

RECOMMENDATION

It is recommended that the Board of Trustee approve the Facilities Comprehensive Plan.

BACKGROUND

In 2022 UNC started a process to update the campus facilities plan. SmithGroup was brought in to help engage students, faculty and staff. From August to November, SmithGroup led focus groups, town halls and other listening sessions with key stakeholders and in open forums. The resulting draft plan was reviewed in March and a revised plan in April with campus groups. The result of this work is the Facilities Comprehensive Plan.



02/14/24



02/15/24

Responsible Staff

Date

President

Date

Board Action

Date



UNC

Facilities Comprehensive Plan
Executive Summary
FALL 2023



What is a Facilities Comprehensive Plan?

A Facilities Comprehensive Plan is a process that allows the University of Northern Colorado an opportunity to re-examine its needs with a 10-year outlook to prioritize near and long-term project goals. This Plan is an extension of *Rowing, Not Drifting 2030* and guides the physical development of the campus, providing a short and long-term framework that is clear, flexible, and implementable. The Plan intends to be a visionary document, adaptable to change, and enhances UNC's core values and principles.

Has the Campus Ever Done This Before?

The University of Northern Colorado has a history of planning that is integrated with its strategic, academic, programmatic, space management, and enrollment plans. The last facilities plan was completed in 2003. In order to stay current with academic, research, and student life needs, the university's goal for a new Facilities Comprehensive Plan articulates the concepts that make the University distinctive and meaningful to the community and beyond.

Why is This Important to UNC?

The Facilities Comprehensive Plan is important to UNC because it provides a structured approach to managing and developing its physical assets in alignment with its strategic goals. The benefits of this effort include but are not limited to:

- Improving Resource Allocation and Asset Management
- Increasing Space Efficiency
- Enhancing Culture of Sustainability
- Improving Functionality and Safety
- Providing Opportunities for Community Engagement
- Reducing and Mitigating Risk
- Prioritizing Financial Resources
- Increasing its Competitive Advantage

We embrace difference, bring together people with a diversity of ideas and experiences, and adapt to the evolving needs of our students.



UNC students are diverse and hard-working, and there is no one "label" that defines them.

Strategic Plan Integration

Integration of UNC's Strategic Plan and Facilities Comprehensive Plan strengthens and unifies a collective vision for the next decade by providing a roadmap for future expansion, enabling UNC to respond to changing needs while maintaining a dynamic vision and a thriving campus.



Guiding Principles

The Guiding Principles outlined from the Facilities Comprehensive Plan inform decisions about future campus investments and development. While the plan will continue to evolve over time, the principles shall remain constant and should be considered as part of a larger vision within future actions.



Promote a Students First Plan



Enhance Learning Environments



Connect Campus



Promote a Resilient & Sustainable Campus



Strengthen Campus Identity



Right-Size the Campus

Recommended Projects

Recommended projects serve as actions within the plan, designed to address short and long-term solutions. Implementing these projects will create positive transformation on campus.

Throughout the Facilities Comprehensive Planning process, several areas of campus were prioritized for upgrades and improvements. This plan is a living document that should be periodically examined and updated as UNC continues to evolve.

Aside from many of UNC's facilities, outdoor spaces, and amenities being scattered and disconnected, there is still a deficit of quality social spaces.

Today, the Facilities Comprehensive Plan comes at an important time in UNC's history. It reflects the vision, mission, and values of the institution and the goals and objectives of a multitude of university stakeholders. It represents a unifying vision that aligns UNC's academic mission, strategic plan, and physical development goals into a single document that helps guide the future direction of the campus.

- 1 New College of Osteopathic Medicine & Partnership District
- 2 New Performing Arts Academic Building
- 3 University Center Upgrade
- 4 New Campus Indoor Practice Facility
- 5 New Athletics Locker Room
- 6 Harrison Hall Replacement
- 7 Lawrenson & Turner Hall Renovations
- 8 Potential Mixed-Use Development
- 9 Candelaria Hall Renovation
- 10 McKee Hall Renovation
- 11 Michener Library Renovation
- 12 Campus Paseo
- 13 Crabbe Hall Renovation
- 14 Wellness Garden
- 15 Campus Quad

NOTES:

1. Campus Safety and Childcare Center facilities remain a need and shall be located on-or-near campus. Locations will be determined upon further study.
2. Ongoing maintenance to be applied to all campus facilities.
3. No major planned projects are recommended for East Campus, Loveland Centerra, and Denver locations.





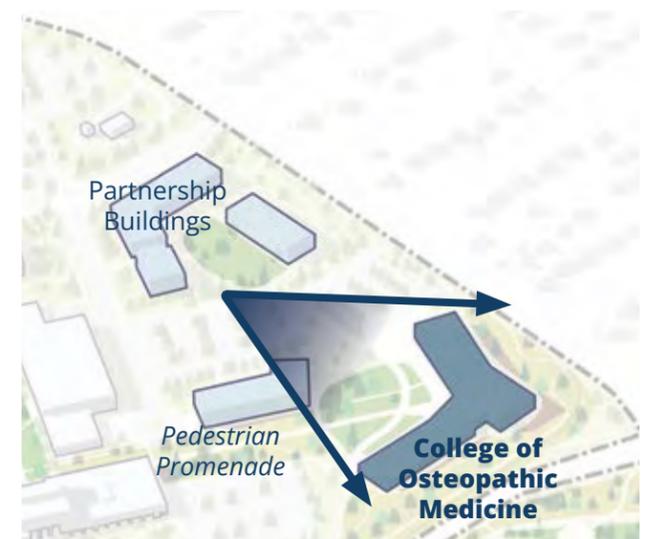
College of Osteopathic Medicine & Partnership District

The new College of Osteopathic Medicine replaces Bishop-Lehr Hall which has been vacant since 2002 and sits on a prominent location at the intersection of 20th Street and 11th Avenue.

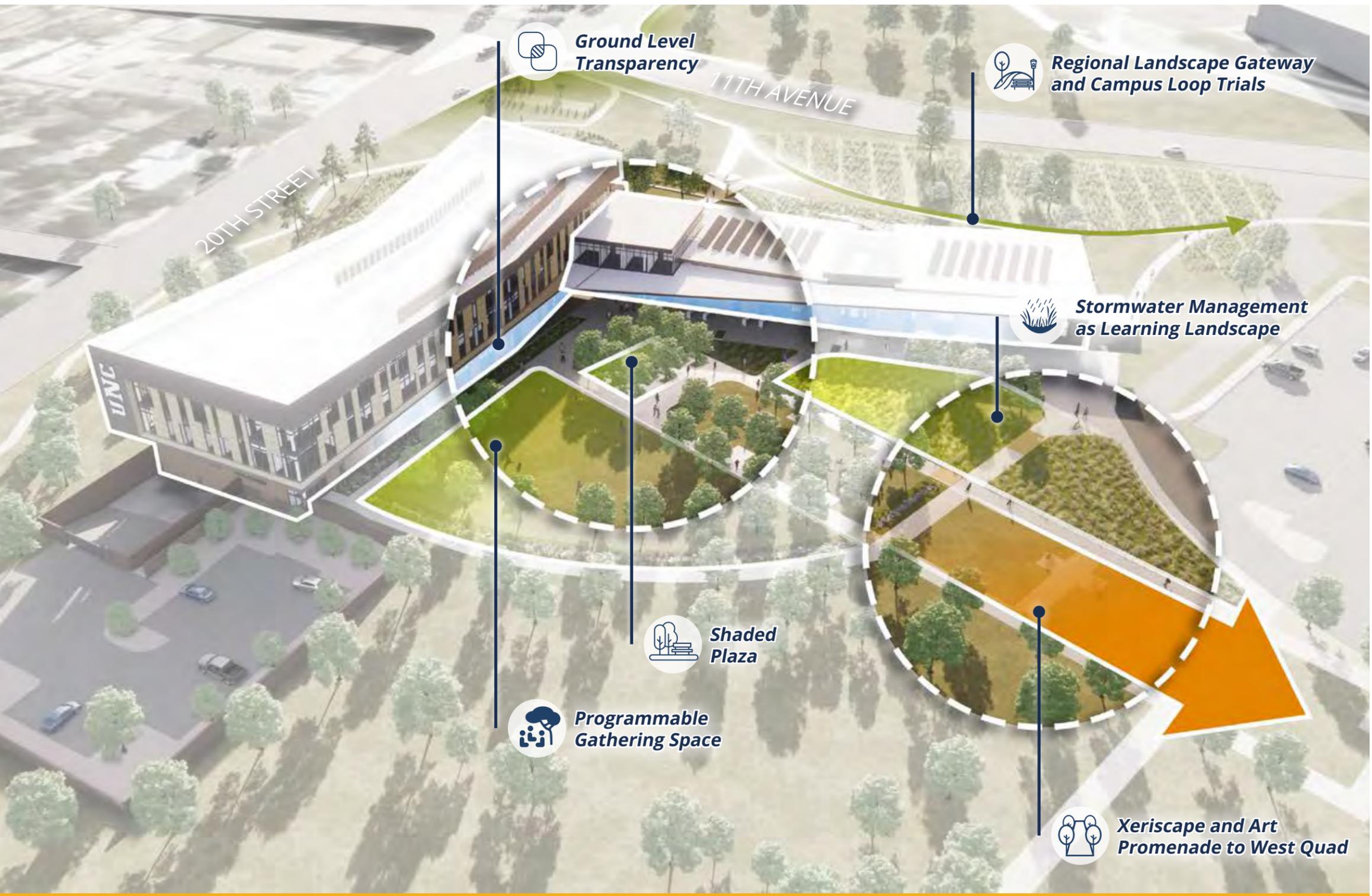
The new 100,000 GSF facility creates a memorable gateway to West Campus and activates the edge of campus.



Existing Conditions



View Location



Site Amenities

A new pedestrian promenade connects the College of Osteopathic Medicine with the core of West Campus and includes a new plaza area as a gathering space near the main entrance and campus trail on the perimeter of the site.

A transparent ground level aids in the experience and promotes exploration and a sense of connection with the rest of campus.

Program

UNC developed the Program Plan supported by SmithGroup and Dekker Perich Sabatini. The project intent is to increase the supply of primary care physicians to serve the State, leverage synergies among existing Health Sciences programs to enhance the osteopathic medicine curriculum, and to improve the health status of citizens in Northern Colorado and the region.

Partnership District

A designated 9-acre area on the existing recreation fields allows for future expansion of allied programming related to the College of Osteopathic Medicine.

Partnerships could include leased buildings and additional academic facilities that enable an ecosystem of active learning and research. Future program and space needs will be determined at a later time.

Campus Paseo West Campus

The Campus Paseo connects people to places and leverages UNC cultural heritage as a series of motifs throughout the campuses. This centralized campus spine provides safe pedestrian and multi-modal access while enabling a heightened sense of community that promotes interactive, artistic, and educational elements throughout.

The Paseo should be seen as an accessible campus link that can also serve as a wayfinding system, promote and showcase student work, communicate campus activities and resources.



Existing Conditions University Center View



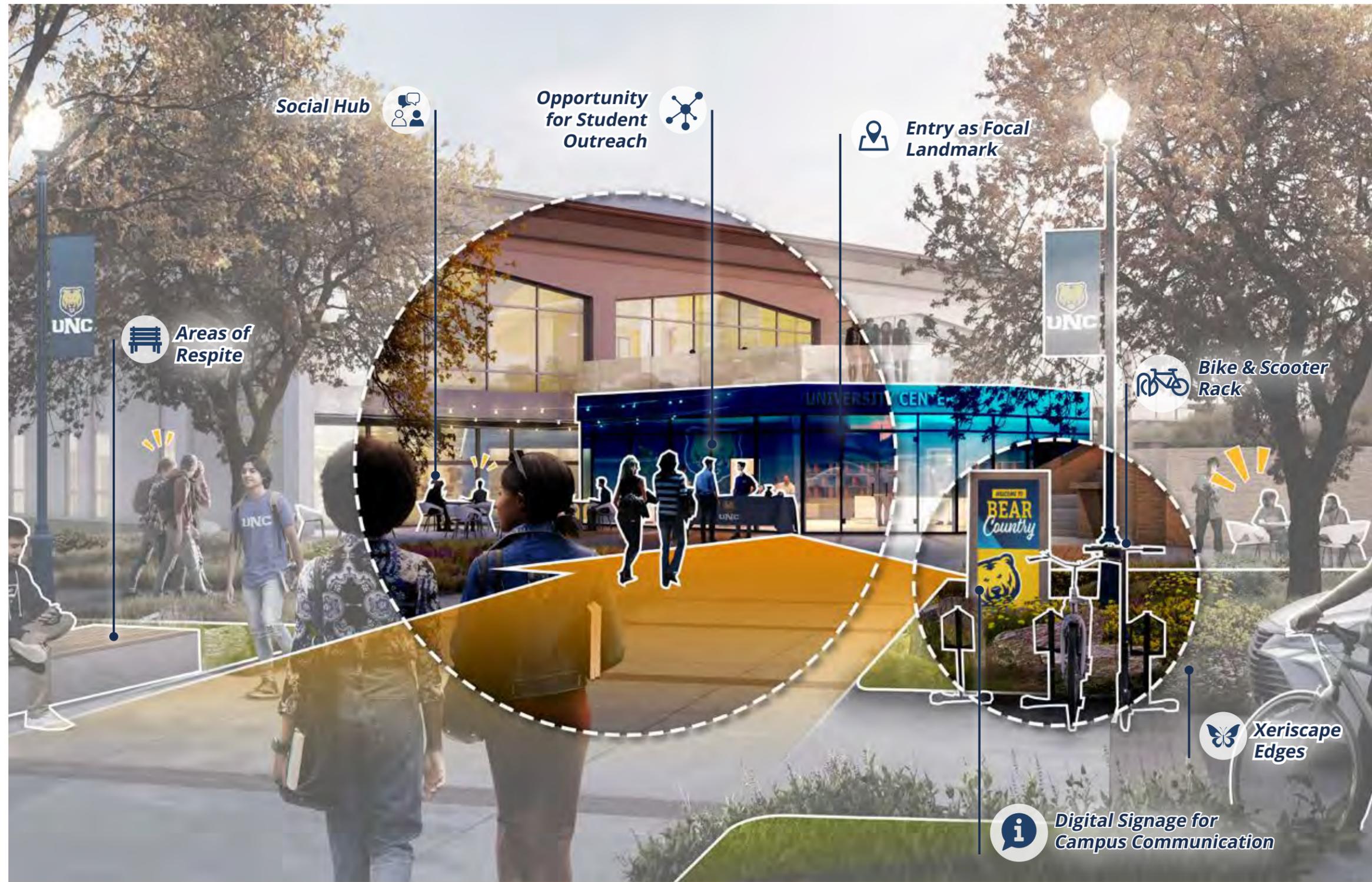
University
Center
View



Program

The Paseo prioritizes pedestrians and creates an active social environment for students as a linear connector of Central Campus and West Campus. Newly activated first floor spaces (or program) at the University Center will provide re-energized social spaces that integrate or connect interior and exterior spaces. The Paseo continues as an interior pathway through the University Center as a vibrant space and the center of activity for campus.

The University Center and Campus Commons is the starting point for many who experience UNC's campus for the first time. Existing conditions are described as dark, cold, and uninviting. Creating a distinct and identifiable landmark is vital to engaging campus locations. The new University Center landmark shown here creates a focal point that improves the entrance experience and provides expanded plaza space enabling what's typical a heavily used pedestrian path.

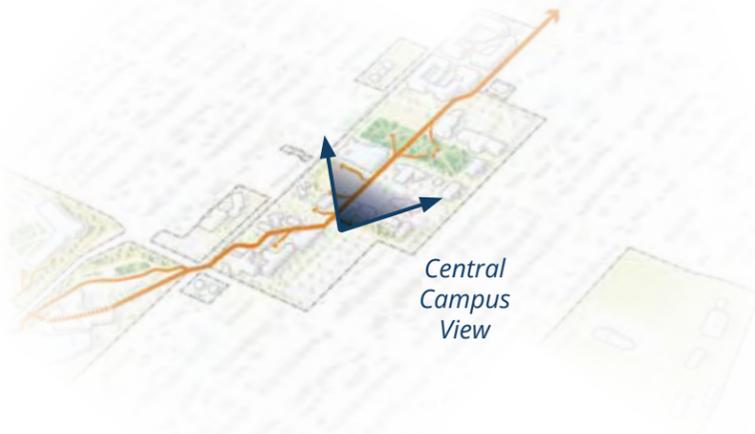


Campus Paseo Central Campus

This concept of the Paseo addresses the desire for more amenities and expression of student identity throughout the campus while creating a safe, accessible, and engaging landscape feature that is distinguishable from other campus pathways. Consistent in materiality and character, the Paseo creates diverse outdoor gathering spaces that reflect the regional beauty and resiliency of Colorado while connecting students with each other and across campus.



Existing Conditions Central Campus View



Program

On Central Campus, the interior courtyards of President's Row include an active and transparent mix of first floor uses and a variety of open space to encourage social interaction. Sustainable stormwater and renewable energy features are also incorporated into the design strategies for each courtyard.

The revived open space provides an opportunity to create a social hub on Central Campus while complementing nearby Gunter Green. A balance of hardscape and xeriscape enables a variety of activities off the paseo. This new outdoor hub is accessible and visible to all along throughout Central Campus.



Paseo Character & Amenities

The Paseo is distinguishable from other campus pathways by its consistent aesthetic character and associated amenities. A set kit of parts for the Paseo ensures its ability to provide a safe, accessible, and engaging connection throughout campus while also providing the flexibility to complement the various spaces one encounters across West and Central Campus.

Kit of Parts

- Consistent hardscape patterning utilizing regional materials
- Shaded through tree canopies and/or shade structures where appropriate
- Xeriscape edges where appropriate to avoid irrigation of hardscape
- Accessible and shaded seating areas of various scales for respite and gathering
- Lighting and banners
- Waste and recycling receptacles
- Student display and communication features. Some examples include digital display panels and bulletin boards
- Focal points such as architecture, artistic expressions, and views



Areas of respite



Increase tree canopy



Distinctive character with materials



Landmarks and visual focal points are highly encouraged



Paseo edges are kept as maintainable xeriscape



Active quadrangles and hubs along the Paseo



Existing lighting and banners provide a sense of safety and identity and should be emphasized along the Paseo

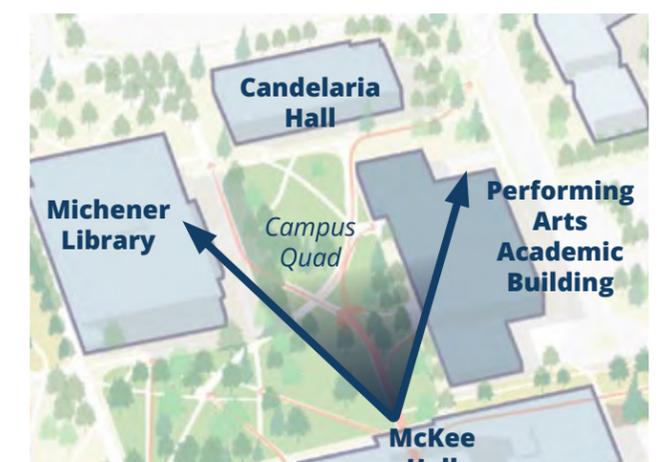


Performing Arts Academic Building & Campus Quad

The future Performing Arts & Academic Building will be located adjacent to Michener Library, Candelaria Hall, and McKee Hall. This facility will define and enclose the existing Campus Quad. The Performing Arts Academic Building creates areas for seating along the lawn sections by introducing event spaces and flexible seating.



Existing Conditions



View Location



Program

The Performing Arts Academic Building ‘right-sizes’ the Schools of Theatre Arts & Dance and Music including Langworthy Theatre, Skinner Library, Kepner Recital Hall, and Norton Theatre in Gray Hall. Art & Design is anticipated to remain on Central Campus.

The facility as shown accommodates a 88,000 GSF program while accounting for additional circulation and support spaces for events typically seen in performing arts facilities with academic programming.

Depending on the type of performance spaces desired, the volume and proportions of the massing may change. The building massing will be driven by performance types, level of flexibility desired, sightlines, seating capacity, and rigging requirements.

The front of house faces the open space shared by Candelaria, Michener, and McKee. This includes a small patio area for events for outdoor classrooms or small events.

Access from 14th Ave and 20th Street could include a drop off area while updating circulation patterns that create accessible parking on the existing Surface Lot Y. These circulation patterns would also provide access for deliveries, as well as touring shows.

An alternative option would be to renovate Frasier Hall, Music Technology, and the Skinner Music Library in place.



SmithGroup

Balanced maintained lawn and native grasses



SmithGroup

Various types of seating areas



SmithGroup

Allocate existing green space for flexible use



View of The Quad in fall on West Campus facing Northwest



SmithGroup

Artistic expressions provide focal areas to gather

Site Amenities

The School of Theatre Arts & Dance and Music relocate to the New Performing Arts Academic Building. This brings programs in closer proximity to essential program facilities such as the Campus Commons. Evening performances and events may utilize surface parking lots and create an active West Campus.

The central quad of West campus is already home to a picturesque landscape with a generous canopy that creates a comfortable setting to gather and bring learning outdoors. A current need for places to gather is met by introducing various types and scales of seating opportunities. Hammocks, Adirondack chairs, benches, and movable furnishings provide a mix of fixed and flexible seating arrangements to meet the various needs of students, staff, and faculty.

Large expanses of maintained turf lawn are preserved to provide a flexible open space while smaller fragments of turf are converted to native grasses to keep the visual feel of a large “campus green” while being mindful of water use and maintenance.

Taking inspiration from the mural at Candelaria, artistic expressions such as sculptures bring that artistic and colorful energy into the West Quad.

Power and cable passes should be provided and integrated into the site at designated points to allow for future activation of the spaces for performances, gatherings, and other events.

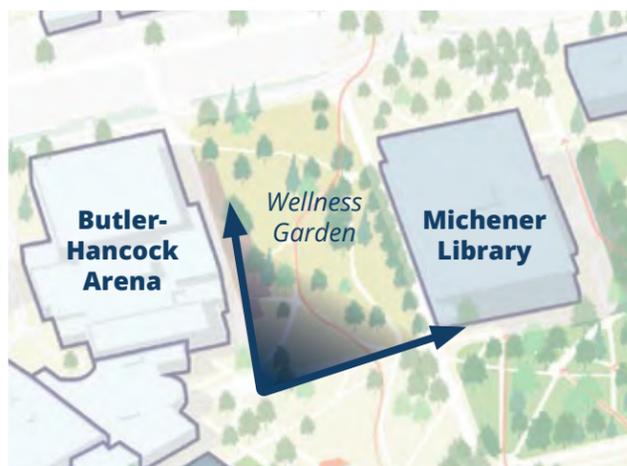
Wellness Garden

The Wellness Garden can become a place where the campus community connects with nature that reflect the unique location and identity of UNC.

The garden works within its existing context to provide a holistic approach to health and well-being and is nestled between Butler-Hancock/Recreation Center and Michener Library.



Existing Conditions



View Location

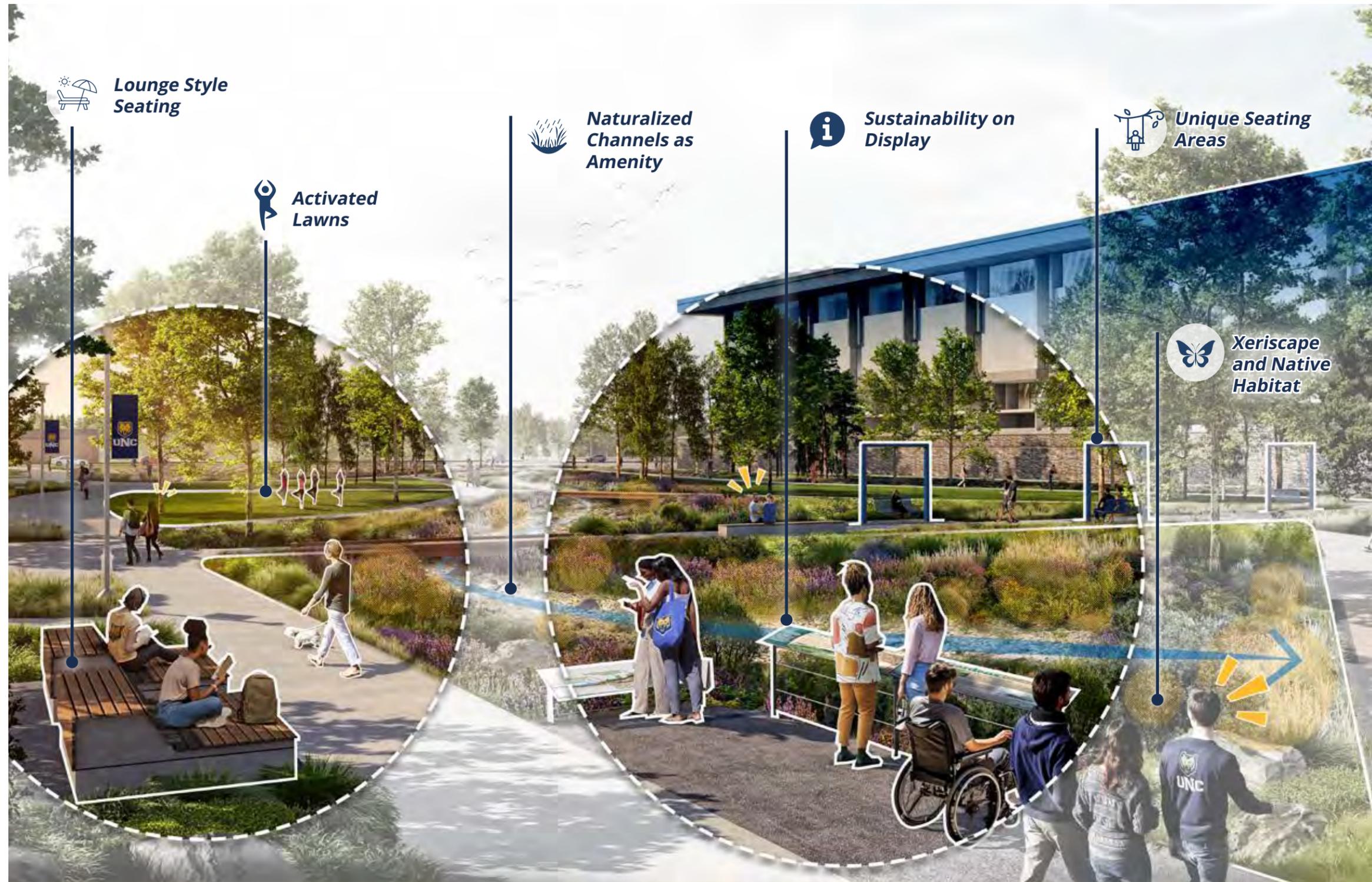


Program

Functioning as both an outdoor recreation space and an educational tool for the campus, opportunities to artistically integrate health, sustainability, and ecological awareness are encouraged.

By providing more diverse recreational activities, the space leverages existing topography to create features that add a naturalistic character to the space while carving out areas for passive recreation and active recreation.

Users have the ability to partake in activities such as walking, biking, wildlife observation, yoga, jogging trails, and fitness through outdoor exercise equipment. The calming environment of the Wellness Garden provides a new outdoor space typology that has the potential to bring learning to the outdoors for everyone.

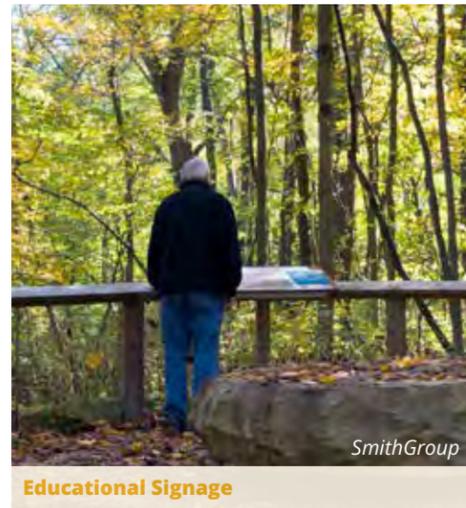


Character & Site Amenities

Wellness Garden provides the campus community with a unique space that addresses the need for more diverse health and fitness opportunities while developing an appreciation for the regional ecosystem. The site amenities in the space play an important role to ensure the social and recreational needs of the UNC campus are met.

The existing concrete channels are reimagined as a naturalized channel that highlights sustainable and restorative stormwater mitigation strategies while providing a maintainable habitat for the local ecosystem. Students, staff, and faculty are immersed in a picturesque setting that highlights the beauty of the local ecology and natural systems.

A variety of accessible, playful, and regionally sourced furnishings complement the calming environment and bring diverse options for users to seek out and make their own. As a campus that prioritizes sustainability, integrated opportunities to showcase and educate about sustainable infrastructure and ecological diversity are highly encouraged as an additional layer of the Wellness Garden.



Educational Signage



Activated gathering spaces at various times of day



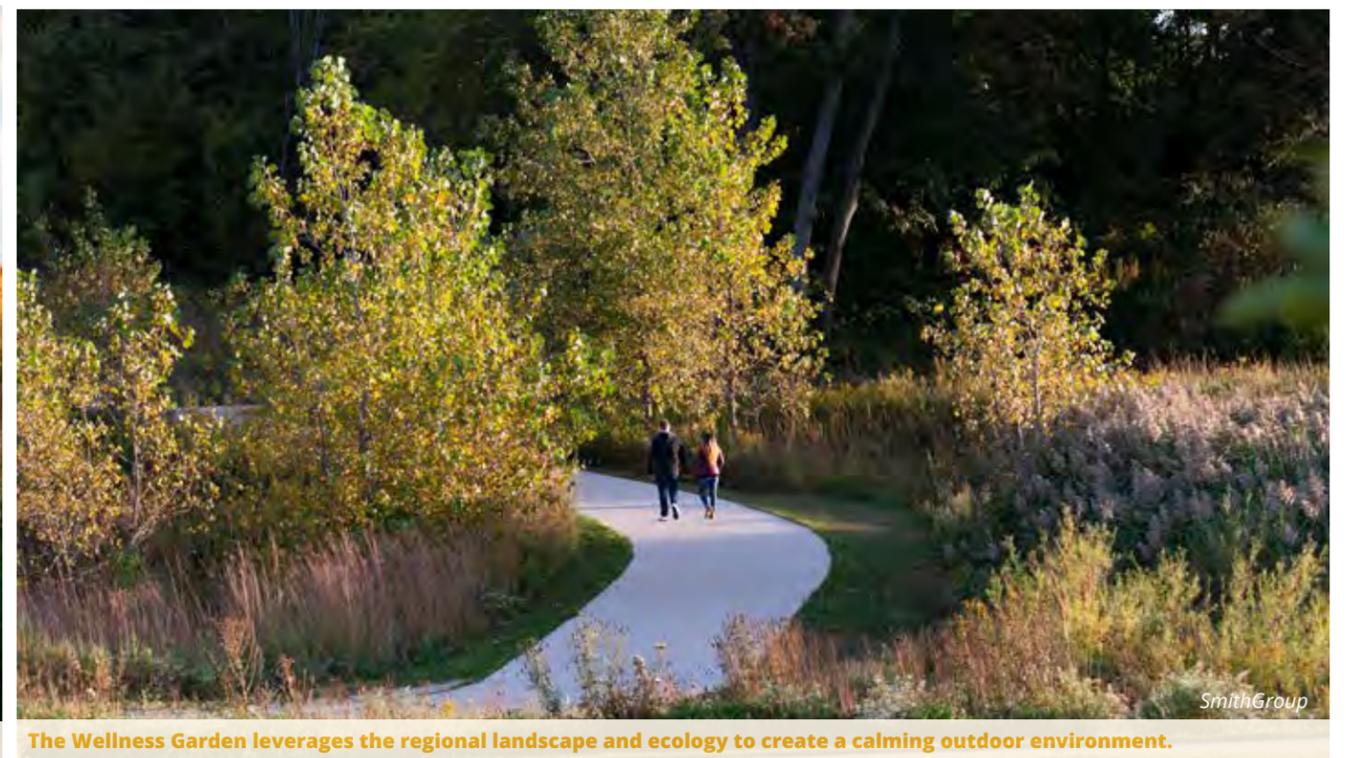
Hub for active and passive recreation



Flexible gathering spaces that engage the outdoor environment

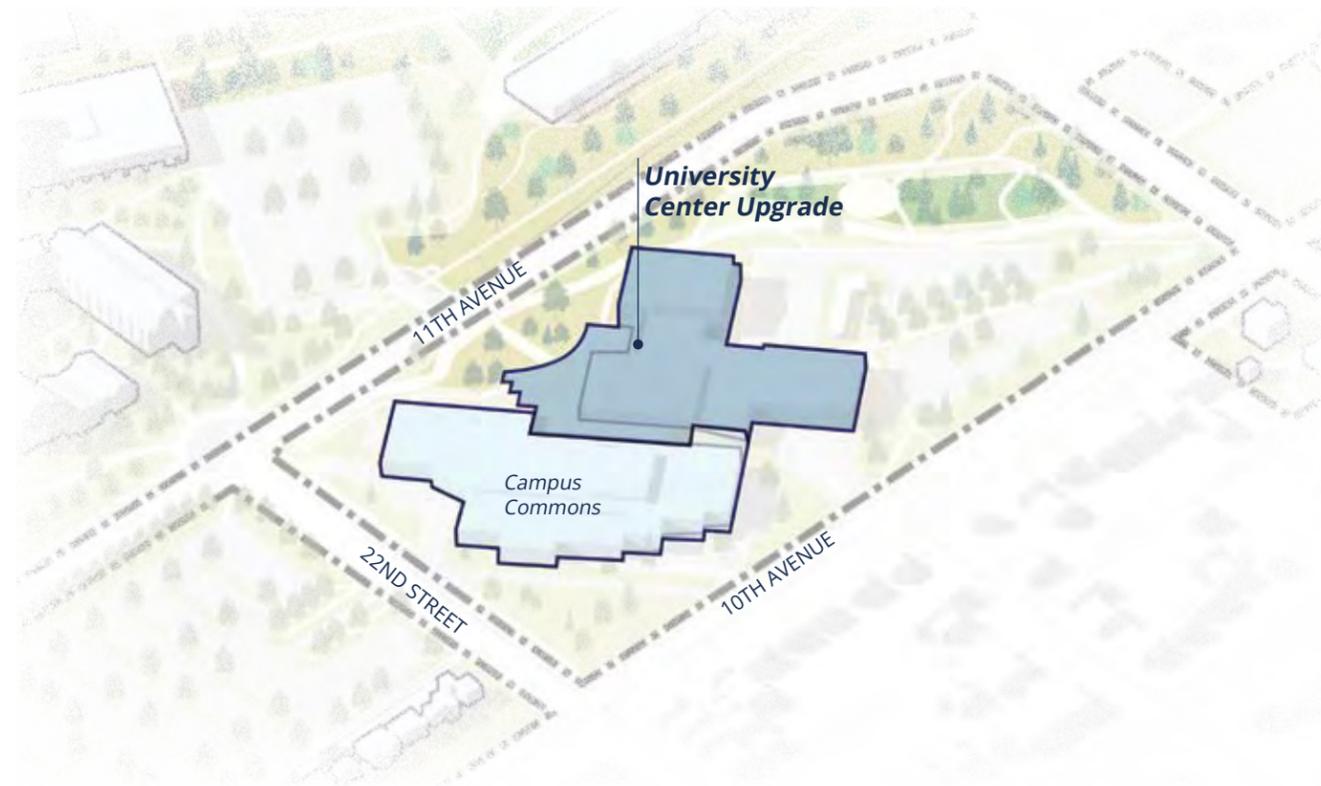


Naturalized channel creates unique moments throughout the garden.



The Wellness Garden leverages the regional landscape and ecology to create a calming outdoor environment.

Student Services Upgrade



UNIVERSITY CENTER/CAMPUS COMMONS INTEGRATION

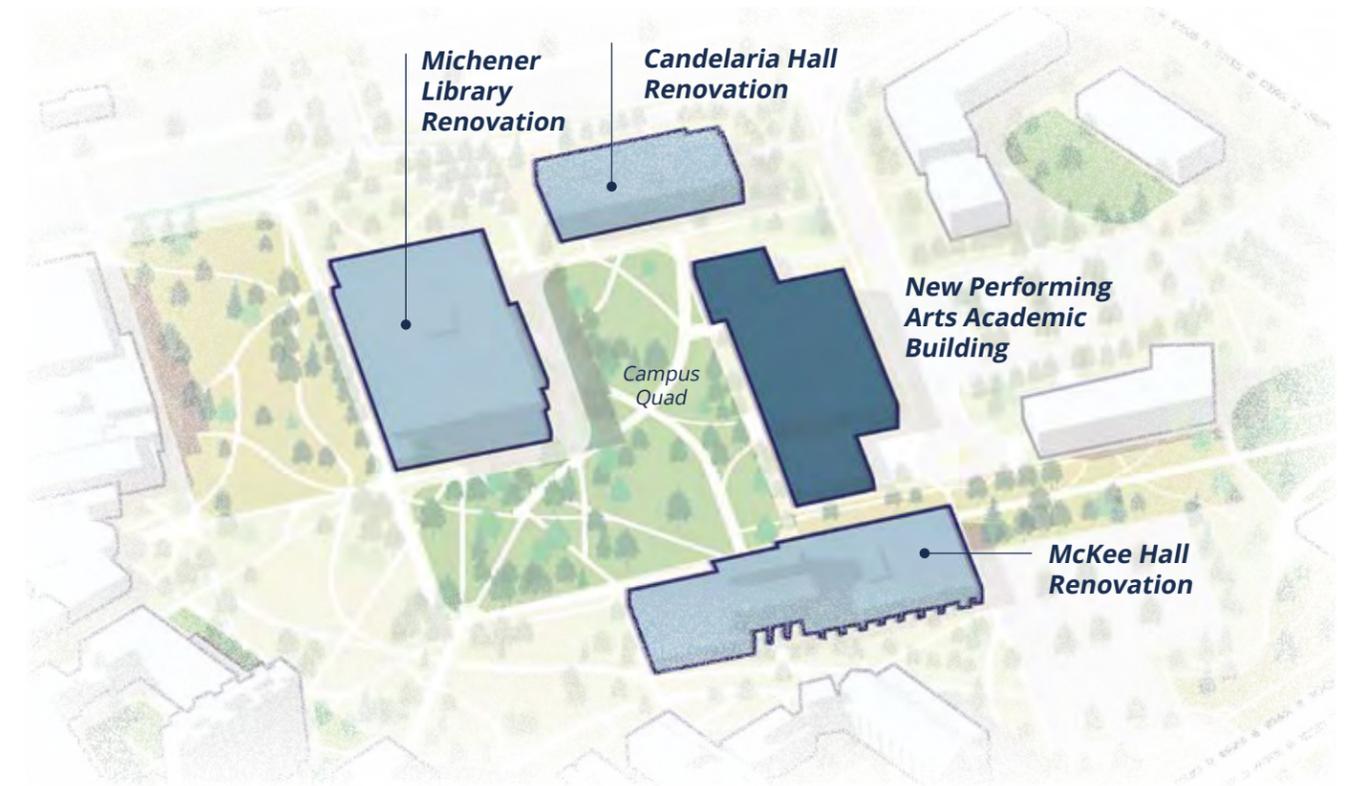
The University Center has been at the epicenter of student life at UNC while the Campus Commons provides state-of-the-art space for student services, performances, and events. The Campus Commons was completed in 2019 with the support of donors and alumni.

The need to improve the student services experience was expressed throughout the project. Improvements primarily to the University Center offers opportunities to repurpose antiquated spaces and create

efficiencies between the overall service experience. Opportunities to soften the Campus Commons are also suggested to minimize the perception that the facility is only for transactional usage and a place dedicated to cultural expression, socializing, and gathering of the broader community.

Additional studies exploring the relationship between University Center and Campus Commons are recommended, including follow up conversations with key academic and administrative support staff.

Academic Facility Renovations

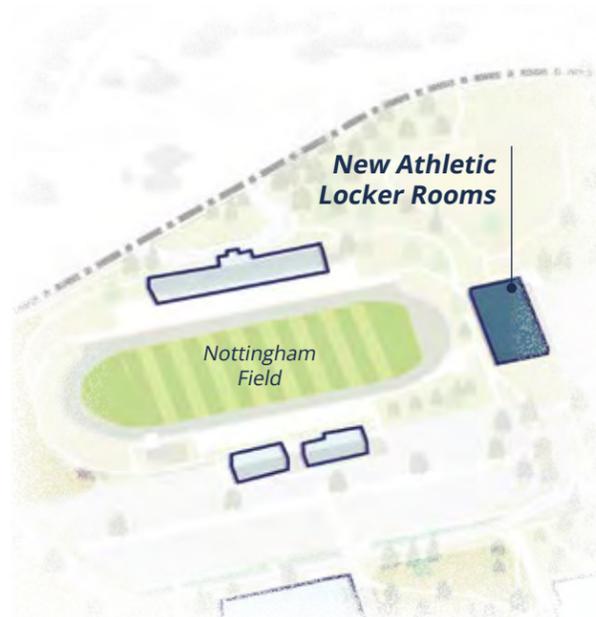
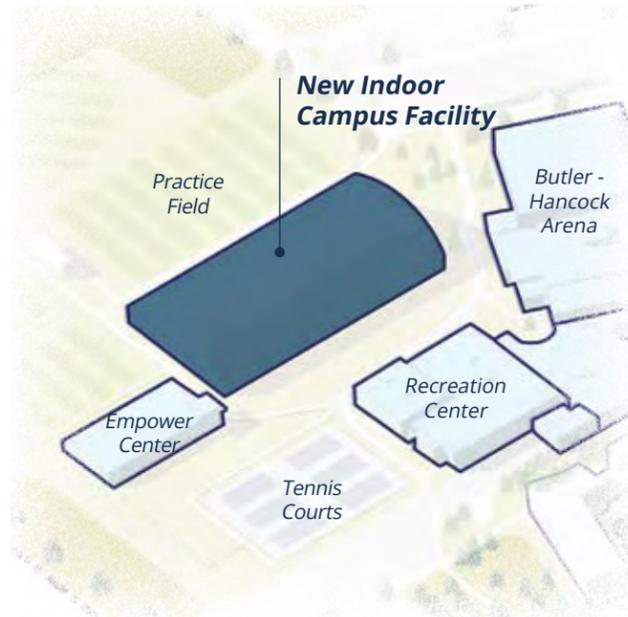


MICHENER LIBRARY, MCKEE AND CANDELARIA HALL RENOVATIONS

These facilities form the essence of UNC's academic experience and are some of the most widely used buildings on campus. However, numerous upgrades are needed to improve the overall function, efficiency, and educational adequacy of the buildings. Ongoing programmatic studies for these facilities should be considered as part of the overall campus plan strategy.

The New Performing Arts Academic Building brings programs in closer proximity to essential program facilities such as the Campus Commons. The presence of this facility also helps define the fourth edge of the Campus Quad. Evening performances and events may utilize surface parking lots and create an active West Campus.

New Indoor Campus Facility & Athletic Locker Rooms



INDOOR CAMPUS FACILITY

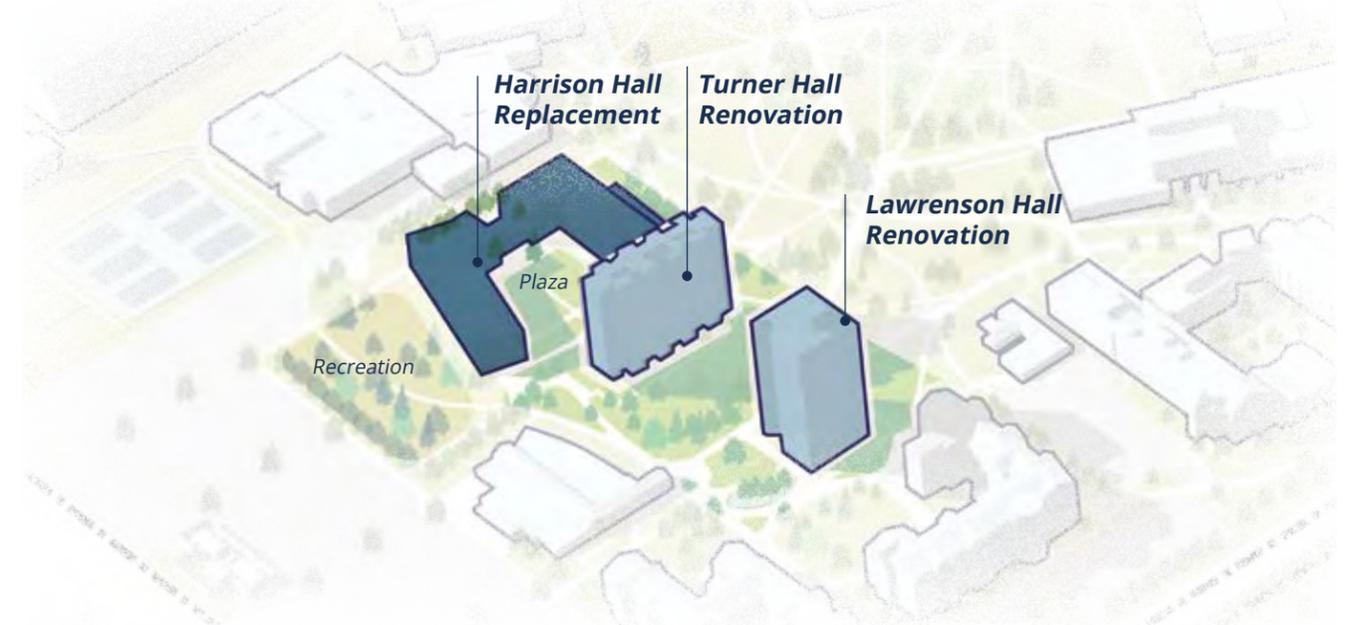
Given the projected deficit of recreational programs on campus, a shared indoor campus facility is proposed next to the Empower Center, Butler-Hancock Arena, and Recreation Center, providing synergy between existing athletic and recreational program.

This facility is envisioned as a 60,000 GSF indoor practice facility that would provide access to all students for recreation, club sports, and athletics.

ATHLETIC LOCKER ROOMS

A 10,000 GSF locker room adjacent to Nottingham Field provides additional support and storage space for athletics programs, and a potential expanded area for additional seating.

Housing Renovations & Upgrades



Projected housing demand is subject to enrollment trends and the potential of evolving live-on requirement policies and practices. Currently, assumptions include a first-year live-on requirement, and the desire for updated unit types which may impact overall capacity. The current surplus of beds enables flexibility in temporarily consolidating beds while ongoing upgrades, renovations, and/or replacements are being made on campus.

HARRISON HALL REPLACEMENT

Preferred Scenario

Replace Harrison Hall and construct new residence hall on site as target enrollment and demand for on campus housing increases.

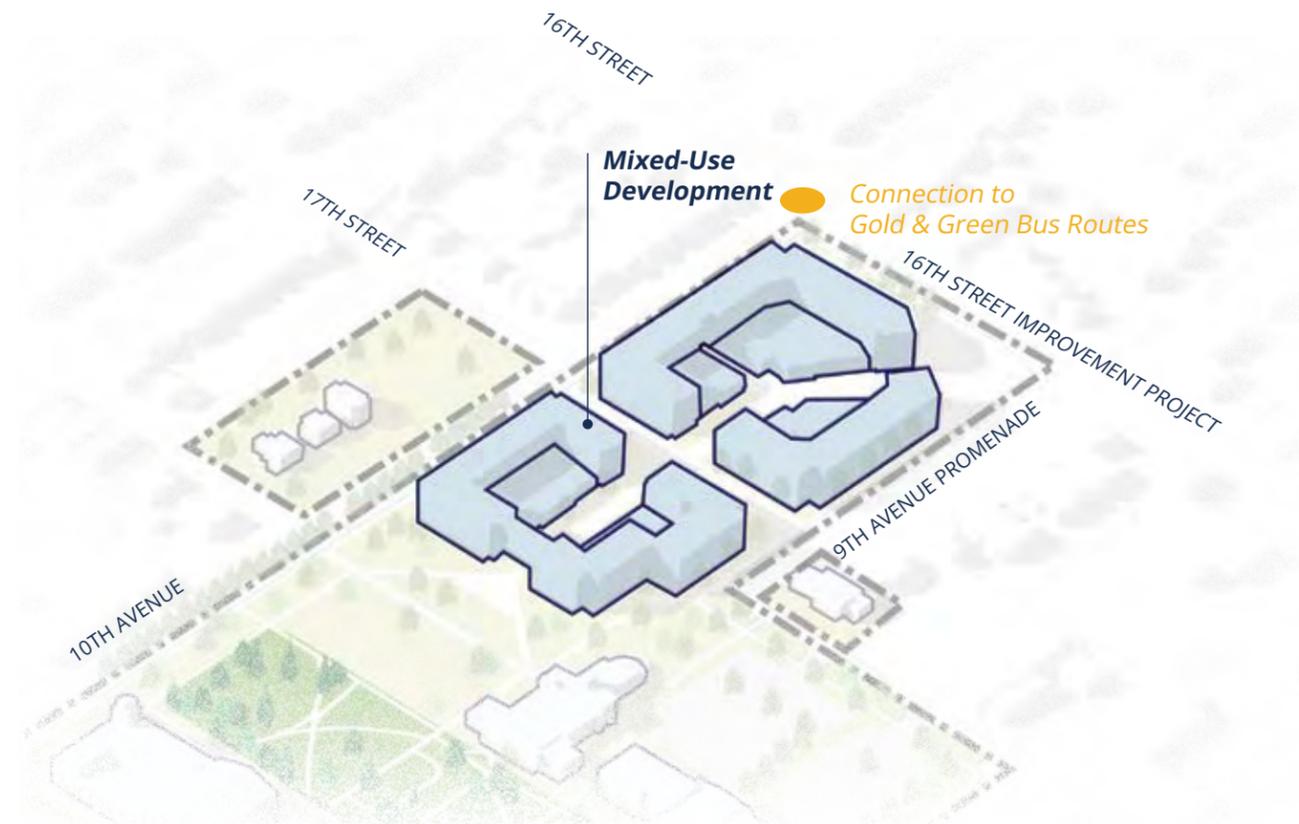
Alternative Scenario

Renovate Harrison Hall to add air conditioning and other student life related upgrades.

TURNER AND LAWRENSON HALL

Complete or partial renovation of existing buildings.

Central Campus Redevelopment



FRASIER HALL REMOVAL

After the Schools of Theatre Arts & Dance and Music and Skinner Library have relocated to West Campus, Frasier Hall may be removed.

The site offers an opportunity to redefine the campus edge with a thoughtful approach to redevelopment. Ideally, this project would define the campus edge and strengthen the relationship between campus and downtown.

Other mobility improvements could include connecting the Campus Paseo with proposed 9th Avenue Promenade (Downtown 2023 The Path Forward Plan) and extending the street grid at 17th Street.

MIXED-USE DEVELOPMENT

The diagram above shows a speculative, potentially phased, development. The 5-acre site roughly north of Carter Hall, in between 10th and 9th Avenues could feasibly redefine the northern edge of Central Campus.

The site sits at the confluence of numerous improvement projects, including Greeley's transit routes that provide access to-and-from Downtown Greeley, the GET Transit Center, and Greeley Mall.

Other Recommended Projects

CAMPUS SAFETY FACILITY

A new 10,000 GSF facility should be centrally located between the Central and West Campuses. It provides efficient vehicular access. At the new site, a surface lot will be required to store fleet vehicles.

Any displacement of existing parking spaces should be considered as well as adequate infrastructure and visibility.

CHILDCARE CENTER

A new 4,000 GSF facility should be located at the edge of campus, ideally on West Campus, and have safe vehicular access for convenient drop-off and pick-up. Multiple, age appropriate playgrounds are required.

CENTRAL CAMPUS RECREATION OUTPOST

With the reinstatement of dining at Tobey-Kendel Hall, a rebalancing of student life amenities should also include a presence of recreation on Central Campus in a dedicated flexible space. The recreation program could include the following elements:

- Dedicated martial arts room
- Indoor cycling studio
- Functional training space
- Improved indoor climbing / bouldering wall
- Outdoor courts: basketball, volleyball, pickleball
- Outdoor training court
- Recreation services in Central Campus

UNC LOVELAND AT CENTERRA

The UNC Loveland Center at Centerra provides convenience from I-25 and US Highway 34 and is located approximately 30 minutes west of the Main Campus in Greeley along the Front Range. The facility currently contains classrooms and amenities intended for Extended Campus students.

Maintaining a presence in this location will enable opportunities to imagine future collaborations for intellectual and operational collaboration between extension programs, the rest of the campus, and the broader region.

CENTER FOR URBAN EDUCATION

The Center for Urban Education is located at UNC's Denver Center at Lowry. It provides space for early childhood, elementary, and special education programs. Currently, alternative locations are being explored within the Denver Metro Area to better accommodate students, particularly those who may be traveling between campuses.

SMITHGROUP



UNC

Facilities Comprehensive Plan

Campus Vision

SPRING 2024



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The University of Northern Colorado sits upon the traditional territories of the Ute, Cheyenne, Arapaho, and Lakota peoples. Further, we acknowledge that 48 tribes are historically tied to the state of Colorado.

PART 1

Campus Vision

- **Letter from the President**
- **Strategic Plan Integration**
- **Guiding Principles**
- **Future Framework**
- **Recommended Projects**

Letter from the President

This Facilities Comprehensive Plan places students first at its core. Our priority is to ensure that our campus is transformative, engaging, and enriching. With this student-first focus, we developed a pathway that addresses the needs and evolving landscape of higher education.

Together, we will shape a campus that reflects UNC's aspirations and values by creating an inclusive and supportive environment that fosters personal and academic growth. We understand that the university experience extends far beyond the classroom, which is why we are planning dedicated resources to enhance our facilities to enable collaboration, improve learning environments, and foster a sense of belonging.

The Facilities Comprehensive Plan prioritizes sustainability and environmental consciousness, as we recognize the importance of promoting a resilient future. From implementing energy-efficient

infrastructure and sustainable facilities to expanding the use of native landscapes throughout open spaces to encouraging improved campus and town relations, we aim to create a campus that inspires intellectual growth and nurtures a sense of responsibility towards our campus community, the region, and our planet.

Our collective vision embodies our unwavering commitment to UNC's campus community that enables what it means to be in Bear Country. Investing in our overall well-being will empower UNC to thrive academically, socially, and personally.



Andy Feinstein

President

University of Northern Colorado

We embrace difference, bring together people with a diversity of ideas and experiences, adapt to the evolving needs of our students.



UNC students are diverse and hard-working, and there is no one "label" that defines them.

Strategic Plan Integration

The Facilities Comprehensive Plan creates a holistic approach for campus development over the next decade and provides a roadmap for future expansion and evolution, enabling the campus to respond to changing university needs while maintaining a dynamic vision and a thriving UNC campus.

PURPOSE

Relation to Strategic Plan

UNC launched the ten-year Strategic Plan, Rowing, Not Drifting 2030, at the beginning of 2020. The plan is organized around five vision elements and articulates a shared vision for UNC's future.

Both Rowing, Not Drifting 2030 and the Facilities Comprehensive Plan are living documents. Both documents are intended to work together to establish a broad foundation for UNC to guide key actions and tactics over the next ten years, ensuring institutional alignment at all levels of the organization.

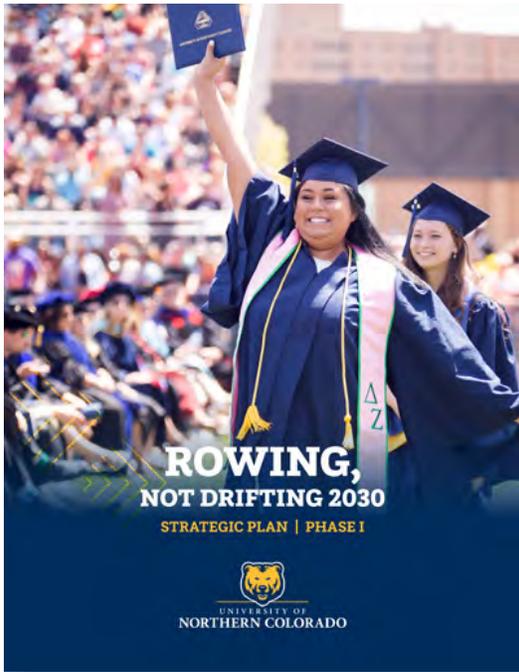
Physical space on campus must be viewed and managed as a strategic resource to the desired goals laid out in this plan. Today, the use and allocation of space influences UNC's ability to deliver instruction for students, recruitment and retention, and provide functional workspaces throughout the campus.

Students First Plan

UNC is committed to being a Students First institution focused on all aspects of our student success. This along with a focus on strategic enrollment management, has yielded an emerging need to increase UNC's coordination and efficient use of existing space throughout the campus.

As a Students First institution, UNC makes intentional decisions to meet the needs of our students. UNC has undertaken many planning efforts related to the academic and social success of our students while improving the physical environment to ensure a first-rate experience.

To provide a comprehensive student experience, the university should align the organization around student needs and emphasize preparedness for students.



Rowing, Not Drifting 2030



Facilities Comprehensive Plan

Guiding Principles

The Guiding Principles were developed and approved by campus leadership to inform decisions about capital improvement and development investments. While the plan will inevitably evolve over time, the principles will remain constant and should be considered within the larger vision.



Promote a Students First Plan

- Promote a sense of belonging and a welcoming environment to students from all backgrounds, especially the emerging Hispanic and first-generation student populations.
- Improve access to student resources and services.
- Promote a better sense of security and wellbeing.
- Provide an engaging and comfortable on-campus residential experience.
- Deliver an affordable education and on-campus experience.



Enhance Learning Environments

- Promote collaboration among the academic disciplines.
- Renovate to create more collaboration and social spaces for students, faculty, and staff.
- Renovate to create quality teaching and learning spaces that are dynamic and flexible.
- Provide facilities for new and expanding academic programs.
- Provide facilities that support recruitment and retention.



Connect Campus

- Enhance programmatic, visual, and physical campus connections.
- Prioritize pedestrian mobility and non-vehicular mobility options.
- Promote a park-once commuter experience.



Promote a Resilient & Sustainable Campus

- Optimize and promote efficient use of facilities, utilities, and natural resources.
- Foster education and innovation in sustainability for the campus and the community.
- Develop integrated systems to measure and monitor progress.



Strengthen Campus Identity

- Enhance the university presence in the Greeley community
- Encourage the economic redevelopment of the University District.
- Reinforce the UNC brand for all campus users and visitors.
- Promote campus cultural heritage.

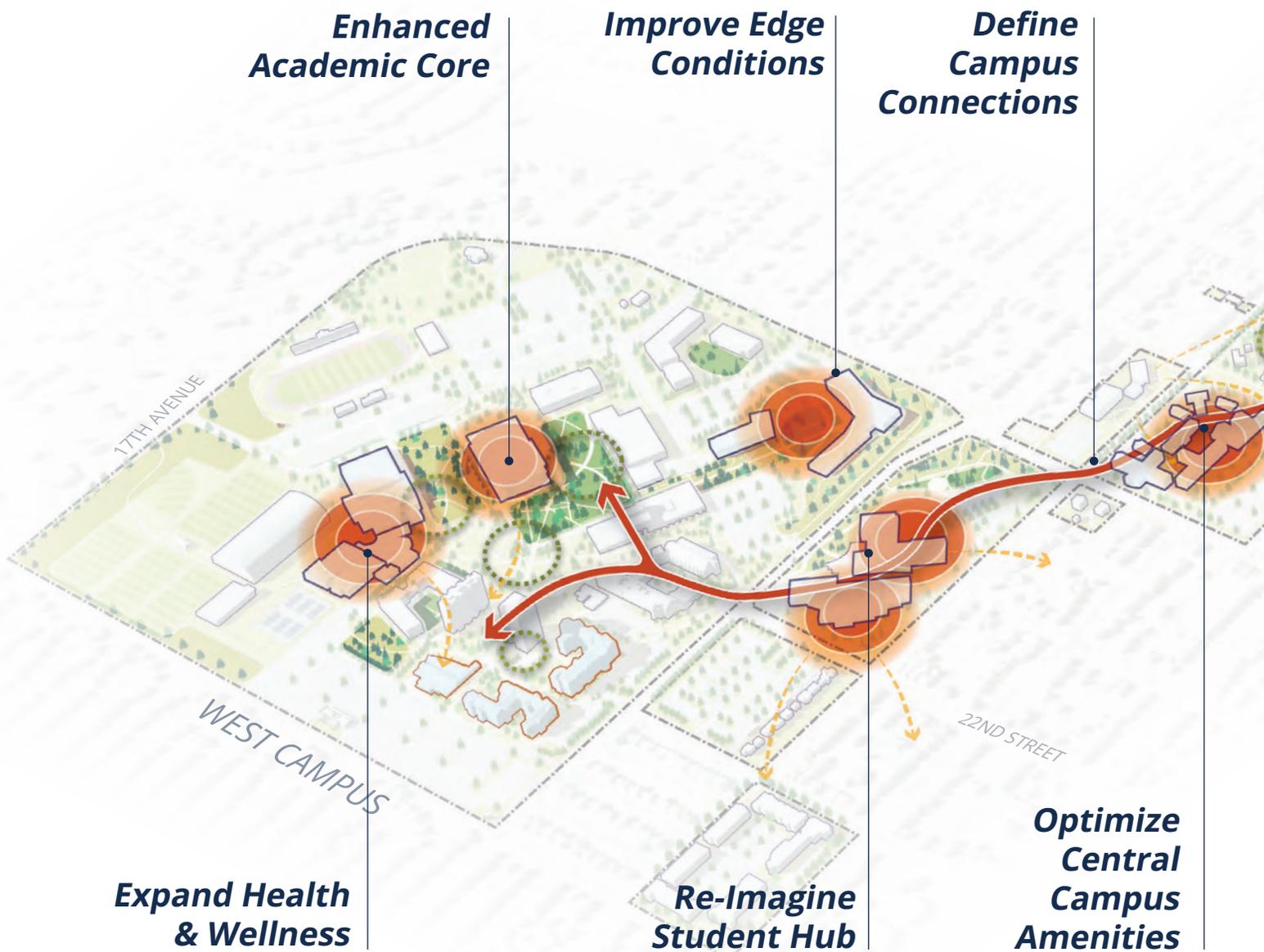


Right-Size the Campus

- Modify existing space for anticipated enrollment
- Prioritize projects with the highest returns on investment (capital, community, and enrollment).
- Enhance operations efficiencies and address deferred maintenance.
- Pursue partnerships for project implementation.

Future Framework

The physical framework establishes key priorities that will help determine appropriate strategies to engage students, promote inclusivity, celebrate high-quality learning environments, and create a vibrant destination that strategically aligns academic, administrative, research, and student life functions across UNC's campus.





Connect With Community

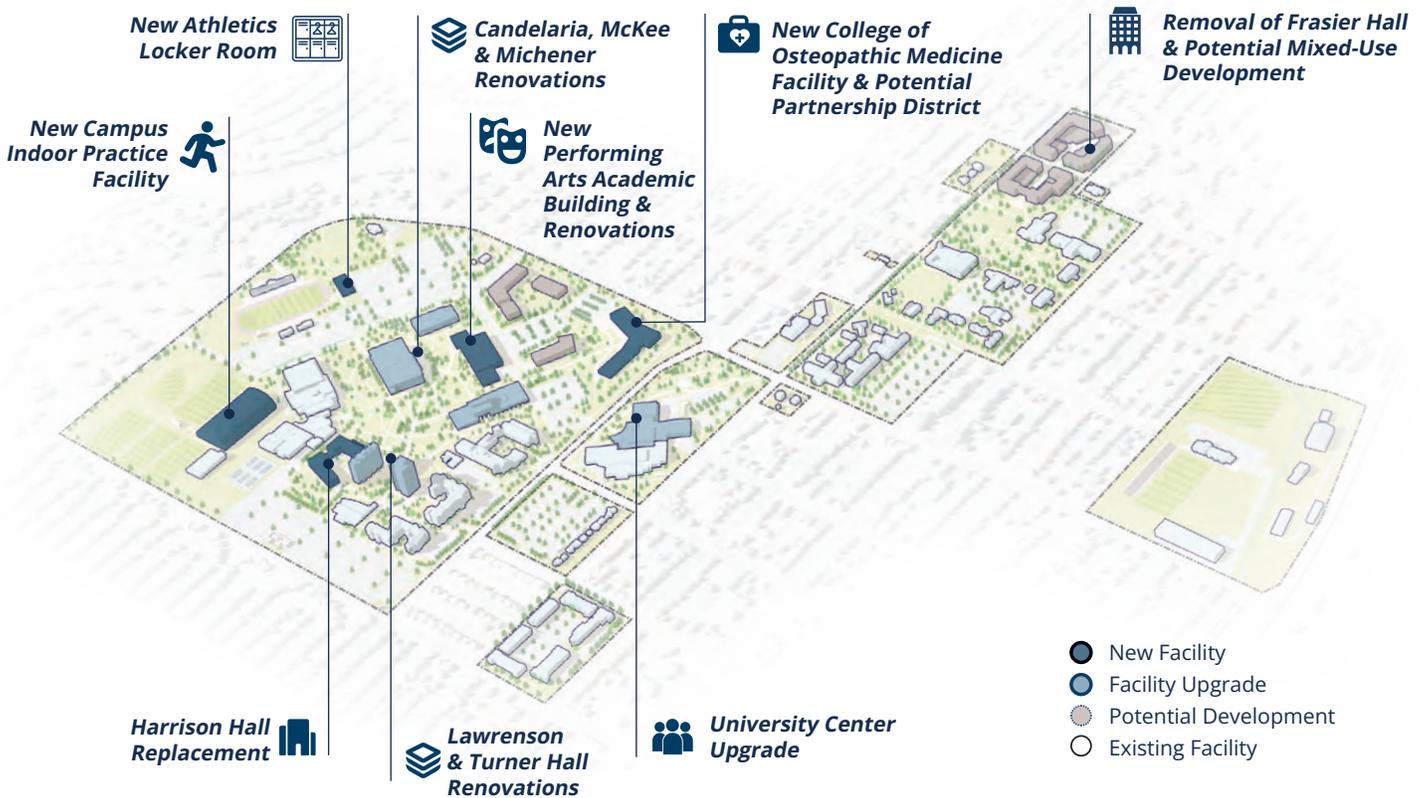
- Campus Paseo
- Major Node
- Secondary Node

By proposing strategic renovations, new facilities, and repurposing and enhancing existing academic and open spaces across campus, UNC will position itself for success over the next decade.

The Future Framework is comprised of the following elements:

- FACILITIES**
- OPEN SPACE**
- STUDENT LIFE**
- SUSTAINABILITY**

Facilities Framework



UNC contains nearly two million assignable square feet of space across all categories, featuring a mix of modern and historic spaces across campus. However, it contains a number of aging and vacant facilities that detract from the overall experience.

New construction focuses on creating dynamic interdisciplinary, multi-purpose, flexible facilities to replace aging single purpose buildings. Initiatives also include reimagining the student life experience, providing improved one-stop experience, and a focus on health and wellness. Renovation strategies focus on improving energy efficiency and reliability across campus, while also providing improved pedagogy.

- Several facilities have been identified for significant renovation. These projects should include substantial upgrades and/or replacement of existing systems and spaces.
- New facilities accommodate planned academic programs, major space adequacy issues, and other programmatic deficits.
- Potential developments are long-term speculative areas where future development could occur.

Open Space Framework

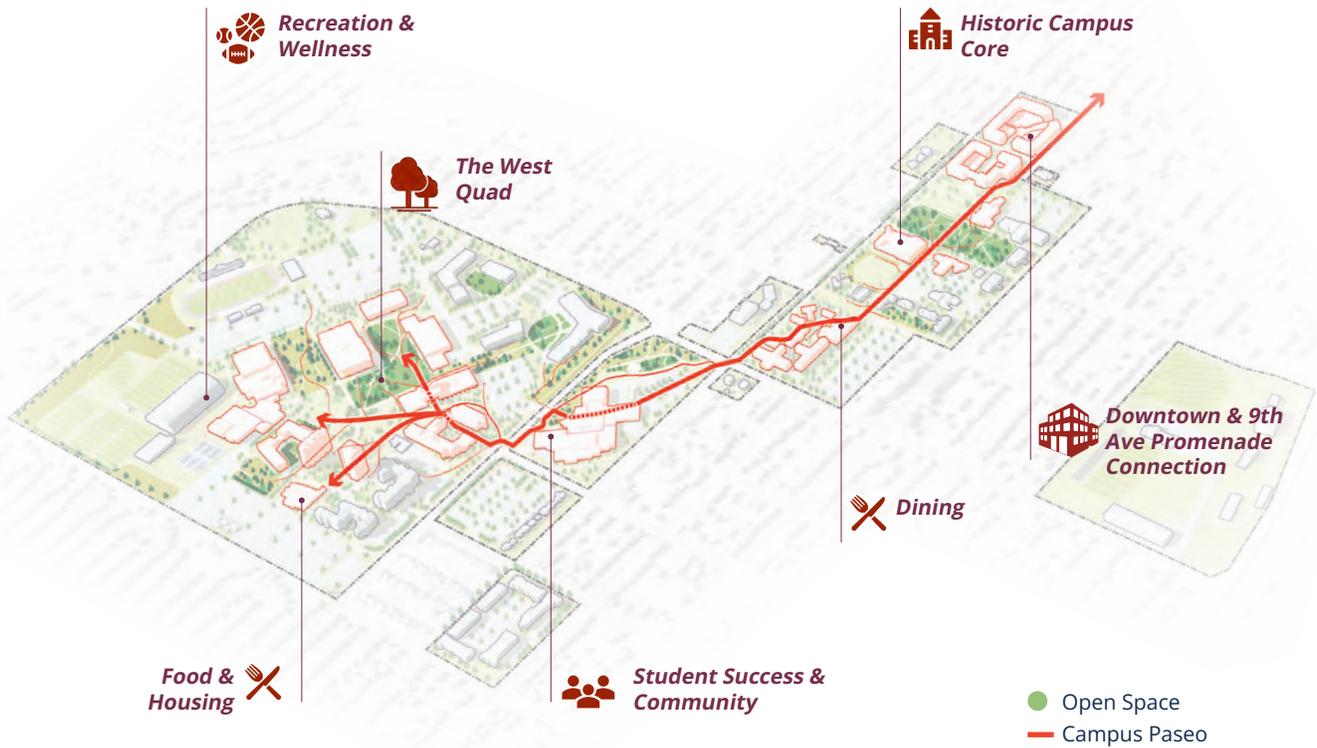


The plan leverages UNC’s picturesque setting by celebrating the traditional campus landscape, while the framework integrates a diverse set of open space typologies to encourage collaboration, socializing, and connectivity between campuses.

Cultural elements will be embedded within the existing and proposed new spaces as a way to connect in the broader campus community.

- Open space types should work together as part of a larger open space system that supports a robust variety of passive and active uses, creates well-understood and safe pedestrian movement, logically connects desire lines to and between destination points.
- Open space types should have gathering spaces of varying sizes, and the campuses should be unified by a cohesive landscape.
- Design of these spaces should consider the neighborhood context, unique features adjacent to the project site, local climate and conservation of water resources.
- Future projects should consider and be integrated with the open space framework and seek to include open space strategies as identified.

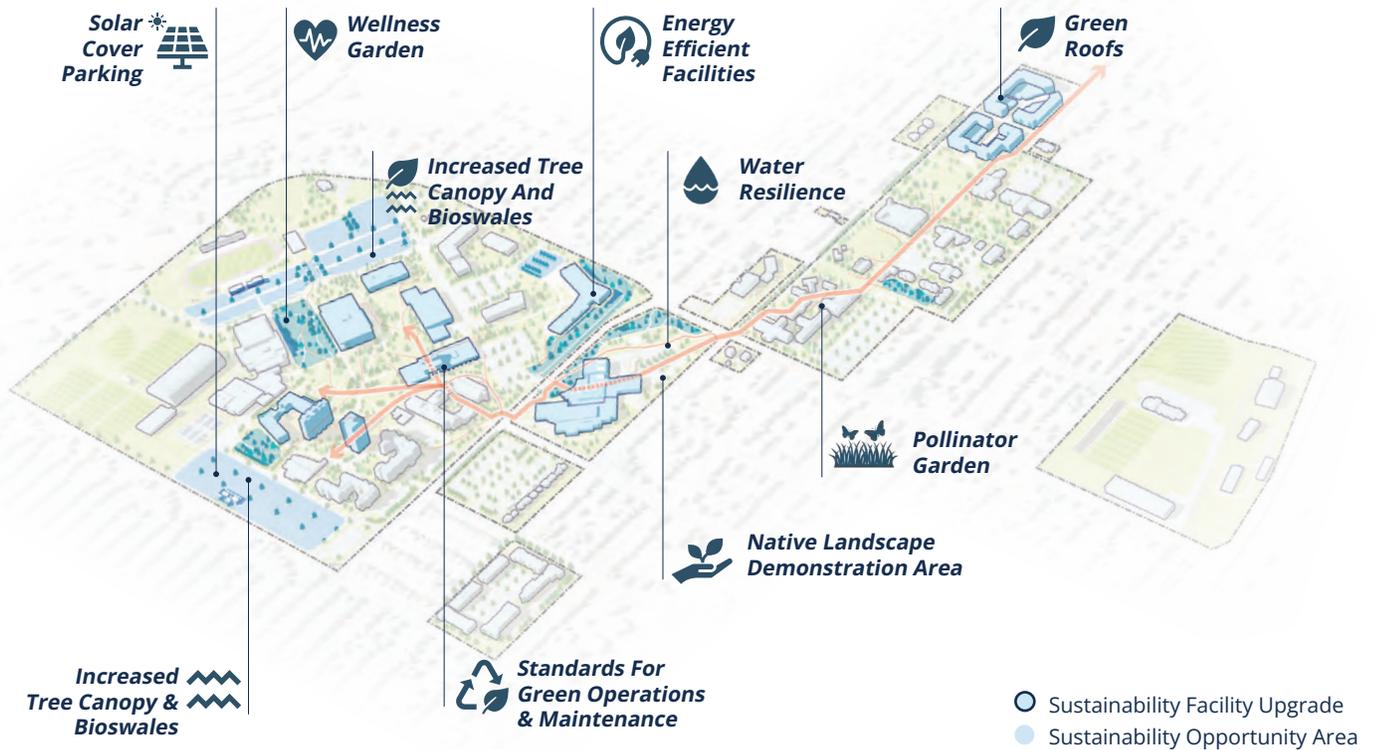
Student Life Framework



The plan reimagines the Student Life experience by proposing new student-centered spaces, upgrades to housing, reinstating dining facilities, and creating a common thread that celebrates the diversity of student body across campus. All these initiatives, together, will help to nurture a stronger sense of community.

- The Campus Commons is envisioned to restore vibrancy with expanded dining, increased study spaces, and an expanded University Center entry opening onto the plaza.
- The residential neighborhood on West Campus is reinvented and includes several social gathering spaces and a dining facility.
- Reopening Tobey-Kendel Dining Hall along with a small recreational outpost facility will enhance the Central Campus student experience.
- The Paseo connects several student-life facilities and will create a safer environment for pedestrians and cyclists.

Sustainability Framework



UNC is committed to sustainable design and construction that creates lasting value for the campus community and region while also serving as a model of environmental, social and financial leadership. The university's sustainability commitments ensure the highest quality of stewardship, adaptability for future growth and well-being of the campus community.

- Reduce the university's environmental impact. All campus projects should include sustainability goals that protect and enhance ecosystems for current and future generations.
- Be a model of innovative sustainability in the local and global community.

Recommended Projects

Recommended projects serve as actions within the plan, designed to address short and long-term solutions. Implementing these projects will create positive transformation on campus.

Throughout the Facilities Comprehensive Planning process, several areas of campus were prioritized for upgrades and improvements. This plan is a living document that should be periodically examined and updated as UNC continues to evolve.

Aside from many of UNC's facilities, outdoor spaces, and amenities being scattered and disconnected, there is still a deficit of quality social spaces.

Today, the Facilities Comprehensive Plan comes at an important time in UNC's history. It reflects the vision, mission, and values of the institution and the goals and objectives of a multitude of university stakeholders. It represents a unifying vision that aligns UNC's academic mission, strategic plan, and physical development goals into a single document that helps guide the future direction of the campus.

- 1 New College of Osteopathic Medicine & Partnership District
- 2 New Performing Arts Academic Building
- 3 University Center Upgrade
- 4 New Campus Indoor Practice Facility
- 5 New Athletics Locker Room
- 6 Harrison Hall Replacement
- 7 Lawrenson & Turner Hall Renovations
- 8 Potential Mixed-Use Development
- 9 Candelaria Hall Renovation
- 10 McKee Hall Renovation
- 11 Michener Library Renovation
- 12 Campus Paseo
- 13 Crabbe Hall Renovation
- 14 Wellness Garden
- 15 Campus Quad

NOTES:

1. Campus Safety and Childcare Center facilities remain a need and shall be located on-or-near campus. Locations will be determined upon further study.
2. Ongoing maintenance to be applied to all campus facilities.
3. No major planned projects are recommended for East Campus, Loveland Centerra, and Denver locations.

CENTRAL CAMPUS



WEST CAMPUS

- New/Replaced Facility
- Facility Upgrade
- Potential Development
- Existing Facility
- Campus Paseo





College of Osteopathic Medicine & Partnership District

The new College of Osteopathic Medicine replaces Bishop-Lehr Hall which has been vacant since 2002 and sits on a prominent location at the intersection of 20th Street and 11th Avenue.

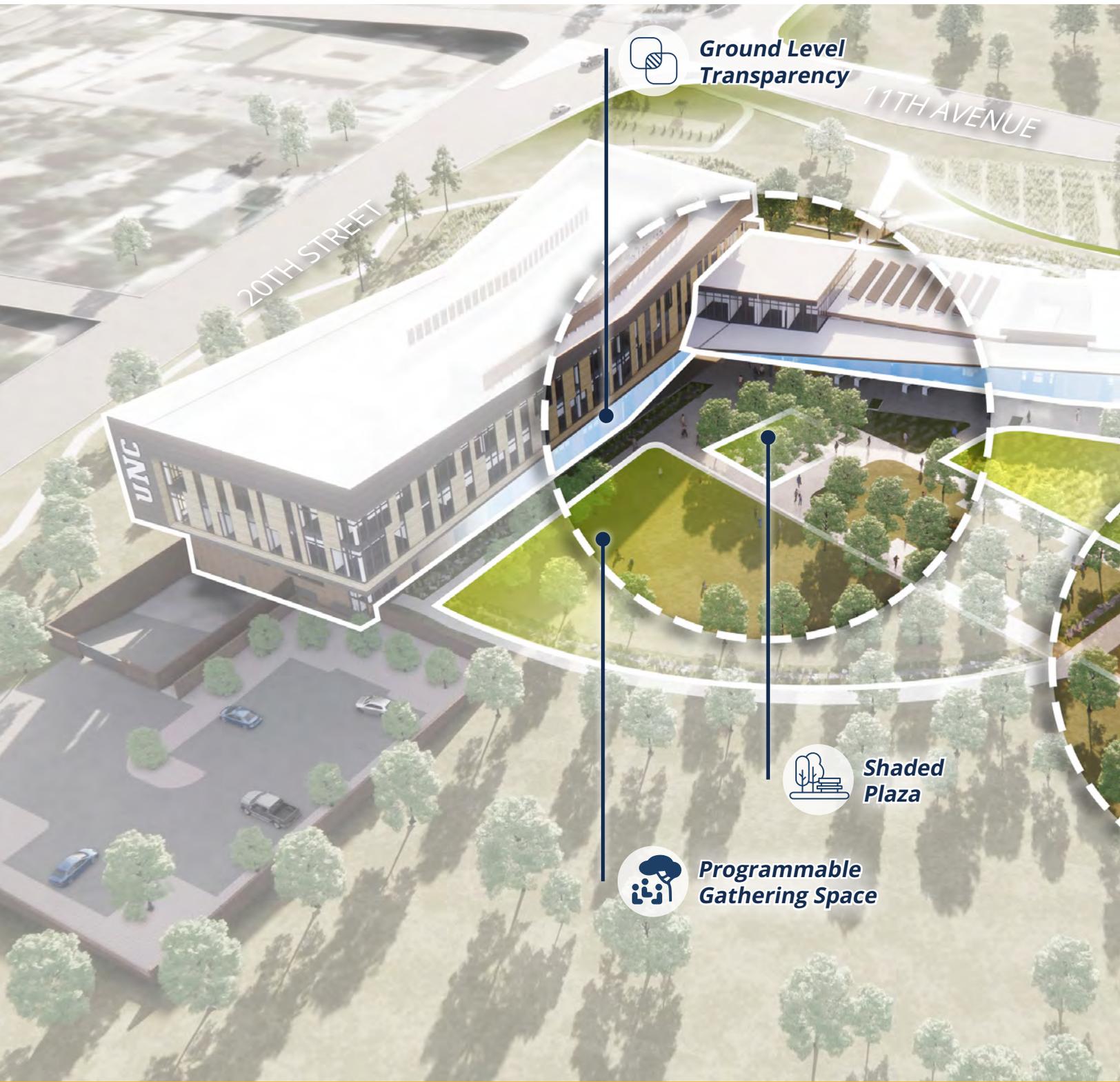
The new 100,000 GSF facility creates a memorable gateway to West Campus and activates the edge of campus.



Existing Conditions



View Location



**Ground Level
Transparency**



**Shaded
Plaza**



**Programmable
Gathering Space**



Site Amenities

A new pedestrian promenade connects the College of Osteopathic Medicine with the core of West Campus and includes a new plaza area as a gathering space near the main entrance and campus trail on the perimeter of the site.

A transparent ground level aids in the experience and promotes exploration and a sense of connection with the rest of campus.

Program

UNC developed the Program Plan supported by SmithGroup and Dekker Perich Sabatini. The project intent is to increase the supply of primary care physicians to serve the State, leverage synergies among existing Health Sciences programs to enhance the osteopathic medicine curriculum, and to improve the health status of citizens in Northern Colorado and the region.

Partnership District

A designated 9-acre area on the existing recreation fields allows for future expansion of allied programming related to the College of Osteopathic Medicine.

Partnerships could include leased buildings and additional academic facilities that enable an ecosystem of active learning and research. Future program and space needs will be determined at a later time.

Campus Paseo

West Campus

The Campus Paseo connects people to places and leverages UNC cultural heritage as a series of motifs throughout the campuses. This centralized campus spine provides safe pedestrian and multi-modal access while enabling a heightened sense of community that promotes interactive, artistic, and educational elements throughout.

The Paseo should be seen as an accessible campus link that can also serve as a wayfinding system, promote and showcase student work, communicate campus activities and resources.



Existing Conditions University Center View



University Center View

View Location

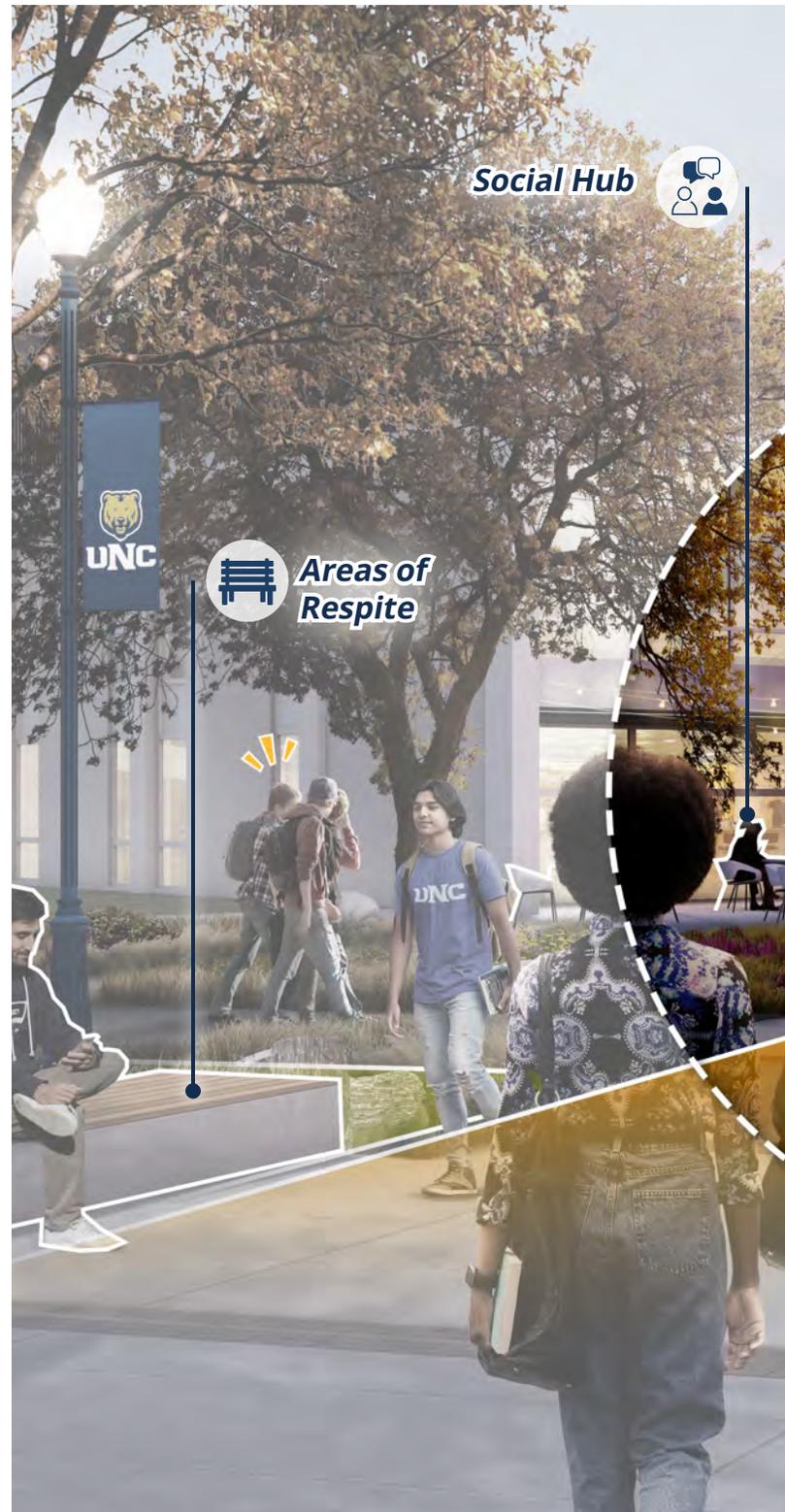




Program

The Paseo prioritizes pedestrians and creates an active social environment for students as a linear connector of Central Campus and West Campus. Newly activated first floor spaces (or program) at the University Center will provide re-energized social spaces that integrate or connect interior and exterior spaces. The Paseo continues as an interior pathway through the University Center as a vibrant space and the center of activity for campus.

The University Center and Campus Commons is the starting point for many who experience UNC's campus for the first time. Existing conditions are described as dark, cold, and uninviting. Creating a distinct and identifiable landmark is vital to engaging campus locations. The new University Center landmark shown here creates a focal point that improves the entrance experience and provides expanded plaza space enabling what's typical a heavily used pedestrian path.



**Opportunity
for Student
Outreach**



**Entry as Focal
Landmark**



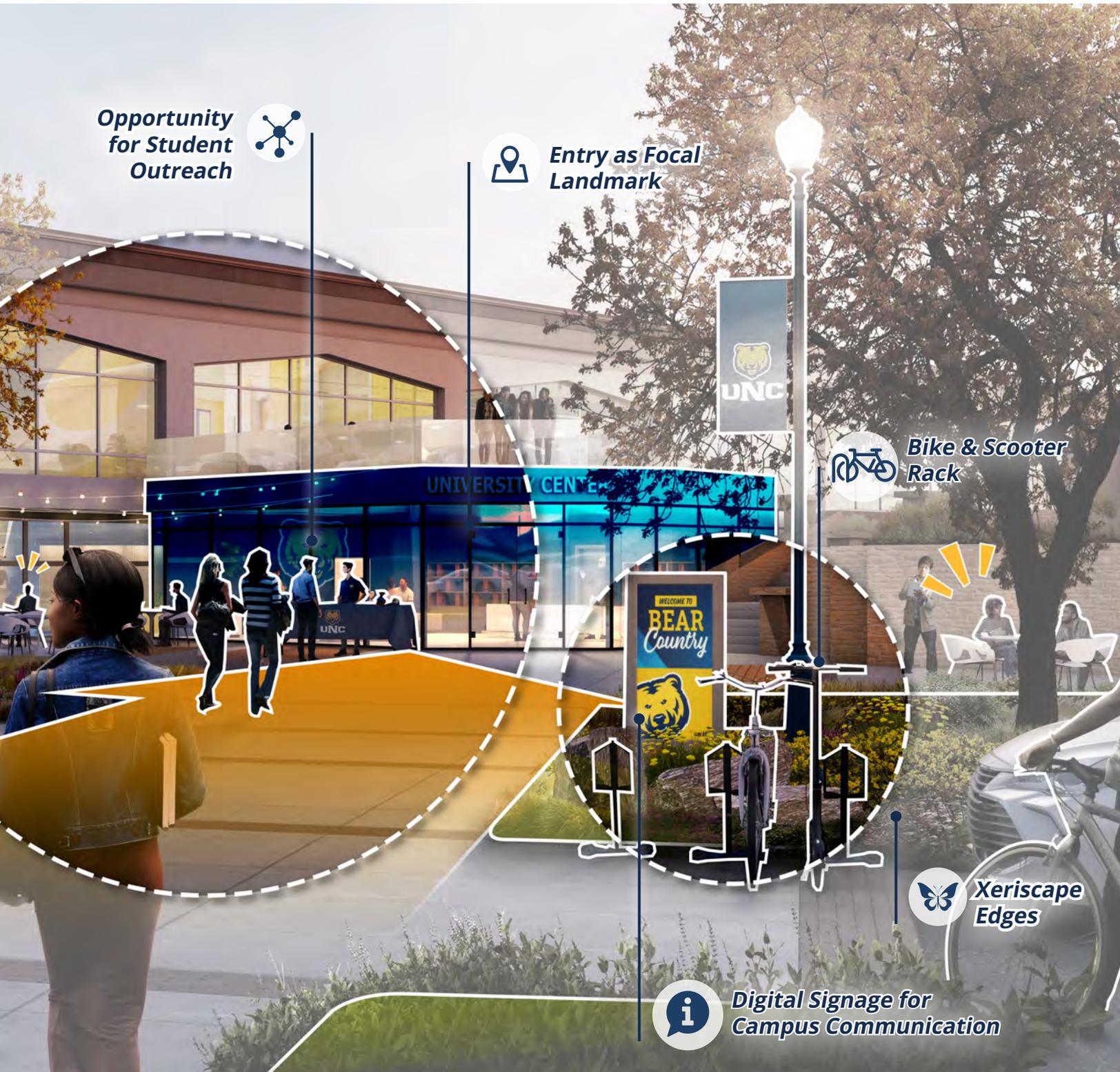
**Bike & Scooter
Rack**



**Xeriscape
Edges**



**Digital Signage for
Campus Communication**



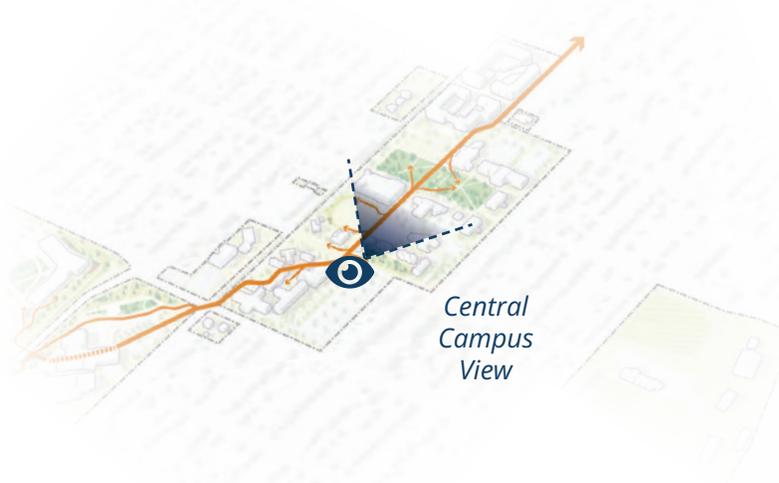
Campus Paseo

Central Campus

This concept of the Paseo addresses the desire for more amenities and expression of student identity throughout the campus while creating a safe, accessible, and engaging landscape feature that is distinguishable from other campus pathways. Consistent in materiality and character, the Paseo creates diverse outdoor gathering spaces that reflect the regional beauty and resiliency of Colorado while connecting students with each other and across campus.



Existing Conditions Central Campus View



Central
Campus
View



Program

On Central Campus, the interior courtyards of President's Row include an active and transparent mix of first floor uses and a variety of open space to encourage social interaction. Sustainable stormwater and renewable energy features are also incorporated into the design strategies for each courtyard.

The revived open space provides an opportunity to create a social hub on Central Campus while complementing nearby Gunter Green. A balance of hardscape and xeriscape enables a variety of activities off the paseo. This new outdoor hub is accessible and visible to all along throughout Central Campus.

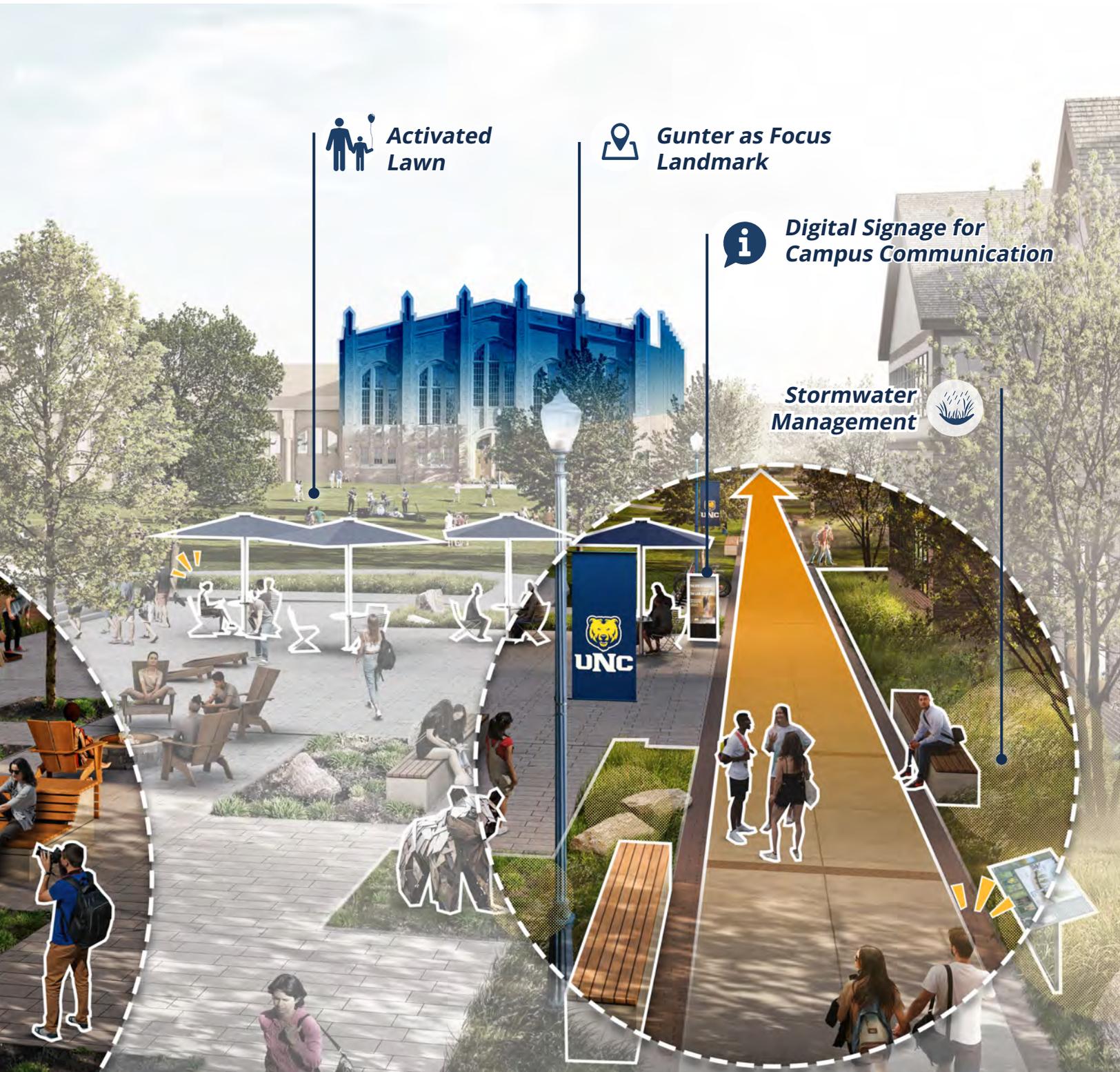


 **Activated
Lawn**

 **Gunter as Focus
Landmark**

 **Digital Signage for
Campus Communication**

**Stormwater
Management**



Paseo Character & Amenities

The Paseo is distinguishable from other campus pathways by its consistent aesthetic character and associated amenities. A set kit of parts for the Paseo ensures its ability to provide a safe, accessible, and engaging connection throughout campus while also providing the flexibility to complement the various spaces one encounters across West and Central Campus.

Kit of Parts

- Consistent hardscape patterning utilizing regional materials
- Shaded through tree canopies and/or shade structures where appropriate
- Xeriscape edges where appropriate to avoid irrigation of hardscape
- Accessible and shaded seating areas of various scales for respite and gathering
- Lighting and banners
- Waste and recycling receptacles
- Student display and communication features. Some examples include digital display panels and bulletin boards
- Focal points such as architecture, artistic expressions, and views



Image courtesy of SmithGroup

Areas of respite



Landmarks and visual focal points are highly encouraged

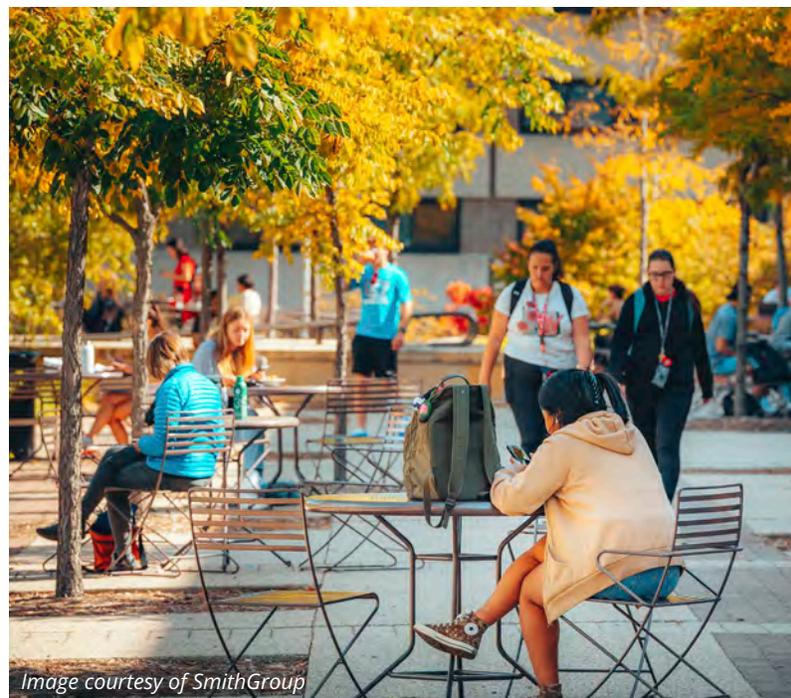
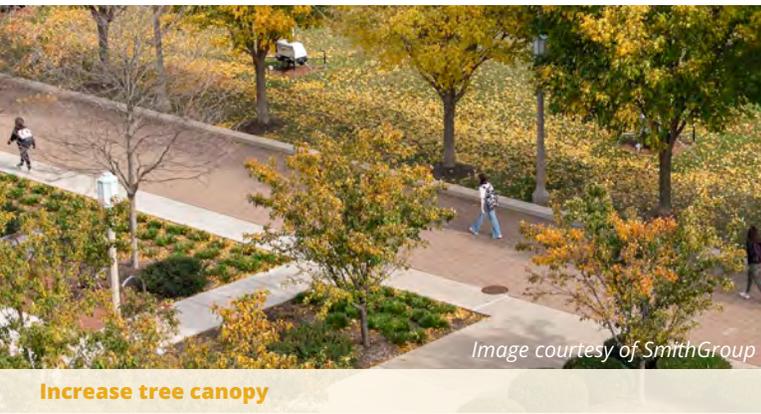
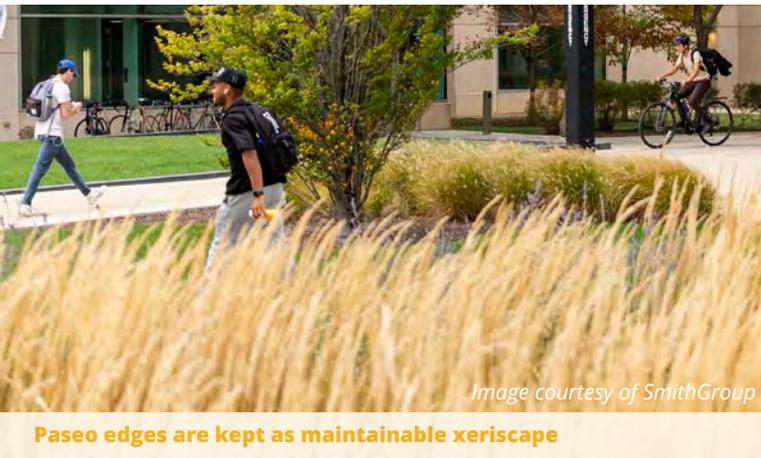


Image courtesy of SmithGroup

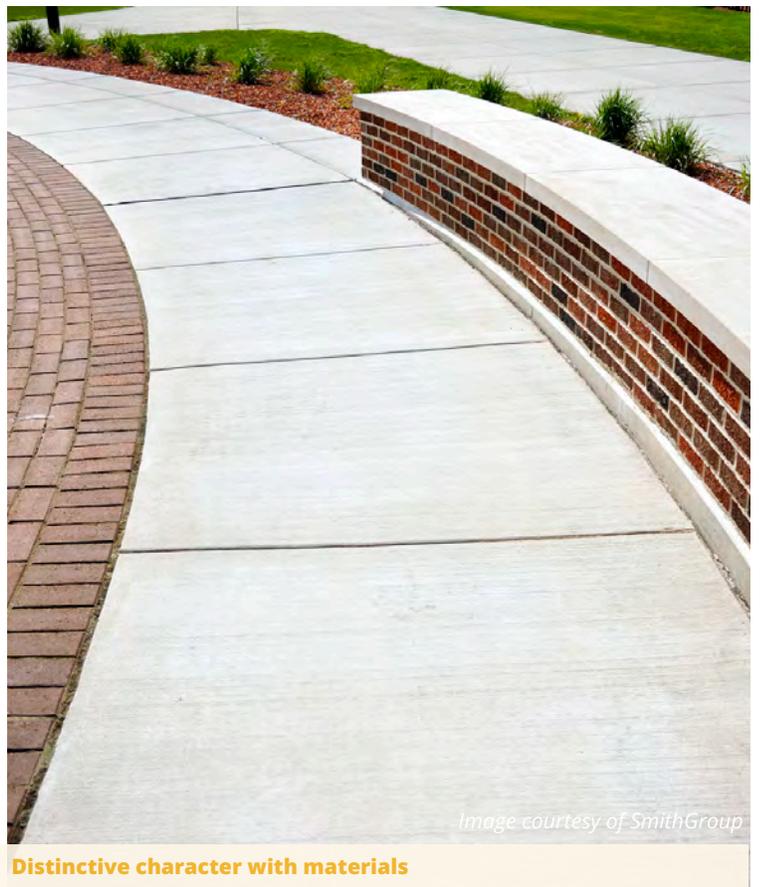
Active quadrangles and hubs along the Paseo



Increase tree canopy



Paseo edges are kept as maintainable xeriscape



Distinctive character with materials



Existing lighting and banners provide a sense of safety and identity and should be emphasized along the Paseo



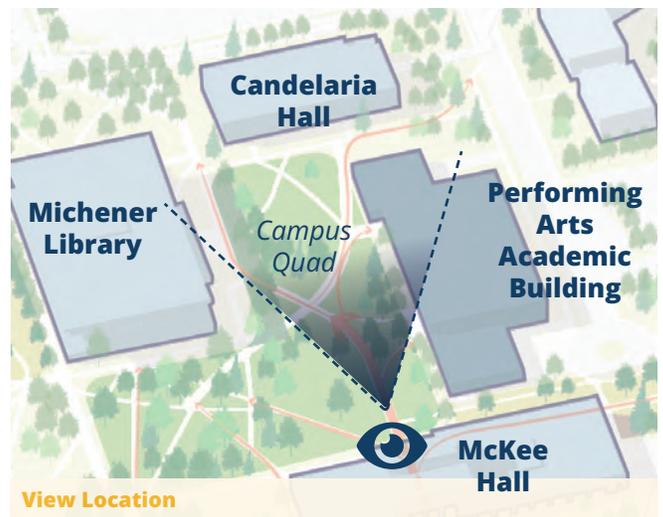


Performing Arts Academic Building & Campus Quad

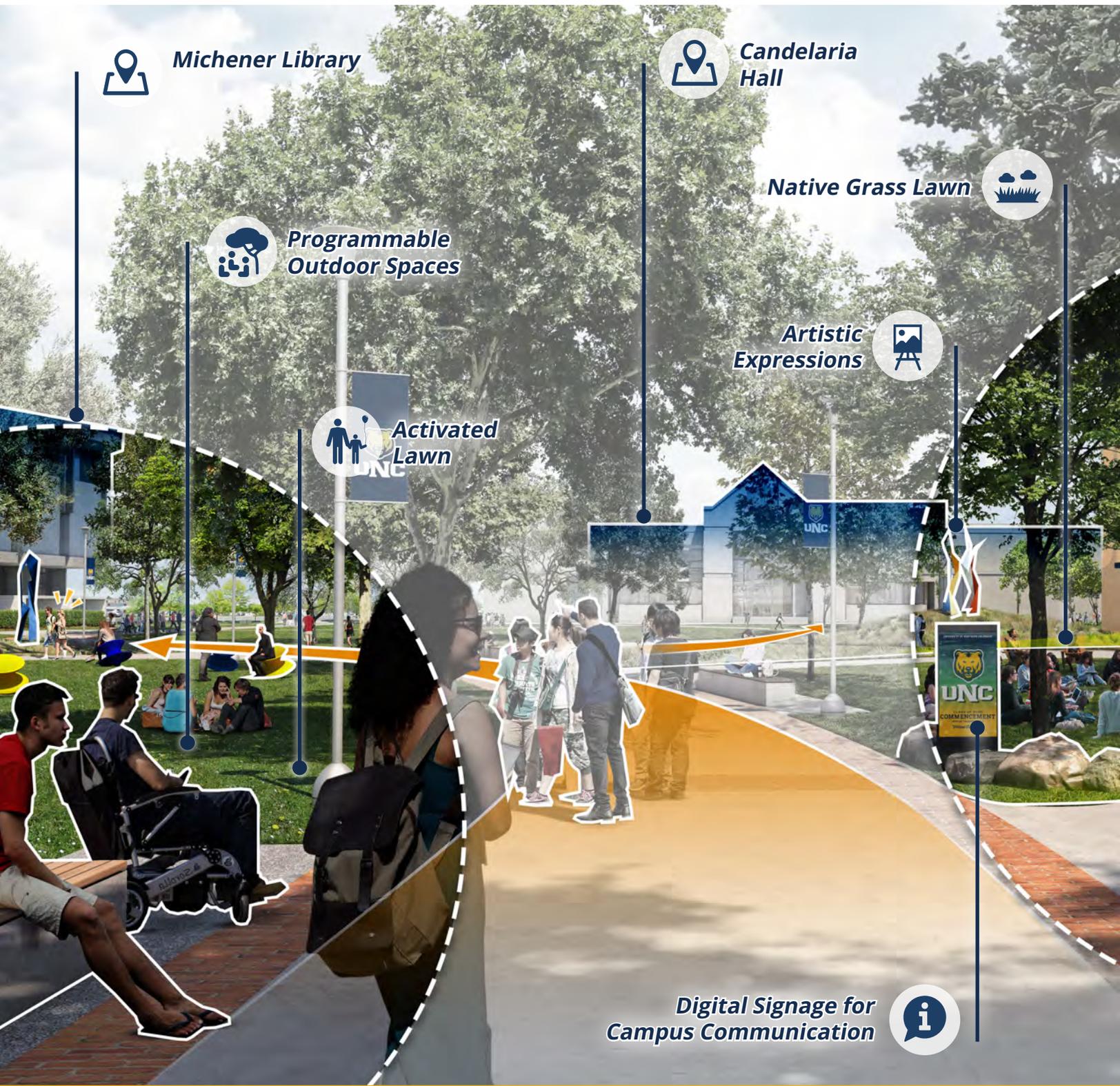
The future Performing Arts & Academic Building will be located adjacent to Michener Library, Candelaria Hall, and McKee Hall. This facility will define and enclose the existing Campus Quad. The Performing Arts Academic Building creates areas for seating along the lawn sections by introducing event spaces and flexible seating.



Existing Conditions



View Location



Michener Library



Candelaria Hall



Native Grass Lawn



Programmable Outdoor Spaces



Artistic Expressions



Activated Lawn



Digital Signage for Campus Communication



Program

The Performing Arts Academic Building 'right-sizes' the Schools of Theatre Arts & Dance and Music including Langworthy Theatre, Skinner Library, Kepner recital hall, and Norton Theatre in Gray Hall. Art & Design is anticipated to remain on Central Campus.

The facility as shown accommodates a 88,000 GSF program while accounting for additional circulation and support spaces for events typically seen in performing arts facilities with academic programming.

Depending on the type of performance spaces desired, the volume and proportions of the massing may change. The building massing will be driven by performance types, level of flexibility desired, sightlines, seating capacity, and rigging requirements.

The front of house faces the open space shared by Candelaria, Michener, and McKee. This includes a small patio area for events for outdoor classrooms or small events.

Access from 14th Ave and 20th Street could include a drop off area while updating circulation patterns that create accessible parking on the existing Surface Lot Y. These circulation patterns would also provide access for deliveries, as well as touring shows.

An alternative option would be renovate Frasier Hall, Music Technology, and the Skinner Music Library in place.



Image courtesy of SmithGroup

Balanced maintained lawn and native grasses



Image courtesy of SmithGroup

Various types of seating areas



View of The Quad in fall on West Campus facing Northwest



Image courtesy of SmithGroup

Allocate existing green space for flexible use

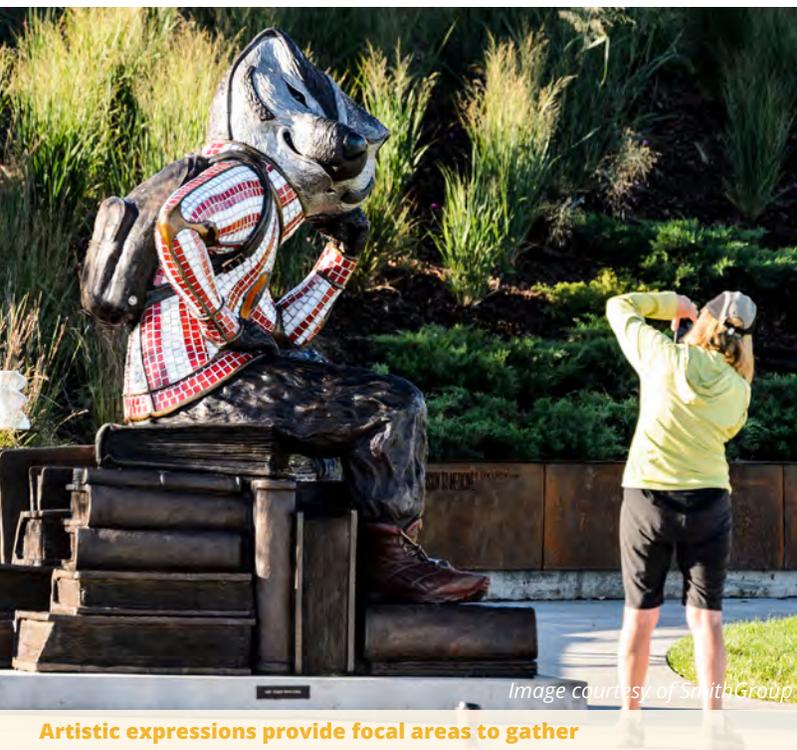


Image courtesy of SmithGroup

Artistic expressions provide focal areas to gather

Site Amenities

The School of Theatre Arts & Dance and Music relocate to the New Performing Arts Academic Building. This brings programs in closer proximity to essential program facilities such as the Campus Commons. Evening performances and events may utilize surface parking lots and create an active West Campus.

The central quad of West campus is already home to a picturesque landscape with a generous canopy that creates a comfortable setting to gather and bring learning outdoors. A current need for places to gather is met by introducing various types and scales of seating opportunities. Hammocks, Adirondack chairs, benches, and movable furnishings provide a mix of fixed and flexible seating arrangements to meet the various needs of students, staff, and faculty.

Large expanses of maintained turf lawn are preserved to provide a flexible open space while smaller fragments of turf are converted to native grasses to keep the visual feel of a large “campus green” while being mindful of water use and maintenance.

Taking inspiration from the mural at Candelaria, artistic expressions such as sculptures bring that artistic and colorful energy into the West Quad.

Power and cable passes should be provided and integrated into the site at designated points to allow for future activation of the spaces for performances, gatherings, and other events.

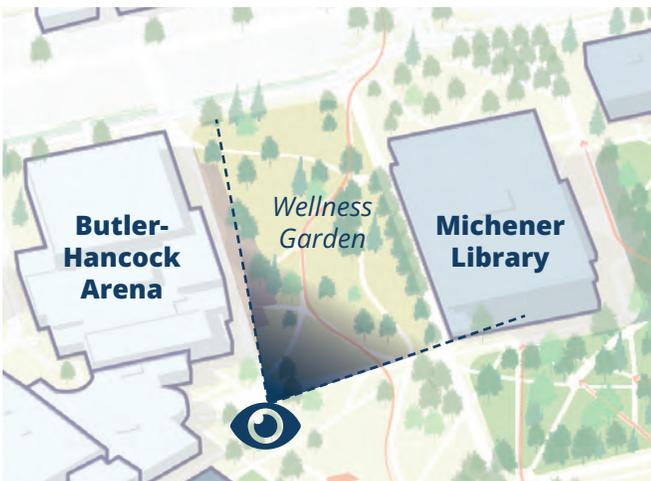
Wellness Garden

The Wellness Garden can become a place where the campus community connects with nature that reflect the unique location and identity of UNC.

The garden works within its existing context to provide a holistic approach to health and well-being and is nestled between Butler-Hancock/Recreation Center and Michener Library.



Existing Conditions



View Location





Program

Functioning as both an outdoor recreation space and an educational tool for the campus, opportunities to artistically integrate health, sustainability, and ecological awareness are encouraged.

By providing more diverse recreational activities, the space leverages existing topography to create features that add a naturalistic character to the space while carving out areas for passive recreation and active recreation.

Users have the ability to partake in activities such as walking, biking, wildlife observation, yoga, jogging trails, and fitness through outdoor exercise equipment. The calming environment of the Wellness Garden provides a new outdoor space typology that has the potential to bring learning to the outdoors for everyone.





Naturalized Channels as Amenity



Sustainability on Display



Unique Seating Areas



Xeriscape and Native Habitat



Character & Site Amenities

Wellness Garden provides the campus community with a unique space that addresses the need for more diverse health and fitness opportunities while developing an appreciation for the regional ecosystem. The site amenities in the space play an important role to ensure the social and recreational needs of the UNC campus are met.

The existing concrete channels are reimagined as a naturalized channel that highlights sustainable and restorative stormwater mitigation strategies while providing a maintainable habitat for the local ecosystem. Students, staff, and faculty are immersed in a picturesque setting that highlights the beauty of the local ecology and natural systems.

A variety of accessible, playful, and regionally sourced furnishings complement the calming environment and bring diverse options for users to seek out and make their own. As a campus that prioritizes sustainability, integrated opportunities to showcase and educate about sustainable infrastructure and ecological diversity are highly encouraged as an additional layer of the Wellness Garden.



Image courtesy of SmithGroup

Hub for active and passive recreation



Image courtesy of SmithGroup

Flexible gathering spaces that engage the outdoor environment



Image courtesy of SmithGroup

Naturalized channel creates unique moments throughout the garden.



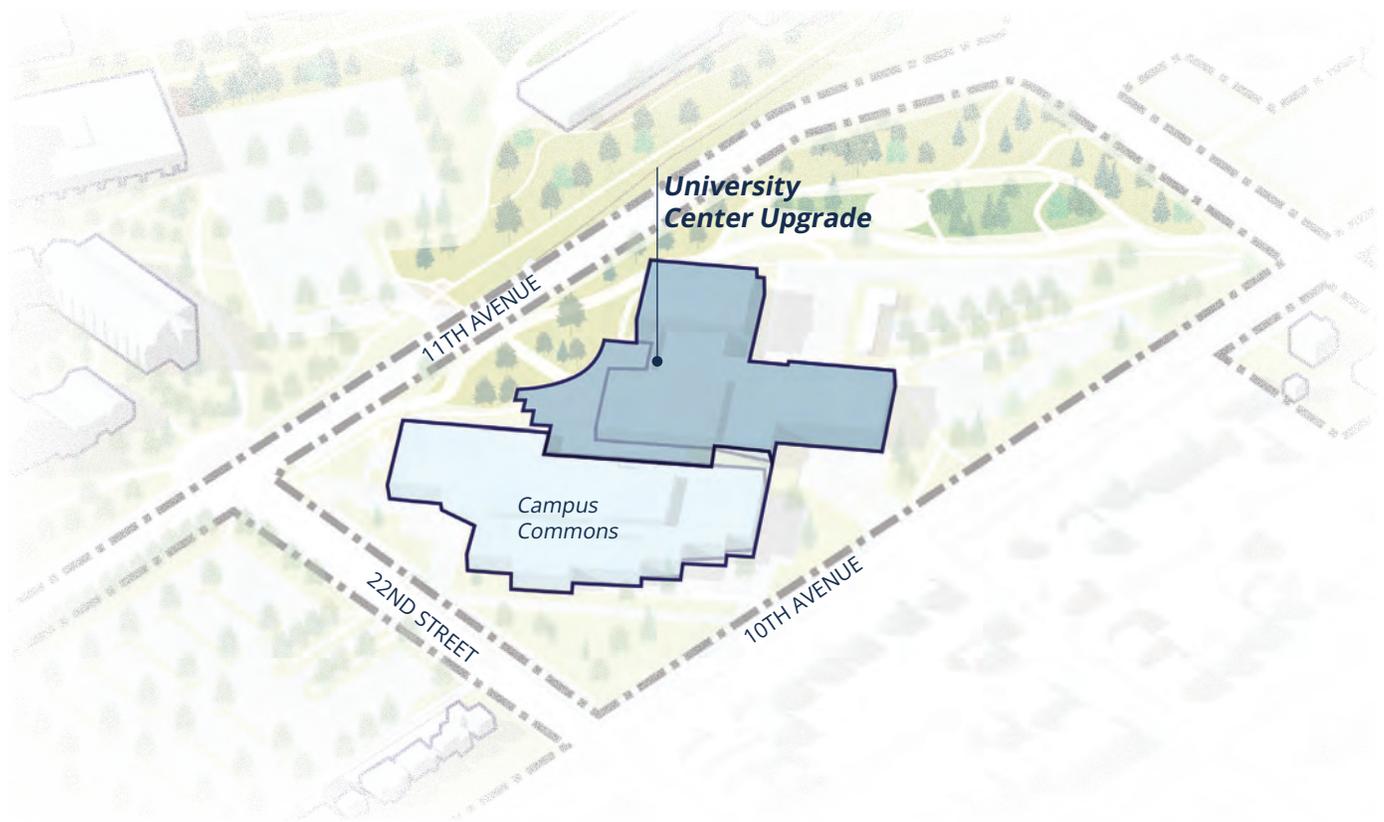
Activated gathering spaces at various times of day

Educational Signage



The Wellness Garden leverages the regional landscape and ecology to create a calming outdoor environment.

Student Services Upgrade



UNIVERSITY CENTER/CAMPUS COMMONS INTEGRATION

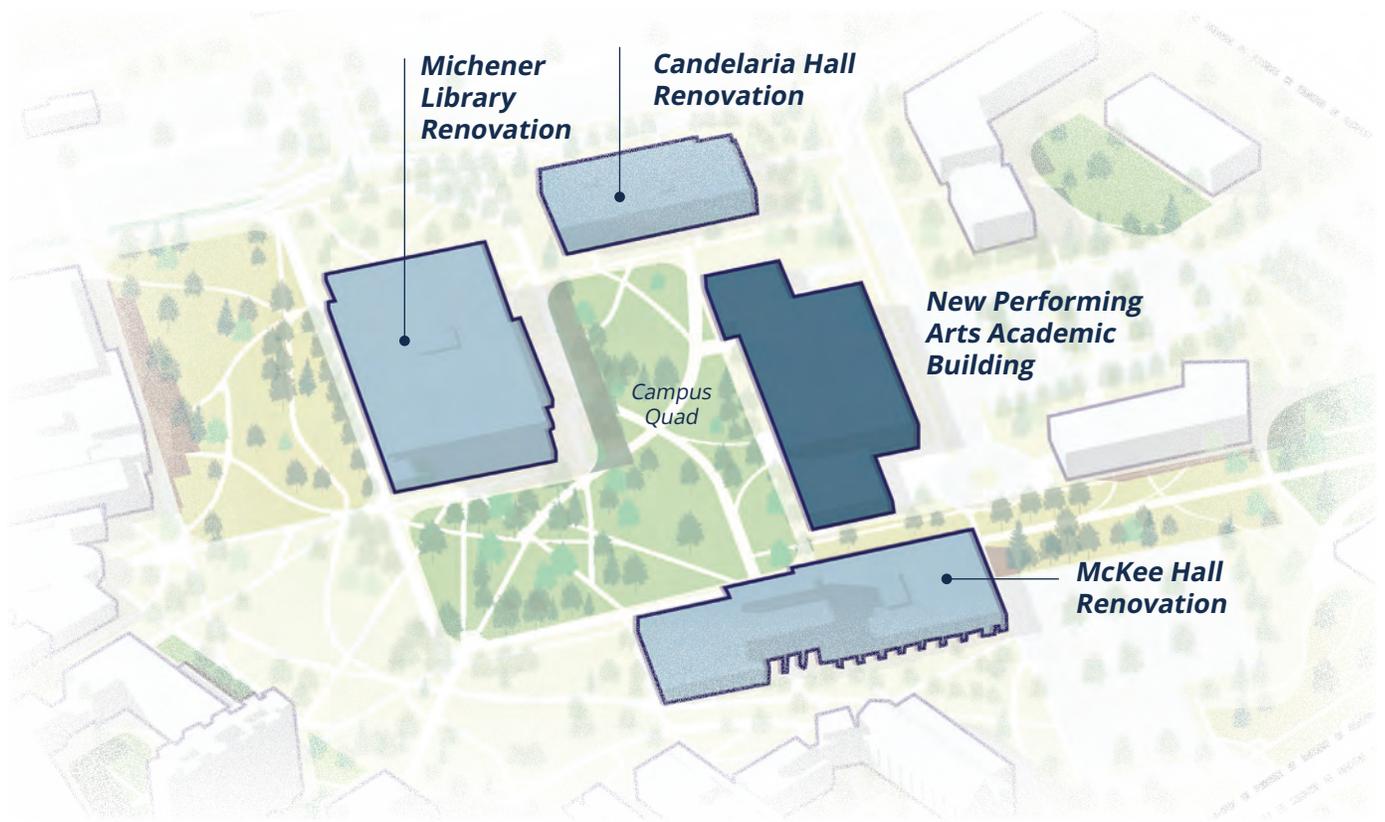
The University Center has been at the epicenter of student life at UNC while the Campus Commons provides state-of-the-art space for student services, performances, and events. The Campus Commons was completed in 2019 with the support of donors and alumni.

The need to improve the student services experience was expressed throughout the project. Improvements primarily to the University Center offers opportunities to repurpose antiquated spaces and create

efficiencies between the overall service experience. Opportunities to soften the Campus Commons are also suggested to minimize the perception that the facility is only for transactional usage and a place dedicated to cultural expression, socializing, and gathering of the broader community.

Additional studies exploring the relationship between University Center and Campus Commons are recommended, including follow up conversations with key academic and administrative support staff.

Academic Facility Renovations

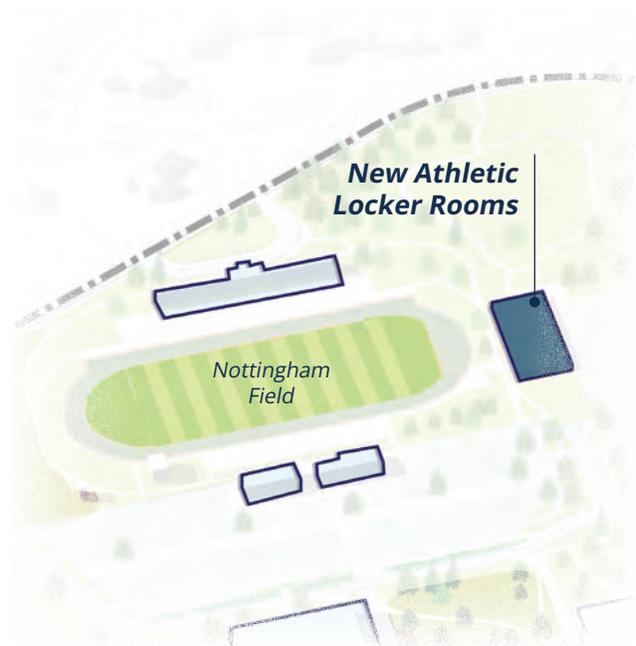
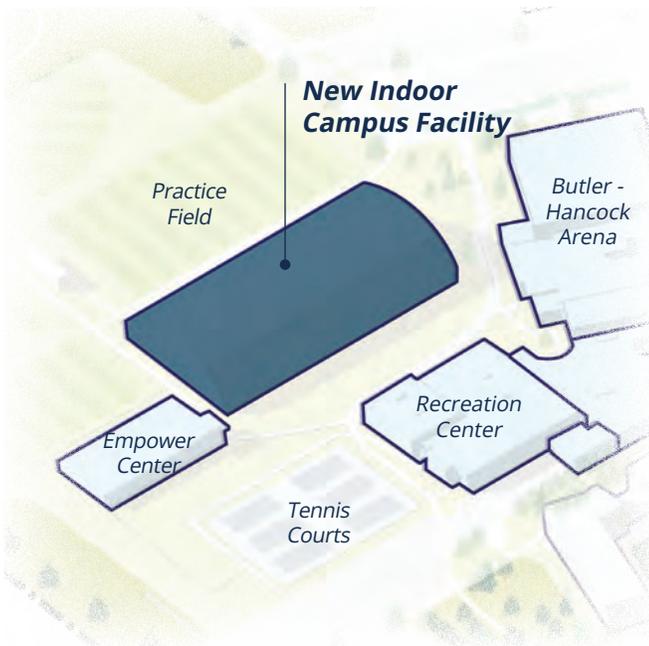


MICHENER LIBRARY, MCKEE AND CANDELARIA HALL RENOVATIONS

These facilities form the essence of UNC’s academic experience and are some of the most widely used buildings on campus. However, numerous upgrades are needed to improve the overall function, efficiency, and educational adequacy of the buildings. Ongoing programmatic studies for these facilities should be considered as part of the overall campus plan strategy.

The New Performing Arts Academic Building brings programs in closer proximity to essential program facilities such as the Campus Commons. The presence of this facility also helps define the fourth edge of the Campus Quad. Evening performances and events may utilize surface parking lots and create an active West Campus.

New Indoor Campus Facility & Athletic Locker Rooms



INDOOR CAMPUS FACILITY

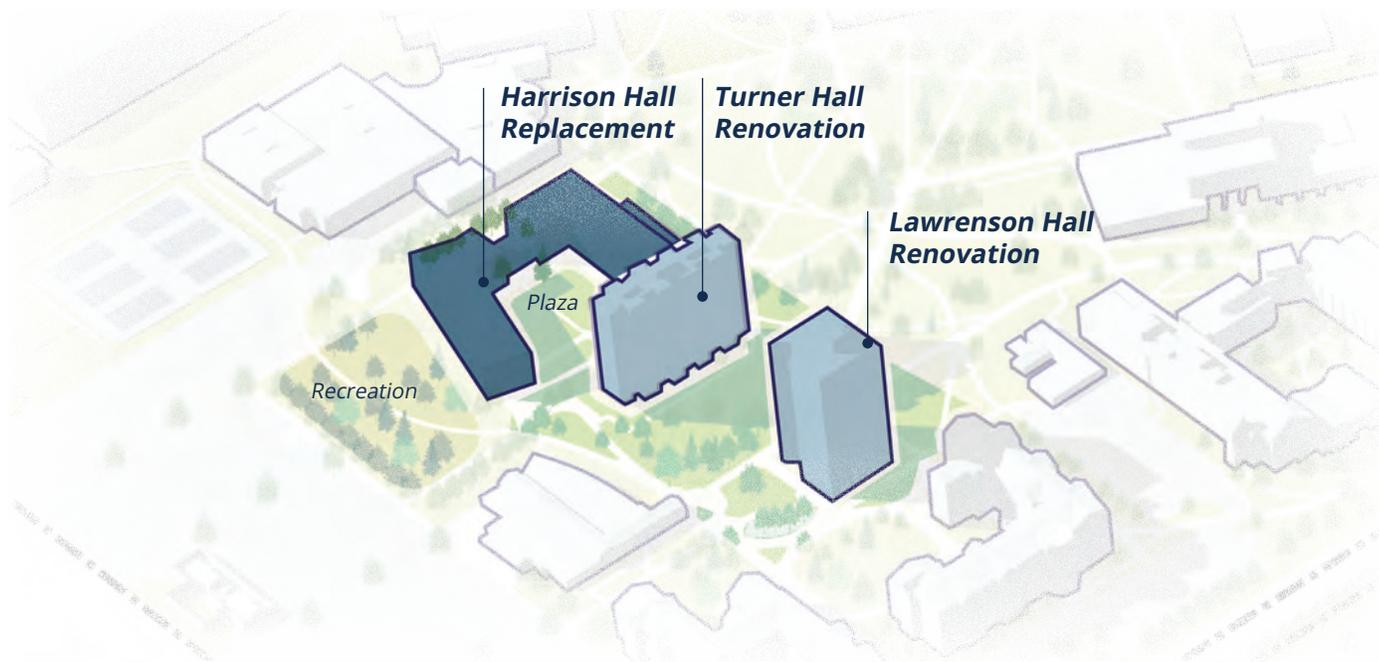
Given the projected deficit of recreational programs on campus, a shared indoor campus facility is proposed next to the Empower Center, Butler-Hancock Arena, and Recreation Center, providing synergy between existing athletic and recreational program.

This facility is envisioned as a 60,000 GSF indoor practice facility that would provide access to all students for recreation, club sports, and athletics.

ATHLETIC LOCKER ROOMS

A 10,000 GSF locker room adjacent to Nottingham Field provides additional support and storage space for athletics programs, and a potential expanded area for additional seating.

Housing Renovations & Upgrades



Projected housing demand is subject to enrollment trends and the potential of evolving live-on requirement policies and practices. Currently, assumptions include a first-year live-on requirement, and the desire for updated unit types which may impact overall capacity. The current surplus of beds enables flexibility in temporarily consolidating beds while ongoing upgrades, renovations, and/or replacements are being made on campus.

HARRISON HALL REPLACEMENT

Preferred Scenario

Replace Harrison Hall and construct new residence hall on site as target enrollment and demand for on campus housing increases.

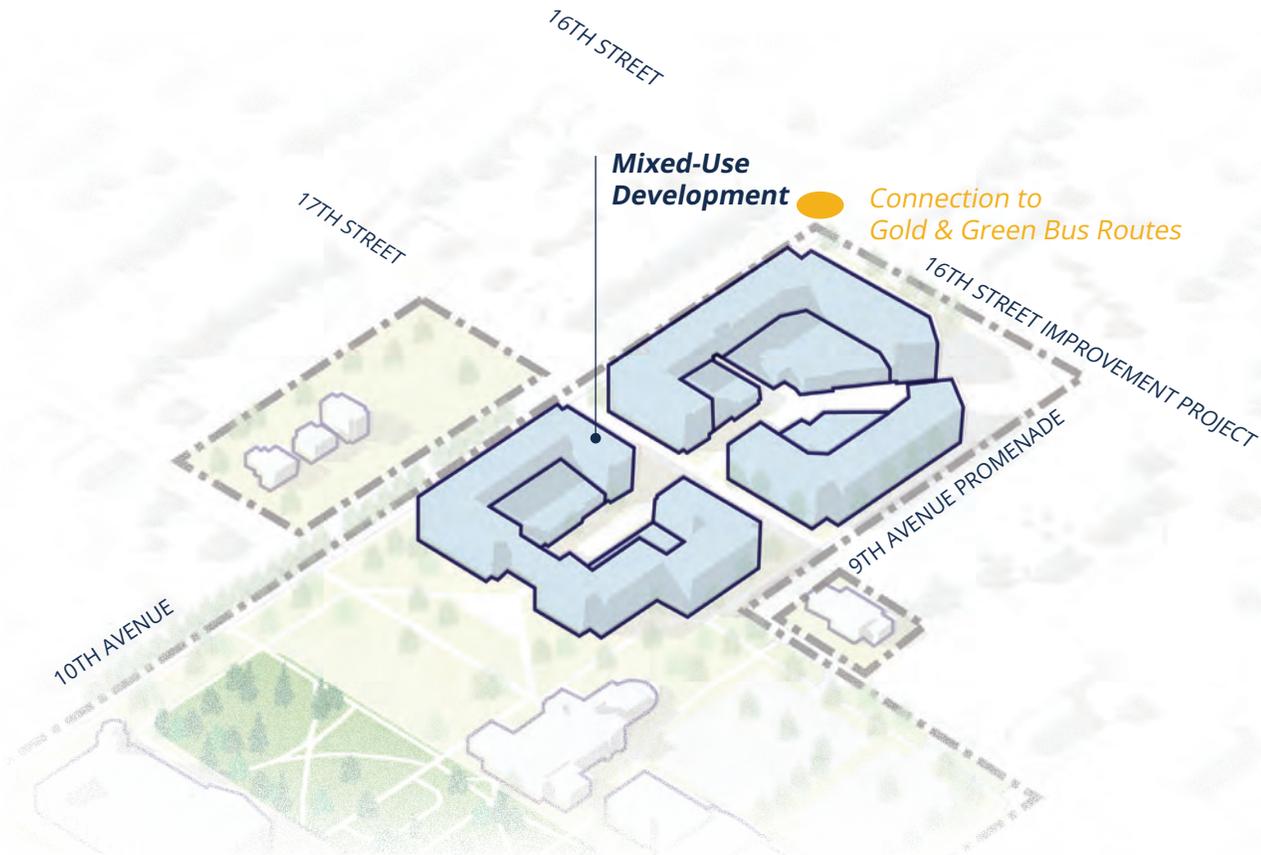
Alternative Scenario

Renovate Harrison Hall to add air conditioning and other student life related upgrades.

TURNER AND LAWRENSON HALL

Complete or partial renovation of existing buildings.

Central Campus Redevelopment



FRASIER HALL REMOVAL

After Schools of Theatre Arts & Dance and Music and Skinner Library have relocated to West Campus, Frasier Hall may be removed.

The site offers an opportunity to redefine the campus edge with a thoughtful approach to redevelopment. Ideally, this project would define the campus edge and strengthen the relationship between campus and downtown.

Other mobility improvements could include connecting the Campus Paseo with proposed 9th Avenue Promenade (Downtown 2023 The Path Forward Plan) and extending the street grid at 17th Street.

MIXED-USE DEVELOPMENT

The diagram above shows a speculative, potentially phased, development. The 5-acre site roughly north of Carter Hall, in between 10th and 9th Avenues could feasibly redefine the northern edge of Central Campus.

The site sits at the confluence of numerous improvement projects, including Greeley's transit routes that provide access to-and-from Downtown Greeley, the GET Transit Center, and Greeley Mall.

Other Recommended Projects

CAMPUS SAFETY FACILITY

A new 10,000 GSF facility should be centrally located between the Central and West Campuses. It provides efficient vehicular access. At the new site, a surface lot will be required to store fleet vehicles.

Any displacement of existing parking spaces should be considered as well as adequate infrastructure and visibility.

CHILDCARE CENTER

A new 4,000 GSF facility should be located at the edge of campus, ideally on West Campus, and have safe vehicular access for convenient drop-off and pick-up. Multiple, age appropriate playgrounds are required.

CENTRAL CAMPUS RECREATION OUTPOST

With the reinstatement of dining at Tobey-Kendel Hall, a rebalancing of student life amenities should also include a presence of recreation on Central Campus in a dedicated flexible space. The recreation program could include the following elements:

- Dedicated martial arts room
- Indoor cycling studio
- Functional training space
- Improved indoor climbing / bouldering wall
- Outdoor courts: basketball, volleyball, pickleball
- Outdoor training court
- Recreation services in Central Campus

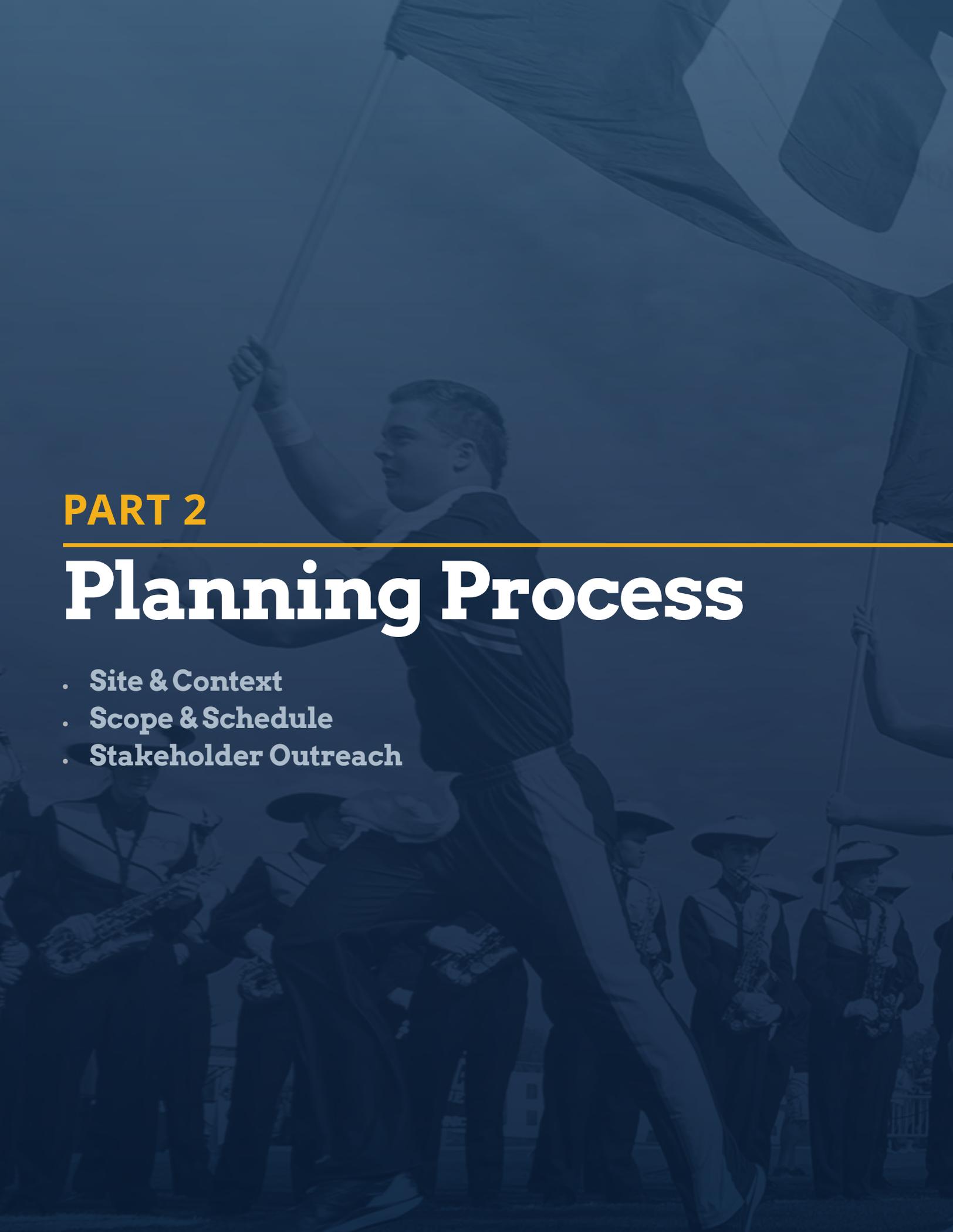
UNC LOVELAND AT CENTERRA

The UNC Loveland Center at Centerra provides convenience from I-25 and US Highway 34 and is located approximately 30 minutes west of the Main Campus in Greeley along the Front Range. The facility currently contains classrooms and amenities intended for Extended Campus students.

Maintaining a presence in this location will enable opportunities to imagine future collaborations for intellectual and operational collaboration between extension programs, the rest of the campus, and the broader region.

CENTER FOR URBAN EDUCATION

The Center for Urban Education is located at UNC's Denver Center at Lowry. It provides space for early childhood, elementary, and special education programs. Currently, alternative locations are being explored within the Denver Metro Area to better accommodate students, particularly those who may be traveling between campuses.



PART 2

Planning Process

- **Site & Context**
- **Scope & Schedule**
- **Stakeholder Outreach**

Site & Context

UNC has evolved to become a leading public research university. Since its founding in 1889 as Colorado's Teachers' College, UNC has developed a rich history of educational excellence, serving as a catalyst for educational and cultural development in the region.

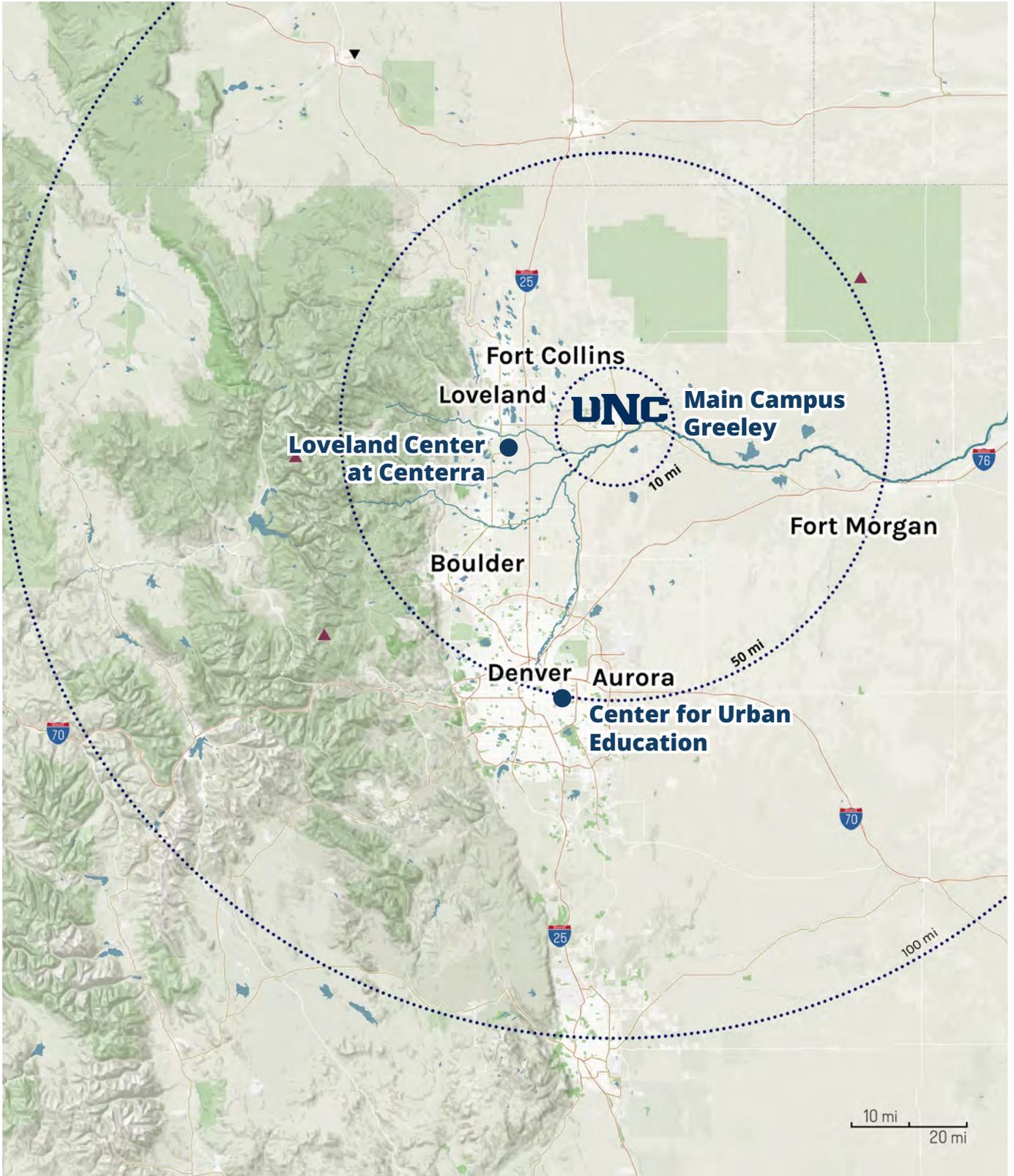
HISTORY

The university has continuously evolved to meet the changing needs of students and society, offering a wide range of undergraduate and graduate programs in various disciplines, including education, business, arts and sciences, health sciences, and performing and visual arts.

As one of the oldest higher education institutions in the state, uniquely situated only an hour east of the Rocky Mountains from Greeley. The residence halls on Central Campus have been designated a state historic district. UNC's 260-acre main campus consists of approximately 50 state-owned buildings, totaling 3 million gross square feet. UNC has additional locations across the Front Range. The Loveland Center at Centerra is a 5-acre campus dedicated to education, nursing, and counseling programs, and a Center for Urban Education is located in Metro Denver.

Today, the Facilities Comprehensive Plan comes at an important time in UNC's history. It reflects the vision, mission, and values of the institution and the goals and objectives of a multitude of university stakeholders. It represents a unifying vision that aligns the University's academic mission, strategic plan, and physical development goals into a single document to help guide the future direction of the campus.

Looking forward, UNC is committed to enhancing student success by engaging with the community, promoting diversity and inclusion, and improving learning experiences. UNC seeks to start a new College of Osteopathic Medicine to continue to develop meaningful contributions to the advancement of knowledge while addressing societal challenges. As a student-first institution, the university will continue to be dedicated to providing enhanced support and resources that empower students to achieve their academic and personal goals, preparing them to become responsible global citizens and leaders in their chosen fields.



Regional Map of Northern Colorado Showing UNC Locations



Renovated dining area in the University Center enables spaces for socializing and collaboration

REVIEWED PLANS

The Planning Team reviewed current and previous initiatives, guideline documents and plans to provide additional context to the planning process. Both local and regional plans were also reviewed to determine opportunities for additional coordination to align goals between the City of Greeley and UNC.

Local & Regional

- *2023 Downtown 2032, The Path Forward, Downtown Greeley's Master Plan*
- *2022 City of Greeley Annual Growth & Development Report*
- *2022 Weld County Economic & Demographic Profile*
- *2021 Non-Potable Water Master Plan*
- *2021 Get Outdoors Greeley*
- *2018 Imagine Greeley Comprehensive Plan*
- *2018 16th Street Corridor Project*
- *2015 Greeley Bicycle Master Plan*

University of Northern Colorado

- *2022 Rowing, Not Drifting 2030 Strategic Plan*
- *2018 Transportation/Parking & Circulation Plan*
- *2016 Athletic Facility Complex Study*
- *2013 Arboretum Gardens Plan*
- *2012 Room-by-room facilities inventory*
- *2012 Classroom utilization study*
- *2009 Utility mapping, utility master plan*
- *2007 Monfort College of Business Facilities Plan*
- *2007 Performing Arts Master Plan*
- *2005 Campus Wayfinding Plan*
- *2003 Campus Landscape Development Plan*
- *2003 Facility Master Plan Building inventory*
- *UNC Sustainability Initiatives*
- *Facility Condition Audits*
- *Architectural Standards & Design Guidelines*
- *Other Facilities Assessments*

Scope & Schedule

PROJECT SCHEDULE

The Planning Team conducted a year long process using a three-step campus planning process to ensure a thoughtful and systematic approach that envisions and transforms the campus. The planning approach considers the needs and aspirations of the community while promoting sustainability, functionality, and an enriching academic environment.

SCOPE

The study area primarily focuses on the main campus and includes a comprehensive analysis of various aspects to improve campus facilities, infrastructure, and overall student experience. Additionally, as part of the project, other locations were analyzed to determine overall space needs.

PROCESS

1. Understand

The first phase conducts a comprehensive assessment of the current campus, considering its physical layout, infrastructure, facilities, and the needs of the community. This includes analyzing existing buildings, open spaces, transportation systems, utilities, engaging with stakeholders to gather input, and identify opportunities for improvement.

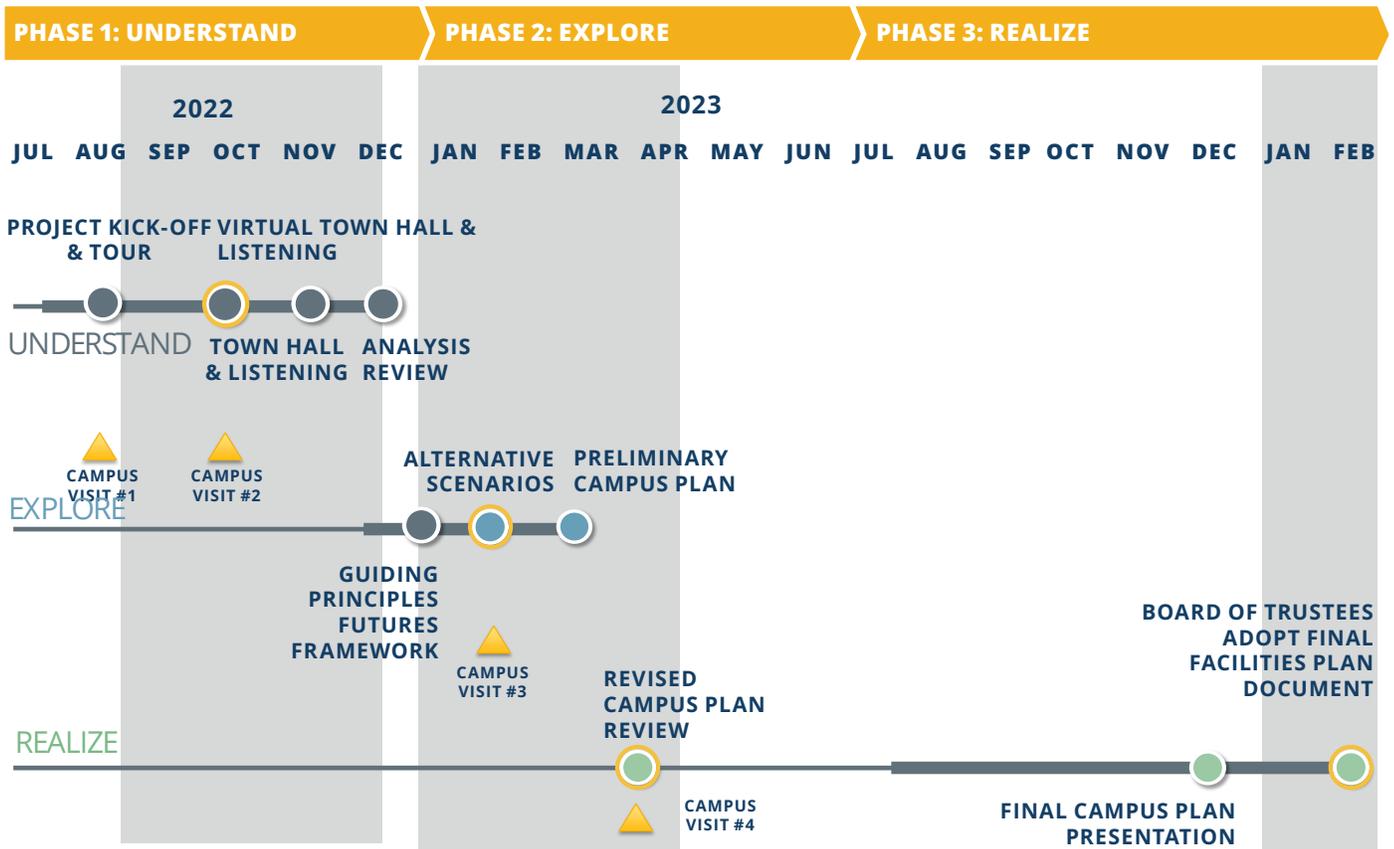
2. Explore

Once the assessment is complete, the visioning phase begins. The explore phase involves creating a shared vision for the future of the campus, considering factors such as sustainability, accessibility, academic needs, and campus identity. Through workshops, surveys, and collaborative discussions, stakeholders come together to shape the long-term goals and aspirations for the campus.

3. Realize

The final phase develops an actionable plan to bring the vision to life. The implementation phase involved collaboration between various departments, campus administration, and external partners to execute the plan, monitor progress, and make adjustments as necessary.

Overall, the three-phase planning process ensures a thoughtful and systematic approach to envisioning and transforming the campus. It takes into account the needs and aspirations of the community while promoting sustainability, functionality, and an enriching academic environment.



WHAT IS A FACILITIES COMPREHENSIVE PLAN?

The document outlines improvements that UNC will need to remain a leading university. It is a collection of ideas that establishes a flexible and realistic framework for coordinating facility improvements across campus.

What it is:

- A process to align strategic, academic, spatial, fiscal, and physical visioning
- A living document driven by Guiding Principles
- A resource that identifies short and long-term strategies
- A reference that is realistic, yet visionary

Why is it valuable?

- Flexible framework for campus development
- Responds to the Strategic Plan *Rowing, Not Drifting 2030*
- Establishes capital priorities
- Optimizes resources and adjacencies
- Implementable Participatory and consensus-based
- Defensible

Stakeholder Outreach

DECISION MAKING STRUCTURE

Several committees directly supported the planning process. The President's Cabinet met near the end of each phase of work for presentation, synopsis, and approval of work during each phase. Leadership provided final direction to the planning team at all critical steps of the planning process. The Steering Committee met throughout the planning process. Committees and stakeholders provided input throughout the planning process. The participants represented a broad range of campus users and community residents for idea generation and consensus building.

In addition, the Board of Trustees met with the planning team to be briefed on the planning process and provide approval. Focus Groups were responsible for the overall planning process, engaging in day-to-day activities with the planning team. The planning teams met weekly throughout the process.

See Part 6: Acknowledgments for a list of participants.

Leadership

- Advocate for the planning process and full stakeholder engagement
- Consider what's best for the university and address prioritized concerns at a high-level

Core Team

Steering Committee

- Provide recommendations to the President's Cabinet and Trustees
- Ensure recommendations are consistent with *Rowing, Not Drifting 2030* and Facilities Comprehensive Plan guiding principles
- Advocate for the planning process and full stakeholder engagement
- Consider university-wide concerns

Planning Team

- The Planning Team was led by members of the UNC Facilities Management team in collaboration with SmithGroup, a national integrated planning and design firm
- The Planning Team actively engaged stakeholders from across the university, including university leadership from UNC's various locations, students, faculty, staff, and community members

Stakeholders

- Raise issues and questions and discuss concerns with the Steering Committee



Steering Committee Charrette

STATE APPROVALS
REVIEWS & APPROVAL

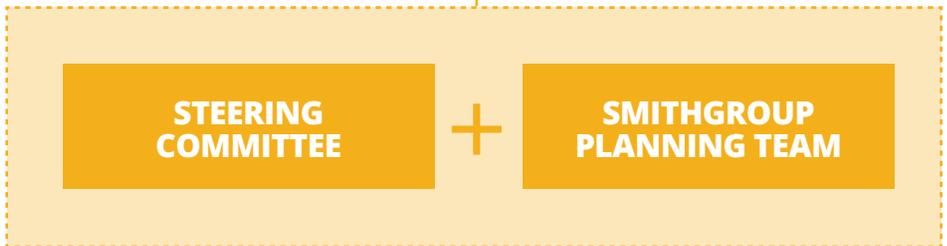
**COLORADO DEPARTMENT
OF HIGHER EDUCATION**

BOARD OF TRUSTEES

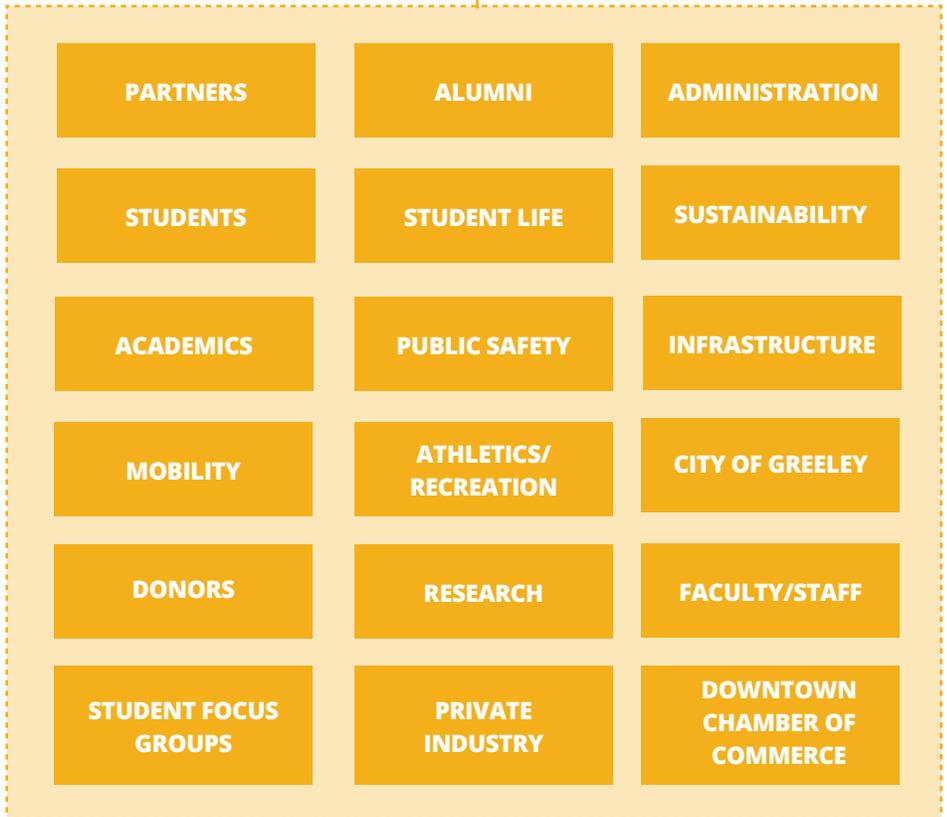
LEADERSHIP
DECISION MAKING & APPROVAL

PRESIDENT'S CABINET

CORE TEAM



**STAKEHOLDERS &
FOCUS GROUPS**





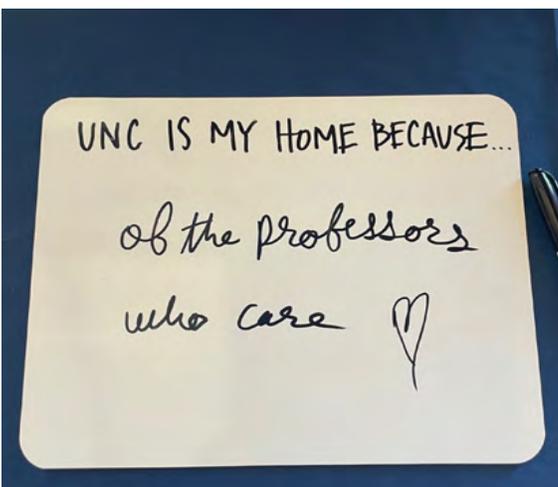
Steering Committee Kick-Off Meeting



Pop-Up Booth at Holmes Dining Hall



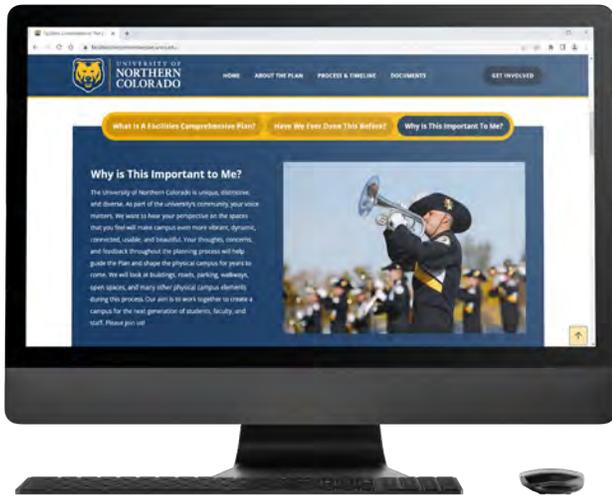
Planning Team Meeting with Student Focus Group



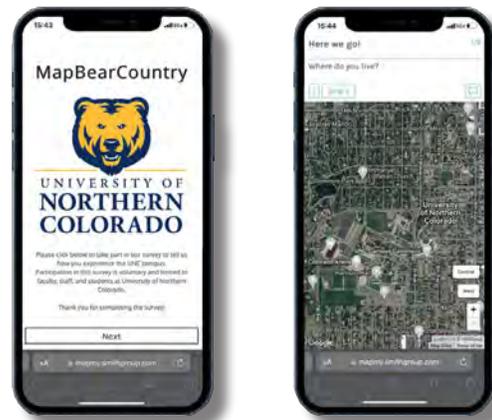
Student Response from Pop-Up Booth



Pop-Up Booth at McKee Hall



Project Website



Campus Surveys

POP-UP BOOTHS

Pop-up booths played a pivotal role in campus engagement, serving as an informal opportunity to learn about the planning efforts and share information. The booths were placed in highly visible areas of campus on site visits throughout the planning process.

COMMUNITY FORUMS

Community forums served as a platform to promote transparency and enable stakeholders to voice their concerns, provide input, and collectively shape decisions that impact the campus in a public setting.

STUDENT FOCUS GROUPS

The planning team met with several student groups on campus to discuss key issues, requirements or issues impacting student success and the overall campus experience.

PROJECT WEBSITE

A project website served as a central location for stakeholders to access information, stay informed, and actively engage with the project's progress. The website was accessible throughout the entire duration of the project.

MAPMYBEARCOUNTRY SURVEY

This survey allowed faculty, staff, and students to share their personal place-based campus experiences. The survey garnered feedback that the planning team was able to map and analyze. The number of stakeholders reached with this tool was far greater than using face-to-face interaction alone.

STUDENT LIFE SURVEY

The planning team conducted a survey to fully understand the student experience with housing, dining, recreation, and student-centered facilities.



PART 3

Space Analysis

- **Enrollment Growth**
- **Space Needs**
- **Space Guidelines**
- **Instructional Space Utilization**
- **Space Benchmarking**



Enrollment Growth

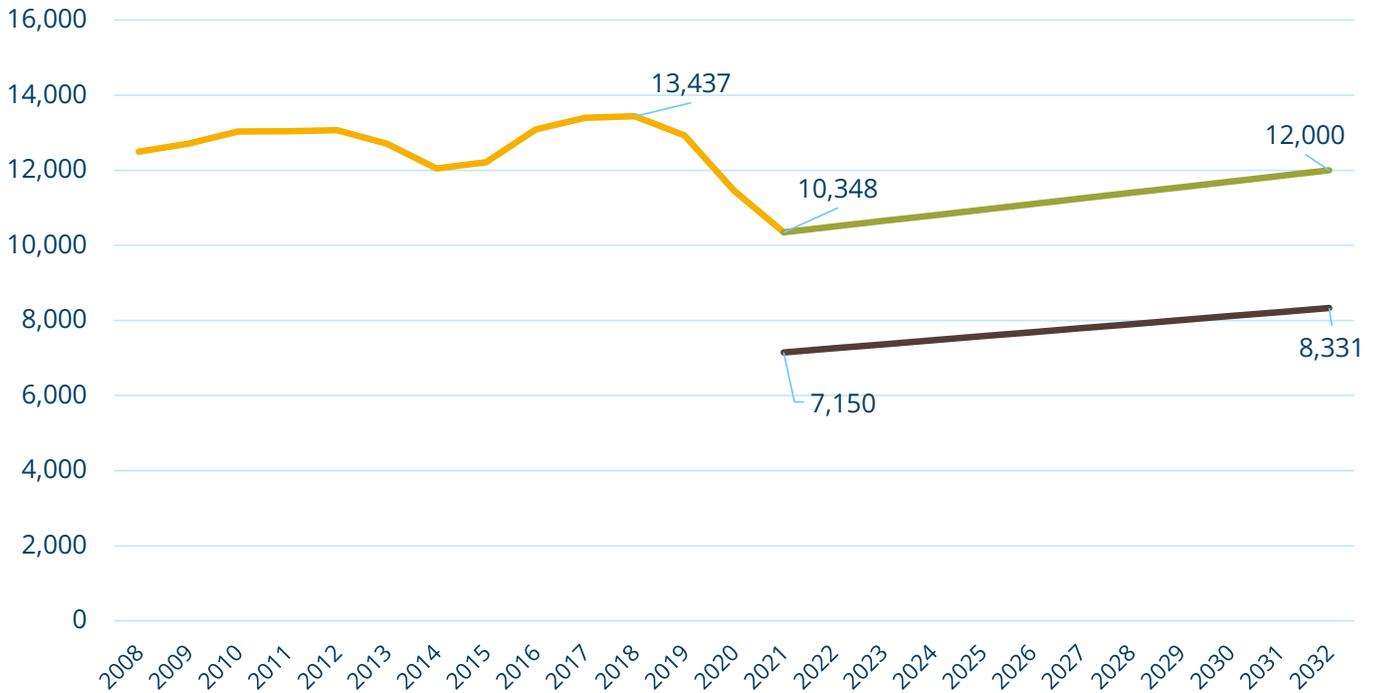
The Division of Student Affairs & Enrollment Services anticipates returning to a headcount of 12,000 students for a total enrollment and increasing the Greeley on-campus enrollment to a headcount of 8,311 students by Fall 2029.

ASSUMPTIONS

Most institutions do not have employee growth projections. However, the defined future state assumes the following based on stakeholder engagement and feedback across UNC leadership where faculty will grow at 75% of the student growth rates, and that staff will grow at half the rate.

Student enrollment will continue to be evaluated on an ongoing basis by UNC and will be adjusted as needed.

Enrollment Projections (Headcount)



Sources: Historic Enrollment: 2021 Fact Book
 Fall 2021 Greeley on-campus: Office of Business Intelligence & Data Engineering
 Projections: Enrollment Management

- Historical Total Enrollment HC
- Projected Greeley On-Campus Enrollment HC
- Projected Total Enrollment HC

Enrollment Breakdown

	FALL 2021	FALL 2029
Enrollment Headcount	7,150	8,331
<i>FTE</i>	5,336	6,218
Faculty Headcount	756	856
<i>FTE</i>	485	566
Staff Headcount	2,422	2,528
<i>FTE</i>	1,038	1,112

Space Needs

The space needs analysis focuses on space related to academics, research, and associated support space. Understanding the space UNC has today was critical in determining the distribution of space across all space types on the main campus.

METHODOLOGY

In determining the future space needs for UNC, the planning team aggregated existing data with stakeholder feedback. The planning team included key themes and outcomes of these meetings into the instructional space utilization expectations and space needs guidelines to form the basis of the space needs analysis.

The analysis focuses on space related to academics, research, and associated support space. In total, the assessment covers 975,160 assignable square feet (ASF) of existing space.

The treemap charts to the right show the distribution of space across all space types on UNC's Main Campus to help inform the physical scenarios and gain a base understanding of the quantity of space.

FINDINGS

There's capacity to meet UNC's strategic enrollment goals.

- Existing quantity to adequately serve the current and projected enrollments.

UNC should continue to focus on reallocation of space to better align existing space with functional needs while ensuring the best and highest use of space.

- As renovation and new design projects take place, modern space guidelines should be used, particularly for instructional and office spaces.
- Not all space can be adapted easily to another use; therefore, quantitative surpluses cannot easily be repurposed to meet deficits.
- Quality and configuration of existing space does impact user experience, functionality, and adaptability.

Need for more recreation, creative activity, and collaborative learning spaces after enrollment grows.

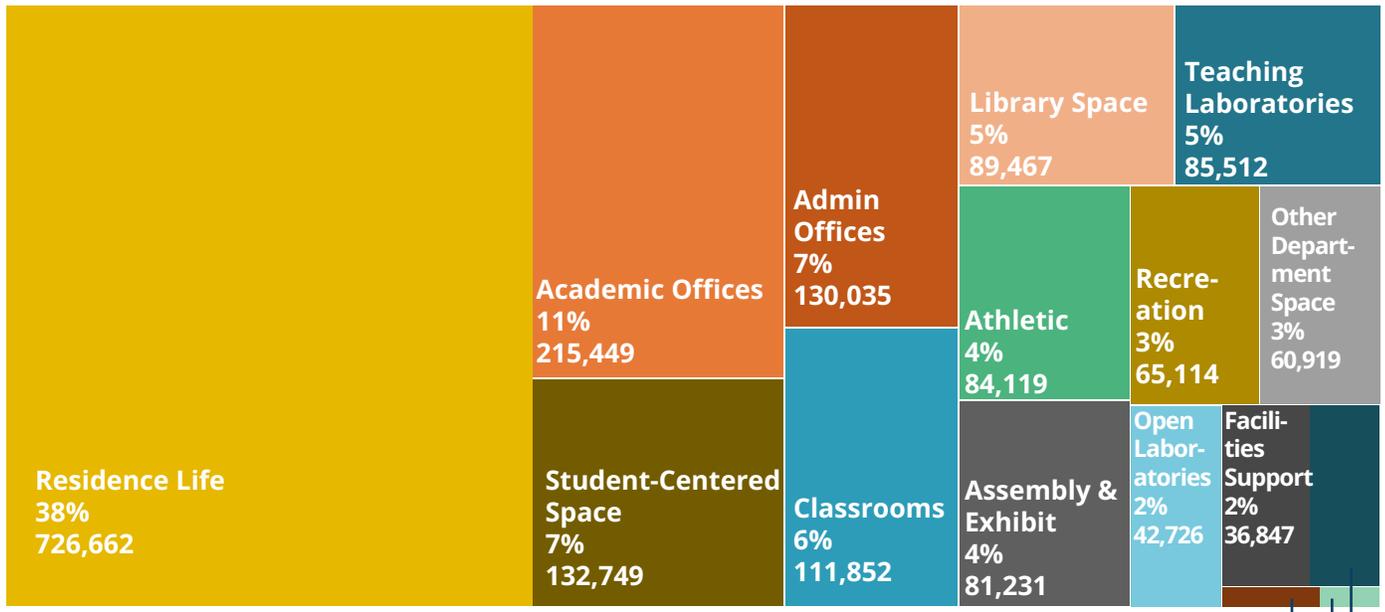
- Space needs may be contingent on rate of future enrollment growth.

UNC may need more research space depending on its research goals.

- Imminent growth of the College of Osteopathic Medicine, including other future programs, may change research need assumptions.

Existing Space – All Campus Space

MAIN CAMPUS (1,899,686 ASF)

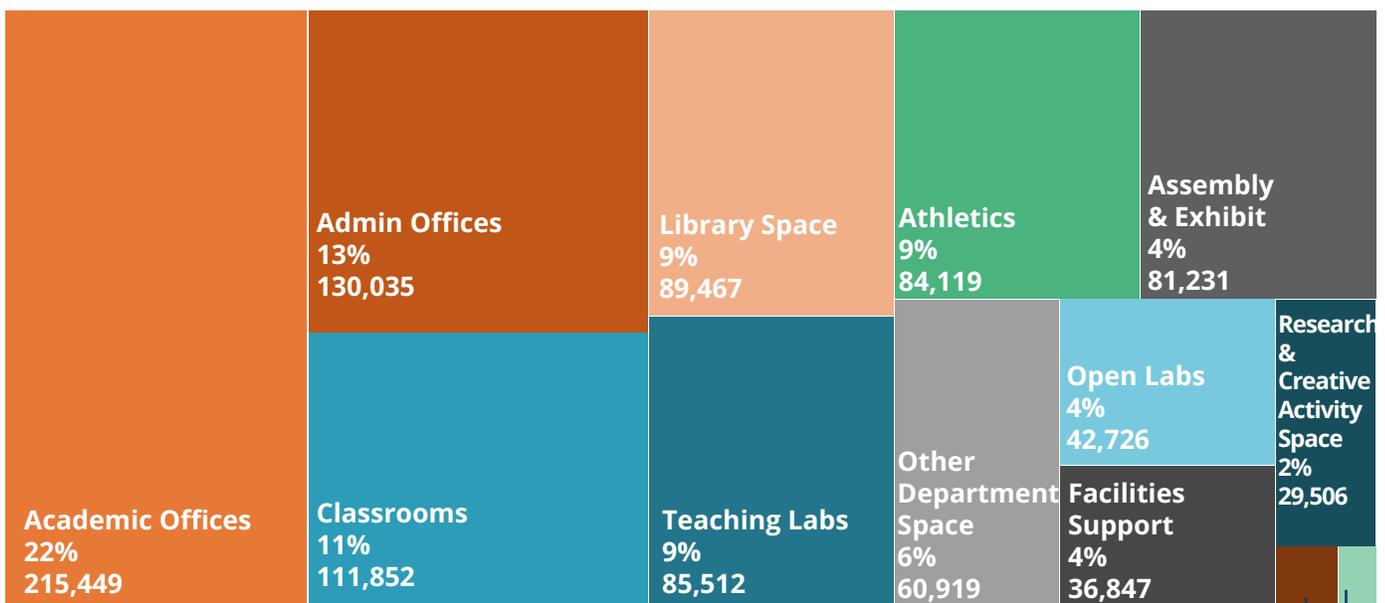


NOTES: Inactive/conversion space is not included.

Collaborative Learning Space <1%, 4,630
 Healthcare Space <1%, 2,868
 Research & Creative Activity Space 2%, 29,506

Existing Space – Within Needs Analysis

MAIN CAMPUS (975,160 ASF)



NOTES: Recreation, student-centered space, residence halls, and inactive/conversion space are not included in the analysis.

Collaborative Learning Space <1%, 4,630
 Healthcare Space <1%, 2,868

Fall 2021 – Base Year

STUDENT HEADCOUNT = 7,150 EMPLOYEE HEADCOUNT = 3,178

SPACE CATEGORY

Academic Space	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/(Deficit)
Classrooms	111,852	73,274	38,579	34%
Teaching Laboratories	85,512	58,512	27,000	32%
Open Laboratories	42,726	21,344	21,382	50%
Research & Creative Activity Space	29,506	50,450	(20,944)	(71%)
Academic Space Subtotal	269,596	203,580	66,016	24%
Academic Support Space				
Academic Offices	215,449	163,950	51,499	24%
Administrative Offices	130,035	68,520	61,515	47%
Library Space	89,467	108,118	(18,651)	(21%)
Collaborative Learning Space	4,630	16,548	(11,918)	(257%)
Academic Support Space Subtotal	439,580	357,135	82,445	19%
Student Space				
Athletics	84,119	48,025	36,095	43%
Healthcare Space	2,868	5,363	(2,495)	(87%)
Student Space Subtotal	86,987	53,387	33,600	39%
Other Space				
Assembly & Exhibit	81,231	61,848	19,382	24%
Facilities Support	36,847	53,172	(16,324)	(44%)
Other Department Space	60,919	26,680	34,239	56%
Other Subtotal	178,997	141,700	37,297	21%
Campus Total	975,160	755,803	219,357	22%
Inactive/Conversion Space	125,118			

NOTE: The base year (Fall 2021) analysis indicates that overall space needs. However, there are notable deficits in research, creative activity space, library space, collaborative learning spaces, and healthcare space.

Fall 2029 – Target Year

STUDENT HEADCOUNT = 8,331 EMPLOYEE HEADCOUNT = 3,384

SPACE CATEGORY

Academic Space	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/(Deficit)
Classrooms	111,852	83,680	28,173	25%
Teaching Laboratories	85,512	65,808	19,704	23%
Open Laboratories	42,726	24,150	18,576	43%
Research & Creative Activity Space	29,506	58,335	(28,829)	(98%)
Academic Space Subtotal	269,596	231,973	37,624	14%
Academic Support Space				
Academic Offices	215,449	179,784	35,665	17%
Administrative Offices	130,035	66,324	63,711	49%
Library Space	89,467	88,402	1,065	1%
Collaborative Learning Space	4,630	19,281	(14,652)	(316%)
Academic Support Space Subtotal	439,580	353,791	85,789	20%
Student Space				
Athletics	84,119	55,958	28,161	33%
Healthcare Space	2,868	6,248	(3,381)	(118%)
Student Space Subtotal	86,987	62,207	24,780	28%
Other Space				
Assembly & Exhibit	81,231	67,138	14,093	17%
Facilities Support	36,847	37,310	(463)	(1%)
Other Department Space	60,919	31,088	29,831	49%
Other Subtotal	178,997	135,535	43,462	24%
Campus Total	975,160	783,506	191,654	20%
Inactive/Conversion Space	125,118			

Space Guidelines

Space guidelines were applied to provide a complete understanding of current and future space needs. Based on experience, SmithGroup believes that comparisons using FTE are the most appropriate as they are comparing an equivalent amount of academic instruction rather than the number of students by headcount. For many of the guidelines, the unit of analysis for this study is assignable square feet per student full-time equivalent (ASF/FTE) or assignable square feet per student station (ASF/Station).

Academic Space

Discipline	WRH	ASF/Seat
Art	20	80
Biological Sciences	24	65
Chemistry	24	75
Computer-based Lab	24	40
Dance/Theatre	20	150
Education	20	40
Exercise Physiology & Kinesiology	20	80
Food Science & Technology	20	80
Geology	24	60
Mathematics	24	30
Music	20	60
Nursing	24	65
Physics	24	75
Psychology	20	50

Classrooms

- 32 weekly room hours (WRH)
- 70% seat fill rate (SFR)
- 25 assignable square feet (ASF)/seat

Teaching Labs

- Weekly Room Hours (WRH) varies
- 80% SFR
- ASF/seat varies
- Refer to chart on the following pages

Open Labs Spaces

- 4 ASF/Student FTE

Research & Creative Activity Space

College/Unit	Department	Guideline ASF	College/Unit	Department	Guideline ASF
College of Education & Behavioral Sciences	Applied Psychology & Counselor Ed	225	College of Natural & Health Sciences	Audiology & Speech Language Sciences	100
	Applied Psychology & Research	85		Chemistry & Biochemistry - CNHS	375
	ASLIS American Sign Language Interpret	60		Comm Sciences & Disorders	100
	Leadership Policy & Development	60		Community Health Program	300
	Psychological Sciences, School of - CEBS	225		Dietetics & Nutrition	300
	Schl of Special Education Office	60		Earth & Atmospheric Science	75
	Schl of Teacher Education Office	60		Human Services	300
	School Psychology	225		Nutrition and Dietetics	300
	Science Education	60		Physics and Astronomy	200
	Urban Education	60		Schl. of Biological Sciences Office	350
	College of Humanities & Social Sciences	Africana Studies		75	Schl. of Human Science Office
Anthropology		100	Schl. of Mathematical Sci Office	85	
Chicana/o & Latinx Studies (CLAS)		75	Schl. of Nursing Operations Office	50	
Communication Studies		75	Schl. of Sport & Exercise Science Office	300	
Criminology & Criminal Justice		75	College of Performing & Visual Arts	Schl. of Art & Design Office	150
Economics		75		Schl. of Music Office	40
English		60		Schl. of Theatre Arts & Dance Office	75
Gender Studies		75	Monfort College of Business	Accounting	60
Geography GIS & Sustain		75		Computer Info Systems	80
History		75		Finance	60
Journalism and Media Studies		65		Management	60
Philosophy		75		Marketing	60
Political Science and International Affair		75			
Sociology		100			
World Languages & Cultures		60			

NOTES:

1. Guideline ASF allocated per faculty member.
2. Guidelines based on Council of Educational Facility Planners International.

Academic Support

Employee Type	Workspace ASF	Service ASF	Total ASF
President	300	150	450
Dean	160	80	240
Vice President	180	90	270
Provost	180	90	270
Assistant/Associate Dean	140	70	210
Assistant/Associate Vice President	140	70	210
Assistant/Associate Provost	140	70	210
Director	120	60	180
Assistant/Associate Director	120	60	180
Coach	120	60	180
Faculty	120	60	180
Adjunct Faculty	60	30	90
Postdoctoral	60	30	90
Professional Staff	120	60	180
Administrative Support	80	40	120
Teaching Associate/Assistant	40	20	60
Graduate Assistant	40	20	60
Police Officer	40	20	60

Office Space

- Space allocation per employee FTE, not a determination of private vs. open workspace.
- Quantifies space needed, not number of doors or seats.
- Assume 100% of employees on campus in base year (Fall 2021).
- Assume 85% of professional staff and administrative support: All other at 100% in future state.

- Allocation of service space of 5% of total collection space.
- Library study space of 25 ASF for 15% of undergraduate student headcount & 5% of graduate student headcount.
- Accounts for the anticipated reduction of physical collections.

Library Space

- Physical Collections (consideration for collection type and shelving type).

Collaborative Learning Space

- Distributed study space of 25 ASF for 10% of undergraduate student headcount & 5% of graduate student headcount.

Student Support & Other Space

STUDENT SPACE GUIDELINES

ATHLETICS

- 9 ASF per Student FTE.

HEALTHCARE SPACE

- 0.75 ASF per Student Headcount.
- Space Guidelines recognizes services are available to all employees.

OTHER SPACE GUIDELINES

ASSEMBLY & EXHIBIT

- Core allowance of 22,450 ASF for institutional size.
- Additional 6 ASF per Student FTE above 5,000 FTE.
- Additional allowance of 5,000 ASF for active music program.
- Allowance of 32,382 ASF to account for existing in Campus Commons.

OTHER DEPARTMENT SPACE

- 5 ASF per Student FTE.

FACILITIES SUPPORT

- 5% of non-facilities support existing space for base year (Fall 2021).
- Future year is based on optimization, application of the guidelines.

Instructional Space Utilization

Analyzing the use of instructional space helps understand current demands and to quantify future opportunities based on recommended targets.

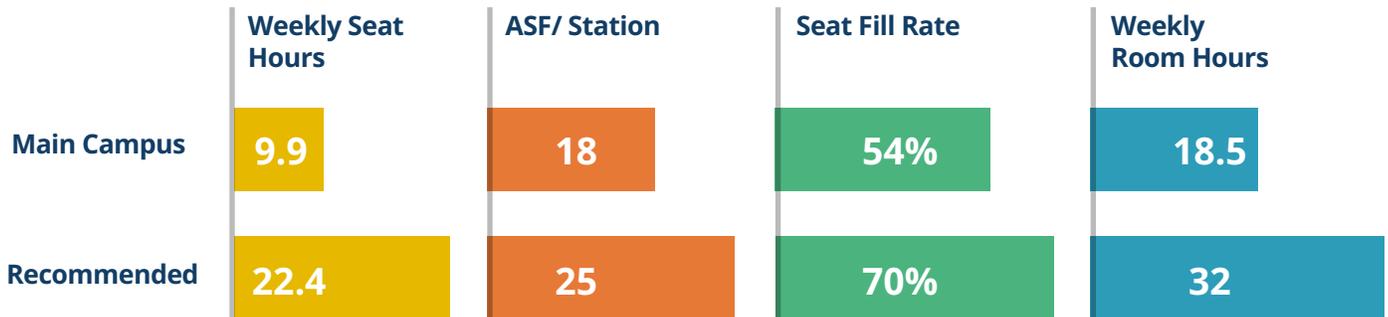
FINDINGS

There's a notable misalignment between UNC's usage when compared to recommended utilization targets.

- UNC's weekly room hours should be closer to 32 hours per week.
- UNC's seat fill rate is under the recommended 70%.
- UNC's ASF/Station is under the recommended 25 ASF per student.
- UNC's weekly seat hours are under the recommended 22.4. (This is a measure that combines the hours and seat fill rate.)

Classroom Utilization vs. Recommended Targets

MAIN CAMPUS - FALL 2021



Instructional Space Utilization

CLASSROOM USE BY DAY AND HOUR - MAIN CAMPUS

Time	Monday		Tuesday		Wednesday		Thursday		Friday		Average	
	Rooms in Use	% in Use										
8:00	17	13%	33	25%	21	16%	29	22%	17	13%	23	18%
9:00	71	55%	97	75%	78	60%	89	68%	54	42%	78	60%
10:00	73	56%	94	72%	77	59%	85	65%	59	45%	78	60%
11:00	75	58%	88	68%	73	56%	80	62%	56	43%	74	57%
12:00	83	64%	102	78%	88	68%	96	74%	67	52%	87	67%
13:00	69	53%	78	60%	84	65%	72	55%	63	48%	73	56%
14:00	68	52%	68	52%	79	61%	60	46%	57	44%	66	51%
15:00	48	37%	75	58%	62	48%	75	58%	31	24%	58	45%
16:00	26	20%	47	36%	31	24%	49	38%	10	8%	33	25%
17:00	23	18%	32	25%	23	18%	34	26%	2	2%	23	18%
18:00	20	15%	27	21%	18	14%	23	18%	2	2%	18	14%
19:00	11	8%	12	9%	6	5%	18	14%	1	1%	10	7%

Total classrooms = 130
(Darker colors indicate a large percentage of rooms are scheduled.)

NOTES:

- Heatmap reflects the number of rooms in use for courses.
- Peak use is in the 9:00am to 2:00pm time slot.

Fall 2021

Average ASF per Station	17.6
Average Weekly Room Hours	18.5
Seat Fill Rate	54%

Teaching Lab Utilization Analysis by Department

MAIN CAMPUS – FALL 2021

Department	No. of Rooms	No. of Seats	Average Room Size	Average ASF per Station	Average Section Size	Weekly Seat Hours	Average Weekly Room Hours	Seat Fill Rate
Art & Design	12	312	1,216	46.8	16	8.8	14.1	59%
Biological Sciences	8	192	1,076	44.8	17	16.0	21.1	76%
Chemistry & Biochemistry – CNHS	5	121	1,416	58.5	19	17.3	22.1	79%
Classroom – C	3	97	989	30.6	23	10.9	15.3	70%
Classroom – MCOB	1	48	1,502	31.3	40	11.7	14.3	82%
Dance	2	74	1,154	31.2	15	7.5	17.5	53%
Earth & Atmospheric Science	4	102	1,140	44.7	11	6.4	15.0	42%
Geography GIS & Sustain	1	24	1,138	47.4	17	9.1	13.0	70%
Mathematical Sciences	1	38	1,008	26.5	24	8.8	13.9	63%
Music	7	359	1,218	23.8	12	6.2	19.5	31%
Nursing	1	36	1,536	42.7	37	2.2	2.1	103%
Open Computer Labs – AA	1	46	1,243	27.0	27	15.1	24.6	62%
Physics and Astronomy	2	50	1,259	50.4	17	13.9	21.0	67%
Special Education	1	30	1,162	38.7	16	6.9	14.0	50%
Specialized Lab	1	0	984	0.0	19	0.0	5.7	0%
Sport & Exercise Science	2	31	727	46.9	11	9.9	12.5	81%
Theatre, School of – CPVA	2	45	892	39.6	17	6.9	9.0	74%
Total No. of Rooms = 54		Average	1,166	39.2	17	9.9	16.6	61%
Total No. of Stations = 1,605		Total ASF	62,971					

NOTE: Teaching labs are those discipline and space specific instructional spaces on campus.

Classroom Utilization Analysis by Building

MAIN CAMPUS - FALL 2021

Building Name and ID		No. of Rooms	Average Room Size	Average ASF per Station	Average Section Size	Weekly Seat Hours	Average Weekly Room Hours	Seat Fill Rate
Ben Nighthorse Campbell Center	BNCC	1	807	20.2	21	7.8	16.0	49%
Butler Hancock	BTLR	5	1,018	26.1	10	2.9	7.2	42%
Candelaria Hall	CAND	28	684	16.4	20	9.9	17.4	53%
Frasier Hall	FRAS	10	874	19.5	14	6.3	18.9	41%
Guggenheim Hall	GUGG	2	610	16.3	14	2.2	3.0	68%
Gunter Hall	GUNT	10	947	18.3	25	10.4	20.9	52%
Kepner Hall	KEPN	16	887	18.3	30	11.2	17.9	70%
McKee Hall	MCKE	34	821	18.5	21	9.5	17.6	55%
Michener Library	MICH	5	926	9.5	35	8.9	18.8	48%
Ross Hall	ROSS	18	903	17.7	27	13.8	25.8	54%
Skinner Music Library	SKNR	1	813	29.1	11	8.3	21.0	39%
Total No. of Rooms = 130		Average	833	17.6	22	9.9	18.5	54%
Total No. of Stations = 6,153		Total ASF		108,278				

NOTE: Over 60% of UNC's classrooms are in CAND, MCKE, and KEPN.

Space Benchmarking

The benchmarking of academic space provides insight into the use and distribution of space at peer institutions. The analysis outcomes are intended to serve as a point of departure for identifying opportunities to improve or adopt best practices.

METHODOLOGY

The peer group is comprised of 11 UNC peers for which SmithGroup had existing benchmarking data. Only main campuses are included in the data set which compared assignable space, grouped according to the National Center for Education Statistics' Postsecondary Education Facilities Inventory and Classification (FICM) taxonomy. The FICM use codes are used by colleges and universities across the country, which allows for this type of benchmarking.

FINDINGS

UNC is in relative balance for total space.

- UNC has the second highest total space per student FTE (225 ASF), the most instructional space per student FTE (45 ASF), and the least research lab space per faculty FTE (47 ASF).
- If UNC's strategic enrollment targets is met, UNC will have the second highest total space per student FTE. In relative balance in terms of instructional space per student FTE.

There is capacity to grow enrollment with the existing space.

- There is not sufficient space to support growth in research activity. UNC is at the low end of the peer group with only 47 ASF per faculty member.
- It's important to note that this category does not capture the research activity that might take place in an office.

There is not sufficient space to support growth in research activity.

- UNC has the lowest total space per faculty FTE (47 ASF), where the median (86 ASF) and average (107 ASF) among peer faculty FTE is significantly higher.

Peer Comparison for Academic Space

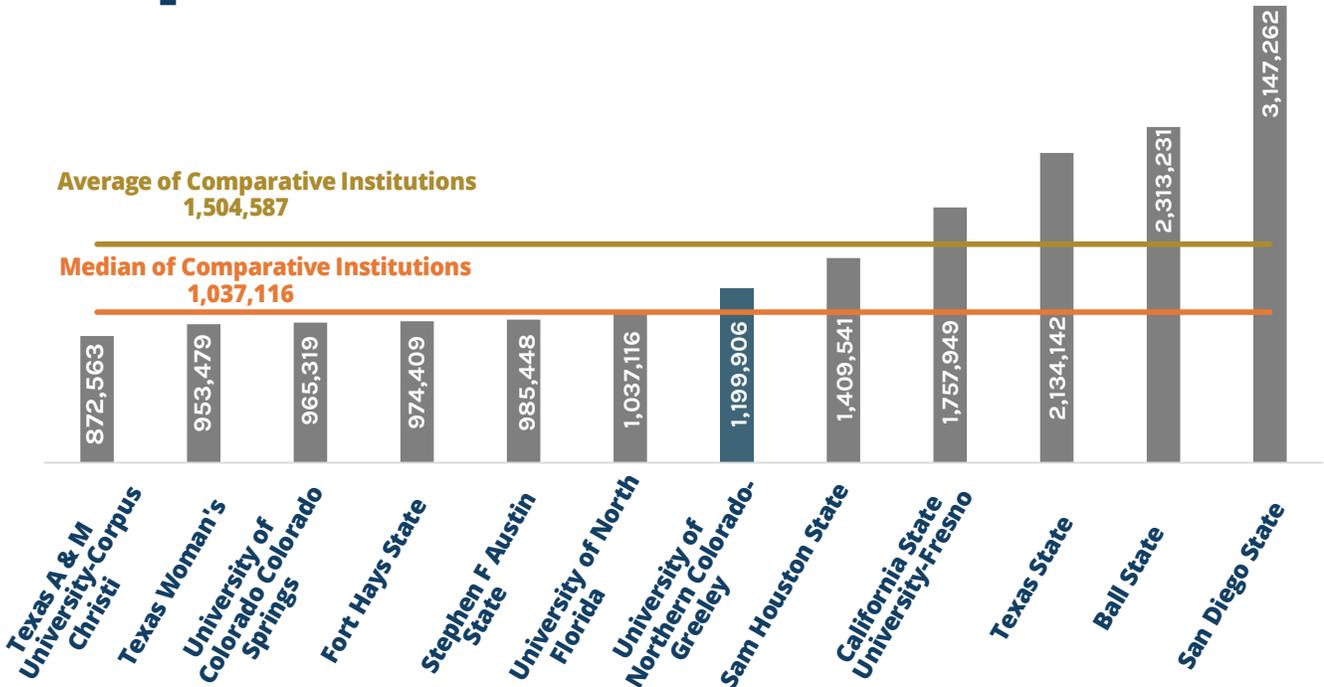
Institution	Term	Total ASF	Student FTE	Faculty FTE
Ball State University	Fall 2019	2,313,231	18,360	-
California State University-Fresno	Fall 2020	1,757,949	22,413	1,121
Fort Hays State University	Fall 2019	974,409	4,036	407
Sam Houston State University	Fall 2020	1,409,541	16,604	740
San Diego State University	Fall 2022	3,147,262	31,770	1,358
Stephen F Austin State University	Fall 2020	985,448	9,313	654
Texas A&M University-Corpus Christi	Fall 2020	872,563	7,552	366
Texas State University	Fall 2020	2,134,142	30,253	1,495
Texas Woman's University	Fall 2020	953,479	11,113	691
University of Colorado-Colorado Springs	Fall 2022	965,319	8,086	743
University of North Florida	Fall 2018	1,037,116	10,862	749
<i>Average of Comparative Institutions</i>	-	1,504,587	15,487	832
<i>Median of Comparative Institutions</i>	-	1,037,116	11,113	742
University of Northern Colorado-Greeley	Fall 2021	1,199,906	5,336	482

NOTES:

1. Total ASF does not include FICM 800s (healthcare) or 900s (residential).
2. The faculty FTE average and median exclude Ball State as data was not available.
3. UNC Greeley faculty FTE data excludes Extended Campus faculty and adjunct faculty.

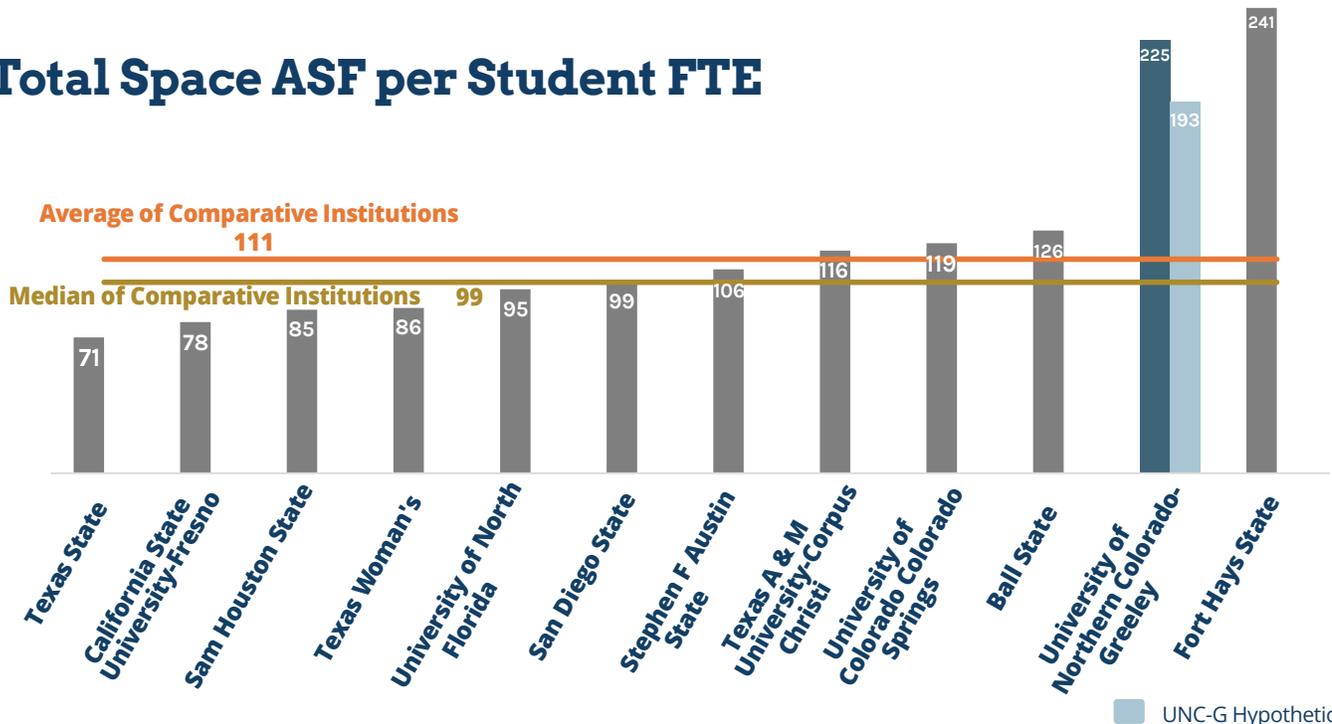
Academic Space Benchmarking

Total Space ASF



Total space includes spaces coded in FICM 100s through 700s (except 740 and 745).

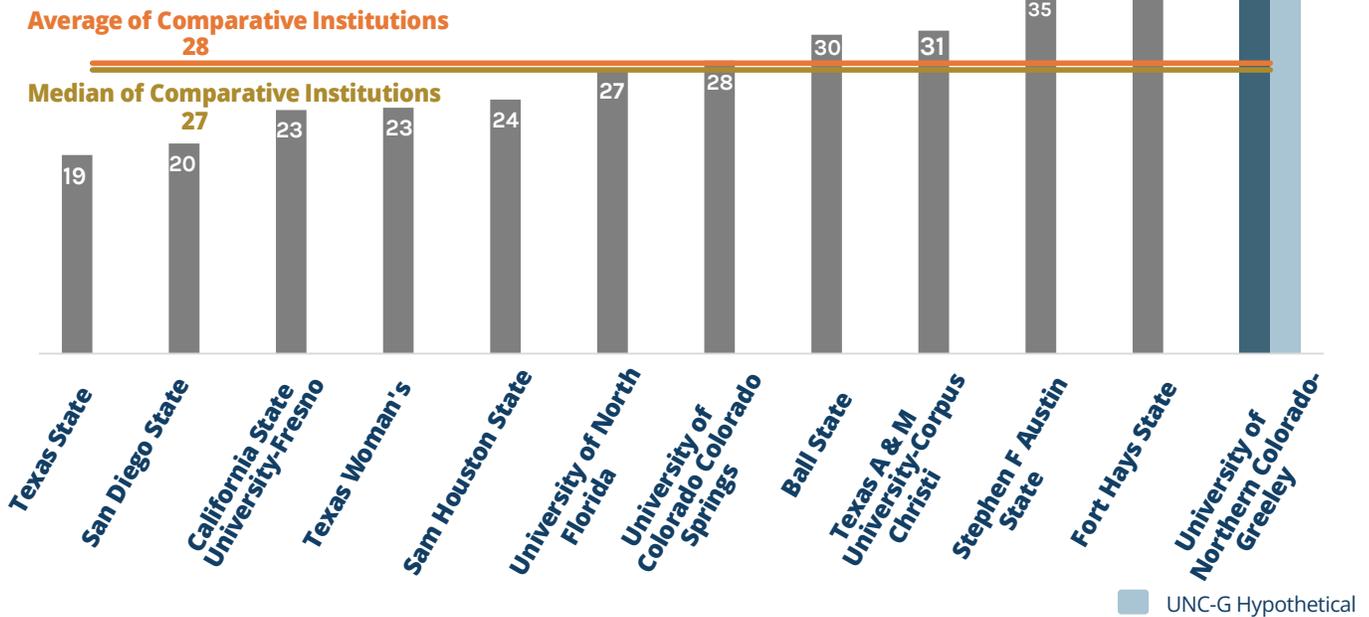
Total Space ASF per Student FTE



The Target Year Student FTE is 6,218 students, which assumes a headcount/FTE ratio consistent with Fall 2021.

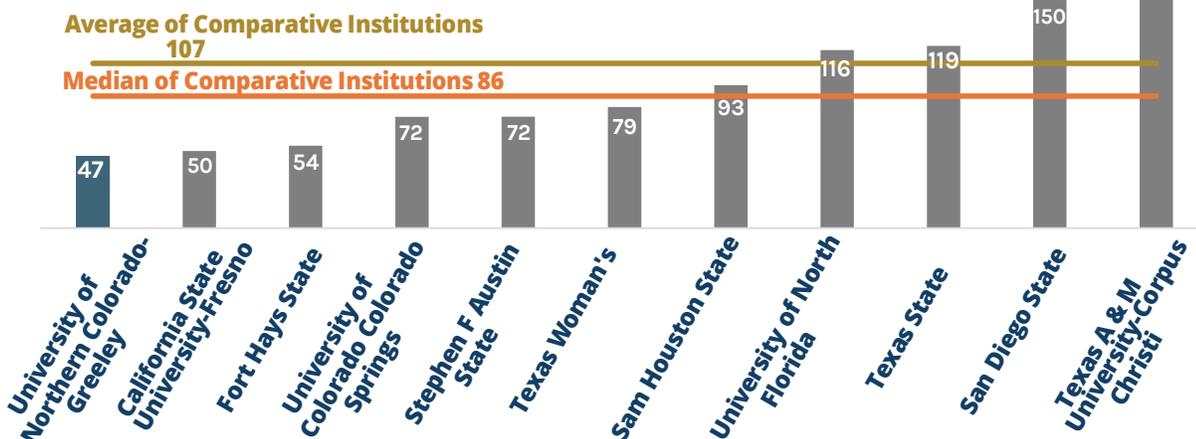
Instructional Space ASF per Student FTE

INCLUDES CLASSROOMS, TEACHING LABS, OPEN LABS & ASSOCIATED SERVICE SPACE



The Target Year Student FTE is 6,218 students, which assumes a headcount/FTE ration consistent with Fall 2021.

Research Lab Space ASF per Faculty FTE



Faculty FTE information was not available for Ball State.



PART 4

Site Analysis

- **Open Space & Facilities Assessment**
- **Educational Adequacy Assessment**

Open Space & Facilities Assessment

Strength: Picturesque Campus

UNC is located in a picturesque setting across a 260-acre campus, featuring a traditional collegiate landscape. Comprised of grand open lawns, a diverse tree canopy, and unique architecture, the campus provides a park-like experience for UNC students, staff, faculty, and the surrounding community.

Central Campus showcases the university's history through its preservation of the early 1900's architecture, some of the historic architecture that gives the campus a traditional and unique character.

With nearly 3,400 trees on campus, UNC has been recognized as a Tree Campus USA by the Arbor Day Foundation since 2012 for its commitment to tree preservation, care, and community involvement. This prestigious acknowledgment shows UNC's appreciation for environmental health, the scenic and aesthetic qualities of the outdoor environment, and the resiliency that comes with a dense and diverse tree canopy.

While the campus understory and Central Campus facilities reflect the traditional qualities of eastern colleges through vast manicured lawns and early 1900s style architecture, UNC has recently taken steps to embrace the regional landscape to further diversify campus open spaces becoming a resilient, sustainable, and diverse ecosystem. Through these steps, UNC can become a regional model for what a campus landscape that embraces the local environment can achieve. While the western region of the United States faces many environmental challenges ahead, UNC's commitment to adapt will create a resilient campus that can face climate and environmental challenges head on.

As the campus continues to develop in a more sustainable direction, the plan identifies special interest areas on Central Campus to preserve in character while evolving the remainder of the "traditional" campus to a resilient landscape that celebrates the regional climate, habitat, and environment.

"I love all the trees and look of the halls surrounding this spot. I also like that it is a unique piece of art."

-North of Gunter Hall

"Heard many positive comments from prospective families coming from Ft Collins (all friends of ours). They expresses surprise on how nice our campus is "

"There is a very pretty view. And it helps me to think"

- Feedback from MapMyBearCountry Survey
- Feedback from Focus Group or Open Forum



Gunter Hall and Gunter Green on Central Campus



Garden Theater provides a unique outdoor event space



A beautiful view of the Rocky Mountains



Manicured lawns drape the campus landscape



Entry to Tobey-Kendel Dining Hall

Strength: Campus Commons University Center

CAMPUS COMMONS FACILITY

Campus Commons serves as the gateway to campus and central location for the campus community. Finished in 2019 with the support of donors in the UNC community, the facility points to UNC as a future forward destination for student support and engagement while providing an important presence on campus and the community.

The large spaces showcase cultural events and performances while also providing a flexible gallery space for art. An abundance of rooms also provides space for group meetings, studying rooms, hangout space, and rooms for rehearsal. The social stairs are a focal point and often used as a starting point for campus tours and orientations.

This facility sets the standard for future building improvements as an energy conscious certified LEED Gold facility that reinforces UNC’s commitment to sustainable growth.

IMPROVED DINING SERVICES AT THE UNIVERSITY CENTER

Recently opened in the Spring of 2023 new restaurants at the University Center bring diverse food options for students, and a spot to socialize, study, and collaborate. With the temporary closure of Tobey-Kendel dining hall, the new restaurants at the core of campus help provide dining options closer to Central Campus.

The consistent student traffic will activate the Campus Core to create a bustling hub.

“The Campus Commons is an inviting public space. The meeting rooms are state-of-the-art and comfortable arranged communally where all can see each other and feel equal.”

“Campus Commons is nice, modern, well-lit and has everything I need in a central area.”

“This is a great facility for our music students, faculty and community!”

“Typically a quiet place to study and just where I spend a lot of time”

- Feedback from MapMyBearCountry Survey
- Feedback from Focus Group or Open Forum



University Center and Campus Commons connection



Performance Hall



UNC Gallery features temporary exhibits



Campus Commons events space



A welcoming entrance to the Campus Commons



New dining at University Center

Strength: An Engaged Student Community

LEVERAGE DIVERSITY

UNC is home to a vibrant student body that continues to grow and diversify. Students connect based on similarities including similar backgrounds and identities. Students create support systems resulting in a community that helps enable student success.

Campus groups and organizations such as the Cultural and Resource Centers, LEAF, Garden Club, Earth Guardians, Athletics, and Greek Life, all add to the vibrancy and diversity of the UNC campus. These groups have created a larger network of communities that support and uplift each other where student groups can promote and encourage needed change.

CONTINUE BUILDING SUPPORT

A strong community is at the heart of a culturally rich institution, which often includes an active student body. UNC has a strong network of passionate communities that can benefit from additional support, both through the quality of the physical environment, facilities upgrades, and through policies allowing flexibility for social engagement. UNC should continue to maintain transparent communication between faculty, staff, and students regarding current and future UNC development plans to ensure a student first approach.

"Campus Recreation has become a second home for me and all of my friends. It's our sanctuary. I would not have been to survive through 6 years at UNC without it."

"This is a great facility for our music students, faculty and community!"
-Campus Commons

"We promote home away from home. It's a space to hang out with friends and staff and feel included."
- Cesar Chavez Cultural Resource Center

- Feedback from MapMyBearCountry Survey
- Feedback from Focus Group or Open Forum



Veteran's affairs socializing



Student LEAF



Dia de Los Muertos event



Juneteenth celebration at Marcus Garvey Cultural Center



Bonnie House dedication celebration



Game day events

Challenge: Undefined Sense of Mobility & Circulation

DRIVING CULTURE

Despite having two walkable campuses, the distance between the campuses, the busy arterial streets that separate them, and student discomfort walking off-campus contribute to a car culture at UNC. It's widely understood that students prefer driving to off-campus destinations, and even between campuses.

There's a cost to the oversupply of parking. Paved surfaces and building sites don't allow for the infiltration of stormwater, promoting flooding. Surface lots also contribute to the heat island effect – raising the ambient temperature. During the peak hour, only 60% of parking spaces were used where. Lots on Central Campus were fuller compared to West Campus.

INCONSISTENT PEDESTRIAN HIERARCHY

While there is an abundance of pathways for both pedestrians and bikes, not all provide accessible connections throughout campus. An undefined campus spine makes it challenging to navigate throughout campus from a wayfinding perspective. This can create a confusing and overwhelming experience for users. Additionally, a lack of a central spine on campus circulation makes it challenging to condense resources, such as lighting, seating, refuse, accessibility, and wayfinding elements.

Recommendations

- Create vibrant student experience within campus open spaces and pedestrian pathways.
- Make circulation around campus easier to navigate.
- Make walking and biking more comfortable and convenient.
- Increase access, comfort, and convenience of Boomerang services.
- Consider redevelopment of underutilized parking lots.
- Change the balance of origins and destinations on the Central and West Campuses.
- Promote walkable off-campus destinations.

"Irregular operating hours/schedule for the Boomerang encourages students to drive to Central Campus rather than use an alternate mode of transportation."

"Accessibility as a general concern across campus."

- Feedback from MapMyBearCountry Survey
- Feedback from Focus Group or Open Forum



Lack of clear wayfinding and signage



An abundance of surface parking areas



Limited shuttle availability



Busy 11th Avenue disconnects West and Central Campuses



Limited bicycle amenities



Pedestrian conflicts in high traffic areas

Challenge: Safety & Security

Students tend to feel less safe at campus perimeters such as busy streets, parking lots, and the threshold between campus and surrounding neighborhoods.

The campus is bound by Downtown Greeley to the north and a mix of residential and commercial uses to the south. Both areas have been expressed as areas of safety concern that deter students from accessing food, amenities, and other resources. This further encourages a car-centric campus experience since many students do not feel safe walking south to the University Square shopping area, and instead drive west to Target and Safeway.

Parking lots are generally located on the outskirts of campus, which allows for a pedestrian focused campus core. However, many safety concerns were brought up in various stakeholder engagement sessions that indicate certain parking lots do not provide adequate lighting or surveillance.

Students have also expressed concerns with the surrounding neighborhood that are rooted in the expression of individual identity and/or culture. As an increasingly diverse campus community, providing a safe space to learn, grow, and build community is an essential component of a student-first plan.

Recommendations

- Improve lighting levels, quantity of emergency phones, and surveillance capabilities along the campus perimeter, particularly within surface parking lots to increase safety and visibility.
- Foster community building within and around campus by promoting community engagement opportunities.
- Continue to work with the City of Greeley to determine increased safety measures in and around campus.

"Across campus there could be more lighting, especially the edges."

"People run red lights or don't know of the scramble intersection for pedestrians."

"Bishop Lehr is a huge maintenance and safety concern."

"J Lot feels exposed and not as safe compared to other areas of campus!"

- Feedback from MapMyBearCountry Survey
- Feedback from Focus Group or Open Forum

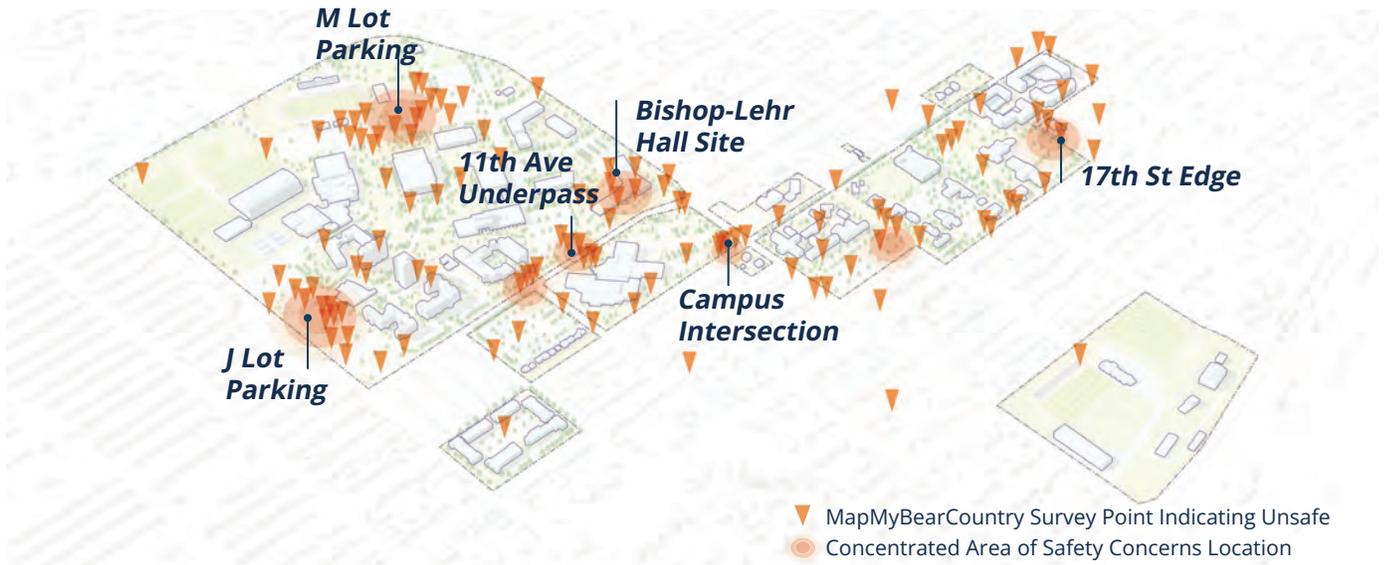


Diagram indicates unsafe areas on campus



Bishop-Lehr is in a prominent location on campus



Poorly lit parking lots at campus edges feel unsafe



Limited lighting within 11th Avenue underpass



Busy intersection creates safety concerns for pedestrians

Challenge: Quality of Open Space Programming

While a picturesque campus provides a stunning outdoor environment, a lack of outdoor amenities and spaces to gather has created the perception that the outdoors is only meant to be visually enjoyed. Large expanses of manicured lawn are not only lacking in biodiversity, but also inhibit diverse open spaces that provide students with places to sit, gather, study, and socialize. The existing expanses of turf lawn create a monoculture landscape that provides little ecological value and that is resource intensive. High amounts of water and frequent maintenance are required to maintain the existing understory landscape.

A general lack of seating and areas of respite throughout the campus has prevented students and the UNC community from fully embracing the benefits the outdoor environment can provide.

Currently, the campus only contains about 8% of xeric landscape while the rest is turf lawn. While turf lawn is an appropriate approach for large gathering spaces and recreational use, it fails to provide a framework for various scales of open space typologies. Students seek spaces to socialize, study, exercise, and relax. While turf lawn can accommodate some of those needs, different landscape and hardscape approaches are needed to provide more diverse and accessible outdoor amenities.

Food truck plazas, pollinator gardens, trail systems, pavilions, picnic areas, hammock groves, wellness/fitness loops, recreational

fields, stormwater demonstration, amphitheaters, art exhibitions, outdoor classrooms, and various other outdoor space typologies all require different landscape approaches to be successful.

Recommendations

- Activate underutilized outdoor spaces and major pedestrian circulation routes with flexible seating opportunities, artistic expressions, accessible trails, lighting, and power.
- Identify campus areas or neighborhoods to create themed landscapes with complementary programs from surrounding facilities to further activate outdoor use.
- Program more sustainable practices, reduction of water use, and flexible furniture for seating.
- Promote seasonal, temporal, or annual events that provide cultural activities, places to socialize and collaborate.
- Create xeric and themed demonstration gardens to encourage and promote water conservation, ecological stewardship, and regional resiliency.

"Overwatering and constant mowing make it difficult to enjoy campus."

"I would like to see more low water grasses and more spaces for students to enjoy. More seating places to do work outside across campus."

- Feedback from MapMyBearCountry Survey
- Feedback from Focus Group or Open Forum



Irrigation channels limit use of space



Opportunities to introduce seating along major pathways



Inactive areas on campus lack a sense of place



Lack of shade and abundance of hardscape creates discomfort in common areas



Immovable furniture limits flexibility and use



Daytime irrigation limits use of space

Challenge: Cultural Representation

Supporting and encouraging a strong sense of campus community is directly tied to student retention and thus success. With an existing and growing diverse student population, it is important to create a welcoming campus that helps alleviate any challenges, uncertainties, and fears that any new, existing, and incoming students may face.

The Cultural and Resource Centers and various student groups and organizations across all campuses play an important role at UNC in building communities that help enrich the student experience. At UNC, the various facilities that make up the Cultural and Resource Centers throughout campus have become communal hubs that embrace and celebrate diverse communities while building strong support systems with each other. Student groups and organizations have found spaces to meet and gather at various facilities throughout campus.

While the people at the core of these communities are the real strength, the physical environment and regulations play a large role in their success. Meeting rooms, event spaces, and general community hubs are due for general maintenance and a review of certain policies and regulations that prevent students from utilizing campus facilities to achieve their needs. While UNC has taken steps to incorporate color and art throughout campus, there is a general desire for more artistic expressions throughout campus that reflects and

celebrates the diversity of the campus community. Similar to the dense historic identity of Central Campus, UNC has an opportunity to embed the stories of today within the campus fabric.

Recommendations

- UNC Facilities Management should work with program directors to identify various rules and regulations that inhibit student expression at communal spaces such as but not limited to meeting rooms and conference spaces.
- Identify exiting barriers that student groups and organizations face when promoting awareness and/or their message.
- Create workshops and/or sessions to further understand the needs and concerns of student groups and organizations.

"Compromises are constantly being made when having events."

"People are interested in sustainable efforts but have no clue it is happening."

"UNC food contracts restrict groups from using their own food vendors at UNC event spaces."

- Feedback from MapMyBearCountry Survey
- Feedback from Focus Group or Open Forum



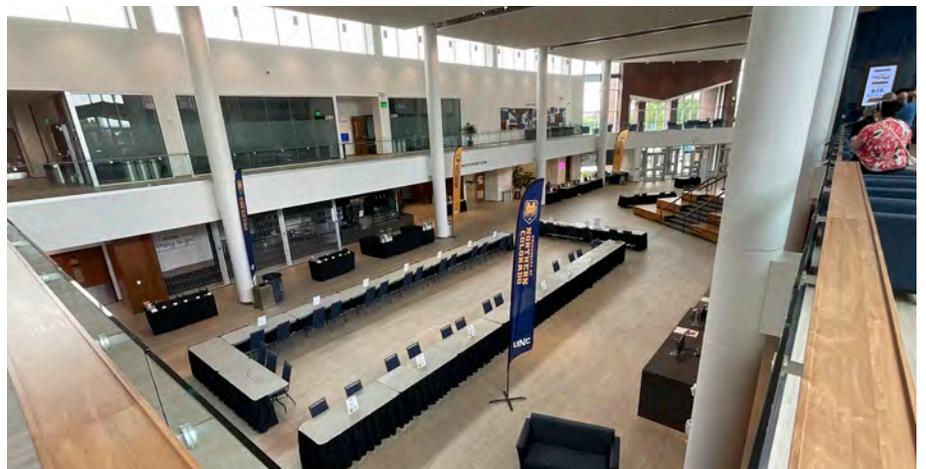
The UNC community values the hidden gems that tell their story



Colorful murals



Gunter Hall lacks vibrancy



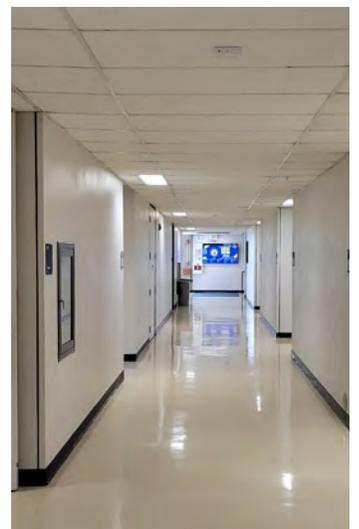
Campus commons could provide space for artistic expressions



Community board at McKee Hall



Common rooms lack identity



Institutional feel

Challenge: Student Housing & Student Life

Cultural and Resource Center

From having connectivity issues from being widely spread out on campus, run down facilities that fail to provide basic amenities, and regulations of campus communal spaces that prevent student expression, the current state of facilities is limited in supporting the needs of the student groups on campus. There has been significant cultural, emotional, and financial investment at these various facilities that speak to the history and resiliency of the various groups on campus. The Cultural and Resource Center groups have all strongly expressed the importance of remaining in place to continue building upon their legacy and have proposed individualized upgrades tailored to their specific needs.

Student Housing

Housing is an opportunity for redefining campus neighborhoods, using swing space for future renovations, and conversations regarding unit and amenity types best suited for UNC's needs.

Recreation

Students have expressed limited functionality of open spaces and present an opportunity to rethink the role and value of campus. These spaces play a vital role in establishing a sense of belonging where additional resources, even temporal, signal an effort and openness to change.

RECOMMENDATION

- Cultural and Resource Centers should remain in place, Facilities Management should work in coordination with program directors to document ongoing maintenance issues and create a phased plan for building improvements.
- Assess all safety concerns related to lighting, climate, and privacy at facilities, especially at facilities located at campus edges and work with campus community to further define and resolve.
- Balance amenities between Central and West Campus residential life program, reinstate a small recreational outpost and other amenities such as dining.

"Some classrooms are too dark and not enough sunlight. No windows."

"Everything needs to be updated, expanded, and easier to access."

"The University Center currently doesn't act like the heart of campus...very administrative"

- Feedback from MapMyBearCountry Survey
- Feedback from Focus Group or Open Forum



Norton Theater entrance



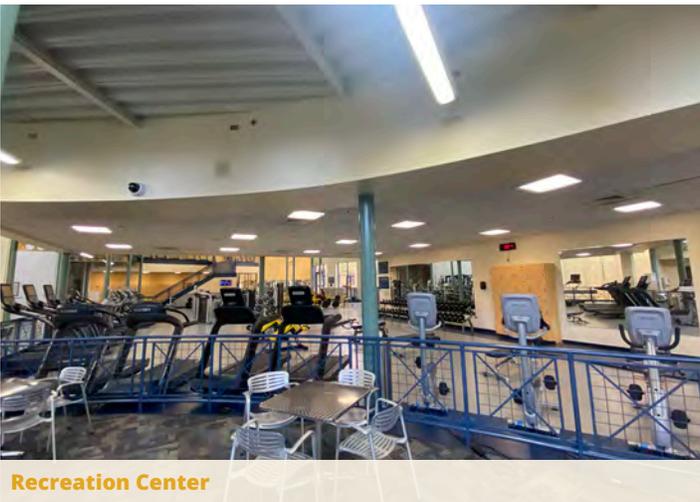
Wiebking Hall common space



Student Service counter



Inadequate workshop space in Frasier Hall



Recreation Center



Hansen Willis room layout

Educational Adequacy Assessment

The educational adequacy study is an assessment of every classroom and class laboratory teaching lab for its current ability to accommodate modern and emerging teaching methods. The assessment team visited every classroom and teaching laboratory lab and assessed each on the categories criteria shown here.

Observations

The Educational Adequacy Assessment was combined with other analyses, interviews, and stakeholder sessions to inform overall recommendations. This plan will focus on the quality and functionality of the facilities.

- Classrooms do not have sufficient space to allow for various teaching approaches.
- Under scheduled classrooms could be repurposed for other needs.
- Frasier Hall does not meet the stature of the College of Performing and Visual Arts. The building is difficult to renovate and is inefficient.
- Performance spaces in Gray Hall and Campus Commons are disconnected.
- McKee Hall and Candelaria Hall don't support modern and flexible teaching styles.
- Michener Library could take a broader view of the library function.
- More research space may be needed to meet research goals.
- Lack of collaboration and social gathering and interaction.

Recommendations

- **Frasier Hall:** Complete renovation or replace elsewhere.
- **McKee Hall:** Complete renovation or replace elsewhere on campus.
- **Michener Library:** Reprogram to a modern learning commons, consider additional student support.
- **Candelaria Hall:** Partial renovation or complete renovation.

Assessment Criteria

ENVIRONMENTAL QUALITY

Daylight & Views

Lighting Control

Location of Controls

Thermal Comfort

Acoustic Quality

LAYOUT AND FURNISHINGS

Proportions & Sightlines

Circulation

Space Flexibility

Student Seating & Writing Surface

Teaching Lab Safety

Teaching Lab Preparation & Storage

Flexible Furnishings

GENERAL CONDITION

Physical Condition

Informal Learning Areas

TECHNOLOGY TOOLS

Podium

Multiple Displays

Electrical Power

Podium Accessibility

Average Room Rating by Building

Employee Type	No. of Rooms Assessed	Total Score	Condition Score	Environmental Score	Layout Score	Technology Score
Skinner Music Library	1	83%	75%	89%	78%	86%
Ben Nighthorse Campbell Center	1	79%	25%	89%	100%	71%
Butler Hancock	5	76%	35%	85%	71%	57%
Ross Hall	39	65%	38%	74%	69%	65%
Kepner Hall	19	63%	55%	53%	63%	80%
Campus Commons	1	62%	50%	78%	78%	29%
McKee Hall	34	60%	44%	42%	82%	62%
Candelaria Hall	31	56%	36%	55%	58%	65%
Gunter Hall	13	55%	29%	57%	63%	57%
Guggenheim Hall	6	53%	33%	63%	54%	48%
Michener Library	5	52%	35%	44%	67%	51%
Frasier Hall	17	50%	29%	48%	58%	52%
Arts Annex	4	44%	38%	39%	50%	43%
Crabbe Hall	6	33%	25%	30%	40%	29%
Grand Total	182	58%	39%	56%	66%	61%

NOTE:

This chart shows the physical condition of academic spaces as well as their adjacency to informal learning spaces. The overall average rating is 58. Most classrooms and teaching labs ranked lowest in the General Condition category. Crabbe Hall, the Arts Annex, and Frasier Hall have the lowest average room ratings.

GOOD ROOM EXAMPLES

Ross Hall 2060: Overall Score: 86%



Kepner Hall 1050D: Overall Score: 72%

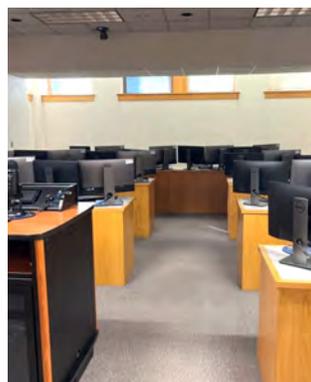


FAIR ROOM EXAMPLES

Candelaria Hall 1085: Overall Score: 59%



Kepner Hall 0090: Overall Score: 63%

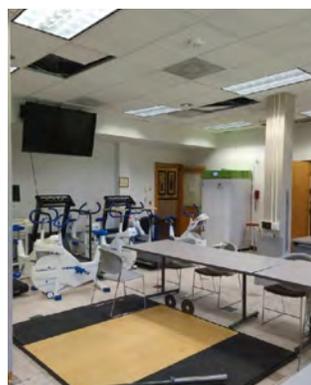


POOR ROOM EXAMPLES

Candelaria Hall 0395: Overall Score: 31%



Gunter Hall 1610: Overall Score: 31%



PART 5

Implementation

- **Plan Ambassadors**
- **Cost Estimates**
- **Partnership Opportunities**

Plan Ambassadors

This plan involves stakeholders, administrators, faculty, staff, students, and campus community, who come together to shape the vision and goals of the institution. While creating a Facilities Comprehensive Plan is important, the role of Plan Ambassadors is equally important to carry on the success of the ideas agreed upon throughout the process.

PURPOSE

Without Plan Ambassadors, the Facilities Comprehensive Plan runs the risk of losing its relevance over time. By having passionate and dedicated individuals who champion the plan, there is a higher likelihood of successfully implementing the ideas outlined in this document. This concept plays a vital role in driving the campus forward, ensuring its transformative impact on the campus community it serves.

Responsibilities Include:

- Providing continuity and momentum to the implementation of the campus plan.
- Ensuring agreed-upon ideas are not forgotten or abandoned once the planning process concludes.
- Advocate and influence to maintain enthusiasm and commitment among the stakeholders.
- Possess the knowledge, skills, and influence necessary to navigate the complexities of campus politics and bureaucracy.
- Mobilize support, build coalitions, and engage key stakeholders to ensure the plan receives the necessary resources, funding, and institutional backing.

Cost Estimates

This estimate has been prepared to provide Order of Magnitude Cost Estimates for the proposed new construction, renovation, and demolition projects identified in the Facilities Comprehensive Plan.

The estimate is based upon the list of potential projects which includes building program, gross square footage, facilities condition index, year built, and estimated timing.

Costs have been developed for each building/program identified by applying appropriate \$/SF for each space, and level of renovation.

The Order of Magnitude Cost Estimates include construction costs only, which comprises direct cost of work, General Conditions, General Requirements, Bonds & Insurances, Overhead & Profit, etc. It does not include project costs such as Design Fees, Permits & Plan Review Fees, Land & Legal Costs, Utility Tap Fees, Special Testing & Inspection, Geotechnical Services, Owner's Contingency, etc.

Unit pricing is based on Q3 2023 costs. Escalation has been included at appropriate percentages based on the estimated timing identified in the list of potential projects.

- For projects identified with an estimated timing of 0-5 years, we have assumed 2.5 years and have carried 15%.
- For projects identified with an estimated timing of 5-10 years, we have assumed 7.5 years and have carried 35%.
- For projects identified with an estimated timing of 10+ years, we have assumed 12.5 years and have carried 55%.

The following pages contain tables of estimated costs and are grouped by description.

0-5 YEARS

- Bishop-Lehr Hall
- Childcare Center
- College of Osteopathic Medicine
- Public Safety Building
- Candelaria Hall
- McKee Hall
- Michener Library
- University Center
- Campus Commons

5-10 YEARS

- Campus Indoor Facility
- New Residence Hall
- Harrison Hall Demo/Upgrade
- Locker Room Addition
- Lawrenson Hall
- Turner Hall
- Jaccuad House
- Kohl House

- Roudebush Cottage
- Davis House
- Cesar Chavez Center
- Scott-Wilcoxon Hall
- Cassidy Hall
- Paseo Central & West Campus
- Paseo Pocket Spaces
- Campus Quad
- Wellness Garden

10+ YEARS

- Performing Arts Academic Building
- Frasier Hall, Music Technology, & Music Library Demo/Upgrade

Description	Program	Building	GSF	FCI	Year Built	Est. Timing (Years)
Demolish	Academic	Bishop-Lehr Hall	135,095	36	1961	0-5
New Construction	Recreation	Campus Indoor Facility	60,000	-	-	5-10
New Construction	Administrative	Childcare Center	10,000	-	-	0-5
New Construction (Option A)	Academic	College of Osteopathic Medicine	110,000	-	-	0-5
New Construction	Athletics	Locker Room Addition	10,000	-	-	5-10
New Construction	Academic	Public Safety Building	15,000	-	-	0-5
New Construction (Option A2)	Academic	Performing Arts Academic Building	88,000	-	-	10+
Demolish (Option A1)	Academic	Frasier Hall	99,626	56	1953	10+
Renovation-High (Option B)	Academic	Frasier Hall	99,626	56	1953	10+
Demolish (Option A1)	Academic	Frasier Hall Music Technology	12,706	88	1994	10+
Renovation-High (Option B)	Academic	Frasier Hall Music Technology	12,706	88	1994	10+
Demolish (Option A1)	Academic	Skinner Music Library	17,543	88	1997	10+
Renovation-High (Option B)	Academic	Skinner Music Library	17,543	88	1997	10+
New Construction (Option A2)	Student Housing	New Residence Hall	100,000	-	-	5-10
Demolish (Option A1)	Student Housing	Harrison Hall	129,697	76	1966	5-10
Renovation-High (Option B)	Student Housing	Harrison Hall	129,697	76	1966	5-10

Q3 2023 Construction Cost/SF (\$)	Escalation	Cost/ SF + Escalation (\$)	Total Cost (\$)	Notes
				Unit pricing is based on Q3 2023 costs.
30	15%	35	4,660,000	Former K-12 school currently vacant, parts used for storage, will require asbestos abatement
870	35%	1,175	70,470,000	Construction assumptions include stand alone steel structure dome with synthetic turf practice field
620	15%	713	7,130,000	Construction assumptions include single story, modest/modular facility, Include small 0.1 acre adventure playground
815	15%	937	103,097,500	Proposed location in place of Bishop-Lehr Hall. Does not include demo of Bishop-Lehr Hall.
700	35%	1,404	7,000,000	Construction assumptions include stand alone building adjacent to Nottingham Field (Football)
750	15%	863	12,937,500	Construction assumptions include a single story model building with 0.5 acre of hardscape for parking and staging of equipment
825	55%	1,279	112,530,000	Construction assumptions include 28,000 GSF for performance and 60,000 GSF for academic functions (classrooms, offices, etc.)
20	55%	31	3,088,400	-
518	55%	802	79,912,500	-
20	55%	31	394,000	-
575	55%	891	11,324,000	-
20	55%	31	543,000	-
546	55%	847	14,853,000	-
585	35%	790	78,975,000	Unit types and mix to be determined.
20	35%	27	3,501,000	-
328	55%	508	65,888,000	Currently being studied by other (to be confirmed)

Description	Program	Building	GSF	FCI	Year Built	Est. Timing (Years)
Renovation-High	Academic	Candelaria Hall	89,907	74	1972	0-5
Renovation-High	Student Housing	Lawrenson Hall	115,343	65	1973	5-10
Renovation-High	Academic	McKee Hall	129,846	79	1968	0-5
Renovation-High	Academic	Michener Library	226,757	75	1972	0-5
Renovation-High	Student Housing	Turner Hall	139,796	76	1968	5-10
Renovation-Medium/Light	Administrative	University Center	129,275	77	1965	0-5
Renovation-Medium	Administrative	Jaccaud House (Gender Resource Center)	1,632	-	1952	5-10
Renovation-Medium	Administrative	Kohl House (APA Resource Center)	3,128	83	1930	5-10
Renovation-Medium	Administrative	Roudebush Cottage (Veterans Resource Center)	1,551	73	1915	5-10
Renovation-Medium	Administrative	Davis House (Marcus Garvey Resource Center)	4,356	77	1917	5-10
Renovation-Medium	Administrative	Cesar Chavez Center (Resource Center)	2,500	-	-	5-10
Renovation-Medium	Administrative	Scott Wilcoxon Hall (Women's Resource Center)	2,589	87	1999	5-10
Renovation-Medium	Administrative	Cassidy Hall (Health Resource Center)	14,447	94	1999	5-10
Renovation-Light	Administrative	Campus Commons	104,292	-	2019	0-5

Q3 2023 Construction Cost/SF (\$)	Escalation	Cost/SF + Escalation (\$)	Total Cost (\$)	Notes
-	-	-	-	See Candelaria Hall renovation study
328	35%	442	51,035,000	17-story building with 400 beds
-	-	-	-	See McKee Hall renovation study
305	35%	411	93,291,000	See Michener Library renovation study
328	35%	442	61,854,500	13-story building with 350 beds
250	15%	288	37,166,500	New 15,000 dining hall renovation was completed in 2023 and is not factored in estimate. Estimate 114,275 GSF (82,000 GSF light-renovation and 32,000 GSF lower level medium-renovation). North entrance to include 5,000 GSF one-level extension.
375	35%	506	826,000	Cultural and Resource Center
350	35%	473	1,478,000	Cultural and Resource Center
375	35%	506	785,000	Cultural and Resource Center
350	35%	473	2,058,000	Cultural and Resource Center
365	35%	493	1,232,000	Cultural and Resource Center
365	35%	493	1,275,500	Cultural and Resource Center
275	35%	371	5,363,500	Cultural and Resource Center
21	15%	24	2,548,500	Total GSF is 104,292 for entire building. Estimate includes minor space renovations of 5,000 ASF office space

Description	Program	Building	GSF	FCI	Year Built	Est. Timing (Years)
Site	Pathways	Paseo Central Campus	2,300(LF)	-	-	5-10
Site	Pathways	Paseo West Campus	2,700 (LF)	-	-	5-10
Site	Open Space	Paseo Pocket Spaces	1 (AC)	-	-	5-10
Site	Open Space	Quad	4 (AC)	-	-	5-10
Site	Open Space	Wellness Garden	2.5(AC)	-	-	5-10
Site	Pathways	Sidewalks	1,000(LF)	-	-	5-10

NOTE:

Facilities Condition Index (FCI) information provided by UNC.

Q3 2023 Construction Cost (\$)	Escalation	Cost/ SF + Escalation (\$)	Total Cost (\$)	Notes
700,000	35%	945,000	945,000	12' Pathway with 80% Concrete, 20% Brick siding/edging
825,000	35%	1,113,750	1,113,500	12' Pathway with 80% Concrete, 20% Brick siding/edging
1,300,000	35%	1,755,000	1,755,000	1 AC to be subdivided in 5 different locations along the paseo. New plazas are 70% hardscape, 30% xeric landscape and tree plantings. Include site amenities such as fixed seating, mobile furniture, lighting fixtures, bike racks, etc.
625,000	35%	843,750	843,500	Replace 20% turf with xeric plantings. Generally high irrigation
2,600,000	35%	3,510,000	3,510,000	Replace 80% of turf with xeric planting. Generally low irrigation. Replace 700 LF of concrete stormwater channel with rip rap and naturalized landscape, include site amenities such as fixed seating, mobile furniture, lighting fixtures, bike racks, etc
200 (LF)	35%	270,000	270,000	Standard 8' sidewalk

Partnership Opportunities

Strengthening collaborative relationships between UNC and the City of Greeley will enhance what it means to be in Bear Country. From economic growth and development, attracting diverse talent, addressing inequalities, and developing strategic partnerships that have the potential to be mutually beneficial.

PURPOSE

Greeley has experienced tremendous growth over the past decade. While it's important to recognize UNC's existing community-based programs and organizations, it's also critical to leverage the continued growth of the region as an opportunity to support UNC's Strategic Plan, more specifically the goals identified within Connect & Celebrate section.

The benefits of aligning priorities cultivate a sense of belonging and identity, which lead to engage constituents and philanthropy, volunteerism, and advocacy for the success of UNC.

Recommendations Include:

- Identify partnership opportunities to implement the proposed 9th Avenue Promenade from *Downtown 2032, The Path Forward*, in order to close the 1-plus mile gap between Central Campus and Downtown.
- Promote development within the dedicated 7-acre area along 20th Street as a co-location district for research, healthcare, and wellness related to the launch of the new College of Osteopathic Medicine.
- Expand the Bear Biz program and continue to grow local businesses, particularly those started by UNC alumni in mixed-use development near campus.
- Entice members of the community to attend a UNC related event by promoting tours of improved spaces and capital improvement projects.
- Enable collaborative research opportunities related to sustainability, health, and wellness within open space capital improvement projects on campus.
- Schedule recurring times for campus community discussions as it's important to find dedicated time to learn from each other in a deliberate and meaningful way.
- Explore redevelopment of Frasier Hall site to create a renewed campus gateway and integrate with surrounding businesses.



Maintain community related events at Campus Commons



Gameday at Nottingham Field



8th Avenue Improvements



UNC Greeley Jazz Festival

PART 6

Appendices



YOUR VOICE MATTERS!

Facilities Master Plan

2020-2025



Acknowledgments

It is with gratitude that we express thanks to individuals, groups, institutions, organizations, and City staff who helped inform the development of the Facilities Comprehensive Plan. This plan was created in the campus community to ensure the success of UNC.

Consulting Team

SmithGroup

Campus Planning, Programming

Wachalski Consulting

Housing and Student Life

Rider Levett Bucknall

Cost Estimating

Project Management

Kirk Lechliter

Assistant Vice President Facilities Management

Christopher Bowers

Energy and Sustainability Manager

President's Cabinet

Andy Feinstein

President

Kirsten Fleming

Provost and Executive Vice President

Dale Pratt

*Vice President for Finance and Administration
and Chief Financial Officer*

Darren Dunn

Director of Athletics

Dan Satriana

General Counsel to the Board of Trustees

Tobias Guzmán

Vice President for Diversity, Equity and Inclusion

Allie Steg Haskett

Vice President for University Advancement

Cedric Howard

Vice President for Student Affairs and Enrollment Services

Dawit Senbet

*Faculty Senate Chair,
Professor and Department Chair, Economics*

Jennifer Almquist

Chief of Staff

Lori Riley

Executive Assistant to the President

Steering Committee

Blaine Nickeson

*Associate Vice President Administration
and Vice President for Administration Office*

Brad Sharp

Senior Director-Academic Technology and Support Services

Christopher Cobb

Executive Director of Student Engagement

Dana Landry

Professor of Jazz Studies and Piano, Director of Jazz Studies

Darin Thrun

Senior Director of Development

Graham Nugent

Assistant Athletic Director of Facilities and Events

Greg Johnson

Facilities Management

Jay Dinges

Director of University Center

Jediah Cummins

Executive Director for Housing and Auxiliary Services

Jeri Lyons

Associate Provost & Dean Grad School

Jordan Barkley

Associate Provost

Kendra Schneider

Assistant Director of Undergrad Operations

Nickie Archibeque

Colorado Opportunity Scholarship Initiative Director

Phillip Wyperd

Assistant Vice President for Information Technology

Stephanie Torrez

Assistant Vice President for Student Success

William Mummert

Controller

Focus Groups

Academic Affairs

Athletics

Campus Recreation

College of Business

College of Education and Behavioral Sciences

College of Humanities and Social Sciences

College of Natural and Health Sciences

College of Osteopathic Medicine

College of Performing and Visual Arts

Division of Diversity, Equity, and Inclusion

Downtown Greeley Development Authority

Enrollment Services

Extended Campus

Facilities Management

Finance and Administration

Graduate School

Housing

Human Resources

Information Technology

Staff

Security

Student Affairs

Student Housing

Student Life

Sustainability Coordinator and Advocates

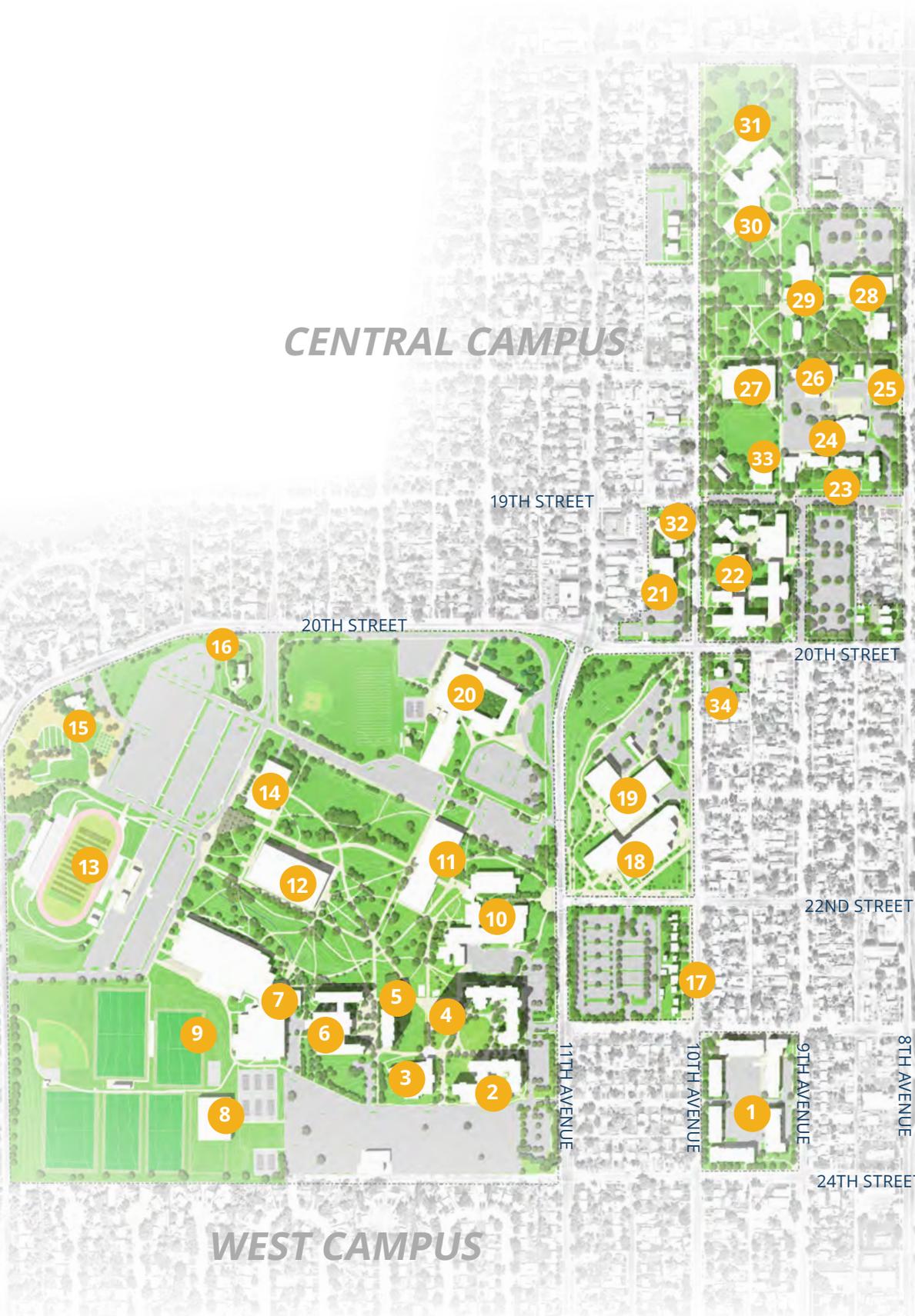
Transportation Services

University Center/Campus Commons

University Advancement

University Libraries

Existing Campus Map





EAST CAMPUS

WEST CAMPUS

- 1 Arlington Park Apartments
- 2 North and South Halls
- 3 Holmes Dining Hall
- 4 Lawrenson Hall
- 5 Turner Hall
- 6 Harrison Hall
- 7 Recreation Center
- 8 Empower Center
- 9 Practice Fields
- 10 Ross Hall
- 11 McKee Hall
- 12 Michener Library
- 13 Nottingham Field
- 14 Candelaria Hall
- 15 Judy Farr Alumni and Development Center
- 16 César Chávez Cultural Center
- 17 Gender and Sexuality Resource Center
- 18 Campus Commons
- 19 University Center
- 20 Bishop-Lehr Hall

CENTRAL CAMPUS

- 21 Hansen-Willis Hall
- 22 Mesa Neighborhood
- 23 Presidents Row
- 24 Arts Annex
- 25 Crabbe Hall
- 26 Roudebush Cottage
- 27 Gunter Hall
- 28 Kepner Hall
- 29 Carter Hall
- 30 Frasier Hall
- 31 Skinner Music Library
- 32 Cassidy Hall
- 33 Ben Nighthorse Campbell Center
- 34 Davis and Kohl Houses

EAST CAMPUS

- 35 Parsons Hall
- 36 Jackson Field
- 37 Jackson Field Sports Complex

SMITHGROUP



Facilities Comprehensive Plan
Sustainability & Landscape Design Guidelines
SPRING 2024



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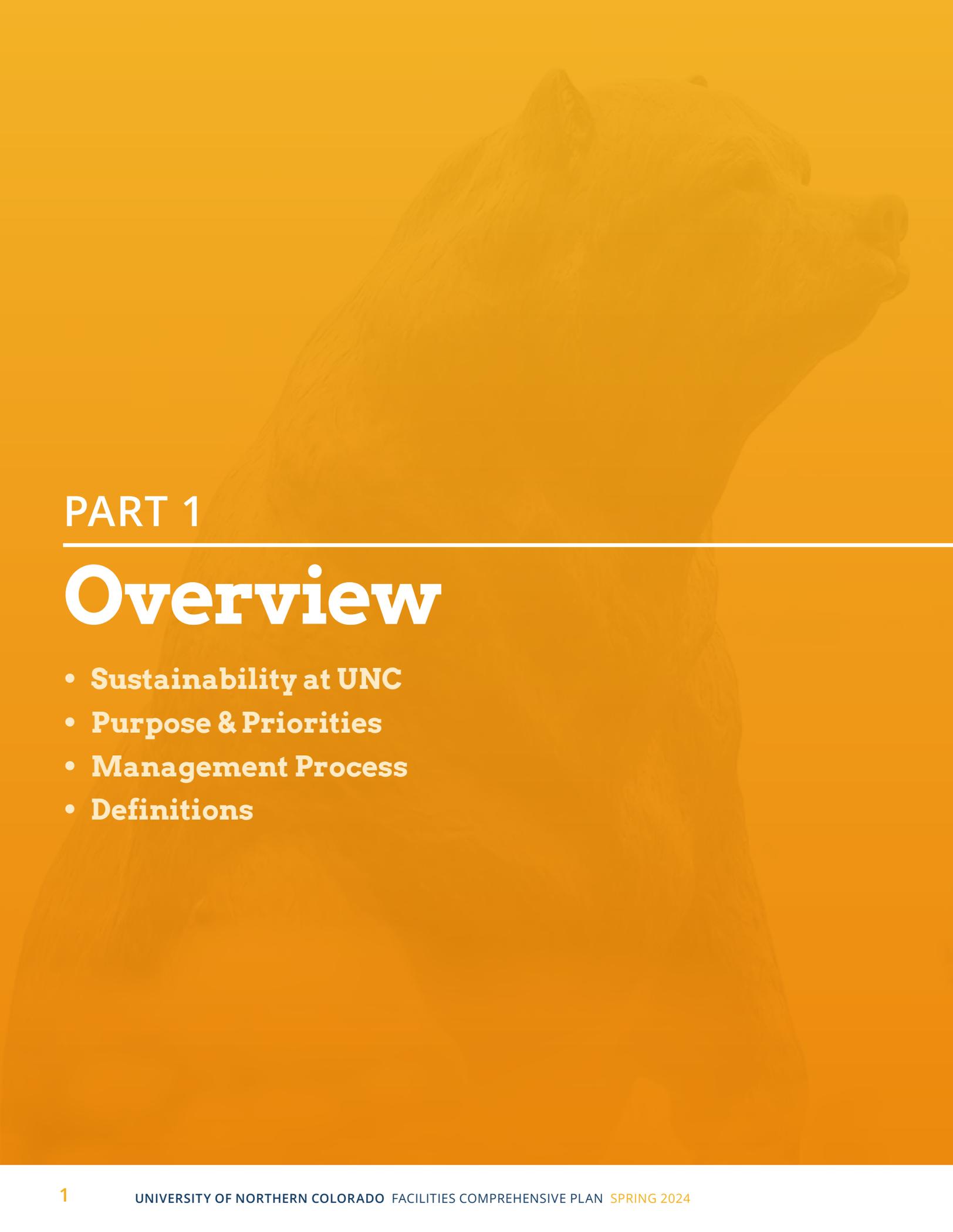
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PART 1

Overview

- **Sustainability at UNC**
- **Purpose & Priorities**
- **Management Process**
- **Definitions**

Sustainability at UNC

Sustainability is emerging as a cornerstone of UNC and is an integral part of the design and construction process. These guidelines represent core priorities and considerations for the successful advancement and execution of UNC's future sustainable campus development projects.

With input from key stakeholders, including faculty, staff, and students, the UNC Sustainability & Landscape Design Guidelines advance the University's commitment to sustainable strategies for the design and construction of new buildings, renovations, open space improvements, and asset renewal projects while informing project managers, stakeholders, architects, engineers, and contractors about the integration of sustainable measures for projects on campus.

UNC Facilities Management welcomes all to use these Guidelines and to provide feedback because the health, well-being, resiliency, and success of our campus is everyone's responsibility. This is intended to be a "living document" and will mature along with the evolution of sustainability policies and practices.

The Sustainability & Landscape Design Guidelines are a companion to the Facilities Comprehensive Plan. Together they align with UNC's Strategic Plan *Rowing, Not Drifting 2030* by focusing on the student experience and environmental sustainability.

This document also builds upon standards set in the 2003 Landscape Guidelines Plan and aligns with various State of Colorado programs to help establish UNC's future goals and aspirations that promote opportunities for future funding.

The document organization consists of three parts:

- **Part 1 Overview:** Establishes the overall purpose, priorities, team roles, and responsibilities
- **Part 2 Technical Guidelines:** Outlines best practices, opportunities, and measures to track progress and impact
- **Part 3 Benchmarking:** Assesses UNC's environmental impact against peer institutions



UNC permaculture garden



Alternative transportation via the Boomerang Shuttle



Recycle and composting booth at the Taste of UNC



Youth Summer Program at the Poudre Learning Center



Tree planting on Arbor Day in partnership with Tree Campus USA

Purpose & Priorities

HOW TO USE THESE GUIDELINES

These guidelines will ensure that sustainability is embedded within the design and construction process, transitioning the university to a more sustainable built environment.

Key Themes

The Technical Guidelines are divided into five topic areas and are reflective of stakeholder priorities and feedback received as part of the Facilities Comprehensive Plan.

Each topic area serves as an aspirational guide for project teams regarding the future projects on campus.

- **Site Systems:** Develop sites sustainably by integrating surrounding ecosystems that prioritize healthy, local, low-carbon materials
- **Landscape:** Emphasize native, diverse, and resilient landscapes that reduce reliance on water
- **Energy:** Prioritize efficient, low-carbon design that is electrification ready
- **Facilities:** Modernize and improve efficiency of buildings to enhance educational adequacy
- **Placemaking:** Promote the design of active, welcoming, healthy, and comfortable spaces

Strategies

Strategies are defined as either minimum requirement, best practice, or aspirational for a project. The following rules apply for selection of strategies.

- **Minimum Requirements:** All minimum requirements are required for applicable project types

- **Best Practices:** Team should select 1-3 best practices as applicable by project type. If no best practices can be pursued the team must document the exception in alignment with the management process
- **Aspirational:** Ideally project teams will choose to implement at least one aspirational strategy as applicable by project type. If an aspirational strategy cannot be selected then the team must document the exception in alignment with the management process

Goals

The goals were informed by the University throughout the Facilities Comprehensive Plan processes. All relevant goals are included in each category of the technical guidelines. These goals are intended to guide future project aspirations.

STUDENTS FIRST APPROACH

Student perspectives are key to advancing UNC's culture of sustainability. Many students expressed their desire to integrate research and experiential learning across the university throughout the planning process as part of a more fully integrated approach that's equally visible and accessible to all stakeholders on campus.

UNC is in a position to leverage its Environmental Studies program and student organizations such as UNC Chapter of Earth Guardians to promote core sustainability concepts to a broader audience and help achieve the university's goals moving forward.

FOLLOW UP ITEMS

● **UNC Should Develop a Comprehensive Climate Action Plan**

A Climate Action Plan is more than just an operational guideline; it's a strategic framework for reducing greenhouse gas emissions and enhancing climate resilience. The creation of such a plan not only lowers operational costs but also prioritizes resource allocation for academic excellence and student services. Moreover, by cultivating an environment ripe for sustainability research and innovation, UNC can better prepare its students to face complex global climate challenges. Thus, a Climate Action Plan extends UNC's reach from mere academic excellence to broader societal impact.

● **UNC Should Annually Review These Guidelines**

It's critical for UNC's Facilities Management to review and update these guidelines annually. An annual review ensures that the guidelines remain a living document, responsive to evolving sustainability challenges and insights. Such revisions will keep UNC aligned with its sustainability goals, making sure they are not only relevant but also ambitious and forward-looking.

● **UNC Should Track and Measure Progress**

A real-time online dashboard that tracks key sustainability metrics serves multiple purposes. Not only does it transparently showcase UNC's environmental commitments, but it also boosts campus-wide engagement. The dashboard acts as both an educational and an accountability tool, fostering a robust culture of sustainability at UNC. In addition to this, UNC should actively participate in the AASHE's STARS (Sustainability Tracking, Assessment & Rating System) program. Reporting to STARS offers a structured approach to measure sustainability performance, providing valuable benchmarks for continuous improvement while elevating UNC's sustainability profile at a national level.

Management Process

ENERGY & SUSTAINABILITY MANAGER

The Energy and Sustainability Manager bears an important role in taking inquiries from faculty, staff, and students about sustainability initiatives as they relate to UNC's strategic initiatives. This role is a critical link to ongoing coordination regarding stewardship efforts that support related goals and priorities, but should also be supported by other stewards including project managers, design and construction teams, and others in related roles.

DESIGN & CONSTRUCTION TEAMS

Design Teams should take an integrative process approach to ensure sustainability is considered through all phases of the project. Key roles typically include architects, engineers, and professional service consultants hired by UNC to advise a project in accordance with project requirements and who are responsible for evaluation, documentation, integration, and execution of these guidelines as part of their professional services.

Construction Teams are the general contractors, subcontractors, suppliers, and others hired by UNC to construct a project in accordance with project Contact Documents.

Both teams are responsible for executing the Sustainability & Landscape Design Guidelines as applicable in their work.

PROJECT TRACKING & REPORTING

UNC Facilities Management will be implementing sustainable design strategies into design projects. The Energy and Sustainability Manager is the key representative that supports Project Managers from Design and Construction Teams through all phases of a project. It is suggested that associated teams meet at a regular schedule (i.e. monthly or weekly) with project managers to review and discuss strategies, exceptions, and deliverables to ensure teams are on track. A regular coordination process should be developed to provide guidance and direction to course correct as needed to ensure goals are met.

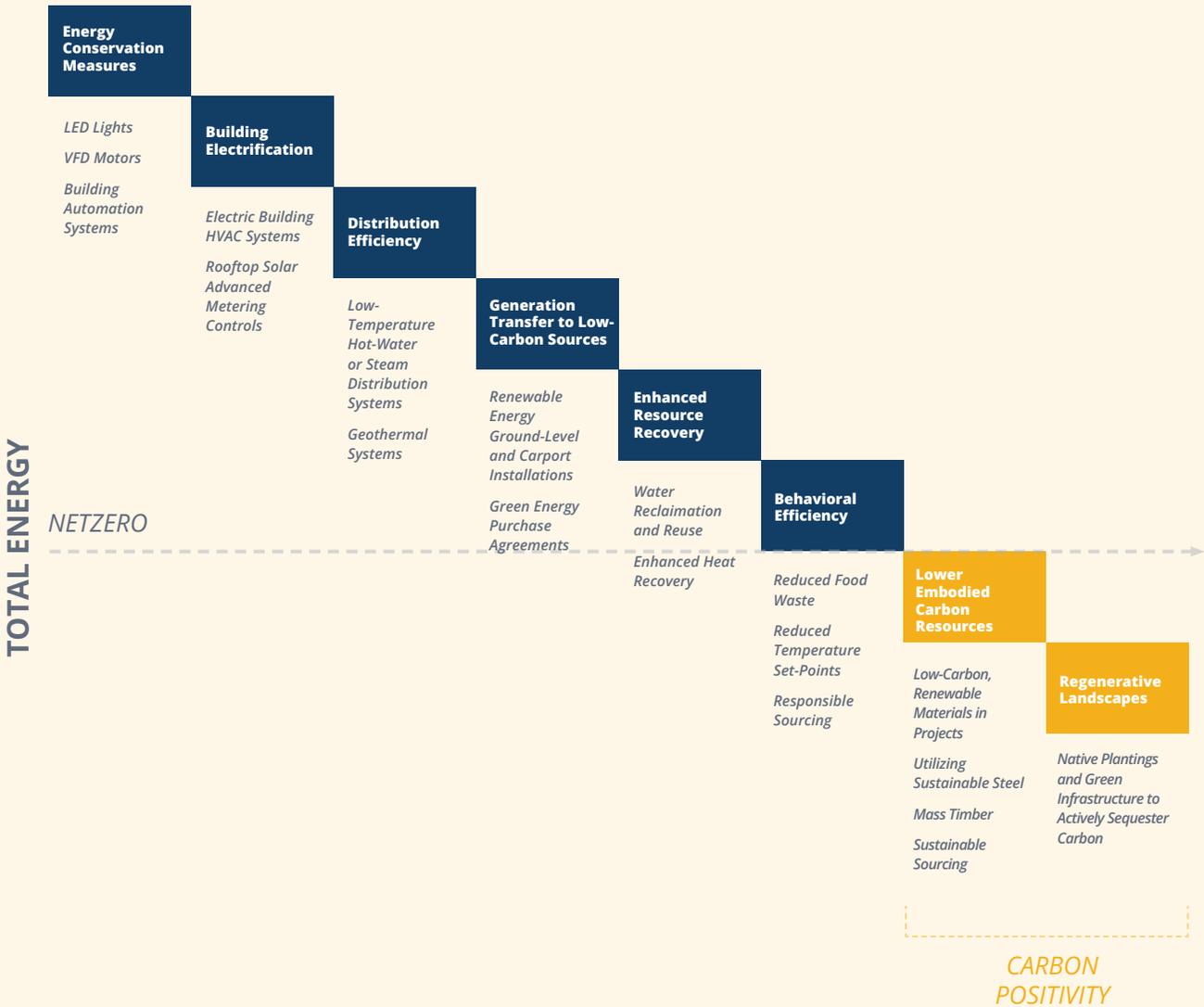
EDUCATION & ENGAGEMENT

UNC's physical environment shapes how students, faculty, staff, and visitors experience the campus. Therefore, project teams should consider opportunities to provide educational opportunities such as signage or artwork around a project's sustainability strategies and accomplishments (examples include LEED certification, expected performance metrics, and innovative design concepts).

Experiential learning enables engagement, research, and potential funding opportunities that advance the culture of sustainability at UNC.

FUNDING STRATEGY & COORDINATION

By committing to a process to reduce emissions and embracing sustainability practices, UNC has an opportunity to contribute to a more resilient future while also positioning for grants, investments, collaborative research, and intellectual support to reduce upfront costs and advance innovation



Definitions

The following definitions serve as a reference guide for the Sustainability & Landscape Design Guidelines Plan. They provide a shared vocabulary to facilitate effective communication among stakeholders working towards a sustainable future and ensure everyone has a comprehensive baseline understanding of strategies, technologies, and policies at UNC.

Climate Action

CARBON FOOTPRINT	The total amount of greenhouse gas emissions directly and indirectly associated with an organization, individual, or activity
CARBON NEUTRALITY	Achieving a net-zero balance of greenhouse gas emissions through a combination of emission reductions and offsetting measures, such as carbon sequestration or renewable energy investments.
ENVIRONMENTAL JUSTICE	The fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, in the development, implementation, and enforcement of environmental laws, regulations, and policies.
GREENHOUSE GAS (GHG)	Gases that trap heat in the Earth's atmosphere, contributing to climate change. Examples include carbon dioxide (CO ₂), methane (CH ₄), and nitrous oxide (N ₂ O).
GLOBAL WARMING POTENTIAL (GWP)	A measure of how much a given mass of a greenhouse gas contributes to global warming over a specified time period, typically 100 years, compared to the same mass of carbon dioxide.
SCOPE 1 EMISSIONS	Direct greenhouse gas emissions that come from sources owned or controlled by an organization, such as the combustion of fossil fuels in vehicles, equipment, and facilities.
SCOPE 2 EMISSIONS	Indirect greenhouse gas emissions that result from the generation of purchased electricity, heat, or steam used by an organization in its owned or controlled sources. These emissions are produced off-site by the entity that generates the energy but are attributed to the organization that consumes the energy.
SCOPE 3 EMISSIONS	Other indirect greenhouse gas emissions that occur in an organization's value chain, including emissions from business travel, waste disposal, transportation and distribution, and the use of purchased goods and services. Scope 3 emissions are often the most challenging to quantify and manage, as they involve activities not directly controlled by the organization.

Management Process

ASSET RENEWAL

Projects whose central purpose is to modernize and extend the life expectancy of a building or infrastructure asset (i.e. deferred maintenance or other asset stewardship projects).

BASIS OF DESIGN (BOD)

The Basis of Design describes the project specific design and technical approach to design, and includes the extended documentation of principles, assumptions, rationale, expectations, variables, and criteria used for calculations during design.

INTEGRATED DESIGN PROCESS (IDP)

An interdisciplinary design approach that brings together disciplines that usually work separately. An IDP can help create a more efficient, sustainable building.

LIFE CYCLE COST ASSESSMENT (LCCA)

The process of assessing the total cost of obtaining, owning, and disposing of an investment. In this context, LCCA is used to evaluate and compare design options for a project for lifetime cost-effectiveness.

OWNER'S PROJECT REQUIREMENTS (OPR)

A foundational document detailing functional requirements and expectations of a project as well as its future operation. The OPR will serve as a guideline that informs design, as well as the Basis of Design (BoD).

Certification Frameworks

** Indicates High Performance Certification Programs (HPCP) adopted by the State of Colorado Office of the State Architect (OSA)*

ENVISION FRAMEWORK

An independent, third-party project verification and awards program to promote projects that adhere to the sustainability criteria in the Envision framework. These criteria cover Quality of Life, Leadership, Resource Allocation, Natural World, and Climate and Resilience.

GREEN GLOBES*

Green Globes is a comprehensive, science-based, three-in-one certification system that evaluates the environmental sustainability, health & wellness, and resilience of all types of commercial real estate.

LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN (LEED)*

A globally recognized 3rd party green building rating system that promotes the sustainable design, construction, and operation of high performance green buildings and communities. The following versions of LEED are referenced in this document: LEED v4.1 BD+C, LEED V4 BD+C, LEED v4 Commercial Interiors. Please refer to applicable LEED documents as needed.

LIVING BUILDING CHALLENGE (LBC)

A performance based built environment certification program and sustainable design framework that bases performance on 7 'Petals' – Place, water, energy, health & happiness, materials, equity, and beauty. LBC certification differentiates itself through a focus on regenerative design.

SUSTAINABLE SITES INITIATIVE (SITES)

A rating system that guides, evaluates and certifies a project's sustainability in the planning, design, construction and management of landscapes and other outdoor spaces.

WELL BUILDING STANDARD

A performance-based framework for measuring, certifying, and monitoring the elements of the built environment that impact human health and wellbeing, through air, water, nourishment, light, fitness, comfort, and mind.

Design Process

CONCEPT / FEASIBILITY	Initial project collaboration and research to determine scope, establish goals, develop requirements, evaluate feasibility, select a project team, and assess the proposed location through a site survey or similar analysis.
SCHEMATIC DESIGN (SD)	Review project requirements to develop an initial building design that includes the development of a general plan and basic exterior design. The end goal is to develop a basic building design.
DESIGN DEVELOPMENT (DD)	Design team revises SD drawings to provide more detail on plumbing, electrical, HVAC, energy usage, and any other project specific systems. This phase includes material, finish, and product selection and concludes when an interior and exterior design is finalized.
CONSTRUCTION DOCUMENTS (CD)	In the CD phase the architect and design engineers finalize a technical design that includes structural engineering and detailing, heating air conditioning and ventilation systems, plumbing, electrical, gas, energy calculations, and all products and materials selected and scheduled.
CONSTRUCTION ADMINISTRATION (CA)	Construction administration includes administrative tasks performed by an architect (or other governing body) to help oversee the construction of a project. This phase aims to ensure the timely execution of construction.

Site & Landscape

BIODIVERSITY	The variety of all living things found in a particular place on Earth, or the total variety of life on Earth.
COOL ROOFS	Roofs constructed of light-colored materials or materials with improved reflectiveness that reflect more sunlight and emit more thermal energy than conventional roofs.
GREEN ROOFS	Flat or slightly sloped roofs comprised of vegetation, preferably native, planted over a waterproofing system.

HEAT ISLAND EFFECT

Increased ambient air temperatures in urbanized landscapes, as result of a scarcity of greenspace, an abundance of pavement and other heat-trapping urban surface materials, urban geometry (wind flow, sunlight exposure, etc.), and heat-generating human activities.

LIGHT POLLUTION

The excessive or improperly designed use of outdoor artificial lighting that adversely impacts human sleep cycles, animal behavior, and astronomical observation.

NATIVE VEGETATION

Regionally indigenous plants that are adapted to the climate and environmental conditions of a given place. At UNC, native vegetation should be: 1) native to the region; 2) drought tolerant/ climate adaptive; 3) and/or reflective of the cultural histories of the Ute, Cheyenne, Arapahoe, and Lakota people, Northern Colorado, and the UNC community.

STORMWATER BEST MANAGEMENT PRACTICES (BMP)

Infrastructural, vegetative, and managerial design practices that reduce flooding, pollution, erosion, and structural damage during rain events.

Materials & Waste

ZERO WASTE

A systematic approach to waste management that emphasizes conservation and reuse of materials with the intent to eliminate landfill waste and support a circular economy. Zero waste typically refers to a minimum of 90% diversion rate.

CIRCULAR ECONOMY

A circular model of production and consumption where materials are made to be reused and repurposed instead of becoming waste.

Health & Wellness

BIOPHILIC DESIGN

A design approach used in the built environment to connect occupants to nature, through naturally inspired shapes, indoor plants and greenery, daylighting, and other space and place conditions.

Energy & Grid

ENERGY USE INTENSITY (EUI)

An indicator used to demonstrate the energy efficiency of a building's design and/or operations, usually expressed in units of energy per square foot per year. Energy Retrofits Energy retrofits are energy conservation measures applied to existing buildings to improve their energy efficiency. The R-value is the capacity of an insulating material to resist heat flow. The higher the R-value, the more effective the material is at insulating. The U-value is the rate in which heat is transferred through a building material. When a building is efficiently insulated, the U-value is low.

SOLAR HEAT GAIN COEFFICIENT (SHGC)

The fraction of solar radiation admitted through a window, door, or skylight, transmitted directly or indirectly and released as heat inside the building. Materials with lower SGHCs transmit less solar radiation. Shoebox Energy Model is a simplified energy model that addresses the basic geometry including, massing, zoning, and seasonal energy consumption trends related to climate.

Water

GREYWATER

Gently used water from bathroom sinks, showers, tubs, and washing machines that may be reused, with or without treatment, for landscape irrigation.

LOW-FLOW FIXTURES

Low-flow / high efficiency fixtures such as toilets, faucets, shower heads, and other water fixtures that are designed to reduce water consumption by having lower flow rates or smaller volumes of water outputted per use.

POTABLE WATER

Potable water is water that is treated to levels safe for use as drinking water or food preparation.

RAINWATER HARVESTING

The collection of rainwater from roofs or other catchment areas, diverted from storm water drainage systems for irrigation or other use.

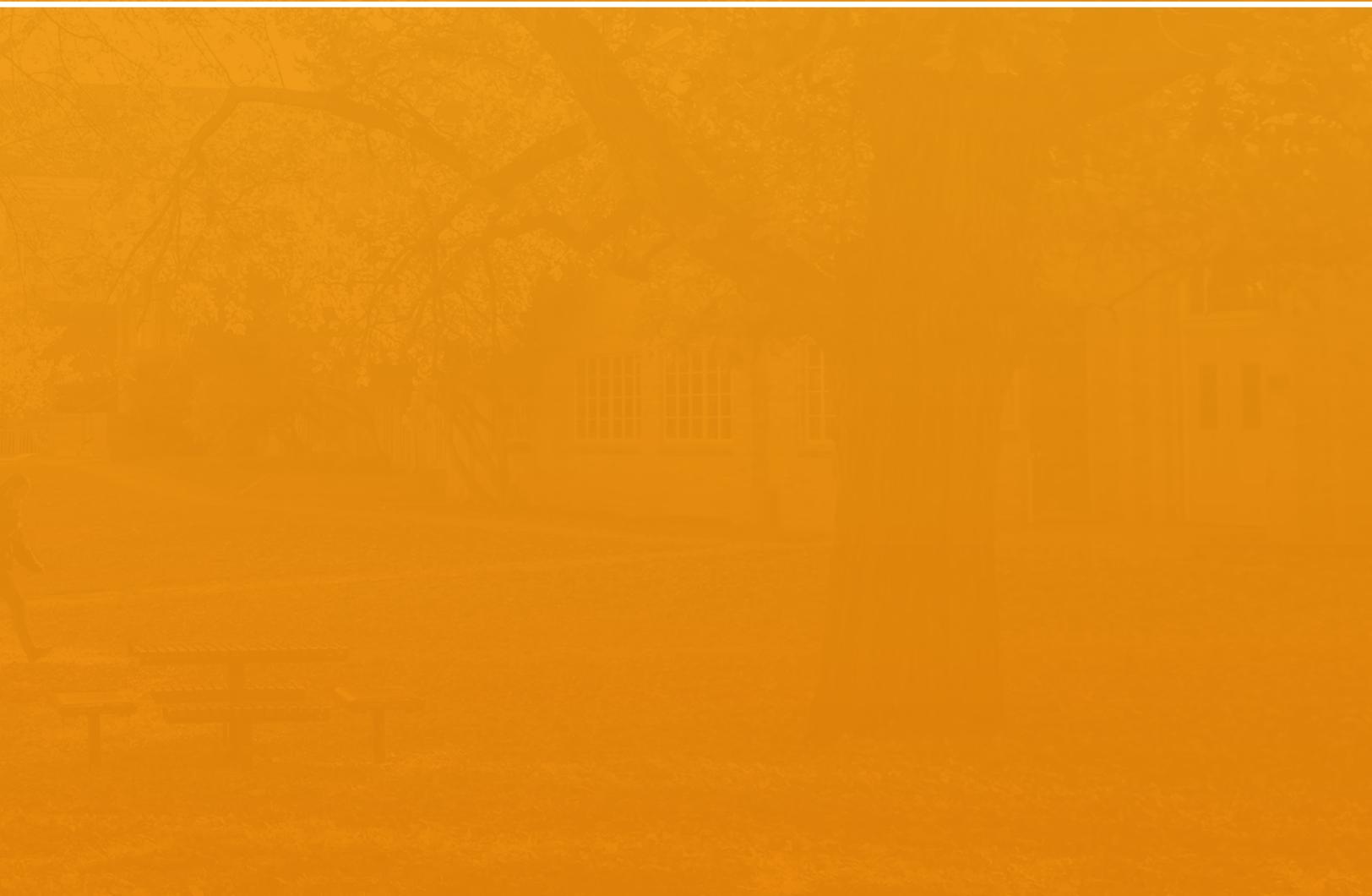
WATER BUDGET

An accounting of all the water that flows into and out of a project area.

PART 2

Technical Guidelines

- **Site Systems**
- **Landscape**
- **Energy**
- **Facilities**
- **Placemaking**





Site Systems

The site of any future project can have a variety of impacts on the overall sustainability of the development including components of site selection and development.

OVERVIEW

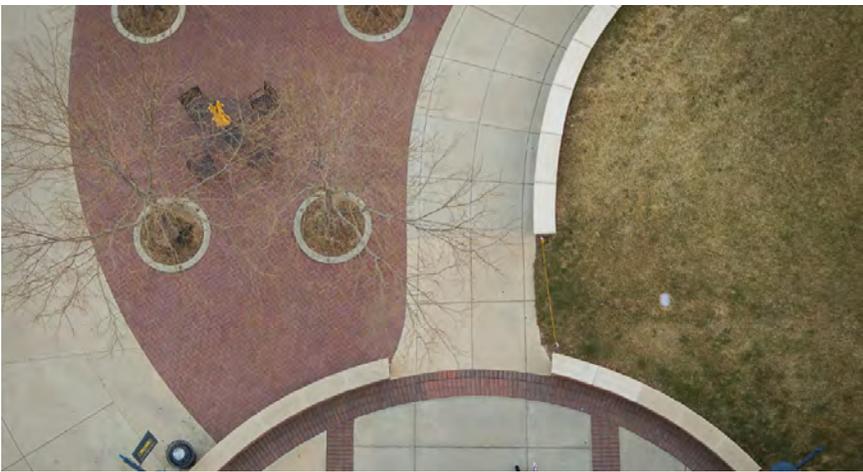
By selecting locations and design strategies that promote sustainability, UNC can better integrate with surrounding ecosystems and minimize the negative impacts of development. This section provides strategies to minimize UNC's impact on surrounding ecosystems, by utilizing best practices in stormwater management and material selection. Further, as a part of an effort to support a carbon neutral campus, project teams should consider opportunities that encourage access to public transportation. Design strategies are grouped into the following four focus areas: stormwater management, access to alternative transportation, hardscape, and materials.



Undefined "Campus Spine"



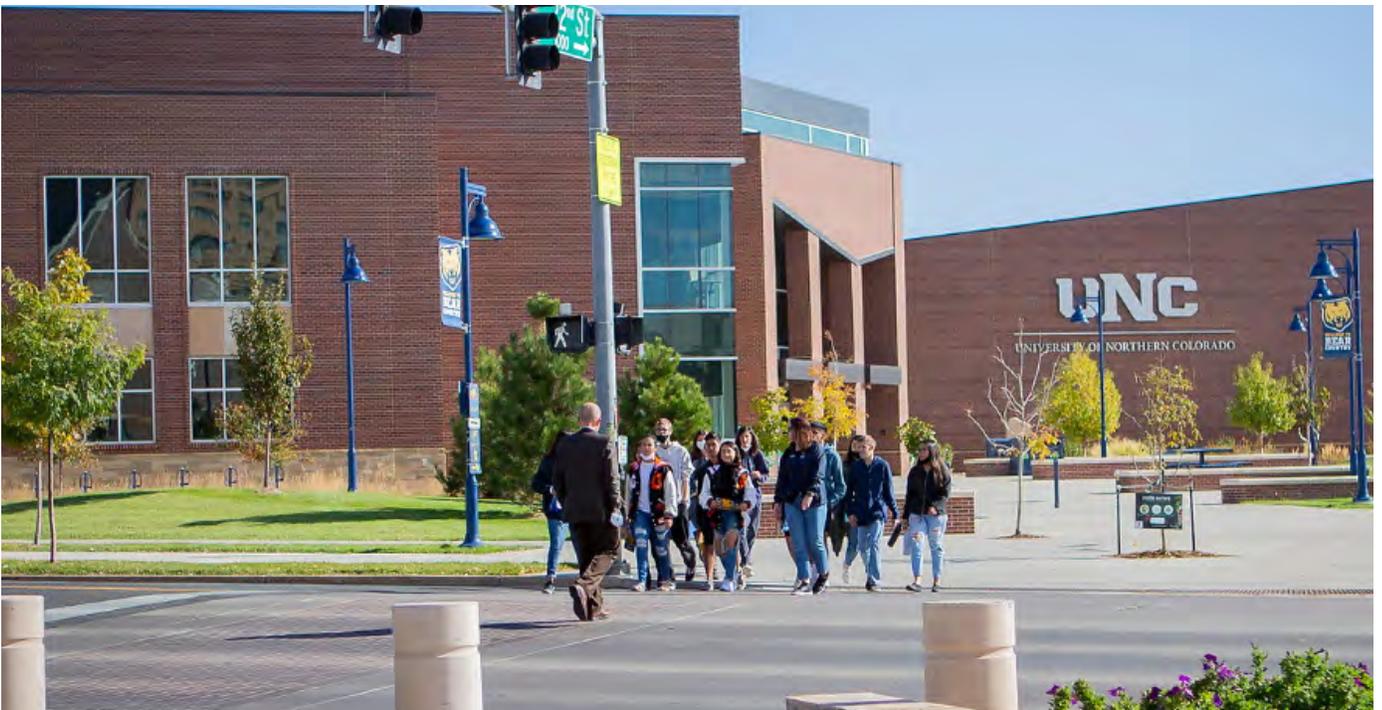
Boomerang Shuttle



Consistent material language defines quadrangles and areas of interest



Bicycle amenities on West Campus



Pedestrianized signals improve safety at critical campus intersections

A. STORMWATER

UNC relies on stormwater infrastructure to prevent flooding and convey stormwater throughout the campus. Weather events involving heavy precipitation can overwhelm existing stormwater infrastructure, increased flooding within the Greeley/Weld County area and increased water pollution in local streams, rivers, and reservoirs. Sustainable stormwater systems that are adaptive, maintain reliability, and efficiency are essential to a functional campus and community. While UNC is a state institution, the university currently complies with the City of Greeley stormwater regulations as a baseline to build upon.

To align with campus sustainability goals and minimize negative environmental impacts, UNC strives to implement stormwater BMPs that exceed local and regional standards, and align with LEED equivalence, at a minimum. Designers and contractors are encouraged to utilize the natural topography and landscape to create a resilient landscape system throughout campus. Project teams shall also evaluate the feasibility of infiltration, retention, and detention BMPs and prioritize these to enhance flood management, recharge the aquifer, and reduce reliance on the public stormwater system. When feasible, surface-level stormwater BMPs shall be implemented, providing multiple benefits, including functional landscaping and elements to enhance biodiversity.

In addition to the minimum required strategies established by UNC, project teams are also encouraged to pursue SITES stormwater guidance as an aspirational goal. Project teams can implement educational signage in designs to promote awareness of stormwater and ecological systems. Furthermore, as climate change continues to challenge the availability of water as a resource, an aspirational goal for larger projects could include a stormwater harvest feasibility study to identify opportunities to use stormwater to reduce water consumption.

B. ACCESS TO ALTERNATIVE TRANSPORTATION

UNC provides the Boomerang shuttle, including nearby Greeley/Evans bus routes, carpools, and bicycle and vehicle parking infrastructure to ensure affordable and equitable campus access to all stakeholders. UNC should continue to promote and explore emerging healthy, low carbon transit alternatives such as increased pedestrian access, improved bicycle circulation and walkability, and expanded electric vehicle charging infrastructure.

C. HARDSCAPE

Due to the abundance of hardscape on campus, future development shall strive to implement sustainable hardscape design on campus to minimize negative environmental effects caused by construction and to create outdoor spaces that are adaptable to increased temperatures. At a minimum, UNC requires newly constructed hardscapes to have high solar reflectance (SR) values consistent with LEED equivalency. High solar reflectance values help to decrease the heat island effect and maximize comfort of outdoor spaces during extreme temperatures.

Additionally, to minimize construction impacts, projects that include a geotechnical engineer shall include an analysis of material re-use opportunities. Project teams may also choose to utilize materials that are accredited by the Concrete Sustainability Council (CSC) to ensure minimal negative environmental impacts caused by material sourcing. As an aspirational goal, projects that include the addition or replacement of outdoor parking stalls may consider installing covered parking stalls with roofing materials having high SR values, vegetation, or, where feasible, solar PV for energy generation and contribution to carbon neutrality goals.

D. MATERIALS

Materials and their lifecycles have an incredible impact on the health of our planet, as well as the people who inhabit it. UNC already knows the importance of quality material selection, as evidenced by the commitment to building with durable, long-lasting exterior materials as well as an adaptive mitigation management approach that sets the stage for building conservation, adaptation, and reuse of its historic resources. The material strategies outlined in this section highlight high impact opportunities to work with UNC colleagues as well as project teams to reach institutional goals within project budgets and resources.

Many strategies are complementary either in anticipated outcomes, documentation requirements, or evaluation processes. Project teams should also review the waste section of the guidelines for further guidance on promoting circularity, as well as comply with the Buy Clean Colorado Act where possible, and aspire to becoming compliant for all project sizes.

SITE SYSTEMS:

Opportunities, Actions, and Performance Measures

Opportunity	Description	Tracking Measures
Decrease Impervious Surfaces on Campus	Employ strategies for decreasing impervious surfaces such as the reduction of surface parking footprints or the incorporation of a pilot green roof demonstration area where appropriate. The use of permeable pavings can also increase permeability in low traffic spaces and with proper maintenance.	Annual change in ratio of impervious to pervious spaces.
Enhance Mobility and Transportation	Prioritize public transportation, biking, and walking. Improve and expand bike paths, provide bike racks in convenient locations, and consider additional bike-sharing incentives.	Number and % of employees and on-campus students who use more sustainable commuting methods. Ridership for bus shuttle, bikes.
Implement a Comprehensive Stormwater Management Plan	Develop a system to capture, store, and reuse stormwater for campus use, reducing reliance on municipal water sources.	Update <i>Stormwater Management Program</i>

Impact	Difficulty	Resource Intensity	Timeframe	Type	Responsible Party
Improved stormwater management, enhanced biodiversity, reduced heat island effect	Medium	Medium	Long-term	Physical	Landscaping & Grounds Department; Transportation Services
Reduced carbon emissions, improved air quality, enhanced community health and wellbeing	Medium	Medium	Mid-term	Policy	Parking, Sustainability, Landscaping & Grounds Department
Reduced flooding risk, improved water quality	Medium	Medium	Short-term	Operations	Landscaping & Grounds Department



Landscape

The following recommendations will contribute to leadership in landscape water conservation and help to embed sustainable design principles into UNC campus landscape design to deliver measurable results for landscape performance.

OVERVIEW

Human health and the health of the ecosystem are linked. To mitigate impacts and stressors associated with pollution, water scarcity, extreme heat, extreme weather events, and a changing climate, the UNC campus will transform and adapt to address these challenges over the coming years. The strategies listed in this section outline a pathway to creating a more healthy and resilient campus landscape.

In 2012, UNC has been recognized as a Tree Campus USA by the Arbor Day Foundation for the university's commitment to tree preservation, care, and community involvement. With nearly 3,400 trees, the UNC campus has held the status of a Level 1 Arboretum since 2014. As of 2019, 157 ash trees have been removed on campus due to the threat of Emerald Ash Borer. The overall goal is to reduce the Ash tree population to 225 trees on campus.

The strategies are consolidated around reducing potable water use, maintaining, and enhancing biodiversity, and expanding the health benefits of the landscape. The UNC campus community may set additional goals related to outdoor water use reductions to align with local plans such as Greeley's Sustainable City Plan.

Overall, transitioning to water-efficient, low maintenance, and resilient landscapes is a high priority.

The following recommendations will contribute to leadership in landscape water conservation and help to embed sustainable design principles into UNC campus landscape design to deliver measurable results for landscape performance.



Students have commented on watering of sidewalks



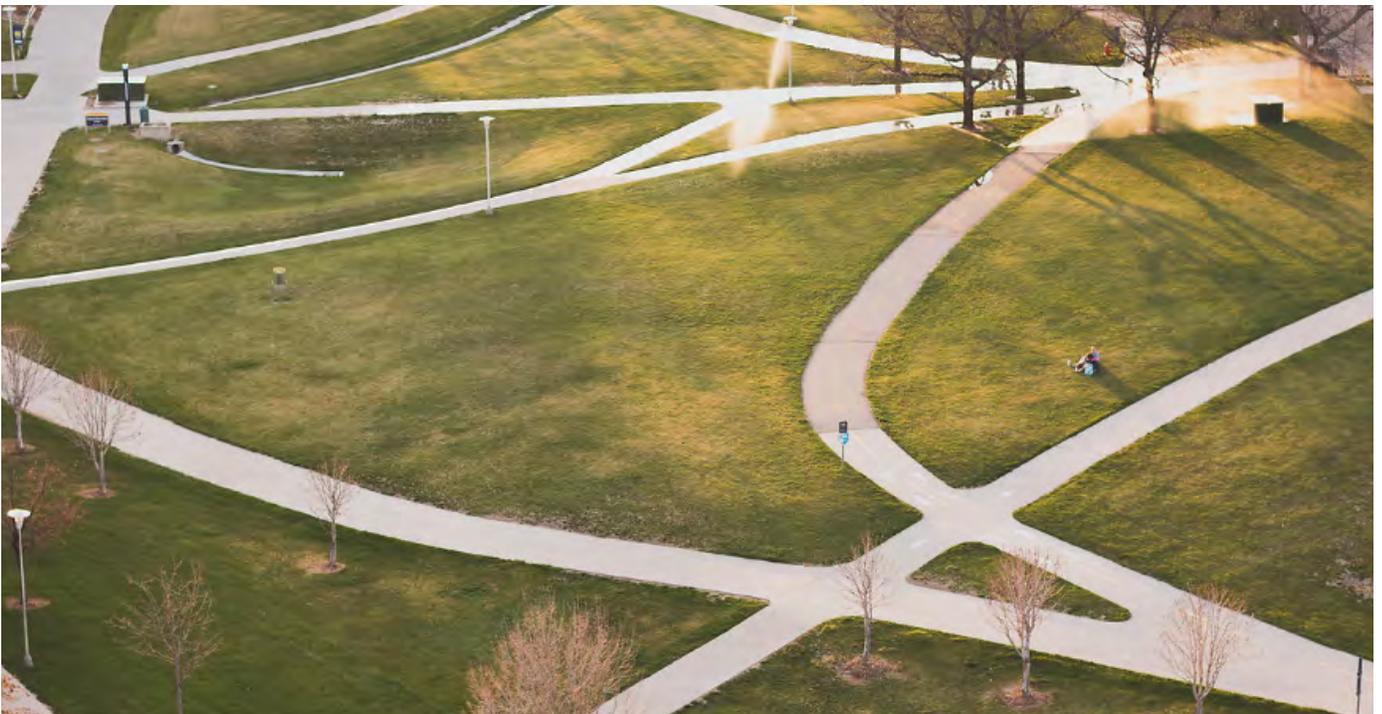
Campus edge landscape



Concrete channels divert stormwater



UNC's has participated in Tree Campus USA for over a decade



Large expanses of turf lawn require lots of water and maintenance to upkeep, and provide a monoculture landscape.

A. WATER USE REDUCTION

Colorado has a semi-arid climate characterized by dry summers and wet winters. Colorado native plants, along with plants that have evolved in semi-arid climate zones, have adapted to survive within this cycle of summer drought and winter snow. Transitioning the campus to a landscape of mostly native and climate adapted plant species is the primary tool for reducing outdoor potable water use on campus.

Much of the existing campus is planted with species requiring moderate to high levels of supplemental water, however parts of West and East Campus use non potable water services. Further reducing water consumption can be achieved by using Colorado native and climate adapted plants that require low amounts of supplemental irrigation after initial plant establishment period. While much of the campus landscape consists of smaller established landscape spaces that are under 2,500 SF, to achieve campus goals for potable water use reductions, UNC should transition these areas to native and climate adapted planting.

B. BIODIVERSITY

Biodiversity helps to maintain the balance of nature and cities and UNC lies within a globally significant biodiversity hotspot. Because many people visit the campuses each year, there is tremendous opportunity to create timeless experiences supporting meaningful connections with nature. Much is unknown about urban nature regarding species composition and distribution, and the UNC campus community has a unique opportunity to add to the knowledge base as a learning laboratory for urban biodiversity. The first step will be for the campus to create a biodiversity baseline from which to measure change over time. The UNC campus community can help to set an example for the region in adding to current knowledge about urban biodiversity.

C. COMMUNITY

UNC hopes to lead the effort in helping communities transition from the typical aesthetic preference of a traditional campus lawn landscape and a regionally adaptive landscape approach. Traditional manicured lawns are lacking in biodiversity and are resource intensive. Xeriscape and regionally adaptive plants help diversify the local ecosystem, require less water, and when properly designed, require less maintenance. UNC recognizes that providing a smooth transition in the landscape can help encourage public support for a regionally adaptive landscape approach that aids in creating a resilient landscape that can adapt to the changing environment and utilizes less resources. An integrated landscape education system in the form of art, signage, or other means of expression, may be implemented throughout campus to help the community understand the function and character of the regional landscape.

LANDSCAPE:

Opportunities, Actions, and Performance Measures

Opportunity	Description	Tracking Measures
Design for outdoor thermal comfort	Design landscapes to enhance human comfort and safety in the face of climate change by considering micro-climates, while supporting local ecosystems.	<p>Average comfort rating of users in outdoor spaces, responses collected by survey</p> <p>Observations of space utilization & trends (account for weather patterns, time of day, user activity, etc)</p> <p>Sensor data for UNC sites (depending on type of data collected, may reflect air quality, temperature, wind, solar radiation, noise, etc)"</p>
Increase Tree Canopy Coverage	Plant more trees to provide shade, sequester carbon, and create habitat.	Increase in tree canopy coverage; Amount of carbon sequestered
Implement a Native Plant Landscaping Policy	Prioritize the use of native plant species in campus landscaping to support local ecosystems and reduce water usage.	Percentage of landscaping that uses native plants; Water consumption for landscaping
Create an Integrated Pest Management Plan	Implement a plan that minimizes the use of chemical pesticides and emphasizes natural pest control methods.	Pesticide usage; effectiveness of pest management
Maximize Passive Design Strategies Through Intentional Shading and Tree Placement	Integrate sustainable landscaping techniques that utilize vegetation to passively cool buildings in the summer and optimize solar gain in the winter, reducing the energy demand of campus buildings.	<p>Amount of energy saved through passive design strategies</p> <p>Energy consumption baseline & trends of nearby buildings (kWh)"</p>
Retrofit Existing Landscaping to Prioritize Native and Drought Tolerant Plant Species	Convert existing landscaping to xeric, water-efficient designs	Water usage specific to irrigation of campus landscaping

Impact	Difficulty	Resource Intensity	Timeframe	Type	Responsible Party
Enhanced biodiversity, climate adaptation	Medium	Medium	Ongoing	Program	Landscaping & Grounds Department; Environmental Health & Safety
Reduced energy usage in nearby buildings, increased biodiversity, improved air quality	Medium	High	Long-term	Operations	Grounds Management
Improved biodiversity, reduced water usage	Medium	Medium	Mid-term	Policy	Grounds Management; Office of Sustainability
Reduced chemical usage, potential cost savings, improved biodiversity	Medium	Low	Short-term	Operations	Grounds Management; Office of Sustainability
Reduced energy costs, improved thermal comfort	Medium	Medium	Mid-term	Physical	Landscaping & Grounds Department; Campus Planning & Construction, Utility Systems & Resource Conservation
Reduced water consumption, enhanced biodiversity	Medium	Medium	Mid-term	Operations	Landscaping & Grounds Department

Opportunity	Description	Tracking Measures
Promote Water Recycling and Reuse	Install greywater systems to recycle and reuse water for landscape irrigation or toilet flushing. Capture and repurpose stormwater and irrigation water when possible.	Stormwater capture and reuse; % decrease in potable water use
Employ Advanced Irrigation Technologies	Use rain sensors and soil moisture sensors to optimize water use.	Potable water use for irrigation and water use change
Group Plants with Similar Water Requirements	Promote efficient water usage for irrigation.	Water usage specific to irrigation of campus landscaping, by landscape area
Update Landscaping Guidelines for Water Efficiency	Require a specific ratio of green space in new developments and enhance xeric landscape requirements.	Water use intensity in gallons per acre and gallons per user
Develop Low-Water Use Plant List Suitable for Campus Edge Conditions	Transition the campus edge from traditional turf lawns to drought-tolerant plants that maintain a vibrant green appearance to harmonize with neighboring landscapes.	Quantity of water saved from campus landscaping irrigation; Comparison of water usage before and after the transition.
Develop Grounds Team Training for Campus Landscape Transition Areas	Create removal plan for existing vegetation, determine appropriate irrigation and soil adjustments, and conduct inventory related to installation, construction, and/or maintenance of native plantings.	Track changes in hours and resources dedicated towards native landscape conversion, maintenance, and operations

Impact	Difficulty	Resource Intensity	Timeframe	Type	Responsible Party
Reduced water consumption, improved water management	Medium	Medium	Mid-term	Physical	Landscaping & Grounds Department
Reduced water consumption, improved water management	Low	Low	Short-term	Operations	Landscaping & Grounds Department
Reduced water consumption, improved irrigation efficiency	Low	Low	Short-term	Operations	Landscaping & Grounds Department
Reduced water consumption, lower heat island effect	Low	Low	Short-term	Policy	Landscaping & Grounds Department
Reduced water consumption, mitigate aesthetic changes of campus edge landscape with surrounding neighborhoods	Medium	Medium	Mid-term	Operations	Landscaping & Grounds Department, Campus Planning & Construction
Improved management of maintenance resources, potential cost savings, enhanced biodiversity, improved campus landscape transition	Medium	Medium	Mid-term	Operations	Landscaping & Grounds Department, Campus Planning & Construction



Energy

UNC has made significant progress in reducing its carbon footprint when it partnered with McKinstry to focus on energy and operational efficiency for its facilities. The partnership includes student, faculty, and staff participation as part of the “powerED” program.

OVERVIEW

UNC partnered with McKinstry in April 2016 as an intentional approach to reduce its carbon footprint through interventions with energy systems.

Today, UNC is well-positioned to undergo a transformative shift in its energy usage and sourcing in response to new legislation and state initiatives focused on sustainability and renewable energy. Colorado has been at the forefront of the renewable energy movement, with ambitious targets for reducing greenhouse gas emissions and increasing the use of clean energy sources.

UNC can leverage legislative changes and state incentives to explore innovative energy solutions, such as solar and wind power installations, energy-efficient infrastructure upgrades, and improved waste reduction strategies.



McKee Hall solar panel installation



UNC Solar Flower Installation



Solar panel installation on top of Parsons Hall

A. INCREASE ON-SITE RENEWABLE ENERGY PRODUCTION

Greenhouse gas emissions associated with electrical demands represent the most straightforward opportunity for decarbonization. Increasing the portion of campus electrical demand being sourced from renewable energy presents a direct reduction in scope 1 and 2 emissions.

A popular path to transition from purchased grid power to power generated on-site through renewable sources, is the addition of solar panels to existing rooftops that can support them, as well as specifying solar-readiness on all new buildings. This provides direct clean power replacement for current building operations, and in some cases, the ability to generate additional power to assist in providing electricity to energy-intensive spaces. The process of retrofitting existing assets to accept renewable sources can be utilized in existing parking lots, providing shaded parking, and capture additional energy for the campus.

Additionally, UNC can seek a partnership with the local utility to purchase power from renewable sources, owned and operated by the utility company. This Power Purchase Agreement not only helps to reduce scope 2 emissions, it can provide an option for decarbonization that is less reliant on capital investment, while also promoting grid-level decarbonization.

B. INCREASE UTILIZATION OF PASSIVE HEATING & COOLING

Some of the most energy-intensive building operations for typical spaces come from building heating and cooling. Reliant typically on either central plants, or on-site boilers and chillers (at a significant cost to efficiency and ease of maintenance), to provide chilled and hot water to meet thermal demand, small investments in strategies to reduce overall heating and cooling demand can have outsized impacts on overall utility cost, as well as greenhouse gas emissions. Passive heating and cooling strategies rely on no active sources, and therefore take advantage of natural processes, such as convection, differential pressure and natural solar radiation to provide heating and cooling to spaces while consuming minimal energy. Natural ventilation, the process of utilizing air displacement through operable windows to provide cooling during suitable periods, can provide adequate cooling in many occupied, low- to medium-intensive energy spaces, while using minimal fan energy, eliminating the need for heating and cooling during those periods. Maximizing passive heating in winter months include strategies such as insulation tightening and solar water heating.

C. UPDATE BUILDING DESIGN GUIDELINES

UNC's building design guidelines and standards present a great opportunity to ensure that the university's future climate goals can be achieved. These guidelines can provide pathways to not only energy and utility cost savings, but reduce emissions associated with building construction and materials, labeled "embodied carbon" which are fixed emissions that cannot be reduced or removed from the overall carbon budget. Building design guidelines can standardize operations such as natural ventilation, passive heating, as well as standardize buildings to be highly efficient, pushing for net-zero ready, or LEED certification, and can specify renewables integration. Building design guidelines can provide a pathway for resiliency, forecasting future weather conditions and ensuring building operations during extreme, unpredictable events. With updated guidelines in place that are focused on sustainable campus development, forecasting additional savings through utility cost reduction, or planning for additional resiliency needs, can be established practices on campus, further progressing towards sustainable operations campus-wide.

D. INCREASE THE TEMPERATURE SET-POINT OF BUILDING THERMOSTATS

In addition to the passive heating and cooling strategies mentioned above, simply expanding the thermal range to reduce overall load on the campus heating and cooling systems can provide the simplest, quickest way to reduce overall emissions. This is achieved by adjusting thermostat temperature setpoints to consistent target temperatures for heating and cooling equipment in all campus buildings to help increase efficiency.

Operational standards have been published based on studies of extended occupant comfort analysis, and should be followed when implementing temperature adjustments, especially during cooling months. Given that for a large portion of the year, the UNC campus is in cooling mode for all buildings, any adjustments to reduce electricity consumption associated with those operations can have high impacts. This change comes at virtually no up-front cost, and can be implemented immediately.

ENERGY:

Opportunities, Actions, and Performance Measures

Opportunity	Description	Tracking Measures
Increase Renewable Energy Production	Install solar panels on rooftops, parking lots, or unused land. Consider partnership with local utility for off-site wind or solar power generation.	Annual change in net power consumption; Annual change in power consumption from sustainable sources
Increase Utilization of Passive Heating and Cooling	Identify where renovations and/or repairs to existing campus buildings can include passive updates like operable windows.	Amount of energy saved through passive design strategies; Energy consumption baseline & trends
Update Building Design Guidelines	Update design guidelines to specify that new development is energy efficient.	Annual change in net power consumption; Annual change in Energy Use Intensity (EUI); Annual change in power consumption from sustainable sources.
Increase the Temperature Set-point of Building Thermostats During Warmer Months	Amount of energy saved through temperature set-point changes; Energy consumption baseline & trends	Amount of energy saved through temperature set-point changes; Energy consumption baseline & trends

Impact	Difficulty	Resource Intensity	Timeframe	Type	Responsible Party
Reduced carbon emissions, improved air quality, reduced energy costs	Medium	High	Long-term	Physical	Campus Planning & Construction
Reduced energy costs, improved thermal comfort	Medium	Medium	Mid-term	Physical	Campus Planning & Construction; Utility Systems & Resource Conservation
Reduced carbon emissions, improved air quality, reduced energy costs	Low	Low	Short-term	Policy	Campus Planning & Construction
Reduced energy costs	Low	Low	Short-term	Operations	Facility Management & Operations; Utility Systems & Resource Conservation



Facilities

Designing, building, and maintaining healthy and comfortable facilities and open spaces is essential to creating a sustainable campus at UNC.

OVERVIEW

Humans spend over 90% of their time indoors, there is an evident link between human health and the indoor environment. Project teams must consider the health impacts of UNC facilities on current and future students, staff, and faculty. By implementing design strategies focused on creating healthy and comfortable indoor spaces, UNC can strive to improve mental health, physical health, and productivity for these building occupants.

In addition to designing healthy and comfortable indoor spaces, UNC must also mitigate potential exposure to chemicals, dust and other pollutants during building construction, renovation, and operation. This section is intended to give minimum requirements, best practice, and aspirational design strategies. The recommendations that follow aim to create healthy and comfortable indoor environments by requiring a focus on health and wellbeing in the design, construction, or renovation of facilities on campus. It should be noted that other strategies that improve health, wellbeing and comfort are addressed throughout the guidelines in applicable sections (e.g. landscape, energy, etc.).

UNC currently complies with the State of Colorado in producing annual water consumption benchmarking for existing buildings. Lastly, the City of Greeley has set various targets for 2035, including sourcing of Greeley's water locally and recycling of wastewater. When developing these guidelines, the university aims to support the state and city in potable water use reduction goals. Currently, water conservation and sustainability efforts at UNC are focused on landscaping & irrigation, high efficiency fixtures, and improved data collection.



Frasier ADA theater entrance



UNC facilities are currently sprawled between the campuses



Outdated classrooms prevent accessibility for all



The new Campus Commons is a vibrant hub during events



Not all campus facilities provide an accessible entrance

A. OPTIMIZE SPACE USE

Thoughtful space allocation across campus and the good utilization of those spaces are important strategies for planning for a sustainable campus. Key locations on campus should be critically examined, such as academic, housing, and administrative buildings, to minimize commute, increase foot traffic, and reduce associated emissions. Efficiently utilizing academic buildings to ensure maximum occupancy, possibly reducing overall building stock, and reorienting academic programming to allow for buildings to run at a higher efficiency.

Academic programming provides an opportunity to optimize building operations for higher efficiencies, by being able to appropriately schedule demand for buildings. Programming suggests that scheduling should prioritize fully occupying buildings, allowing for other buildings to reduce their heating and cooling capacity during those times, rather than all buildings operating at lower capacities. Programming can reduce overall building energy demand, as well as allow for high-efficiency buildings to take priority for high-volume scheduling. The practice of programming can be extrapolated beyond the course schedule, to the calendar year – prioritizing high occupancy courses during shoulder seasons, as well as highest occupancy in the most efficient buildings during peak heating and cooling seasons, to reduce overall campus energy demand.

B. CAMPUS DENSITY

When planning for future development, and building retrofitting, designing for a dense, efficient campus should take priority. A key component is designing with energy recirculation in mind; the most sustainable energy is the recovery of that which has already been distributed. A common practice of energy recirculation is waste heat recovery, taking waste heat from high energy intensive processes such as heat rejection, waste heat from data centers, and waste heat from wastewater distribution. Closed-loop heat exchangers strategically positioned throughout a distribution network can capture this heat and return it to spaces to provide free heating, reducing overall heating demand on campus. This process of heat exchange works well for cooling as well; freely exchanging the heat from unconditioned, hot air during cooling months with previously mechanically cooled air in order to reduce the amount of energy required to adequately cool the incoming air, a technique known as pre-cooling. Beyond the building level, these processes, when utilized within a sufficiently dense campus or cluster of buildings with complementary demand peaks, can provide opportunities for buildings to interact with each other, creating synergistic feedback loops to improve the performance of all of the buildings in a localized area.

District energy design allows for not only centralized utility demand, but economies of scale in terms of efficiency, as well as improved operability and reduced maintenance needs. An additional benefit to centralized district energy plants is the

ability to quickly advance greenhouse gas emissions reduction targets through the replacement of centralized district energy plants with a variety of heating sources. This is a long-term benefit as the plant ages and requires replacement. Smaller districts will play an important role in determining the feasibility of different sources of heat on campus, and provide an opportunity to understand the implementation of the future evolution of infrastructure on campus.

C. UPGRADE INFRASTRUCTURE DESIGN GUIDELINES

In addition to updating the building design guidelines, UNC should consider updating the campus infrastructure design guidelines to keep campus systems operating at peak efficiency, building automation and controllability, and increase resilience through proactive measures and planning while reducing energy needs.

Energy audits of existing energy-intensive buildings are audited as required by the State of Colorado to identify where compliance with ASHRAE 90.1 can be achieved, or even where building system upgrades can push the envelope on retrofits to increase efficiency. In the future, infrastructure guidelines should be set and updated to push energy efficiency in new buildings and should be coordinated with campus energy goals.

D. DESIGN FOR OUTDOOR COMFORT

To better facilitate a walkable campus that minimizes the use of cars while on campus, an emphasis must be placed on comfort. Buildings nearby can create micro-climates which can either foster a comfortable environment that encourages students and faculty to use on-campus amenities outside of the built environment, or a hostile environment that can force students and faculty inside. These micro-climates are typically a product of two variables – wind and shade. While reducing direct sun and increasing cross-body air movement can provide cooling during the summer, during the winter these same forces can prove to deter those seeking to spend time outdoors. Landscapes must be designed to enhance comfort, as well as safety, by considering these micro-climates, as well as supporting local ecosystems to address rising temperatures and more extreme weather events.

E. CLIMATE & ENVIRONMENT HEALTH

Building and construction materials generate over 11% of annual global CO2 emissions, and a significant portion of the emissions from new construction will come from the CO2 emitted in production of just three materials: concrete, steel, and aluminum.

Additionally, the extraction, manufacture, and assembly of building materials often negatively impact the environment by causing air and water pollution, soil degradation, and habitat destruction along the supply chain. The strategies below focus on two main goals: the immediate need to reduce carbon emissions and ultimately sequester more carbon than emitted, and the importance of using building materials which restore environmental health through the responsible use of natural resources. To do either of those things, the industry must increase the demand for product transparency and factor in the true long-term costs of the material choices made – one project at a time.

F. CONSTRUCTION DEMOLITION WASTE

When addressing building related waste generation we must consider the full life cycle of a building. In 2018, 600 million tons of construction and demolition (C&D) debris was generated in the United States. This is more than twice the amount of Municipal Solid Waste produced in the same year. The State of Colorado Department of Public Health and Environment established a minimum of 75% C&D waste diversion. UNC campus guidelines suggest meeting at least the minimum target for C&D waste, and determine a path towards 100% diversion (i.e. zero waste). The following sustainable design recommendations provide best practices for mitigating C&D Waste at UNC. These include the diversion rate requirement as well as strategies such as waste stream identification and separation and the use of manufacturer take back programs.

FACILITIES:

Opportunities, Actions, and Performance Measures

Opportunity	Description	Tracking Measures
Optimize Space Use and Campus Density	Encourage density to consolidate infrastructure and transportation facilities. Ensure any potential new student housing in the future is located within a walkable distance of existing facilities or accessible by alternative transportation. Optimize space utilization.	Total square feet of sustainably rated buildings (in terms of construction and operations and maintenance)
Adopt Green Building and Construction Standards	Establish standards for green building and construction and Incorporate a waste management plan in all construction projects to minimize waste and prioritize recycling.	Total square feet of sustainably rated buildings (in terms of construction, operations and maintenance); % construction waste diverted from landfill
Upgrade Infrastructure Design Guidelines	Adopt proactive and predictive maintenance to increase the life and efficiency of equipment, reducing labor costs and waste.	Adoption and update of sustainable operations and maintenance plan

Impact	Difficulty	Resource Intensity	Timeframe	Type	Responsible Party
Reduced carbon emissions, enhanced community connectivity, efficient use of resources	High	High	Long-term	Policy	Campus Planning & Construction
Reduced construction waste, energy efficiency, improved indoor environmental quality	High	High	Long-term	Policy	Campus Planning & Construction
Reduced waste, energy efficiency, improved indoor environmental quality	Medium	Medium	Mid-term	Policy	Landscaping & Grounds Department; Environmental Health & Safety



Placemaking

Placemaking is a collaborative process by which we can shape the public realm to strengthen the connection between people and their shared spaces.

OVERVIEW

UNC is a beautiful, picturesque campus with many iconic features that suffers from a shortage of social gathering spaces and poor physical connectivity.

Central campus is home to many historic and iconic features and spaces that relate to the history and character of UNC during early years. Frasier Hall, Garden Theater, Norton Theater, Gunter Bells, and Stonehinge are some of the few features that define the Central Campus environment.

The result of the development of prominent facilities like Holmes Dining, Michener Library, Butler-Hancock Recreation Center, Candelaria Hall, McKee Hall, Ross Hall, and several residence halls, West Campus has become the center of activity of the main campus. This has left the historic Central Campus feeling disconnected and underutilized. A lack of social amenities and expression of student identity, along with disconnected campus destinations and an undefined campus “spine”, hinders the ability for campus communities to grow.

Placemaking embraces multiple design disciplines including campus planning,

landscape architecture, civil engineering, sustainability, resiliency, wayfinding, and lighting. These diverse disciplines are leveraged to re-imagine space in a holistic way—creating a true identity for the campus that aims to connect people to place including those unexpected, more intimate moments between buildings and pathways.

Through the placemaking process, project teams can focus UNC’s resources in a way that creates engaging spaces that address the immediate social and cultural needs of the UNC community while connecting Central and West campus in a safe and accessible manner.

It should be emphasized that community-based participation is at the core of a successful placemaking process that will result in unique spaces that reflect the needs, wants, and identity of the community itself. The success of a great space is measured by its physical attributes, but by the way it functions and serves the local community.

The Place Diagram

A tool used to help design teams evaluate the quality of spaces. The core are a place's key attributes while the outer ring represents intangible qualities.



WHAT MAKES A SUCCESSFUL PLACE?

Placemaking practices have determined that places thrive when there is a variety of reasons to be there and they reflect the community using those spaces.

These can include anything from places of respite, food to consume, art and music to enjoy, and people to meet. These physical attributes are even more powerful when they reflect the unique history and culture of the community.

UNC can leverage the beautiful Colorado setting to create a learning environment that encourages students to study, explore, and socialize outdoors. To achieve this, outdoor spaces should be seen as more than just plazas with areas to sit. They should strive to create a variety of places that range from seating nooks, art plazas, and outdoor classrooms. Spaces should be thoughtfully designed to accommodate the various events and serendipitous gatherings that can occur when a community comes together.

Design teams are recommended to carefully program outdoor and indoor environments to reflect and reinforce surrounding programs, retrofit existing furnishings and select additional amenities that will attract students and foster social collaboration, and incorporate elements that encourage outdoor learning. Spaces should be unique and provide specific uses while providing the campus community with flexibility to transform spaces as needed.



Beloved by the UNC community, the Candelaria Mural is a hidden gem on West Campus



Under the Stars performance at Garden Theatre



Image courtesy of SmithGroup

Example of sustainability and cultural celebration at the River People Health Center in Arizona



Culturally significant artistic expressions have added community identity to the Campus Commons



Image courtesy of SmithGroup

Gathering spaces should add color, interest, and character.

A. HEALTH & WELLNESS

The UNC campus landscape is the context for achieving many interrelated goals of the sustainability guidelines. It is also the place where the positive effects of a healthy environment are experienced. The Campus Recreation Center, the existing recreation fields, and the various bike and pathways provide some with opportunity for a healthy lifestyle on campus. However, while some find riding their bike or going to the gym an acceptable form of activity, other students seek opportunities that are more in line with their lifestyle and that make them feel safe and comfortable in their environment.

Walking through or spending time within open spaces on campus can be restorative. Taking a 15-minute walk across campus along a tree-lined pathway with areas of respite and diverse opportunities for passive and active recreation can help to promote mental health, reduce stress, and lower blood pressure rates.

Increasing tree canopy coverage on campus can help to promote healthy and low-carbon transportation choices by encouraging walking and biking to campus, and encourage students, staff and visitors to use the campus as a place for exercise and restoration. Health infrastructure is not only for hospitals, but for green open spaces, tree-lined walkways, and gardens, places where people can gather, learn, and build social connections. It will be important to create healthy, resilient landscape spaces for the UNC community and the larger surrounding community.

B. JUSTICE, EQUITY, DIVERSITY, & INCLUSION

UNC is home to an increasingly diverse student population that will continue to grow and evolve over time. UNC should encourage community building and ensure that design teams work with organizations, student groups, and cultural and resource centers as part of a student's first approach. The existing design guidelines should be referenced to ensure compliance with accessibility requirements under the ADA. While ADA standards provide the minimum requirements for accessibility, design teams are encouraged to apply universal design principles to create a more inclusive public realm for underserved communities.

Opportunities to engage with the community should be considered at all stages of design to ensure the spaces being created on campus meet the needs of the UNC community and ensure successful placemaking.

C. SUSTAINABILITY & RESILIENCE

UNC is home to several sustainable groups on campus such as Student LEAF, Earth Guardians, and the Garden Club that are passionate and active in spreading sustainable efforts throughout campus. These groups have a very important role in helping spread a sustainable message and continue to promote sustainable solutions and actions. The sustainability focused groups are encouraged to participate in the design process of new spaces on campus to ensure student sustainability goals and initiatives are being met.

UNC is one of several designated Tree Campus USA sites. This program awards national recognition to university campuses promoting healthy urban forest management and engaging the campus community in environmental stewardship. UNC can continue to promote this prestigious designation by enhancing the social spaces throughout campus that allow the beauty of a campus arboretum to be fully enjoyed and immersed in. Through appreciation and exposure, UNC can foster environmental stewardship within students by simply creating a connection between students and their environment.

In general, UNC should continue to promote campus stewardship by encouraging design teams and contractors to create places that are conscious of their environmental impact, use sustainable materials, and build upon a larger sustainable campus framework that reinforces a resilient campus.

D. FUNCTIONALITY/PROGRAM

The campus hosts a of number of events throughout the year that promote and celebrate student groups, clubs, organizations, and campus efforts. While the campus has designated event and gathering spaces, there are policy and infrastructure issues that prevent spaces from being properly utilized.

Indoor and outdoor spaces should be programmed in a manner that supports and encourages a student's first approach and allows them to socialize, celebrate, and flourish. It is recommended that existing policies surrounding events and gathering spaces be revisited to ensure guidelines and regulations are not hindering student expression and community building.

To reconnect both ends of campus, the Paseo, and several identified facilities and outdoor spaces for improvement are used to create a pedestrian route that connects pedestrians around campus while providing quality social spaces along the way.

E. BEAUTY AESTHETICS

UNC is home to a picturesque campus where the recent addition of the Campus Commons came with a and resilient landscape design that incorporates regional expressions. This thoughtful implementation showcases sustainable spaces that can be designed in a beautiful manner, creating an appreciation for the environment while also being durable and maintainable. Landscape, hardscape material, and site furnishings should be carefully selected to be resilient, regionally sourced, and timeless. Artistic expressions such as sculptures, murals, student art, and furnishings add a layer of color, life, and identity that further activates a space. Design teams and contractors are encouraged to engage and collaborate with the student population and local community when conceptualizing artistic expressions around campus as this approach gives students a sense of ownership and therefore results in more meaningful installations.

UNC facilities need renovations and repairs to ensure students have quality spaces to live, learn, and play. Students see themselves and how they are valued through their everyday environment and accommodations. This makes the quality and details of facilities, residence halls, and shared indoor and outdoor spaces so important. A community feels seen and cared for when the public realm and its intimate spaces reflect the quality and values of UNC.

A continued commitment to transform the UNC campus into a resilient model for their students and the community will continue to transform the campus, one space at a time.

PLACEMAKING: Opportunities, Actions, and Performance Measures

Opportunity	Description	Tracking Measures
Provide Demonstration Space for Sustainability Research	Establish an interactive learning environment where sustainability research projects are conducted, displayed, and celebrated, offering a tangible connection between academic theories and real-world practices.	Number of research projects conducted; Number of visitors to the demonstration space; Advances or contributions to sustainability practices
Develop a Network of Open Spaces and Walking Paths	Promote mental and physical health of the community while reducing the need for motorized transport. Provide access to nature and enhance natural habitats.	Number of programmed open spaces created; Total area of open spaces in acres; distance of non-motorized paths; connectivity of paths
Create Quality Outdoor Learning Environments	Develop outdoor classrooms that utilize natural light and fresh air. This provides an engaging learning environment and reduces energy consumption by limiting indoor classroom use.	Number and quality of programmed spaces by Academic buildings and Residence Halls, provide power, wifi, and comfortable and accessible seating
Develop Sustainability Campus Tour	Create an educational tour that showcases the university's sustainable initiatives and features. This tour could be offered to students, faculty, visitors, and prospective students and their families (similar to campus tree tour). Meets LEED Green Building Education credit.	Number of tours conducted; Number of participants; Feedback from participants; Number of features on map tour
Develop Campus Art Tour	Promote appreciation and implementation of artistic expressions throughout campus through an interactive self-guided walking tour (similar to Campus Tree Tour). The Art Tour would be an extension of <i>The Greeley Public Art Master Plan</i> initiative used to "enhance and reinforce the community's goals, visions, and values through the provision of art".	Number of tours conducted; Number of participants; Feedback from participants; Number of features on map tour
Implement Artistic Expressions Throughout Campus	Develop a process for UNC commissioning, installing, and enhancing community involvement in artistic expressions with renovations and new development. This ensures UNC students, staff, faculty, and local community voices are reflected in selected art, sculpture, furnishings, murals, and campus landmarks.	Number of art installations; Feedback from campus community; Increase in campus aesthetic appeal

Impact	Difficulty	Resource Intensity	Timeframe	Type	Responsible Party
Increased knowledge and awareness of sustainability, practical research applications	Medium	High	Long-term	Physical	Academics; Campus Planning & Construction; Research Departments
Improved campus aesthetics, community engagement, mental well-being	High	High	Long-term	Physical	Landscaping & Grounds Department
Improved campus aesthetics, student engagement and identity, and mental well-being	Low	Medium	Short-term	Physical	Campus Planning & Construction; Academics
Increased awareness and education of sustainability initiatives; Increased student engagement	Low	Low	Short-term	Program	Academics; Campus Planning & Construction; Public Relations
Improved campus aesthetics, community engagement and identity, and mental well-being; enhanced cultural appreciation	Low	Low	Short-term	Program	Campus Arts Department; Public Relations
Enhanced campus aesthetic; Increased appreciation for art; Enhanced cultural richness	Medium	Medium	Long-term	Program	Campus Arts Department; Campus Planning & Construction

PART 3

Benchmarking

- **Methodology**
- **Peer Sustainability Profiles**



Methodology

Peer Sustainability Benchmarking provides a collection of plans, strategies, targets, and performance tracking. Peer institutions will be selected to provide relevant and feasible data to, and this data will be used to inform the sustainability goal and strategy discussions and outcomes for UNC.

PEER SUSTAINABILITY PROFILE SELECTION

The selection process resulted in the identification of six UNC sustainability peer institutions.

APPROACH

The identification of sustainability peers will be made by applying selection criteria. This will ensure alignment between the UNC and institutions with regard to driving influences, sustainability progress, and institutional scale. The strength of alignment between UNC and peer institutions along these selection criteria will determine the overall ranking and inclusion of institutions.

SELECTION CRITERIA

Selection criteria include geographic proximity; climate zone; institutional enrollment; sustainability progress; and alignment with academic peers.

INSTITUTIONAL SUSTAINABILITY DATA VARIABLES

These variables capture basic benchmarking data and key performance Indicators for each sustainability peer institution.

BENCHMARK SOURCES

Organizations facilitating and tracking campus sustainability plans and performance.

Princeton Review Green Colleges 2022

We chose our *Top 50 Green Colleges* for 2021 based on a combination of school-reported data and student opinion, collected in 2020–2021 via our institutional and student surveys. When ranking our *Top 50 Green Colleges*, we factored in the school's Green Rating. We tally our Green Rating scores based on institutional data we obtain from school administrators. Our ten survey questions cover these key factors: whether students have a quality of life on campus that is both healthy and sustainable; how well a school is preparing students for employment in an increasingly green economy; how environmentally responsible a school's policy are.

Sierra Club Cool Schools

In past years, Sierra used a “snapshot” of data institutions had submitted via the Sustainability Tracking, Assessment & Rating System (STARS). Beginning in 2018, we based our rankings on institutions’ existing STARS scores. Any valid STARS reports from the past three years were eligible for our rankings. To participate in the 2021 rankings, educational institutions needed to:

- Have a valid STARS 2.1 or 2.2 rating (i.e., Bronze, Silver, Gold, or Platinum; unscored reports with a STARS Reporter designation were not sufficient)
- Have earned that rating within the three years prior to the deadline (i.e., submitted after March 6, 2018). STARS ratings that were more than three years old were not considered for the Cool Schools ranking.
- Opt in to sharing data with Sierra.

AASHE 2020 Sustainability Campus Index

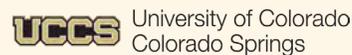
Top Performer scores are based on performance at the time of STARS report submission. All top performer data presented in this publication reference STARS Version 2.0, 2.1, and 2.2 reports submitted between March 7, 2017, and March 6, 2020. Reports submitted after this date are eligible for inclusion in future publications.

AASHE Stars Rating

To participate in STARS, you will need to identify which credits you will be pursuing and collect the required information from campus stakeholders. Credits are organized into the following categories and detailed in the STARS Technical Manual:

- Academics (AC): Curriculum, Research
- Engagement (EN): Campus
- Engagement, Public Engagement
- Operations (OP): Air & Climate, Buildings, Energy, Food & Dining, Grounds, Purchasing, Transportation, Waste, Water
- Planning & Administration (PA): Coordination & Planning, Diversity & Affordability, Investment & Finance, Wellbeing & Work
- Innovation & Leadership (IN)

PEER PROFILES





**PRINCETON REVIEW
GREEN COLLEGES**



**AASHE 2020
SUSTAINABILITY
CAMPUS INDEX**

#9 WATER

**SIERRA CLUB
COOL SCHOOLS**



**AASHE STARS
RATING**



Air & Climate

Heating Degree Day
3,453
Cooling Degree Day
1,506



GHG

Current GHG Emissions
41,651
Per Weighted Campus User
3.58



Water Use Intensity

Gallons/GSF
11.53
Gallons/Acre
679,878.69



Buildings Guidelines

SQ FT of Green Buildings
914,011
% of new green building
99%



Energy Use

Annual Energy Consumption
673,494 MMBtu
Clean Renewable Sources
0.01%



Waste

% of materials diverted
from the landfill or
incinerator
32.91%



Transportation

% of using sustainable
commuting
51% students
27% employees



Food

% of total annual
food and beverage
expenditures
2.33%



**Investments &
Financing**

None



PRINCETON REVIEW GREEN COLLEGES	AASHE 2020 SUSTAINABILITY CAMPUS INDEX	SIERRA CLUB COOL SCHOOLS	AASHE STARS RATING
	<p>#3 ENGAGEMENT</p> <p>#2 CURRICULUM</p>	<p>#1 RESEARCH</p> <p>#2 WELLBEING</p>	<p>10</p> 

 Air & Climate Heating Degree Day 6,502 Cooling Degree Day 613	 GHG Current GHG Emissions 137,241 Per Weighted Campus User 5.05	 Water Use Intensity Gallons/GSF 29.23 Gallons/Acre 176,234.59
 Buildings Guidelines SQ FT of Green Buildings 119,627 % of new green building 96%	 Energy Use Annual Energy Consumption 1,699,615 MMBtu Clean Renewable Sources 13.48%	 Waste % of materials diverted from the landfill or incinerator 58.79%
 Transportation % of using sustainable commuting 69% students 30% employees	 Food % of total annual food and beverage expenditures 5.50%	 Investments & Financing Total Annual Investment in Sustainability Funds \$64,119,791



PRINCETON REVIEW GREEN COLLEGES 	AASHE 2020 SUSTAINABILITY CAMPUS INDEX #10 AIR & CLIMATE #2 WATER	SIERRA CLUB COOL SCHOOLS <div style="border: 2px solid orange; border-radius: 50%; width: 60px; height: 60px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> 120 </div>	AASHE STARS RATING 
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 Air & Climate Heating Degree Day 7,425 Cooling Degree Day 684	 GHG Current GHG Emissions 21,879 Per Weighted Campus User 2.52	 Water Use Intensity Gallons/GSF 16.32 Gallons/Acre 426,368.60
 Buildings Guidelines SQ FT of Green Buildings 219,925 % of new green building 73%	 Energy Use Annual Energy Consumption 208,322 MMBtu Clean Renewable Sources 0.90%	 Waste % of materials diverted from the landfill or incinerator 51.32%
 Transportation % of using sustainable commuting 14% students 9% employees	 Food % of total annual food and beverage expenditures 8.82%	 Investments & Financing Total Annual Investment in Sustainability Funds \$17,500,000



**AASHE STARS
RATING**



Air & Climate

Heating Degree Day
6,553
Cooling Degree Day
636



GHG

Current GHG Emissions
32,755
Per Weighted Campus User
5.58



Water Use Intensity

Gallons/GSF
37.13
Gallons/Acre
190,977.78



Buildings Guidelines

SQ FT of Green Buildings
652,776
% of new green building
100%



Energy Use

Annual Energy Consumption
316,026 MMBtu
Clean Renewable Sources
0.14%



Waste

% of materials diverted
from the landfill or
incinerator
27.40%



Transportation

Reduced Fee for Public
Transportation



Food

% of total annual
food and beverage
expenditures
2.70%



**Investments &
Financing**

None



**PRINCETON REVIEW
GREEN COLLEGES**



**AASHE STARS
RATING**



Air & Climate

Heating Degree Day
5,949
Cooling Degree Day
726



GHG

Current GHG Emissions
110,147
Per Weighted Campus User
3.22



Water Use Intensity

Gallons/GSF
20.12
Gallons/Acre
2,290,894.74



Buildings Guidelines

SQ FT of Green Buildings
251,596
% of new green building
96%



Energy Use

Annual Energy Consumption
1,425,522 MMBtu
Clean Renewable Sources
0.26%



Waste

% of materials diverted
from the landfill or
incinerator
53.32%



Transportation

% of using sustainable
commuting
90% students
49% employees



Food

% of total annual
food and beverage
expenditures
17.94%



**Investments &
Financing**

Total Annual Investment
in Sustainability Funds
\$17,500,000



 <p>Air & Climate</p> <p>Heating Degree Day 5,230</p> <p>Cooling Degree Day 1,169</p>	 <p>GHG</p> <p>Current GHG Emissions 116,233</p> <p>Per Weighted Campus User 5.34</p>	 <p>Water Use Intensity</p> <p>Gallons/GSF 28.68</p> <p>Gallons/Acre 180,900.10</p>
 <p>Buildings Guidelines</p> <p>SQ FT of Green Buildings 523,269</p> <p>% of new green building 100%</p>	 <p>Energy Use</p> <p>Annual Energy Consumption 686,688 MMBtu</p> <p>Clean Renewable Sources 0.11%</p>	 <p>Waste</p> <p>% of materials diverted from the landfill or incinerator 41.48%</p>
 <p>Transportation</p> <p>Reduced Fee for Public Transportation</p>	 <p>Food</p> <p>% of total annual food and beverage expenditures 5.78%</p>	 <p>Investments & Financing</p> <p>Total Annual Investment in Sustainability Funds \$1,614,497</p>



**PRINCETON REVIEW
GREEN COLLEGES**

**AASHE STARS
RATING**

N/A

N/A



Air & Climate

Heating Degree Day

6,531

Cooling Degree Day

1,191



GHG

Current GHG Emissions

N/A

Per Weighted Campus User

N/A



Water Use Intensity

Gallons/GSF

N/A

Gallons/Acre

N/A



Buildings Guidelines

SQ FT of Green Buildings

N/A

% of new green building

N/A%



Energy Use

Annual Energy Consumption

N/A MMBtu

Clean Renewable Sources

N/A%



Waste

% of materials diverted from the landfill or incinerator

N/A%



Transportation

% of using sustainable commuting

N/A% students

N/A% employees



Food

% of total annual food and beverage expenditures

N/A%



Investments & Financing

Total Annual Investment in Sustainability Funds

\$N/A

SMITHGROUP