







CONTINUING TO HONOR OUR PROMISE

I am pleased to present this final report detailing Western Carolina University's updated master plan, which will guide the development and improvements of the campus over the next decade. The original master plan was developed and approved in December 2013 by the WCU Board of Trustees. This 2022 Campus Master Plan Update will link the physical facilities of the university, including future construction and renovation, to the goals of our updated 2021 strategic plan, "Honoring Our Promise" and provide a flexible framework for sustainable growth.

Completion of the plan, which was drafted with the guidance of the Campus Master Planning Committee, came after a process that started with conversations with academic leadership and went on to include public forums, and a student focus group designed to collect input and feedback from university students, faculty, staff, and regional and community stakeholders. The 2014 plan goals remain as the foundation for this update, with a renewed focus on maximizing existing campus resources through building renovations and additions, enhanced multimodal connectivity, engaging landscapes, and strategic new construction opportunities. The proposed projects and program reshuffling strategies allow for the creation of a new STEM Hub for Engineering and Natural Sciences, a vibrant Arts District, a collaborative Student Life Core, and provides opportunities to preserve campus heritage and connect with the surrounding community.

I am thankful for the leadership provided by our partners at Hanbury, the Campus Master Planning Committee, Executive Council, Provost's Council, and the Board of Trustees in the development of this update. And I am especially thankful for the participation and feedback provided by our faculty, staff, students, alumni, community members, and regional partners.

As we begin execution of this latest update of our master plan, I am excited about what the future holds. And I am reminded that this plan is a living document, one that is not set in stone but rather will be a guide to us going forward – a tool adaptable to changing conditions as we continue to work together to honor our promise to our students, our region, and our State.

Dr. Kelli R. Brown

Kelli R. Brown

Chancellor

acknowledgements

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executive summary

REFINING THE VISION

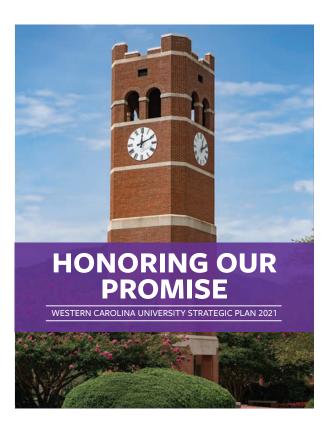
The Western Carolina University 2022 Campus Master Plan Update supports the University's Honoring Our Promise Strategic Plan. As stated by Chancellor Brown in the opening letter of the 2021 Strategic Plan, "Our aim is to include innovative thinking and a culture of change so that all students, faculty, and staff are valued and empowered. By expanding opportunities to fulfill our commitment to each student, we will achieve equity and excellence so that all students can successfully discover and embark upon their chosen path. Providing a high-quality education, integrated with our core values and sense of place, will equip students for local and global leadership as well as ambitious community and career goals of their choice". The updated strategic plan outlines seven strategic directions:

- **Academic Excellence**
- We commit to providing our students with a 21st century rigorous curriculum that is composed of the intellectual, creative, cultural, and personal outcomes necessary to advance and excel.
- Student Experience We will enrich the student experience through creating intentional cocurricular and curricular programs, which will prepare students to successfully engage in a vibrant, complex, and culturally diverse world.
- **Inclusive Excellence** We commit to creating a campus reflective of our core values and we offer curricular and co-curricular educational programs that prepare our students for the diverse world in which they live.

Regional Development and Engagement

Through regional and community partnerships, we will be a force for the progress and growth of Western North Carolina. A state-wide institution dedicated to the overall development of North Carolina, WCU serves all of the state with particular focus on the communities, towns, and cities of the 15 westernmost counties of North Carolina as well as the Qualla Boundary of the Eastern Band of Cherokee Indians.

- **Employee Excellence**
- We will continue to attract, retain, and promote outstanding faculty and staff while providing valuable scholarship, leadership, and professional development opportunities.
- Responsible Stewardship We will focus our priorities on facilities, technology, core resources, and business policies and practices.
- Vision Advancement We will create and promote a shared understanding of WCU's future around our areas of distinction, student support, and faculty and staff initiatives.





MASTER PLAN UPDATE GOALS

The planning team and WCU Steering Committee reviewed the 2014 master plan goals and determined that the original goals are still relevant for this plan update. A few additions and modifications have been added to the core tenents and are in bold italics in the Master Plan Update Goals list.

- Support the *updated 2021 Strategic Plan, Honoring Our Promise*, by enabling WCU's physical resources to accommodate the goal to be a national model for student learning and engagement that embraces its responsibilities as a regionally engaged university.
- Plan for the long range highest and best use of the University's land assets with a focus on sustainability and resilience.
- Maximize the value and usefulness of the existing campus infrastructure while accommodating growth. **Employ strategies** to integrate interdisciplinary collaboration spaces and support regional engagement, while creating WOW factor moments.
- Plan sustainable transportation, *multimodal*, and infrastructure systems to anticipate growth rather than react to demand.
- Preserve the unique heritage of Western Carolina and celebrate the campus as a place *through engaging and interactive landscapes*.
- Create a walkable, highly connected, and vibrant campus.

 Enhance accessibility and leverage outdoor spaces to foster community and wellness.
- Produce a *flexible "living" framework plan* to allow for future revisions and alternatives, while proposing solutions based on current strategies and data.

PLAN UPDATE THEMES AND DRIVERS

The master planning process included multiple iterations of input from the WCU community, with information vetted and distilled with the Master Plan Steering Committee. This inclusive process employed varied input mechanisms including constituent meetings, open forums, and a student focus group. As a result of this input process, themes emerged that were consolidated into prioritized drivers for the plan. The list of drivers below provide focus strategies for the master plan. The graphic icons in the list populate the sections of this document to denote strategic ties between the master plan recommendations and relevant plan drivers.







INTENTIONAL PEDESTRIAN EXPERIENCE



COLLABORATIVE/ **INTERDISCIPLINARY SPACE**



CONNECT TO AND SUPPORT THE ENHANCEMENT OF OLD CULLOWHEE



ENHANCE THE SPACES BETWEEN (OPEN SPACE NETWORK)



PROVIDE CASUAL CAMPUS "LIVING ROOM" SPACES



CELEBRATE NATURE: TREAT OUTDOOR SPACES AS PROGRAMMABLE FACILITIES



ADDRESS QUALITY DISPARITIES THROUGH BUILDING RENOVATION



INTENTIONAL MULTIMODAL + **VEHICULAR CIRCULATION**



CAMPUS ENTRY AND SENSE OF ARRIVAL



CREATE WOW FACTOR MOMENTS FOR INTERIOR AND EXTERIOR SPACES

PROCESS OVERVIEW

Part A of the master plan update process included general data collection and the utilization and space needs analysis. Stakeholder input workshops for the space needs analysis included:

- Chancellor
- Provost
- Provost's Council
- College of Education and Allied Professionals
- College of Health and Human Sciences
- College of Engineering and Technology
- College of Arts and Sciences
- Belcher College of Fine and Performing Arts
- College of Business
- Brinson Honors College
- Graduate School and Research
- Hunter Library Director
- Biltmore Park Instructional Site
- Educational Outreach
- Highlands Biological Station
- Student Focus Group
- Student Affairs (non-housing)
- Student Affairs (Housing and Dining)
- Bookstore Operations
- Athletics
- Information Technology
- Advancement
- Administration and Finance
- Facilities Management

Informed by the findings of the space needs analysis, Part B of the plan update commenced over the summer of 2021. The planning team met with Western Carolina University's Master Plan Update Committee several times throughout the development of the plan to present analysis and options, obtain feedback on plan priorities, and confirm appropriateness of recommendations. The planning team also facilitated a student focus group and two virtual open forums, with over 200 campus community, local and regional stakeholders in attendance. Progress updates were presented to the Board of Trustees in November and December, with final approval in March of 2022.



Having accomplished many of the recommendations from the 2014 Campus Master Plan, the 2022 Campus Master Plan Update provides a refocused vision for project opportunities in WCU's 10-year planning horizon. It should be noted that the overarching goals and strategies outlined in the 2014 document remain foundational to the overall campus vision.

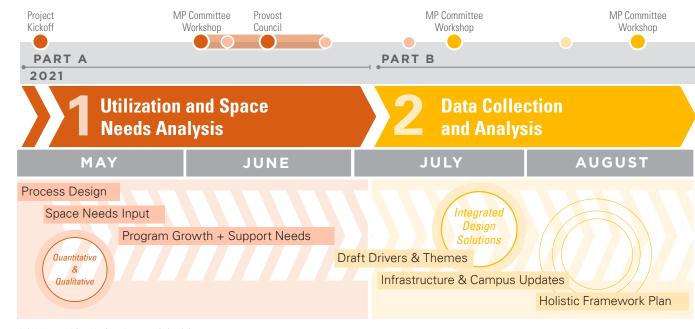
Consider the following when reading this document:

- In order to provide continuity between the 2014 Master Plan and this 2022 Master Plan Update, the chapter structure is the same for both documents.
- Driven by new enrollment projections, space needs, and updated strategic goals, much of the content in

- the Executive Summary (Chapter 1), Focus Areas (Chapter 2), and Space Utilization (chapter 4) is new.
- Minimal updates were required for the chapters on Community & Campus Heritage (Chapter 3), Enhancing Parking & Transportation (Chapter 5), Sustainable Campus (Chapter 6), Improving Technology (Chapter 7), and Safety & Security (Chapter 8).
- Only significant changes relating to new/modified projects or goals are outlined in this document.
- Refer to the 2014 Campus Master Plan for additional information: https://www.wcu.edu/webfiles/pdfs/ WCU_2014CampusMasterPlan_HighRes.pdf



Planning Team Touring New Apodaca Science Building



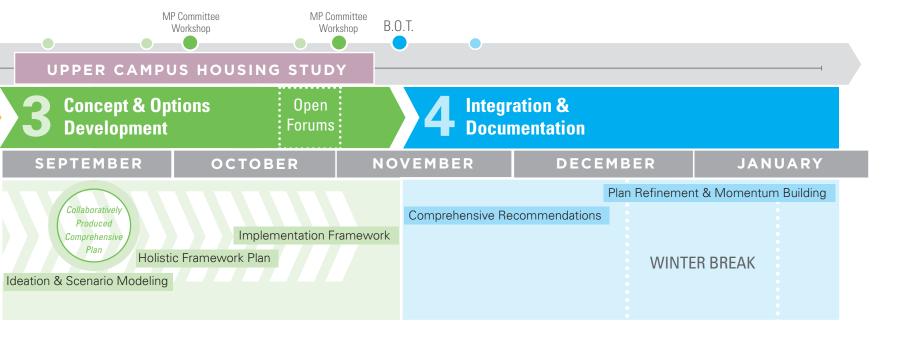
WCU Master Plan Update Process Schedule



Steering Committee Workshop Meeting

The following programming and planning studies were reviewed by the planning team and either updated or incorporated where appropriate:

- Cullowhee Creek Greenway Master Plan (2019)
- WCU Athletics Master Plan (2019)
- National Pan-Hellenic Council (NPHC) Site Selection Study (2021)
- Upper Campus Housing Master Plan Update (2021)
- Moore Building Programming Study (2021)
- Gender Inclusive Study (2019)
- Cullowhee River Park Conceptual Design Study (2015)



CAMPUSWIDE SPACE ANALYSIS

To establish the University's space needs for the planning horizon, WCU's 10-year enrollment projections were provided by University leadership. The projected future enrollment for this analysis is 13,013 students, a 12% increase from 11,598 students in the Fall of 2019. The projected future space need campus-wide is 259,566 assignable square feet (ASF). The Space Needs Analysis overlaps quantitative and qualitative information gained from the comprehensive campus planning dialogue. Hanbury held meetings with department heads and/or selected representatives, University staff, and administration to gather information on how physical space is currently used on campus and what space might be needed to accommodate program growth in the 10-year planning horizon. For the complete Space Needs report, refer to Appendix A.





Current Year 2020 Student Headcount = 11,598

Future Horizon 2030 Student Headcount = 13,013

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ace Use Category	Current ASF	Calculated Space Requirement ASF Difference		Percent Difference	Future Built ASF	Calculated Future Space Requirement	ASF Difference	Percent Difference
Classrooms and Service	94,761	111,800	(17,039)	(18%)	91,475	125,600	(34,125)	(37%)
Class Laboratories and Service	105,892	113,900	(8,008)	(8%)	125,191	127,600	(2,409)	(2%)
Open Laboratories and Service	42,843	46,400	(3,557)	(8%)	47,820	52,350	(4,530)	(9%)
Research and Service	28,181	36,400	(8,219)	(29%)	45,413	45,200	213	0%
Office and Service	304,216	228,500	75,716	25%	309,438	247,600	61,838	20%
Study/Library	121,953	115,150	6,803	6%	121,134	126,650	(5,516)	(5%)
Physical Education/Recreation	135,592	143,000	(7,408)	(5%)	135,592	157,400	(21,808)	(16%)
Athletics	57,517	175,000	(117,483)	(204%)	57,517	195,000	(137,483)	(239%)
Special Use	27,281	26,150	1,131	4%	28,626	29,380	(754)	(3%)
Assembly & Exhibit	98,746	106,800	(8,054)	(8%)	98,746	115,300	(16,554)	(17%)
Student Center	64,748	104,400	(39,652)	(61%)	64,748	117,200	(52,452)	(81%)
General Use	45,133	58,570	(13,437)	(30%)	45,813	65,900	(20,087)	(44%)
Support	57,847	78,700	(20,853)	(36%)	57,956	80,000	(22,044)	(38%)
Health Care	3,246	5,800	(2,554)	(79%)	3,246	6,500	(3,254)	(100%)
Residential Facilities	1,393,699	1,291,100	102,599	7%	1,586,879	1,587,480	(601)	(0%)
TAL	2.581.655	2.641.670	(60.015)	(2%)	2.819.594	3.079.160	(259.566)	(9%)

Campuswide Space Analysis by Space Category

Athletics has the greatest future need for square footage due to the function and scale of sports facilities. There is also a significant need for additional Student Center space that supports a variety of informal, flexible "living room" space where students can gather to study alone or in groups, share a meal or cup of coffee, and enjoy recreation amenities such as game rooms, movies, and events.

New or newly renovated high-tech and flexible instructional and meeting space is incorporated throughout several of the plan recommendations. While primarily focused in the academic core, additional multi-purpose meeting and classroom space is proposed throughout campus to provide more equitable access to resources and facilities.

Several programs expressed a need for consolidated and convenient storage space, including Residence Life and Student Life/Events. A new storage warehouse is proposed on west campus to the south of Little Savannah Road. While Health Services, which includes Counseling & Psychological Services (CAPS), does not have a large square footage need relative to other programs on campus, there is an expressed desire by WCU Leadership to expand capacity and access to physical and mental health care for students and the campus community at large.

Athletics: 137,480 ASF

Existing Square Footage: 5 ASF/FTE Guideline for Analysis: 15 ASF/FTE Guideline Range: 10-25 ASF/FTE

Student Center: 52,450 ASF

Existing Square Footage: 6 ASF/FTE Guideline for Analysis: 9 ASF/FTE Guideline Range: 9-12 ASF/FTE

Instructional Space: 34.125 ASF

Existing: 1.067 Factor (Used comparative schools for benchmarking)

Support Space (Storage): 22.040 ASF

Existing Square Footage: 2% of Campus Total S.F. Guideline Range: 2% - 3%

Physical Ed./Recreation: 21,800 ASF

Guideline for Analysis: 12.1 ASF/FTE Guideline Range: N/A

General Use (Meeting Space): 20,100 ASF

Fxisting: 4 ASF/FTF Guideline Range: 5-15 ASF

Assembly & Exhibit: 16,555 ASF

Guideline: 22,450 + 6 ASF/FTE above 5,000 Students + 5.000 ASF for Music program *Ramsev Center and Mountain Heritage Center

Health Services: 3.255 ASF

Existing Square Footage: .27 ASF/FTE Guideline for Analysis: .5 ASF/FTE

PROGRAM ADJACENCIES + SYNERGIES

The space needs analysis determined that quantitatively there is adequate square footage on campus to meet program needs in the 10-year horizon. However qualitatively, that square footage is not apportioned correctly to meet program needs. Additionally, a large percentage of the campus square footage in the academic core is in need of renovation. There are opportunities to create programmatic synergies by relocating certain programs to be adjacent to one another while also enhancing the quality and utilization of existing space through renovation.

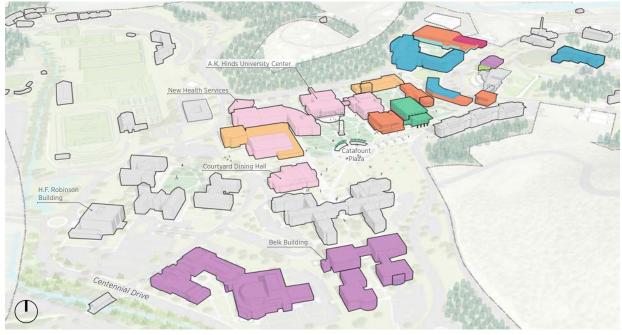
RESHUFFLING THE DECK

This master plan update builds on and refines the Reshuffling the Deck strategy outlined in the 2014 Master Plan. This strategy endeavors to make the best use of existing infrastructure through renovation, optimizing operational adjacencies, and taking advantage of core campus existing building locations. Key components of this strategy include:

- Reinforcing an "Arts District" by relocating and consolidating arts programs to a renovated Belk Building.
- Reinforcing the student life core by renovating the University Center and expanding into Coulter Building for more student center recreation space. Additionally, a new Interdisciplinary Learning Commons facility will be located in this area.
- Reinforcing a "Sciences District" by renovating Hunter Library to accommodate Engineering programs and renovating Moore Building for Arts and Sciences programs to better integrate lower campus with the historic upper campus area.



Existing Building Use by Program

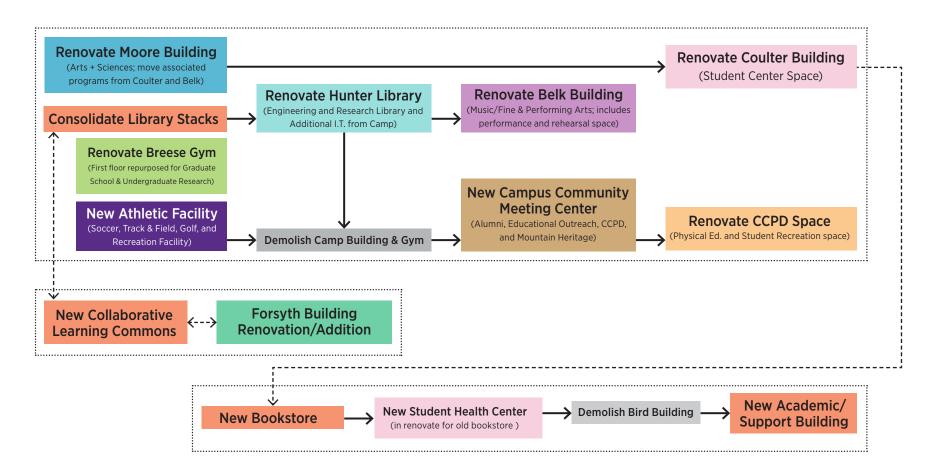


Proposed Building Use by Program

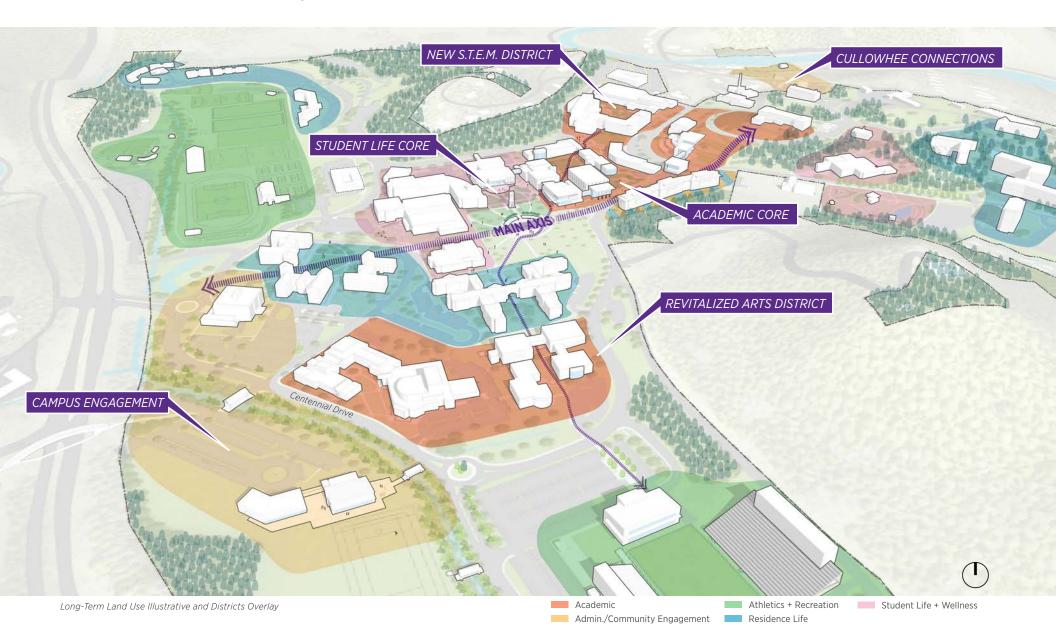
CRITICAL PATH FOR PROJECTS

The programmatic and physical reshuffling proposed in this plan requires a phased approach to projects, with certain projects dependent on the completion of others. The diagram below illustrates the planning team's current understanding of project dependencies, (shown with a solid connecting line), and complementary projects, (shown with a dashed connecting line).

Multiple locations for the bookstore were explored during the planning process and can be found in the Focus Areas Overview section. Likewise, additional options for a new Engineering Building can be found in the Academic Core Focus Area section. Projects not represented in the diagram below are relatively autonomous to other projects based on current circumstances.



land use and connectivity



CULLOWHEE CONNECTIONS • Pursue development and collaboration opportunities at east campus edge with Old Cullowhee • New Campus Community Meeting Center on existing Camp Building and Gym site • Enhanced admissions and wayfinding experience

NEW S.T.E.M. DISTRICT

- Renovation of Hunter Library for Engineering, Research Library, and I.T. Hub. Option for new facility with integrated parking structure for Engineering
- New Terraced Outdoor Classroom (Demolition of University Auditorium)
- Closure of Killian Building Lane for Pedestrian Plaza + Food Truck Zone

STUDENT LIFE CORE

ACADEMIC CORE

CAMPUS ENGAGEMENT

- Renovation of Coulter Building for Informal and Recreational Student Life
- New Collaborative Learning Commons to support interdisciplinary work, innovation, study, and lounge spaces

REVITALIZED ARTS DISTRICT

- Complete renovation of Belk and Center for Applied Technology for Arts and Performing Arts (includes performance and rehearsal space)
- New entry addition at Belk south facing exterior
- Enhancement of natural and outdoor spaces

HONORING OUR PROMISE 2021 STRATEGIC PLAN UPDATE **Academic Excellence Student Experience Inclusive Excellence Regional Development and Engagement Employee Excellence** Responsible Stewardship **Vision Advancement**

program accommodation

BUILDING RECOMMENDATIONS:

- (A) Renovate Moore Building for Academics
- B) New Campus Bookstore
- © Renovate for Health Services, Counseling & Psychological Services (CAPS)
- D Renovate Hunter Library for Engineering + Research Library
- (E) Renovate Belk for Fine and Performing Arts
- (F) Renovate Coulter for Student Center Expansion
- (G) Partially Renovate A.K. Hinds Student Center
- (H) New Collaborative Learning Commons (CLC)
- Renovate Forsyth Building and New Addition
- Renovate McKee Building for Academics
- K Renovate H.F. Robinson Building, Phase II
- (L) New Soccer, Track & Field, and Golf Facility
- (M) New Intramural Restroom and Storage Facility
- New Football Team Facility
- (o) Whitmire Stadium Improvements
- P New Campus Community Meeting Center (CCMC)
- New Base Camp Cullowhee Outpost
- (R) Renovate Buchanan Residence Hall
- (s) Renovate Robertson Residence Hall
- T New Campus Amphitheater and Wellness Hub

- (U) Renovate Breese Gym for Graduate School + Undergraduate Research
- (v) Addition to Killian Building and Annex
- (w) New Storage Warehouse Facility
- (x) Partial Renovation of Chancellor's Residence
- (Y) Renovate the Old Student Union Building
- Relocate Forensic Osteology Research Facility (FOREST) off of Wake Robin Drive, west of the Health and Human Sciences Building
- (A) New Grounds and Greenhouse Facility and New Restroom and Storage Area for Pride of the Mountains (POTM) Marching Band

LONG-TERM BUILDING OPPORTUNITIES:

- a New Parking Garage
- **b** New Academic/Student Support Building

LANDSCAPE RECOMMENDATIONS:

- i New North Campus Recreation Fields
- New Terracing and Pathway to Upper Campus
- iii New Campus Outdoor Enjoyment & Wellness Park
- (iv) New Traffic Circle with Center Feature
- New Vehicular and Pedestrian Covered Bridge
- (vi) New Pedestrian Covered Bridge

- (vii) New Pedestrian Promenade
- (viii) New Terraced Outdoor Classroom
- (x) Catafount Plaza User Experience Enhancements
- Cullowhee Creek Open Space Enhancements
- (xi) National Pan-Hellenic Council Garden
- Base Camp Cullowhee Recreation Park
- Enhanced Entry Drive and Traffic Circle
- (xiv) Expanded Parking and Landscape Buffer
- (xv) Open Space Enhancement
- (w) Camp Field Enhancements
- 🕪 Enhanced Courtyard Spaces West of Reid Gym
- Killian Building Lane Transition to Pedestrian Way
- Upgrade and Expansion of Joyner Drive
- (xx) Pedestrian Enhancements along Central Drive

General Landscape Recommendation: Campus entrance treatments at all entrances should be influenced by the main entrance design. This includes Forest Hills, Central Drive at Old Cullowhee Road intersections, and any new entrances.

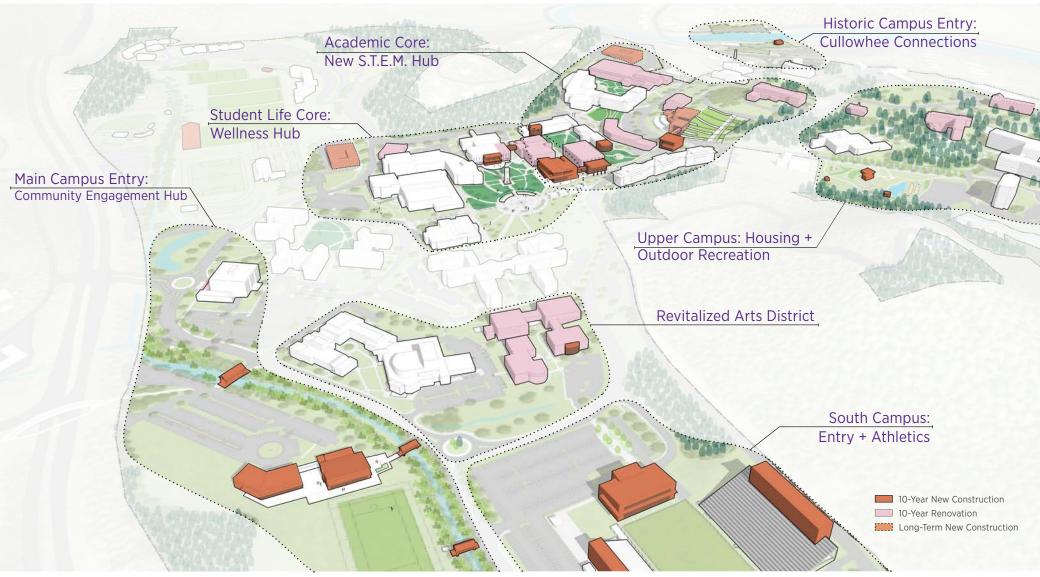




©2 FOCUS AREAS



focus areas



Master Plan Update Focus Areas





















MAIN CAMPUS ENTRY: COMMUNITY ENGAGEMENT HUB

- (K) Renovate H.F. Robinson Building, Phase II
- (P) New Campus Community Meeting Center (CCMC)
- (iv) New Traffic Circle with Center Feature
- New Vehicular and Pedestrian Covered Bridge
- (vi) New Pedestrian Covered Bridge
- (x) Cullowhee Creek Open Space Enhancements
- (xi) National Pan-Hellenic Council Garden
- (XIII) Enhanced Entry Drive and Traffic Circle
- (xiv) Expanded Parking and Landscape Buffer
- (v) Open Space Enhancement
- (wi) Camp Field Enhancements

SOUTH CAMPUS: ENTRY + ATHLETICS

- New Football Team Facility
- (ii) Whitmire Stadium Improvements
- (vii) New Pedestrian Promenade

HISTORIC CAMPUS ENTRY: CULLOWHEE CONNECTIONS

- (a) New Base Camp Cullowhee Outpost
- 🕅 Base Camp Cullowhee Recreation Park

REVITALIZED ARTS DISTRICT

- (E) Renovate Belk for Fine and Performing Arts
- iv New Traffic Circle with Center Feature
- (xv) Open Space Enhancement

UPPER CAMPUS: HOUSING + OUTDOOR RECREATION

- (R) Renovate Buchanan Residence Hall
- (s) Renovate Robertson Residence Hall
- (T) New Campus Amphitheater and Wellness Hub
- (Y) Renovate the Old Student Union Building
- (iii) New Campus Outdoor Enjoyment & Wellness Park
- (xx) Pedestrian Enhancements along Central Drive

ACADEMIC CORE: NEW S.T.E.M. HUB

- (A) Renovate Moore Building for Academics
- (B) New Campus Bookstore
- D Renovate Hunter Library for Engineering + Research Library
- (H) New Collaborative Learning Commons (CLC)
- (I) Renovate Forsyth Building and New Addition
- J Renovate McKee Building for Academics
- (U) Renovate Breese Gym for Graduate School + Undergraduate Research
- (V) Addition to Killian Building and Annex
- New Parking Garage
- (b) New Academic/Student Support Building
- (ii) New Terracing and Pathway to Upper Campus
- wiii New Terraced Outdoor Classroom
- (xi) National Pan-Hellenic Council Garden

STUDENT LIFE CORE: WELLNESS HUB

- © Renovate for Health Services, Counseling & Psychological Services (CAPS)
- (E) Renovate Belk for Fine and Performing Arts
- (F) Renovate Coulter for Student Center Expansion
- (G) Partially Renovate A.K. Hinds Student Center
- (i) New North Campus Recreation Fields
- (ix) Catafount Plaza User Experience Enhancements
- (xvii) Enhanced Courtyard Spaces West of Reid Gym
- Killian Building Lane Transition to Pedestrian Way
- (xix) Upgrade and Expansion of Joyner Drive
- a New Parking Garage



MAIN CAMPUS ENTRY: COMMUNITY ENGAGEMENT HUB

The main campus entry presents an important first impression of the WCU campus. It is also a gateway to multiple outward focused programs such as Admissions, Performing Arts, and Athletics. The Plan proposes a new Campus Community Meeting Center on the site of the current Camp Gym. It will provide a convenient location for campus and community to come together to learn, meet, and showcase the regional heritage of Western North Carolina. Landscape and circulation improvements will enhance walkability and feature Cullowhee Creek as a campus amenity to enjoy and for teaching opportunities.

KEY BUILDING RECOMMENDATIONS:

(P) New Campus Community Meeting Center (CCMC)

This flexible multi-use facility will contain programs including Advancement, Educational Outreach, Center for Career and Professional Development, and Mountain Heritage Center. Co-locating these programs at this location will promote ease of access for both campus and community members.

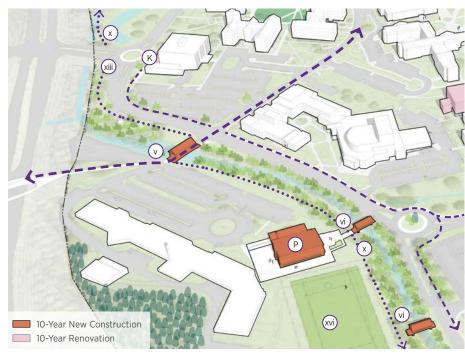
The mix of programs will ensure an active facility daily, at night, and as a hub for special events. Within easy walking distance to Performing Arts and Athletics, it provides pre-function amenities

for visitors and alumni with convenient parking. Associated outdoor terraces will connect the complex to views, surrounding open spaces, and Cullowhee Creek.

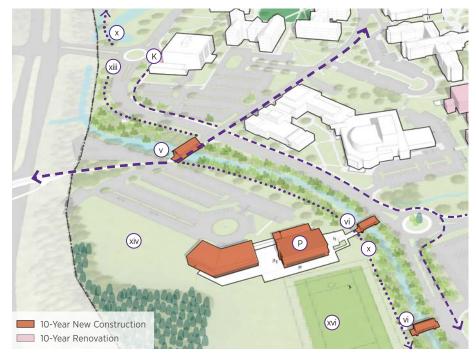
(K) Renovate H.F. Robinson Building, Phase II

Phase II improvements overview:

- Expansion of Admissions and improved visitor engagement.
- Façade improvements to include large banners celebrating campus heritage, points of pride, and student achievements.



Potential Phase 1 of New Campus Community Meeting Center



New Campus Community Meeting Center (demolition of Camp Building

- Administrative office renovations to provide efficient office suites and meeting spaces in a suitable collaborative environment.
- New vehicular pull-through lane for shuttle and bus access to accommodate admissions tours.
- These projects will enhance the identity and functionality of HFR - often the first building one encounters upon coming to the WCU campus and home to the Chancellor's office.

LANDSCAPE RECOMMENDATIONS:

(xiii) Enhanced Entry Drive and Traffic Circle

Building on recent enhancements to the main campus entry; new landscape, a new Catamount statue, and pedestrian improvements are proposed. In tandem with HFR renovations, improvements will provide a highly memorable campus gateway.

New Vehicular and Pedestrian Covered Bridge

As the sole vehicular access to the Camp site and pedestrian path to West Campus, a new bridge is needed to increase usability and safety for pedestrians and bikers. It is also an opportunity to upgrade the campus aesthetic and celebrate Cullowhee Creek. Shown as a covered bridge.

(vi) New Pedestrian Covered Bridge

A series of new bridges across Cullowhee Creek will provide safer crossing while creating a consistent architectural feature and promote engagement with the creek and nature.



Existing H.F. Robinson Facade at Campus Entry Roundabout



Schematic Concept of Facade Enhancements



Schematic Concept of Facade Enhancements



Existing Vehicular and Pedestrian Bridges at University Way



H.F. Robinson Building Renovation, Phase I

(x) Cullowhee Creek Open Space Enhancements

In support of the Cullowhee Creek Greenway initiative, multiple locations along the path are planned as outdoor classrooms, gathering and reflective spaces. Points indicated relate to existing and proposed structures such as the Solar Lounge, Welcome Center, and CCMC.

(xiv) Expanded Parking and Landscape Buffer

With the long-term removal of the Camp Building, expanded parking for the Campus Community Meeting Center and campus generally will be possible as well as increasing the buffer from the highway.

(xvi) Camp Field Enhancements

Fields to be upgraded for intramural and recreation uses and well as to continue to be the home of the Mountain Heritage Day. Landscape connections to the Mountain Heritage Center within the CCMC will create outdoor gathering spaces.



Pedestrian Bridge at Lewis and Clark College, Photo by Lincoln Barbour



Precedent for New Campus Community Meeting Center



Precedent for New Campus Community Meeting Center





SOUTH CAMPUS ENTRY: ATHLETICS

With the newly completed parking garage at the Forest Hills Road entry to campus, Athletics will experience a higher volume of users and pedestrians circulating to and from main campus. An Athletics Master Plan was developed in the spring of 2019 and outlines in detail existing conditions, priorities/needs, and proposed concepts to support the 16 varsity sports currently operated by WCU. Since the 2019 Athletics Plan, priorities have slightly shifted as shown in the list below. The most notable change includes moving the proposed football practice facility out beyond the 10-year horizon of this plan update.

UPDATED PROJECT PRIORITY LIST

Priority 1

New Football Team Facility Whitmire Stadium Renovations New Soccer, Track & Field, and Golf Facility

Priority 2

Renovations to Ramsey Center New Baseball Team Facility New Softball Practice Facility



Graphic Rendering of South Campus: Entry + Athletics Focus Area







10-Year Renovation

KEY BUILDING RECOMMENDATIONS:

N New Football Team Facility

The proposed facility will include a football locker room, player's lounge, equipment area, team meeting spaces, coaches' offices, space for sports medicine, strength and conditioning, and academic facilities for all student-athletes.

(i) Whitmire Stadium Improvements

A new press box and amenity club tower, (including suites, boxes, loges, and Chancellor's box), is proposed on the west side of Whitmire Stadium to address orientation related glare and visibility issues. The existing press box and Chancellor's box on the east of Whitmire Stadium should be renovated to address accessibility and deferred maintenance issues while providing additional premium seating options for patrons.

LANDSCAPE RECOMMENDATIONS:

(vii) New Pedestrian Promenade

The proposed Football Team Facility serves as the southern terminus for the primary north-south pedestrian axis through main campus. A wide pedestrian path will include native landscaping, new trees, seating, and shade.



Existing Bob Waters Field and Ramsey Regional Activity Center

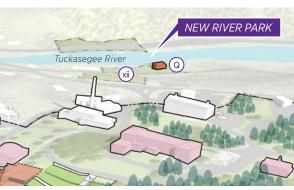


HISTORIC ENTRY: CULLOWHEE CONNECTIONS

The plan supports WCU's desire to support and invest in the redevelopment of Old Cullowhee. The proposal of a new river park by Cullowhee Revitalization Endeavor (CuRvE) provides several opportunities for collaboration between the university and community. During the virtual Open Forums, the planning team conducted a couple of audience participation polls and attendees were enthusiastic about improvements and new amenities in this area.

When asked "In what ways would you like to see opportunities for engagement with Old Cullowhee and the Tuckasegee River", participants provided a variety of ideas for new amenities and programs:

- River park and outdoor recreation
- Picnic shelters/tables
- Bike paths, trails, and repair stations
- Restaurants/brewery
- Saturday market
- Extend the Greenway Connection
- Boat launch for paddle commuters
- Affordable faculty housing
- Revamped historic campus entry & signage
- Sidewalks with site lighting, seating, and landscape
- Connection to Community Garden
- Outdoor river/music pavilion on the river
- Innovation Lab
- Outdoor recreation equipment rental through Base Camp Cullowhee.



New Base Camp Cullowhee Outpost at Proposed River Park



Existing Intersection at Old Cullowhee Road and Central Drive



Base Camp Cullowhee Rock Climbing Lesson



Base Camp Cullowhee Canoe Equipment Rentals



Kayak launch at Rio Vista Park, photo courtesy of San Marcos Daily Record

KEY BUILDING RECOMMENDATIONS:

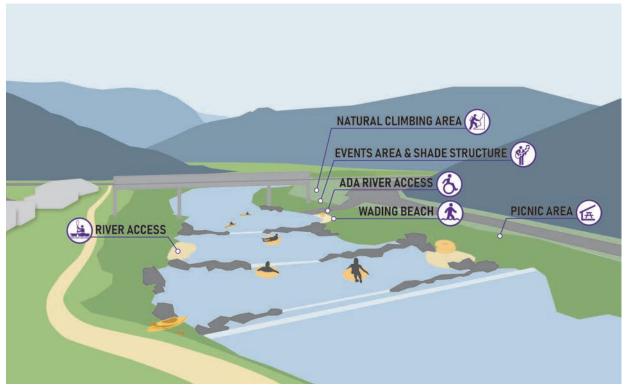
(a) New Base Camp Cullowhee Outpost

This program is currently located at the rear of the campus recreation center and lacks visibility/accessibility. Whether the entire program is relocated or just an outpost, a new outdoor recreation facility is proposed on current WCU land along the Tuckasegee river in Old Cullowhee that allows for more public facing engagement and community building.

LANDSCAPE RECOMMENDATIONS:

(xii) Base Camp Cullowhee Recreation Park

To make this new destination inviting and accessible for a broad range of users, park amenities that allow for both passive and active enjoyment can be implemented: picnic tables, shade sails, lawn games, etc.



Graphic Illustration of Proposed River Amenities per the CuRvE project list



REVITALIZED ARTS DISTRICT

This southernmost academic zone is adjacent to two campus entry focus areas including Main Campus Entry: Community Engagement Hub and South Campus: Entry + Athletics. As such, these facilities and grounds are highly visible to campus visitors and should anchor this threshold between the campus core and Athletics/ Cullowhee Creek corridor with improved pedestrian connectivity, landscaping, and building enhancements.

KEY BUILDING RECOMMENDATIONS:

(E) Renovate Belk Building for Fine and Performing Arts Originally constructed in 1971-1977, the last major renovation of these buildings occurred in 1996. Significant upgrades to address building systems, accessibility, and code compliance are needed along with renovation to address outdated classroom, studio, and circulation space. As the new home for Fine and Performing Arts, the renovation should include performance and rehearsal space along with classrooms, offices, and associated support spaces for these programs.



Graphic Rendering of Revitalized Arts District Focus Area





An enhanced entry is proposed at the south Belk Building facade



Existing Entry at Belk Building Connector Breezeway

KEY LANDSCAPE RECOMMENDATIONS:

(iv) New Traffic Circle with Center Feature

The intersection of Centennial Drive and Catamount Road is a primary wayfinding node for navigating campus. A new roundabout at this busy intersection will improve ease of traffic flow, enhance wayfinding, and provide opportunity for consistent campus identity.

XV) Open Space Enhancement

Serving as the link between core campus and Athletics, the Plan proposes to preserve the natural elements of these spaces, but to promote more opportunities for active engagement and enjoyment of the landscape.



Existing stream south of the proposed Revitalized Arts District



Existing pathways between Belk and Balsam and Blue Ridge Halls



Existing Intersection at Catamount Road and Centennial Drive



Existing Green Space and Path between Belk Building Wings



UPPER CAMPUS: HOUSING + OUTDOOR RECREATION

As shown in the Plan Update Process Schedule from the Executive Summary, a separate effort commenced parallel to the master plan update to assess opportunities for residence life on upper campus. The Hanbury planning team was asked to explore renovation, replacement, and demolition options for the following buildings:

- Albright-Benton Hall
- Buchanan Hall
- Reynolds Hall
- Robertson Hall

WCU's residence and student life leadership indicated that a range of 4,200-4,500 on-campus residents was desirable for future housing capacity. Once the three new Lower Campus Residence Halls currently under construction come online, the total campus bed count will be +/- 5,017 beds which allows the university flexibility to reimagine or shed facilities that are in poor condition. The team first reviewed existing conditions and qualitatively evaluated each building's interior, exterior, site location and proximity to campus amenities, and overall community model.

Moderate to substantial renovation options were explored for all four buildings, accompanied by high-level project cost estimates. The team arrived at preferred recommendations after considering building quality issues, return on investment to renovate, and siting constraints. While shifting sentiments and funding sources might alter the viability of the preferred scheme, the current recommendations include the demolition of Albright-Benton and Reynolds Halls.



Graphic Rendering of Upper Campus: Housing + Outdoor Recreation Focus Area

KEY BUILDING RECOMMENDATIONS:

(R) Renovate Buchanan Residence Hall

Major architectural renovations will be focused at the intersection of the existing wings and will include accessibility upgrades, new highly visible entries, interior common spaces, and exterior terraces that utilize the surrounding wooded landscape and create a unique place for community building and engaging with nature. A staff apartment and storage space will be provided on the ground floor.

(s) Renovate Robertson Residence Hall

A moderate renovation of Robertson Hall will address accessibility issues, create a new entry lobby and common spaces and will maximize the return on investment by renovating in place and updating finishes, fixtures, and appliances.

(T) New Campus Amphitheater and Wellness Hub

Utilizing the natural topography, terraced seating and an open-air pavilion stage will provide a new resource for informal gathering, concerts, and community events on the former Albright-Benton site.

X Partial Renovation of Chancellor's Residence

The project will address both interior and exterior improvements to the existing residence, with a new covered front entry and the addition of a new event space and associated storage.

(Y) Renovate the Old Student Union Building

Constructed in 1939, this historic building was the original student union for the campus. While a specific program use for this building has not been determined as a part of this plan, there are renovation opportunities that would allow this space to better contribute to campus legacy and sense of place. A program for this space should be further evaluated.



Existing Buchanan Hall



Existing Front Facade of Robertson Hall



Existing Landscape between Buchanan Hall and Brown Dining



Existing Buchanan Hall as seen from path to Robertson Hall



Existing Parking Lot at Robertson Hall



Existing Drive and Green at Reynolds Hall

LANDSCAPE RECOMMENDATIONS:

(iii) New Campus Outdoor Enjoyment & Wellness Park

Situated adjacent to Brown Dining Hall and along Central Drive, the former Albright-Benton site will become an outdoor recreation and wellness amenity for the campus comprised of several distinctive landscape and activity zones allowing for direct connections with nature. Opportunities for this site include:

- Picnic shelters/pods
- Fire pit with moveable seating
- Additional daylighting of stream
- Water feature/stormwater retention pond
- Organic design, native plantings
- Yoga/meditation space
- Community garden
- Disc golf course
- Bocce ball court
- Tensile shade canopies
- Hammock poles
- Landscape lounge chairs
- String lights/sculptural site lighting

Pedestrian Enhancements along Central Drive

Central Drive is the primary circulation route for students journeying from upper campus residence halls to main campus and for those visiting Brown Dining Hall. Smaller moves like widening the sidewalk in a few select areas to accommodate shaded seating patios are recommended.



Existing Albright-Benton Building and Site



Existing Chancellor's Drive on Upper Campus



Existing Sidewalk along Central Drive headed South



Existing Sidewalk along Central Drive headed North

ACADEMIC CORE: NEW S.T.E.M. DISTRICT

Recommendations in this area of the campus aim to fulfill the Master Plan Update Goals of maximizing the usefulness of existing campus infrastructure to accommodate growth while integrating interdisciplinary collaboration spaces and celebrating the campus as a place. Renovation of historic campus buildings in tandem with select new construction opportunities further enhance programmatic synergies, social connectedness, and campus cohesion.

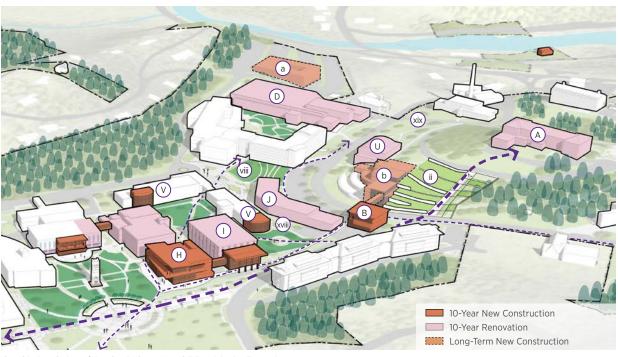
KEY BUILDING RECOMMENDATIONS:

(A) Renovate Moore Building for Academics

As the oldest building still standing on campus, Moore has served a number of purposes throughout the years and has been vacant in recent history. After an extensive renovation, the building will serve as the home for English, Criminal Justice, International Programs, and the Center for Community Engagement and Service Learning, among other academic classrooms and support spaces.

(B) New Campus Bookstore

With proposed plans to renovate the current bookstore building for student health services, a few potential locations for the new bookstore are highlighted in the diagram to the right. Final site selection should be informed by the recently completed Bookstore Needs Study, further feasibility study, and operational needs. The new location will ideally be highly visible and accessible to students and campus visitors.



Graphic Rendering of Academic Core: New S.T.E.M. District Focus Area

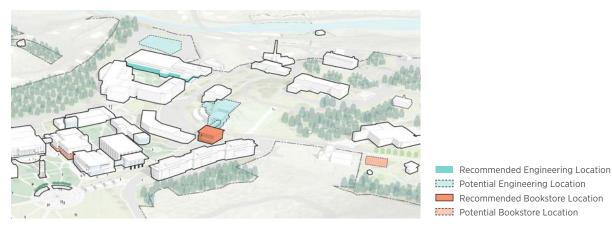


Diagram of Potential Alternate Locations for Bookstore and Engineering Programs

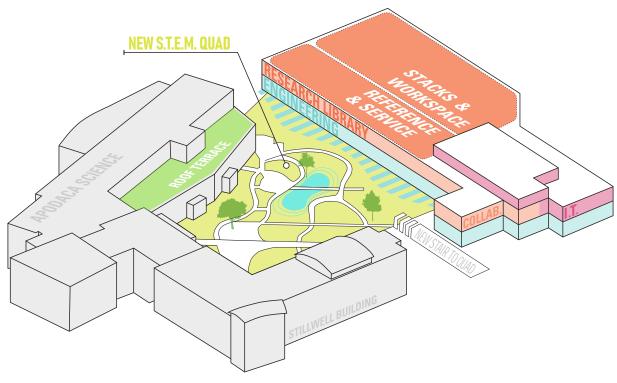
(D) Renovate Hunter for Engineering + Research Library

With over 130,000 assignable square feet, Hunter Library is the largest academic building on main campus. Using contemporary benchmarks and guidelines for collection size, the Space Needs Analysis identified a current overage of open stack and stack study square footage to the tune of 61,000 ASF. The Plan Update recommends an alternate model for academic, library, study, and research space in Hunter:

- Consolidate stack volumes and utilize highdensity storage where appropriate.
- Renovate the ground floor to be the new home of Engineering, creating a S.T.E.M. district and shared guad with the Apodaca Science and Stillwell Buildings.
- The generous 18 foot floor to floor heights on the ground and first floors allow for the accommodation of large equipment associated with Engineering lab classrooms.
- A focused research library will remain in Hunter with associated staff, support, and study space while more collaborative space will relocate to the new learning commons.

Renovated Research Library Program Components

- Refined Circulation and Resource Desk
- Consolidated Physical Volumes Collection
- Student-Published Research
- Research Catalogs
- Individual/Focused Work Spaces



Concept Graphic for New S.T.E.M. Quad and Renovation of Hunter Library



Existing Open Stack Storage in Hunter Library



Precedent of Updated Library Work Space

(H) New Collaborative Learning Commons (CLC)

When constructed in 1953, Hunter Library was positioned at the heart of campus and student life. However, as the campus has grown and evolved, the campus center has shifted west, away from Old Cullowhee thus positioning Hunter at the periphery of main campus. During the student focus group, participants conveyed a desire for a more centrally located library commons with updated amenities and collaborative, engaging spaces.

University libraries are increasingly taking on multifunctional roles that allow for a broader range of social and study spaces. Today's library requires spatial, programmatic, and technological nimbleness to meet the rapidly changing ways students and faculty engage with material and each other.

Potential Learning Commons Program Components:

- Digital Collections
- Rotating/Curated Physical Collections
- Technology Support
- Social/Collaborative Work Spaces
- Quiet Study Rooms
- Meeting Rooms
- Streaming Video Databases
- Scholar Studio Makerspace
 - Design/Editing Stations
 - Maker Equipment (3D Printers)
 - Recording Booths
 - Virtual Reality Room
 - Pitch Space/YouTube Room



Existing Campus Center



Proposed Campus Center

Renovate Forsyth Building and New Addition

Through a highly visible, transparent addition and interior renovation, student activity and project work will be better highlighted and showcased to prospective employers, campus visitors, and the broader campus community. New space should include entrepreneurial "pitch" spaces with virtual streaming and recording capabilities. Accessibility enhancements are proposed via a connecting bridge to the proposed New Interdisciplinary Learning Commons and/or to Centennial Drive above Forsyth Drive. Further study of clearances to achieve the latter pedestrian bridge are required.

(Renovate McKee Building for Academics

Situated at the center of the Academic Core. McKee Building will continue to serve primarily as a general classroom building with some offices/support spaces for the College of Arts and Sciences and College of Education and Allied Professionals. Technology, general facility, and furnishing improvements will allow for flexible classroom spaces with high utilization.

(U) Renovate Breese Gym for Graduate School + **Undergraduate Research**

Originally constructed in 1939 and last renovated in 2004, Breese Gymnasium adds to the historic fabric of upper campus. The currently unoccupied ground floor will be renovated to take on new life as a home for Graduate School and Research, while the upper floor will continue serving as rehearsal space for the College of Fine and Performing Arts. The former building entry off Central Drive will be revived as the main entry for the new program.

(V) Additions to Killian Building and Annex

To fulfill the master plan update goals of creating more wow factor moments on campus and improving the vibrancy of existing buildings and infrastructure, the plan recommends new entry additions for the Killian Building and Annex.

LANDSCAPE RECOMMENDATIONS:

The following projects address several of the Plan Update Themes and Drivers, including:

- Intentional Pedestrian Experience
- Collaborative/Interdisciplinary Space
- Enhance the Spaces Between (Open Space Network)
- Celebrate Nature: Treat Outdoor Spaces as Programmable Facilities
- Create Wow Factor Moments for Interior and Exterior Spaces



Existing Forsyth Building, Drive and Parking Lot



Existing Breese Gymnasium along Central Drive



Existing Path to Upper Campus

(ii) New Terracing and Pathway to Upper Campus

The east termination of Centennial Drive at its intersection with Central Drive is a prominent node for both pedestrians and transit. With the demolition of Bird Building, a dramatic transformation of the hillside is proposed to support greater connectedness with historic upper campus while simultaneously opening views, creating new accessible pathways and a variety of unique outdoor moments to meet and enjoy campus year-round.

(viii) New Terraced Outdoor Classroom

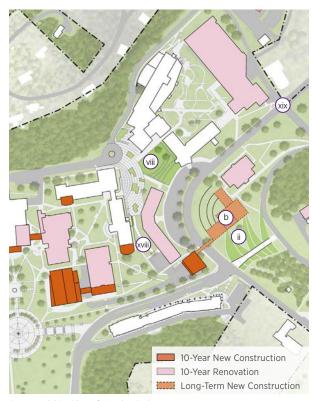
A continued recommendation from the 2014 Master Plan, the proposed removal of University Auditorium, (formerly Hoey Hall), provides opportunity for a new open green space to be used informally by students and as an outdoor classroom space.

(x/iii) Killian Building Lane Transition to Pedestrian Way

As outlined as a recommendation in the 2014 Master Plan, the proposed change will reduce inefficient parking and vehicular circulation from this central pedestrian area and strengthen pedestrian path connectivity and sense of place in the academic core.

(xix) Upgrade and Expansion of Joyner Drive

Enhance intersection between Buzzard's Roost Road and Joyner Drive for improved vehicular access to historic upper campus.



Proposed Site Plan of Academic Core

LONG-TERM BUILDING RECOMMENDATIONS:

(b) New Academic/Student Support Building

As identified in the 2014 Master Plan, this pivotal site has the potential to act as a linchpin in connecting upper and lower campuses and providing an accessible route for navigating the significant grade change.





Existing Stair Headed toward Upper Campus and Moore Building



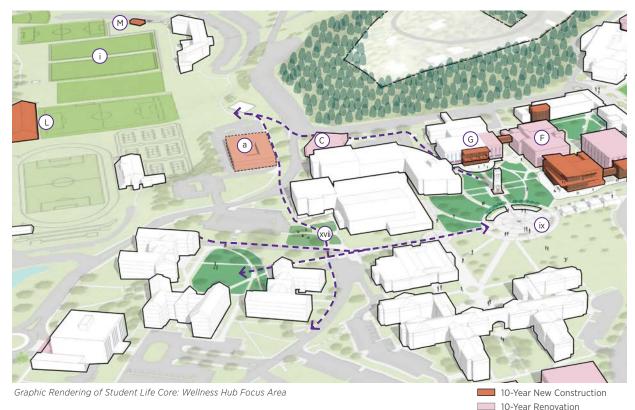
Existing Intersection at Central and Centennial Drives



STUDENT LIFE CORE: WELLNESS HUB

The goal is to provide a centrally located dynamic center for Student Life with a focus on social, physical, and mental wellness. Major Student Life facilities are currently located in the campus core and include: Campus Recreation Center, Reid Gym, A.K. Hinds University Center, and Courtyard Dining Hall. The Plan accommodates growth needs for Campus Recreation and the Student Center. Health Services growth needs are accommodated by repurposing the existing Bookstore. Several new locations for the Bookstore are under consideration, including in the UC expansion.

Pedestrian routes to North Campus Housing and to the West Athletics and Rec Fields are further clarified and enhanced. New and existing open spaces are activated for use adjacent to these new facilities with ground floor inside/out connections. A new parking structure provides needed centrally located parking as smaller lots within the core are displaced by needed new facilities and pedestrian enhancements.



Long-Term New Construction

KEY BUILDING RECOMMENDATIONS:

© Renovate for Health Services and Counseling & Psychological Services (CAPS)

This existing facility provides the needed space for growth and will link to student recreation to form a Wellness Hub. On the edge of the campus core, this location provides the opportunity for increased awareness surrounding Wellness while not being front and center. Nearby parking will provide much easier access and servicing.

During a virtual student focus group held in late October 2021, participants were asked what kinds of spaces they desired on campus in addition to those already outlined in the 2019 Student Union Research Report. The planning team recorded the notes to the right during the workshop with students.

The 2019 Report highlighted a need for the following:

- Increased Social and Dining Space
- On-campus Entertainment and Recreation
- Stress Relief & Mental Wellness Spaces
- Increased Meeting Space & Conference Compatibility
- Student Group Inclusivity & International/Diversity Appreciation

More dispersed throughout academic quad and around/behind Brown (tables at Courtyard are loud)

Solar hammock is popular, but on pretty days it's overcrowded

Charging stations outdoors

Bright, modern, comfortable reading space Less benches, more tables for laptops and books

UC is not a hangout space since food court moved out

Balancing light safety with light pollution concerns

Current UC has a lot of meeting space, but no lounge space

Courtyard is congested; around Brown has opportunities for outdoor community space

More outdoor hangout locations

Variety of spaces and amenities; loud and quiet spaces; soft furniture and tables

No more meeting rooms

Not sure about comfort of seat stairs; likes idea of using Coulter since it's in center campus

Input Exercise from Virtual Student Focus Group Session



Students Walking at Catamount Plaza



Precedent Image of Engaging Student Life Space



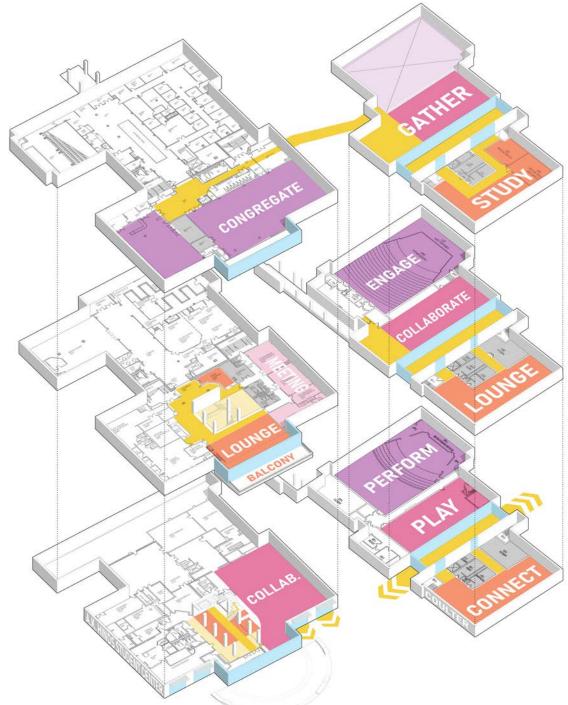
Precedent Image of Highly Visible Student Life Facility and Circulation

(F) Renovate Coulter for Student Center Expansion

Repurposing Coulter, (as the Music program relocates adjacent to Performing Arts in the Belk Building), provides ideal space to expand the University Center in front the Central Plaza – further enhancing this space with indoor/outdoor activities. Similar connection to the east will bring new life to Killian Courtyard. A bridge connection at the third level allows direct access to upper-level meeting spaces between the two buildings. The Coulter renovation for University Center space will provide much needed lounge space and create a "campus living room" in the core.

(G) Partially Renovate A.K. Hinds Student Center

Renovations will include making the ground floor more open and user friendly, and better connected to the adjacent Central Plaza. A new front porch element at the ground and second levels would provide covered outdoor space with views and would be a natural social hangout space for students. Other renovations would enhance meeting spaces and student life offices.



Exploded Axon Graphic for Renovation of A.K. Hinds Student Center and Coulter Building

LANDSCAPE RECOMMENDATIONS:

(i) New North Campus Recreation Fields

North of Athletics and West of Norton Residence Hall three new fields will provide a second hub for intramural and student recreation on North Campus.

(ix) Catafount Plaza User Experience Enhancements

The iconic heart of campus, the fountain and space are well loved by students. The Plan proposes enhancements to the plaza that will encourage even greater use throughout the day and at night such as: enhanced lighting for both security and aesthetic purposes, movable seating in the courtyard so groups can organically create small gatherings, and landscape improvements throughout this area to encourage multiple uses, spaces and a vibrant campus heart.

(xvii) Enhanced Courtyard Spaces West of Reid Gym

On the north and south sides of the Physical Education and Student Recreation building, these courtyard spaces will hold outdoor wellness-related fitness and teaching activities. Permanent activities might include an outdoor climbing wall and fitness equipment. The spaces will include infrastructure for temporary outdoor events as well.

LONG-TERM BUILDING OPPORTUNITIES:

(a) New Parking Garage

Located to provide substantial parking capacity for the campus core and between the main campus entry and a potential new north campus entry. This garage will relieve traffic pressure along Centennial Drive with easily accessible parking at the perimeter of the campus core and at the four tier parking lot for STEM Hub and Cullowhee Connections.





Existing Outdoor Seating at Courtyard Dining Hall



Existing Catamount Athletic Complex



INTEGRATING COMMUNITY & PRESERVING CAMPUS HERITAGE

integrating community and preserving campus heritage

Three of the six focus areas in this plan update address core campus edges while presenting opportunities to elevate community engagement and individual wellness. Many of the proposed projects, several of which are identified in the 2019 Cullowhee Creek Greenway Master Plan, increase access to and enjoyment of Cullowhee Creek and the Tuckasegee River, two natural amenities that set WCU's campus apart from its peers. The campus improvements outlined below provide rich community building and place appreciation experiences for students, faculty, and staff, as well as the surrounding community and region.



Mountain Heritage Day



Native Heritage Festival

HERITAGE + COMMUNITY BUILDING PROJECTS

- New Campus Community Meeting Center includes:
 - Mountain Heritage Center
 - Multipurpose Meeting and Event Space
 - Institutional Advancement and Alumni Relations
 - Educational Outreach programs
 - Career and Professional Development programs
 - Camp Recreation Field Improvements
- Renovation of Belk Building for Fine and Performing Arts to create a new, consolidated Arts District adjacent to the core campus main entrance

- Renovation of Historic Campus Buildings:
 - Breese Gymnasium
 - McKee Building
 - Moore Building
 - Old Student Union
- Connecting to Old Cullowhee with New Base Camp Cullowhee outpost and River Park recreation area
- Cullowhee Creek Corridor Improvements
- Whitmire Stadium Improvements
- Western Carolina University acknowledges that its campus is situated within the ancestral homelands of the Eastern Band of Cherokee Indians, At WCU our work seeks to embrace and connect to this Cherokee landscape as we work to reinforce our mission at WCU. We will work to actively engage our community with the extraordinary indigenous identity and culture of this special place that was once known as Two Sparrows Place.



International Festival

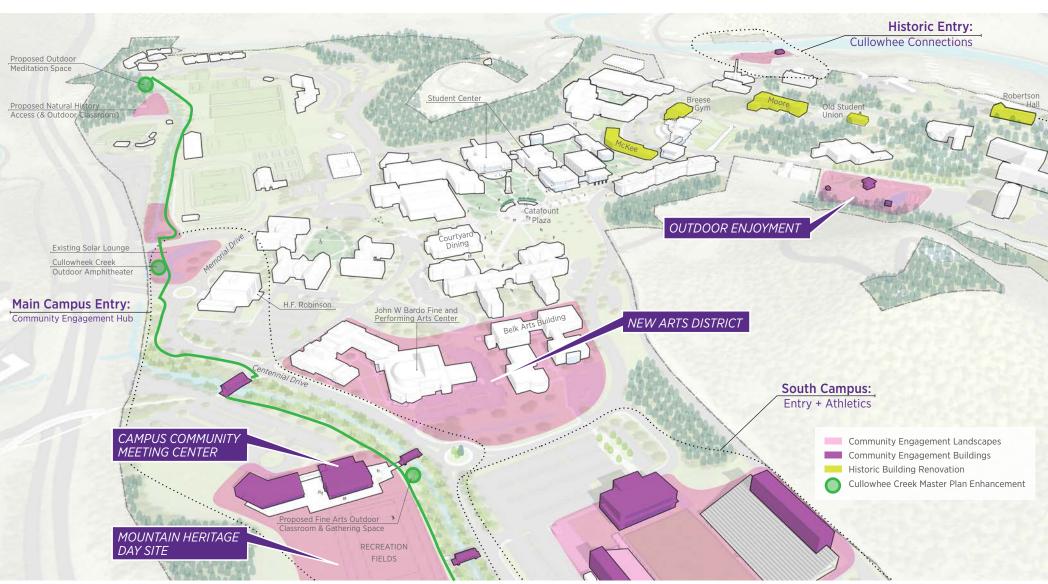


Diagram of Proposed Community Interface and Campus Heritage Enhancements

HERITAGE + COMMUNITY LANDSCAPE PROJECTS

- Continue improving wayfinding and signage to better communicate locations that visitors and community access frequently, including visitor parking
- Continue using native plants and responsible landscaping to preserve natural campus character and its unique and beautiful regional setting
- Continue pursuing arboretum status of the upper campus to preserve character and enhance educational opportunities for students and the community
- · Continue creating signage and acknowledgement of Cherokee heritage sites, and historic and culturally significant campus sites
- Continue supporting the development of the Jackson County Greenway and make a connection to this community resource when possible
- Pursue opportunities to enhance and preserve Cullowhee Creek as a unique campus resource for teaching and recreation as outlined in the 2019 Cullowhee Creek Greenway Master Plan
- Enhance physical connections to and visibility of the historic upper campus; open up a view corridor to Moore Hall via New Terraced Landscape and Pathway to Upper Campus
- Implement Catafount Plaza User Experience Enhancements to provide a variety of ways to actively and passively engage with the campus community
- Create a New Pedestrian Promenade to link main north-south axis from core campus to Whitmire Stadium and provide dedicated space for gathering



Panthertown Exeriential and Outdoor Education



Valley Ballyhoo Event



Homecoming Tailgate





analysis and projections overview

The following section describes the parameters for establishing space needs in the future. The Fall 2019 student enrollment used for this analysis is 11,598 students. The enrollment projection used for this analysis is to reach an enrollment of 13,013 students. For the complete Space Needs report, refer to Appendix A.

The goal of the Master Plan is to provide direction and clarity for future campus development. It should be noted that this analysis has been performed at a master plan level in assignable square feet. This analysis has not been performed at a program level to provide numbers and types of rooms to meet the requirements of the projections. The space needs analysis findings should be viewed as tools and information for decision making and planning and not as entitlements to space for individual divisions or as a defined plan to correct unmet present and future space needs.

All space in this analysis is projected in assignable square feet (ASF) which is defined as the usable space contained within classrooms, laboratories, offices, etc. It does not include circulation and building service space, nor does it include the thickness of walls or structural components like building columns.

The space needs analysis for Western Carolina University was performed by understanding the The State of North Carolina Higher Education Comprehensive Planning Program standards and factoring in the planning teams historical knowledge and utilization data for Western Carolina. The planning team used experience with normative standards and expectations, and by comparison to other system and institution guidelines keeping the role, mission, future goals, student enrollment, and program mix at WCU in mind. The guideline selected for each space category was the one deemed most appropriate for WCU.

The planning team analyzed campus data provided by WCU for staffing, and courses. The planning team received room inventory details and several floor plans to develop the facilities information for WCU. The data provides a "snapshot in time" of staff, course enrollments, and facilities at the College. For the analysis of space needs in the future, information was gathered on projected future enrollment and staffing expectations.



Student Lounge Space in A.K. Hinds University Center



Coulter Faculty Commons Conference Room, Hunter Library

The space needs analysis findings should be viewed as tools and information for decision making and planning and not as entitlements for individual divisions or departments. The space needs analysis assists in determining the amount and types of space needed at both the current time and at a future plan horizon. The space needs analysis is a quantitative analysis only. All built space is counted regardless of its quality.

Guideline analysis for campus in the current year showed an overall campus space need of 0%. Looking at individual space categories for the current year analysis shows a need for additional Athletics, Health Care, Student Center, Support Space and General Use.

Using projections into the future, the calculation of space need shows the campus will require over 250,000 ASF of additional space when enrollment reaches 13,013 students. In the future projections, the Athletics Facilities space category still shows the greatest need for space. This is followed by the Health Care, Student Center, and General Use space.

Inactive, conversion, and leased space was not included in the analysis but are included in the Space Needs Analysis Table. Inactive and conversion space indicates facilities on campus that are not being used and/or are set for demolition. The physical space for Highlands Biological Station as well as the programs in Asheville have been listed outside of the physical space totals for the main table. Highlands Biological and the programs at Asheville are separate from the Cullowhee Campus and have been looked at individually to evaluate their space needs assessment.



Campus Recreation Center



Reid Health and Human Performance Building

Current Year 2020 Student Headcount = 11,598

Future Horizon 2030 Student Headcount = 13,013

Space Use Category	Current ASF	Calculated Space Requirement	ASF Difference	Percent Difference	Future Built ASF	Calculated Future Space Requirement	ASF Difference	Percent Difference
Classrooms and Service	94,761	111,800	(17,039)	(18%)	91,475	125,600	(34,125)	(37%)
Class Laboratories and Service	105,892	113,900	(8,008)	(8%)	125,191	127,600	(2,409)	(2%)
Open Laboratories and Service	42,843	46,400	(3,557)	(8%)	47,820	52,350	(4,530)	(9%)
Research and Service	28,181	36,400	(8,219)	(29%)	45,413	45,200	213	0%
Office and Service	304,216	228,500	75,716	25%	309,438	247,600	61,838	20%
Study/Library	121,953	115,150	6,803	6%	121,134	126,650	(5,516)	(5%)
Physical Education/Recreation	135,592	143,000	(7,408)	(5%)	135,592	157,400	(21,808)	(16%)
Athletics	57,517	175,000	(117,483)	(204%)	57,517	195,000	(137,483)	(239%)
Special Use	27,281	26,150	1,131	4%	28,626	29,380	(754)	(3%)
Assembly & Exhibit	98,746	106,800	(8,054)	(8%)	98,746	115,300	(16,554)	(17%)
Student Center	64,748	104,400	(39,652)	(61%)	64,748	117,200	(52,452)	(81%)
General Use	45,133	58,570	(13,437)	(30%)	45,813	65,900	(20,087)	(44%)
Support	57,847	78,700	(20,853)	(36%)	57,956	80,000	(22,044)	(38%)
Health Care	3,246	5,800	(2,554)	(79%)	3,246	6,500	(3,254)	(100%)
Residential Facilities	1,393,699	1,291,100	102,599	7%	1,586,879	1,587,480	(601)	(0%)
TOTAL	2,581,655	2,641,670	(60,015)	(2%)	2,819,594	3,079,160	(259,566)	(9%)
Inactive	4,326				4,326			
Conversion	37,291				37,291			
Highlands Biological Station	18,896				18,896			
WCU Programs in Asheville	30,091				30,091			
TOTAL	2,672,259	_	_	_	2,910,198	_		

Campus-wide Space Analysis by Space Category

ACADEMIC AND ADMINISTRATIVE NEEDS

The space needs analysis table summarizes the campus-wide space needs for WCU by type of space. The analysis was also performed at an academic and administrative division level. The planning team met with the Executive Council and Department Leaders to discuss specific needs of the individual academic and administrative divisions on campus. The planning team performs space analyses at the division level as department level is too granular for a master plan study.

When looking at the analysis by division, it should be remembered that the information presented is at a master plan level, not a detailed program level. The goal of the Master Plan is to provide direction and clarity for future campus development. It should be noted that this analysis has been performed at a high level, identifying amounts of space by assignable square feet. This analysis has not been performed at a program level, which would provide information on the number and types of

rooms. The space needs analysis findings should be viewed as tools and information for decision making and planning and not as entitlements for individual divisions or departments or as a defined plan to correct unmet present and future space needs.

Current Year 2020 Student Headcount = 11,598

Futu	re Horizo	on 20	30	
Student	Headcou	ınt =	13.0	13

College/Administrative Division	Current ASF	Calculated Space Requirement	ASF Difference	Percent Difference	Future Built ASF	Calculated Future Space Requirement	ASF Difference	Percent Difference
Classrooms & Service	94,761	111,800	(17,039)	(18%)	91,475	125,600	(34,125)	(37%)
College of Arts and Sciences	110,854	148,330	(37,476)	(34%)	158,960	175,350	(16,390)	(10%)
College of Business	17,758	23,200	(5,442)	(31%)	17,758	27,400	(9,642)	(54%)
College of Education and Allied Professions	91,057	90,020	1,037	1%	91,057	98,550	(7,493)	(8%)
College of Engineering and Technology	41,749	49,230	(7,481)	(18%)	41,749	54,160	(12,411)	(30%)
College of Fine and Performing Arts	119,196	102,750	16,446	14%	119,196	110,650	8,546	7%
College of Health and Human Sciences	61,465	49,900	11,565	19%	61,465	55,000	6,465	11%
Honors College	1,854	1,750	104	6%	1,854	1,800	54	3%
Graduate School and Research	4,811	1,900	2,911	61%	4,811	2,100	2,711	56%
Education Outreach	7,705	5,500	2,205	29%	7,705	5,800	1,905	25%
Office of the Chancellor	81,970	198,070	(116,100)	(142%)	81,970	219,400	(137,430)	(168%)
Academic Affairs/Office of the Provost	152,466	132,120	20,346	13%	152,466	145,570	6,896	5%
Advancement	8,245	7,650	595	7%	8,245	7,950	295	4%
Administration and Finance	167,812	193,900	(26,088)	(16%)	167,751	204,100	(36,349)	(22%)
Information Technology	18,673	18,000	673	4%	18,673	18,800	(127)	(1%)
Student Affairs	1,601,279	1,507,550	93,729	6%	1,794,459	1,826,930	(32,471)	(2%)
TOTAL	2,581,655	2,641,670	(60,015)	(2%)	2,819,594	3,079,160	(259,566)	(9%)
TOTAL (minus classrooms)	2,486,894	2,529,870	(42,976)	(2%)	2,728,119	2,953,560	(225,441)	(8%)
Inactive	4,326				4,326			
Conversion	37,291				37,291			
Highlands Biological Station	18,896				18,896			
WCU Programs in Asheville	30,091				30,091			

Academic and Administrative Division Space Needs Analysis

The space needs analysis summary table in the previous section showed findings by various functional space categories on a campus-wide basis. The application and review of the guidelines at the academic and administrative division level shows the various space needs that may exist that are not obvious in a campus-wide study. The remainder of this section describes the space needs on a divisional level using current enrollment and projected enrollment expectations.

The summary tables for the academic divisions total the findings both with and without classroom space. Since courses may not always be scheduled in classrooms that are assigned to a particular division, the normative guidelines generated by the courses do not necessarily match the ASF of classroom space assigned to the academic divisions. Therefore, for a master plan, classroom space quantities and configurations are best viewed on a campus-wide basis rather than at the divisional level.

UTILIZATION ANALYSIS

This analysis included a review of classroom and class laboratory utilization. Understanding how classrooms and class laboratories are scheduled and utilized provides the foundation for, and assists in the application of, classroom and class laboratory guidelines.

An analysis of classroom and class laboratory utilization also helps a campus to understand its space management. Space issues can be caused by the quantity of space, the quality of space, the location of space, the assignment of space, or the campus culture regarding the use of space. The data in the utilization analysis can provide information and insight for space management decisions.

The utilization analysis of classrooms and class laboratories was performed using the course file from the Fall 2019 term and information on classroom and class laboratory facilities. The Fall 2019 information was deemed to be the most relevant for this analysis since it was prior to any disruptions resulting from the COVID-19 pandemic. The planning team also received course file information for Spring 2020. This information was processed as a point of reference and use by the planning team to understand how the COVID-19 pandemic impacted the use of classrooms and class lab space.

The utilization analysis for both classrooms and class laboratories reviews the average number of weekly hours rooms are scheduled and the percentage of student stations occupied in the rooms when they are in use. The utilization of a room is determined by

calculating the average enrollment of the courses taught in a room along with total weekly student contact hours, weekly seat hours, weekly room hours (also referred to as weekly contact hours), and percentage of student stations occupied.

During Fall 2019, the campus housed 107 classrooms and averaged 24 hours of scheduled use per week, with 10% of the student stations filled when classrooms were in use. The classrooms averaged 52 ASF (assignable square feet) per student station. The average for weekly seat hours use was 17 hours.

During the Fall 2019 academic semester the planning team found that Western Carolina stayed consistent and within range of their typical utilization benchmarks as documented in the Facilities Inventory and Utilization Study 2018. It should be noted that the average ASF per Student Station is higher than the UNC's Master's Average as well as Hanbury Professional Expectation.

Class laboratory use was well within Western Carolina's average as well. Based on the planning teams experience, there is capacity for a higher utilization for student station occupancy and a larger ASF per student station. It should be noted that the new science building Apodaca was not online during this analysis and would contribute to a higher occupancy and ASF per student station.



Forsyth Building Classroom



Support Services in Forsyth Building

CLASSROOM UTILIZATION SUMMARY

	Hanbury Professional Expectation	UNC Master's Average	WCU Average Utilization
Average Weekly Seat Hours	20	17	21
Average Weekly Room Hours	32	26	30
Average Student Station Occupancy	63%	62%	64%
Average ASF per Student Station	22	20	52

Note: Used middle of Hanbury expected range

Classroom Utilization per Fall 2019 Course File

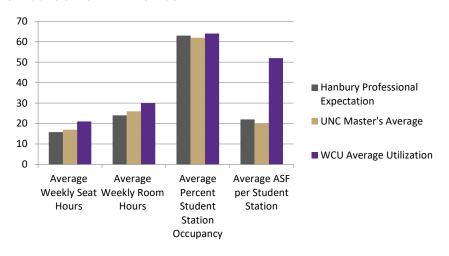
CLASSROOM LABORATORY UTILIZATION SUMMARY

	Hanbury Professional Expectation	UNC Master's Average	WCU Average Utilization
Average Weekly Seat Hours Average Weekly Room Hours Average Student Station Occupancy	12 17 70%	13 16 71%	13 16 64%
Average ASF per Student Station	42	41	23

Note: Used middle of Hanbury expected range

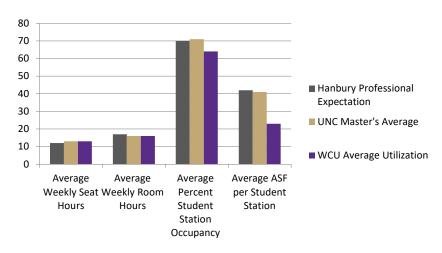
Classroom Laboratory Utilization per Fall 2019 Course File

CLASSROOM UTILIZATION SUMMARY



Classroom Utilization Graph per Fall 2019 Course File

CLASSROOM LABORATORY UTILIZATION SUMMARY

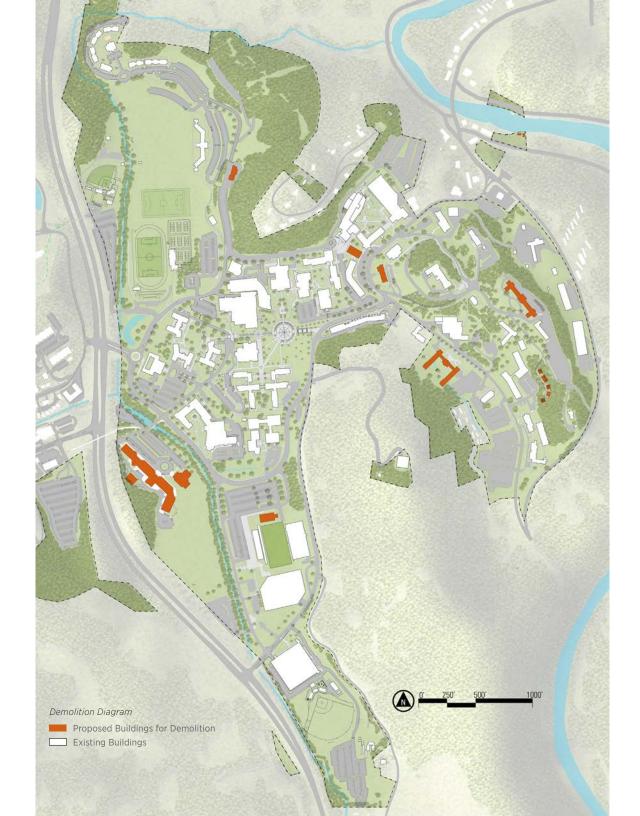


Classroom Laboratory Utilization Graph per Fall 2019 Course File

FACILITY DEMOLITION

The long-term demolition recommendations include:

- Albright-Benton Hall
- Bird Building
- Cordelia Camp Annex
- Cordelia Camp Building
- Cordelia Camp Gymnasium
- Jordan-Phillips Field House
- Reynolds Hall
- University Auditorium
- University Print Shop and Mail Services
- Young Drive Storage Houses





Reynolds Hall Exterior



Albright-Benton Hall Exterior



Reynolds Hall Interior Ground Floor



Albright-Benton Hall Interior Corridor



Young Drive Storage Houses



Albright-Benton Hall Shared Bathroom



ENHANCING PARKING & TRANSPORTATION

transportation plan

CIRCULATION

The 2014 Master Plan outlined fundamental strategies to promote a more pedestrian friendly campus while providing appropriate vehicular and parking access as part of a comprehensive, multi-modal circulation network. Key strategies from the 2014 plan include:

- Provide and promote good pedestrian connectivity.
 This is essential to any efficient, robust, and sustainable transportation system, regardless of mode of travel.
- Encourage "parking once." To reduce traffic congestion and conflicts with other travel modes, driving between campus locations should be discouraged. Achieving this objective requires removing impediments to other modes, as well as investing in infrastructure and services to make walking, bicycling, and transit more attractive. Also implied in this strategy is a parking system that eliminates driving around to find the best space, and one that works with the road network to promote driving directly to a particular parking facility by the shortest route.
- Recognize differences in the value of parking spaces.
 Not all people place the same value on a parking space. Location, time-of-day, and purpose of trip affect the perceived value of a space. People will pay a price commensurate with their need and the value received, if they are given a choice. Appropriate pricing can be used to help manage demand by increasing occupancy in remote or less convenient lots, and suppressing demand (while generating additional revenue) in more desirable and convenient facilities.

- Use strategies to reduce traffic and parking demand.
 In addition to increasing capacity where necessary and appropriate, make alternatives available, and provide incentives (and disincentives) to encourage their use.
- Consider the total costs of transportation investments. In addition to the costs of constructing. financing, operating, and maintaining transportation infrastructure projects, careful consideration should also be given to the opportunity costs (what else could be done with those funds, or that land?), as well as the often overlooked risks built into the assumptions justifying such projects. If fuel costs increase, and fewer people choose to drive, will parking permit sales and revenues be adequate to cover expenses, including debt service for structured parking? Does focusing on satisfying expectations for automobile travel create a situation where there is little choice for an institution (and its constituents) to do other than invest even more resources in support of automobile travel? Are roadway capacity improvements necessitated by a new parking deck captured in a rigorous benefit-cost analysis?



Campus Resident Shuttle Stopping along Centennial Drive



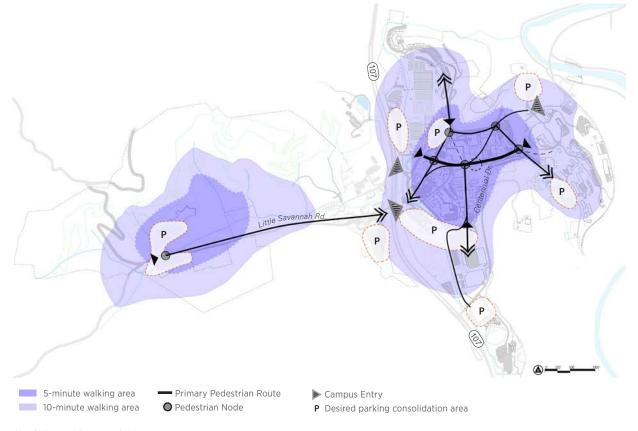
Vehicular Congestion and Pedestrian Conflict along Centennial Drive



Existing Parking Lots along Centennial Drive



Existing Pedestrian Route through Coulter Parking Lot



Circulation and Framework Diagram

The principles guiding development of the transportation recommendations include the following:

- Maintain balance. Avoid depending too much on a single facility or mode, and provide options or choices whenever practical.
- Promote safety among all modes of travel.
- Recognize and work with the strengths and limitations of the external transportation system.
- Anticipate and adapt to changing travel patterns, both on and off campus.

- Preserve and utilize existing capacity as efficiently as possible.
- Minimize the amount of driving on campus by providing the most direct routes possible to major trip generators, and by locating such facilities where they can be accessed effectively.
- Emphasize multimodal options. At the very least, do nothing to preclude or obstruct other modes of travel.

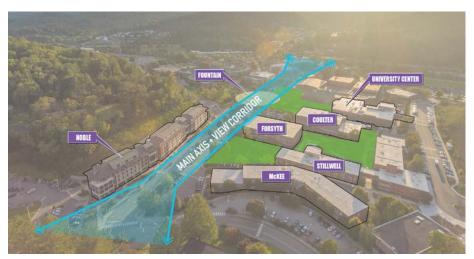


Diagram of Main Axis and Green Spaces along Centennial Drive



Diagram of Parking, Vehicular Congestion and Pedestrian Crossings along Centennial Drive





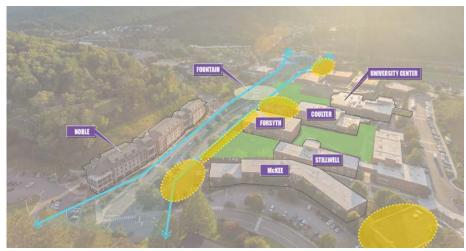
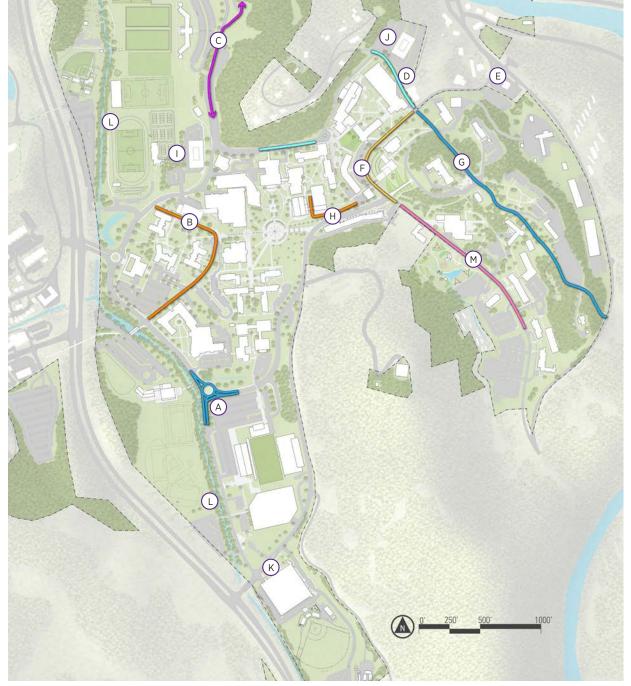


Diagram of Pedestrian/Building Enhancement Opportunity Areas along Centennial Drive

The construction of Noble Hall has increased pedestrian activity adjacent to the intersection of Central and Centennial Drive and reinforces the need to continue advancing this strategy. To minimize pedestrian/vehicular conflict in this area and support the proposed Collaborative Learning Commons and Forsyth addition, the plan recommends the removal of Coulter and Forsyth parking lots, (except for accessible parking and service access). There is also an opportunity to relieve vehicular congestion at the intersection of Central and Centennial Drive by implementing an additional campus entry from the north at Norton Road, allowing commuter students to bypass the pedestrian-oriented core in route to the commuter parking garage on south campus.

This 2022 update builds on and refines these core principles and proposes specific actions to support the 2022 planning drivers. Key parking and transportation actions as noted in the Roadway Improvements Projects Diagram include:

- (A) New traffic circle and wayfinding signage
- (B) No thru traffic; pedestrian friendly
- (c) Potential new entrance from Norton Road to Monteith Gap
- D Improve cross-section; pedestrian improvements
- (E) Remove high-speed right-turn lane; pedestrian improvements
- F) Traffic calming; pedestrian zone
- (G) Improve cross-section and create alignment between Joyner Drive and Buzzard's Roost Road; extend road to Central Drive and potentially to Old Cullowhee Road; make two-way
- (H) Remove parking except for accessible spaces, building service, and emergency support; pedestrian friendly "promenade" from fountain area to Central Drive
- () Locate potential future parking structure on the sunken parking lot adjacent to the tennis courts
- (J) Locate potential future parking structure on the 4-tier parking lot to the east of Hunter Library
- (K) Enhance shuttle and pedestrian circulation from new south campus parking structure to the campus core
- (L) Utilize the Cullowhee Creek corridor as a key bicycle and pedestrian north-south connection
- (M) Pedestrian enhancements along Central Drive including breakout seating areas with benches, shade structures, and landscaping



Roadway Improvement Projects



sustainable campus

OVERVIEW

The key recommendations of this master plan update provide substantial opportunities to advance the fundamental sustainability and resilience strategies outlined in the 2014 plan. Key sustainability and resilience actions include:

- Maximizing use of existing infrastructure through renovation in the existing developed core campus while minimizing new development of greenfield sites
- Improving energy efficiency of existing building envelopes through renovation
- Advancing sustainable stewardship of the Cullowhee Creek corridor through execution of several program initiatives and multi-modal circulation enhancements in this area of campus
- Continuing to create functional outdoor spaces to promote wellness, access to outdoors, and connection with nature
- Continuing to advance multi-modal campus circulation and reduce cross-campus vehicular trips and also reduce pedestrian-vehicular conflicts
- Continuing to shepherd appropriate landscape strategies per the Landscape Typologies outlined in the 2014 plan
- Promoting universal access routes in this challenging campus terrain
- Promoting development of outdoor spaces that incorporate sustainable storm water best practices

2014 Master Plan Sustainable Campus Drivers And Goals

- Design and manage the campus landscape without compromising the natural environment
- Focus on stewardship of resources landscape and water
- Emphasize campus as a living learning-laboratory woodlands, waterways
- Optimize energy and conservation
- Restore and preserve open space
- Balance growth
- Champion sustainability
- Update campus design standards to address sustainability
- Enhance community partnerships and connections
- Employ less consumptive maintenance practices emphasize life cycle
- Consider waste stream in the composting, reusing, and recycling of materials
- Achieve carbon neutrality
- Reduce energy consumption
- Consider downstream effects of campus landscape decisions
- Consider the interconnectedness of stewardship, pedagogy, and service learning





RESILIENCE PLANNING

Responsible stewardship of Western Carolina's campus goes beyond planning for sustainable use of the physical building and land resources. Because a campus operates as a system of systems, a holistic campus planning approach requires consideration of multiple components ranging from deferred maintenance, leadership transitions, emergency management, revenue diversity, and institutional/regional partnerships, to name just a few examples.

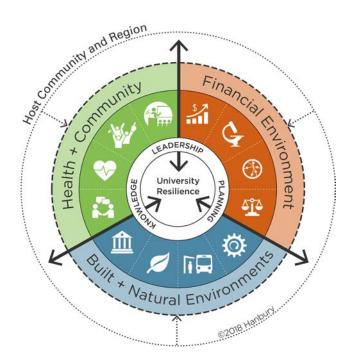
The diagram to the left illustrates a three-prong framework for understanding campus resilience as it relates to the physical campus, the financial health of the university, and the health and cohesion of the campus community. Assessment of the University's potential strengths and vulnerabilities is an iterative process and requires regular review:

- What are the projections for WCU? (Enrollment, demographic, financial resources, student-life trends, climate change impacts, economic development, etc.)
- What changes might the physical campus, institutional structure, student body, community and region experience as a result of these projections?
- How can WCU be best prepared to nimbly and proactively address those changes and what steps need to be taken?

The following recommendations provide strategies for mitigating and adapting to projected and unforeseen changes in the long-term planning horizon that contribute to a more resilient campus:

- Conduct regular assessment of projections, campus facilities and operations, and communication channels.
- Increase access to wellness spaces and resources for students, faculty, and staff.
- Continue building and reinforcing relationships with local, regional, and state stakeholders to identify shared challenges and opportunities.

- Increase biodiversity of plants and trees to protect against pests and diseases while creating a healthier campus ecosystem.
- Strategically balance capital investments so that critical infrastructure and building maintenance needs are met in addition to new growth expenditures.
- Utilize passive building systems where possible to reduce energy load demand.
- Use native plant species where appropriate to reduce demands on water resources and improve biohabitats.





IMPROVING TECHNOLOGY

information technology

Improvements made since the last Master Plan update proved to be significant enablers during the COVID-19 pandemic. The university quickly transitioned to online/hybrid classes and remote work, with IT providing the necessary support and capabilities.

As WCU continues to change, adjust, and evolve in its pedagogy, academic delivery, and business processes, Information Technology will need to ensure that the underlying foundations, architecture, process automation, and academic enablement stay ahead of potential capability needs and university expectations.

CAMPUS CORE INFRASTRUCTURE

Today's university campus must support a technology landscape that is constantly evolving and expanding in

terms of higher data bandwidth, business process automation, unified communications, video technology and approaches, residential student expectations, and the use and integration of cloud technologies and systems. In this time of rapid technological change, infrastructure and delivery of systems solutions must be planned to be as flexible, expandable, sustainable, and resilient as possible.

The university network architecture serving the Western Carolina University main campus, Biltmore Park instructional site, and other ancillary locations comprises a backbone of optical fiber in support of many specialized applications including, but not limited to, information technology data, voice, video distribution, advanced audio-visual capabilities, data analytics, cloud systems and services, and security systems.

Over the past several years, WCU has taken efforts to modernize and enhance its architecture; preparing for future growth and capabilities:

- Fully replaced main campus interbuilding outside plan (OSP) fiber and copper infrastructure. This included:
 - Minimizing aerial OSP and moving OSP underground.
 - Removing Core Distributor (CD) buildings and creating separate multipoint connections for each building on the main campus. This greatly increased redundancy and resiliency.
- Migrated to new VoIP phone system and services.
- Improved and expanded cellular service in the Health and Human Sciences building and the Apodaca Science building.
- Developed and implemented new collaboration and lecture classroom technology standards that support and enable the modern and evolving pedagogy being employed by WCU faculty.
- Continued to modernize and refresh the main and secondary data centers.
- Implemented and enhanced capabilities for remote work, virtual services, and remote service management.

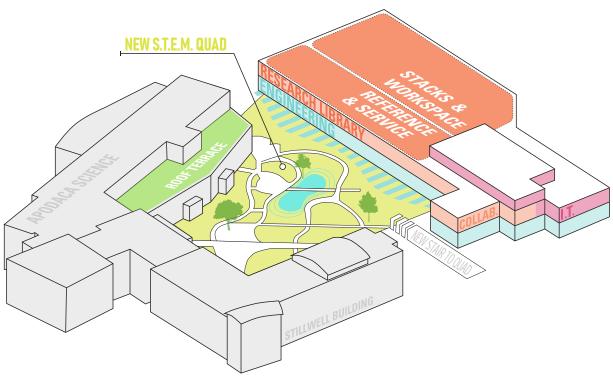


INFORMATION TECHNOLOGY STRATEGIC GOALS

A number of strategic goals have been developed by the WCU Information Technology Division (IT) for implementation over the foreseeable future. Some of these goals address internal agendas for improvements, such as further engagement and support of administrative technologies and business processes, including increasing automation. Others include enabling and adapting to improved faculty pedagogical approaches and engaged student learning. However, most of the goals discussed can be directly impacted by the implementation of the Master Plan

The physical improvements to infrastructure and facilities in the plan will directly support the following goals:

- Enhance collaboration across IT
- Provide IT student/faculty support and training space in New Collaborative Learning Commons
- Co-location of IT groups in renovated Hunter Library
- Maintain IT's engagement and support of instructional delivery technologies
- Maintain IT's support of students in academic needs and residential living halls
- Ensure that current and future technology needs are addressed
- Support increased usage of personal technology devices
- Plan for 'portability' of technology



Concept Graphic for New S.T.E.M. Quad and Renovated Hunter Library with New I.T. Hub

INFORMATION TECHNOLOGY OPERATIONAL SPACE

Currently, Information Technology offices, programs, and services occupy space in several buildings on campus: including spaces that are identified as nearer term academic needs. As WCU "Reshuffles the Deck" with the changes recommended in this plan, IT functions that are displaced before the IT Hub is created in the Hunter Library Renovation will need temporary homes. Due to the length of time a Master Plan encompasses, "temporary" can often translate into a timespan of more than a few years. Therefore, it is important to be intentional about appropriate space. It is the intent of the University to consolidate these functions into Camp Building during

these interim periods, as space becomes available there due to other departmental moves. This enables IT to be collocated with other IT functions until the permanent home is created. For example, the Moore Building and Breese Building (first floor) Renovations will create a new home for several academic departments currently residing in Camp Building; and will require IT functions in Moore to be relocated. The intended solution in this case is to move the IT functions from Moore to Camp Building.





safety & security

PLANNING PRINCIPLES (FROM 2014 MASTER PLAN)

Campus safety and security personnel identified several goals that are affected by the master plan that include:

- Incorporate issues of safety and security in planning for new buildings or renovation of existing buildings
- Detail equipment and technology resources necessary to secure the campus and ensure business continuity and disaster recovery
- Assess the impact of steps taken to ensure safety and security on campus employees, students, and visitors
- Set physical security design standards in new building plans and in renovation and repair plans
- Partner with external agencies to ensure campus safety and security where prudent
- Understand and mitigate how the physical layout of the campus affects communication response systems and coordination
- Balance access to space and equipment in buildings and the need to mitigate risk

These questions are largely addressed in this section of the master plan. The topic of disaster recovery is addressed in more detail in the Information Technology Core Infrastructure section. Namely, the development of redundant network and communications strategies including the implementation of optical cross-connect facilities not tied to physical buildings requiring maintenance and replacement is a major consideration to improve business continuity. The needs for partnering with external agencies to support safety and security should be addressed internally as it relates to operations and governmental contracts beyond the reach of the master plan.

To provide a foundation for decision-making by designers and stakeholders now and in the future, and to reinforce the plan's intent, the following planning principles can be used to guide future decisions for technology implementation, staffing, policies and procedures, and refreshment.

Balance: Safety	Physical security systems shall be designed to improve student, staff, and visitor safety with the understanding that balancing how security is perceived in a collegial setting is an important influence on planning.
Balance: Privacy	Physical security systems shall be designed to improve safety while being sensitive to the privacy concerns of students and staff.
Adaptability	Systems and procedures should be able to adapt to heightened security levels or concerns by implementing additional measures when appropriate.
Industry Best Practices	Systems shall be designed to comply with industry best practices, based on operational needs of the facilities.
Interoperability	Interoperability of the security systems is key to the daily and long-term operations of campus facilities by safety personnel and administrators. Proprietary systems and components should be avoided.
Ease of Operation	Systems shall be designed to operate simply and efficiently. Whenever possible, the solutions should require a minimal amount of training to operate effectively by safety personnel and staff.
Supportable	Systems must be supportable by campus and departmental technical personnel with limited outside technical assistance. Multiple companies should be able to provide service and maintenance on installed products.
Integrated Solutions	Systems will strive to deliver seamless integration of technologies with facility architecture and enterprise systems.
Cost Effective	Solutions will use financial resources effectively, efficiently and strategically.
Goals and Objectives	Goals should be realistic. Interim objectives to reach overall goals should promote visible results that staff and students can take pride in achieving.

SITE CONSIDERATIONS (FROM 2014 MASTER PLAN)

- Create a soft site perimeter around campus facilities, implementing video surveillance of all potential pedestrian access including associated signage.
- Incorporate analytics such as motion sensing based recording and alarm/alert at pedestrian and vehicular access areas.
- Improve site lighting, especially in parking lots, at stairwell and elevation transitions, and around buildings.
- · Add license plate recognition (LPR) analytics to new camera positions at the vehicular entrances to the campus. LPR systems can integrate site cameras with patrol vehicle cameras, tying in to a central server referencing law enforcement databases.
- · Install door contacts with hold-open alarms at all exit doors; exit-only doors should not have exterior pull hardware.

BUILDING PERIMETERS (FROM 2014 MASTER PLAN)

- Creating a defined perimeter around buildings is an essential component to any physical security plan. Since the majority of personnel and assets are inside buildings most of the time, defining and securing all potential points of access into the buildings is critical to the overall success of any facility project. This includes public access doors, staff-only doors, and emergency exits required by code. It also includes any vulnerable points that could serve as entries such as low-level windows, loading docks, and other less-obvious weak points.
- Incorporate video surveillance cameras at building perimeter doors to capture foot traffic entering or exiting facilities.
- · Install door contacts with hold-open alarms at all exit doors. Exit-only doors should not have exterior pull hardware.

