provide additional classroom space, while moving the library from that space into the Annex building. The Annex building will also contain a new student life area. Also as part of the renovation project, the College has signed a contract, subject to certain provisions, to acquire an adjacent property which approximates 1.15 acres and includes a 22,372 square foot, two-story structure. The College intends to provide additional classrooms in that structure through renovations.

The second initiative is to construct a 53,675 square foot three-level classroom building together with an attached 360 space parking garage (three levels above ground and one below). The anticipated 32 classrooms will more than double the current classroom capacity within the campus.

Scotch Plains Campus

The two buildings on the Scotch Plains Campus were transferred to Union County College from the Board of Education of the Union County Vocational Schools under New Jersey Statutes Title 18A:64A-66,67, which transferred all then property of the Union County Technical Institute to Union County College. During the subsequent years, Union County Vocational Schools has taken occupancy of The Business/Engineering Technology Building and has assumed all incidents of ownership.

Currently, the Health Technology Building is being occupied by the University of Medicine and Dentistry of New Jersey (UMDNJ) through a lease expiring July 13, 2014, subject to a tenant exercised option extending the term to July 13, 2019. UMDNJ has until January 13, 2014 to notify Union County College of its intentions. Under the terms of the lease, UMDNJ suffers all incidents of ownership for the Health and Technology Building. Currently, both the HVAC and elevator are in need of replacement and or significant refurbishment. The HVAC system is all-electric and the cost of operation of such a system is significantly more than alternately fueled systems. The College anticipates replacing the HVAC system and refurbishing the elevator upon retaking possession of the building.

Union County College

Summary of New Construction & Major Renovation Projects

		Est. Start Date	Est. Sq, Ft,	Est. Costs	Type
Cranford Campus					
1	Student Services Building	June, 2013	30,000	$14,183,473	New Construction
2	Advising /Counseling Area Renovation	June, 2013	6,000	$1,785,000	Major Renovation
3	NJ Global Education Center	*	41,827	$20,551,144	New Construction
4	Cranford Parking Garage	*	193,142	$17,661,699	New Construction
Elizabeth Campus					
1	Lessner Renovation	June, 2014	17,470	$4,614,144	Major Renovation
2	Science Labs	*	5,695	$1,874,464	Major Upgrading
Plainfield Campus					
1	Renovation of Annex, Logos and New buildings	June, 2013	34,096	$5,200,000	Major Renovation
2	Plainfield Campus Expansion	*	62,932 plus 109,655 parking	$44,607,356	New Construction
Scotch Plains Campus					
1	HVAC Replacement	**	n/a	$2,700,000	Major Replacement
2	Elevator Repair	**	n/a	$500,000	Major Replacement

* The extent to which these projects are realized, and their related timetables, are subject to funding constraints.

** Timing subject to utilization of term option by tenant.