

COMMUNITY COLLEGE OF RHODE ISLAND

FACILITIES MASTER PLAN

JANUARY 2020

FLANAGAN



NEWPORT



LISTON



KNIGHT



GOODYCLANCY



EQUITY

EMPATHY

COURAGE

EXCELLENCE

COLLABORATION

CCRI

CCRI



Contents

Executive Summary	1
CCRI Strategic Goals and the Facilities Master Plan Process	5
Existing Physical Condition	11
Strategic Priorities	21
Knight Campus Plan	25
Flanagan Campus Plan	43
Liston Campus Plan	55
Newport Campus Plan	63
Proposed Structure for Facilities Planning	70
Appendix	73



Executive Summary

Community College of Rhode Island (CCRI) has developed this Facilities Master Plan to identify our highest priorities for physical improvements at our four campuses in Lincoln, Newport, Providence and Warwick. Across these campuses, our faculty and staff support the needs of more than 18,000 CCRI students who come to campus to continue their educations and strengthen their opportunities in the 21st century workforce.

The Facilities Master Plan supports and advances the three core goals of CCRI's Strategic Plan, completed in 2017:

- Enhance Student Success and Completion
- Expand Partnerships and Programs
- Strengthen Institutional Effectiveness

This Facilities Master Plan was developed through a process that engaged the full CCRI community. Our students, faculty, staff worked with CCRI's leadership team to identify a set of priority initiatives to address our most urgent facility needs and to improve our ability to support staff and serve students.

CCRI anticipates no major increase in student enrollment over the next decade. Our analysis suggests that we will generally have sufficient space to meet our needs in coming years. However, as we continue to evaluate whether we are providing programs at the campuses that are most convenient for our students and our training partnerships with Rhode Island employers, we may need to address space deficits on certain campuses.

The most significant facility challenge we face is the quality and suitability of our space to support our students' learning and engagement. Many campus spaces have seen little change during almost 50 years of use, a period when student needs, technology and pedagogy have evolved significantly. Most proposed initiatives therefore involve renovation of existing spaces to address the following concerns:

- **Student study and social spaces are inadequate in quantity and in function,** limiting students' opportunities to collaborate or interact with their peers on campus or find quiet places to do their work.

- **Student services space on our largest campuses have developed piecemeal over time, are fragmented** and not structured in ways that allow our staff to most effectively support students.
- **Many classrooms do not support current and emerging teaching pedagogy**, which favors group learning and increased classroom collaboration, and require technology and furniture upgrades.
- **There is significant deferred maintenance across the system** which CCRI will begin to address through the facilities initiatives prioritized in this Plan.
- The Facilities Master Plan process **reinforced our recognition of the importance of our community partnerships** and how CCRI's workforce initiatives and programs address important needs for the economy and workforce of the State of Rhode Island. Meeting these needs and providing state of the art programming will require additional space to serve this important function. The most effective location for these programs to be held is at or near our Liston Campus in Providence.

Overall, CCRI's priority will be to focus on how to improve the major spaces we share as a community and invest in these areas. This effort will occur across all campuses.

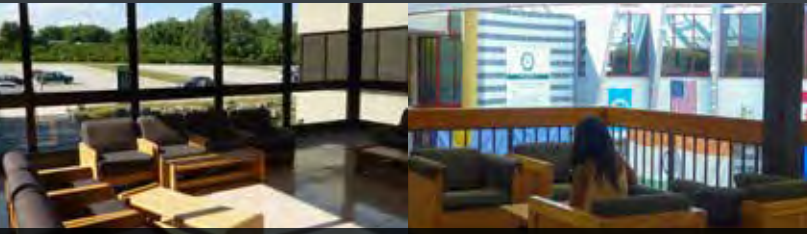
This plan outlines sixteen priority improvement projects spread across our four campuses, ranging from small interventions to large and complex renovations, which together will help us meet the future needs of our community of learners.

Some initiatives will be achievable in the near term based on the availability of funds. Other larger initiatives will require authorization and funding support from the state and other partners. As these initiatives move forward, we will continue to refine our plans in ways that are responsive to the needs of our students and staff, and we will continue to seek out and listen to their input.

All CCRI campuses are within a 30-minute drive of each other.



Knight Campus | Opened 1972



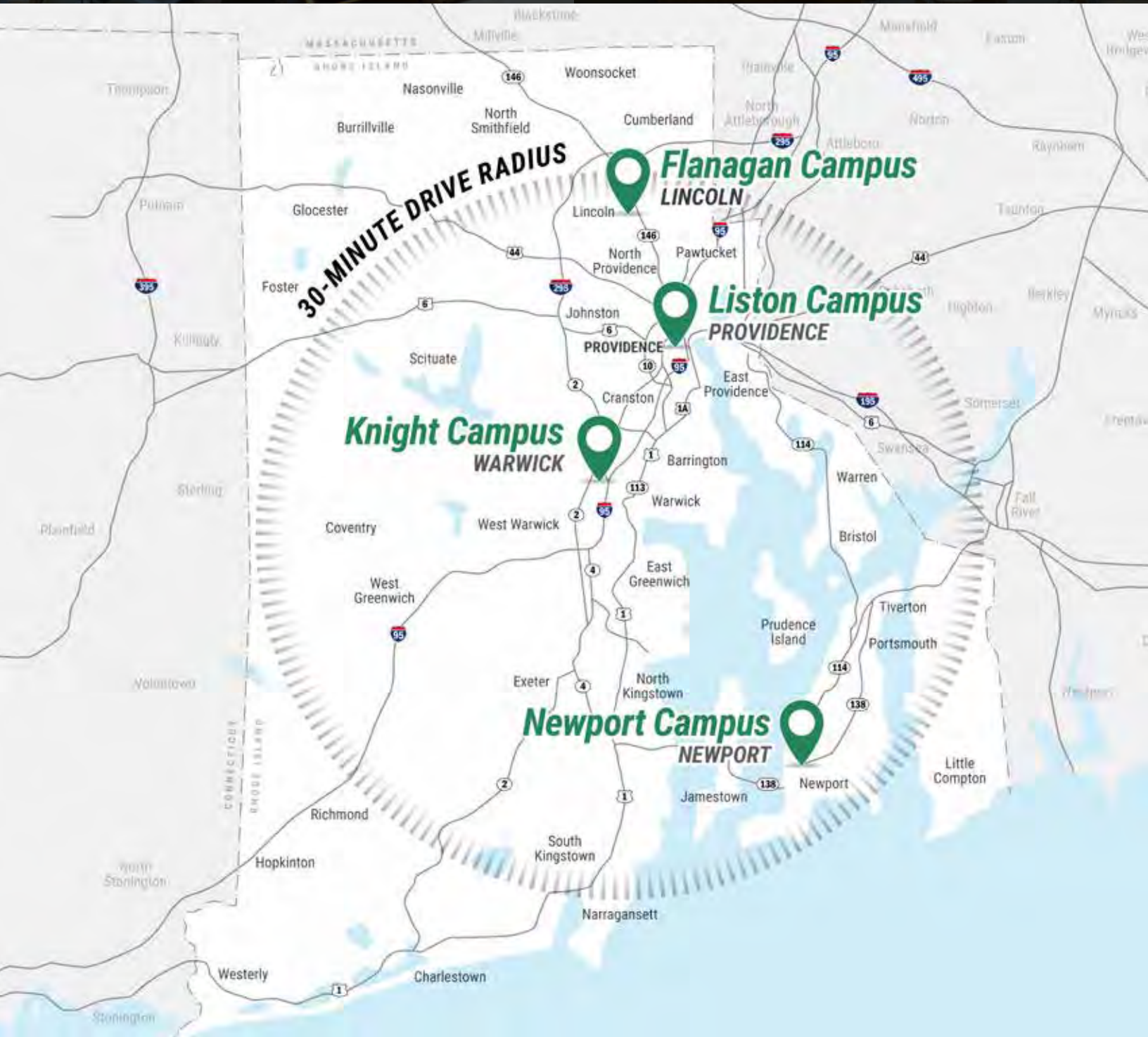
Flanagan Campus | Opened 1976



Newport Campus | Opened 2005



Liston Campus | Opened 1990





CCRI

Flanagan | Knight | Liston | Newport

Tell us
about
your
campus!

GOODYCLANCY

MASTER PLANNING





CCRI Strategic Goals and the Facilities Master Plan Process

The Community College of Rhode Island's Facilities Master Plan (Plan) process aims to create a capital planning policy document with the 2017 Strategic Plan as its foundation.

The Plan presents the capital initiatives created during a transparent and inclusive planning process encompassing constituents from all the campuses and lasting two years. The process was led by the Executive Committee with input from the Steering Committee, campus stakeholder groups and outreach events at each of the campuses.

To help operationalize the plan and establish ongoing physical planning methodologies and governance, the Facilities Master Plan includes a recommendation for the establishment of new CCRI Committees to provide ongoing oversight and input on initiatives identified in the Facilities Master Plan and provide a venue for future discussion of changes and improvements to CCRI facilities.

Strategic Plan Goals

1

ENHANCE STUDENT SUCCESS AND COMPLETION

We will work diligently to ensure student success with the objective of increasing certificate and degree completion rates, based on our belief that our students are motivated, capable and committed to attaining academic achievement. With equity as a cornerstone, our role is to ensure excellence in academic quality and support services to prepare students for success through completion, transfer or placement in the workforce.

- Support college readiness by scaling high-impact best practices.
- Provide pathways that enhance structure and support.
- Enhance teaching and learning.

2

EXPAND PARTNERSHIPS AND PROGRAMS

To prepare our students for future success and to support Rhode Island's economic and workforce goals, we will continue to develop robust partnerships and programs that align with educational institutions, employer needs, and community organizations. With equity as our frame, these partnerships will provide our students with the outstanding education, skills training, and support they require to successfully transfer to a four-year institution or secure quality employment. Our emphasis on partnerships and programs will allow us to promote the College as an adaptive, responsive, high-performing institution.

- Develop a process to better understand and respond to the economic needs of Rhode Island as well as the needs and goals of our students.
- Leverage the resources of the college and educational, workforce, and economic development partners to meet the needs of our students and the State of Rhode Island.

3

STRENGTHEN INSTITUTIONAL EFFECTIVENESS

We will improve institutional effectiveness by developing a strong organizational culture, investing in professional development and enhancing our systems. We will collectively embrace a culture of trust, respect, and open, transparent communication. We will invest in ongoing professional development that positions faculty and staff to continuously grow and develop in their careers. We will revitalize our financial, operational, and technology systems to enable the college to be more innovative, effective, and responsive. Through this focus on institutional effectiveness, we will support more collaborative, data-driven, student centered decision making.

- Foster a culture that promotes transparency, collaboration, respect, and accountability.
- Promote a rich environment of professional development that rewards performance and encourages all faculty and staff to develop and expand their skills.
- Create data-driven systems to support the College's mission and promote continuous improvement.



The Math Emporium is an example of creating space and program to enhance student success and completion.

Facilities Master Plan Process

The Facilities Master Plan was developed through a participatory, iterative process to engage members of the CCRI community in shaping our collective environment and to ensure that stakeholder knowledge informed decision-making.

Members of the CCRI community participated on committees focused on the Facilities Master Plan, took part in stakeholder groups to review plan alternatives, or attended an open campus forum. Throughout each phase of the planning process, participation was sought from all four campus communities and a variety of faculty, staff, students, and leadership.



Over 300 students, faculty, and staff were surveyed during pop-up events held at each campus. The events took place in campus gathering spaces, like the Great Hall at Knight, Campus Common at Flanagan, and atriums at Liston and Newport during high-traffic lunch hours. A staff and faculty-focused event was held as part of the system-wide professional development day.

The Facilities Master Plan was overseen by the following groups and Committees:

- **Executive Committee:** Consisting of the President and college administration, the Executive Committee served as a sounding board for ideas and brought forward the decisions that guided the creation of the Facilities Master Plan.
- **Steering Committee:** To represent the system, CCRI established a fifteen-member Steering Committee which included academic faculty, student life and facilities staff from each of the campuses. This group of professionals had specific responsibilities for or

interests in the CCRI system. This committee was the working group involved in determining the most important challenges, identifying the solutions that most closely supported CCRI's strategic plan goals and helping to develop recommendations presented to the Executive Committee.

- **Campus Stakeholder Groups:** To ensure the process was informed by information and opinions specific to each of CCRI's four locations, stakeholder groups representing each campus were engaged throughout the process. These groups included faculty, staff and students with special responsibilities or interest at an individual campus. Each stakeholder group was met with several times over the duration of the project and their input and opinions helped to shape the recommendations that were presented to the Steering Committee and the Executive Committee.

Ultimately through the multi-phased process the Facilities Master Plan was created by our community and represents the physical changes required on each of our campuses to begin achieving our strategic goals.

PRE-PLANNING

The Facilities Plan effort was launched with a period during which the scope of work, the planning process and participation for creating the plan were established. The roles and responsibilities of the committees were established, existing condition information was collected, the team toured each campus, and a detailed schedule was produced. During the Pre-planning phase the structure responsible for leadership and participation in creating the plan were established.

PHASE 1 | IDENTIFY NEEDS

Through on-the-ground investigation, quantitative facilities space use analysis, review of past studies/documentation, and campus stakeholder engagement key campus physical infrastructure and programmatic needs were identified. This phase of the planning process involved a series of meetings with the executive committee, steering committee and stakeholder groups to collectively deepen the understanding of the possible futures and how the people, place, and program all impact the campus communities' future academic and social experiences. These meetings informed and shaped the future projects and capital investments that enable flexible futures for each of the campuses. The Plan incorporates a wide spectrum of stakeholder input. This was a period of intense and focused activity that generated strong ideas and rationale that become the basis for a strong, yet flexible physical development program for both infrastructure and programmatic needs.

PHASE 2 | DEVELOP CONCEPT ALTERNATIVES

Phase 2 focused upon exploring alternative approaches for how CCRI's campuses could evolve over time in response to the physical development program developed from the work in Phase 1. Alternatives, illustrating a range of different project initiatives that addressed the development program and considered each of CCRI's four campus locations. The iterative and transparent process shaped the alternatives. The approach to the considering alternatives incorporated conceptual cost estimates to help CCRI decision-makers make understand the level of investment necessary to implement each alternative.

PHASE 3 | DEVELOP, PRESENT, AND REFINE THE PLAN

In Phase 3, the preferred concept alternatives were refined into a draft master plan presentation which was reviewed and refined based on Stakeholder Groups, and Steering Committee input and endorsed by the Executive Committee. As this draft plan was shared with the CCRI community, the suggested initiatives were refined, a few were removed and a couple were added. It was a process that was reiterative and responsive.

Administration

Resource
Center

Call



Existing Physical Condition

As part of this Facilities Plan, the consultant team paired significant quantitative analysis of physical spaces with extensive interviews, surveys, and public engagement about how the campus community used campus spaces, what they valued about them, and what most needed to be improved. Across over 300 surveys, students and staff raised common themes for the CCRI system, including:

- Students want quiet places to study and noisier places to work together and socialize.
- Although limited in supply, the students valued the quiet environment in the libraries and access to equipment the computer labs provide and wanted more space on each campus to help fulfill this need.
- Building infrastructure such as air handling on many campuses created a distraction in many spaces.
- The faculty saw the advantages of having the students remain on campus and wanted more space for co-curricular activities.

As part of the data-driven analysis, the existing physical condition and operational practices of each campus were evaluated. Critical building systems (including HVAC, plumbing, fire protection and electrical) and traffic circulation and infrastructure were evaluated.

A critical piece of this analysis was determining the space utilization of each campus, including what deficits and surpluses may exist by use. Overall space needs are driven by total personnel (both in terms of overall headcount and FTE), student enrollment numbers (both in terms of overall headcount and FTE), and how instructional course scheduling uses space. Existing data for each of these factors on each

CCRI campus were overlaid on an inventory of existing space and evaluated based on common nationwide industry standards. The analysis also accounted for anticipated changes in instructional methodology or pedagogy over the next decade as well as anticipated changes to academic programs. There was particular focus on understanding how the Division of Workforce Partnerships (DWP) functions as a part of the CCRI system currently, and how that relationship may evolve in the future.

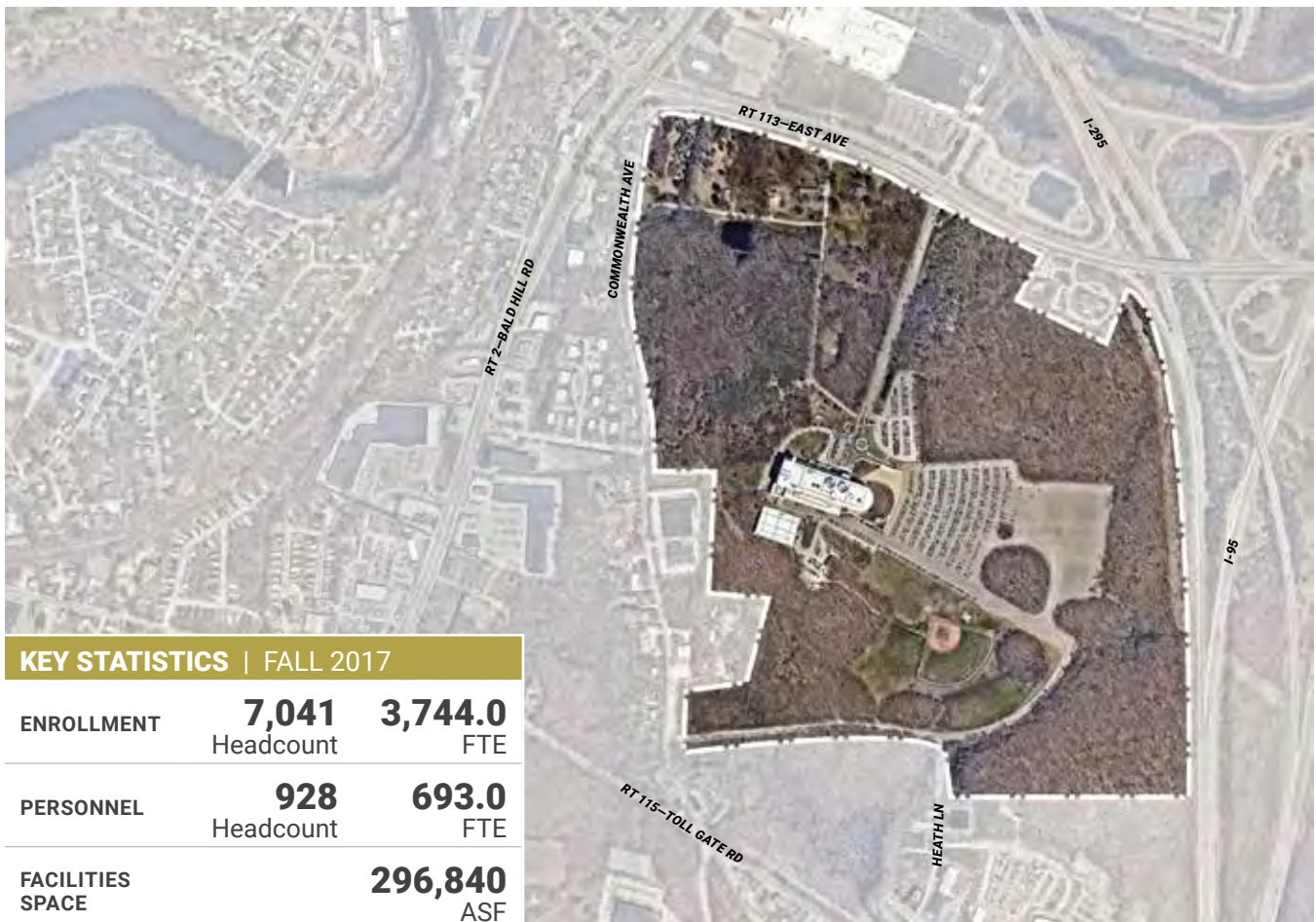
The following sections present the conclusion of these analyses for each of the CCRI campuses.

Knight

The Knight Campus in Warwick is the oldest and largest campus in the CCRI system, at almost 300,000 ASF. As the flagship building of the system, Knight hosts central administrative functions and staff. Almost every CCRI student will take at least one class at Knight to complete a degree or course of study. The Great Hall gathering space at Knight was recently renovated, adding new furniture, carpeting, decorations, tables with charging capability, and a large high-definition video screen to enable a wider range of programs in the Hall and to make it a more attractive study space. These renovations to the Great Hall are very well-utilized by students and have been well-received by the CCRI community.

Key issues at the Knight Campus facility include:

- Essential student services are spread throughout the building, making it difficult for students to locate offices and navigate interrelated services. Many spaces do not meet operational requirements or the needs of the students or staff that serve them.



EXISTING PHYSICAL CONDITION

- The current café has limited hours and operational capacity because of its physical layout, complicating efforts to add grab-n-go and healthier options. While the cafe is adjacent to the improved Great Hall, the lack of attractive food options means students are more likely to leave campus in search of meals or refreshments.
- The Knight Campus hosts 45 general-purpose classrooms and 1,621 seats. Current classroom design and furniture can preclude pedagogical variety, such as allowing for collaborative group work or the flexibility to offer multiple formats within a class time. The existing desks and classroom furniture can also be uncomfortable for larger-bodied students.
- The campus store is in a prominent location at the building entrance yet is underutilized by students because of the lack of services such as printing, grab-n-go services, and flexible space to study or socialize in the store.
- The largest number of students, faculty, and staff were surveyed at this campus, and they responded with three themes that were consistent across all four campuses: the desire for quiet places to study, places to come together as a community, and better classroom furniture.



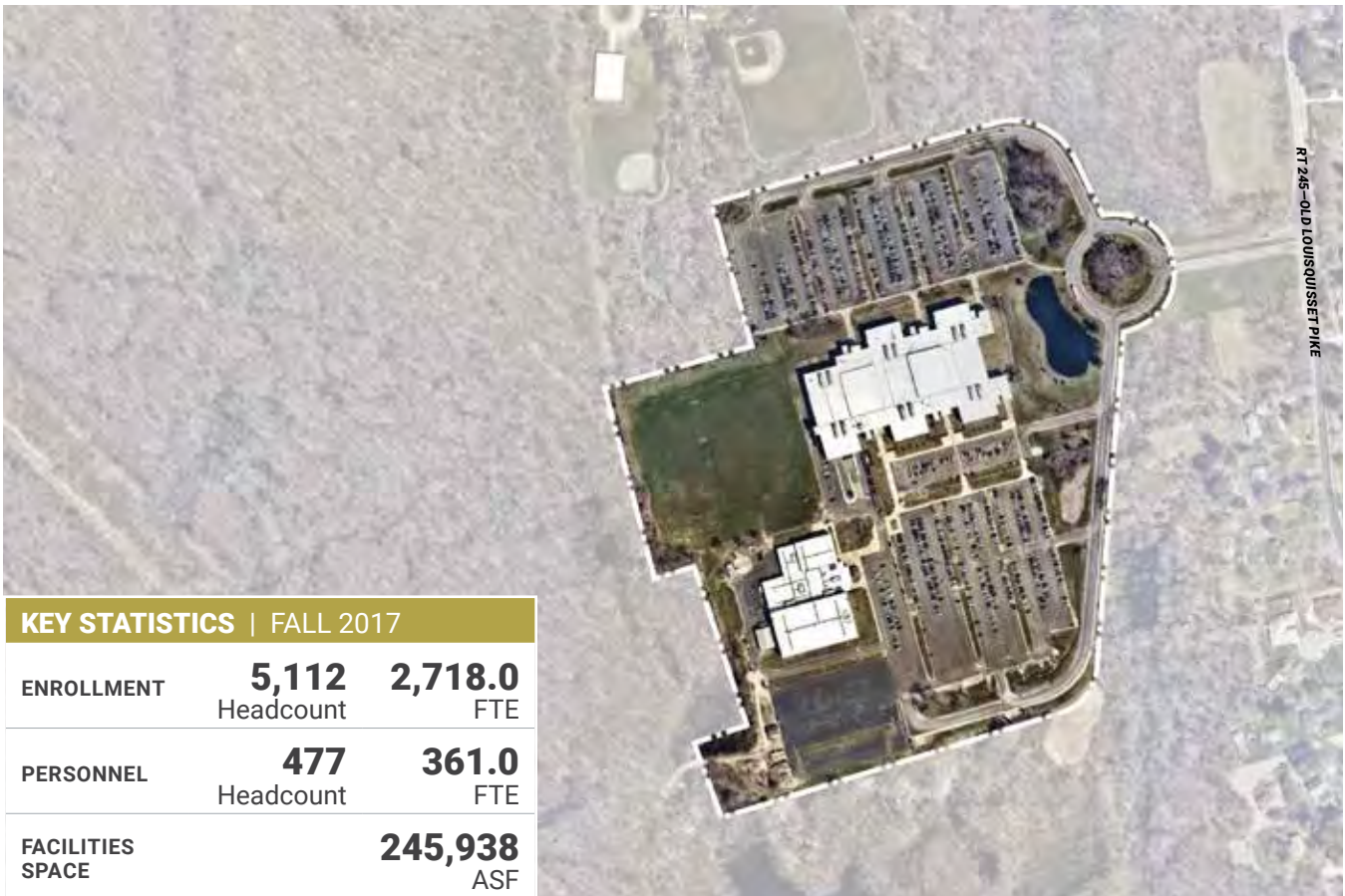
Recently renovated Great Hall is popular with the students.

Flanagan

The 250,000 ASF Flanagan Campus in Lincoln was constructed in 1976 as the second CCRI campus serving northern Rhode Island. It hosts most nursing classes, including new simulation labs for that program, so many healthcare students must come to this campus to complete their degree at CCRI regardless of their home campus.

Key issues at the Flanagan Campus facility include:

- The large Student Dining Common is well-used for eating, completing assignments, and meeting and socializing with fellow students. Currently, seating is provided in two rows of uniform, large tables and the space can be loud during mealtimes. Lack of charging infrastructure and places for solo-work mean this area is less suitable for studying.
- The campus lacks adequate quiet spaces for studying or assignment work, whether for solo students or in small groups, compared to the ample space for louder collaborative work in the Dining Common.



KEY STATISTICS FALL 2017		
ENROLLMENT	5,112 Headcount	2,718.0 FTE
PERSONNEL	477 Headcount	361.0 FTE
FACILITIES SPACE	245,938 ASF	



The Dining Common is an example of the outdated student life spaces at the Flanagan campus.

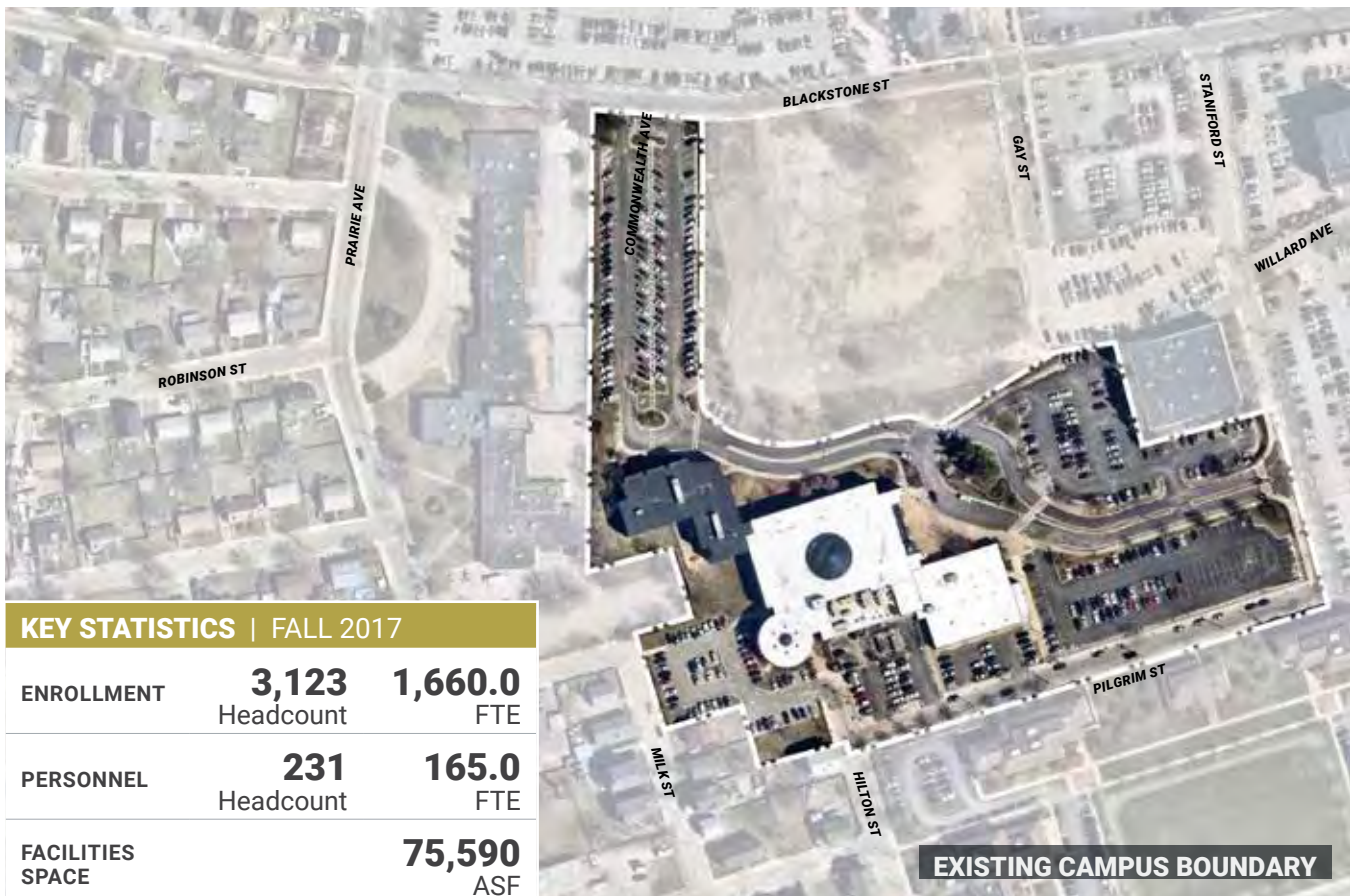
- Student services provided at the campus are easy to find within the building but are delivered from behind counters in what is a “transactional” environment. Operational spaces are inadequate for student privacy.
- The Flanagan Campus has 31 general-purpose classrooms and 1,687 seats. Current classroom design and furniture can preclude pedagogical variety, such as allowing for collaborative group work or the flexibility to offer multiple formats within a class time. The existing desks and classroom furniture can also be uncomfortable for larger-bodied students.
- The student, faculty, and staff surveys at Flanagan indicated that CCRI community members appreciated the easy-to-navigate layout of this campus and natural setting. Respondents were interested in more space in the library, study rooms that would accommodate group work, and places for students to hang the art produced in classes for display.

Liston

The Liston Campus is a 75,000 ASF building constructed in 1990 which was purchased to establish a CCRI presence in Providence, the capital and largest city in Rhode Island. Many students prefer to take classes at Liston because the campus is near where they live or work, has the best public transit access, and is located close to significant employers in Providence. The students and community served by Liston have a higher proportion of non-native English speakers, students without access to a computer, and users of public transportation than other campuses.

Key issues at the Liston Campus facility include:

- The Liston Campus has a central atrium space, bordered by a cafeteria, bookstore, a few classrooms, and bathrooms, which is a popular place but needs to update furniture and/or interior design.
- There are limited transportation options to travel between CCRI campuses. Because students at Liston likely need to travel to Flanagan and/or Knight to attend class or access student services, Liston students relying on public transportation are most





Dated design of the atrium space creates an unwelcoming space.

affected by the comparative difficulty of traveling to other campuses without access to a personal vehicle

- Liston's location also puts it into closer proximity than other CCRI campuses to many of the businesses and institutions that use the services of the Division of Workforce Partnerships (DWP). During the course of the planning process, interest was expressed in expanding DWP offerings in Providence. While these programs are currently accommodated by counter-scheduling with academic classes, future growth in the program would best be accommodated in Providence as well. Significant growth in DWP would generate the need for additional new facilities space at or near the Liston Campus.
- Students, faculty, and staff at Liston prized the cleanliness of the campus and the close working relationships they have with their colleagues and staff. The top ideas from student engagement at Liston were to increase the number of places to study and the number of places to meet and socialize with their fellow students.
- Students indicated that there were not enough outlets and/or charging stations for their devices throughout the campus.

Newport

The 50,000 ASF Newport Campus is the newest and smallest property in the CCRI system. Constructed in 2005, its small-school feel is prized by many students. As a comparatively new building, Newport had fewer challenges regarding the quality of space or outdated facilities than the other three campuses.

Key issues at the Newport Campus facility include:

- Due to the specificity of its programs and its design, Newport is not, nor meant to be, a full-service or independent campus.
- The current quad classroom design, due to the dividers and air handling equipment and noise from the other classrooms makes this set of classrooms difficult to occupy simultaneously.
- Students would like more quiet places to study, more places to relax as a group, and spaces for tutoring and group study.



KEY STATISTICS FALL 2017		
ENROLLMENT	1,363 Headcount	724.0 FTE
PERSONNEL	129 Headcount	94.5 FTE
FACILITIES SPACE		47,174 ASF

Strategic Priorities

CCRI's four campuses serve more than 18,000 students statewide and support the training needs of diverse Rhode Island employers. As the needs of students and employers change, CCRI facilities must adapt to meet new challenges and opportunities. While the state's pool of high school graduates will decline over the next decade, as it will in other New England states, less predictable factors such as economic conditions, employer needs and state policies can result in increases or decreases in enrollment. As it plans for the future, CCRI will seek to upgrade its facilities to align with the needs of its students while maintaining flexibility to respond to enrollment changes and the needs of employers.

Key drivers of the Facilities Plan are as follows:

- **CCRI's Warwick, Lincoln, and Newport Campuses are not anticipated to require growth in their overall space inventory** to meet future student needs in the foreseeable future. Modest increases in enrollment on these campuses can be accommodated by adjustment to scheduling windows that will modestly increase scheduling in off-peak periods. CCRI's Providence facility may require additional space to better serve the large number of students and employers within the Providence market.
- **Several campuses need targeted upgrades to key spaces to better meet the needs of students.** These upgrades can generally be accommodated through adaptation and renovation of existing buildings. Most upgrades aim to address the following deficiencies:
 - *Incremental additions and changes in the student services function and vision have created spaces that do not meet the operational requirements or needs of the student or the staff who serve them.*
 - *Study and social spaces are inadequate in size and function and do not support the success of students.* Some currently underutilized spaces can be reprogrammed to mitigate these deficits.
 - *The classroom environment does not, in many cases, support current and emerging teaching pedagogy, which stress a more interactive classroom environment and small group learning.*

- **CCRI's Warwick and Lincoln are approaching 50 years in age and account for almost 80% of the system's inventory of space. Many building systems in these locations, including HVAC, need to be replaced** as they are past their useful service life, and are inefficient and costly to maintain.

CCRI's highest priorities relate to spaces (such as the recently renovated Knight Student Commons) that are shared by the whole community and are critical to the success of all students and the professionals who support them. CCRI is also committed to accommodating the current demand for Workforce Partnerships and future growth in this program as may be required.

The following pages describe CCRI's highest priority changes on each campus. Each initiative directly aligns with the goals of the 2017 Strategic Plan; input from students, faculty, and staff who participated in the Facilities Master Plan process; and analysis undertaken by CCRI's team of consultants. Some of these initiatives can move forward quickly. Other will have longer lead times and will require state funding support before they can be advanced. Most of these initiatives are described here in concept only. As each move forward, there will be additional opportunities for input from the CCRI community as concepts are developed and refined.

The following are the key initiatives by campus. The initiatives are not listed in any order or priority. Initiatives marked with ** reflect projects currently underway as of November 2019.

Across all campuses, CCRI is developing Faculty and Student Learning Research Centers, modeled on the initiative piloted at the Knight Campus.

- **Knight Campus**
 - Student Services Hub **
 - Classroom and Lab Upgrades
 - Café Lounge
 - Campus Store
 - Student Success Center
 - Faculty and Student Learning Research Center
 - Faculty Offices Reconfiguration

■ Flanagan Campus

- Campus Common Redesign **
- New Student Study Space & Redesigned Campus Store **
- Classroom Upgrades
- Student Services Redesign

■ Liston Campus

- Atrium Redesign **
- Additional Space to Meet Workforce Training Needs

■ Newport Campus

- Study Space in Auditorium Balcony
- Café Initiative
- Long-Term Classroom Expansion

COMMUNITY COLLEGE OF RHO



Knight Campus Plan

Initiatives for Knight Campus

The proposed initiatives at Knight Campus continue to improve the student experience both inside and outside of the classroom.

- Student Services Hub
- Classroom and Lab Upgrades
- Café Lounge
- Campus Store
- Student Success Center
- Faculty and Student Learning Research Center
- Faculty Offices Reconfiguration







Precedent image of student services central spine with “self help buoys.” Opportunity for staff members to provide quick help and direction.

STUDENT SERVICES HUB

CCRI’s student services staff provide support to students throughout their educational experience, from first interactions with admissions staff until program completion. Over the course of a student’s CCRI career they will interact with professional staff in admissions, advising and counseling, career services, financial aid, the bursar, and a variety of other services. Staff seek to assist students in the most supportive and integrated way. For many students, coordinated services from several staff members may be required. CCRI’s ability to most effectively support students requires that staff are located together and can easily interact with the student and each other. The current physical layout of student services does not allow this, creating serious challenges for students and staff. Throughout the planning process, students, faculty and staff highlighted this as one of the highest-priority items to be addressed, with a goal of creating a place that allowed students to feel comfortable and welcomed.

This initiative will establish a new and integrated Student Services Hub at the Knight Campus and will require a comprehensive redesign of the approximately 30,000 square foot student services space located on two floors adjoining the Great Hall. Preliminary design concepts were developed to test this vision and explore how it might be accommodated:

- The redesigned student services center will include spaces for records and admissions, opportunities and outreach, advising and counseling, career services, financial aid, the bursar, testing facilities, health services, disability services, and veterans’ services as well as office spaces for the dean and vice president.

CONCEPTUAL PLAN | UPPER LEVEL



CONCEPTUAL PLAN | LOWER LEVEL



- The redesign includes a “one-stop” area, where students can get quick help and direction from staff at the outset. They can then move back to dedicated offices and other student services spaces as needed. This design should make student services easier to navigate, with students spending less time shuttling between disparate offices. This investment will also make student service unit operations more efficient.
- The preliminary concept organizes the student service functions around a “spine” containing comfortable and inviting waiting/lounge spaces for the students. This space will also contain self-help kiosks and places for the student services professional to have discussions not requiring confidentiality. The following plans and diagrams illustrate the spine and the suggested location for the other student services units.
- The redesign would incorporate an elevator connecting both levels of student service. The current absence of such connection poses significant problems for accessibility today.
- Completing two projects is required to enable the student services redesign: relocating the CAD Lab (1,400 square feet) and relocating the computer lab (1,400 square foot). Together these two relocations will allow all the student services functions to be organized into a single hub of 30,000 square foot.
- With the Athletic Department temporarily moving to Flanagan, the Field House can be repurposed as swing space for the student services hub project.

CCRI leadership has already taken the initial steps to move forward on this priority initiative by beginning the process of identifying a design team to further develop the concept into plans for implementation. The amount and location of temporary swing space during the construction period will be studied as part of the further detailed design of the initiative.

CLASSROOM AND LAB UPGRADES

During the stakeholder group meetings and the campus outreach sessions many of the comments and discussion related to the quality of the classroom learning environment. Over time, as at many institutions, seats have been added to the classrooms beyond their designed capacity to accommodate enrollment growth and preferred teaching times . This has led to crowded classes, and also classes being held in rooms with too many seats. The teaching pedagogy has also shifted to include more in-class peer to peer participation, but there have been too few corresponding updates to classroom furniture. Finally, classroom technology has evolved beyond what is in use at Knight. All these factors contribute to the need to invest in the general classroom environment. As changes are advanced, close collaboration with the registrar's office will be essential to ensure classroom capacity continues to meet program needs.



Precedent image of classroom project.

- To begin this initiative the classroom portfolio can be adjusted for optimal seat count by removing existing chairs from some rooms and adding them to others to balance the classroom supply portfolio. This effort can be made even more effective by expanding the class scheduling window.
- Selected classrooms can also be identified to receive new furniture. New movable and comfortable furniture will enable a quick switch between a pedagogy of all-class lecture to team-based activities. This new furniture can also be more comfortable for students of all sizes and will be fully accessible. Chairs designed with built-in space for backpacks and other storage can help keep walkways clear.
- During the discussion of classroom characteristics many faculty and students wanted more consistent audio-visual equipment in each of the rooms. Connecting to display devices to easily share information was an important function missing from many current classrooms.
- This classroom upgrade project can begin very quickly through relocation of classroom chairs after further discussion with the registrar. The furniture and technology upgrades can continue to be implemented over several years as resources become available.

In addition to classroom upgrades, ongoing renovation of labs continues to contribute to a dynamic learning environment. The Physics and Engineering Lab at Knight is currently being renovated.



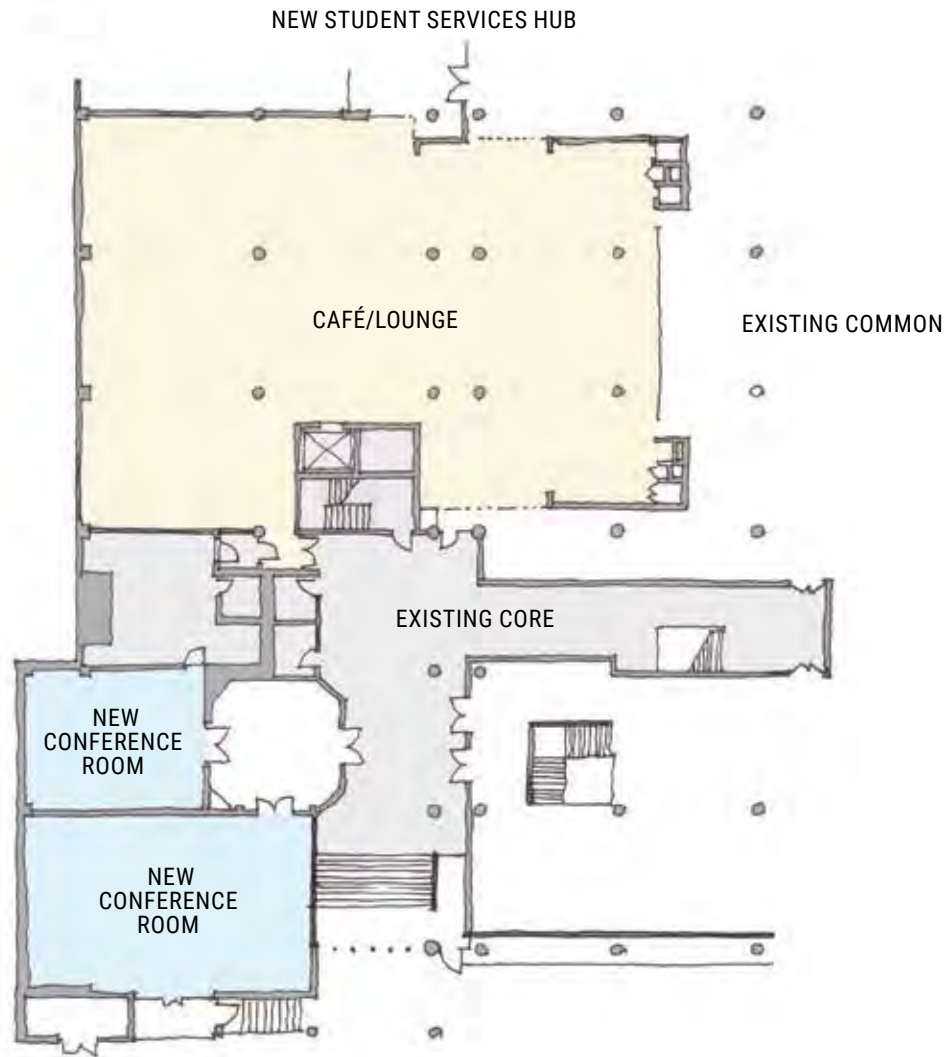
Precedent image of new café lounge.

CAFÉ LOUNGE

The Café Lounge space initiative can build off the success of the renovated Great Hall at Knight and extend that community space into the other areas adjacent to the commons. Studies show that as students spend more time “on campus” their chances of completion increase significantly. This Café Lounge initiative creates a space where the students feel comfortable, find food they enjoy and are able to engage in “social” studying. Social studying space encourages interaction and group productivity, and establishes a positive environment to help structure students’ time on campus outside of the classroom.

- There is also an opportunity to create a supply of spaces types and sizes different from the large Great Hall space. Existing conference rooms behind the cafeteria servery could be relocated to create more space for this café and lounge environment.
- By enabling delivery of different types of food over a longer period, this initiative would improve the quality of space and operation of the current cafeteria. It would become a mixed-use food service space providing greater variety, value, and quality. Grab-and-go options could enable longer hours of operation. Food options throughout the day could be a part of flexible food service.
- Removing the interior walls around the current servery will create desirable views from Great Hall through to the windows and the view outside.
- The renovated space should be attractive, filled with bright color, well-lit, and open to other uses. The space could accommodate a food education and wellness program or other activities that help support campus learning and community. Like the successful renovations to the Great Hall, these changes would help extend the amount of time that members of the campus community stay on campus. The next steps for this project are to advance the programming work and to study the foodservice equipment and related building systems in greater detail.

CONCEPTUAL SKETCH





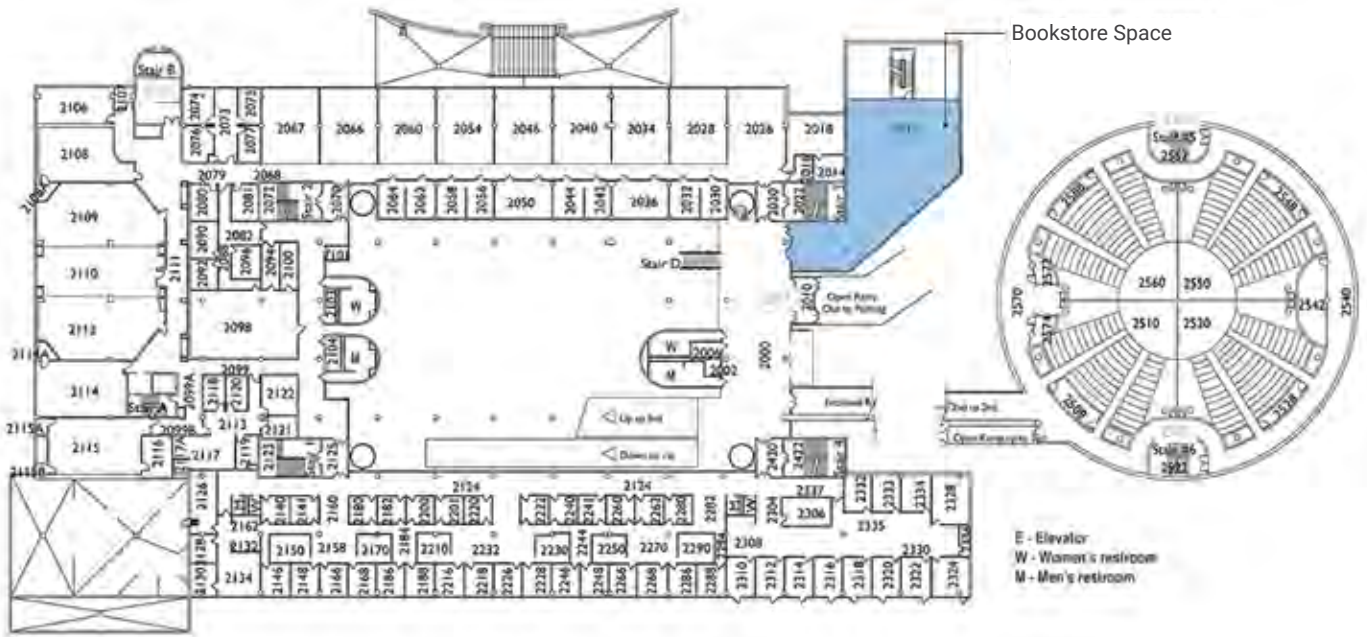
Precedent image of campus store.

CAMPUS STORE

The Knight bookstore space stretches over two floors, totaling nearly 4,000 square feet, and occupies more space than is now required. A continuing trends in student bookstores across the country is towards smaller, more multi-use facilities, because personalized ordering, ebooks, and other technological changes have reduced the need for physical space.

- The store will be designed to occupy its current space that is on the second floor and if necessary, storage located in another location in the building.
- The store would provide “grab and go” for food, convenience items and “pop” printed material such as magazines and popular books
- The new space will include seating and tables designed to encourage relaxing and connecting with other members of the CCRI community.
- The further programming, design and implementation of this initiative could begin as soon as funding is available and operational practices are confirmed.

KNIGHT CAMPUS | SECOND FLOOR





Precedent image of student success center.

STUDENT SUCCESS CENTER

This initiative showcases the commitment CCRI has to the success of its students at the most-used entrance on campus. During the planning process this commitment was characterized as “bringing the service to the students”. Through the repurposing of one of the floors that was once the bookstore there is an opportunity to create a highly visible place highlighting the programs, staff and help available for the students on campus.

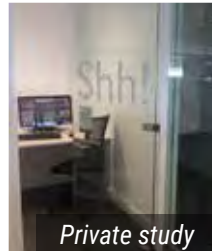
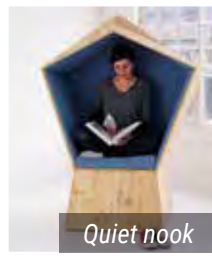
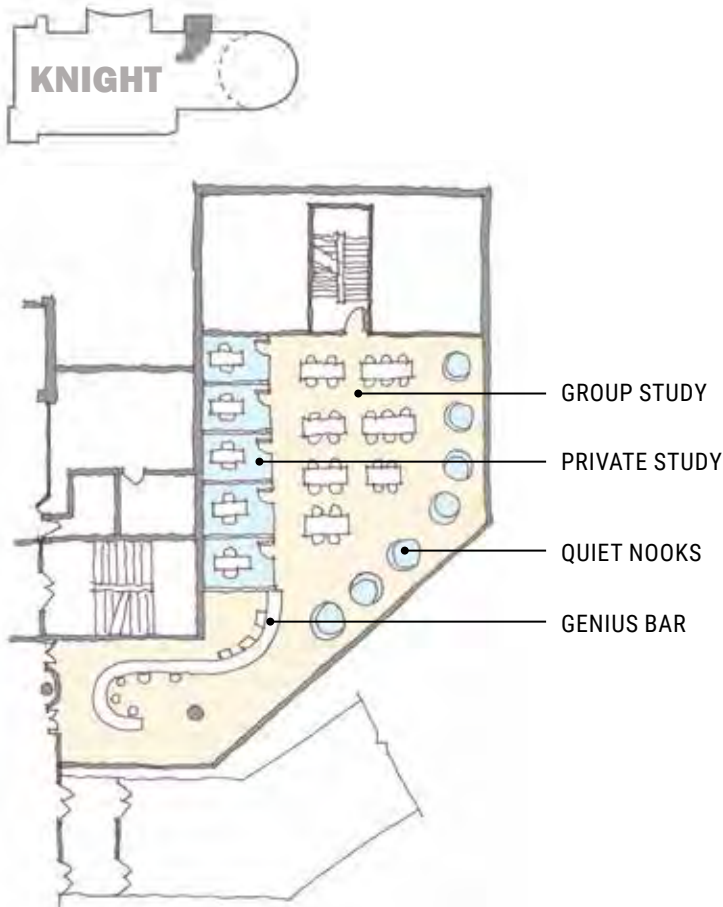
- The Center can offer a mix of space types for group study, individual exploration, mentoring, and tutoring activities. As the diagrams suggest, there are a variety of types of spaces to accommodate a variety of learning and studying paradigms. There are spaces in the plan to accommodate meetings, group study and individual study and tutoring. Some of the offices for the staff of the Student Success center may also be located here.
- This Student Success Center could become a “touchstone” for preliminary information about all the student success services at CCRI, but not necessarily the place where all the activities happen. Depending upon the activity, the services could be provided in one of the many other mixed-use locations this plan has proposed creating on campus.

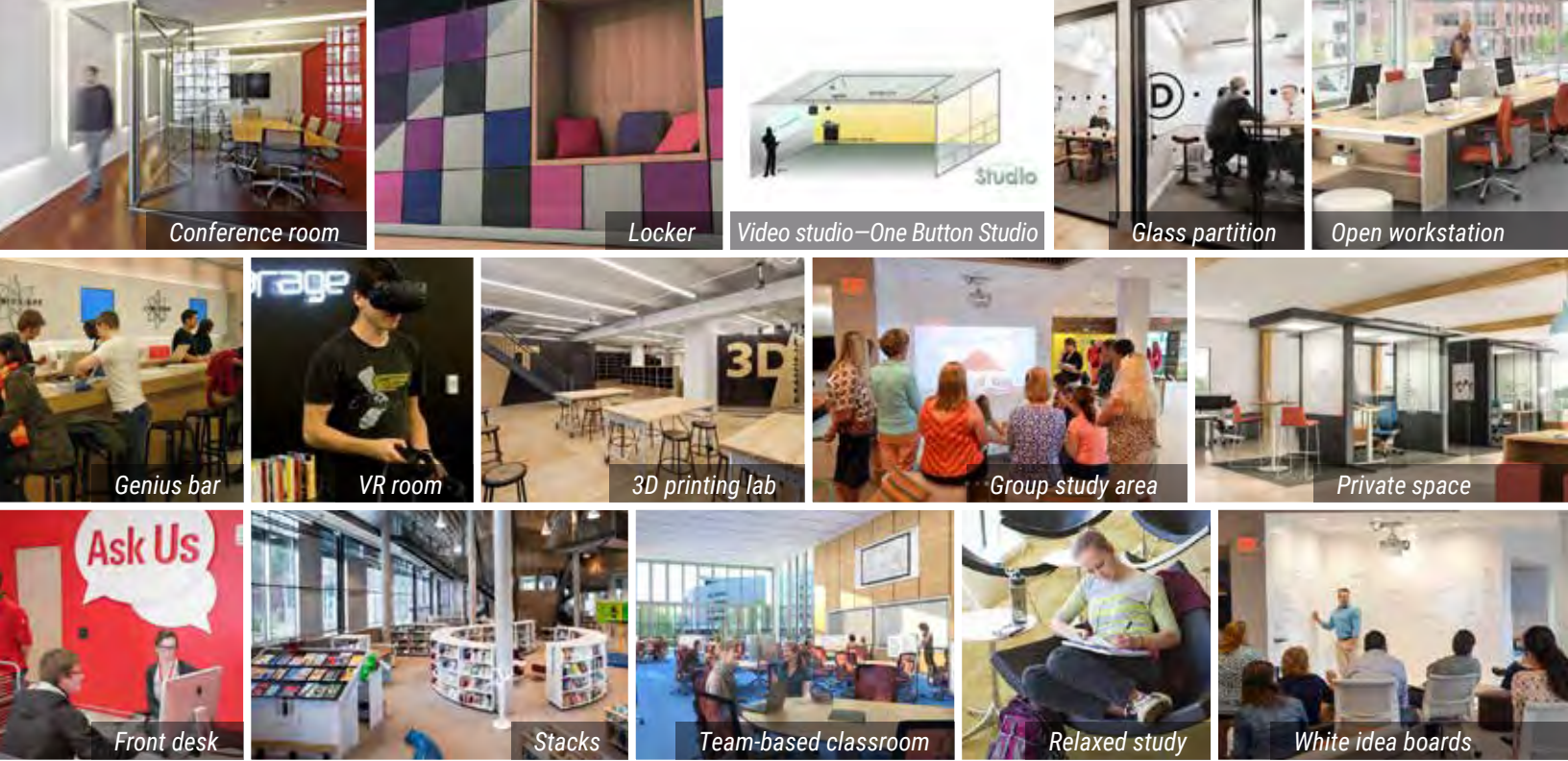
To allow this initiative to proceed, first the Campus Store initiative must be implemented to create the necessary space. An operational study (which could happen immediately) would help to determine the optimal sequence for relocating student success services, many currently offered in hard-to-find places, to the new Center.

KNIGHT CAMPUS | THIRD FLOOR



CONCEPTUAL SKETCH

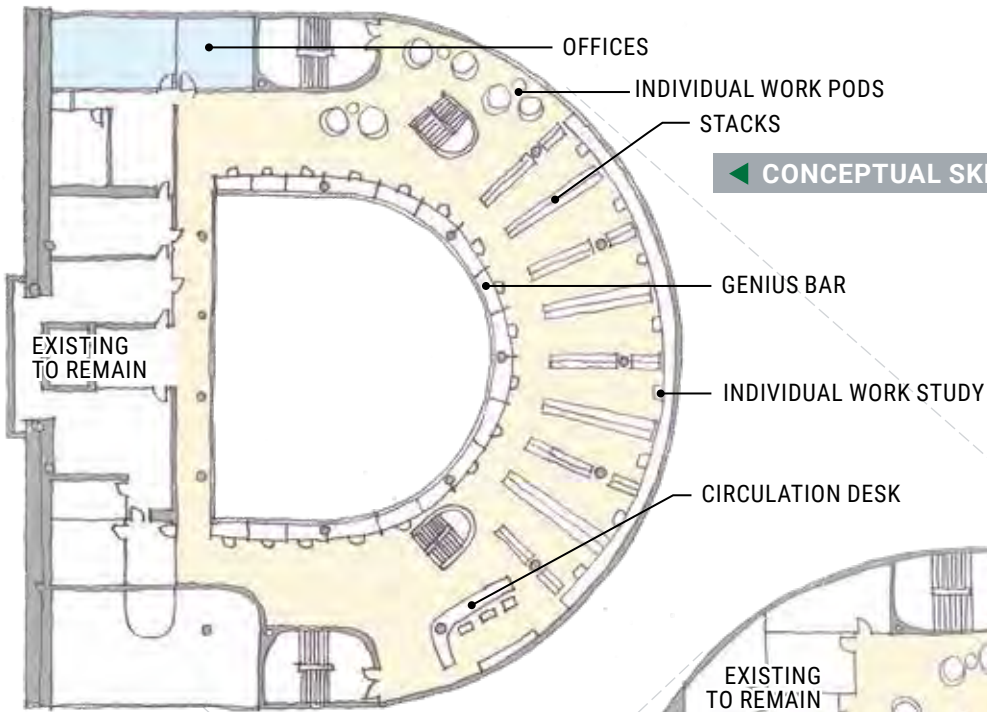




FACULTY AND STUDENT LEARNING RESEARCH CENTER

To help achieve the strategic direction of institutional effectiveness the plan includes making significant modifications to the current library space at the Knight Campus. Curriculum design and instructional effectiveness can be enhanced with the access to current information, peers and places to practice within this improved space. This project reconfigures the library into spaces that encourage and support individual research and improvement, team collaboration and production. Conference rooms, research areas and “practice” classrooms are proposed in this reconfiguration. Elements include:

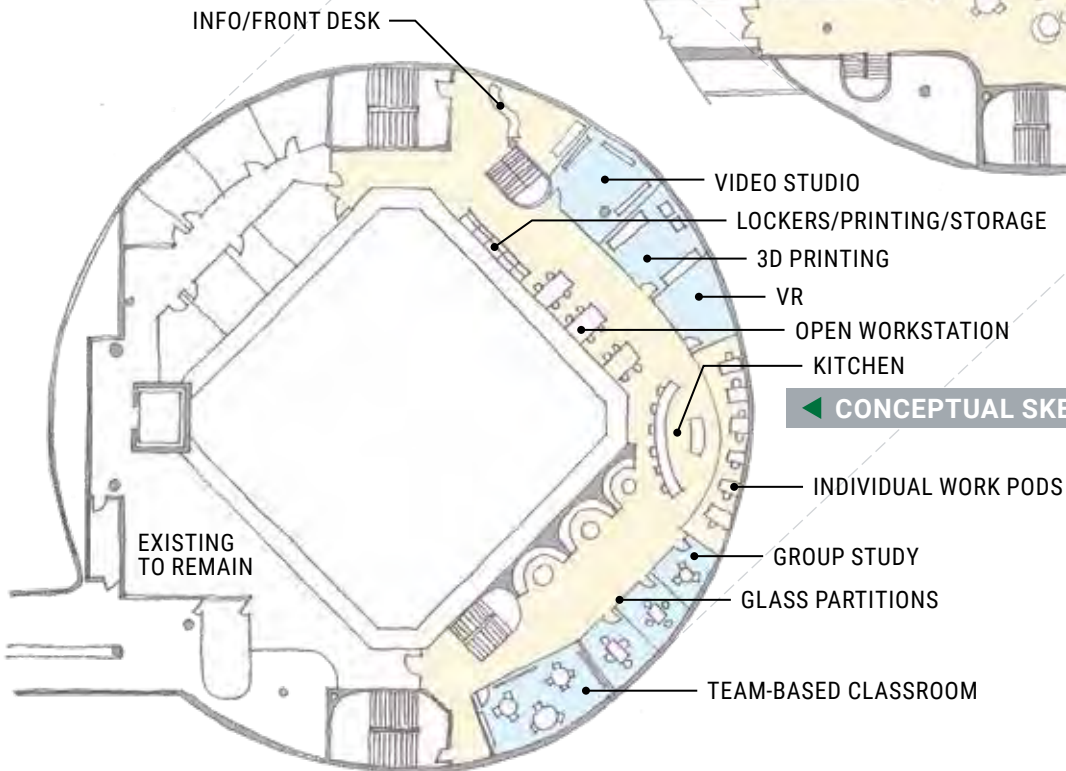
- A variety of bright, colorful seating that is comfortable and convertible to fit and support multiple uses and needs.
- Absorptive wall and ceiling finish materials that are also visually appealing, to control noise in this lively and energetic space
- More group study space with tools, technology, and access to electricity the students and faculty need to prepare for their projects and presentations.
- Improved lighting throughout the space, including the offices.
- Improvements to make the 5th floor stacks ADA compliant.
- Enhanced signage throughout the space directing users to the collection and other resources.
- Locating the most “public” spaces near the windows, so that natural light and spectacular views of the landscape can be shared by everyone.



◀ CONCEPTUAL SKETCH | FIFTH FLOOR



CONCEPTUAL SKETCH | FOURTH FLOOR ▶



◀ CONCEPTUAL SKETCH | THIRD FLOOR

The success of this initiative will require further programming, engineering, and architectural design. This project will require updated operational definitions of the functions and services being provided within this space. The project seeks to transform the space into a campus destination where the community can get comfortable, stay a while, connect, and learn.

FACULTY OFFICE RECONFIGURATION

To create spaces that facilitate community-building in all CCRI spaces this pilot project proposes reconfiguring a selected section of faculty office spaces. The current floor plan of the faculty offices contains unwelcoming physical barriers; the students must “know where to go” to find their professors. Clearer circulation and a more “permeable” space configuration will help create a friendlier and more functional environment.

- As with most of the other initiatives, this project proposes additional glazing, brighter wall colors and new flooring.
- Flexible, modern, mixed-function furniture and modern lighting will make the faculty office spaces better places for professors and students to interact, connect, and learn.
- Along with the library at Knight, one of the most striking and unique assets of the existing faculty office space is its location along the windows, which provide natural light and spectacular views of the landscape. This initiative suggests reconfiguring the space so that great characteristics of the windows can be shared by all.

The planning team met with faculty several times to discuss offices of the future. In consultation with the faculty, there was some support for creating a pilot project to learn from and possibly adapt to a new work/learning environment. The next step towards implementing this project is thus to identify the faculty unit best positioned to participate in the pilot, along with the necessary resources.



Conference room



Open workstation



Locker room



Conference room



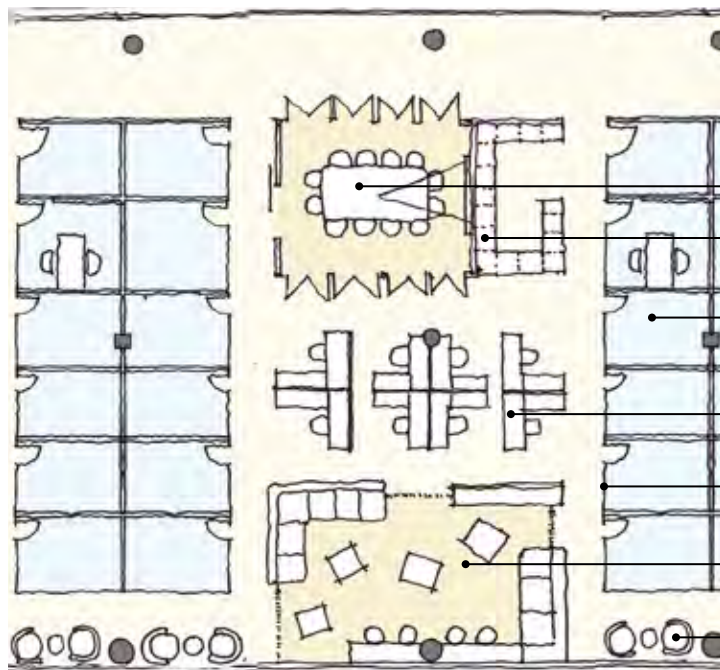
Faculty lounge



Private space

CONCEPTUAL SKETCH | THIRD FLOOR

OFFICES OF THE FUTURE
PILOT PROJECT



- CONFERENCE ROOM
- LOCKERS/PRINTING/STORAGE
- PRIVATE SPACE
- OPEN WORK STATION
- GLASS PARTITIONS
- FACULTY WORK AREA or LOUNGE
- INDIVIDUAL WORK PODS

CCri

Community College of

NO
SMOKING



Flanagan Campus Plan

Initiatives for Flanagan Campus

The proposed initiatives at the Flanagan Campus help further a consistent focus on common student spaces across the CCRI system. Like at Knight, there are opportunities for reuse of excess bookstore space, reconfigure the cafeteria, redesign student services, and introduce new classroom upgrades in furniture and technology. In addition to the initiatives below, it is likely that the library at Flanagan may require some capital investment to create a faculty/student learning research center.

- Campus Common Redesign
- New Student Study Space and Redesigned Campus Store
- Classroom Upgrades
- Student Services Redesign







Precedent image of campus common and café.

CAMPUS COMMON REDESIGN

The Campus Common on the Flanagan Campus is an outdated and poorly-functioning space. Current furniture, finishes, lighting, and a lack of power outlets are frequently cited by students as issues that should be addressed. The faculty/staff dining room and an adjoining classroom located along the building's external wall shield much of the Common from views of the outdoors and access to natural light, making it an uninviting space. Many of these same factors were recently addressed in the successful renovation of the Great Hall at the Knight Campus, which could serve as a model for improvements at Flanagan. As at Knight, these changes would help extend the time that students stay on campus.

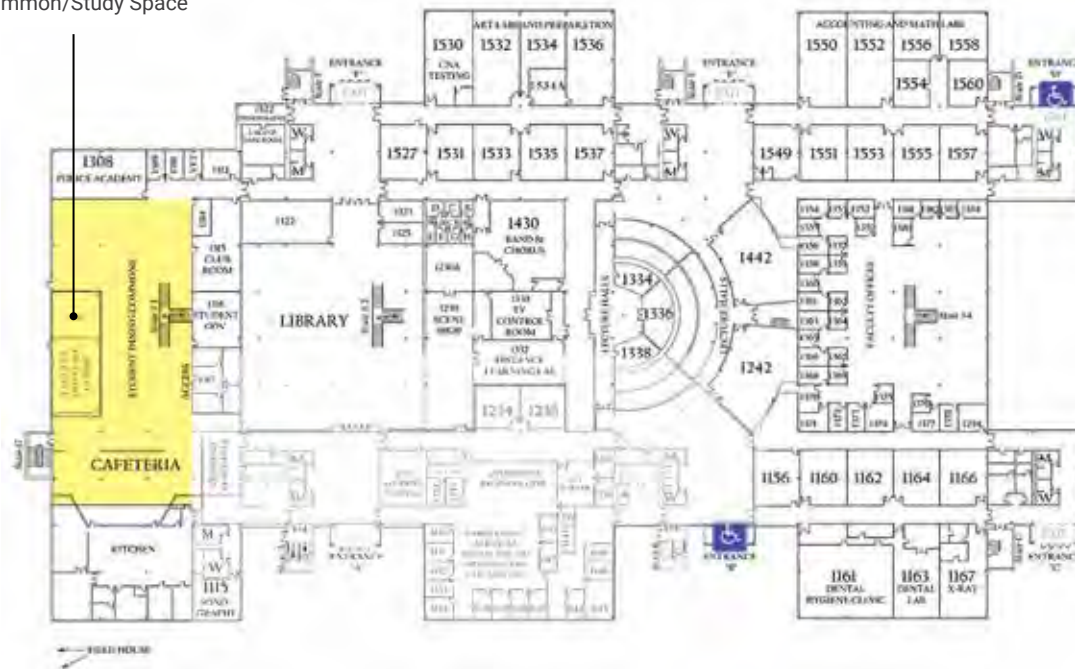
The Flanagan kitchen and servery is the best-designed and highest-functioning of all the kitchens within the system. However, it has operated with only limited hours and as a result the food options actually available to students are relatively low.

The Flanagan Commons renovation would include the following elements:

- The renovated space should be attractive, filled with bright color, well-lit, and open to the other campus life offices lining the space. While used as a primary dining space in peak periods, it can be used as a social and collaboration space or study space in quieter periods.
- Improvements would include new furniture, lighting, finishes and power outlets.
- The space could accommodate a food education and wellness program or other activities that help support campus learning and community.

FLANAGAN CAMPUS | FIRST FLOOR

Relocate for additional
Common/Study Space



- The existing cafeteria seating area could be renovated into a mixed-use/food service seating space that provides greater variety, value, and quality of food. Grab-and-go options could enable longer hours of operation beyond the mid-day hours it now maintains. Scalable delivery options could be a part of flexible food service.
- The faculty/staff lunchroom and an adjoining classroom, located along the external wall of the building, could be relocated to create more light, views and dining space for the Commons.
- More campus life activities spaces could be located around the Flanagan Common, like the student government offices that currently benefits from this area’s visibility and convenience.

This project would help the current cafeteria evolve into a more inviting mixed-use student commons. CCRI leadership has recognized this as an important initiative for the campus and has advanced this concept vision into a more detailed programming, design and construction project.



Precedent image of bookstore/study space.

NEW STUDENT STUDY SPACE AND REDESIGNED CAMPUS STORE

Students, faculty, and staff identified a need for more study spaces on the Flanagan Campus with many noting that the library is frequently stretched beyond its capacity. Students face difficulties in finding a quiet place to work. The bookstore currently occupies 9,000 square feet of space, significantly larger than current or future operations require.

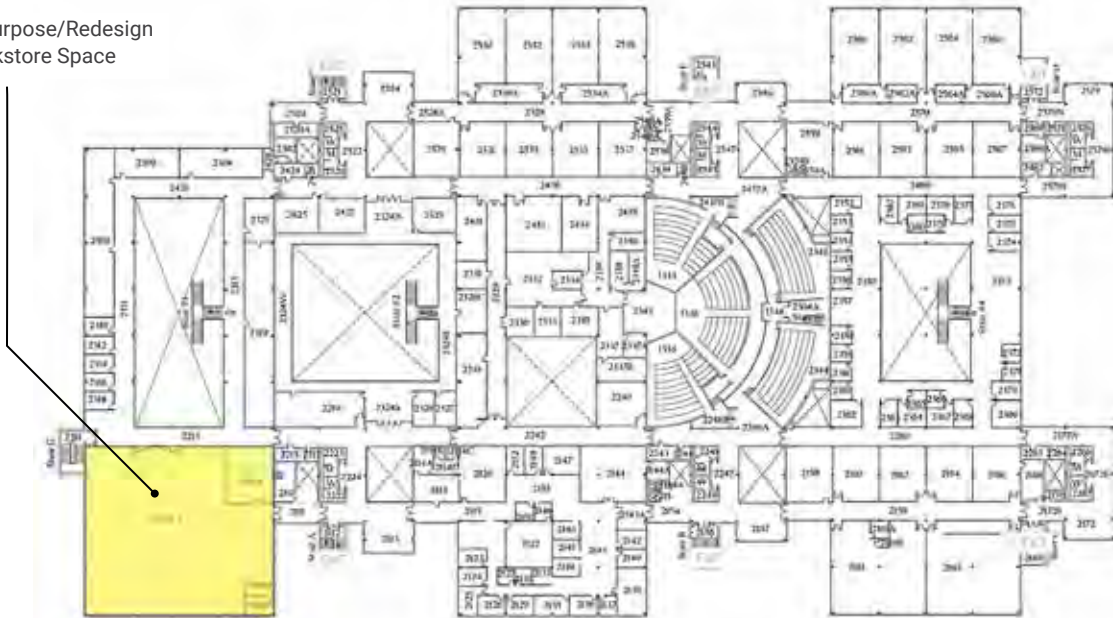
This project would include the following elements:

- Repurpose surplus bookstore spaces to provide students with more dedicated study/collaboration space. Create a well-designed environment that includes both social and study opportunities.
- Include a variety of furniture configurations to allow group work at tables, lounge spaces, and private reading.
- The bookstore and study spaces could be divided or combined in a single mixed-use space, with book stacks, other retail, and study areas.
- Explore the possibility of improving natural light by adding windows at the exterior wall.

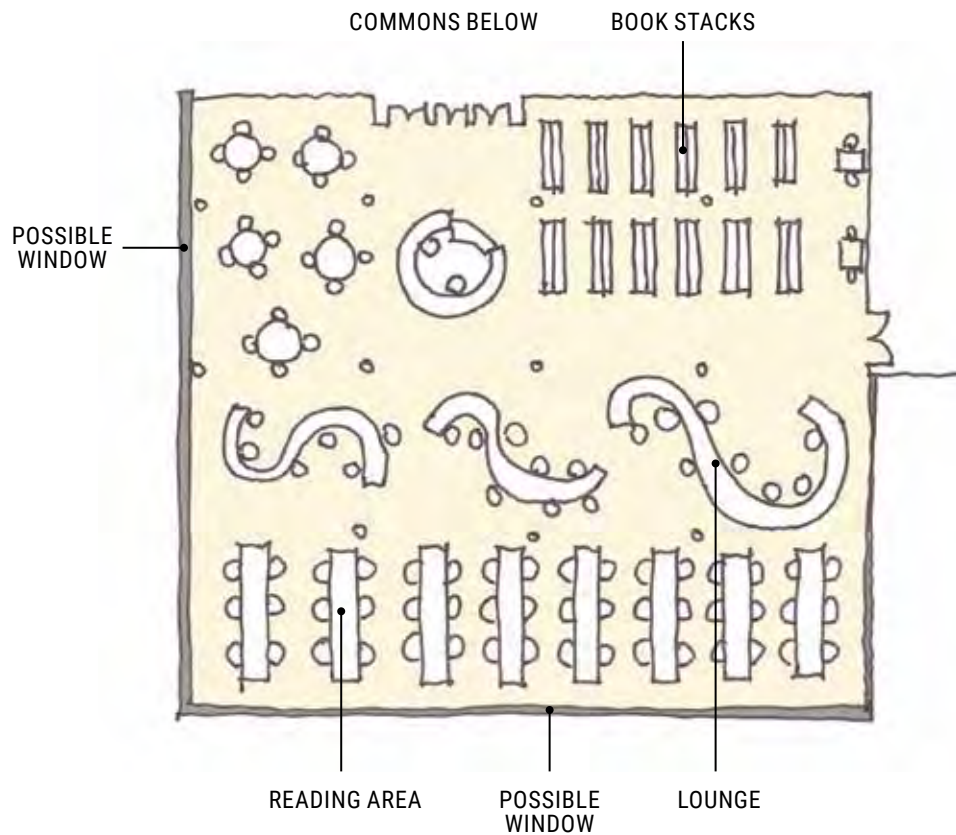
This project would develop the current bookstore into a more mixed-use inviting student study space and campus store. CCRI leadership has recognized this as an important initiative for the campus and has advanced this concept vision into a more detailed programming and design.

FLANAGAN CAMPUS | SECOND FLOOR

Repurpose/Redesign
Bookstore Space



CONCEPTUAL SKETCH





CLASSROOM UPGRADES

At Flanagan, current classroom overcrowding and poor layouts could be addressed by upgrading and modernizing classroom furniture and by updating classroom configurations, designs, and sizes. The campus pop-up master plan input sessions identified the quality of the classrooms as one of the most severe physical constraints in creating a successful environment for learning. As with the other campuses, over many years seats were added to the classrooms well beyond their designed capacity, in order to accommodate student population growth and the desire to teach or take classes during the most preferred times. It is important that a close working connection between the registrar's office and the implementation of this initiative is achieved.

The teaching pedagogy has also shifted to include more in-class peer to peer participation, which now is enabled through a different style of furniture. In addition, classroom technology has changed considerably. All these factors contribute to the need to invest in the general classroom environment at Flanagan.

- To begin this initiative the classroom portfolio can be adjusted for optimal seat count by removing existing chairs from some rooms and adding them to others to balance the classroom supply portfolio. This effort can be made even more effective by expanding the class scheduling window.
- Selected classrooms can also be identified to receive new furniture. New movable and comfortable furniture will enable a quick switch between a pedagogy of all-class lecture to team-based activities. This new furniture can also be more comfortable for students of all sizes and will be fully accessible. Chairs designed with built-in space for backpacks and other storage can help keep walkways clear.

- During discussion of the classroom environment during the planning process, many faculty and students wanted more consistent audio-visual equipment in each of the rooms. Connecting to display devices to easily share information was an important function many of the classroom do not now have. An initial pilot project could upgrade 8 classrooms.

This classroom upgrade project can begin very quickly through relocation of classroom chairs after further discussion with the registrar. The furniture and technology upgrades can continue to be implemented over several years as resources become available.



Precedent image of student service space.

STUDENT SERVICES REDESIGN

The student services area is not configured to allow staff to engage most effectively with students. The current format, with its service counter situated along a busy corridor, is outdated and offers limited privacy for students in interactions with staff. An optimal redesign would create an environment that encourages making connections between the student service staff and the students.

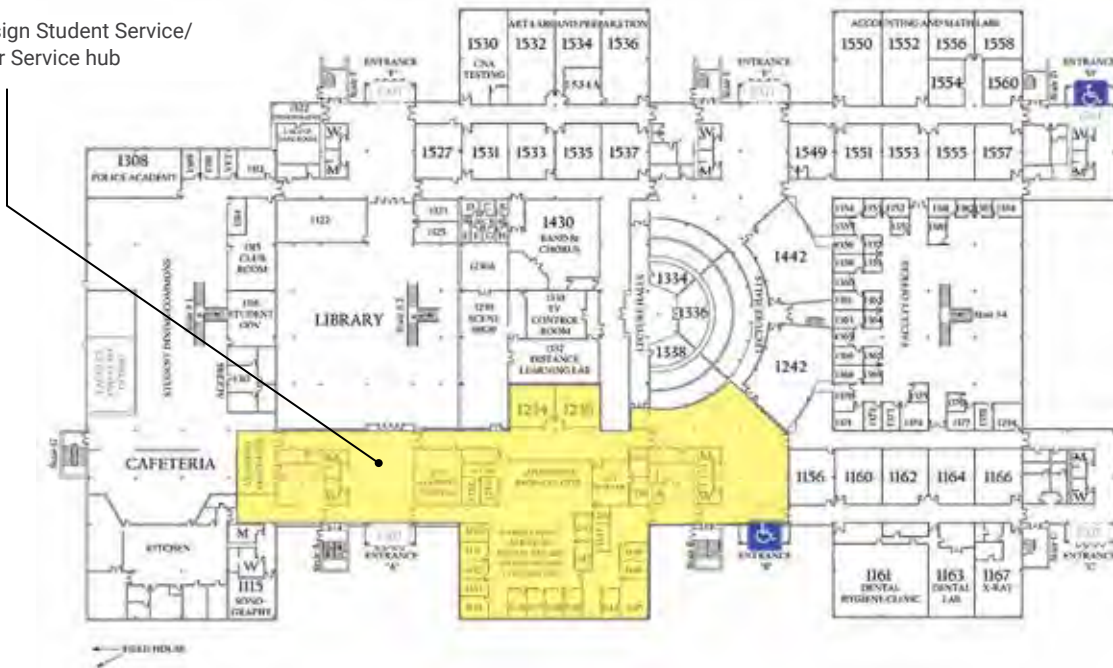
A redesigned student services area would include the following elements:

- Redesign of a 24,000 square foot student services area to function as a welcoming front door for the campus.
- The redesigned student services center will include spaces for records and admissions, opportunities and outreach, advising and counseling, career services and financial aid.
- The redesign includes a “one-stop” area, where students can get quick help and direction from staff at the outset. They can then move back to dedicated offices and other student services spaces as needed.
- The precedent identified for this space organizes the student service functions around an easy access “main street” containing waiting/lounge space designed to be comfortable and inviting for the students. This space will also contain self-help kiosks and places for the student services professional to have discussions not requiring confidentiality.

This project would improve the quality of space and functioning of the student services offered at Flanagan into a more inviting student/staff interaction space. The next steps after funding is allocated will be to advance this concept vision into a more detailed programming, design and construction project.

FLANAGAN CAMPUS | FIRST FLOOR

Redesign Student Service/
Career Service hub







Liston Campus Plan

Initiatives for Liston Campus

The proposed initiatives at the Liston Campus help further a consistent focus on common student spaces across the CCRI system. The plan also identifies the potential need for additional space in the Providence area.

- Atrium Redesign
- Additional Space to Meet Workforce Training Needs



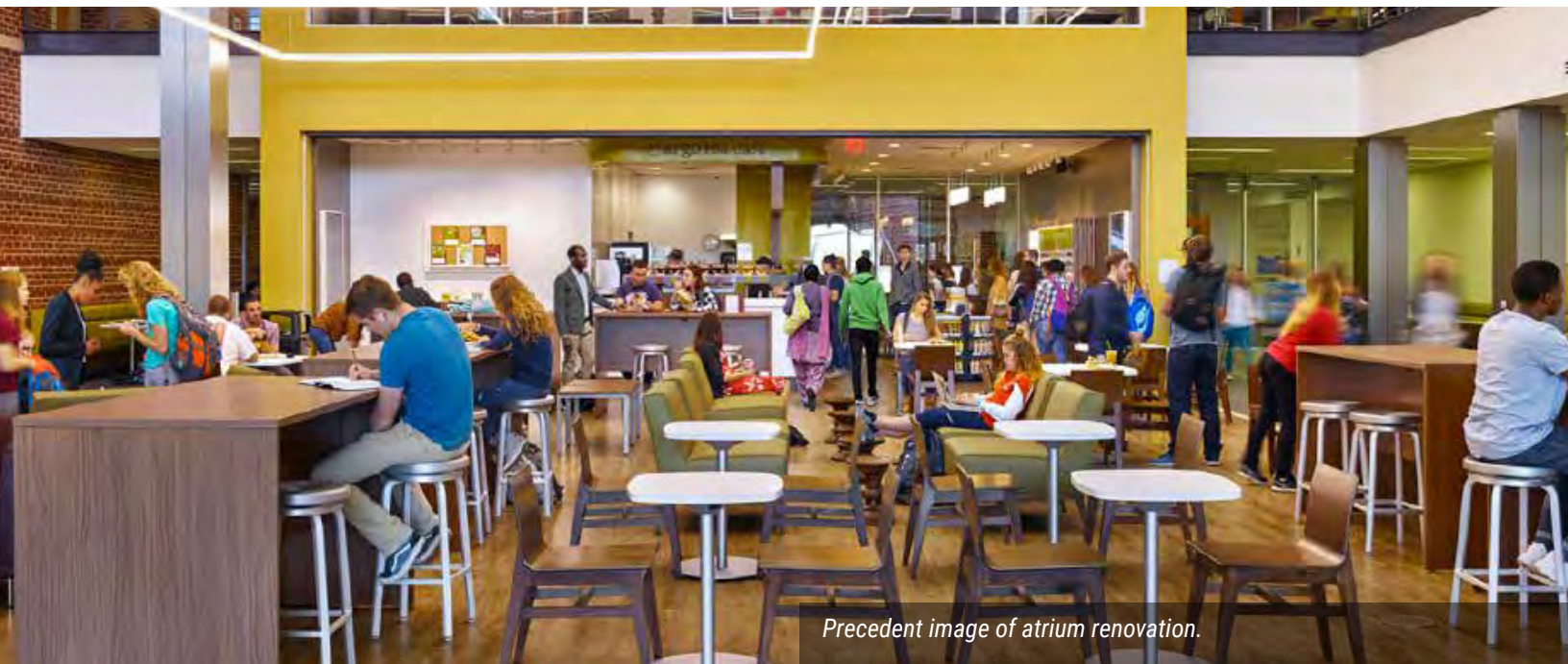




Precedent image of atrium renovation—bookstore and cafeteria.

ATRIUM REDESIGN

The Atrium Renovation initiative, to create a community common space, is the Liston equivalent of the Great Hall at the Knight Campus. This Atrium Renovation initiative creates a space where the students feel comfortable, find food they enjoy and are able to engage in “social” studying. Social studying space encourages social interaction and group study work creating an environment where time before between and after classes can be spent on campus with the academic community. When students stay for longer periods of time on campus—studying and completing assignments; working on collaborative projects; meeting with fellow students, teachers, and advisors; and being a part of the CCRI community—they are more likely to succeed in and complete their course of study.



Precedent image of atrium renovation.

LISTON CAMPUS | FIRST FLOOR



Renovate atrium,
bookstore, and cafeteria
into campus space

This initiative will improve the existing central atrium space, bordered by the cafeteria, bookstore, and a few classrooms, and bathrooms, into a central hub of campus life for Liston.

- The redesigned layout will create more space for students and allow more of an open environment.
- The bookstore would shrink in size, with more space given to student seating and lounge areas in the open atrium.
- Seating areas would be connected to a mixed-use café and dining area with tables and chairs. During mealtimes it can serve as a dining area, and during other times of day as a space for meetings, student work groups, and socializing. Because the atrium is two stories tall, these spaces would be visible from the second floor and connect clearly to the front door of the campus.

Recognizing the need for this new type of environment at Liston, CCRI leadership has immediately advanced this initiative. The project is in the design phase and construction of the project is expected to begin soon.

CONCEPTUAL SKETCH





ADDITIONAL SPACE TO MEET WORKFORCE TRAINING NEEDS

As the College continues to define corporate/work force development programs and the appropriate location for other related programs, there may be a need for additional space near Liston. This could involve new space at the campus or new or leased space within the City of Providence.



The study space in the Liston Library is very limited.



Community College of Rhode Island



Newport Campus Plan

and

Initiatives for Newport Campus

The proposed initiatives at the Newport Campus help further a consistent focus on common student spaces across the CCRI system. Like the others, there are opportunities for reuse of excess bookstore space, reconfigure the cafeteria, and identify space for future classrooms.

In addition to these initiatives, ongoing capital renewal projects such as building systems upgrades and the currently underway roof replacement ensure timely maintenance of campus physical assets.

-
- Study Space in Auditorium Balcony
-
- Café Initiative
-
- Long-Term Classroom Expansion





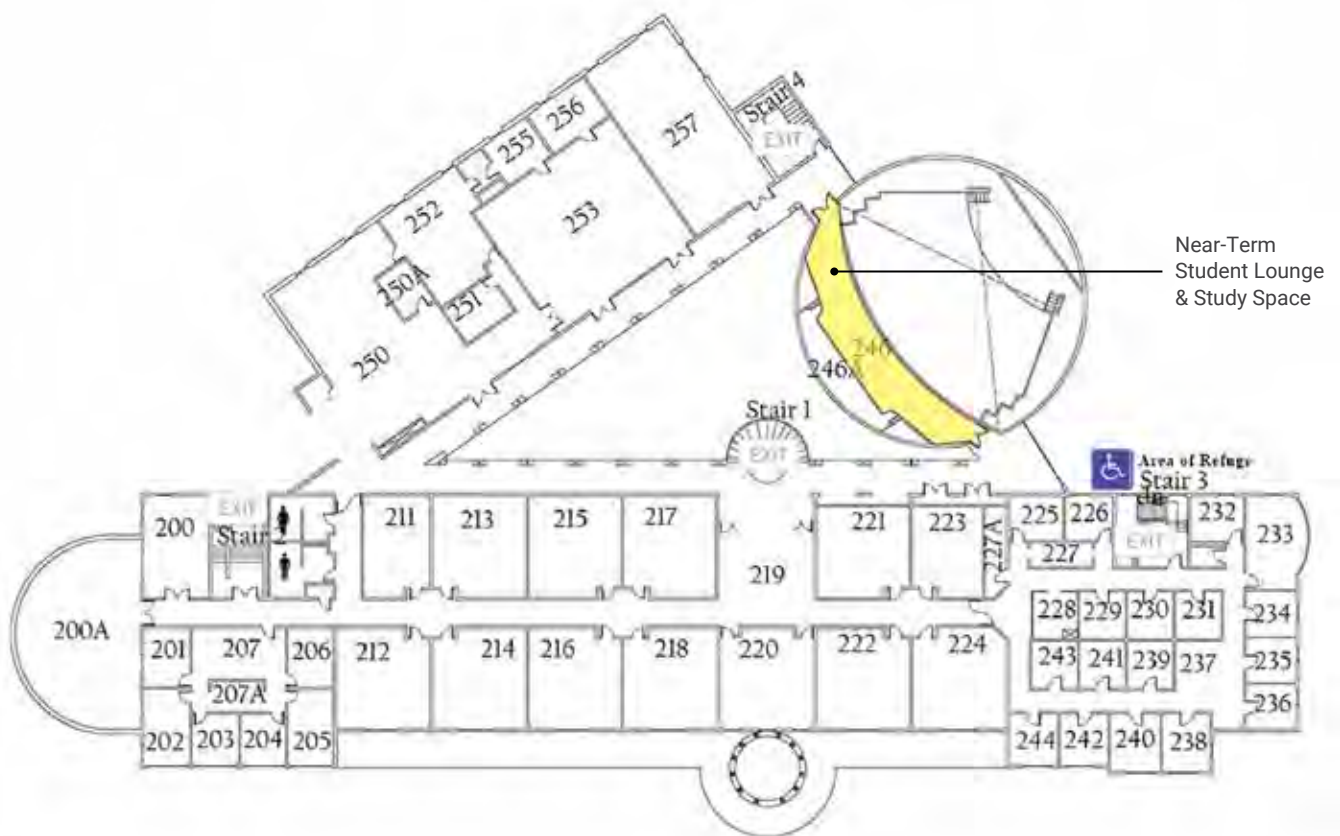
STUDY SPACE IN AUDITORIUM BALCONY

In the immediate future, the balcony space near the auditorium could be repurposed into a student lounge and study space, through the addition of furniture only.

- The redesigned space can increase the amount of campus “sticky” spaces for student social life and study.
- More formal separation between the balcony and stage level seating could be introduced to improve the ability to use both of the spaces at the same time.

The relatively straight-forward and small (900 square feet) project could be implemented quickly. The next step would be identification of the furniture pieces appropriate for lounge and study use.

NEWPORT CAMPUS | SECOND FLOOR





Precedent image of mixed-use café and lounge space. Environment that encourages relaxing and connecting with other members of the CCRI community.

CAFÉ INITIATIVE

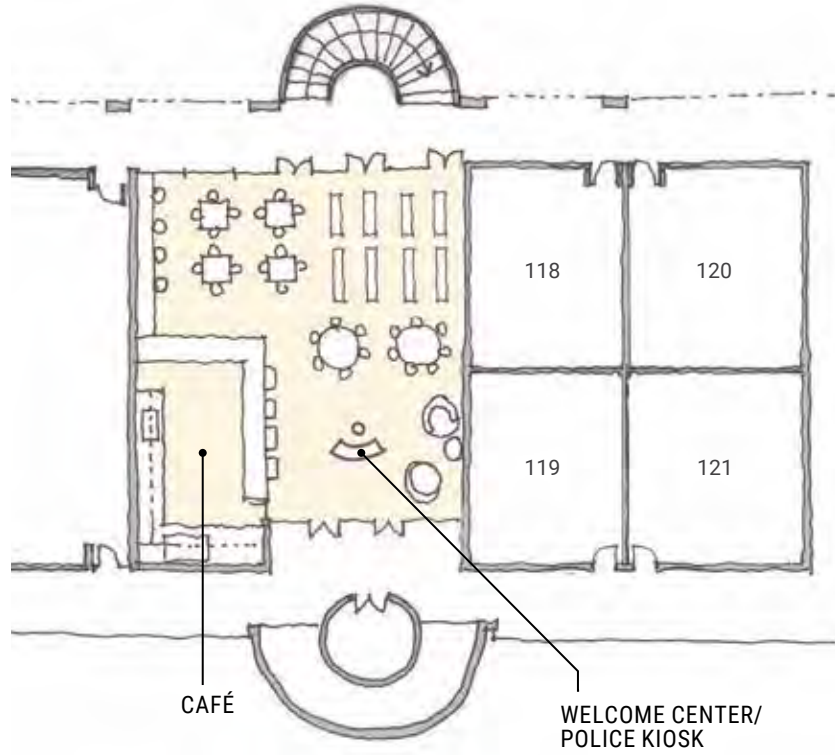
The Café Initiative, as a proposed community common space for the Newport Campus students, is the equivalent of the Great Hall at the Knight Campus. This initiative creates a space where students will feel comfortable, find food they enjoy and are able to engage in “social” studying.

This initiative will improve the existing entrance (currently bordered by the space that was once the bookstore, a few classrooms, and security guard station) into an extended central hub of campus life for Newport.

- The redesigned layout will create more space for students and allow more of an open environment.
- The bookstore space will be repurposed to student seating and lounge areas connected to the space in the open atrium.
- Seating areas would be connected to a mixed-use café and dining area with tables and chairs. During mealtimes it can serve as dining area, and during other times of day a space for meetings, student work groups, and socializing. Because the atrium is two stories tall, these spaces would be visible from the second floor and connect clearly to the front door of the campus.
- The current welcome/security guard station will be reconfigured but will remain as an important use in the space.

The “vision” sketches in the plan will provide a beginning point for further programming and design for the initiatives and adjacent spaces.

CONCEPTUAL SKETCH

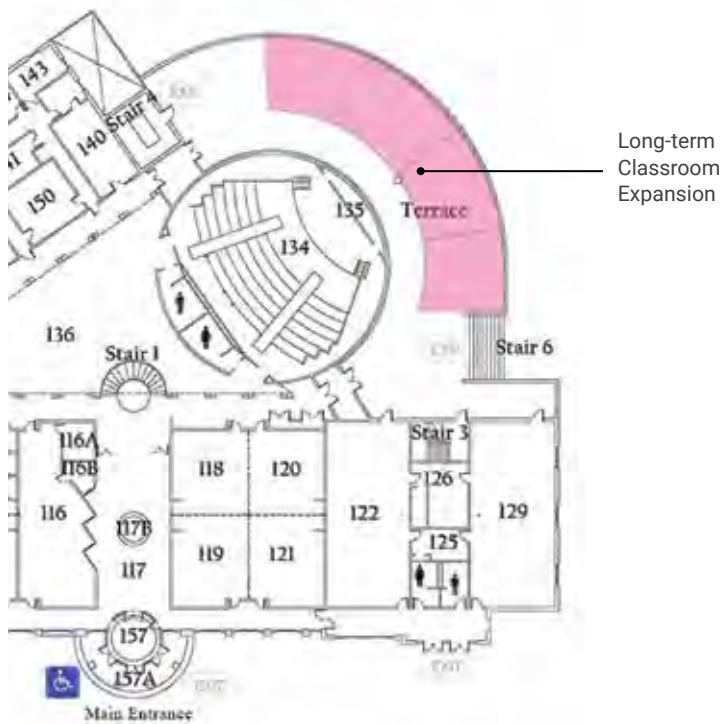




LONG-TERM CLASSROOM EXPANSION

The outdoor terraces at Newport are a unique feature of the building's architectural character. However, they also provide an opportunity to expand the enclosed indoor space for the campus. If needed over the long-term, the outdoor terrace could be enclosed to create new classrooms.

NEWPORT CAMPUS | FIRST FLOOR



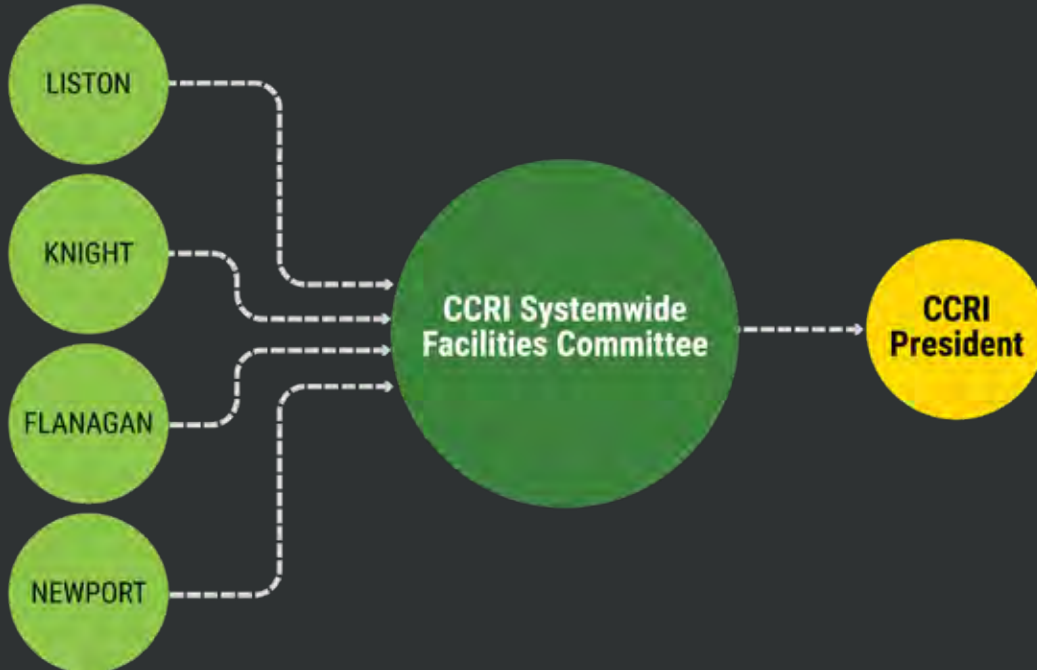
Proposed Structure for Facilities Planning

At the outset of the Facilities Master Plan process, CCRI did not have an organizational structure at its campuses or in the system to effectively implement the recommendations in this plan and provide ongoing input to leadership on future facility changes and priorities.

CCRI will now establish systemwide and campus-level committees to provide input to the President on capital improvement priorities:

- **CCRI Systemwide Facilities Committee**—The charge of this new committee will be to evaluate all proposed physical projects within the system, including new buildings, additions, renovations, roadway changes or landscape changes, to ascertain the project’s compatibility with the Facilities Plan goals and with current needs across all campuses. It will have a regular, reliable schedule of meetings; a consistent process of bringing a project before the committee; and the ability to make substantive recommendations to the President. The 26-member committee will be appointed by the President based on recommendations from the CCRI community. It will include the following representatives:
 - *CCRI Master Plan/Space Committee Chair—Assistant Vice President for Administration*
 - *Academic Affairs—2 members*
 - *Business Office—1 member*
 - *Campus Coordinators—4 members*
 - *Campuses Master Plan/Space Committee Chair—4 members*
 - *Workforce Representative—1 member*
 - *Facilities—2 members*
 - *HR Representative—1 member*
 - *Informational Technology Representative—2 members*
 - *Institutional—1 member*
 - *Student Services—2 members*
 - *Student, one from each campus—4 members*
- **CCRI Campus Facilities Committees**—A campus committee will be established at each of CCRI’s four campuses. The charge of each of these committees will be to evaluate all proposed physical projects on the individual campuses (including new buildings, additions, renovations, roadway changes or landscape changes) and to provide input

**CCRI Campus
Facilities Committees**



on the project’s compatibility with the Facilities Plan goals and current needs of the campus. The committee will have a regular, reliable schedule of meetings; a consistent process of bringing a project before the committee; and the ability to make substantive recommendations to the CCRI Systemwide Facilities Committee. Each CCRI Campus Facilities Committee will include the following representation:

- *Campus Coordinator, Chair—The Chair of this Committee will be a member of the CCRI Master Plan/Space Committee.*
 - *Academic Dean*
 - *Workforce Representative*
 - *Physical Plant*
 - *Student Service/Life Representative*
 - *Student*
- **CCRI President**—The committees and process are all in place to help inform and support the CCRI President in determining capital improvement priorities and decisions. The recommendations created by the committees will be presented to the President for presentation to the Board of Trustees and a final decision.





Appendix

Architectural Engineers, Inc. conducted site visits to the four Community College of Rhode Island (CCRI) campuses to evaluate the existing conditions of mechanical, electrical, and plumbing/fire protection systems. The following are summaries of system modifications needed to facilitate identified initiatives at each for the four campuses.

Knight Campus

The initiatives considered at this campus include:

- Student Services Hub
- Classroom Upgrades
- Café Lounge
- Campus Store / Student Success Center
- Faculty and Student Learning Research Center
- Faculty Office Reconfiguration

The above initiatives individually or in total do not require improvements to mechanical, electrical, plumbing and fire protections systems (MEP/FP) that require upgrades to main central building services. Recommended MEP/FP system improvements are described below

STUDENT SERVICES HUB

HVAC

Existing terminal units and ductwork in this area will be demolished and removed entirely. New local HVAC will be installed. These units will be connected to existing hot water, chilled water, and ventilation air systems already in place at the building. New systems will be hydronic based to minimize the space taken by the ductwork. Possible new systems will include chilled beams and fin-tube radiation at the perimeter. VAV boxes will be installed to control ventilation air based on CO2.

Plumbing

There are no impacts to the plumbing system for this work.

Fire Protection

If this work involves reconfiguring architectural layout of partitions and spaces fire protection work will be limited to modifying existing sprinkler piping, adding new sprinkler heads and/or relocating existing sprinkler heads to accommodate the new layout.

Electrical

Power Distribution

Existing devices and circuiting will be removed back to existing panelboards. The panelboards serving this area are older and original to the building construction. New panelboards will either replace existing panelboards in place or separate new panelboards will be provided dedicated for the renovated area. It is estimated that one or two new 225A, 208/120V, 3Ø, 4W will be required. New branch circuiting will be provided to new devices serving work stations and convenience power. Convenience receptacles for student use will include USB charging plugs.

Lighting

All existing lighting and lighting control will be removed entirely. New lighting systems will consist of energy efficient LED fixtures using the suggested below approaches:

Location	General Approach
Corridors	1'x4' or 2'x 2' recessed "indirect" style LED fixtures
Private offices, small conference rooms	Suspended direct/indirect LED fixtures or 2'x2' high performance troffers
Open offices	Suspended direct/indirect LED fixtures or 2'x2' high performance troffers

Location	General Approach
Accent	Linear LED tape/strip fixtures may accent ceiling clouds or other accent features

All lighting will be automatically controlled using a combination of ceiling occupancy sensors in offices and smaller spaces and network programmable relays for larger spaces. Perimeter spaces will have closed loop light level sensors 12' from window for 2 zone dimming control of primary and secondary daylight zones. Selected fixtures in egress paths will be connected to emergency panels.

Elevator

New Service and controls will be introduced into the space for the new vertical circulation system suggested in the plan.

Fire Alarm

The building has an addressable fire alarm and voice evacuation system, by Notifier, that appears to be less than 10 years. The existing system will be reworked to relocate existing and provide new devices as necessary for the new layout.

Telephone/Data

The existing tel/data devices will be removed along with all existing cabling back to existing IDF closets. New tel/data devices be provided at staff and student workstations. Wireless Access Point points will be provided throughout the renovated areas. Horizontal cabling will consist of Category 6 UTP plenum rated cabling connected to modular telephone and data jacks. In general, cabling will be extended in conduit from outlets to the ceiling space but will be routed exposed above the ceiling supported by J hooks. All wiring, outlets and terminations will be installed to comply with EIA/TIA 568.

Given the extend of renovations in this area, a new IDF closet serving the renovated area may be appropriate. If a new closet is provided, fiber optic backbone cabling will be extended from the

new IDF closet to the main telephone/data room. The new IDF closet will be provided with 19" racks, fiber optic and unshielded twisted pair (UTP) patch panels. Ladder style cable tray will be provided for organizing cabling distribution.

Security System

Card access and CCTV cameras may be provided in selected areas. New CCTV cameras will be IP based with Category 6 cabling extended to system switches in IDF closets. New door controllers for the access control system will need to be added for any new card access door.

CLASSROOM UPGRADES

HVAC

There are no impacts to the HVAC system for this work, assuming classroom occupancy loads do not increase enough to impact existing HVAC system loads.

Plumbing

There are no impacts to the plumbing system for this work

Fire Protection

It is assumed new furniture will not impact the fire protection coverage.

Electrical

Power Distribution

There may be minor additions or relocations of existing receptacles to accommodate new furniture layouts. New circuiting to new devices will be connected to existing panelboards.

Lighting

New furniture layouts do not inherently require new lighting, but to upgrade classrooms, new lighting systems may be desirable. Below is suggested lighting improvements:

Location	General Approach
Classrooms	Suspended direct/indirect LED fixtures or 2'x2' high performance troffers Recessed linear "whiteboard" lights may be appropriate in some areas.

If new lighting is provided, new lighting controls should also be provided and would consist of occupancy sensors. Perimeter spaces will have closed loop light level sensors 12' from window for 2 zone dimming control of primary and secondary daylight zones.

Fire Alarm

If classrooms do not have fire alarm visual device, new fire alarm visual devices should be provided.

Telephone/Data

There may be additions of tel/data devices to accommodate new furniture layouts. Furthermore, if new layouts include new teacher stations or classroom imaging technology, cabling and fitup of devices will be necessary.

Security System

There are no impacts to the security system for this work.

CAFÉ LOUNGE

HVAC

The existing cafeteria/server room is not adequately conditioned including improper ventilation resulting in migration of smells. Because of this, all existing HVAC serving the dining area will be demolished and removed. New HVAC will be installed which may include rooftop equipment, new kitchen exhaust fans serving kitchen hoods, and a new makeup air unit. New equipment will likely be stand-alone but may

be connected to existing hot water and chilled water systems.

Depending on the use of the space, the existing systems in the conference rooms may be able to be re-used or reconfigured for these spaces to serve as lounges or computer spaces. Existing ductwork and diffusers will be reconfigured along with possible relocation of thermostats. More extensive reworking of existing conference rooms such as conversion to a Café will require replacement of terminal units. New terminal units will utilize existing hot water, chilled water, and ventilation air systems. New systems will be hydronic based to minimize the space taken by the ductwork. Possible new systems will include chilled beams and fin-tube radiation at the perimeter.

Plumbing

Plumbing utilities (sanitary waste and vent, hot and cold water) for the new dining area will be modified to feed new plumbing fixtures in the reconfigured space.

Fire Protection

Fire Protection work to reconfigure architectural layout of partitions and spaces will be limited to modifying existing sprinkler piping, adding new sprinkler heads and/or relocating existing sprinkler heads to accommodate the new layout.

Electrical

Power Distribution

It is assumed the extent of the reconfiguration will require removal and/or relocation of all systems in the renovated area, including kitchen equipment. Existing kitchen equipment feeders and devices will be removed back to existing panelboards. The panelboards serving this area are older and original to the building construction. New panelboards will either replace existing panelboards and will be added as necessary. It is estimated that the area will require the following:

- New kitchen panels consisting of one 225A, 480/277V, 3Ø, 4W panelboards and two 225A, 208/120V, 3Ø, 4W panelboards.
- One new 100A, 208/120V, 3Ø, 4W panelboard for bookstore

A significant number of new feeders and circuits will be required for new or relocated kitchen equipment. Servery and other island equipment may require routing/circuiting in basement for stub up or saw cutting existing floors to extend conduits to equipment. Convenience receptacles for student use will include USB charging plugs.

Lighting

All existing lighting and lighting control will be removed entirely. New lighting systems will consist of energy efficient LED fixtures using the suggested below approaches:

Location	General Approach
Kitchen/back area	2'x4' recessed lensed LED fixtures
Servery	2'x2' high performance troffers in general area Dedicated pendant LED fixtures over selected areas such as POS stations and food bars Linear LED tape/strip fixtures may accent ceiling clouds, signage or other accent features
Bookstore	2'x2' high performance troffers in general area Dedicated pendant LED fixtures POS stations and food bars Linear LED tape/strip fixtures may accent ceiling clouds, signage or other accent features

Location	General Approach
Dining	Open ceiling areas will have LED pendant fixture with circular profile Ceiling areas will have 2'x2' high performance troffers

All lighting will be automatically controlled using a combination of ceiling occupancy sensors in offices and smaller spaces and network programmable relays for larger spaces. Perimeter spaces will have closed loop light level sensors 12' from window for 2 zone dimming control of primary and secondary daylight zones. Selected fixtures in egress paths will be connected to emergency panels.

Fire Alarm

The building has an addressable fire alarm and voice evacuation system, by Notifier, that appears to be less than 10 years. The existing system will be reworked to relocate existing and provide new devices as necessary for new layout.

Telephone/Data

New Wireless Access Point points will be provided throughout the renovated space and new student tel/data devices will be located in selected areas of dining and bookstore. Point of Sale (POS) systems in the kitchen and bookstore will require new data cabling. Horizontal cabling will consist of Category 6 UTP plenum rated cabling for telephone and data connected to modular telephone and data jacks. In general, cabling will be extended in conduit from outlets to the ceiling space but will be routed exposed above ceiling supported by J hooks. All wiring, outlets and terminations will be installed to comply with EIA/TIA 568.

Security System

Card access and CCTV cameras may be provided in selected areas. New CCTV cameras will be IP based with Category 6 cabling extended to system switches in IDF closets. New door controllers for the

access control system will need to be added for any new card access door.

CAMPUS STORE / STUDENT SUCCESS CENTER

HVAC

Repurposing the bookstore will require limited HVAC scope including reconfiguration of existing ductwork and return and supply grilles. Thermostats will be relocated as needed to accommodate new space layout. Alternatively, new HVAC systems may be desirable for better temperature control. New systems will utilize existing hot water, chilled water, and ventilation air systems. New systems will be hydronic based to minimize the space taken by the ductwork. Possible new systems will include chilled beams and fin-tube radiation at the perimeter.

Plumbing

There are no impacts to the plumbing system for this work.

Fire Protection

Fire Protection work to reconfigure architectural layout of partitions and spaces will be limited to modifying existing sprinkler piping, adding new sprinkler heads and/or relocating existing sprinkler heads to accommodate the new layout.

Electrical

Power Distribution

It is assumed all existing devices will be removed including circuiting back to panels. New devices will be provided for student and staff work stations. New circuiting will be extended to existing panels.

Lighting

New furniture layouts do not inherently require new lighting, but to upgrade classrooms, new lighting systems may be desirable. Below is suggested lighting improvements:

Location	General Approach
Student Area	Suspended direct/indirect LED fixtures or 2'x2' high performance troffers Dedicated pendant LED fixtures or linear LED tape/strip fixtures may draw attention to selected areas

In new lighting is provided, new lighting controls should also be provided and would consist of occupancy sensors. Perimeter spaces will have closed loop light level sensors 12' from window for 2 zone dimming control of primary and secondary daylight zones.

Fire Alarm

The building has an addressable fire alarm and voice evacuation system, by Notifier, that appears to be less than 10 years. The existing system will be reworked to relocate existing and provide new devices as necessary for new layout.

Telephone/Data

New Wireless Access Point points will be provided throughout the renovated space. New student and staff tel/data devices will be provided at work stations. Horizontal cabling will consist of Category 6 UTP plenum rated cabling for telephone and data connected to modular telephone and data jacks. In general, cabling will be extended in conduit from outlets to the ceiling space, but will be routed exposed above ceiling supported by J hooks. All wiring, outlets and terminations will be installed to comply with EIA/TIA 568.

Security System

Card access and CCTV cameras may be provided in selected areas. New CCTV cameras will be IP based with Category 6 cabling extended to system switches in IDF closets. New door controllers for the access control system will need to be added for any new card access door.

FACULTY AND STUDENT LEARNING RESEARCH CENTER

HVAC

There are no impacts to the HVAC system for this work, assuming current library occupancy loads do not increase enough to impact existing HVAC system loads.

Plumbing

There are no impacts to the plumbing system for this work.

Fire Protection

Fire Protection work to reconfigure architectural layout of partitions and spaces will be limited to modifying existing sprinkler piping, adding new sprinkler heads and/or relocating existing sprinkler heads to accommodate the new layout.

Electrical

While some existing devices may remain....

Lighting

New furniture layouts do not inherently require new lighting, but to upgrade the working environment in the Research Center, new lighting systems may be desirable. Below is suggested lighting improvements:

Location	General Approach
Program Areas	Suspended direct/indirect LED fixtures or 2'x2' high performance troffers

If new lighting is provided, new lighting controls should also be provided and would consist of occupancy sensors. Perimeter spaces will have closed loop light level sensors 12' from window for 2 zone dimming control of primary and secondary daylight zones.

Fire Alarm

The building has an addressable fire alarm and voice evacuation system, by Notifier, that appears to be less than 10 years. The existing system will be reworked to relocate existing and provide new devices as necessary for new layout.

Telephone/Data

New Wireless Access Point points will be provided throughout the renovated space. New student and staff tel/data devices will be provided at work stations. Horizontal cabling will consist of Category 6 UTP plenum rated cabling for telephone and data connected to modular telephone and data jacks. In general, cabling will be extended in conduit from outlets to the ceiling space, but will be routed exposed above ceiling supported by J hooks. All wiring, outlets and terminations will be installed to comply with EIA/TIA 568.

Security System

Card access and CCTV cameras may be provided in selected areas. New CCTV cameras will be IP based with Category 6 cabling extended to system switches in IDF closets. New door controllers for the access control system will need to be added for any new card access door.

FACULTY OFFICE RECONFIGURATION

HVAC

All existing HVAC in this area will be demolished and removed. New systems will be installed connecting to existing hot water, chilled water, and ventilation air. New systems will be hydronic based to minimize the height taken by the ductwork and maximize head-height. Likely new systems will be 4-pipe chilled beams that will also provide heat. VAV boxes will be utilized to properly zone the space including CO2 monitoring in open office areas. Closed offices will be provided with 1 VAV box per each row of

offices that will provide ventilation air and heating/cooling. Thermostats will be placed to properly zone each area for maximum comfort. For chilled beams, mixing valves and circulation pumps will be installed in either the mechanical room or another, closer, mechanical space in order to temper the chilled water supply to the beams.

Plumbing

There are no impacts to the plumbing system for this work.

Fire Protection

Fire Protection work to reconfigure architectural layout of partitions and spaces will be limited to modifying existing sprinkler piping, adding new sprinkler heads and/or relocating existing sprinkler heads to accommodate the new layout.

Electrical

While some existing devices may remain...

Lighting

New furniture layouts do not inherently require new lighting, but to upgrade faculty areas, new lighting systems may be desirable. Below is suggested lighting improvements:

Location	General Approach
Faculty Office	Suspended direct/indirect LED fixtures or 2'x2' high performance troffers

In new lighting is provided, new lighting controls should also be provided and would consists of occupancy sensors. Perimeter spaces will have closed loop light level sensors 12' from window for 2 zone dimming control of primary and secondary daylight zones.

Fire Alarm

The building has an addressable fire alarm and voice evacuation system, by Notifier, that appears to be less than 10 years. The existing system will be reworked to relocate existing and provide new devices as necessary for new layout.

Telephone/Data

New Wireless Access Point points will be provided throughout the renovated space. New student and staff tel/data devices will be provided at work stations. Horizontal cabling will consist of Category 6 UTP plenum rated cabling for telephone and data connected to modular telephone and data jacks. In general, cabling will be extended in conduit from outlets to the ceiling space, but will be routed exposed above ceiling supported by J hooks. All wiring, outlets and terminations will be installed to comply with EIA/TIA 568.

Security System

Card access and CCTV cameras may be provided in selected areas. New CCTV cameras will be IP based with Category 6 cabling extended to system switches in IDF closets. New door controllers for the access control system will need to be added for any new card access door.

Flanagan Campus

The initiatives considered at this campus include:

- Campus Common & Cafeteria Reconfiguration
- New Student Study Space and Redesigned Campus Store
- Classroom Upgrades
- Student Services Redesign

The above initiatives individually or in total do not require improvements to mechanical, electrical, plumbing and fire protections systems (MEP/FP) that require upgrades to main central building services. Recommended MEP/FP system improvements are described below

CAMPUS COMMON & CAFETERIA RECONFIGURATION

HVAC

Existing supply and return diffusers are built into the ceiling and lights, so any reconfiguration of the existing space will require new ductwork and supply and return diffusers. New ductwork and diffusers will connect to existing rooftop equipment. There is a chance that reheat coils will need to be installed to make up for the heat normally provided through the lights. New VAV boxes will be installed along with new thermostats for better zoning.

Plumbing

There are no impacts to the plumbing system for this work

Fire Protection

Fire Protection work to reconfigure architectural layout of partitions and spaces will be limited to modifying existing sprinkler piping, adding new

sprinkler heads and/or relocating existing sprinkler heads to accommodate the new layout.

Electrical

Power Distribution

Existing devices and circuiting will be removed back to existing panelboards. The panelboards serving this area are older and original to the building construction. New panelboards will either replace existing panelboards in place or separate new panelboards will be provided dedicated for the renovated area. It is estimated that one or two new 225A, 208/120V, 3Ø, 4W will be required. New branch circuiting will be provided to new devices serving work stations and convenience power. It is assumed the existing kitchen would remain largely unaffected; however, if the existing kitchen is significantly removed, new panels will be required for the reconfigured kitchen. Convenience receptacles for student use will include USB charging plugs.

Lighting

All existing lighting and lighting control will be removed entirely. New lighting systems will consist of energy efficient LED fixtures using the suggested below approaches:

Location	General Approach
Servery	2'x2' high performance troffers in general area. Dedicated pendant LED fixtures over selected areas such as POS stations and food bars. Linear LED tape/strip fixtures may accent ceiling clouds, signage or other accent features.

Location	General Approach
Common area	2'x2' high performance troffers in general area Linear LED tape/strip fixtures may accent ceiling clouds, signage or other accent features
Dining	Open ceiling areas will have LED pendant fixture with circular profile. Ceiling areas will have 2'x2' high performance troffers

All lighting will be automatically controlled using a combination of ceiling occupancy sensors in offices and smaller spaces and network programmable relays for larger spaces. Perimeter spaces will have closed loop light level sensors 12' from window for 2 zone dimming control of primary and secondary daylight zones. Selected fixtures in egress paths will be connected to emergency panels.

Fire Alarm

The building has an addressable fire alarm and voice evacuation system, by Notifier, that appears to be less than 10 years. The existing system will be reworked to relocate existing and provide new devices as necessary for the new layout.

Telephone/Data

The existing tel/data devices will be removed along with all existing cabling back to existing IDF closets. New tel/data devices be provided at staff and student work stations. Wireless Access Point points will be provided throughout the renovated areas. Horizontal cabling will consist of Category 6 UTP plenum rated cabling connected to modular telephone and data jacks. In general, cabling will be extended in conduit from outlets to the ceiling space, but will be routed exposed above the ceiling supported by J hooks. All wiring, outlets and terminations will be installed to comply with EIA/TIA 568.

Given the extend of renovations in this area, a new IDF closet serving the renovated area may be appropriate. If a new closet is provided, fiber optic backbone cabling will be extended from the new IDF closet to the main telephone/data room. The new IDF closet will be provided with 19" racks, fiber optic and unshielded twisted pair (UTP) patch panels. Ladder style cable tray will be provided for organizing cabling distribution.

Security System

Card access and CCTV cameras may be provided in selected areas. New CCTV cameras will be IP based with Category 6 cabling extended to system switches in IDF closets. New door controllers for the access control system will need to be added for any new card access door.

NEW STUDENT STUDY SPACE AND REDESIGNED CAMPUS STORE

HVAC

Existing supply and return diffusers are built into the ceiling and lights, so any reconfiguration of the existing space will require new ductwork and supply and return diffusers. New ductwork and diffusers will connect to existing rooftop equipment. There is a chance that reheat coils will need to be installed to make up for the heat normally provided through the lights. New VAV boxes will be installed along with new thermostats for better zoning.

Plumbing

There are no impacts to the plumbing system for this work.

Fire Protection

Fire Protection work to reconfigure architectural layout of partitions and spaces will be limited to modifying existing sprinkler piping, adding new sprinkler heads and/or relocating existing sprinkler heads to accommodate the new layout.

Electrical

Power Distribution

It is assumed all existing devices will be removed including circuiting back to panels. New devices will be provided for student and staff work stations. New circuiting will be extended to existing panels.

Lighting

New furniture layouts do not inherently require new lighting, but to upgrade classrooms, new lighting systems may be desirable. Below is suggested lighting improvements:

Location	General Approach
Student Area	Suspended direct/indirect LED fixtures or 2'x2' high performance troffers Dedicated pendant LED fixtures or linear LED tape/strip fixtures may draw attention to selected areas.

In new lighting is provided, new lighting controls should also be provided and would consists of occupancy sensors. Perimeter spaces will have closed loop light level sensors 12' from window for 2 zone dimming control of primary and secondary daylight zones.

Fire Alarm

The building has an addressable fire alarm and voice evacuation system, by Notifier, that appears to be less than 10 years. The existing system will be reworked to relocate existing and provide new devices as necessary for new layout.

Telephone/Data

New Wireless Access Point points will be provided throughout the renovated space. New student and staff tel/data devices will be provided at work stations. Horizontal cabling will consist of Category 6 UTP plenum rated cabling for telephone and data connected to modular telephone and data jacks.

In general, cabling will be extended in conduit from outlets to the ceiling space, but will be routed exposed above ceiling supported by J hooks. All wiring, outlets and terminations will be installed to comply with EIA/TIA 568.

Security System

Card access and CCTV cameras may be provided in selected areas. New CCTV cameras will be IP based with Category 6 cabling extended to system switches in IDF closets. New door controllers for the access control system will need to be added for any new card access door.

CLASSROOM UPGRADES

HVAC

Existing supply and return diffusers are built into the ceiling and lights, so any reconfiguration of the existing space will require new ductwork and supply and return diffusers. New ductwork and diffusers will connect to existing rooftop equipment. There is a chance that reheat coils will need to be installed to make up for the heat normally provided through the lights. New VAV boxes will be installed along with new thermostats for better zoning.

Plumbing

There are no impacts to the plumbing system for this work.

Fire Protection

Fire Protection work to reconfigure architectural layout of partitions and spaces will be limited to modifying existing sprinkler piping, adding new sprinkler heads and/or relocating existing sprinkler heads to accommodate the new layout.

Electrical

Power Distribution

It is assumed all existing devices will be removed including circuiting back to panels. New devices will

be provided for student and staff work stations. New circuiting will be extended to existing panels.

Lighting

New furniture layouts do not inherently require new lighting, but to upgrade classrooms, new lighting systems may be desirable. Below is suggested lighting improvements:

Location	General Approach
Student Area	Suspended direct/indirect LED fixtures or 2'x2' high performance troffers
Private offices, small conference rooms	Suspended direct/indirect LED fixtures or 2'x2' high performance troffers
Open Offices	Suspended direct/indirect LED fixtures or 2'x2' high performance troffers
Accent	Linear LED tape/strip fixtures may accent ceiling clouds or other accent features.

Dedicated pendant LED fixtures or linear LED tape/strip fixtures may draw attention to selected areas.

In new lighting is provided, new lighting controls should also be provided and would consists of occupancy sensors. Perimeter spaces will have closed loop light level sensors 12' from window for 2 zone dimming control of primary and secondary daylight zones.

Fire Alarm

The building has an addressable fire alarm and voice evacuation system, by Notifier, that appears to be less than 10 years. The existing system will be reworked to relocate existing and provide new devices as necessary for new layout.

Telephone/Data

New Wireless Access Point points will be provided throughout the renovated space. New student

and staff tel/data devices will be provided at work stations. Horizontal cabling will consist of Category 6 UTP plenum rated cabling for telephone and data connected to modular telephone and data jacks. In general, cabling will be extended in conduit from outlets to the ceiling space, but will be routed exposed above ceiling supported by J hooks. All wiring, outlets and terminations will be installed to comply with EIA/TIA 568.

Security System

Card access and CCTV cameras may be provided in selected areas. New CCTV cameras will be IP based with Category 6 cabling extended to system switches in IDF closets. New door controllers for the access control system will need to be added for any new card access door.

STUDENT SERVICES REDESIGN

HVAC

Existing supply and return diffusers are built into the ceiling and lights, so any reconfiguration of the existing space will require new ductwork and supply and return diffusers. New ductwork and diffusers will connect to existing rooftop equipment. There is a chance that reheat coils will need to be installed to make up for the heat normally provided through the lights. New VAV boxes will be installed along with new thermostats for better zoning.

Plumbing

There are no impacts to the plumbing system for this work

Fire Protection

Fire Protection work to reconfigure architectural layout of partitions and spaces will be limited to modifying existing sprinkler piping, adding new sprinkler heads and/or relocating existing sprinkler heads to accommodate the new layout.

Electrical

Power Distribution

Existing devices and circuiting will be removed back to existing panelboards. The panelboards serving this area are older and original to the building construction. New panelboards will either replace existing panelboards in place or separate new panelboards will be provided dedicated for the renovated area. It is estimated that one or two new 225A, 208/120V, 3Ø, 4W will be required. New branch circuiting will be provided to new devices serving work stations and convenience power. It is assumed the existing kitchen would remain largely unaffected; however, if the existing kitchen is significantly removed, new panels will be required for the reconfigured kitchen. Convenience receptacles for student use will include USB charging plugs.

Lighting

All existing lighting and lighting control will be removed entirely. New lighting systems will consist of energy efficient LED fixtures using the suggested below approaches:

Location	General Approach
Servery	<p>2'x2' high performance troffers in general area</p> <p>Dedicated pendant LED fixtures over selected areas such as POS stations and food bars</p> <p>Linear LED tape/strip fixtures may accent ceiling clouds, signage or other accent features</p>
Common area	<p>2'x2' high performance troffers in general area</p> <p>Linear LED tape/strip fixtures may accent ceiling clouds, signage or other accent features</p>

Location	General Approach
Dining	<p>Open ceiling areas will have LED pendant fixture with circular profile</p> <p>Ceiling areas will have 2'x2' high performance troffers</p>

All lighting will be automatically controlled using a combination of ceiling occupancy sensors in offices and smaller spaces and network programmable relays for larger spaces. Perimeter spaces will have closed loop light level sensors 12' from window for 2 zone dimming control of primary and secondary daylight zones. Selected fixtures in egress paths will be connected to emergency panels.

Fire Alarm

The building has an addressable fire alarm and voice evacuation system, by Notifier, that appears to be less than 10 years. The existing system will be reworked to relocate existing and provide new devices as necessary for the new layout.

Telephone/Data

The existing tel/data devices will be removed along with all existing cabling back to existing IDF closets. New tel/data devices be provided at staff and student work stations. Wireless Access Point points will be provided throughout the renovated areas. Horizontal cabling will consist of Category 6 UTP plenum rated cabling connected to modular telephone and data jacks. In general, cabling will be extended in conduit from outlets to the ceiling space, but will be routed exposed above the ceiling supported by J hooks. All wiring, outlets and terminations will be installed to comply with EIA/TIA 568.

Given the extend of renovations in this area, a new IDF closet serving the renovated area may be appropriate. If a new closet is provided, fiber optic backbone cabling will be extended from the new IDF closet to the main telephone/data room.

Liston Campus

The initiatives considered at this campus include:

- Atrium Renovation

The above initiatives individually or in total do not require improvements to mechanical, electrical, plumbing and fire protections systems (MEP/FP) that require upgrades to main central building services. Recommended MEP/FP system improvements are described below

ATRIUM RENOVATION

HVAC

Select supply and return ductwork and diffusers will need to be modified to accommodate new partitions and spaces. Thermostats will also need to be relocated to maintain proper zoning. Overall, HVAC work will be minimal.

Plumbing

There are no impacts to the plumbing systems for this work in the reconfigured Atrium and Bookstore. The Cafeteria renovation will require that plumbing utilities (sanitary waste and vent, hot and cold water) be modified to feed new plumbing fixtures and new or relocated kitchen equipment.

Fire Protection

Fire Protection work to reconfigure architectural layout of partitions and spaces will be limited to modifying existing sprinkler piping, adding new sprinkler heads and/or relocating existing sprinkler heads to accommodate the new layout.

Electrical

Power Distribution

Existing devices will be removed back to existing panelboards. The panelboards serving this area are older and original to the building construction. New

panelboards will either replace existing panelboards reconnecting existing branch circuits outside the renovated area, or new panelboards will be provided exclusively for the renovated area. It is estimated that the area will require one or two new 208/120V, 3Ø, 4W panelboards with a combined capacity of 225A. It is assumed the existing kitchen would remain largely unaffected; however, if the existing kitchen is significantly removed, new panels will be required for the reconfigured kitchen. New branch circuiting will be provided to new devices serving work stations and convenience power. Convenience receptacles for student use will include USB charging plugs.

Lighting

All existing lighting and lighting control will be removed entirely. New lighting systems will consist of energy efficient LED fixtures using the suggested below approaches:

Location	General Approach
Servery	2'x2' high performance troffers in general area
	Dedicated pendant LED fixtures over selected areas such as POS stations and food bars
	Linear LED tape/strip fixtures may accent ceiling clouds, signage or other accent features
Common area	2'x2' high performance troffers in general area
	Linear LED tape/strip fixtures may accent ceiling clouds, signage or other accent features

Location	General Approach
Dining	<p>Open ceiling areas will have LED pendant fixture with circular profile</p> <p>Ceiling areas will have 2'x2' high performance troffers</p>

All lighting will be automatically controlled using a combination of ceiling occupancy sensors in offices and smaller spaces and network programmable relays for larger spaces such as corridors and gymnasium. Perimeter spaces will have closed loop light level sensors 12' from window for 2 zone dimming control of primary and secondary daylight zones. Selected fixtures in egress paths will be connected to emergency panels.

Fire Alarm

The building has an addressable fire alarm and voice evacuation system, by Notifier, that appears to be less than 10 years. The existing system will be reworked to relocate existing and provide new devices as necessary for new layout.

Telephone/Data

The existing tel/data devices will be removed along with all existing cabling back to the IDF closets. New tel/data outlets be provided at staff and student work stations. Wireless Access Point points will be provided throughout the renovated space. Horizontal cabling will consist of Category 6 UTP plenum rated cabling for telephone and data connected to modular telephone and data jacks. In general, cabling will be extended in conduit from outlets to the ceiling space, but will be routed exposed above ceiling supported by J hooks. All wiring, outlets and terminations will be installed to comply with EIA/TIA 568.

Given the extend of renovations in this area, a new IDF closet serving the renovated area may be appropriate. If a new closet is provided, fiber optic backbone cabling will be extended to the main telephone/data room (and the new IDF closet will be provided with 19" racks, fiber optic and unshielded twisted pair (UTP) patch panels. Ladder style cable tray will be provided for organizing cabling distribution.

Security System

Card access and CCTV cameras may be provided in selected areas. New CCTV cameras will be IP based with Category 6 cabling extended to system switches in IDF closets. New door controllers for the access control system will need to be added for any new card access door.

Newport Campus

The initiatives considered at this campus include:

- Study Space in Auditorium Balcony
- Bookstore/Café Initiative
- Long-Term Classroom Expansion

The above initiatives individually or in total do not require improvements to mechanical, electrical, plumbing and fire protections systems (MEP/FP) that require upgrades to main central building services. Recommended MEP/FP system improvements are described below

STUDY SPACE IN AUDITORIUM BALCONY

HVAC

Select supply and return ductwork and diffusers will need to be modified to accommodate new partitions and spaces. Thermostats will also need to be relocated to maintain proper zoning. Overall, HVAC work will be minimal.

Plumbing

There are no impacts to the plumbing system for this work.

FIRE PROTECTION

Fire Protection work to reconfigure architectural layout of partitions and spaces will be limited to modifying existing sprinkler piping, adding new sprinkler heads and/or relocating existing sprinkler heads to accommodate the new layout.

Electrical

Power Distribution

Existing devices will be removed back to existing panelboards. New branch circuiting will be extended

back to new or existing panelboards. Convenience receptacles for student use will include USB charging plugs.

Lighting

All existing lighting and lighting control will be removed entirely. New lighting systems will consist of energy efficient LED fixtures using the suggested below approaches:

Location	General Approach
Study Space	<p>2'x2' high performance troffers in general area</p> <p>Dedicated pendant LED fixtures over selected areas such as POS stations and food bars</p> <p>Linear LED tape/strip fixtures may accent ceiling clouds, signage or other accent features</p>
Common area	<p>2'x2' high performance troffers in general area</p> <p>Linear LED tape/strip fixtures may accent ceiling clouds, signage or other accent features</p>
Dining	<p>Open ceiling areas will have LED pendant fixture with circular profile</p> <p>Ceiling areas will have 2'x2' high performance troffers</p>

All lighting will be automatically controlled using a combination of ceiling occupancy sensors in offices and smaller spaces and network programmable relays for larger spaces such as corridors and gymnasium. Perimeter spaces will have closed loop light level sensors 12' from window for 2 zone dimming control of primary and secondary daylight

zones. Selected fixtures in egress paths will be connected to emergency panels.

Fire Alarm

The building has an addressable fire alarm and voice evacuation system, by EST, that appears to be less than 10 years. The existing system will be reworked to relocate existing and provide new devices as necessary for new layout.

Telephone/Data

The existing tel/data devices will be removed along with all existing cabling back to the existing IDF closets. New tel/data outlets be provided at staff and student work stations. Wireless Access Point points will be provided throughout the renovated space. Horizontal cabling will consist of Category 6 UTP plenum rated cabling for telephone and data connected to modular telephone and data jacks. In general, cabling will be extended in conduit from outlets to the ceiling space, but will be routed exposed above ceiling supported by J hooks. All wiring, outlets and terminations will be installed to comply with EIA/TIA 568.

Security System

Card access and CCTV cameras may be provided in selected areas. New CCTV cameras will be IP based with Category 6 cabling extended to system switches in IDF closets. New door controllers for the access control system will need to be added for any new card access door

BOOKSTORE/CAFÉ INITIATIVE

HVAC

Existing ductwork and VAV boxes in this area will be reconfigured to accommodate the new space layout. Existing VAV boxes will be replaced with new VAV boxes sized properly for the space load. New thermostats will be installed to control new VAV boxes. New ductwork and diffusers will be installed to accommodate new ceilings.

Plumbing

There are no impacts to the plumbing system for this work in the Bookstore. Café reconfiguration will require that plumbing utilities (sanitary waste and vent, hot and cold water) be modified to serve new and/or relocated plumbing fixtures and kitchen equipment.

Fire Protection

Fire Protection work to reconfigure architectural layout of partitions and spaces will be limited to modifying existing sprinkler piping, adding new sprinkler heads and/or relocating existing sprinkler heads to accommodate the new layout.

Electrical

Power Distribution

It is assumed all existing devices will be removed including circuiting back to panels. New devices will be provided for student and staff work stations. New circuiting will be extended to existing panels.

Lighting

New furniture layouts do not inherently require new lighting, but to upgrade classrooms, new lighting systems may be desirable. Below is suggested lighting improvements:

Location	General Approach
Student Area	Suspended direct/indirect LED fixtures or 2'x2' high performance troffers Dedicated pendant LED fixtures or linear LED tape/strip fixtures may draw attention to selected areas.

In new lighting is provided, new lighting controls should also be provided and would consists of occupancy sensors. Perimeter spaces will have closed loop light level sensors 12' from window for

2 zone dimming control of primary and secondary daylight zones.

Fire Alarm

The building has an addressable fire alarm and voice evacuation system, by EST, that appears to be less than 10 years. The existing system will be reworked to relocate existing and provide new devices as necessary for new layout.

Telephone/Data

New Wireless Access Point points will be provided throughout the renovated space. New student and staff tel/data devices will be provided at work stations. Horizontal cabling will consist of Category 6 UTP plenum rated cabling for telephone and data connected to modular telephone and data jacks. In general, cabling will be extended in conduit from outlets to the ceiling space, but will be routed exposed above ceiling supported by J hooks. All wiring, outlets and terminations will be installed to comply with EIA/TIA 568.

Security System

Card access and CCTV cameras may be provided in selected areas. New CCTV cameras will be IP based with Category 6 cabling extended to system switches in IDF closets. New door controllers for the access control system will need to be added for any new card access door.

LONG-TERM CLASSROOM EXPANSION

Building Systems

When this initiative is advanced because it is enclosing now exterior space all new building systems will be required in these classrooms and corridor.





