

MASTER PLANS Montreat Campus and Black Mountain Campus JANUARY 2023



sitework

FOREWORD

The 2022-2023 Montreat College Master Plan would not have been possible without the support of College President, Dr. Paul Maurer; Vice President for Finance & Administration, John Beaghan; and Facilities Director, Tommy Hendrix. As our core team of advisors, their time and energy in this effort was essential to the success of our planning process.. We would also like to thank the Board of Trustees and President's Cabinet for their contributions to this process.

The master planning process provided an opportunity for Montreat College to reflect upon past successes and identify new goals for the future. Input was gathered from a broad spectrum of stakeholders including representatives from Montreat College (students, faculty, alumni and staff), Town of Montreat staff and residents, Town of Black Mountain staff and business owners, and other interested parties.

As a result of the master plans, our primary recommendation is modest new construction on the Montreat Campus, to be combined with the reprogramming of existing buildings for improved functionality. In contrast, the Black Mountain Campus (Black Mountain Campus) is better suited for more significant development and growth, as the site sits mostly undeveloped. The Black Mountain College master plan considered opportunities for private partnerships at the Black Mountain Campus and designated locations for these opportunities.

The culmination of both master plans, once fulfilled, allows the College to achieve its goals for enrollment, academic achievement, vibrant student culture, and campus connectivity.



MONTREAT College MASTER PLANS

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01 Executive Summary

The executive summary chapter is an abbreviated synopsis of recommendations made for Montreat College's Montreat Campus and Black Mountain Campus.

- Final Black Mountain Campus Master Plan
- Final Montreat Campus Master Plan

EXECUTIVE SUMMARY



The Master Plan for Montreat College is an analysis of the existing physical conditions, existing facility needs, anticipated growth, and anticipated facility needs to accommodate that growth over the next 10 years and beyond. Our master planning work enhances the College's current and planned initiatives by helping the administration set a holistic vision for the campuses, facilities, and surrounding environs to elevate Montreat's mission of educating "students through educational inquiry, spiritual formation, and preparation for calling and career, all to impact the world for Jesus Christ."

Envisioning the future of Montreat College requires a deep understanding of the College's complex history. Founded in 1916 as a four-year preparatory school and two-year college, the College was restructured into a four-year school for women in 1945 before becoming a co-ed junior college in 1959. In 1986, the College ultimately became a baccalaureate institution. Through all of the iterations, the College has maintained its focus as a Christ-centered institution of higher learning. Declining enrollment threatened its viability in 2012-2014. Mergers were discussed but ultimately failed. An anonymous donation of \$6 million in 2014 saved from closure and sparked a growth trajectory for the College. The impetus for this master plan was the award of a North Carolina state appropriation of \$30 million for a new Cyber Security Center at the College – its location being key to the Center's and the College's growth for the future.

The outcome of the Master Planning process is a culmination of growth strategies at each of the two main campuses to address enrollment growth projections and modern facility needs. While the Montreat Campus is inherently less appropriate for major growth because of its lack of undeveloped land and steep topography, opportunities do exist for key additions and building reconfiguration and adaptation to improve functionality and provide much needed student engagement facilities. Feedback received from stakeholders emphasized the importance of maximizing the 'magic' of the Montreat Campus and allowing all students the opportunity to experience the 'magic'.

At the heart of the Montreat Campus, Gaither Hall overlooks a rolling front yard with mountain views, visitor parking and drive, and the back of the food service kitchen. A main priority of our master plan for this campus is to relocate the kitchen/dining (Howerton Dining) from the center of campus. This relocates the delivery operation to a less prominent area of campus and enhances the student experience at this area. The opportunity exists to make this drive a pedestrian thoroughfare with limited move-in day and fire truck access. Howerton can then be adapted to a student center for functions currently held in Belk. Howerton's east side can then be activated to better relate to Gaither Hall.

More information about the reprogramming of several buildings for functionality can be found in the following sections of this report.

The 89-acre Black Mountain Campus is suitable for development and offers gentle sloping, open spaces for new buildings, sports facilities, and fields. Access to this campus and the location of the Cyber Security Center are crucial elements in the final plan. It is important that the Cyber Security Center be situated in a visible location to the public. A knoll was chosen for a new academic core of buildings for its prominence and scenic views of the surrounding mountains. The Cyber Security Center site requires much infrastructure in terms of grading, road and bridge construction, and utility extensions. This site was chosen, in part, to propel future development as infrastructure could be designed with the full master plan in mind. We recognize the logical advantages of grouping the athletic fields and courts around the existing Pulliam Stadium, citing the convenience it offers to athletes, coaches, and visitors. We envision a new, full-sized, collegiate baseball stadium in the southeast corner of the campus. The existing baseball field at the Montreat Campus is undersized, hard to access, and does not allow night play or practice because lights are lacking. In addition to a practice field and rerouted cross-country trail, a new Fieldhouse/Wellness Center to house all athletic support needs is proposed and located central to all fields. This building would also contain a spectator gymnasium with courts for basketball and volleyball competition and practice, freeing up McAlister Gymnasium at the Montreat Campus for a Wellness Center available to non-student athletes.



Montreat College's Mission: Montreat College is an independent, Christ-centered, liberal arts institution that educates students through intellectual inquiry, spiritual formation, and preparation for calling and career, all to impact the world for Jesus Christ. With an academic core and athletic facilities occupying the south side of the campus, the north side is appropriate for student housing. A series of four residence halls each anticipated to be four stories tall with 160 beds - is planned to overlook Tomahawk Branch in a park-like setting. Adjoining parking is to the north of the residence halls buffering them from Highway 70. The College's main student food service will remain at the Montreat Campus until the additional residence halls create a need for these services at the Black Mountain Campus. Kiosk-type food service will continue to be available at the Black Mountain Campus until such a need arises. Parking is typically a challenge on most College campuses, and Montreat is no exception. The compact Montreat Campus provides 185 College-owned parking spaces and 130 non-owned spaces. The College offers parking passes to students after their first year. As a result, first-year students often park vehicles at the Black Mountain Campus, often illegally along narrow roadsides and in MRA lots, causing frustration amongst other residents and visitors. The opportunity to improve the parking condition in Montreat lies in policy changes and additional long-term parking at the Black Mountain College. Our team envisions long-term parking for more than just freshmen students living in Montreat. More students could be required to store their cars at the Black Mountain College and utilize the shuttle to retrieve the vehicle when needed, thus improving the parking availability for staff, visitors and students with valid parking passes. A fully developed Black Mountain College can provide space for approximately 1,080 cars without a structured parking facility.

PROJECT SCHEDULE

2022	2023								
JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY			
GATHER INFORMATION	STAKEHOLDER ENGAGEMENT	ANALYSIS & SCENARIO PLANNING	PRELIMINARY RECOMMENDATIONS	FRAMEWORK FO GROWTH	R				
1	-2-	3	-4-		5				

To maintain a cohesive College despite the bifurcation, the two campuses must be connected. Eliminating existing leased student housing at Ridgecrest is a priority which will allow the existing shuttle system to run directly between the two campuses, simplifying routes and improving timelines.

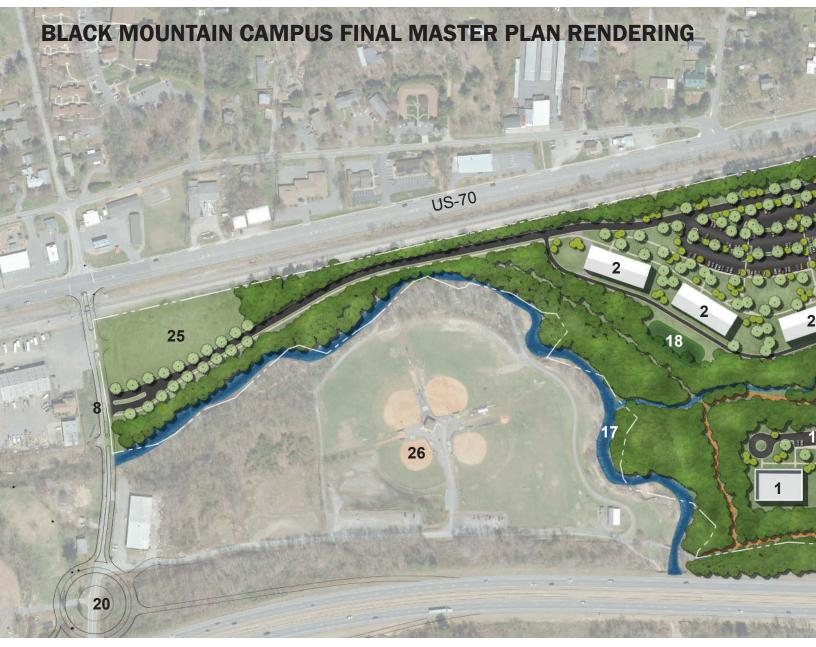
Our team listened to and considered the challenges for growth and respected the existing relationships and cultures for each location and suggested future development with a sensitivity to these precepts. Our master planning team is honored to have worked with the College to support its vision to be a leader in Christ-centered higher education regionally, nationally, and globally. Our interactive process has addressed a wide array of planning issues in the development of a master facility plan for both campuses. We hope you agree that our collective team has created a vision to enhance Montreat College's mission as it grows, expands, and serves.



IMAGE SOURCE: MONTREAT College STRATEGIC PLAN



- 1. ACADEMIC BUILDING
- 2. RESIDENCE HALL (4 STORIES, 160 BEDS EACH BUILDING)
- 3. FIELD HOUSE/ WELLNESS CENTER
- 4. FOOD SERVICE/ DINING HALL
- 5. ABBOTT HALL
- 6. MANOR HOUSE
- 7. NEW BASEBALL FIELD
- 8. PRIMARY CAMPUS ENTRANCE
- 9. SECONDARY ENTRANCE/ EXIT
- 10. TENNIS COURTS
- 11. EXISTING ADMINISTRATION BUILDING
- 12. HALF SIZE PRACTICE SPORTS FIELD
- 13. PARKING: 1,080 TOTAL SPACES

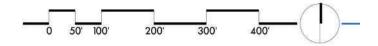


- 14. HIGH ROPES COURSE & CLIMBING WALL
- 15. EXISTING PULLIAM STADIUM WITH NEW BLEACHERS
- 16. NEW SOFTBALL FIELD
- 17. SWANANNOA RIVER
- 18. STORMWATER MANAGEMENT
- 19. CULVERT OVER TOMAHAWK BRANCH CREEK
- 20. FUTURE NCDOT INTERSTATE INTERCHANGE
- 21. TOMAHAWK BRANCH TRAIL
- 22. BLACK MOUNTAIN MUNICIPAL WELL
- 23. REGIONAL MULTI-MODAL GREENWAY
- 24. RESTORED MANOR HOUSE GARDEN
- 25. 2-ACRE OUTPARCEL
- 26. CITY OF BLACK MOUNTAIN VETERAN'S PARK



MONTREAT COLLEGE MASTER PLANS

LEGEND



EXISTING BUILDING

NEW BUILDING/ BUILDING ADDITION

- PRIMARY VEHICULAR STREET
- PRIMARY PEDESTRIAN WALKWAY
- --- MONTREAT COLLEGE PARCEL PROPERTY LINE
- – PEDESTRIAN CORRIDOR

EXISTING TREES

PROPOSED TREES

- 1. NEW STUDENT CENTER (EXISTING HOWERTON DINING HALL)
- 2. NEW LIBRARY / ACADEMIC CENTER (EXISTING BELK CAMPUS CENTER)
- 3. NEW DINING HALL (EXISTING BELL LIBRARY) WITH KITCHEN ADDITION
- 4. NEW RESIDENCE HALLS (SITE OF EXISTING NEWELL BASEBALL FIELD)
- 5. NEW RESIDENCE HALL
- 6. NEW ACADEMIC BUILDING
- 7. WELLNESS CENTER (RENOVATED MCALISTER GYMNASIUM)
- 8. SERVICE ROAD ONLY; FUTURE CAMPUS PLAZA
- 9. PRIMARY GREENSPACE/ ENHANCED OUTDOOR GATHERING AREA
- 10. PARKING
- 11. GAITHER HALL & GRAHAM CHAPEL
- 12. MCLEOD HALL
- 13. DAVIS HALL
- 14. CHAPEL OF THE PRODIGAL/ MCGOWAN CENTER
- 15. ANDERSON HALL
- 16. MORGAN HALL
- 17. MCGREGOR HALL
- 18. ANDERSON HOUSE
- 19. HOWERTON RESIDENCE HALL
- 20. LAKE SUSAN

MONTREAT CAMPUS FINAL MASTER PLAN RENDERING LS3P CDC sitework HII 10¹ m



02 Introduction

- Overview
- Location & Context
- Guiding Principles

OVERVIEW

In April of 2022, Montreat College solicited proposals from Architectural/Engineering firms to analyze the College's needs and develop a Master Plan for both campuses, an update to the previous plans completed in 2006 for the Montreat Campus and 2017 for the Black Mountain Campus (Black Mountain College). The team of LS3P, in association with Sitework Studios and Civil Design Concepts was selected by the College in June, and the process kicked off shortly thereafter.

LS3P was the lead architect/project manager for the master planning process and consulted with Sitework Studios for land planning and Civil Design Concepts for civil engineering guidance. All three firms have offices based in nearby Asheville, and many of the team members have personal connections with Montreat College and the Town of Montreat.

Our master planning approach was divided into 5 phases – of which each will be explained in more details in following sections of this report.

- I GATHER INFORMATION
- II STAKEHOLDER ENGAGEMENT
- **III ANALYSIS & SCENARIO PLANNING**
- VI PRELIMINARY RECOMMENDATIONS
- V FRAMEWORK FOR GROWTH

We kicked off the master planning process with a "deepdive" into getting to know Montreat College and its culture. We toured the campus and facilities and spoke at length with key College stakeholders including our core team of College President, Dr. Paul Maurer, Vice President for Finance & Administration John Beaghan, and Facilities Director Tommy Hendrix. We focused on gathering information such as past master plans, strategic plans, missions, current enrollment and growth projections. Our team documented site conditions, existing infrastructure, circulation, and zoning/ planning requirements. We worked with the Facilities Maintenance department to assemble existing floor plans with which to base our classroom utilization.

In concurrence with our information gathering, we conducted a classroom utilization analysis by distilling scheduling information from the registrar and cataloging physical properties of existing classrooms. This analysis serves as a guide in determining the highest and best uses of the College's current assets and when new classrooms as needed for enrollment growth need to come online. More information about the classroom utilization is included in following sections of this report.

In our journey to learn more about the College to frame our planning, we facilitated meetings to engage campus stakeholders and elicit feedback from all relevant user groups. These discussions helped identify opportunities and constraints and develop preliminary goals. We conducted over 30 meetings with master plan committees and focus groups. Several meetings were with non-College entities who maintain a stake in the College's growth. Student involvement included discussions with the student body government. LS3P then prepared a summary of initial findings and recommendations. The findings from these sessions guided the planning team in our studies of both campuses.

Our team then utilized "scenario planning" techniques to assess a variety of possible futures at the distinct campus settings. We collectively explored numerous possibilities for each campus. These concepts allowed us to test, challenge, and validate existing campus patters and consider new opportunities. We concentrated the possibilities into several feasible concepts that addressed factors such as land use, vehicular and pedestrian circulation, infrastructure, environmental features, campus identity, and campus connectivity. The design team proposed three alternative concepts for the Black Mountain Campus and one for the Montreat Campus for consideration of possible options for future campus development and change. These were prepared as simple diagrams meant to stimulate thought and generate input from Montreat College stakeholders to achieve a common overarching vision for the physical organization of campus.

Direction from the Board and Cabinet was given on a singular plan for each campus for the team to continue to develop. This Preliminary Campus Master Plan established a singular concept for patterned growth on each of the campuses. These plans provided recommendations for future development, adaptive reuse and reprogramming of existing buildings, vehicular circulation and parking, pedestrian connectivity, and campus character.

Finally, the LS3P Team further developed the Final Campus Master Plans to illustrate the recommendations and direction for future physical development on the campuses. Recommendations included concepts to improve facilities and enhance the overall quality of the environment at each campus.

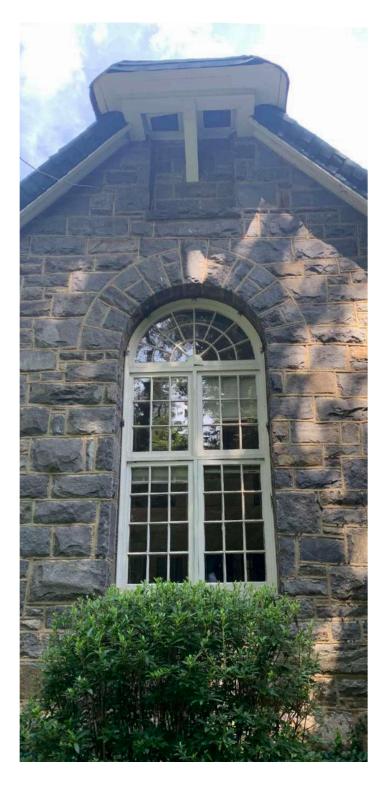


LOCATION & CONTEXT

Montreat College has two main campuses in the foothills of the Blue Ridge Mountains to the east of Asheville, North Carolina. The original campus is part of the 4000-acre cove that is the Town of Montreat. A newer, mostly undeveloped campus is located in the Town of Black Mountain, approximately four miles from Montreat.

The Montreat Campus, with its 100-year plus history of Christ-centered education, is a secluded, natural, mountainous setting comprised of mostly historic, stone clad buildings and lush vegetation. The roads are narrow and winding and are often treated as wide pedestrian walkways. Flat Creek runs through campus, interrupted only by Lake Susan before continuing down to the Swannanoa River. Open spaces are organic and natural with mature trees and incredible nearby mountain views. Buildings owned by the Mountain Retreat Association blend into campus with no demarcation of property boundaries. Modest signs attempt to direct visitors. The campus is a dense, tight-knit collection of sixteen main buildings with complimentary architecture. The campus is walkable (although steep) and intricately mixed with cottages of the Town of Montreat. There is a single point of access - through the Town of Montreat gateway arch.

Three hundred feet lower in elevation sits the 89-acre Black Mountain Campus. This property is a relatively new acquisition for the College, purchased in 2001 and sits in contrast in many ways to its sister campus up the mountain. The Black Mountain College lies between Interstate 40 and US Highway 70. To the east is the Vance Avenue residential neighborhood that is adjacent to downtown Black Mountain. To the west is the Swannanoa River, Black Mountain's Veteran's Park with a community baseball/softball complex and Blue Ridge Road. A known, future NCDOT project is planned for Blue Ridge Road to add an exit from I-40 and create two traffic circles. With its surrounding highways, this property is visible and offers several options for access.



The Black Mountain campus is less steep in most places than the Montreat Campus and contains the historic Manor House and adjacent structures. The main current use of the Black Mountain College is for sports fields, a trail system for students and the public, and outdoor recreation education. It has a more gradual topography over a much larger expanse of land than most mountainous properties. Tomahawk Branch bisects the campus in the east to west direction and flows to the Swannanoa River that forms the western edge of campus. A large portion of the developable land is flood plain. Incredible long distance mountain views are visible from many locations on campus.

The difference in the two campuses is stark. The Montreat Campus is active, friendly, with a small-town

feel. Students generally know each other, and professors are seen often around campus. Black Mountain remains mostly undeveloped with concentrated activity mostly around athletics and outdoor activities. Both campuses are openly used by the public for recreation.

We have examined and planned for both campuses equally. Strong emphasis was directed to best use of the newer Black Mountain campus and its potential for new buildings, new programs, and potential business partnerships. Emphasis on best use of existing assets and areas for expansion was placed on the wellestablished Montreat campus. A plan to effectively connect the two campuses with a reliable and frequent shuttle service was discussed in detail as a primary need as both campuses grow and change.

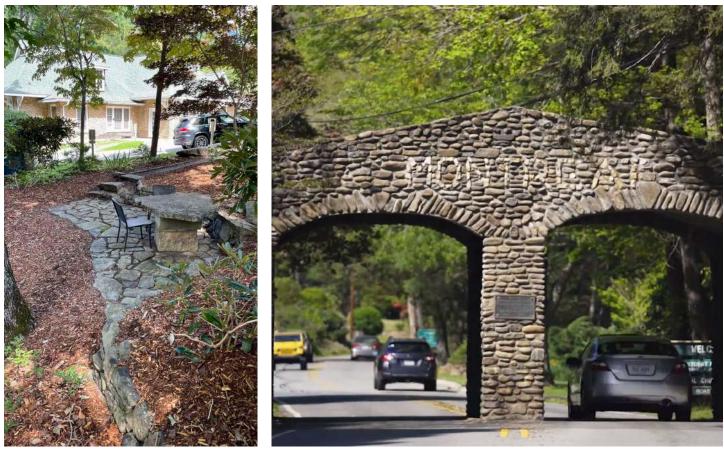


IMAGE SOURCE: MONTREAT College WEBSITE VIDEO

GUIDING PRINCIPLES

Montreat College developed and shared with our team a strategic plan for 2019 through 2023. The vision of this strategic plan is to "be a leader in Christ-centered higher education regionally, nationally, and globally" by being Christ-centered, offering a traditional liberal arts education, expanding its focus on science and technology, and being a leader of higher education. Two goals were identified within the strategic plan – Strengthen the Mission and Strengthen the Model.

Within the strategic plan as framework, our stakeholder feedback sessions were exercises in open dialogue and listening. With 30 different sessions we heard a plethora of information, facts, and opinions. Remarkably, a large majority of the feedback was readily organizable into five distinct guiding principles for the master planning process. These principles served to strengthen and guide us in envisioning and challenging multiple concepts and developing one final master plan for each unique site.



5 GUIDING PRINCIPLES

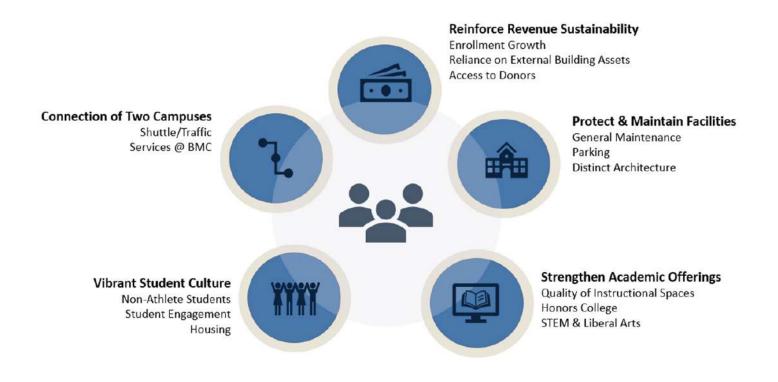
1. REINFORCE REVENUE SUSTAINABILITY

2. PROTECT AND MAINTAIN FACILITIES

3. STRENGTHEN ACADEMIC OFFERINGS

4. ENHANCE A VIBRANT STUDENT CULTURE

5. CONNECTION OF TWO CAMPUSES





03 Classroom Utilization

- Data Collection
- Data Analysis
- Future Scenarios/Recommendations

INTRODUCTION

As part of the Montreat Master Plan, a classroom utilization study was conducted to evaluate the effectiveness of the existing inventory of classrooms throughout the Montreat campus. The focus of this study is on classroom and laboratory spaces that are utilized throughout the campus for in-person instruction. Physical spaces used for providing virtual instruction for the College's online programs were not considered in this study.

The study provides both a quantitative analysis of classroom utilization and a qualitative evaluation of the effectiveness of the classroom inventory in meeting the instructional needs of faculty and students. This information was used to provide Montreat College with a current picture of how existing classrooms are utilized, and to identify how effectively the current classroom inventory can support enrollment growth into the future. This report includes a summary of the process of collecting and analyzing utilization data and concludes with recommendations to help Montreat College with future planning.





DATA COLLECTION

This Classroom Utilization Study began with a work session that includes members of the master planning team and Montreat College's Registrar's Office. Each scheduled instructional space throughout Montreat College was identified and the use of each was documented. Based on information provided throughout this work session, the team visited select instructional spaces on campus to observe more gualitative environmental conditions within these classrooms. The team observed the variety of the instructional space inventory, availability of technology to support instruction, and furnishings and equipment for student and faculty use. Following this work session and field observation, the Registrar's Office provided current scheduling and enrollment data for the inventory of classrooms.

The quantitative data collected and provided by the Registrar's Office includes:

• The square footage of each classroom

• The number of hours per week that each classroom is scheduled for instruction

• The average number of students enrolled in classes in each classroom

• The student capacity of each classroom or laboratory

Calculating the student capacity of classrooms and laboratories establishes a consistent square footage per student based on how a particular classroom or laboratory is used. Included in this study is an analysis of student capacity alignment with building code requirements for room occupancy, student capacity as established by Montreat College, and data gathered by benchmarking similar institutions.

All of this collected data is used to calculate the following Utilization Variables.

Seat Hours:

Seat Hours are the average hours of instructional use for each scheduled seat in a classroom. It is calculated by dividing the capacity of the instructional space by the product of the average enrollment and scheduled room hours.

Station Occupancy Ratio (SOR):

Station Occupancy Ratio is the percentage of seats filled in a classroom when a class is scheduled. It is calculated by dividing the maximum classroom capacity by the average class size.

Scheduled Room Hours:

Scheduled Room Hours is the average hours per week of scheduled instructional time per classroom.

Assignable Square Footage (ASF):

Assignable Square Footage is the square footage per individual student in each given classroom or lab. It is calculated by dividing the square footage of a classroom or lab by the average class size in each classroom.

MONTREAT COLLEGE DATA SET

This study reflects data collected across 21 classrooms and 8 laboratories at Montreat College. These instructional spaces are in the following buildings:



Classroom Statistics

• Smallest Classroom: Morgan Resource Center (248 SF)

• Largest Classroom: Chapel of the Prodigal (1,606 SF)

- Average Classroom Size: 647 SF
- Average Classroom Capacity: 25 students per class

Laboratory Statistics

- Smallest Lab: Morgan Lab 209 (323 SF)
- Largest Lab: Morgan Biology Lab 309 (1,038 SF)
- Average Lab Size: 752 SF
- Average Lab Capacity: 17 students per class

BENCHMARKING UTILIZATION DATA

In addition to gathering utilization data specific to Montreat College, research was conducted to establish benchmarks with which to compare the Montreat data. Public higher education institutions often publish yearly data comparing utilization data across the institution with internal standards that they have established. For the purposes of this study, benchmark data was collected using published reports from the State of North Carolina and the South Carolina Commission on Higher Education. The data from these reports includes data from the University of North Carolina, North Carolina Community Colleges, the University of South Carolina, and South Carolina Technical Colleges.

		Class	rooms		Labs				
Resource	Assignable Square Footage- Classrooms	Scheduled Room Hours	Seat Hours	Station Occupancy Ratio	Assignable Square Footage - Labs	Scheduled Room Hours	Seat Hours	Station Occupancy Ratio	
UNC 2018 Standards	18	35	22.75		70	20			
UNC 2018 CC Average		10.4	6.0	52.9%		9.6	5.9	54.7%	
UNC 2018 Average		24.0	17.0	63.9%		12.8	9.8	65.6%	
UNC 2019 Standard	18	35	22.75		70	20			
UNC 2019 Average		24.0	17.0	64.0%		13.1	10.3	66.4%	
SC 2002 Standard	22			60.0%	57			65.0%	
SC 2019 Average	19.4	21.2		48.6%					
SC 2019 CC Average	21.56	20.25		48.6%					

South Carolina and North Carolina collect data and prioritize emphasis on metrics in different areas. Additionally, each applies standards in certain metrics to evaluate the actual measured outcomes in each area. The above table presents a variety standards and actual analysis of collected data over different yearly reports.

The data available from such reports reflects data collected prior to the 2020-2022 Covid-19 Pandemic. The pandemic was a time of change in higher education instruction, including a significant reliance on virtual instruction. Data from these years, when published, will likely be very different than the data used for this utilization report. For this reason, utilizing the available 'Pre-Covid' data gives Montreat College a better comparison to plan forward, based on the College's desire to be a campus with a strong 'in-person' instructional environment. The above benchmarking institutions have multiple campuses and larger enrollment than Montreat College. Large public institutions can rely on deeper staff and financial resources to study these metrics on a yearly basis and work with much deeper data sets. Large public institutions also often have an obligation to publish their reports and findings which makes the information readily available. Similar information from private institutions more comparable in size to Montreat College is not readily available for use as a benchmark. Some consideration to this disparity is given in analyzing the data that has been collected for this report.

DATA ANALYSIS

The following summary data analysis will focus on the scheduled room hours, seat hours, station occupancy ratio and assignable square footage for the 21 classrooms and 8 laboratories on the Montreat Campus. A section on each data set will include summary data, charted data for individual instructional spaces and a comparison to collected benchmark data. For this portion of the utilization report, classrooms and laboratories will be reported separately to better align with the available benchmark data and to increase the accuracy of the information by grouping spaces with similar use.

Montreat College Assignable Square Footage and the square footage per student in each classroom or lab

An evaluation of assignable square footage provides the opportunity to evaluate if planned classroom capacity is consistent throughout the classroom and laboratory inventory, driven by the way individual classrooms and laboratories are used. Planned square footage comes from benchmark institution recommendations and the NC State Building Code for 'square footage per occupant' maximum allowable occupancy. These figures serve as a baseline for comparing actual classroom enrollment conditions and provide a methodology to plan room capacity. This planned square footage can be used to calculate classroom capacity by dividing the total room square footage by the SF per student. Planned square footage per student in this study is as follows:

- Classrooms: 26 SF/student
- Seminar/Conference Rooms: 30 SF/student
- Computer/Art Labs: 40 SF/Student
- Science Labs: 50 SF/Student

The table below reports both an analysis of planned capacity and actual capacity conditions throughout the Montreat inventory of instructional spaces. In the table columns representing planned data, and standard assignable square footages are used to generate the room capacity. In the columns showing actual conditions, Montreat's established room capacity is used to calculate the assignable square footage per student. The portion of the table included in this report highlights the classrooms and laboratories in the inventory where there is a disparity of more than 5 points in either capacity or assignable square footage between Planned and Actual.



IMAGE SOURCE: MONTREAT College WEBSITE VIDEO

xxx	SAMPLE 5	(data by Montreat)							
XXX	SAMPLE 5		Benc	hmark	(data by Montreat)		(data by Montreat)		
	SEAT CLASSROOM	⁰ 1000	50	1000/50= 20	25	1000/25=40	30.00	30/50=60%	
132	Belk Cyber Defense Lab	983	25	40	19	52	12.00	48.8%	19 Computers
143	Belk Black Box	936	36	26	25	37	14.70	40.8%	
219	Belk Classroom	458	18	26	30	15	16.00	90.8%	
304	Belk Classroom	595	23	26	40	15	23.10	100.9%	
306	Belk Classroom	626	24	26	37	17	18.40	76.4%	
105	Bell Seminar	383	15	26	25	15	11.33	76.9%	
107	Morgan Lecture	410	16	26	30	14	13.10	83.1%	
110	Morgan Lecture	817	31	26	40	20	20.10	64.0%	
200-A	Morgan Chemistry Lab	905	18	50	25	36	10.00	55.2%	
	143 219 304 306 105 107 110	143 Belk Black Box 219 Belk Classroom 304 Belk Classroom 306 Belk Classroom 105 Bell Seminar 107 Morgan Lecture 110 Morgan Lecture	143Belk Black Box936219Belk Classroom458304Belk Classroom595306Belk Classroom626105Bell Seminar383107Morgan Lecture410110Morgan Lecture817	143 Belk Black Box 936 36 219 Belk Classroom 458 18 304 Belk Classroom 595 23 306 Belk Classroom 626 24 105 Bell Seminar 383 15 107 Morgan Lecture 410 16 110 Morgan Lecture 817 31	143 Belk Black Box 936 36 26 219 Belk Classroom 458 18 26 304 Belk Classroom 595 23 26 306 Belk Classroom 626 24 26 105 Bell Seminar 383 15 26 107 Morgan Lecture 410 16 26 110 Morgan Lecture 817 31 26	143 Belk Black Box 936 36 26 25 219 Belk Classroom 458 18 26 30 304 Belk Classroom 595 23 26 40 306 Belk Classroom 626 24 26 37 105 Bell Seminar 383 15 26 25 107 Morgan Lecture 410 16 26 30 110 Morgan Lecture 817 31 26 40	143 Belk Black Box 936 36 26 25 37 219 Belk Classroom 458 18 26 30 15 304 Belk Classroom 595 23 26 40 15 306 Belk Classroom 626 24 26 37 17 105 Bell Seminar 383 15 26 25 15 107 Morgan Lecture 410 16 26 30 14 110 Morgan Lecture 817 31 26 40 20	143 Belk Black Box 936 36 26 25 37 14.70 219 Belk Classroom 458 18 26 30 15 16.00 304 Belk Classroom 595 23 26 40 15 23.10 306 Belk Classroom 626 24 26 37 17 18.40 105 Bell Seminar 383 15 26 25 15 11.33 107 Morgan Lecture 410 16 26 30 14 13.10 110 Morgan Lecture 817 31 26 40 20 20.10	143 Belk Black Box 936 36 26 25 37 14.70 40.8% 219 Belk Classroom 458 18 26 30 15 16.00 90.8% 304 Belk Classroom 595 23 26 40 15 23.10 100.9% 306 Belk Classroom 626 24 26 37 17 18.40 76.4% 105 Bell Seminar 383 15 26 30 14 13.10 83.1% 107 Morgan Lecture 410 16 26 30 14 13.10 83.1% 110 Morgan Lecture 817 31 26 40 20 20.10 64.0%

PLANNED ACTUAL

Classrooms and labs with actual assignable square footage below the planned assignable square footage have less square footage per student than is desirable for the activities taking place in a particular course. Adequate square footage per student becomes especially important in laboratory spaces where there is a higher degree of active learning and more instructional equipment. These spaces with lower assignable square footage will have an actual capacity that exceeds the planned capacity of a classroom and are likely overcrowded.

Conversely, classrooms and labs where actual assignable square footage that is higher than the planned assignable square footage are providing more square footage for each student than may be necessary for a particular course or activity. In these instances, additional students could be enrolled in classes scheduled for these spaces, provided there is enough educational equipment available for additional students.

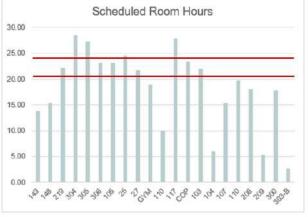
Overall, based on the analysis of the above assignable square footage, enrollment per class could increase in the Belk Cyber Defense Lab and the Belk Black Box Classroom. There are an additional 7 classrooms and labs that are likely overcrowded with a class size that is too big. These 7 classrooms represent 24% of the total classroom/laboratory inventory.

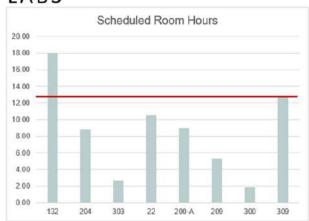
Montreat College Scheduled Room Hours

Montreat College Scheduled Room Hours: the number of hours per week that an instructional space is scheduled for instruction

- Average Classroom Scheduled Room Hours: 18.4 hours per week
- Average Laboratory Scheduled Room Hours: 8.62 hours per week

CLASSROOMS





LABS

Benchmarking of Scheduled Room Hours (shown on charts with RED line)

	1	Class	rooms		Labs				
Resource	Assignable Square Footage- Classrooms	Scheduled Room Hours	Seat Hours	Station Occupancy Ratio	Assignable Square Footage - Labs	Scheduled Room Hours		Station Occupancy Ratio	
UNC 2018 Standards	18	35	22.75		70	20			
UNC 2018 CC Average		10.4	6.0	52.9%		9.6	5.9	54.7%	
UNC 2018 Average		24.0	17.0	63.9%		12.8		65.6%	
UNC 2019 Standard	18	35	22.75		70	20			
UNC 2019 Average		24.0	17.0	64.0%		13.1	10.3	66.4%	
SC 2002 Standard	22			60.0%	57			65.0%	
SC 2019 Average	19.4	21.2		48.6%					
SC 2019 CC Average	21.56	20.25		48.6%					

When compared to the benchmark data, approximately 50% of the classrooms and 25% of the laboratories have instructional schedules within the range of both the UNC and USC actual scheduled use data for 2018 and 2019. When compared to the UNC Standard target of 35 hours per week of scheduled instruction for classrooms, Montreat is operating at 53% of this target. When compared to the UNC Standard target of 20 hours per week of scheduled instruction in laboratories, Montreat College is operating at 43% of this target.

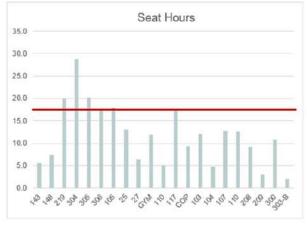
This data is an indicator that Montreat College could increase the number courses offered throughout the week without increasing classroom and laboratory inventory.

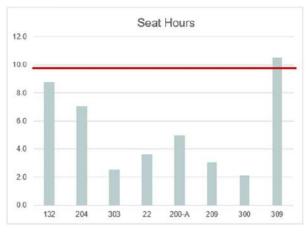
Montreat College Seat Hours

Montreat College Seat Hours: the average hours of instructional use for each scheduled seat in a classroom per week

- Average Classroom Seat Hours: 11.8 hours per week
- Average Laboratory Seat Hours: 5.3 hours per week

CLASSROOMS





LABS

Benchmarking of Scheduled Room Hours (shown on charts with RED line)

		Class	rooms		Labs				
Resource	Assignable Square Footage- Classrooms	Scheduled Room Hours	Seat Hours	Station Occupancy Ratio	Assignable Square Footage - Labs		Seat Hours	Station Occupancy Ratio	
UNC 2018 Standards	18	35	22.75		70	20			
UNC 2018 CC Average		10.4	6.0	52.9%		9.6	5.9	54.7%	
UNC 2018 Average		24.0	17.0	63.9%		12.8	9.8	65.6%	
UNC 2019 Standard	18	35	22.75		70	20			
UNC 2019 Average		24.0	17.0	64.0%		13.1	10.3	66.4%	
SC 2002 Standard	22			60.0%	57			65.0%	
SC 2019 Average	19.4	21.2		48.6%					
SC 2019 CC Average	21.56	20.25		48.6%					

When compared to the benchmark data, approximately 29% of the classrooms and 11% of the laboratories have seat hours reaching the actual seat hours recorded by the UNC System in 2018 and 2019. When compared to the UNC Standard of 22.75 seat hours per week, Montreat is operating at 52% of this target. In 2018 and 2019, UNC did not establish a similar standard for seat hours in laboratory spaces.

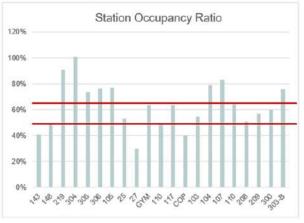
This data is an indicator that Montreat College could increase both the number courses offered throughout the week and number of students enrolled in a particular class without increasing classroom and laboratory inventory.

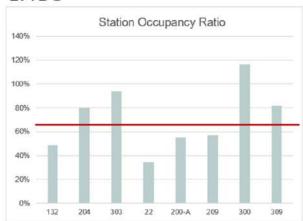
Station Occupancy Ratio

Montreat College Station Occupancy Ratio (SOR): the percentage of seats filled in a classroom when a class is scheduled

- Average Classroom (SOR): 64%
- Average Laboratory (SOR): 71%

CLASSROOMS





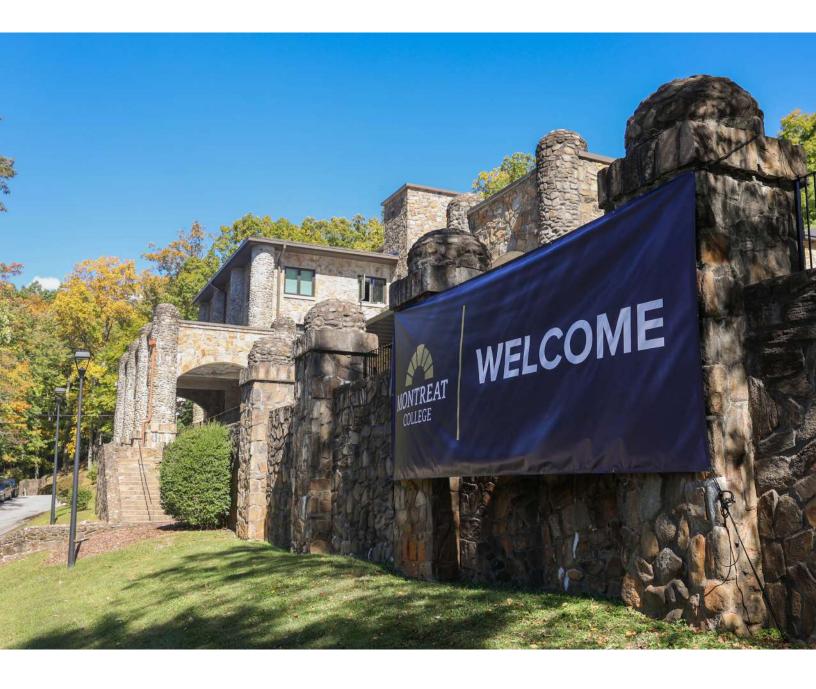
LABS

Benchmarking of Student Occupancy Ratio (shown on charts with RED line)

		Class	rooms	-	Labs				
Resource	Assignable Square Footage- Classrooms	Scheduled Room Hours		Station Occupancy Ratio	Assignable Square Footage - Labs	Scheduled Room Hours	Seat Hours	Station Occupancy Ratio	
UNC 2018 Standards	18	35	22.75		70	20			
UNC 2018 CC Average		10.4	6.0	52.9%		9.6	5.9	54.7%	
UNC 2018 Average		24.0	17.0	63.9%		12.8	9.8	65.6%	
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SC 2002 Standard	22			60.0%	57			65.0%	
SC 2019 Average	19.4	21.2		48.6%					
SC 2019 CC Average	21.56	20.25		48.6%					

When compared to the benchmark data, approximately 76% of the classrooms and 50% of the laboratories have an SOR that reaches the actual SOR reported by USC in 2019. Approximately 38% of classrooms reach the higher UNC SOR from 2018 and 2019. As an average SOR across all classrooms, Montreat College exceeds the station occupancy ratio of the USC standard target of 60% for classrooms. In a comparison to average laboratory SOR, Montreat College exceeds the station occupancy ratio of the usc standard target of 60% for classrooms. In a comparison to average laboratory SOR, Montreat College exceeds the station occupancy ratio of the USC standard target of 65% for laboratories. The UNC system did not establish a standard SOR for classrooms or laboratories in 2018 or 2019 although the actual SOR in both years was reported.

This data is an indicator that when classes are scheduled in classrooms or laboratories, most weekly classes are more than half occupied and that Montreat College aligns well in this regard with larger nearby institutions.



UTILIZATION ANALYSIS CONCLUSIONS

The quantitative data reported above would indicate that the current inventory of classrooms and labs at Montreat College can accommodate some growth in enrollment as the College works towards an enrollment goal of reaching 1,000 - 1,200. This will help Montreat College absorb additional students on campus while planning into the future for additional instructional space.

There are qualitative factors that will influence Montreat College's ability to fully reach planned assignable square footage, scheduled room hours, seat hours, and station occupancy ratio. Observation of existing classroom conditions and feedback from faculty and administrators suggest some limiting factors for maximizing utilization of instructional spaces.

Limitations:

• Enrollment Size: with a small current enrollment (<700 students), Montreat College may be struggling to fully enroll a class or fill a classroom because of low demand for a particular course.

• Classroom Size Variety: with only 29 instructional spaces throughout the campus, there is limited variety in the size of existing classrooms. Because of this, 'right-sizing' a classroom to a specific class size or course demand maybe difficult. This could result in scheduling a low enrollment class in a space that is too large, or a high enrollment class in a space that is too small.

• Athletic Practice Schedules: a majority of current Montreat students are participating in College athletics on campus. There is high demand for classes scheduled between 10:00 AM and 3:00 PM to align best with athletic team practice schedules. It is likely that classes offered before 10:00 AM and after 3:00 PM have less participation or are not offered at all, reducing







the scheduled room hours of classrooms across campus.

• Aging Facilities and Instructional Resources: Course offerings can be limited because of aging equipment or an inability of the instructional environment to support a particular course. Similarly, the number of available student workstations will limit enrollment even if the assignable square footage suggests that more students could be enrolled.

Facility conditions in some specific locations are impacting the quality of the instruction provided throughout campus.

• The Chapel of the Prodigal is the largest classroom on campus and is regularly scheduled as a lecture hall. It is equipped with church pews for students to sit in which lack writing surfaces. Its original use as a worship space is providing limitations in a more instructional setting. Improvements could be made to lighting, technology, and adequate seating for students.

• The Black Box Theater space is a large classroom sized space that is occasionally scheduled for classroom use. Its configuration as a 'black box' impacts the quality of the environment for more general instructional uses because of poor lighting and furnishings for students.

• Science Labs in Morgan Hall were noted by administration and faculty as the most in need of renovations or equipment because of general building conditions, lab equipment and classroom layout. These conditions create limitations in student and faculty research opportunities and course offerings.

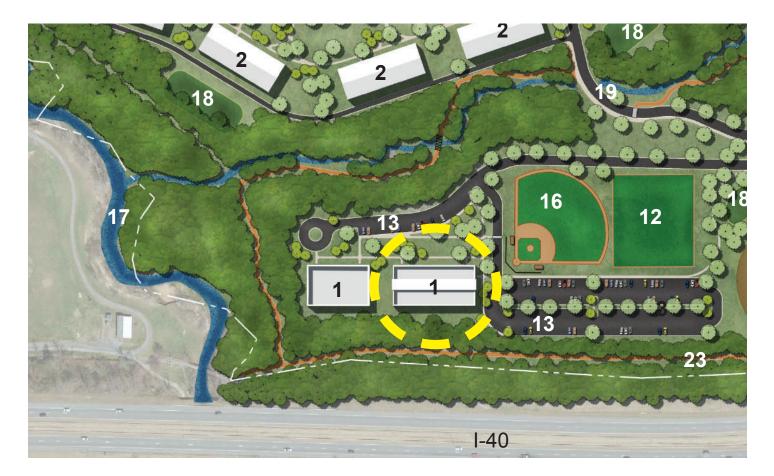


FUTURE SCENARIOS

In conjunction with the development of priorities and recommendations throughout this master plan, the data prepared in the classroom utilization study can be used to estimate the impact that future master plan implementation will have on classroom inventory and future needs for additional instructional square footage.

Scenario 1: A new Cyber Security Center

When a new Cyber Security Center is constructed and operational on the Black Mountain Campus, current Cyber security courses and activities will be relocated into the new facility. At that time, 2 classrooms in Belk currently used as part of the Cyber Security program could be reallocated into general classroom space. The total square footage of this gain is 1,644 SF. This square footage would accommodate a total of 62 students in each class scheduled in these spaces. Additionally, the computer lab in Bell Library could be used for general instruction or computer lab space for students.



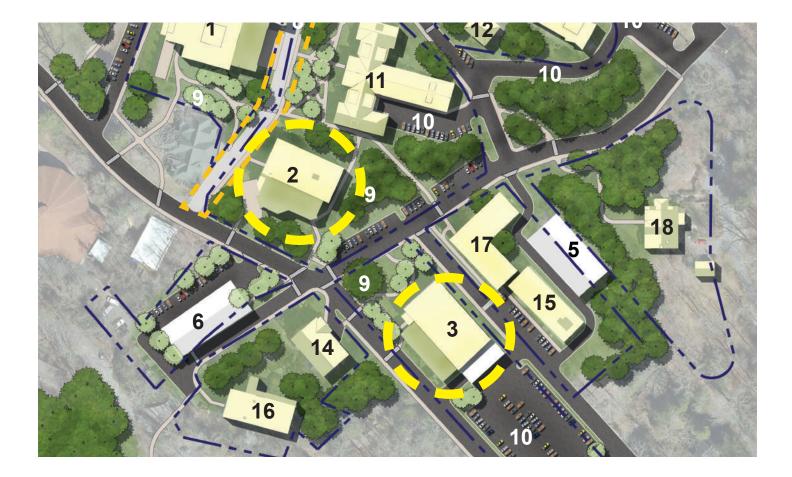
Scenario 2: Replace Morgan Hall

Morgan Hall has been identified by faculty and administration as the academic building most in need of replacement. The science labs which account for most of the square footage of the building are outdated and need to be renovated. In this scenario, a new science building could be constructed on the Black Mountain Campus with new state-of-the-art labs and Morgan Hall could be renovated and adapted to a more flexible use as a general academic building with a variety of classroom spaces for various departments. In doing this, Montreat College gains approximately 5,000 SF of instructional space with a resulting classroom capacity of 192 students per class.



Scenario 3: Conversion of Bell Library and Belk Student Center

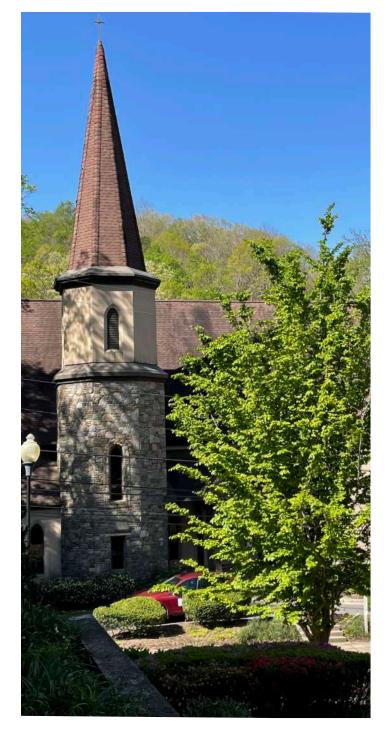
Anticipating student enrollment growth, the Howerton dining facility could be relocated to Bell Library and the library use of Bell could be relocated to the Belk Student Center. In addition to the first floor library use in Belk Student Center, the upper two floors would be reprogrammed to consolidate faculty offices and academic departmental support services. Assuming with these potential new uses, Bell and Belk would no longer contain scheduled classroom spaces, and the College would need to replace 6,300 SF of existing scheduled instructional space. Depending on the timing of other master plan recommendations like the renovations to Morgan Hall or construction of academic buildings at the Black Mountain Campus, this deficit could be incorporated into other improvements.



SUMMARY RECOMMENDATIONS

Based on the data analysis of the classroom utilization study, there is potential within the existing inventory of instructional spaces for Montreat College to continue to grow student enrollment without an immediate need for additional instructional space. Scheduling and planning strategies to increase scheduled room hours and seat hours will allow the College to schedule more students for classes throughout the academic year. As the College enrolls more non-athlete students it will become easier to schedule students in classes that overlap athletic practice times. In the short term, minor improvements in select classrooms and labs could address noted instructional environment deficiencies like seating for students and access to technology and equipment. When opportunities arise, expanding the variety of classroom sizes available for scheduling will improve the College's capability to allocate the right sized classroom for a particular class size.

Over time, as phases of the master plan are implemented, there is opportunity to capture additional instructional space by reusing existing spaces when departments like Cyber Security or Science are relocated. This will allow Montreat College to add classroom inventory in alignment with enrollment growth. When Montreat College reaches a goal enrollment of 1000-1200 students, additional instructional space will need to be constructed on either or both campuses. The total current square footage of instructional spaces at Montreat College is 19,608 SF. This inventory is currently serving a student population of roughly 50% of the goal enrollment of 1000-1200. Without factoring for specific needs of unknown academic programs or expansion of course offerings, Montreat College can expect to construct an additional 20.000 – 30,000 SF of academic space to serve a total enrollment of 1,000 - 1,200 students.



MONTREAT COLLEGE MASTER PLANS





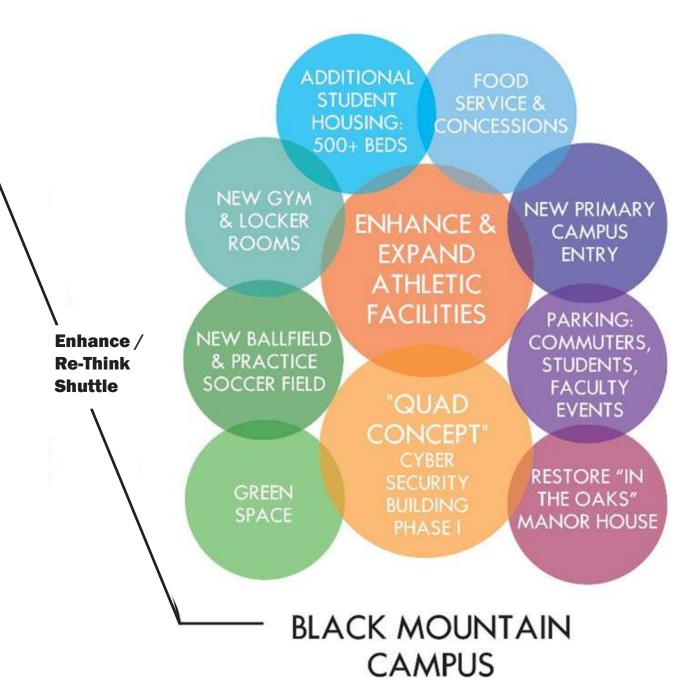
04 Stakeholder Engagement

- Gather Information
- Engagement Sessions
- 5 Buckets of Information

INTRODUCTION

Stakeholder engagement is the first stage of successful development of a master plan. It is the process of gathering information and conversation with stakeholders to fully understand the needs and priorities that will inform and guide the master plan decisions. Data and information provided by stakeholders is studied and organized to discover where consensus exists between stakeholder groups. This consensus data serves to reinforce and emphasize points of priority for the master plan and to identify topics for deeper study and conversation. In contrast, understanding outlier or conflicting information encourages deep discussion to challenge and test prevailing ideas and concepts. The stakeholder engagement process for Montreat College Master Plan includes a period of gathering data, engagement sessions with stakeholders and the resulting **5 Buckets of Information**.





INFORMATION GATHERING

A variety of information is required at the beginning of the planning process to provide a foundation that informs the direction of early property evaluation, site analysis and future conversations with stakeholders. During this phase, Montreat College provided property and building information in the form of drawing plans, site surveys, property demarcations and previous planning studies for various campus priorities. Montreat College facilitated on-site tours of the Montreat and Black Mountain Campuses, describing current building uses, current site challenges, athletic facilities, and College history. With this provided information, site analysis of the Montreat and Black Mountain Campuses began.

Through the initial site analysis, Montreat College provided an inventory of existing College owned parking lots, recent construction projects including building renovations and athletic field improvements. Distinctions were made to differentiate between Montreat College and Montreat Conference Center property assets and property agreements for shared or leased properties were reviewed. Current lease agreements include residential lodges owned by the Montreat Conference Center along Kentucky Road.

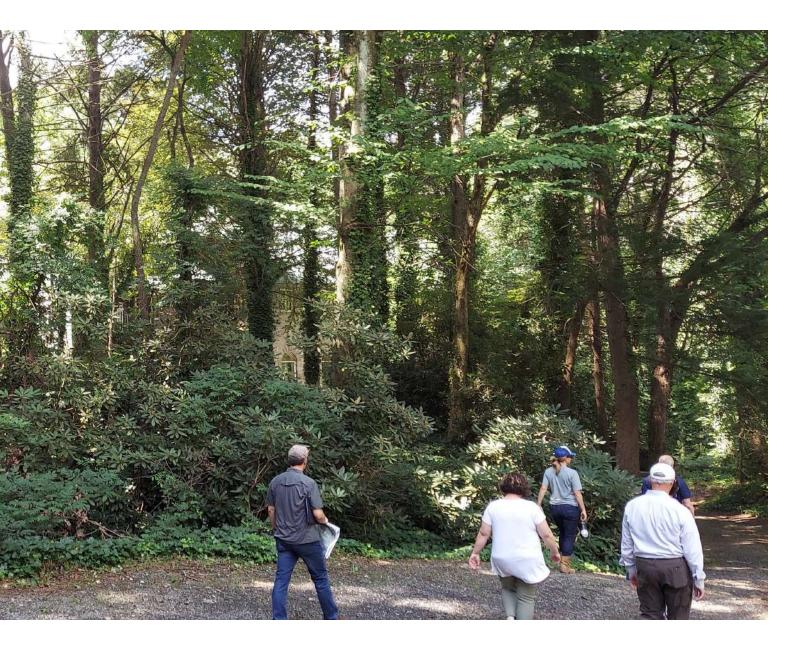
Early analysis of existing documents and campus conditions included an understanding of existing residence halls and other housing provided by Montreat College on and around campus. Montreat College provided a current housing census for each residence hall, off-site housing and housing leased from the Montreat Conference Center.

Additional data and documents that were gathered and reviewed include:

- Enrollment and course schedule data provided by the Montreat College Registrar's Office
- Current athlete rosters

• Preliminary NCDOT designs for a new I-40 exit at Blue Ridge Road





ENGAGEMENT SESSIONS

Over the course of four months, the master planning team conducted 32 separate engagement sessions with a variety of stakeholders. The team began with small groups of Montreat College leadership teams:

- Montreat College Executive Team and Cabinet
- Facilities, Security, Transportation and Parking departments
- Administration
- Housing and Student Life
- Athletics
- President Maurer
- Faculty
- Cyber Security Faculty
- Alumni
- Student Government
- Montreat College Board of Trustees

This core group of stakeholders were exclusively responsible for working to establish the guiding principles for the master plan project. As conversations progressed, consistent themes and priorities emerged and began to fit into distinct categories which became affectionately known as the 5 Buckets.

With a foundation of information from Montreat College stakeholders and the beginnings of guiding principles and priorities, the master planning team shifted focus to engage stakeholders with close relationships to Montreat College.

- Town of Montreat
- Christ Community Church, Montreat
- Montreat Conference Center
- Town of Black Mountain
- President's Advisory Council
- Montreat Residents
- Givens Highland Farms
- Other College Advisors



Conversations with these groups provided an opportunity to connect areas of alignment and support with the priories identified by Montreat College and to identify areas where Montreat College's plans would impact surrounding neighbors and stakeholders. Throughout the varied conversations, Montreat College and the master planning team was consistently encouraged to continue deep engagement with the residents and property owners in the Town of Montreat. The residents of the Town of Montreat care deeply about protecting the character of the town and shared concerns about Montreat College's plans for growth which could lead to potential new construction on College property and increased town traffic with more students living on campus.

With strong encouragement from stakeholders, Montreat College and the planning team spoke with the Town of Montreat Planning and Zoning Commission to provide an opportunity for commissioners to ask questions, share concerns and to be informed as they work through updates to the Town's Comprehensive Plan. Additionally, the planning team created a project presentation and hosted 2 additional 'town hall' meetings with residents of the Town of Montreat. President Maurer presented an overview of the College's history, current master planning process, and future goals and priorities, emphasizing clear information to counteract misconceptions about the College's plans. Residents were provided opportunities to ask questions of President Maurer and the planning team and to voice concerns for the team's consideration.

Additionally, stakeholder groups were engaged periodically to provide more technical feedback on the master plan ideas and scenarios that were emerging throughout the engagement process.

- Aramark Food Service
- NC Department of Transportation

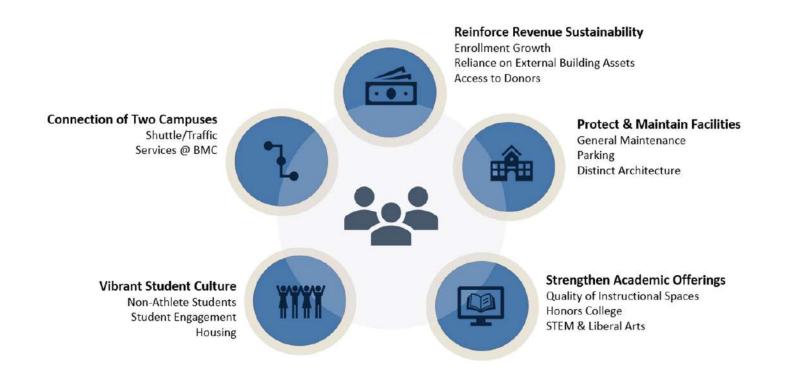




THE 5 BUCKETS

The outcome of stakeholder engagement with Montreat College is a collection of feedback from stakeholders that has been tested through ongoing engagement, measured against dissenting opinions, and organized to create guiding principles for the project. As a collection of information, we first organized the information that was distinctly related to either the Montreat Campus or the Black Mountain Campus.

Without losing the importance of the feedback organized in this way, it was clear that Montreat College cares deeply about the integration of these two campuses in both practical and meaningful ways. As feedback was analyzed and organized holistically for both campuses, the information collected was organized around district themes or "buckets" of information.



REINFORCE REVENUE SUSTAINABILITY

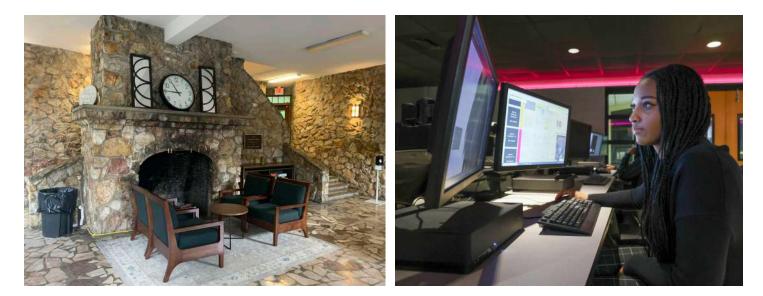
To be successful, revenue sustainability must be multifaceted. The College has diversified its revenue generation to protect its future. Enrollment growth, increased online education, and the Carolina Cyber Center are some of the key initiatives we understand the College is pursuing.

Enrollment growth is a large part of revenue sustainability for the College. With its near demise less than a decade ago, much thought has been given to its sustainability so the College is never in a similar position financially. The guiding principle to grow enrollment from 660 to 1000-1200 traditional undergraduate students by 2030 was identified from our meetings with the President and Cabinet and is a major factor in the outcomes of the master plans.

The College is challenged with a lack of student housing and must significantly increase housing for this growth goal to be feasible. Resources are being utilized to lease nearby housing owned by others and to shuttle students to and from campus. Currently, the College leases over 167 beds from nearby Ridgecrest and different lodges owned by the MRA. A goal of the College is to own 100% of its student housing. Currently, residence hall rooms are being reconfigured to increase beds temporarily while a cost estimating and fundraising analysis is occurring for major residence hall renovations. These renovations across campus will increase bed numbers and improve housing conditions, thus improving the overall student experience.

The future Cyber Security Center is intended as a revenue generator. With adequate facilities, the program can continue to grow. The Cyber Security program is the only known program that balances Cyber security with a Christian moral background. Conferences, speakers, and incubator programs can utilize the facility once online.

Finalized master plans for each campus can be used by the administration to engage potential donors and illustrate the College's investment in the future of the two main campuses.



PROTECT AND MAINTAIN FACILITIES

One frequent comment from stakeholders was that Montreat is special and feels like home. This was heard from students, staff, and alumni. The College's greatest assets - the unique campus setting and its buildings contribute to this special feeling. In the College's pursuit for growth, the character of existing facilities must be protected and maintained.

Deferred maintenance has taken hold of most buildings across campus. The College will need to focus its resources on major renovations of existing buildings to ensure these assets continue to serve the College well and do not become liabilities. Stakeholder feedback highlighted the need to improve the residence halls and academic spaces as a priority. This guiding principle led us to recommend relatively minor additions to and adaptations of existing buildings in lieu of major new building projects at the Montreat Campus and direct major development to the Black Mountain Campus. The magnificent Manor House at the Black Mountain Campus is the exception. With its history and grandeur, there is growing support to find the funds needed for the 24,400 SF home's total restoration.

Through the master planning process, we endeavored to enhance campus stewardship by ensuring the highest and best use of land and resources, protecting existing assets, and improving the quality of connectivity between the College's campuses.





STRENGTHEN ACADEMIC OFFERINGS

Montreat College cares about the quality of their academic offerings. As part of the College's current strategic plan there is a focus on Honor's College and increasing enrollment selectivity. Montreat College is expanding Cyber Security and STEM curriculum offerings into the future in response to the strong technology focused drivers in the economy of the future. This focus will allow Montreat College to continue to grow its reputation as a modern, Christian thought leader. Funraising opportunities may present themselves with additional programs and outreatch.

The quality of instructional spaces is at the forefront of Montreat's thinking. The educational environment: classrooms, laboratories, libraries, easy access to faculty and an environment that fosters collaboration, creativity and inquisitiveness supports academic success of students and the academic programs offered by Montreat College. Renovations to existing classrooms and laboratories, will better support faculty and student research. Modernization of the campus library can help encourage collaboration, provide access to technology and create varied workspaces for students and faculty.



VIBRANT STUDENT CULTURE

Montreat College recognizes the importance of a vibrant student life experience in creating strong student retention. As the College increases enrollment of non-athlete students, expansion of student life offerings beyond athletics will become important: clubs, wellness opportunities, leadership skill building, and other activities will encourage student engagement of non-athlete students at Montreat College.

The primary concern of Montreat Campus stakeholders is the condition and availability of housing on campus in the existing residence halls. The current conditions of the residence halls are detrimentally impacting the recruitment and retention of students. Additionally, Montreat College is reliant on additional leased housing to accommodate all students. Not only is this a burden to the College's financial resources but students housed at Ridgecrest are disconnected from the student life experience of the Montreat Campus and are reliant on the shuttle system or personal transportation to attend class and participate on campus



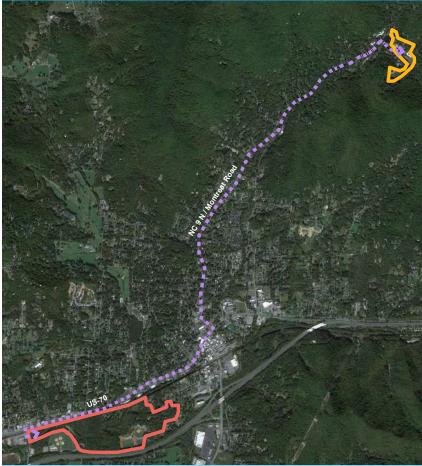
CONNECT THE TWO CAMPUSES

Montreat College property in the Town of Montreat is a known, fixed entity. There is very limited opportunity to acquire additional property to help with expected College growth. The acquisition of the acreage in Black Mountain has already helped Montreat College to expand programming beyond the gates of Montreat. The College sees the Black Mountain Campus as the primary focus for College expansion and new construction in response to goals for enrollment growth

A bifurcated campus is a challenge for any institution. As mentioned previously, Montreat will need to be intentional with programming divisions between the two campuses which allows students extended periods of time or days on either campus. This division was discussed in detail, but ultimately the College will need to determine a system that works for most once there is need for a new academic building at the Black Mountain Campus. Until that time, Cyber Security, outdoor recreation, and athletics may be the only programs at the Black Mountain campus.

With parking a major campus challenge, policies and student culture will need to shift. At the Montreat Campus, daily parking issues are experienced. The College hosts several major campus events every year with five hundred attendees maximum (like the Cyber Conference). Likewise, the MRA hosts large events that require students to relocate cars off campus. Parking challenges at Montreat exacerbate the need for a strong connection between the two campuses.

At the Black Mountain Campus, a current program with outdoor education classes is highlighting problems with the existing shuttle schedule.



Currently twenty-three sports teams travel to the Black Mountain campus for practice and competition throughout the seasons. Coaching offices were recently moved to this campus. With more functions being relocated to the Black Mountain campus, a strong connection becomes increasingly more important. The College's culture of students relying on their personal vehicles will need to change. By providing adequate, secure, long-term parking at the Black Mountain campus and frequent and reliable shuttle service, students will benefit. Convenient transportation between the two campuses can mean less money spent on gas, more time for social interaction and connection aboard the shuttle and less frustrated neighbors in both the Town of Montreat and the Vance Avenue neighborhood in Black Mountain.

In addition to a physical connection via a shuttle system, the identity and brand of Montreat College will need to be maintained with the changes at Montreat as well as translate to the Black Mountain Campus with its growth. In the planning process, much consideration was given to the 'feel' of Montreat College and its culture. All proposed changes to the Montreat Campus are intended to enhance this 'feel' and improve the physical spaces and their functions. For Black Mountain, the location of the residence halls near the creek, planned trail system, and entrance drive are planned to replicate the 'feel' of the Montreat campus. This will provide a strong connection experientially between the two campuses and strengthen the College's identity and brand by leveraging its location in the region, creating welcoming gateways for the surrounding communities, augmenting existing iconic spaces and buildings, and clarifying campus edges and gateways.



STAKEHOLDER ENGAGEMENT SUMMARY

The extensive stakeholder engagement process provided a deep understanding of the priorities for the College and concerns of neighbors and adjacent stakeholders. All the information documented by the planning team becomes the litmus test to evaluate planning scenarios and master plan concepts for Montreat College. The 5 Buckets have become the Guiding Principles for the project. Master plan scenarios and concepts work to provide the infrastructure and support for Montreat College to reach goals in these 5 areas.









05 Analysis & Scenario Planning

- Campus & Community Site Analysis
 - Constraints & opportunities
 - Utilities-infrastructure/growth analysis
- Scenario Planning

WAATS W

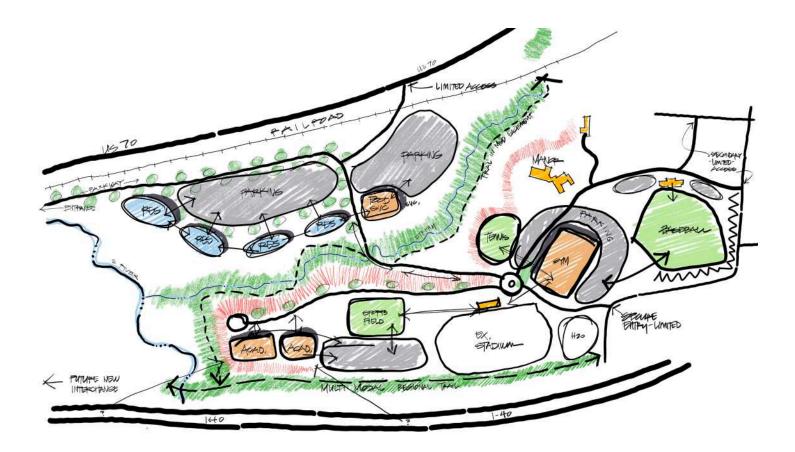
- Internal Design Charrette
- Scenario Testing

CAMPUS & COMMUNITY SITE ANALYSIS

When considering changes to a College campus, a master planning process must analyze the campus and its broader community context. With a framework of maps, surveys, and campus tours, our team performed a site analysis and identified constraints and opportunities for each campus. This initial assessment of campus can help guide concept development with areas ready for change and conversely areas to avoid.

The Montreat Campus is ripe with both opportunities and constraints. Its setting in a steep, dense cove limits major new development. Opportunities exist, however, to better utilize existing assets and re-purpose them for different functions. The renovation of existing buildings is key in Montreat. Open negotiations if they don't already exist about usage agreements for two MRA-owned properties that could significantly improve campus functions. Underutilized flat land and roadways can be reclaimed for student housing sites and pedestrian gathering spaces. A re-envisioned Montreat campus can preserve and improve existing College assets, increase student housing, and enhance the student experience.

Similarly, the Black Mountain Campus is teeming with both opportunities and constraints. Despite its large expanse of unused acreage, the campus is constrained by its two main roads, the Swannanoa River and its tributary and the associated flood ways and flood plains. Opportunities do exist for major development such as roads, new academic buildings, new student housing, an athletic complex and the renovation for the continued use of the existing Manor House.



UTILITIES-INFRASTRUCTURE/GROWTH ANALYSIS WATER

Existing Conditions for Montreat Campus:

The Town of Montreat owns and operates the municipal water system that provides all domestic and fire protection water to all facilities located in Montreat. The Town's water system supply comes from multiple groundwater wells that require a minimum level of treatment prior to distribution to the public. The wells are located sporadically throughout Town limits and all pump to elevated storage tanks located in strategic positions to provide adequate storage supply and pressures to all connections. There are approximately 675 connections to the Town's water supply that provide for an average domestic daily demand of 100,000 gallons per day with a total of 600,000 gallons of storage available. Montreat College is one of the largest water consumers within the Town's system and currently averages 25,000 gallons per day

Near Term/Long Term Montreat Campus:

The Town's water system has ample capacity to provide for additional growth within the Montreat campus both in the near- and long-term scenarios. It is recommended that the College continue to look into the water efficiencies of existing plumbing fixtures as a means to reduce water expenses. Additionally, it is recommended that all existing water services lines behind the town meter be properly maintained and upgraded as needed to prevent breakage, leaks, or system outages for all the facilities.

Existing Conditions for Black Mountain Campus:

The Town of Black Mountain owns and operates the municipal water system that provides all domestic and fire protection water to all facilities located on the Black Mountain campus. The Town's water system supply comes from multiple groundwater wells and also an interconnection with the City of Asheville water system that allows for the Town to purchase water. The Town 's water supply has an overall capacity rated for 2,100,000 gallons per day and currently has an average daily domestic demand of approximately 750,000 gallons per day. There are approximately 4,300 connections/ customers to the Town's water supply with a total of 2,710,000 gallons of ground storage available within the system. The current Black Mountain campus does not purchase/consume a large quantity of water today. However it is anticipated that this campus is the location for future growth of the College.

Near Term/Long Term Montreat Campus:

There is minimal water infrastructure currently located on the Black Mountain campus. A Town of Black Mountain 10" water main is located in the shoulder of Blue Ridge Rd. The future campus water system should be connected to this line in order to provide adequate water supply and pressures to the future campus. The Town of Black Mountain water system should be extended from Blue Ridge Rd into and through the campus in order to serve the future facilities as shown on the proposed Master plan. As the full master plan gets developed, it is recommended for the Town's water system to be looped and also connected into the Town's water system located in Vance Ave. This will provide the College with a looped system that ultimately improves fire flows, pressure, and redundancies should any distribution outages occur in the future. Ultimately, it is estimated that full build-out of the Black Mountain Campus may generate a daily demand of water in the magnitude of around 100,000 gallons per day. As noted above, the Town of Black Mountain's water supply and distribution are more than adequate in order to provide for this supply in the future moving forward.

SEWER EXISTING CONDITIONS:

MSD is a non-profit, publicly owned utility that owns, operates and maintains a 40 million gallon per day (MGD) wastewater treatment plant to treat raw sewage and industrial wastewaters collected in an extensive network (approximately 1100 miles) of collector sewers currently owned, operated and maintained by the District pursuant to the consolidation agreements signed on July 2, 1990. The District also owns, operates and maintains approximately 60 miles of interceptor sewers that connect such sewers to the treatment plant. MSD owns and operates all sanitary sewer collection system throughout the Town of Montreat and the Town of Black Mountain (Both Campuses). The collection system is predominantly composed of concrete and brick manholes with various size sewer mains and services. The entire collection system is a gravity system composed of manholes and service line ranging in sizes from 4-inch to 36-inch for the system's mainline. MSD requires that no permanent structures be located within the easements of their gravity sewer lines and also that these easements remain free and clear of trees. MSD has ample capacity within their systems, and we do not foresee any limiting factor for future growth within either campus to accommodate the future grown as provided in the Master Plan.

Near Term & Long Term:

MSD is responsible for ongoing maintenance of their existing collection system, however it is recommended that the College continues to maintain and evaluate existing private sewer services in order to keep them in good working order. Given there is no capacity constraint as it relates to future growth of the College in regards with MSD, it is recommended that the College seeks to reduce overall waste streams to the extent possible, in that all waste stream reduction is a reduction in overall expenses.





OPPORTUNITIES & CONSTRAINTS THE MONTREAT CAMPUS

Our site analysis revealed the following:

OPPORTUNITIES:

1. Opportunity to renovate existing gymnasium to better serve the needs of the entire campus population.

2. Opportunity to negotiate utilization of the MRA Winsborough Lodge for additional student residence space.

3. Opportunity to create enhanced outdoor pedestrian gather spaces to maximize character and sense of community.

4. Opportunity to create a pedestrian-only road section to enhance the campus character and safety.

5. Opportunity to create new outdoor gathering spaces.

6. Opportunity to enhance the campus entry with new signage, creating a sense of arrival.

7. Opportunity to repurpose the existing ballfield into new housing opportunities.

8. Opportunity to renovate the existing library building and Howerton dining hall into more inclusive multi-purpose spaces.

CONSTRAINTS:

1. Building owned by MRA is taking up valuable real estate in the core campus area.

2. Stormwater constraints associated with the Flat Creek Floodway.

3. Service area associated with Howerton dining hall creates a visual eyesore and takes up valuable real estate in the central campus core.

4. Newel baseball field has inadequate pedestrian access.

5. Vehicular access to Newel baseball field along Yale Road is inadequate and travels through MRA property.





MONTREAT COLLEGE MASTER PLANS

OPPORTUNITIES & CONSTRAINTS THE BLACK MOUNTAIN CAMPUS

Our site analysis revealed the following:

OPPORTUNITIES:

1. Tomahawk Branch Creek: presents opportunities for views, campus character, connection to nature and recreation potential.

2. Opportunity to create a new main entry from Blue Ridge drive in conjunction with the planned DOT road improvements and new I-40 entrance.

3. Opportunity for a scenic, winding entry drive, establishing the campus character and creating a sense of arrival.

4. Existing mounded topography presents an opportunity to excavate dirt and transport it to other areas of the campus that need additional fill dirt in order to be raised above the flood plain. This also presents the opportunity to create a flat area for parking or a sports field.

5. Opportunity to renovate and utilize the In The Oaks Manor house as a historic architectural feature and anchor of the campus character.

6. Opportunity to restore and highlight the Manor House's formal garden as a campus feature and to help develop the campus character.

7. Opportunity to relocate the historic care taker's house and barn.

8. Opportunity for a secondary campus entrance from US 70 across the railroad right of way.

9. Opportunity to expand existing parking areas to better support campus functions.

11. The Historic Stone Culvert where the Tomahawk branch crosses under the railroad right of way presents an opportunity to be a visual focal-point.

12. A relatively flat field between the creek and Abbott Hall presents an opportunity for a passive recreation.

13. Bishop Henry Center presents an opportunity for additional faculty offices and classroom.

14. Open, relatively flat area offers opportunity for significant new development.



CONSTRAINTS:

1. Tomahawk Branch Creek: limits buildable area and presents an obstacle to pedestrian and vehicular circulation.

2. Flood hazard area: Requires fill in order to raise above flood plain before development.

3. Regulatory flood-way: No development is allowed in this area, limiting buildable area and dividing the campus into two separated areas.

4. City of Black Mountain Institutional zoning buffer: Requirements for a 100' buffer between adjacent residential, commercial, and vacant lots puts a limit on developable area.

5. The topography presents constraints for siting buildings and parking withouts significant grading.

6. Existing campus entrances are through narrow

residential roads with a lack of way finding signage and little sense of arrival.

7. Bishop Center - It if remains, limits ability for new ball field construction.

8. Existing vehicular roads are narrow without shoulders, sidewalks, or crosswalks, and without a clear hierarchy of routes.

9. A municipal well house, well easement, and pump house limit development to the east of Pulliam Stadium.

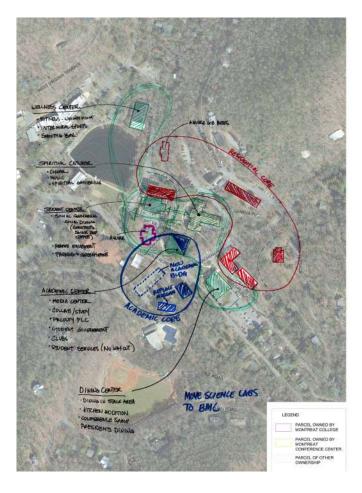
10. A public MSD sewer line runs through the campus, excavation for re-grading or building foundations must avoid the sewer and its easement.

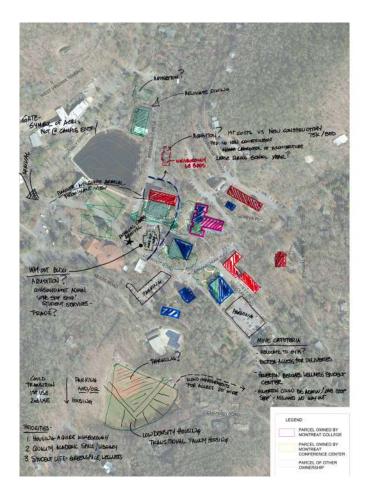
11. 200' Railroad row limits access opportunities on the north side of the property.



INTERNAL DESIGN CHARRETTE – MONTREAT CAMPUS

Equipped with guiding principles, stakeholder engagement and a deep understanding of the site opportunities and constraints for each campus, the design team began scenario planning to propose site and building solutions that would address Montreat's priorities into the future. With extensive feedback from stakeholders with concerns about large development expansion at the Montreat Campus, the team planned with a focus on the best ways for existing building assets to support future goals, enhanced pedestrian and outdoor campus experience and proposed limited new construction for modest growth and to address the needs of aging buildings.





1. A strong idea emerged through the team's collaboration which was driven by a desire to reduce car traffic on Gaither Circle in the heart of campus. Making Gaither Circle a largely pedestrian route, the Howerton Dining Hall Kitchen and back service area would need to be relocated. A campus plan idea emerged as the team worked through a solution to relocate the kitchen and 'back-of-house' activities of the dining hall away from Gaither Circle.

2. As enrollment at Montreat College grows, Howerton Dining Hall will struggle to support the dining needs of additional students. The kitchen has not been updated in many years, it is limited in square footage and is battling aging infrastructure. Additionally, the seating capacity of the dining room is limited in the number of additional students it can serve. The team looked for an existing building on campus that could serve as a new dining facility with larger seating capacity, the opportunity to provide a new kitchen and more discreet delivery and service access for larger vehicles. Bell Library became this location. The library, with an open second floor, large patio and front lawn is an appealing location for a new dining hall. The large parking area behind the building is on the edge of the campus with easy routes for delivery traffic and a location to construct a new kitchen.

The design team discovered that a proposed change to the use of the Bell Library Building to the dining hall created a ripple throughout the campus that started with finding a new home for the library.

3. As the College works to strengthen academic offerings, the library becomes a hub of activity that can provide areas for students to work independently and collaboratively, accessing research materials and studying with friends. Over time libraries on College campuses have become vibrant hubs of academic activities of all kinds. Services have been expanded beyond book stacks and study carrells, integrating technology, active student spaces and access to faculty. Belk Student Center could be this place. The location of the Belk Student Center in the heart of the primary academic buildings on campus, could be an ideal location for a new library. The large footprint of the first floor and the wrap-around walk-ways and exterior patios at the corner provide space for book stacks, access to technology and student-centered work areas. The upper two floors would allow the College to consolidate faculty offices and departmental resources into a convenient location where students can easily access support for their coursework.

4. The third ripple is the creation of a new student center at Howerton Dining Hall. The existing dining hall space has been newly renovated and without much additional investment, could become a large student gathering and activity center. Portions of the building not yet renovated could be transformed into meeting rooms for student clubs, and administrative departments that students regularly need to access like the registrar's office or the finance office. More casual, social dining concepts could be incorporated into this space like the coffee shop currently in the building or the snack shop currently located in Bell Library.

5. The final big move on this campus would be to reimagine McAlister Gym as a wellness center for students and faculty. There was significant consensus from Montreat stakeholders for this need on campus. As the College works to increase enrollment of nonathlete students, this becomes an instrumental part of the campus life experience. McAlister Gym struggles to meet the needs of student athletes with locker rooms in poor condition, limited spectator seating and overlapping needs of multiple sports teams. The ongoing use of this facility by student athletes limits access to other students for fitness uses or intramural activities. Creating a new athletic facility on the Black Mountain Campus to better meet these needs would provide an opportunity to renovate McAlister Gym to address the needs of non-athlete students and faculty.

6. The last remaining concern on campus in this scenario is the best way or ways to address the needs of Morgan Hall. It was identified by stakeholders as the building on campus most in need of replacing. It is the academic work-horse of the campus, containing the highest concentration of classrooms and labs of any other building. As Montreat's needs for additional academic space grows with enrollment, this building could be replaced, potentially in the adjacent parking lot. Tearing down the existing building when a new academic building is constructed would provide opportunity to replace the existing parking. Additionally, Morgan Hall could be renovated with isolated new construction to improve building circulation and ADA accessibility.

SCENARIO PLANNING

Scenario planning around these ideas continued as the design team checked and re-checked the concept against the guiding principles and stakeholder feedback. The campus can accommodate moderate enrollment growth with a larger dining facility. The concept is a reassurance that the College experience in Montreat can be expanded and enhanced without large new development that expands the College's footprint or proposes large new construction. The full concept provides for enhancement of outdoor spaces with dining opportunities on the lawn and patio of Bell, outdoor collaboration spaces at the library around Belk, social gathering on the front patio of Howerton overlooking Lake Susan and a strong spine of pedestrian circulation on Gaither Circle connecting the new centers of the campus:

- The Spiritual Center: Gaither Hall
- The Academic Center: Belk Library
- The Dining Center: Bell Dining Hall
- The Student Center: Howerton
- The Wellness Center: McAlister



INTERNAL DESIGN CHARRETTE – BLACK MOUNTAIN CAMPUS

On the Black Mountain Campus, these work sessions were focused initially on land use for the largely undeveloped campus site. With a clear understanding of the extent of the Tomahawk Branch and Swannanoa River flood plains and the topography of the site, clear land use areas emerged. The north section bounded by US-70 and Tomahawk Branch, a South section bounded by Tomahawk Branch and I-40 and an eastern section closest to the Vance Avenue neighborhood.

Because of limited opportunities for large scale expansion and development on the Montreat Campus, key considerations for the Black Mountain campus focused on campus entry and arrival along with ideal locations for housing, academic buildings including the Cyber building, athletic fields and student parking. Much of the new construction needed by the College to house a total student population of 1,000 – 1,200 students will be developed at the Black Mountain campus.

The new campus entry capitalizes on the new I-40 exit at Blue Ridge Road which creates the western boundary of the Black Mountain Campus. The entry road travels East into the heart of the property, following the topography of the site and in consideration of potentials for shuttle stops along the way. Locating the new main entrance at Blue Ridge Road will help to draw campus traffic away from the Vance Avenue neighborhood.

The northern section of the site lends itself nicely to new housing. Situating housing along Tomahawk Branch creates a park-like setting for students with easy access to pedestrian trails throughout the site. The eastern section of the site is well-suited for athletic amenities in proximity to the existing athletic field and restrooms, with sensitivity and buffering adjacent to the Vance Avenue neighborhood.

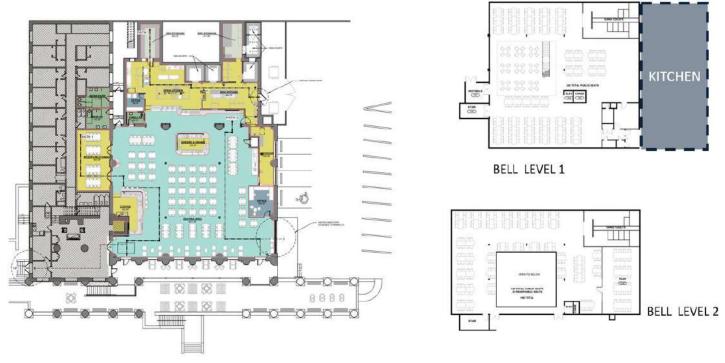
The team explored several options for placement of academic buildings in relation to housing, prominence, and exposure to the public from I-40, grouped with additional future academic buildings and in various locations along the main campus drive through the site. These concepts became the foundation of our preliminary concepts presented to the College for consideration.



MONTREAT COLLEGE MASTER PLANS

SCENARIO TESTING

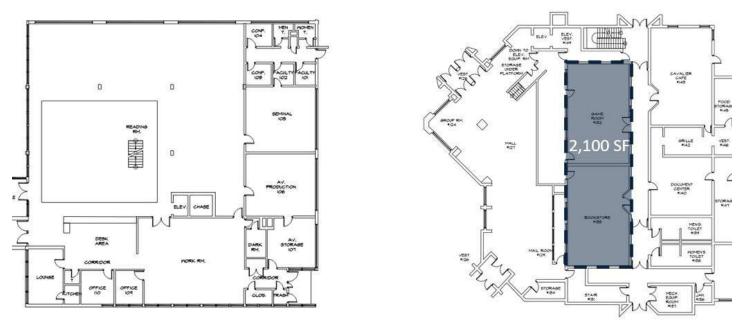
With preliminary concepts developing for each campus, some further testing of the ideas was necessary to confirm that the overall concept really provides the opportunities for expansion within the existing buildings.



Bell Library as the Dining Facility

Renovating the Bell building into the Dining Facility would provide the College with 11,310 SF of dining room square footage, which is 3,700 SF larger than the existing dining facility. Aramark, the College's food service provider recommends that a dining room to service 1,000-1,200 students would be 12,460 SF. A new 4,700 SF kitchen would be constructed at the back of Bell Library. While the available space in Bell would fall short of this 12,460 SF, relocating the dining room to the Bell Library would provide Montreat College the opportunity to expand food service amenities through most of the enrollment growth planned for the College until an additional dining facility could be constructed at the Black Mountain College.

Belk Student Center as the Campus Library



When Bell Library becomes the dining room, The Belk Student Center would become the new campus library. In the existing library, the book stacks currently occupy approximately 2,100 SF of the current library footprint. In the sketch of the Belk building on the first floor, a similar footprint of stacks would fit within the first floor of the building and could be incorporated within library programming that included technology spaces along with student collaboration and work areas. Renovations would take into consideration the structural system that supports the upper two floors of faculty offices and departmental support areas.



Housing Expansion At Montreat Campus

In addition to proposing larger scale construction of new residence halls at the Black Mountain College, there could be opportunity to modestly increase the available housing on the Montreat Campus. An early goal of the College is to reduce reliance on rented housing from the Ridgecrest Conference Center and Montreat Retreat Association. Development of the existing baseball field site with new housing could add between 100 and 120 additional beds for students. In addition, there is available land between the McGregor/Anderson Residence Halls and Anderson House that could support a new multi-story residence hall with approximately 120 beds









Bi-Lo Property for Cyber Security

In response to inquiries from some stakeholders, part of the scenario planning phase of this project included a study of the presently vacant, former Bi-Lo Grocery Store property located at the end of Vance Avenue along US HWY 9. The location of this property in close proximity to the Black Mountain Campus and along the route between the two campuses makes this study relevant to the master planning process. In researching the viability of this property, it was discovered that it is unlikely that the property would be available for purchase by the College. This would put the College in the position of investing resources into renovating the property for the College's use without gaining a long-term asset for the College, either for use as the cyber security center or other College programming. Additionally, when discussed, stakeholders and the design team expressed concerns about adding a third campus with additional challenges of building cohesiveness between campuses. The team determined it was not a viable long term option for the College.





06 Preliminary Recommendations

- Black Mountain College Option A
- Black Mountain College Option B
- Black Mountain College Option C
- Montreat Campus

AND A TANK

PRELIMINARY RECOMMENDATIONS

Several viable concepts were developed from our internal design charrette for consideration by the College. These concepts are diagrammatically presented without further analysis of quantities of parking, beds, classrooms, etc. That level of detail is layered once a concept or combination of concepts is selected to develop further.

The varying options were more limitless on the Black Mountain Campus, and we consolidated our ideas into three concepts - A, B, and C for presentation to the President's Cabinet and Board of Trustees. The main differences between concepts boiled down to campus main entry, building placement, and early infrastructure investment.

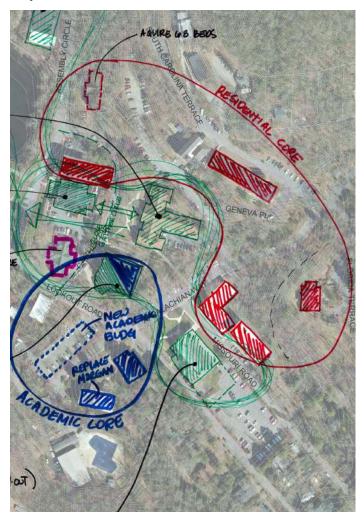
As shown in the accompanying graphic, each concept's approach to infrastructure cost versus Cyber Security Center cost varied based on how far the future building was located from the campus entry. There was discussion on the Cyber Security Center acting as a catalyst for development on this campus. With a sizable investment into the campus infrastructure as part of the Cyber Security Center project, future housing, athletics, and academic buildings would benefit from the forethought and infrastructure built with the Cyber Security Center. With the funding in place for the Cyber Security Center, this strategy to jump start future development was part of the reason Concept B was chosen to further develop.

In addition to the infrastructure investment, the Cyber Security Center's prominence to the public was discussed. With the opportunity to be a forward face for the College along Interstate 40 with thousands of travelers per day, the Cyber Security Center could help strengthen the identity and brand of Montreat College. Ultimately, a location of a knoll adjacent to I-40 was chosen to enhance the building's, and therefore College's, outward visibility.

The Montreat Campus, conversely, lended itself to a singular, logical path forward. A diagram of the three major cores for the campus – residential, academic, and student – identified zones for each major function that were organically realized, but logical in placement.

Once the kitchen location at the heart of campus was discussed as being a constraint to growth, the team identified an alternative location for food service in Bell Library and library function in Belk. Howerton can become the central student life center. With the repurposing of several buildings for major campus uses, their function could be significantly improved.

Preliminary recommendations are presented to imagine the viable future campus possibilities. The concepts generate healthy discussion among stakeholders and challenge future outcomes. Many times a hybrid or combination concept is chosen to develop further. For the Black Mountain Campus, Concept B was chosen for the Cyber Security Center's location. The Montreat Campus concept was accepted to be developed more fully.



COMMON ELEMENTS BETWEEN THE THREE CONCEPTS

Each concept includes a new primary entrance to the Black Mountain Campus off of Blue Ridge Road. This location removes College-affiliated traffic from the residential neighborhood east of the campus and improves accessibility to the campus from both the Town of Black Mountain and the planned NCDOT Interstate Interchange. A new road is created to connect the new entrance with the campus core.

All of the concepts include the new Cyber Security Center and an additional academic building, residence halls, field house, practice field and baseball field. The new academic and residential buildings allow expansion of the student population beyond what is feasible with the existing facilities at the Montreat Campus. The new field house and baseball field allow all collegiate sports to be consolidated at the Black Mountain Campus. In all of the concepts, the new field house is located to the north of the softball field, central to all athletic activities. This allows the McAlister Gymnasium in Montreat to be repurposed as a fitness center that also serves non-athlete students. In addition, the baseball field at Montreat can be redeveloped into new student housing, a purpose better suited for the residential neighborhood context.

Each of the concepts preserves the Manor House and Manor House Garden, as well as Abbott Hall and the Athletics office building. Pulliam Stadium and the softball field are also preserved in their existing locations. All of the concepts maintain the campus entrances off of Vance Avenue as secondary shuttle and/or event entrances or emergency only exits. Each concept includes an option to add an additional entrance/exit at the location of the existing right of way onto US-70/ West State Street.

All of the concepts require extensive earthwork on the hill west of Pulliam Stadium to create a developable area. Earth removed from this location can be utilized as fill for the area north of Tomahawk Branch Creek to reduce the risk of flooding and expand the buildable land area. A vehicular and pedestrian crossing of Tomahawk Branch Creek shown on the following pages.



BLACK MOUNTAIN CAMPUS CONCEPT PLAN A

In this concept, the new Cyber Security Center and an additional academic building are located on the north side of the campus near the new potential entrance at the right of way onto US-70. The buildings are situated to form a "quad" greenspace between them, with parking on either side. Round-a-bouts ease the flow of traffic. The concept has four new residence halls along Tomahawk Branch Creek, in an arrangement that creates a shared greenspace to the north of the buildings and harnesses views of the creek to the south. Parking for the residences is north of the greenspace and is accessible from the primary entrance road.



1. ACADEMIC BUILDING 2. RESIDENCE HALL (3 STORES, 180 BEDS, DINING FACILITY IN FIRST FLOOR OF ONE BUILDING) 3. FIELD HOUSE / GYMNASIUM, FOOD SERVICE

- 4. QUAD
- 5. EXISTING ABBOTT HALL
- 6. MANOR HOUSE WITH ARRIVAL AREA AND PARKING

- 7. NEW BASEBALL FIELD
- 8. PRIMARY CAMPUS ENTRANCE
- 9. SECONDARY ENTRANCE
- 10. SHUTTLE EVENT AND EMERGENCY EXIT
- 11. ATHLETICS OFFICE
- 12. HALF SIZE PRACTICE SPORTS FIELD
- 13. PARKING

The new baseball field is located at the east side of the campus, near the residential neighborhoods off of Vance Avenue. This location has minimal slopes, requiring less site grading than in other locations of this campus. It also has the advantage of having several existing entrance/exits nearby, which would ease traffic congestion around baseball games A vegetated buffer would remain between the field and the neighborhood. Parking is added between the baseball field and the existing softball field, which is also shared by the new field house.

The new practice field is located to the west of Pulliam Stadium, with adjacent parking to serve the stadium. This location has the advantage of keeping soccer practices consolidated into one area and allowing the practice field to be accessible for warm ups during soccer games. The area to the west of this parking lot can be utilized for future development and expansion.



- 14. GREEN SPACE
- **15. EXISTING PULLIUM STADIUM**
- 16. EXISTING ROXY HINES MEMORIAL SOFTBALL FIELD
- **17. SWANANNOA RIVER**
- 18. PRIMARY VEHICULAR ACCESS ROUTE
- 19. SECONDARY VEHICULAR ACCESS ROUTE
- 20. PEDESTRIAN WALKWAY TRAIL

- 21. RAILROAD RIGHT OF WAY
- 22. 100' ZONING BUFFER
- 23. TOMAHAWK BRANCH CREEK
- 24. REGIONAL MULTI-MODAL GREENWAY
- 25. RESTORED MANOR HOUSE GARDEN
- 26. PLANNED INTERSTATE INTERCHANGE
- 27. BLACK MOUNTAIN MUNICIPAL WELL
- 28. FUTURE PARKING OR DEVELOPMENT

BLACK MOUNTAIN CAMPUS CONCEPT PLAN B

This concept includes the new Cyber Security Center and two additional new academic buildings placed near the highest point on the property, just north of I-40, where they would be visible from the Interstate. The three buildings are arranged to form a "quad" or greenspace between them, with parking for all three buildings to the east that would be shared with Pulliam Stadium. Like Concept A, this concept has four new residential buildings along Tomahawk Branch Creek, in an arrangement that creates a shared greenspace to the north of the buildings and harnesses views of the creek to the south. Parking for the residences is north of the greenspace and is accessible from the primary entrance road. This concept places the new baseball field to the east of the residences near the new campus entrance off of US-70. The new practice field is located in the east section of campus adjacent to the Vance Avenue neighborhood. New parking is added between the practice field, softball field and field house, as well as near the baseball field.



1. ACADEMIC BUILDING 2. RESIDENCE HALL (3 STORES, 180 BEDS, DINING FACILITY IN FIRST FLOOR OF ONE BUILDING) 3. FIELD HOUSE / GYMNASIUM, FOOD SERVICE

- 4. QUAD
- 5. EXISTING ABBOTT HALL
- 6. MANOR HOUSE WITH ARRIVAL AREA AND PARKING

- 7. NEW BASEBALL FIELD
- 8. PRIMARY CAMPUS ENTRANCE
- 9. SECONDARY ENTRANCE
- 10. SHUTTLE EVENT AND EMERGENCY EXIT
- 11. ATHLETICS OFFICE
- 12. HALF SIZE PRACTICE SPORTS FIELD
- 13. PARKING

This option places the new academic buildings in the farthest location from the new primary entrance off of Blue Ridge Road. If a new academic building is the first project to be completed, a large portion of the new campus infrastructure cost (including road and utility construction) would be required in the first phase of development. Future phases of development would be easier to accomplish, as the infrastructure will largely be in place.



- 14. GREEN SPACE
- 15. EXISTING PULLIUM STADIUM
- 16. EXISTING ROXY HINES MEMORIAL SOFTBALL FIELD
- 17. SWANANNOA RIVER
- **18. PRIMARY VEHICULAR ACCESS ROUTE**
- **19. SECONDARY VEHICULAR ACCESS ROUTE**
- 20. PEDESTRIAN WALKWAY TRAIL

- 21. RAILROAD RIGHT OF WAY
- 22. 100' ZONING BUFFER
- 23. TOMAHAWK BRANCH CREEK
- 24. REGIONAL MULTI-MODAL GREENWAY
- 25. RESTORED MANOR HOUSE GARDEN
- 26. PLANNED INTERSTATE INTERCHANGE
- 27. BLACK MOUNTAIN MUNICIPAL WELL
- 28. FUTURE PARKING OR DEVELOPMENT

BLACK MOUNTAIN CAMPUS CONCEPT PLAN C

In this concept, the new Cyber Security Center and two additional new academic buildings are placed north of Tomahawk Branch Creek. The buildings are arranged to form a "quad" with parking location to the east and west. This location places the academic buildings closest to the primary entrance, making them accessible without needing to drive through the rest of the campus. This has the disadvantage of making later development phases more expensive and harder to accomplish. Concept C places three new residence halls northwest of the Manor House. Two buildings are on the north side of Tomahawk Branch Creek and one is to the south. All of the buildings would have views of the creek. This arrangement has the disadvantage of not having a shared greenspace. It also would require a second crossing of Tomahawk Branch Creek. A large parking lot is located to the north of the residential buildings, with two smaller lots to the west and northeast.



1. ACADEMIC BUILDING 2. RESIDENCE HALL (3 STORES, 180 BEDS, DINING FACILITY IN FIRST FLOOR OF ONE BUILDING) 3. FIELD HOUSE / GYMNASIUM, FOOD SERVICE

- 1. QUAD
- 5. EXISTING ABBOTT HALL
- 6. MANOR HOUSE WITH ARRIVAL AREA AND PARKING

- 7. NEW BASEBALL FIELD
- 8. PRIMARY CAMPUS ENTRANCE
- 9. SECONDARY ENTRANCE
- 10. SHUTTLE EVENT AND EMERGENCY EXIT
- 11. ATHLETICS OFFICE
- 12. HALF SIZE PRACTICE SPORTS FIELD
- 13. PARKING

Like Concept A, this concept places the new baseball field at the far east side of campus near the Vance Avenue entrances. It is also similar in that they both have a practice field to the west of Pulliam Stadium with parking to the west of the practice field. This location has the advantage of keeping sports practices consolidated and allowing the practice field to be accessible for warm ups during soccer games. The area to the west of this parking lot can be utilized for future development and expansion.



- 14. GREEN SPACE
- 15. EXISTING PULLIUM STADIUM
- 16. EXISTING ROXY HINES MEMORIAL SOFTBALL FIELD
- **17. SWANANNOA RIVER**
- **18. PRIMARY VEHICULAR ACCESS ROUTE**
- **19. SECONDARY VEHICULAR ACCESS ROUTE**
- 20. PEDESTRIAN WALKWAY TRAIL

- 21. RAILROAD RIGHT OF WAY
- 22. 100' ZONING BUFFER
- 23. TOMAHAWK BRANCH CREEK
- 24. REGIONAL MULTI-MODAL GREENWAY
- 25. RESTORED MANOR HOUSE GARDEN
- 26. PLANNED INTERSTATE INTERCHANGE
- 27. BLACK MOUNTAIN MUNICIPAL WELL
- 28. FUTURE PARKING OR DEVELOPMENT

MONTREAT CAMPUS CONCEPT PLAN

- 1. STUDENT LIFE CENTER
 - SOCIAL GATHERING SPACES
 - SOCIAL DINING (COFFEE HOUSE, SNACK SHOP, ETC.)

2. SPIRITUAL CENTER

- CHAPEL
- MUSIC EDUCATION SPACE
- SPIRITUAL GATHERING SPACES
- 3. ADACEMIC CENTER
 - MEDIA CENTER
 - COLLABORATION AND STUDY AREAS
 - FACULTY OFFICE SPACE
 - SPACE FOR STUDENT GOVERNMENT AND CLUBS
- 4. <u>DINING CENTER</u> (RENOVATED BELL LIBRARY)
 - DINING HALL IN THE STACK AREA
 - NEW ADDITION TO HOUSE KITCHEN AND EQUIPMENT
 - CONFERENCE SPACE
 - PRESIDENT'S DINING ROOM
- 5. <u>WELLNESS CENTER</u> (RENOVATED MCALLISTER GYMNASIUM)
 - FITNESS AND WEIGHT ROOMS
 - INTERMURAL SPORTS
 - SMOOTHIE BAR/ SOCIAL SPACE
- 6. CAMPUS CORE OUTDOOR GATHERING CENTER
 - PEDESTRIAN ORIENTED "FRONT DOOR" OF THE COLLEGE
 - LIMITED VEHICULAR ACCESS
- 7. OUTDOOR GATHERING SPACES
- 8. NEW ACADEMIC BUILDING
- 9. RENOVATED MORGAN HALL
- 10. PEDESTRIAN CIRCULATION
- 11. NEW HOUSING (BALLFIELD MOVED TO BLACK MOUNTAIN CAMPUS)
- 12. 18' WIDE VEHICULAR ACCESS ROAD (THROUGH MRA PROPERTY)
- 13. WINSBOROUGH HOUSE: CONTINUE CONVERSATION WITH MRA ABOUT POTENTIAL FOR USE AS STUDENT HOUSING
- 14. PARKING (UTILIZE REMOTE PARKING AT BLACK MOUNTAIN CAMPUS)
- 15. VEHICULAR CIRCULATION





ASSA 784974

07 Framework for Growth – Final Master Plan Recommendations

- Black Mountain College Preliminary Campus Master
 Plan
- Phasing & Implementation Plan residence hall renovations, Cyber center, building reuse sequencing

MONTREAT CAMPUS

PHASE 1:

At the Montreat Campus, advanced planning for major renovations of Howerton, Anderson, Davis, and McGregor Residence Halls is underway. Preliminary building code analysis, bed counts and deferred maintenance needs have been reported and project budgets are being estimated to support project fundraising efforts.

At the Montreat Campus, the primary master plan recommendations include the renovation and adaptive reuse of existing buildings. The precipitating goal for reimaging these buildings to new uses is the goal of expanding the capacity of dining facility services on this campus as enrollment grows. In this proposed sequence of building transitions, Montreat College can adapt these buildings to their new use, with minimal impact of services to students and faculty.

- Belk Campus Center becomes the new campus library
- Renovate Howerton, Davis, McGregor, & Anderson Residence Halls

PHASE 2:

Once the library has been relocated to Belk, Bell can be transformed into a new dining facility. An addition on the Southeast side can be an adequately sized kitchen while the interior can be renovated into dining space with a variety of seating options.

A series of renovations follows the renovation of Belk to improve the campus functionality and efficiency.

- · Bell Library becomes the new dining facility
- Howerton Dining Hall becomes the new student center
- McAlister Gym becomes the new campus wellness center; contingent on new Gymnasium construction at the Black Mountain College.

PHASE 3:

As enrollment continues to grow, and future phases of the Black Mountain Campuses are implemented, Montreat College should address the academic needs of the Montreat Campus by renovating or replacing Morgan Hall. This focus on academic needs will be in response to continued enrollment growth, increased enrollment selectivity and careful study and planning for the specific needs and programs that will be situated long term at the Montreat Campus.

The last priority on the Montreat Campus is the future redevelopment of the existing baseball field site. As housing is one focus of this master plan and the greatest need for the College in accommodating a target enrollment of 1,000 – 1,200 students, additional housing scenarios have been included in this master plan document to illustrate the potential for future development of the baseball field site.

• Construct new town home or cottage style residences on the site



MONTREAT COLLEGE MASTER PLANS

BLACK MOUNTAIN

PHASE 1:

At the Black Mountain Campus, design and construction of the new Cyber Security Center will be a catalyst for future phases of development. As part of the construction of the Cyber building, the main entrance and primary road that organizes the site will be constructed including parking adjacent to the Cyber building. Additional parking could be included in this phase to address parking challenges at the Montreat Campus, including long-term parking for students. This will be the first new development to begin at the Black Mountain College.

- Construct new entry road and utility infrastructure to connect to and support the Cyber Security Center
- Construct the Cyber Security Center
- Relocate existing climbing wall and low ropes course adjacent to existing high ropes course

PHASE 2:

At the Black Mountain Campus, the second phase of master plan implementation focuses on the development of the north portion of the site for student housing. Incrementally, each of the new residence halls can be constructed at a pace that matches growth in student enrollment, incorporating a new dining facility for this campus as the number of on-campus residents can support the financial operations of food services. Additional parking, not addressed in the early development of the campus can be incorporated into the campus housing phase.

- Construct new residences halls and adjacent parking
- Establish the Tomahawk Branch Trail

PHASE 3:

Phase 3 at the Black Mountain College is largely the relocation of the remaining athletic programs located at the Montreat Campus. A new basketball gym and field house would be constructed along with the relocation of the baseball field and softball field and construction

of tennis courts and a practice field. A location for an additional academic building has been identified and could be built in conjunction with the renovation or replacement of Morgan Hall on the Montreat Campus, allowing the College to plan for academic offerings and needs collectively on both campuses.

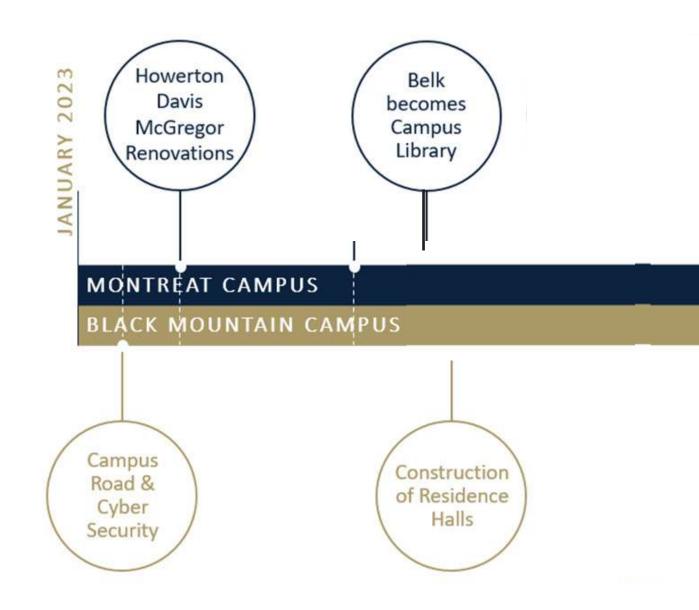
- · Construct new field house and adjacent parking
- Construct new baseball field, softball field and practice field
- Construct new tennis courts
- Construct additional new academic building

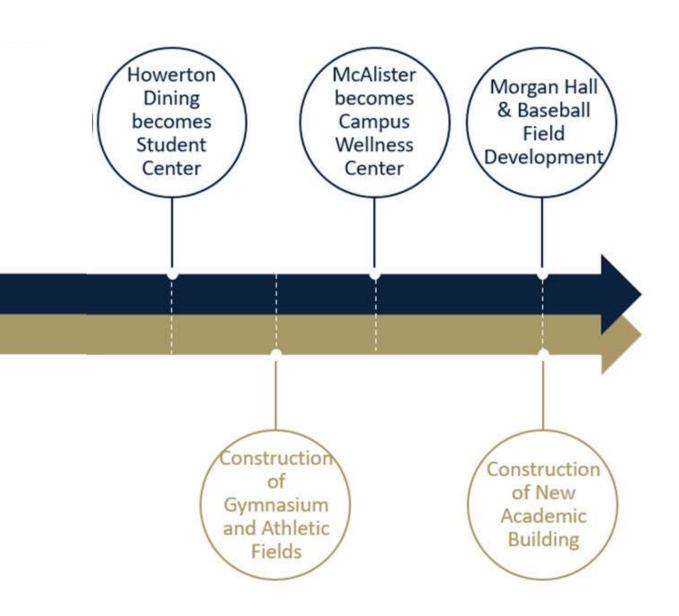




PHASING SUMMARY

The master plan recommendations are designed to be implemented incrementally as enrollment increases at Montreat College. This allows the College time to anticipate future needs and to stay flexible as the course of the College changes over time. With a few notable exceptions like the sequencing of new gymnasium construction at Black Mountain College before the conversion of McAlister Gym into a student wellness center and the relocation of the baseball field from Montreat to Black Mountain, much of the implementation sequence back and forth between campuses can be rearranged over time as needs change.





BLACK MOUNTAIN CAMPUS PRELIMINARY CAMPUS MASTER PLANS

Once given direction to further develop Concept B from the preliminary recommendations phase, the master planning team pushed the concept along with more detail and thought. Student residence halls were analyzed and compared with previous LS3P projects to ensure the size and proportions were appropriate to align with bed number objectives from the College. Roads and parking were advanced to gather lengths and parking counts. The addition of six tennis courts was made based on feedback from athletics staff. A location for the existing climbing wall and low ropes course was identified just north of the Manor House. The baseball field was sized and located to eliminate the need to demolish the athletic offices in the small building to its north.

Option A was developed to show an alternate location for the field house/Gymnasium along Interstate 40. Although not as prominent as the Cyber Security Center up on the knoll, the gym building would have been visible to those traveling on I-40. This plan kept the softball field in its current location.

Option B, similar to the original Concept B from preliminary recommendations phase, located the field house/Gymnasium more central to all the sports fields and courts. This location enabled more parking to be located both at the field house and at the Academic buildings in case simultaneous use became an issue. This location requires the softball field to be relocated from its current location to a home beside the practice field. Another advantage of the field house in Option B is that people traveling south on the main campus road would see the field house on their approach to the Academic and athletics area of the campus. The building would act like a terminus or anchor for the road coming up the hill after crossing Tomahawk Branch. This strategy is used for wayfinding and identity building.

All other elements remained the same in the two preliminary campus master plans. The team was excited to present the two slightly different plans to the President and his Cabinet for feedback.

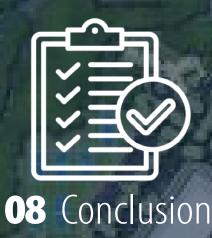






MONTREAT COLLEGE MASTER PLANS





Martin State

- Next Steps: vesting plan w/ Black Mountain , site design (road infrastructure) residence hall renovations, Cyber center design
- 1st priorities: residence hall renovations, Cyber center
- Black Mountain College Final Campus Master Plan
- Montreat Final Campus Master Plan

CONCLUSION

The Montreat Campus and the Black Mountain Campus Master Plans are tools to help Montreat College shape its future growth. The plans are intended to guide the College to meet its mission and its needs as they inevitably morph over the years to come. As enrollment and program demands shift over time, these plans provide the appropriate flexibility to address changes while still supporting Montreat College's guiding principles. As with all master plans, the strength of these plans lies in revisiting and updating them every 5-10 years depending on the growth and change the institution may experience.

With the guiding principles as a framework, the master plans serve as a tool to guide future development on the campuses. The plan acknowledges the need for an additional 340-640 beds and the goal for the College to own its residence halls. By prioritizing initial investments on the renovations of existing student housing and the Cyber Security Center, the College is kick-starting development at the Black Mountain Campus and ensuring positive student experiences at the Montreat Campus.

An important next step will be to vest the master plans with the Towns of Montreat and Black Mountain.

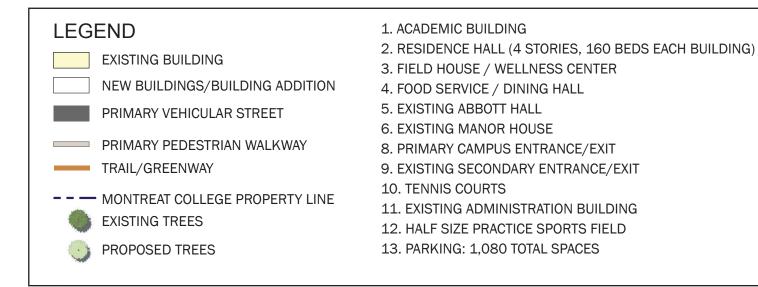
The Town of Black Mountain is in the process of updating its town master plan and it is this team's hope that the College's Plan could dovetail right into their process. In addition to this due diligence, design for the Cyber Security Center and its site and infrastructure could coincide to allow for efficiencies of resources, namely time and money. The entrance road, bridges utilities and associated grading will be an expensive project, but the investment will enable and support the Black Mountain Campus' development for many future projects.

With the support of so many College stakeholders and friends, it is impossible to recognize everyone who contributed to our planning process. A special thank you is needed for our core team of administrators, without whom we would still be touring the Manor House.

Dr. Paul Maurer, John Beaghan, and Tommy Hendrix-Your organization of meetings, readiness with information, and general helpfulness has made this process as streamlined as we have experienced. A giant thank you! Our team wishes the College great success as you grow, expand and serve.



IMAGE SOURCE: MONTREAT College STRATEGIC PLAN

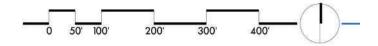




- 14. EXISTING HIGH ROPES COURSE & RELOCATION OF CLIMBING WALL
- 15. EXISTING PULLIAM STADIUM WITH NEW BLEACHERS
- 16. NEW SOFTBALL FIELDS
- 17. SWANNANOA RIVER
- **18. STORMWATER MANAGEMENT**
- 19. CULVERT OVER TOMAHAWK BRANCH CREEK
- 20. FUTURE NCDOT INTERSTATE INTERCHANGE
- 21. TOMAHAWK BRANCH LOOP TRAIL
- 22. EXISTING TOWN OF BLACK MOUNTAIN MUNICIPAL WELL (EASEMENT)
- 23. EXISTING PEDESTRIAN WALKWAY & NON-MOTORIZED BICYCLE PATHWAY (EASEMENT)
- 24. RESTORED MANOR HOUSE GARDEN
- 25. 2-ACRE PARCEL FOR FUTURE DEVELOPMENT
- 26. TOWN OF BLACK MOUNTAIN VETERAN'S PARK



LEGEND



EXISTING BUILDING

NEW BUILDING/ BUILDING ADDITION

- PRIMARY VEHICULAR STREET
- PRIMARY PEDESTRIAN WALKWAY
- --- MONTREAT COLLEGE PARCEL PROPERTY LINE
- – PEDESTRIAN CORRIDOR

EXISTING TREES

PROPOSED TREES

- 1. NEW STUDENT CENTER (EXISTING HOWERTON DINING HALL)
- 2. NEW LIBRARY / ACADEMIC CENTER (EXISTING BELK CAMPUS CENTER)
- 3. NEW DINING HALL (EXISTING BELL LIBRARY) WITH KITCHEN ADDITION
- 4. NEW RESIDENCE HALLS (SITE OF EXISTING NEWELL BASEBALL FIELD)
- 5. NEW RESIDENCE HALL
- 6. NEW ACADEMIC BUILDING
- 7. WELLNESS CENTER (RENOVATED MCALISTER GYMNASIUM)
- 8. SERVICE ROAD ONLY; FUTURE CAMPUS PLAZA
- 9. PRIMARY GREENSPACE/ ENHANCED OUTDOOR GATHERING AREA
- 10. PARKING
- 11. GAITHER HALL & GRAHAM CHAPEL
- 12. MCLEOD HALL
- 13. DAVIS HALL
- 14. CHAPEL OF THE PRODIGAL/ MCGOWAN CENTER
- 15. ANDERSON HALL
- 16. MORGAN HALL
- 17. MCGREGOR HALL
- 18. ANDERSON HOUSE
- 19. HOWERTON RESIDENCE HALL
- 20. LAKE SUSAN

MONTREAT CAMPUS FINAL MASTER PLAN RENDERING LS3P CDC sitework HII 10¹ m



09 Appendix

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- Classroom Utilization Tables: Raw Data
- Classroom Utilization Presentation
- Trustee Presentation: Preliminary Options
- Stakeholder Engagement Meeting Notes
- 2022-2023 Athletic Rosters
- Building Info spreadsheet
- I-40 Preliminary Overall Drawing
- Montreat College Strategic Plan 2019-2023
- Sketches from Internal Charrette
- Parking Master List

