

UNION COUNTY COLLEGE FACILITIES MASTER PLAN

2019-2023

Revised April 2019



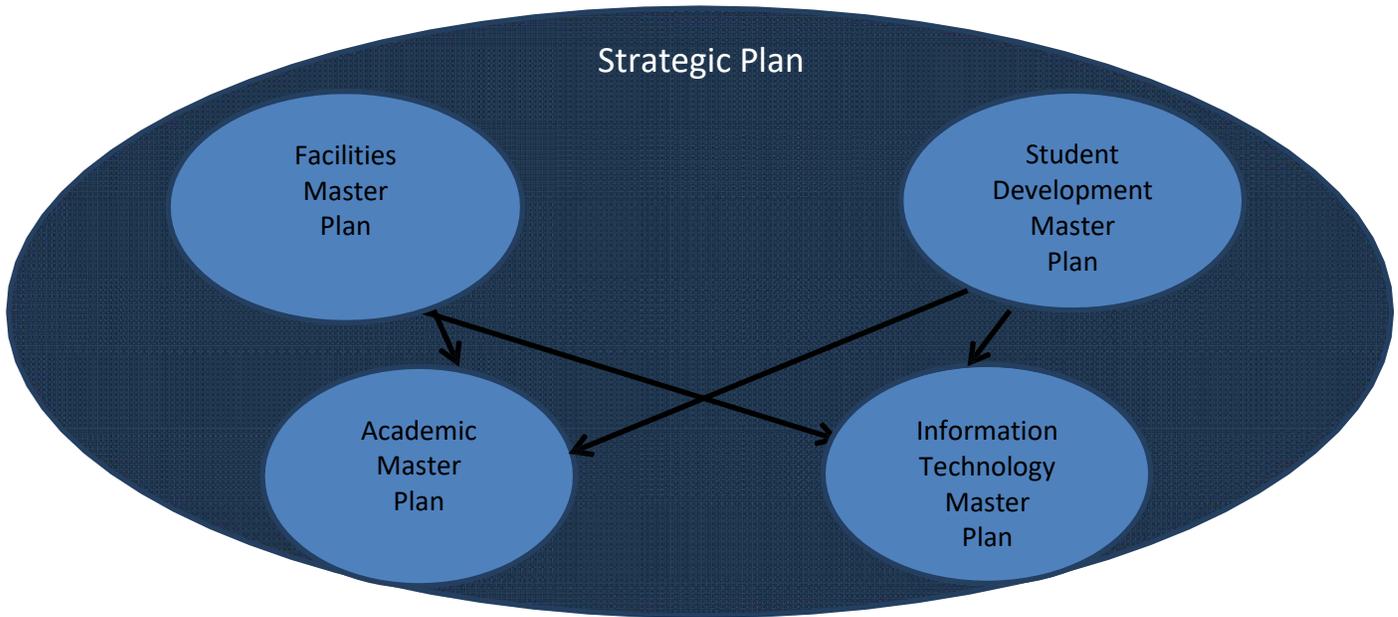
Facilities Master Plan

The Facilities Master Plan (FMP) is the gateway for facilities development to support the goals and objectives of the three other College Master Plans: Academic Master Plan, Student Development Master Plan and the Information Technology Master Plan. The FMP will address the roadmap for facility improvement, replacement, renovation and new construction for the next five years.

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 are 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 aligned with the College's mission. It is designed to provide strategic and operational direction for facilities planning through 2023. 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. The College is committed to the development of new initiatives to keep the College as a front runner with respect to leading edge practices and offerings. In many cases, this entails the reconfiguration and utilization of our existing facility footprint to achieve these end results. New and refurbished facilities accommodate revised and innovative academic programs that meet the changing needs of our student population as well as needs within the community. The College strives to achieve institutional standardization with respect to classroom and administrative space creates a uniformity with respect to the overall layout of the campuses as it refurbishes existing as well as new spaces.

The philosophical vision for the Facilities Master Plan is the creation of facilities that provide first-class academic support, student services, administrative support, and technology. The intent is to create an environment that fosters success by providing the tools necessary for students to attain a cohesive and comprehensive educational experience that will give them the skills necessary to succeed well after they graduate the College. This document will direct facilities construction and renovation as well as funding needed to support the further development of strategic initiatives of the College.



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Chapter 1: College Overview

Union County College (Union) 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 17,000 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.

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 colleges in New Jersey. The Institute for Intensive English is a National model for teaching English as a Second Language. In the 2018-2019 academic year, students representing 61 countries and Puerto Rico, and speaking 30 different languages, were enrolled in ESL classes on the Elizabeth campus.

Union County College partners with the Trinitas School of Nursing in Elizabeth, New Jersey and the JFK Medical Center Muhlenberg Harold B. & Dorothy A. Snyder Schools, in Plainfield, New Jersey to offer degrees and certificates in nursing, sonography, and radiology.

The College is responsive to course and program needs and this reflects on the institution's commitment to student success. Guided Pathways is imbedded into virtually all academic programs to provide students with support services that incorporate clear roadmaps and enhanced support from entry to completion. The College is committed to providing students with a successful educational experience which includes a campus environment that supports such an experience.

The Student Development Division strives to provide programs and services to foster a student's personal, academic and social development as well as provide services that support students' transitions to college, success in college, and progression into careers. The support programs at the College promote academic and personal success with an emphasis on helping students to graduate. A well-maintained campus facility contributes to such success.

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, 27 and 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, 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, 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 near 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. There are 27 spaces behind the Kellogg Building and 30 spaces behind the Lessner Building.

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 208 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 with the Union County Vocational Technical Schools and the John H. Stamler Police Academy. The Campus is not served by any form of mass transportation but is convenient to Route 22 as well as State and County roads.

Building Inventory

Cranford Campus

There are nine major buildings on the Cranford Campus at 1033 Springfield Avenue, Cranford: Kenneth Campbell MacKay Library with the 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, faculty offices, lounges, cafeteria and dining rooms; the Campus Center with the Roy W. Smith Theater, gymnasium, fitness center, Executive Education (teleconferencing) Center, additional facilities for student activities and the 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. The latest addition to the Cranford Campus, the Student Development Building, opened in August of 2016, contains regular and computer classrooms, faculty offices and the Helen Chaney Student Services Center which provides student registration, financial aid counseling, admission testing and student accounts services using a “One-Stop concept” environment.

Elizabeth Campus

The Elizabeth Campus is housed in the eight-story Sidney F. Lessner Building at 12 West Jersey Street and the five-story Elizabeth I. Kellogg Building at 40 West Jersey Street. These buildings provide classrooms, 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, cafeteria and dining room, bookstore, a “One-Stop concept” Student Services Center and a Career Services Center. The Trinitas School of Nursing is located on the third floor of the Kellogg Building.

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. Logos Building contains classrooms, computing and science laboratories, a state-of-the-art laboratory for American Sign language and Deaf Studies, a “One-Stop concept” student services center, a student lounge, and faculty offices. The adjacent Annex Building houses the Library and Academic Learning Center, a small conference room, study rooms, faculty and administrative offices,

bookstore, cafeteria and dining room. The new Health Sciences Building (HSB) opened in 2015 and provides an academic center for three key health-science programs; Practical Nursing, Emergency Medical Technology and Paramedic Sciences. The extended portion of the HSB (Phase II) is under construction and will house additional health-science programs.

Scotch Plains Campus

The College shares a portion of 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.

The Health Technologies Building currently provides classrooms, a lecture hall, seminar and conference rooms, allied health and science laboratories, a library, and faculty and administrative offices.

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 and responsibly.

Union County College seeks to be energy efficient through programs such as energy and water saving touch free faucets and automatic flushometers installed in restrooms on the Plainfield, Elizabeth and Cranford campuses. Additionally, highly-energy efficient LED lighting fixtures and automated light and HVAC controls have been installed throughout the College and are standard design elements for all construction and improvement projects. Utilization of a web-based utility that monitors energy usage helps budget energy usage and indicate buildings and areas targeted for energy savings.

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.

The College also seeks to lessen its environmental impact through a commitment to maintaining its buildings and grounds using environmentally responsible products. Union's Facilities Department purchases, and trains its staff in the use of, environmentally friendly chemical cleaning products with auto-dilution control units to prevent waste and promote safety. The College maintains a recycling effort 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 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. Finally, storm water management plans have been implemented 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 600 parking spaces for student, faculty and staff use in the J. Christian Bollwage Parking Garage located between the Lessner and Kellogg Buildings in Elizabeth, all on the same side of the side of West Jersey Street. The Plainfield Campus has two parking lots. Currently, total parking for close to 200 vehicles is available for students, faculty and staff use.

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

The College provides free shuttle services to the Cranford parking lots during the day to assist students, faculty and staff.

Outdoor Recreational Facilities

The College owned outdoor recreational facilities consist of four hard surface tennis courts on the Cranford Campus. The College makes use of softball and baseball athletic fields in Union County's Nomahegan Park opposite the Cranford Campus. Student-athletes travel to county owned fields from Cranford to Berkeley Heights, Warinanco Park and Rahway River turf fields for practices and games.

	<u>Square Footage</u>	
	<u>Building</u>	<u>Campus</u>
Cranford Campus		
Student Development Center	31,179	
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	<u>308,470</u>
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Elizabeth Campus		
Kellogg Building	132,607	
Lessner Building (with 2018 Addition)	104,266	<u>236,873</u>
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Plainfield Campus		
Logos Building	28,314	
Annex Building	11,724	
Health Science Building (Phase 1)	16,980	
Garage	2,190	<u>59,208</u>
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Scotch Plains Campus		
Health Technologies Building	66,546	
Business & Engineering (utilized by Union County Vocational Technical Schools)	56,559	<u>123,105</u>
<hr/>		
Total		<u>727,656</u>

Chapter 3: Project Development and Schedule

New construction projects are planned throughout the College.

Cranford Campus

The Cranford Campus requires rehabilitation and renovation to its existing major buildings which were constructed between 1959 and 1969, during which time the student population and the regulatory demands of servicing students were significantly less. Times have changed and so have the methods for student engagement. The current design of the Cranford Campus offers a limited footprint of open and available areas for students to engage and partake in College activities outside of the classroom. The College has overflow parking lots and negotiated parking arrangements with a local church. There is a free shuttle for students, faculty and staff that manages the distance between the parking facilities and the academic buildings on the Cranford campus. Finally, while our student retention efforts have focused on teaching, learning and outcomes, the College is also committed to improving student engagement through enhancing college life, activities, and athletics.

Project #1: MacDonald Hall Renovation

The first floor of MacDonald Hall has been partially unoccupied as previous occupants have relocated to the new Student Development Building. This project will reconfigure the first floor space of MacDonald Hall to support administrative functions/offices for Student Success and Service Initiatives. Departments intended to occupy this space include Financial Aid, Continuing Education, Project Graduation, the Outreach Call Center, Grants Accounting, Student Accounts and Records and a new central records storage facility.

Project #2: Roy Smith Theatre Renovation

The theatre space in the Campus Center building is in poor condition, contains asbestos vinyl tile, does not meet current building code requirements, and is not conducive to current use requirements. This project will remediate asbestos containing materials and renovate the interior space with replacement seating, house and stage lighting and updates to the sound system and theatre acoustics. The necessary stage rigging and curtains need replacement. It is also the intent of this project to expand an adjacent data closet to create a larger space that is environmentally controlled and conducive to technological growth in the Campus Center Building.

Project #3: NJ Global Education Center

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 being 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 would be "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 anytime. 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. Using inventive architecture and innovative pedagogy, the NJ Global Education Center will provide classrooms that can meet the needs of several 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 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. 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 building: 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 using new web-based platforms that offer opportunities to engage learners in computer supported collaborative learning activities with both onsite and remote learners. (25% of building)
- 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 for group interaction. 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 using computer simulations that provide content and tutorial support. The emporium model may be implemented with several courses being taught at the same time. (15% of building)

- In Technology Enhanced Wireless Bring Your Own Device (“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. Equipped with a computer projector and screen, the BYOD classroom will encourage the use of tablets, iPads, and mobile devices. These classrooms will be ideal for course re-design in which acceleration and self-paced tutorial approaches will improve student success outcomes. (20% of building)

Project #4: Cranford Parking Expansion

The College plans to construct a two-deck parking structure over existing parking spaces that will yield 470 additional spaces to help alleviate some of the parking difficulties inherent in a commuter campus.

Project #5: Athletic Facility

There is a lack of compliance with NJCAA and Garden State Athletic Conference standards to provide playable fields for extra-curricular sports activities. The College intends to either procure or construct suitable facilities to safely service our student athletic needs. This project can convert existing unused grounds on the Cranford Campus or procure land to construct a multi- purpose soccer and lacrosse field.

Project #6: MacKay Library Interior Renovation

This project will construct a café facility on the first floor of MacKay library. This new area will provide expanded, convenient food and beverage service to students, staff and faculty of the MacKay Library and Humanities Buildings alleviating the need to visit the full-service cafeteria.

This project also includes the removal of the library reference desk and shelving to expand the tutoring capacity for students. New furniture will be provided in this area and carpeting on the first floor, steps, and second floor will be replaced

Project #7: Gymnasium Renovation

The current gymnasium footprint is not in compliance with the NJACC and the Garden State Athletic Conference standards; seating is insufficient and limits the number of spectators who may attend. The new gymnasium facility would change from a north-south orientation to an east-west

orientation and provide ample seating and athletic area to ensure safety and compliance.

Project #8: Campus Center Renovation

The kitchen and server areas of the cafeteria need renovation and upgrade. New equipment and redesign is required to achieve efficiencies in food quality, safety and delivery of services to students, faculty, staff, and visitors. The furniture in the Richel Commons is also in need of replacement. This project includes upgrades to interior finishes and replacement of tiled floor and carpeting.

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: Lessner Science Laboratories

The College plans to meet an increasing demand for science classes through construction of a new wet-Chemistry laboratory and a Microbiology laboratory on the 7th floor of the Lessner Building. The new laboratories approximate 3,000 square feet, will replace existing laboratories and consist of demolishing existing space, constructing new walls and ceilings and installing new wet-Chemistry science equipment and hoods with appropriate ventilation. Upgrades to existing laboratories includes new equipment with additional ventilation and electrical work.

Project #2: Lessner Engineering Consolidation

The Engineering Department is currently located on the second floor of Lessner in undersized spaces with faculty offices throughout the remainder of the building. This project will provide for a consolidated design of appropriately configured laboratory, computer classrooms and lecture classroom spaces on the sixth floor of the building to provide a cohesive space for expansion of the engineering program on the Elizabeth Campus.

Project #3: Lessner Floors 2 - 5 Renovation

The Lessner Building was last renovated in 1992. Building code upgrades and program

alignments are needed for occupant safety, health and efficient delivery of educational programs. This project would provide suitable administrative space on the second floor to support Lessner Student Success Center, including space for academic administration for the Elizabeth Campus. Floors 3 through 5 would be upgraded and the space repurposed to meet current program needs.

Project #4: **Theatre Renovation**

The theatre space on the lower level of the Lessner building is in poor condition and not conducive to current use requirements. This project will renovate the interior space with a new floor and ceiling, replacement seating, house and stage lighting and updates to the sound system.

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. Logos Building contains classrooms, lecture hall, computing and science laboratories, a state-of-the-art laboratory for American Sign Language and Deaf Studies, and a “One-Stop concept” student services center a student lounge, and faculty offices. The Dean’s Office is in the Logos Building. The adjacent Annex Building on the site houses the Library and Academic Learning Center, a small conference room, study rooms, faculty and administrative offices, bookstore, cafeteria and dining room. The new Health Sciences Building which opened in 2015 provides an academic center for three key health-science programs including Practical Nursing, Emergency Medical Studies and Paramedic Health Science. The planned expansion of the Health Sciences Building will provide additional classroom and laboratory spaces for additional degree programs in allied health.

In November 2013, the College acquired an adjacent property which approximates 1.15 acres and includes a 28,701 square foot, two-story structure with an adjacent 6,918 square foot paved parking lot. The College completed a major Phase 1 partial renovation of this building and opened the Health Sciences Building on the Plainfield Campus in the Fall of 2015. The Phase 1 renovation project succeeded in converting the front of the interior space of the building into a featured academic center for three key health-science programs: Practical Nursing, Emergency Medical Technology and Paramedic Sciences. A Phase 2 renovation of the remaining unfinished and unusable space is planned to enhance academic outcomes by delivering quality health-care education.

Additionally, the College has acquired approximately 50,000 square feet of vacant land adjacent to the Health Sciences Building on the Plainfield Campus which is planned to provide much

needed additional parking to the campus.

Project #1: Health Sciences Building Phase II (Thul II) Renovation

A Phase 2 renovation of the remaining unfinished and unusable approximate 11,500 square feet of the interior building space is required to enhance academic outcomes by delivering quality health-care education for new Allied Health programs. The anticipated renovation would include construction of three additional teaching labs, two additional lecture classrooms, two computer classrooms, conference and study rooms, interior and exterior student gathering spaces and provide the residents of Plainfield with improved access to high-priority allied health programs. The Phase 2 renovation project also includes conversion of the 6,918 square foot parking lot into a Plaza area for students, staff and faculty use.

Project #2: New Parking Facility

Additionally, the College the 50,000 square feet of vacant land adjacent to the Health Sciences Building on the Plainfield Campus will be converted into a paved parking facility to provide an additional 105 parking spaces to the campus. This project includes an underground storm water detention facility, lighting, security, landscaping and a custom streetscape.

Project #3: New Warehouse Storage Facility

The College has limited storage capabilities and there is an existing building structure on the former steakhouse property that is not usable. This project calls for the demolition of the existing brick and wood structure, investigation of the subsurface using ground penetrating radar, and the excavation of the entire property. The College would then construct a new, light-steel warehouse facility for College storage.

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 Technologies Building is being occupied by the Rutgers School of Health (Rutgers) subject to a tenant exercised option extending the term to July 13, 2019. Under

the terms of the lease, Rutgers suffers all incidents of ownership for the Health Technologies Building.

The building needs system upgrades and renovations to correct persistent deficiencies regarding water intrusion and HVAC prior to being re-occupied. The lower level of the facility suffers from water intrusion problems presented by inappropriate drainage of storm water and ground water levels and the existing HVAC system needs replacement. Utility supply upgrades also need to take place. Roofing restoration or replacement will be advisable. Classroom furniture is in poor condition, as are interior finishes and lighting fixtures. Construction of science laboratories are needed, and the elevator requires evaluation and reconditioning. Network and technology infrastructure, communication and security systems need to be upgraded.

After July 13, 2019, the College, upon transfer of ownership, will begin renovations to remediate the facility to ready it for instructional occupancy. The plan is to create a University Center which would allow the College to partner with four-year institutions. The goal is for the College to issue an AS degree and the four-year institution to issue a BS degree with the possibility of a master's option. The College is also looking to offer Associate academic programs at this facility that would be attractive to these potential four-year partners. Finally, the College seeks to establish a Supply Chain Academy in partnership with Union County Vocational-Technical Schools (UCVTS).

Micro Campuses

The College is looking to establish a presence in major towns throughout the County of Union to establish a presence of awareness on a more informal basis than a full academic campus setting. The College currently has a location in Rahway at 1591 Irving Street. Humanities and STEM courses will be offered in the Fall of 2018 at the Rahway location.

Union County College

Summary of New Construction & Major Renovation Projects

	Est. Start Date	Est. Sq. Ft.	Est. Costs	Type	
<u>Cranford Campus</u>					
1	MacDonald Hall Renovation	Sept 2018	8,500	\$600,000	Major Renovation
2	Roy Smith Theatre Renovation	May 2020	5,514	\$1,600,000	Major Renovation
3	NJ Global Education Center	*	41,827	\$20,551,144	New Construction
4	Cranford Parking Expansion	*	193,142	\$17,661,699	New Construction
5	Athletic Facility	*	TBD	\$2,000,000	New Construction
6	MacKay Library Interior Renovation	May 2020	30,000	\$450,000	Major Renovation
7	Gymnasium Renovation	*	TBD	TBD	Major Renovation
8	Campus Center Renovation	Dec 2019	23,500	\$950,000	Major Renovation
<u>Elizabeth Campus</u>					
1	Lessner Science Laboratories	*	TBD	\$1,500,000	Major Renovation
2	Lessner Engineering Consolidation	*	TBD	TBD	Major Renovation
3	Lessner Floors 2-5 Renovation	*	39,450	\$3,500,000	Major Renovation
4	Theatre Renovation	*	3,110	\$600,000	Major Renovation
<u>Plainfield Campus</u>					
1	Health Sciences Building Phase II (Thul II) Renovation	Dec 2019	18,253	\$5,500,000	Major Renovation
2	New Parking Facility	Dec 2019	48,703	\$1,000,000	New Construction
3	Warehouse Storage Facility	*	TBD	TBD	New Construction
<u>Scotch Plains Campus</u>					
1	Health Technologies Building	July 2019	66,546	\$5,200,000	Major Renovation

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

Chapter 4: Betterments and Renewal

As noted in Chapter 3, major buildings on the Cranford campus were constructed between 1959 and 1969. Similarly, one of the two major buildings on the Elizabeth campus was constructed in 1965 and the principal building on the Plainfield campus dates from 1925. Consequently, betterments and renewal of existing structures are essential to providing support to the institution and ensuring the campuses have current technology, security and integrated systems. In addition, the College seeks to ensure the responsible use of energy in its operations. Betterment and Renewal projects planned during this Plan are:

<u>Project</u>	<u>Location</u>	<u>Estimated Cost</u>	<u>Description</u>
HVAC Replacements (Phase 2 of 2)	Cranford – McDonald Hall, the Commons, Bookstore, Campus Center, Fitness Center and Nomahegan Building	\$2.48 Million	Replace current HVAC with new systems tied to and controlled by a state of the art Building Management System.
Roof Replacement	Cranford – Science Hallway	\$370 Thousand	Install new insulation board and single ply roofing system.
Roof Replacements	Cranford – Chemistry Hallway and Campus Center	\$700 Thousand	Install new insulation board and single ply roofing system.
Gas Generator	Cranford – Humanities Building	\$430 Thousand	Install natural gas generator to provide 24/7 uninterrupted backup service for Computer Operations.
Electrical Substation Upgrade	Cranford Campus Substations: Science, Nomahegan, Commons	\$1.50 Million	Replace old electrical high-voltage substation and distribution gear to three buildings.
Substation Replacement	Cranford – MacDonald Hall	\$1.60 Million	Install new higher capacity, code compliant, expandable substation.
Cooling Tower	Cranford - Library	\$2.20 Million	Replace and relocate cooling tower on MacKay Library roof with a cooling tower on roof of MacDonald Hall. Enclose void in library to provide additional classroom space.
Signage	Various	\$500 Thousand	Standardize signage throughout the College, including building and room signs, way-finding signage, and a digital sign for the Cranford campus.

Betterments and Renewal (Continued)

<u>Project</u>	<u>Location</u>	<u>Estimated Cost</u>	<u>Description</u>
Data Closet	Cranford – Campus Center	TBD	Construct new intermediate data room in upper portion of Gym/Theatre stairway.
Observatory Dome Replacement	Cranford	\$299 Thousand	Replace metal dome roof on Sperry Observatory.
Lessner Escalator	Elizabeth	\$400 Thousand	Replace/demolish escalator.
Building Management System (BMS)	Elizabeth	\$100 Thousand	Replace equipment and upgrade system and software so new BMS in Kellogg is able to communicate with other campus systems