



FACILITIES MASTER PLAN

2015

Mission

The College of New Jersey, a nationally recognized public institution founded in 1855 as the New Jersey State Normal School, is a primarily undergraduate and residential college, with targeted graduate programs. Grounded in the liberal arts, TCNJ's personalized, collaborative, and rigorous education engages students at the highest level within and beyond the classroom.

TCNJ believes in the transformative power of education to develop critical thinkers, responsible citizens, and lifelong learners and leaders. The College empowers its diverse students, staff, and faculty to sustain and enhance their communities both locally and globally.

Vision

TCNJ will offer an unparalleled education in a vibrant, collaborative, and inclusive community of learners who will make a distinct mark on the world. By following our values, we will serve as a national exemplar of public higher education, and we will do this while being committed to accessibility and affordability.



Values

Excellence

We admit highly talented students, whom we challenge to discover and realize their potential.

We recruit the highest quality faculty, staff and administrators who have the expertise and experience to mentor and challenge our students.

We support innovation and experimentation and continue to build on our accomplishments. We hold the highest expectations for ourselves and support each other in achieving them.

Engagement

We encourage students, faculty, and staff to pursue their curiosities and passions inside and outside the classroom.

We collaborate across disciplinary and operational boundaries to draw on all our strengths.

We work together to enrich our local, national, and global communities.

Integrity

We treat each other with civility and respect.

We act ethically and take responsibility for our choices.

We work together in a spirit of fairness, cooperation, and transparency.

Inclusiveness

We recognize the unique worth of each member of our community.

We believe that a community composed of people with diverse backgrounds, perspectives, and abilities promotes learning and engagement.

We are committed to building a diverse and inclusive community.

Self-reflection

We assess our practices in the classroom, on campus, and in the community.

We nurture ongoing campus dialogue to ensure that we adhere to our mission, vision, and values.

We routinely monitor the allocation and expenditure of our resources in order to assure that we are supporting priorities and that we are fiscally responsible.

Strategic Map: 2012 - 2015

Make the Timely Strategic Choices Necessary to Provide Educational Excellence on and Affordable, Sustainable Basis

A	B	C	D	E
Clarify and Communicate TCNJ Identity & Distinctiveness	Strengthen TCNJ's Intellectual Community and Focus Academic Programs	Strengthen the Integrated, Transformative Total Student Experience	Develop and Implement a Sustainable Financing Model Supporting A, B, C & F	Create a Strategically Effective Institution Focused on Outcomes Supporting A, B C&F
Reaffirm the TCNJ Mission and Key Educational Elements/Outcomes	Increase Support for TCNJ Faculty Scholarship	Enhance "Entry Point" Opportunities for Engagement and Integration	Build Financial Models to Support Strategic Resource Deployment	Align Decision Making with Strategic/Institutional Effectiveness
Define Key Outcomes for TCNJ Graduates	Use Program Assessment and Prioritization to Drive Excellence		Develop & Implement Reallocation to Support Strategic Priorities	Align Institutional Planning, Assessment and Budgeting Processes
Define a Concise Institutional Identity	Foster Engaged Pedagogies and Best Practices Wherever Learning Occurs		Expand and Strengthen Development Efforts Aligned with Priorities	Create the Physical Infrastructure to Support Effectiveness
Implement Effective Communications Strategies for Key Target Audiences	Strengthen Advising to Foster Student Learning and Success		Ensure Adequate Human Resources Aligned with Strategic Priorities	Implement the Technology to Support Effectiveness
		Create/Modernize Facilities for Co-curricular Student Engagement		Expand and strengthen faculty and staff development
F	Live a Culture of Diversity & Inclusion			

Facilities Master Plan Parameters

- 1. Enrollment Growth.** Undergraduate enrollment will have modest growth of approximately 500 students over the next ten years; graduate enrollment will increase incrementally. Undergraduate enrollment increases are expected in Chemistry, Biology and Biomedical Engineering, as well as in Nursing, Health, & Exercise Science (see item #5 below). These increases will likely require additional faculty and administrative space needs.
- 2. STEM Complex.** Program needs that cannot be met within the STEM Complex will be part of the Facilities Master Plan. The Facilities Master Plan shall include potential future growth within the STEM Complex.
- 3. Brower Student Center.** Program needs that cannot be met within the Brower Student Center renovation will be part of the Facilities Master Plan
- 4. Campus Town.** The Facilities Master Plan must be coordinated with Campus Town (bookstore, fitness center, increase in on-campus bed counts, access, site planning).
- 5. School of Nursing, Health, & Exercise Science.** The needs of this school will not be met within the STEM Complex. An additional undergraduate major and a masters program are expected for this School.
- 6. Classroom Utilization.** Potential changes to centralize scheduling of classrooms and to the grid must be included in the Facilities Master Plan.
- 7. Pedagogy.** Continuing education, on-line learning and blended learning are likely to start and/or increase in the coming years and may have space needs.

The Facilities Master Plan Goals are intended to:

Deliver a physical infrastructure for the campus that enhances life safety and security, supports the Strategic Plan, is intellectually enriching and promotes social engagement, creates an environment that celebrates and fosters the diversity of the College, is financially and operationally supportable, responsibly stewards state resources, and is environmentally sustainable. The Facilities Master Plan must have the flexibility to adapt to changing conditions.

Goal - Academic

Provide for academic and co-curricular space that enhances teaching and research and fosters a broad living-learning community. Encourage collaboration, combining of resources, and sharing of space among “transformative learning” programs. Ensure that the physical master plan is coordinated with the “virtual” or digital master plan for the institution.

STRATEGIC PLAN ALIGNMENT: Aligns with priorities B, C & F

TASKS:

- Rethink overly specialized and underutilized spaces as multi-use, adaptable research spaces that encourage collaboration
- Enhance cross-disciplinary collaboration through College-wide moves to share and co-locate space among academic programs
- Consolidate fragmented programs into single and /or dedicated facilities when divisions become detrimental to teaching or learning
- Introduce dispersed indoor and outdoor gathering spaces for students and faculty across the campus to provide informal learning and group study environments
- Focus on community outreach and “engaged learning”
- Create a more inviting campus that represents and welcomes a diverse campus community
- Build a campus that utilizes the latest in information technologies and is flexible to accommodate changes in that technology going forward.

MEASURES:

- Increased classroom and laboratory utilization, in conjunction with central scheduling and changes to the scheduling grid
- Percentage of classrooms that are smart classrooms
- Percentage of campus that has wireless

Goal – Student Affairs

Enhance Living-Learning qualities of campus to provide for the needs of students, faculty and staff. Encourage collaboration, combining of resources, and sharing of space among “transformative learning” programs.

STRATEGIC PLAN ALIGNMENT: Aligns with priorities B, C & F

TASKS:

- Rethink overly specialized and underutilized spaces as multi-use, adaptable program spaces that encourage collaboration
- Maintain a minimum of 60% of undergraduate students living on campus within residential education programmed housing.
- Ensure attractive and functional student center and recreation facilities to meet programmatic demands.
- Enhance the campus environment for student retention and success
- Introduce dispersed indoor and outdoor gathering spaces for students and faculty across the campus to enhance student engagement and build community
- Coordinate Campus Town planning with master plan efforts
- Create a more inviting campus that represents and welcomes a diverse campus community
- Determine best location(s) on campus to locate services to serve students

MEASURES:

- Percent of undergraduate students living on campus at a minimum of 60%
- Post Occupancy Evaluation for the renovated Brower Student Center, with a minimum of 80% of survey respondents satisfied
- Graduation rate
- Retention rate
- Traffic study at lounge, social and study spaces
- Response on assessment measures
- Number of students in housing lottery to measure student demand for housing

Goal – Administration

Encourage collaboration and efficiency by combining resources and sharing space among compatible administrative functions in order to be convenient, welcoming and accessible to prospective and current students; and to be supportive of fundraising goals.

STRATEGIC PLAN ALIGNMENT: Aligns with priorities A, E & F

TASKS:

- Provide offices that are attractive and functional
- Provide spaces that encourage collaboration and co-located function where appropriate
- Create and/or update space standards for all administrative functions.
- Create a more inviting campus that represents and welcomes a diverse campus community

MEASURES:

- Achieve Building Owner and Management Association (BOMA) Class B quality space for all public accessible administrative functions on campus.
- Achieve BOMA Class C office space for general, non-public administrative office space.

Goal – Physical Infrastructure

Provide a campus environment that is visually cohesive, cohesive and compatible in architectural language, is organized around a network of open spaces defined by free-standing buildings, contains diverse indigenous landscaped grounds that are connected by a hierarchical network of paved walkways, is safe and secure, creates/preserves vistas of iconic buildings and natural features, has exterior spaces of unique and exceptional quality and has varying focal points of interest such as fountains, sculpture, plazas or other features.

STRATEGIC PLAN ALIGNMENT: Aligns with priorities E & F

TASKS:

- Provide up-to-date physical infrastructure, building and utility systems necessary to achieve the institution's academic and residential education programs
- Coordinate deferred maintenance issues with Facilities Master Plan projects
- Improve the arrival, circulation and visitor parking experience as well as the over-all presentation of campus to potential students, alumni, and visitors
- Improve the student experience by addressing issues of access, visibility and usability of open spaces and lakes on campus (i.e. outdoor gathering spaces, continuous path around lakes, access to water, and orientation of buildings to open spaces)
- Consider exceeding the accessibility code requirements to meet needs of the campus community
- Create a more inviting campus to attract and retain students, faculty and staff.

TASKS Continued:

- Include alternative pedagogies and off-campus facilities in planning efforts
- Maintain and improve security
- Consider becoming a designated botanical garden for educational and reputational benefits.
- Provide formal and informal opportunities for congregating outdoors

MEASURES:

- Call boxes, lighting
- Implement a comprehensive signage and way-finding plan
- Conduct a comprehensive campus landscape plan
- Continue phased implementation of the campus signage plan
- Continue to adhere to Stormwater Management Plan
- Update the asset renewal plan

Goal – Sustainability

Create a plan that supports the institution's strategic plan, is financially feasible, and minimizes disruption to the College's living-learning, research, and administration operations with consideration of environmental resources.

STRATEGIC PLAN ALIGNMENT: Aligns with priorities D, E & F

TASKS:

- Conserve resources by improving and maximizing existing spaces before beginning new construction
- Reassess prior facility replacement recommendations against options for renovation and renewal
- Bear in mind long-term maintenance costs when considering options to renovate or build new
- Pursue LEED Silver criteria for all new construction and significant renovation projects
- Align with College's financial plan
- Consider life cycle cost, carbon footprint and greenhouse gas implications of new systems and construction. (maybe this is covered by LEED)
- Adequately staff and fund the operation and maintenance of facilities to preserve the institution's capital investment.

MEASURES:

- LEED Checklist with each major project
- Create and review with Treasurer a full operations plan for each facility at the end of the design phase.

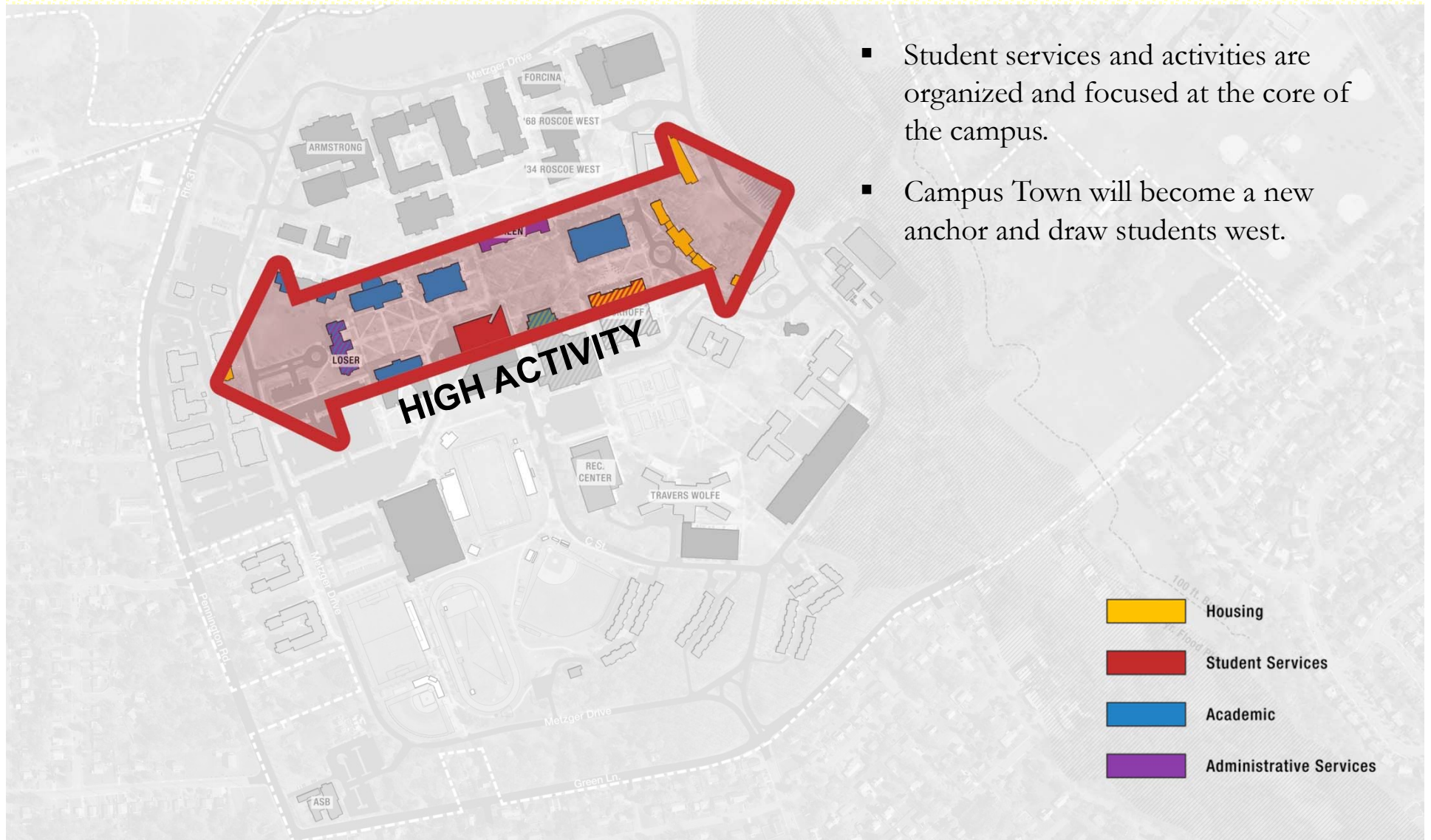
Open Space Framework

Existing Conditions



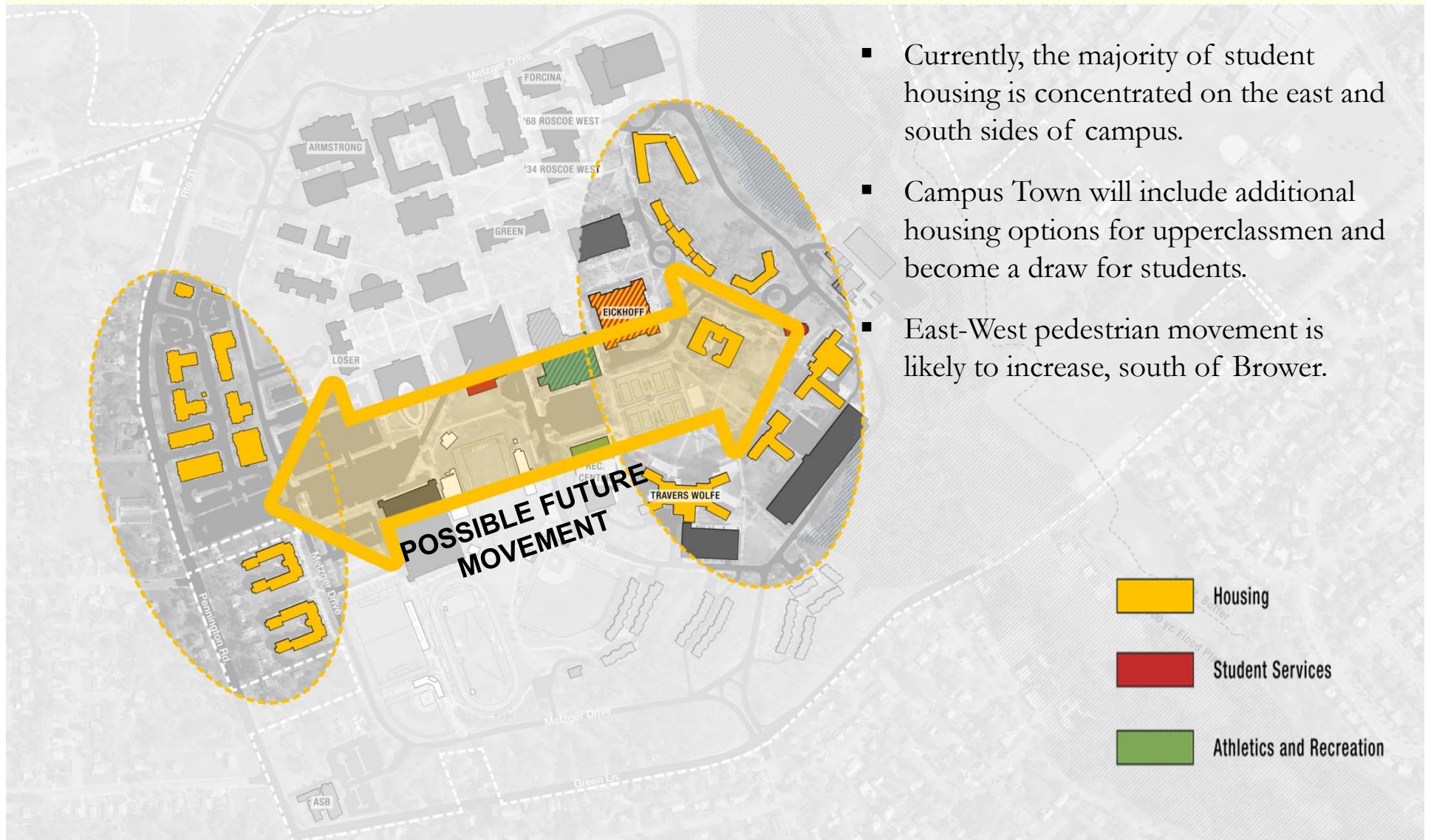
Planning Context

Campus Core



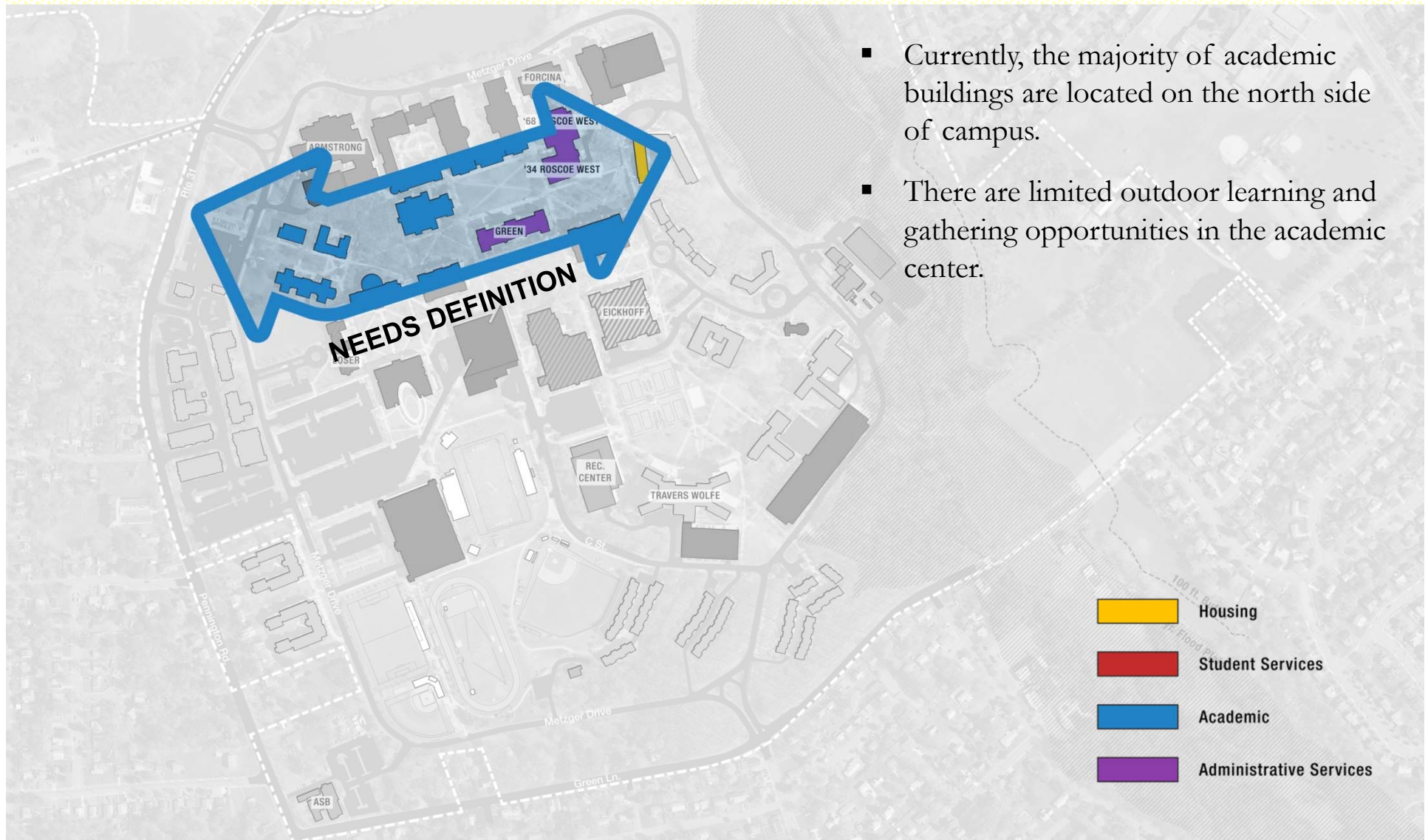
Planning Context

Student Housing



Planning Context

Academic Center



Open Space Framework

Existing Site



Open Space Framework

Spatial Organization



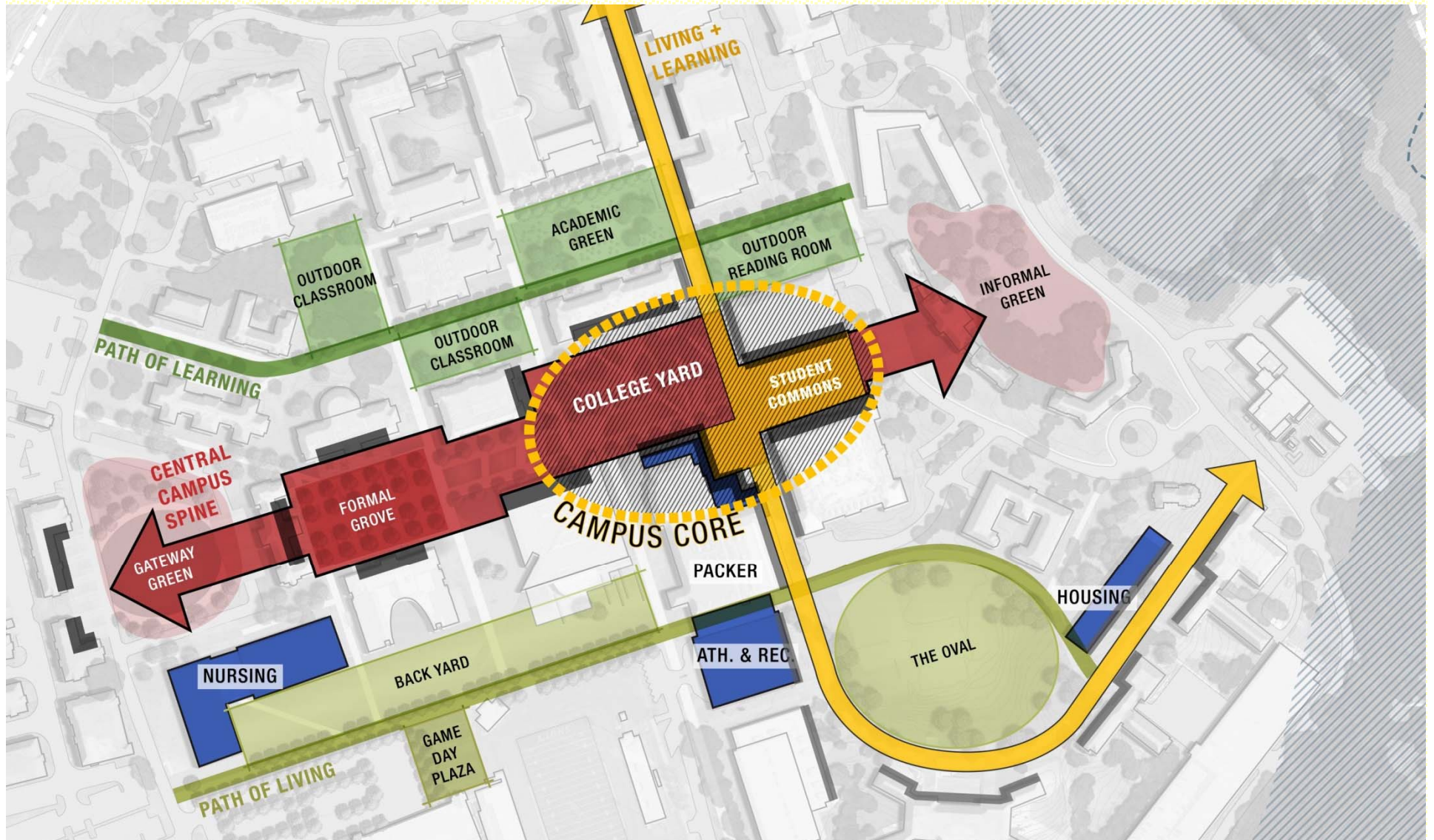
Open Space Framework

Spatial Organization



Open Space Framework

Campus Structure





Facilities Master Plan

This Facilities Master Plan builds on the groundwork outlined by previous facilities master plans. A balanced planning process must include consideration for the evolving needs of the campus community. Like previous facilities master plans, this plan is ambitious, both in the number of projects and the total cost, but is entirely in keeping with the current aspirations of The College of New Jersey. A number of the buildings projected for replacement or renovation in this plan are nearing functional obsolescence. Without considerable new investment, the cost of persistent maintenance will mount increasingly and modest modifications will in no way address concerns. This facilities master plan provides a unified and integrated solution to functional obsolescence in a systematic, prudent, and purposeful manner.

Facilities Master Plan



Step 1: 2015 – 2018 (funded)

- Brower Student Center Renovation & Addition
- STEM Complex Phase 1 – new construction
- STEM Complex Phase 2 – Science & Biology Renovation

Step 2: Dates and Funding To Be Determined

- Travers-Wolfe Renovation
- Armstrong Hall Renovation

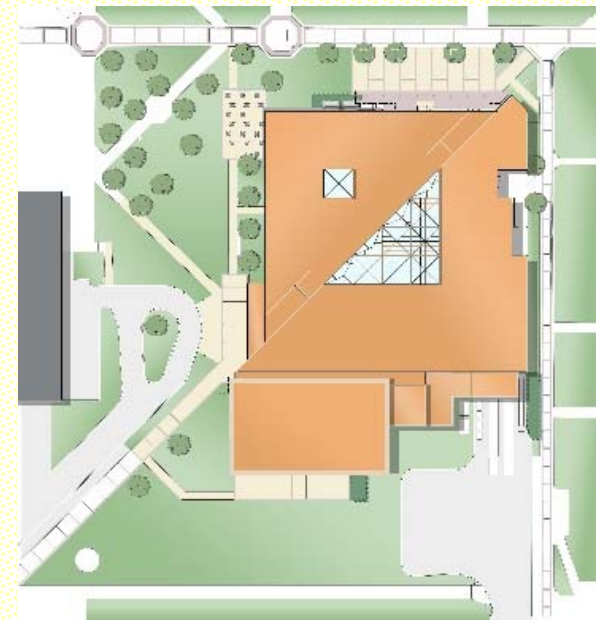
Step 3: Dates and Funding To Be Determined

- New Nursing, Health & Exercise Science and Public Health Building / Renovate Trenton Hall
- Packer Hall Renovation
- New Athletics and Recreation Field House
- Central Plant Increased Capacity and Parking as needed to support Facilities Master Plan

Step 1: Brower Student Center

Brower Student Center Renovation and Addition.

The existing 90,000 gross square foot building will undergo a transformative renovation of the interior and exterior to meet its mission to provide educationally purposeful on-campus activities for all TCNJ students and to maintain partnerships within the community that accentuate the student and community experience. The Brower Student Center will provide student organization spaces, student activities spaces, dining, student affairs offices, conference rooms, and a game room. A 25,000 gsf addition will provide column-free, high-bay multi-purpose space on the first floor, which is not feasible in the existing building.



Brower Student Center Site Plan

Step 1: STEM Complex Phase 1

STEM Complex Phase 1 – new construction

The STEM Complex provides cross-disciplinary spaces used by the School of Engineering and the School of Science. Phase 1 includes a new 89,000 gsf, three-story building constructed on the approximate site of Holman Hall. The building will house instruction space, faculty research space, inter-disciplinary collaborative space, administrative offices, and grant supported space, as well as building support spaces. The massing, scale, materials and details of the building should allow it to fit comfortably within the existing Collegiate Georgian architectural vernacular. The siting, footprint and massing shall consider how the building responds to the slope of the site, helps create the STEM Complex, and how the building responds to the surrounding buildings and green spaces in both the short-term and long-term.



STEM Phase 1 Site Plan

Step 1: STEM Complex Phase 2

STEM Complex Phase 2 - renovation

This project will renovate spaces vacated after the occupancy of STEM Phase 1. Renovated areas will provide laboratories, classrooms, and faculty offices for Biology, Physics, Math & Statistics, and Chemistry.



Biology Building



Science Complex Aerial

Step 2: Travers - Wolfe

Travers-Wolfe Renovation

This first year residence hall has two 11-story U-shaped wings connected by a 2-story link. Each tower houses over 550 students in primarily double occupancy rooms. The 2-story link houses a large building lounge, offices, and recreation rooms on the first floor, and a dining facility on the lower level. The renovation will provide a transformation of the interior and exterior of the building that will showcase welcoming and attractive housing to prospective students. The renovation will upgrade building infrastructure systems, renovate bathrooms, and provide additional accessible bedrooms and bathrooms.



Travers-Wolfe Hall

Step 2: STEM Phase 3

STEM Complex Phase 2 – Armstrong Hall / Forcina Hall / '68 Roscoe Hall Renovations.

This project will renovate spaces vacated by Mechanical Engineering and Biomedical Engineering after their move to STEM Phase 1 and may require space in Forcina Hall and '68 Roscoe West Hall. Renovated areas will provide laboratories, classrooms, and faculty offices for Civil Engineering, Electrical & Computer Engineering, Engineering Science, and Integrative STEM/Technology.



Armstrong Hall

Step 3: School of Nursing, Health, & Exercise Science

New Building for Nursing, Health & Exercise Science and Public Health

- **Nursing (57,000 gsf)**
- **Health & Exercise Science (52,000 gsf)**
- **Public Health program (11,500 gsf)**
 - Approximately 100 students
 - 6 faculty plus department chair
 - 2 instructional labs and 1 classroom with associated support space
 - Assumes shared space with Nursing/HES: human performance lab, PT/AT clinical space, student/faculty lounge, lockers
 - Assumes existing general classroom inventory to draw on
- **Optional program includes:**
 - **Health & Wellness (12,000 gsf)** - Includes Anti-Violence Initiative, Alcohol, Drug & Education Program, Counseling and Psychological Services, Disability Support Services, and Student Health Services

Step 3: Packer Hall

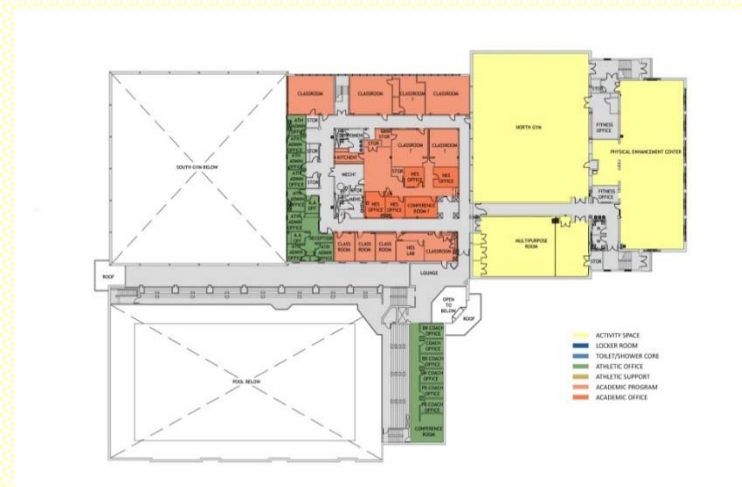
Packer Hall Renovation and Addition

Packer Hall is home to Athletics, Recreation, and Health and Exercise Sciences. The building contains gymnasiums, locker rooms, weight rooms, a pool, classrooms, and offices for faculty and staff.

This project includes an addition to and a complete renovation of Packer Hall, including spaces vacated when Health and Exercise Science moves into the new Nursing, Health, and Exercise Science Building. The renovated Packer Hall will become a comprehensive recreation center, accommodating the full recreation program while effectively reusing the existing building and optimizing the central campus location.



Packer Hall – Upper Level



Packer Hall – Lower Level

Level 2 (38,500 GSF)

Sustainability

The College has a deep commitment to sustainability, as evidenced by the signing of the American College & University Presidents Climate Commitment (ACUPCC), and the subsequent formation of the Presidents Climate Commitment Committee.

Energy Conservation Strategies

- *Knowledge is Power* is an energy conservation awareness initiative to help reduce usage and mitigate the escalation in energy prices. Implementing simple changes in energy utilization behaviors can positively affect operating costs and the environment.
- Geothermal wells
- Cogeneration plant with turbine
- Automatic load management system for demand response opportunities
- Steam boiler with high efficiency low NOx burners
- Campus-wide lighting retrofit to energy efficient lamps and ballasts

Water Conservation Strategies

- Employ strategies that in aggregate use 20 percent less water than the Energy Policy Act of 1992 fixture performance requirements, by using high efficiency fixtures, faucets, and dual-flush toilets
- Exceed potable water use reduction by an additional 0 percent efficiency increase where possible
- Design water efficient landscaping. No net increase of stormwater runoff from existing to developed conditions OR if existing impervious is greater than 50 percent, implement a stormwater management plan that results in a 25 percent decrease of stormwater runoff.

Sustainability

TCNJ Recycling Program

The College of New Jersey has been continually developing our recycling program in an effort to reduce bulk trash and to increase the amount of materials recycled on campus. As each community recycles different materials and as additional materials can be recycled due to developments in technology and recycling initiatives, the College promotes education of the campus community in an effort to improve the understanding of recycling initiatives on campus. The overall success of the recycling program is dependent upon the concerted actions of all the community members of our campus.

What is LEED?

The Leadership in Energy and Environmental Design (LEED) Green Building Rating System encourages and accelerates global adoption of sustainable green building and development practices through the creation and implementation of universally understood and accepted tools and performance criteria.

The College uses sustainable design and building practices that provide LEED compliance. We believe that sustainable design can be economical, and that high performance design features can be accomplished within tight budgetary constraints through design innovation and selection of sustainable design strategies that best serve individual project goals.

TCNJ Named a “Green Leader”

Once again, Princeton Reviews, *The Guide to 322 Green Colleges: 2014 Edition* describes TCNJ’s exemplary carbon reduction efforts as “impressive sustainable action,” naming TCNJ a “green leader.”

Since creating the President’s Climate Commitment Committee (PC3) in 2007, it has been working extensively to become carbon neutral by 2040, through the implantation of auditing programs and various green initiatives. Following recommendations from the Carbon Fund TCNJ supports renewable energy installations, funds energy efficiency projects, and has been working to reforest areas surrounding TCNJ.

On campus, The College offers environmental classes, research opportunities, and student organizations, placing students at the forefront of environmental activism. Organizations such as Water Watch, Roots and Shoots, and the Bonner Center turn students to environment advocates, teaching them how to live greenly as well as providing opportunities to volunteer in environmental sustainability projects and activities.

TCNJ also offers an Environmental Studies concentration and numerous environment- focused classes in scientific, sociological, historical, and even literary disciplines. In addition, the College has implemented Sustainability Ambassadors, students who act as liaisons between the general student body and PC3. These students aim to get the whole campus involved in carbon emissions reduction by implementing programs such as carpooling and campus gardening initiatives.

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Facilities Master Plan 2016 Amendment 8-Year Outlook

The Step 1 projects (STEM Phase 1 construction, Brower Student Center Renovation and Addition, and STEM Phase 2 – Science and Biology Renovation) were funded and work was underway on these projects by the culmination of the Facilities Master Plan process.

The 8-Year Outlook amendment addresses the funding sources for the projects to be commenced between 2016 and 2024:

- Armstrong Hall Renovation
- Travers-Wolfe Hall Renovation
- '34 Roscoe West Hall Renovation
- Trenton Hall Renovation

8-Year Outlook Projects

The Armstrong Hall Renovation is funded by the Higher Education Capital Improvement Fund (CIF) Bond. The bond funding will be used to renovate Armstrong Hall for Civil Engineering, Electrical and Computer Engineering, and Technological Studies. The renovation will focus on addressing asset renewal needs.

The Travers-Wolfe Hall Renovation will be funded by a College issued Bond. This project will provide a complete interior and exterior renovation, including utility infrastructure within the building.

'34 Roscoe West Hall and Trenton Hall Renovations will be funded by a College issued Bond. This project will renovate the vacant '34 Roscoe West Hall for Admissions and College Advancement, allowing the School of Nursing, Health, & Exercise Science to expand into a renovated Trenton Hall. This project is advanced in place of the new building proposed in the 2015 Facilities Master Plan for the School of Nursing, Health, & Exercise Science. The renovation of '34 Roscoe Hall is a more financially and environmentally sustainable choice than the construction of a new building.

8-Year Outlook Projects Schedule

	2016	2017	2018	2019	2020	2021	2022	2023	2024
STEM Phase 1									
BSC Renovation									
STEM Phase 2									
Armstrong									
Travers-Wolfe									
'34 Roscoe West									
Trenton Hall									