



THE UNIVERSITY OF
TENNESSEE
MARTIN

CAMPUS MASTER PLAN 2021 - 2031

AUGUST 2022

UNIVERSITY OF TENNESSEE AT MARTIN **2021 - 2031 CAMPUS MASTER PLAN**

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COME FLY WITH US!

The University of Tennessee at Martin is a regional campus of the University of Tennessee System where students experience high-quality academic programs, excellent facilities, and outstanding faculty members. The University serves students in multiple ways.

- Baccalaureate degrees, majors, concentrations, and options in more than 150 specialized fields.
- Academic majors in natural sciences, social sciences, humanities, education, business administration, engineering, and agriculture.
- Seven graduate degrees in agriculture and natural resources, family and consumer sciences, business administration, strategic communication, education, criminal justice, and sport coaching and performance.
- Hands-on learning experiences through internships and other real-world opportunities.
- Online programs offered through UT Martin Online, including the online Bachelor of Interdisciplinary Studies (BIS) Degree for working adults.
- Regional centers in Jackson, Parsons, Ripley, Selmer, and Somerville, plus dual-enrollment course offerings to Tennessee high school students.
- Leadership development and education through the University's WestStar Leadership Program.
- 58 academic and support buildings, including the new Latimer Engineering and Science Building that opens in the spring of 2023.
- NCAA Division I in both men's and women's athletics and a member of the Ohio Valley Conference.
- The only collegiate rodeo team in Tennessee.

The University of Tennessee at Martin is an incredible place to live, learn, and grow. Through academic excellence, dedication and vision, the University creates a special learning environment for our students. Every day is a great day to be a Skyhawk!

DR. KEITH S. CARVER JR. | **CHANCELLOR**

MASTER PLAN GOALS AND THEMES

The Master Plan aligns with the policy directions set by the University and the changing needs of the students, faculty, and staff in this post-pandemic educational environment. The Strategic Plan is used to guide this Master Plan.

Following The University of Tennessee at Martin's (UTM) Five-Year Strategic Plan for 2018-2023, the Master Plan focused on their core values and five key goals:

Core Values:

- Academic Program Excellence
- Student Experience and Success
- Inclusion
- Advocacy and Service

The Strategic Plan goals include:

Goal I: Prepare graduates to be responsible, informed and engaged citizens in their workplaces and the larger community.

Goal II: Recruit, retain and graduate students prepared for careers, professions and life.

Goal III: Ensure a campus that is open, accessible and welcoming to all.

Goal IV: Promote strategic, sustainable and responsible stewardship of human, financial and capital resources in support of University goals and objectives.

Goal V: Improve the vitality and prosperity of West Tennessee and beyond and increase the visibility of UTM through service and advocacy.

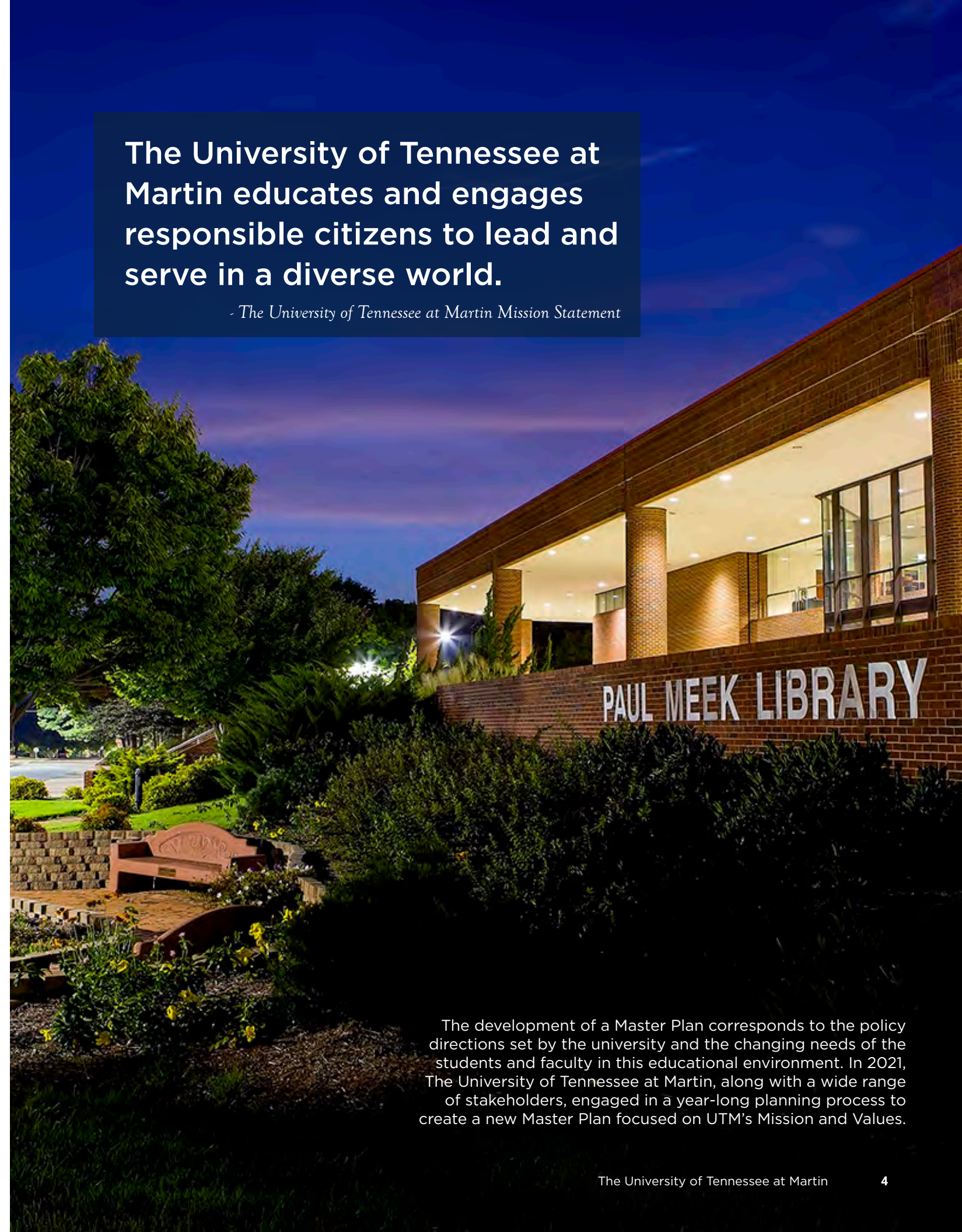
The University of Tennessee at Martin has implemented its Strategic Plan to recruit and retain students who will flourish in the high-quality undergraduate and graduate education programs offered. Recruitment efforts include attracting students from West Tennessee and beyond to encounter the UTM experience, including the vision of an engaged living-learning environment. Construction and renovations are underway to improve the existing facilities.

In addition, the UTM Master Plan serves as a blueprint for rational building expansions and site improvements that preserve and renew existing facilities and reinforce the positive aspects of the campus. The following overarching **goals of the 2010 Master Plan Update remain valid:**

- Define current and future facility needs, including renovations, expansions, and new buildings that enhance the quality of academic programs and support campus community life issues.
- Develop facilities to support UTM's mission of enhancing the educational, cultural, and economic life in the region and serving as a focal point for a range of programs and services.
- Provide an overall impression of quality in all aspects of the campus, allowing UTM to recruit and retain the highest-quality students and faculty.
- Provide a variety of options for housing to attract and maintain students while supporting and promoting a sense of community interaction on campus.

The University of Tennessee at Martin educates and engages responsible citizens to lead and serve in a diverse world.

- The University of Tennessee at Martin Mission Statement



The development of a Master Plan corresponds to the policy directions set by the university and the changing needs of the students and faculty in this educational environment. In 2021, The University of Tennessee at Martin, along with a wide range of stakeholders, engaged in a year-long planning process to create a new Master Plan focused on UTM's Mission and Values.

MASTER PLAN GUIDELINES AND COMPONENTS

The Tennessee Higher Education Commission (THEC) coordinates and supports the efforts of higher education institutions throughout the State of Tennessee. THEC has established guidelines for master planning at the institution level. The guidelines outline each of the components that are required within the plan. Overall, Master Plans should address physical needs in the context of student retention and success, as well as statewide higher education goals and policies. The THEC Guidelines include Space Needs, Enrollment, Facilities Conditions, Site Considerations, Design Guidelines, Land Acquisition, Infrastructure, Student Services, Housing and Dining, Security, Athletics and Recreation, Implementation, and Capital Planning.

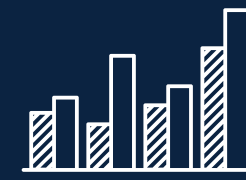
The Master Plan is consistent with UTM's current Strategic and Academic Plans, linking the master plan's identified goals in implementable physical form. In addition, the THEC Guidelines provide organization for the variety of important quantitative and qualitative data collected throughout the analysis, engagement, and concept development portions of the master planning process.

UTM leadership and the planning team integrated the guidelines and components throughout the master planning process. The full report details each component according to THEC requirements.



THEC COMPONENTS

Per the full report, the Executive Summary provides a summary that includes key objectives for the master plan and recommended solutions and this chapter encapsulates the brief history and campus overview of the entire UT Martin campus. Below lists the remaining key THEC components that will be included throughout the remainder of the report.



ENROLLMENT

Projections include a timeline of five to 10 years, supported by demographics and history for consideration in the development of the annual capital budget.



FACILITIES CONDITION

This plan identifies high-level conditions and areas for further evaluation, including recommended actions to maintain and upgrade facilities programs.



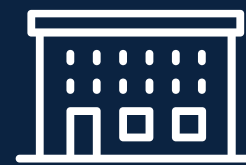
LAND ACQUISITION

UT Martin has not identified needed land acquisitions/disposal to support the future vision of the campus described herein.



INFRASTRUCTURE

General condition and age of the existing infrastructure systems includes comparison between current demand and current capacity with future demand.



HOUSING & DINING

Replacement and reconfiguration of existing housing and dining facilities. Other needs include student centers and related student service facilities.



SECURITY

Consideration for site security, campus access and access to buildings, recreation / athletic fields and related public areas.



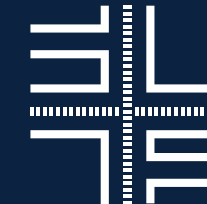
ONGOING CAPITAL IMPROVEMENT PLANS

Near term five year plan including capital outlay, capital maintenance, and major disclosed projects.



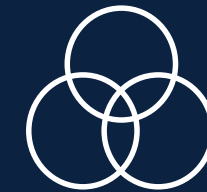
SPACE NEEDS

E&G space inventory and analysis aligns with the THEC Space Guidelines, and includes alternatives with national standards and best practices in determining future space needs.



SITE CONSIDERATIONS

Site plans analyze existing relationships between campus systems and features, including parking, and proposes improvements that address deficiencies.



DESIGN GUIDELINES

Major campus design objectives articulate and address approaches to implementing outcomes through architecture, landscape design, and historic preservation.



STUDENT SERVICES

Considerations for one-stop-shops to support student needs and related items of student interest, including housing, dining and recreation.



ATHLETICS & RECREATION

Improvements to existing athletic, intramural and recreational facilities as well as academic athletic facilities for student wellbeing.



IMPLEMENTATION AND COST

All recommended projects are prioritized and identified per near/mid/long term phasing to support the development of the annual capital budget.

ENROLLMENT PROJECTIONS

This Master Plan projects an increase in on-ground student enrollment of 21.6% between Fall 2021 and Fall 2031 on the Main Campus, driven primarily by new program initiatives. The THEC Master Plan Guidelines require a comparison of current and prior Master Plan enrollment projections, but the 2010 Master Plan Update did not include any projections.

Future enrollment projections were developed based on enrollment data between 2016 and 2021, but without taking 2020 into account due to the effects of the COVID-19 pandemic. Enrollment projections were developed for each department and combined to create the overall total. For departments that experienced growth during the target years, a linear trend was used to project forward. For those departments that experienced a decrease in enrollment, a logarithmic trend line was used to moderate the decline.

Below shows university-wide enrollment (Table 1) as well as the enrollment on the Main Campus (Table 2). For the purposes of enrollment projections and space calculations, only the on-ground enrollment on the Main Campus was considered, but the full enrollment numbers are provided here for context.

Table 1: The University of Tennessee at Martin Total Historical FTE Enrollment

STUDENT ENROLLMENT	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
TOTAL	6,993	6,750	6,541	6,275	6,001	5,667	5,717	5,581	5,645	5,605	5,185

Table 2: Main Campus Historical FTE Enrollment

2016-2019 & 2021 were used to determine enrollment projections

STUDENT ENROLLMENT	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 (1)	2021
ON-GROUND (FTE)	5,719	5,692	5,459	5,182	4,850	4,438	4,420	4,233	4,193	1,562	3,585
ONLINE (FTE)	453	464	497	497	563	615	723	786	828	3,469	1,142
TOTAL (FTE)	6,172	6,155	5,955	5,679	5,414	5,053	5,142	5,019	5,021	5,031	4,727

(1) Fall 2020 is shown here for information purposes only. Because this year was an anomaly due to the pandemic the on ground/online mix is skewed and has been excluded from the enrollment projection trend analysis.

The following table shows enrollment projections by college for the Main Campus. These represent the sum of individual department enrollment projections and reflect the overall combined growth rate of 21.6%. The 21.6% enrollment growth is aspirational on-ground enrollment growth projected and based on proposed programs and demographics trends by department. Assumes approximately 77 FTE, on average, added each year.

Table 3: Summary of Projected Enrollment by College - Main Campus

COLLEGE	CURRENT (2021) ON - GROUND FTE	PROJECTED (2031) ON - GROUND FTE	DIFFERENCE	PERCENT DIFFERENCE
COLLEGE OF AGRICULTURE & APPLIED SCIENCES	598	872	274	45.8%
COLLEGE OF BUSINESS & GLOBAL AFFAIRS	424	486	62	14.6%
COLLEGE OF EDUCATION, HEALTH & BEHAVIORAL SCIENCES	742	724	-18	-2.4%
COLLEGE OF ENGINEERING & NATURAL SCIENCES	862	1,239	377	43.7%
COLLEGE OF HUMANITIES & FINE ARTS	807	893	86	10.6%
GENERAL STUDIES	152	147	-5	-3.29%
TOTALS MAIN CAMPUS	3,585	4,361	776	21.6%

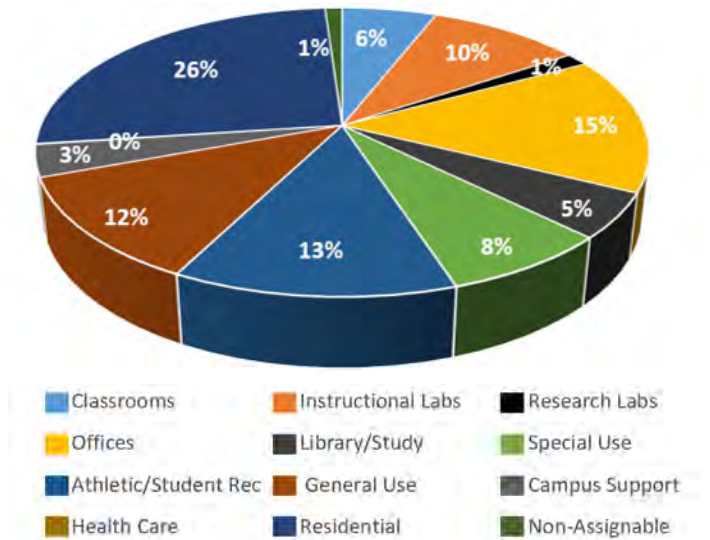
SPACE NEEDS ASSESSMENT

EXISTING SPACE

An existing space inventory of the Main Campus was collected and validated as part of the planning process and totals 1.59 million assignable square feet. Room use, seating capacity, and departmental assignment were verified during the data collection phase.

Table 4: Summary of Existing Space

SPACE TYPE	ASF	% of ASF
CLASSROOMS	94,911	6%
INSTRUCTIONAL LABS	154,495	10%
RESEARCH LABS	22,706	1%
OFFICES	245,220	15%
LIBRARY / STUDY	80,380	5%
SPECIAL USE	121,432	8%
ATHLETIC / STUDENT REC.	201,555	13%
GENERAL USE	187,858	12%
CAMPUS SUPPORT	57,172	4%
HEALTH CARE	1,132	0%
RESIDENTIAL	415,388	26%
NON-ASSIGNABLE	17,208	1%
EXISTING SPACE	1,599,457	100%



PROJECTED SPACE NEEDS

The following table summarizes current (2021) and future (2031) needs on the Main Campus by space type according to the THEC Space Guidelines and an alternative space model developed for the Master Plan for comparative results. Deficits (shown in red numbers) indicate a need for additional space.

Table 5: Projected Space Needs for E&G Space - THEC and Alternative Model Combined

SPACE CATEGORY	EQUIV FICM	EXISTING E&G ASSIGNABLE SQUARE FEET (ASF)	THEC SPACE NEEDS MODEL - MAIN CAMPUS (ASF)				ALTERNATIVE MODEL NEED ANALYSIS - MAIN CAMPUS (ASF)	
			THEC MODEL CURRENT NEED	CURRENT SURPLUS (DEFICIT)	THEC MODEL PROJECTED NEED	10-YEAR PROJECTED SURPLUS (DEFICIT)	ALT MODEL 10-YEAR PROJECTED NEED	ALT MODEL 10-YEAR PROJECTED SURPLUS (DEFICIT)
CLASSROOMS	100	94,911	51,414	43,497	71,934	22,977	80,189	14,722
LAB/STUDIOS	210, 215	125,453	85,425	40,028	117,344	8,109	149,810	(24,357)
OPEN LABS	220, 225	29,042	17,925	11,117	22,825	6,217	33,309	(4,267)
RESEARCH	250, 255	22,706	26,378	(3,672)	46,720	(24,014)	100,234	(77,528)
OFFICES	300	236,036	132,164	103,872	139,098	96,938	178,626	57,410
LIBRARY	400	80,380	56,018	24,362	55,537	24,843	82,409	(2,029)
PHYSICAL ED.	520, 523, 525	157,316	80,235	77,081	115,971	41,345	169,316	(12,000)
TOTAL		745,844	449,559	296,285	569,429	176,415	793,893	(48,049)

- All numbers are shown in assignable square feet

- Existing E&G space calculation includes new Latimer Building, update to Hall-Moody and reassignment Clement Hall and Johnson EPS Building

- Projected need incorporates program needs from the following projects: TEST Hub, Fine Arts Building addition, new College of Business Administration Building, Meat Processing Facility, and Beef Cattle Teaching and Demonstration Facility

- Gap analysis does not include ASF lost due to upgrades of existing buildings

PROJECTED SPACE NEEDS: ADDITIONAL SPACE TYPES

The following table summarizes current (2021) and future (2031) needs on the Main Campus for additional space types not included in the THEC Space Guidelines, assuming that the priority projects listed below are implemented. These numbers are based on the consultant's space model. Deficits (shown in red numbers) indicate a need for additional space.

Table 6: Additional Space Needs Analysis: Main Campus

SPACE CATEGORY	EQUIV FICM	EXISTING E&G ASSIGNABLE SQUARE FEET (ASF)	CURRENT NEED - MAIN CAMPUS (ASF)		PROJECTED NET NEED - MAIN CAMPUS (ASF)	
			CURRENT NEED	CURRENT SURPLUS (DEFICIT)	10-YEAR PROJECTED NEED	10-YEAR PROJECTED SURPLUS (DEFICIT)
SPECIAL USE SPACE	500	128,619	131,464	(2,845)	150,579	(21,960)
ATHLETIC SPACE	520	201,555	201,555	0	353,136	(151,581)
OTHER GENERAL USE SPACE	600	7,297	7,297	0	7,297	0
ASSEMBLY SPACE	610	86,888	73,256	13,632	103,599	(16,711)
EXHIBITION SPACE	620	4,517	3,494	1,023	4,252	265
FOOD/DINING SPACE	630	27,979	27,841	138	31,741	(3,762)
LOUNGE SPACE	650	13,175	10,766	2,409	16,500	(3,325)
MERCHANDISING SPACE	660	10,653	9,730	923	11,500	(847)
RECREATION SPACE	670	11,827	11,827	0	14,327	(2,500)
MEETING SPACE	680	25,522	8,708	16,814	23,191	2,331
SUPPORT SPACE	700	59,169	68,814	(9,645)	86,587	(27,418)
HEALTH CARE SPACE	800	1,132	1,397	(265)	3,500	(2,368)
RESIDENTIAL SPACE	900	415,388	415,388	0	459,111	(43,723)
TOTAL		836,405	814,221	22,184	1,265,320	(271,599)

*All numbers are shown in assignable square feet

Projected need incorporates program needs from the following projects: TEST Hub, Fine Arts Building addition, new College of Business Administration Building, Meat Processing Facility, and Beef Cattle Teaching and Demonstration Facility

Gap analysis does not include ASF lost due to upgrades of existing buildings

PRIORITY PROJECTS INCLUDED IN SPACE PROJECTIONS

Projected future space needs calculations assume that the following priority projects have been implemented by 2031.

- FineArts Addition
- Business Administration Building
- Tennessee Entrepreneurship, Science, and Technology (TEST) Hub
- Meat Processing Facility
- Beef Cattle Teaching and Demonstration Facility
- Proposed housing demolition

STUDENT LIFE ASSESSMENT

As part of the Master Planning process, there was a planning and needs assessment for student life facilities that included four focus areas: student housing, dining, student centers, and student recreation and wellness facilities. The process included the review of existing facilities and operations, strategic visioning with the University's key stakeholders, student focus groups, needs assessment / programming, and facility concept development.

STUDENT LIFE SPACE NEEDS

The following specific space needs were identified related to student life based on conversations with the University.

- Boling University Center addition and dining expansion with North and South courtyard updates
- Phased Student Housing replacements and renovations
- Student Recreation Center's pool addition
- Kathleen and Tom Elam Center renovation (with indoor turf field addition)
- New Student Health & Counseling Center
- Pacer Pond Pavilion
- Outdoor Basketball Courts South of Elam Center
- Intramural and Club Sports Fields near Student Housing
- Gateway opportunity with Outdoor Amphitheater including seating and programmable space at the current Grove Apartments site



10-YEAR VISION PLAN

FUTURE CAMPUS VISION

The Master Plan development was based on listening to the needs of campus stakeholders, and an analysis of campus space needs and physical site conditions, with the intent to address each of the planning principles and planning objectives.

A major driver of the plan is the further development of **a campus where students and staff feel supported and inspired to be their best**. To achieve this, organization of the site plan is designed to support success within the themes developed during workshops:

- Connectivity and Accessibility
- Community
- Academic Success
- Facilities and Infrastructure
- Student Life and Amenities
- Open Space, Athletics, and Recreation

VISION DEVELOPMENT

The Master Plan reflects the total assumed need for a full build-out of which includes the Tennessee Entrepreneurship, Science, and Technology (TEST) Hub, College of Business and Global Affairs replacement facility, and the Fine Arts Addition. The Master Plan divides the campus into three areas: North Campus, University Street / UTM Gateway, and South Campus.

The following pages outline proposed categories of projects that include facilities, open space and circulation.

BIG IDEAS THEMES



Connectivity + Accessibility

Integrate campus edges with the campus core to create a cohesive, well-connected pedestrian-friendly campus environment.



Community

Create a sense of place for the campus and enhance the town and gown relationship with the surrounding community.



Academic Success

Align the Master Plan with the Strategic Plan and Academic Plan / Integrate past plans and stakeholder engagement to deliver live/learn/work experiences as an anchor institution.



Facilities + Infrastructure

Utilize and maintain current facilities on campus to their fullest capability and update infrastructure to sustain growth for years to come.



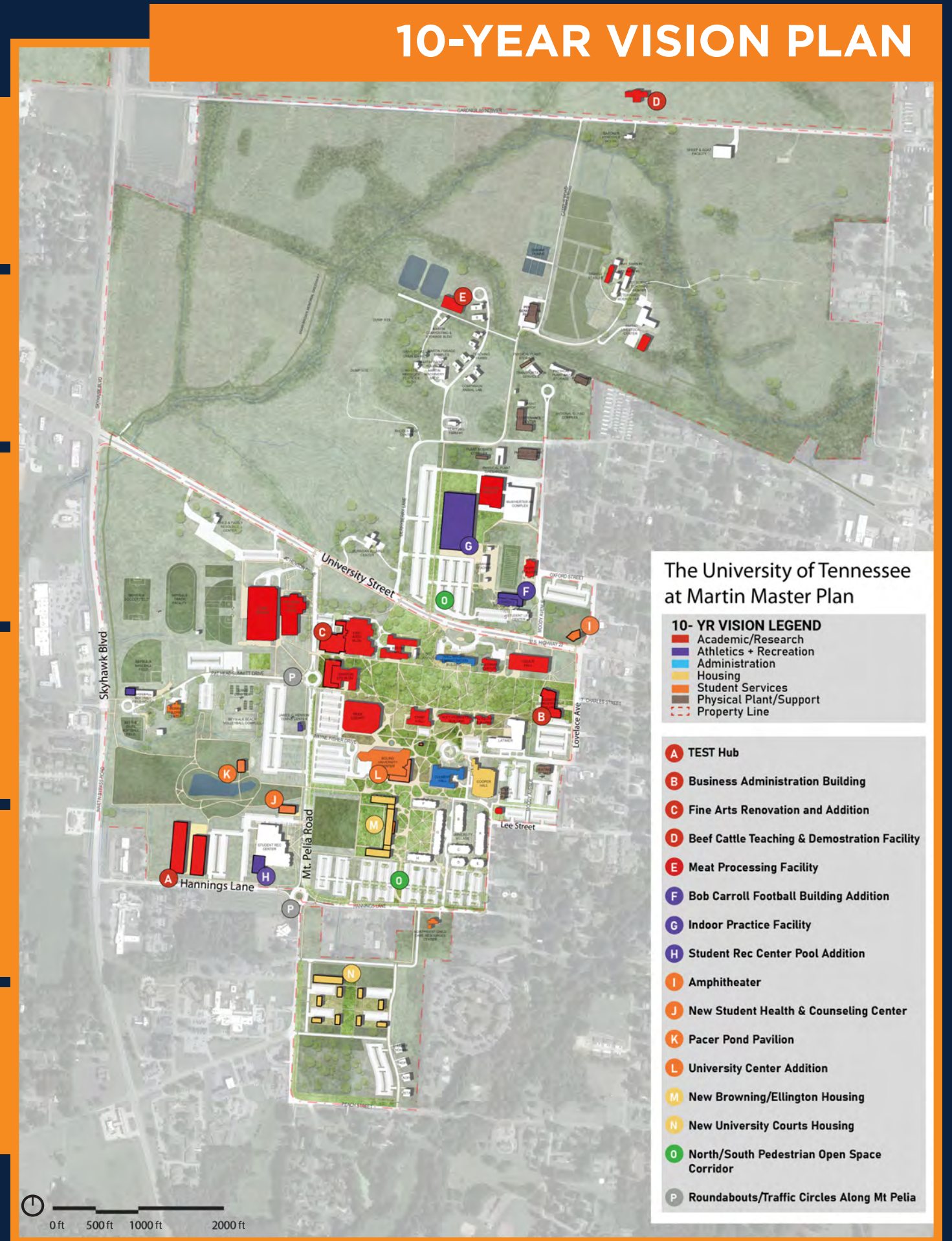
Student Life and Amenities

Create a vibrant campus life and campus community through student-focused activities, programs, and amenities.



Open Space, Athletics, and Recreation

Integrate campus core, the Quad, and green spaces, expand pedestrian realm and connect student life and activities, cohesion of campus pathways and connectors.



The University of Tennessee at Martin Master Plan

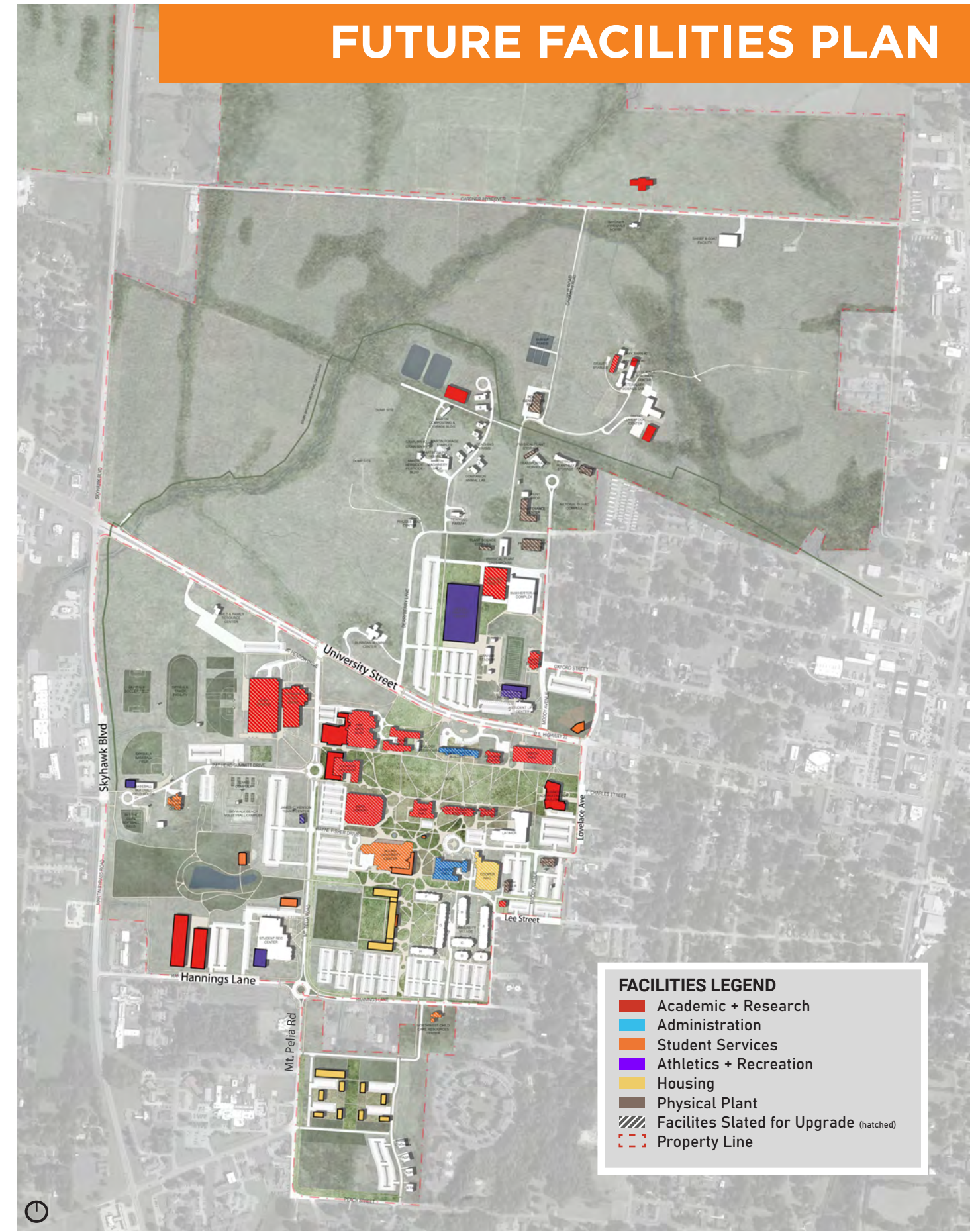
10- YR VISION LEGEND	
[Red Box]	Academic/Research
[Blue Box]	Athletics + Recreation
[Light Blue Box]	Administration
[Yellow Box]	Housing
[Orange Box]	Student Services
[Grey Box]	Physical Plant/Support
[Red Dashed Line]	Property Line

[A]	TEST Hub
[B]	Business Administration Building
[C]	Fine Arts Renovation and Addition
[D]	Beef Cattle Teaching & Demonstration Facility
[E]	Meat Processing Facility
[F]	Bob Carroll Football Building Addition
[G]	Indoor Practice Facility
[H]	Student Rec Center Pool Addition
[I]	Amphitheater
[J]	New Student Health & Counseling Center
[K]	Pacer Pond Pavilion
[L]	University Center Addition
[M]	New Browning/Ellington Housing
[N]	New University Courts Housing
[O]	North/South Pedestrian Open Space Corridor
[P]	Roundabouts/Traffic Circles Along Mt Pelia

FACILITIES IMPROVEMENTS

The built environment of the campus is instrumental in establishing a vibrant and welcoming campus experience, deeply rooted in a sense of place, and celebrating the unique Martin setting. This plan accommodates the need for increased development capacity necessary to meet the demands relative to academic instruction and student life. The increased capacity is distributed throughout campus, and areas of development are consistent with the goal, themes, and objectives of this Master Plan. The plan also builds upon the 2015 Master Plan Refinement.

An assessment of the existing built environment, with consideration of how this plan reflects and reinforces the underlying principles that support the campus identity and character, is included in the detailed report herein. The vision imagines **growth and development over time that will seamlessly integrate the densified campus areas into a built environment and open space framework reflecting an appropriately evolved yet cohesive campus character.** It also calls for a densified campus core that maintains an appropriate balance of building and open space, and of infrastructure and environment that are essential to the campus character.



Future Improvements - Facility Use

OPEN SPACE IMPROVEMENTS

Open space is critical to the identity of the University of Tennessee at Martin Main Campus. The connectivity that the open space provides brings a sense of place to the campus users and facilities.

Historically, the campus has had a traditional quad area with collegiate character that is encompassed within the main academic core. However, this plan proposes **improvements and additional outdoor spaces of varied scale, character, and function to expand an open space framework for enhanced connectivity and activity**. New plazas and courtyard spaces between buildings help facilitate activity in the outdoor environment, while the new green space corridor connects the North and South of the campus seamlessly.

Open spaces share a cohesive and intuitive language emerging from new pedestrian ribbons, purposefully planned to extend from north to south and east to west. These corridors stitch together future development with new housing, central quads, agriculture facilities, and core academic facilities.

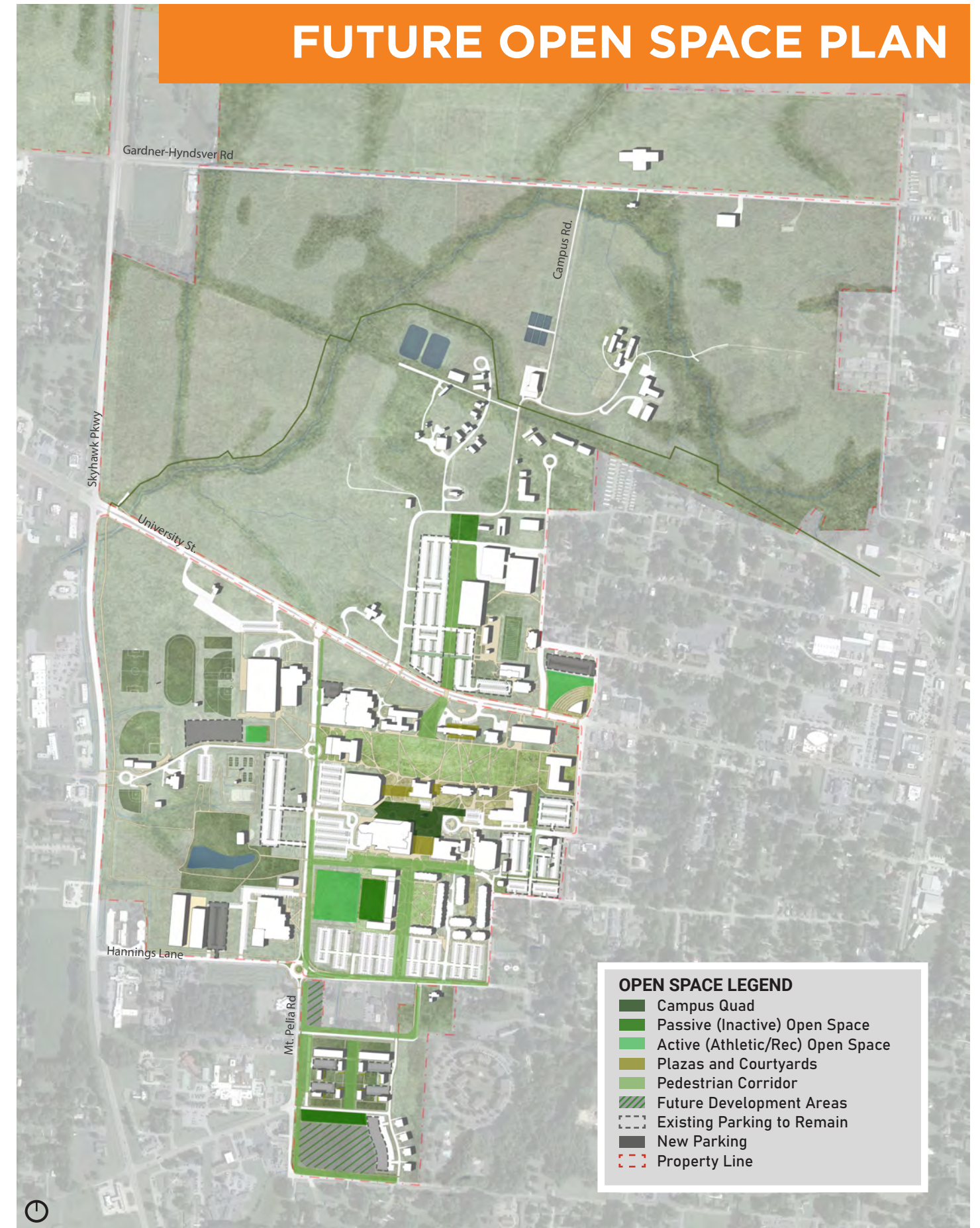
Open spaces at UTM vary in type, scale, size, use, and level of significance. Each space, along with enhanced streetscapes, forms part of a larger pedestrian circulation network and contributes to the overall perception of the campus.

Objectives that will guide improvements to create a positive physical space on campus, enhancing what is already available, include:

- Pedestrian circulation for north-south and east-west connection
- Enhanced student, staff, and faculty gathering spaces
- New intramural fields that promote student activity
- Streetscape improvements that allow safer paths through campus
- Accessibility for all

Projects anticipated to meet the objectives listed above include:

- Pacer Pond Pavilion
- Outdoor amphitheater space at current Grove Apartment site
- University Center northern and southern courtyard improvements
- Brian Brown Greenway campus trailhead and trail connection
- Administration Building north and southern courtyard improvements
- Park-like setting and future development site south of new student housing between Hannings Lane and West Peach Street
- Improved campus signage and wayfinding



Future Improvements - Open Space

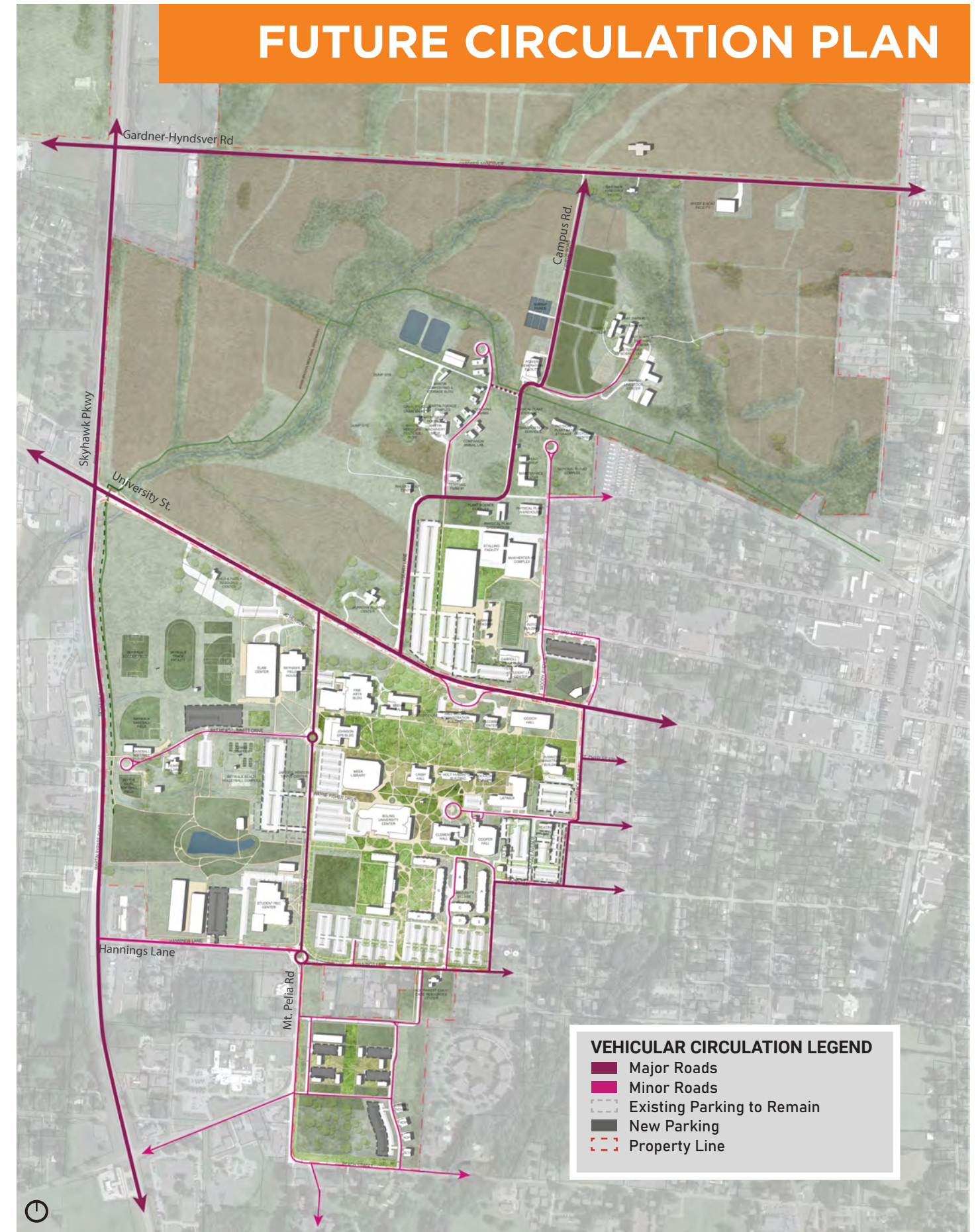
CIRCULATION IMPROVEMENTS

The desire to develop and expand a pedestrian-dominant campus requires careful planning and placement of facilities to eliminate points of conflict between modes, ensuring safe and direct access for all. The physical setting of campus with University Street and Mount Pelia Road as dividing provides significant challenges for pedestrians negotiating the campus, but at the same time, provides an ideal opportunity to create long and visible connections across the campus.

The UTM main campus currently has major entry points at Skyhawk Parkway, University Street, and Hannings Lane. The current pedestrian and vehicular circulation have been reformatted in the new Master Plan, which aims to solve many of the pinch points on campus.

Where previously vehicular traffic took precedence on campus, the new plan also takes into account pedestrian infrastructure to support the cohesion of the campus. A major new element in the new plan includes two traffic circles on Mount Pelia Road with a goal to calm vehicular traffic and make pedestrians feel more at ease in their journey.

The Master Plan assesses each mode of travel, making recommendations for improvements that are mutually supportive and accommodate increased development. The result is a campus that emphasizes the pedestrian first, with ease of access to all parts of campus and a regional trail network.



Future Improvements - Circulation

IMPLEMENTATION PLAN

This section explores a growth-oriented phasing scenario for full build-out of the campus plan. As it is impossible to predict actual phasing, with funding often unknown and program needs continually evolving, this study is seen as a “test” to ensure the plan is feasible.

The phasing strategies described in the pages to follow would allow for implementation of the long-term vision. Phasing includes programmatic “chess-moves” of major functions along with phased internal open space and infrastructure improvements including multi-mobility circulation and improvements on campus. Ultimately, the phased development in this “test” assumes one single move for every unit to a permanent location as phasing occurs. Any future planning efforts should recognize this study as a working tool for selecting sites that can catalyze the planned outcome described in this plan.

The phasing is broken up into three sequential stages: near (0-5 years), mid (6-10 years) and long (10+ years). This provides a basis for developing assumptions around the bundling, sequencing and enabling of specific moves to achieve the described goal and objectives of the plan. Further study is recommended to determine functional considerations and to verify cost impacts with each significant project.



IMPLEMENTATION PLAN

Growth-oriented implementation begins as the near-term development plan identifies a potential sequence of projects assumed to be completed in the following phases, as funding becomes available. As it is impossible to predict actual phasing, with funding often unknown and program needs continually evolving, this study is seen as a “test” to ensure the plan is feasible. This provides a basis for developing assumptions around the bundling, sequencing, and enabling of specific projects in order to achieve the described goals, themes, and objectives of this plan.

PHASE I - SHORT TERM (0-5 YEARS)

Project Type	Project Recommendations	Key	Demolition GSF	Renovation GSF	New Construction GSF	Cost/SF	Budget	Source
Demolish	Demolish Existing Baseball Batting Facility	5	(2,324)				\$71,449	Gift funds
Demolish	Demolish Ellington Hall	2	(105,829)				\$4,602,739	Auxiliary and Bond
Demolish	Demolish Grove Apartments	3	(65,700)				\$1,500,000	State Appropriations and Plant Funds
Demolish	Demolish Business Building	1	(38,846)				\$1,424,468	Capital Maintenance / Capital Outlay Request
Demolish	Demolish University Courts Apartments (Bldg A, B and Laundry)	4	(31,400)				\$1102,074	Auxiliary and Bond
New Construction	Tennessee Entrepreneurship, Science, and Technology (TEST) Hub	9			54,300		\$19,160,000	State Appropriations
New Construction	New Business Administration Building	8			62,688		\$50,000,000	Gift and Capital Outlay Request
New Construction	Beef Cattle Teaching and Demonstration Facility	7			8,333		\$5,000,000	Gift and Capital Outlay Request
New Construction	Baseball Indoor Batting Facility	10			4,700		\$622,000	Gift
New Construction	Pacer Pond Pavilion	11			6,000		\$817,721	TBD
New Construction	Outdoor Amphitheater - programmed open space with seating	6			8,000		\$3,207,853	TBD
New Construction	Student Housing (replacement for Ellington Hall)	12			210,000		\$129,284,305	Auxiliary and Bond
New Construction (Upgrade/Addition)	Fine Arts Renovation & Addition	13		8,400	50,000		\$47,000,000	Gift and Capital Outlay Request
New Construction (Upgrade/Addition)	Bob Carroll Football Building Renovation & Addition	14		18,317	14,000		\$6,230,000	Gift
Upgrade	Baseball Building Facility Upgrade	10					\$6,950,000	TBD
Upgrade	ROTC Building Upgrades	16		14,973		\$337	\$2,649,000	Capital Maintenance / Capital Outlay Request
Upgrade	Hall-Moody Administration Building Upgrade - Welcome Center & Courtyard	15		41,348			\$13,087,627	TBD
Upgrade	Kathleen & Tom Elam Center Upgrade (including indoor turf field conversion)	17		148,315		\$337	\$2,360,000	Capital Maintenance (mall glass), Lighting (plant funds), indoor turf field/closing pool (TBD)
Open Space Improvement	Gateway enhancements at corner of Skyhawk Blvd. & University St.	*					\$78,650	Gift and plant funds
Open Space Improvement	Gateway enhancements at corner of University St. & Lovelace Ave.	*					\$26,217	Gift and plant funds
Open Space Improvement	New recreational outdoor basketball courts near Elam Center	18					\$183,517	TBD
Open Space Improvement	Trailhead and trail connection to Brian Brown Memorial Greenway	19					\$20,536	TBD
Infrastructure Upgrades	Campus Fire Alarm Upgrades	n/a					\$1,850,000	Capital Maintenance / Capital Outlay Request
Infrastructure Upgrades	Stormwater improvements south of Clement Hall	21						Capital Maintenance / Capital Outlay Request
Infrastructure Upgrades	Stormwater improvements near athletics facilities, south of Elam Center	20						Capital Maintenance / Capital Outlay Request
Infrastructure Upgrades	Water (potable) improvements near softball, baseball and soccer facilities	22						TBD
Circulation Improvements	Sidewalk along west side of Mt. Pelia Road between Pat Summit Dr and Student Rec Center entry	23					\$329,457	Partnership with City
Circulation Improvements	Pave parking lot near athletic facilities, south of current rec fields and track	24			200 stalls		\$1,585,435	Auxiliary
Circulation Improvements	Parking at new outdoor amphitheater site	25			124 stalls		\$958,040	Auxiliary

*Refer to symbol on Near Term Map

The list of projects above identifies priorities for near term capital improvements consistent with the timeline of this plan. In addition to the list above, the full report provides estimated project costs, priority ranking, and funding sources per project.

SHORT-TERM PHASE



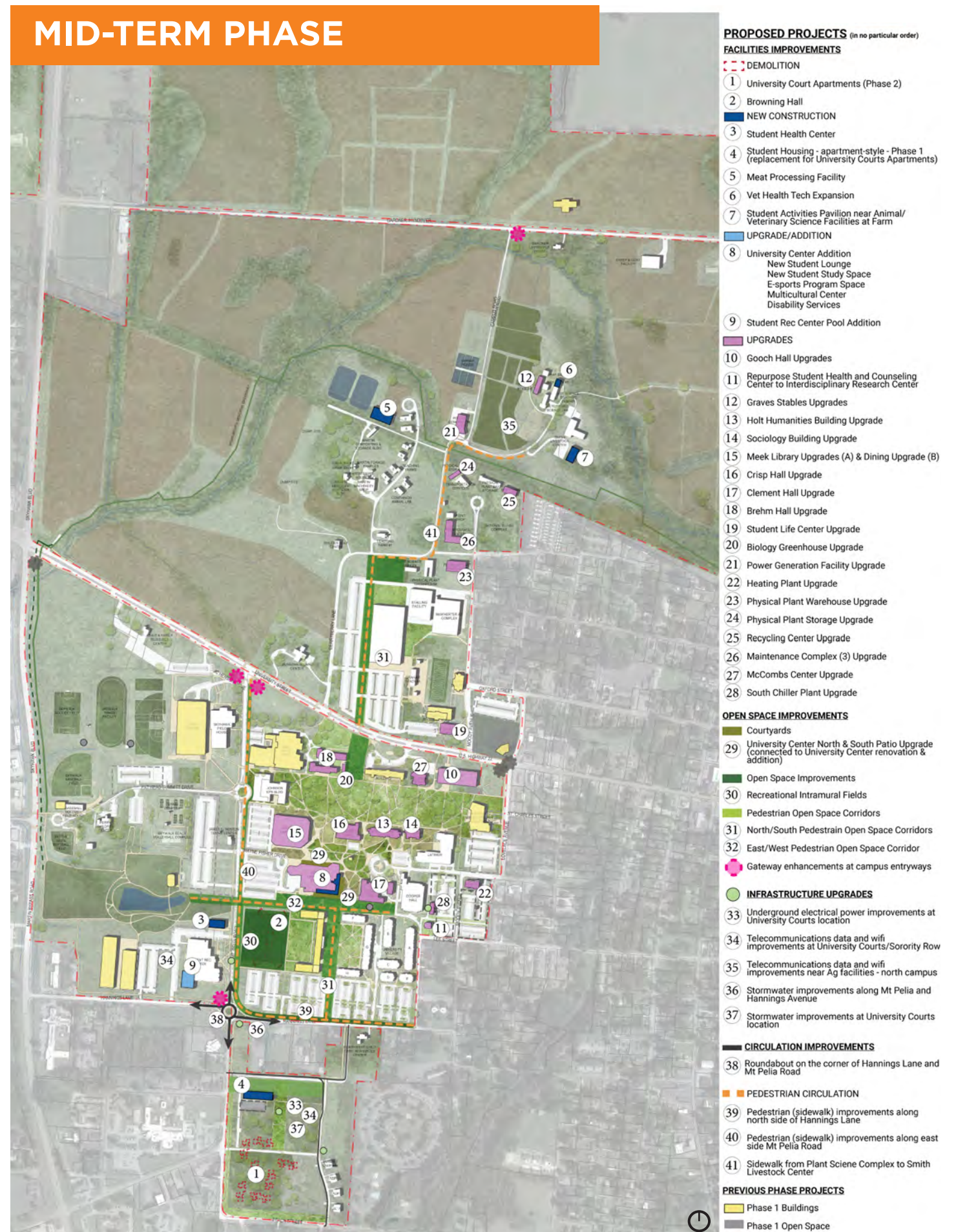
The Master Plan includes phased development and implementation planning that identifies projects assumed to be completed in the specified time frames as funding and functional needs allow. Anticipated development to be considered in six to ten years include:

PHASE II - MID TERM (6-10 YEARS)

Project Type	Project Recommendations	Key	Demolition GSF	Renovation GSF	New Construction GSF	Cost/SF	Budget	Source
Demolish	Demolish University Courts Apartments (C, D, E, F, G, H, I, J)	1	105,600				\$3,706,886	Auxiliary and Bond
Demolish	Demolish Browning Hall	2	106,100				\$3,723,725	Auxiliary and Bond
New Construction	New Student Health Center	3			8,700		\$5,724,089	Gift, Student Fees, Bond
New Construction	Meat Processing Facility	5			16,700		\$9,263,439	Gifts
New Construction	Vet Health Tech Expansion	6			3,000		\$2,263,263	TBD
New Construction	Student Housing - Phase I Apartments (University Courts Apts. replacement)	4			62,500		\$42,445,562	Auxiliary and Bond
New Construction	Student Activities Pavilion near Animal/Veterinary Science Facilities at Farm	7			8,600		\$2,444,547	TBD
New Construction (Upgrade/Addition)	Boling University Center Addition (and building upgrade)	8		11,000	20,200	\$337	\$27,061,700	Gift
New Construction (Upgrade/Addition)	Student Rec Center Pool Addition	9			16,000		\$1,207,719	Student Fees, Bond
Upgrade	Repurpose Student Health & Counseling Center to Interdisciplinary Research Cntr	11		3,465		\$337	\$1,096,755	TBD
Upgrade	Gooch Hall Upgrade	10				\$220	\$575,000	TBD
Upgrade	Graves Stables Upgrade	12				\$786,642	TBD	
Upgrade	Holt Humanities Building Upgrades	13				\$305	\$4,065,600	Capital Maintenance / Capital Outlay Request
Upgrade	Sociology Building Upgrades	14		8,300		\$337	\$4,600,000	Capital Maintenance / Capital Outlay Request
Upgrade	Meek Library Upgrades (and dining option)	15				\$337	\$25,308,500	Capital Maintenance / Capital Outlay Request
Upgrade	Meek Library Dining Upgrade	15		3,900				Auxiliary
Upgrade	Crisp Hall Upgrades	16				\$220	\$5,425,852	Capital Maintenance / Capital Outlay Request
Upgrade	Clement Hall Upgrade	17		45,000		\$220	\$9,000,000	Capital Maintenance / Capital Outlay Request
Upgrade	Brehm Hall Renovation	18				\$220	\$734,000	Capital Maintenance / Capital Outlay Request
Upgrade	Student Life and Leadership Center Upgrade	19				\$7925,757	Capital Maintenance / Capital Outlay Request	
Upgrade	Biology Greenhouse Upgrade	20				\$220	\$479,000	Capital Maintenance / Capital Outlay Request
Upgrade	McCombs Center Upgrade	27				\$337	\$5,350,000	Capital Maintenance / Capital Outlay Request
Upgrade	Power Generation Facility Upgrade	21				\$300	\$4,628,800	Revenue (TVA) and Plant Funds
Upgrade	Heating Plant Upgrade	22				\$2,648,062	Capital Maintenance / Capital Outlay Request	
Upgrade	South Chiller Plant Upgrade	28					Capital Maintenance / Capital Outlay Request	
Upgrade	Physical Plant Warehouse Upgrade	23				\$3,578,731	Capital Maintenance / Capital Outlay Request	
Upgrade	Physical Plant Storage Upgrade	24				\$1,091,317	Capital Maintenance / Capital Outlay Request	
Upgrade	Recycling Center Upgrade	25				\$1,926,174	Capital Maintenance / Capital Outlay Request	
Upgrade	Maintenance Complex (3) Upgrade	26				\$4,195,084	Capital Maintenance / Capital Outlay Request	
Open Space Improvement	New intramural recreational fields (near Browning Hall demolition site)	30				\$1,568,788	TBD	
Open Space Improvement	North/South pedestrian corridor - University St to Plant Science Complex	31				\$25,021	TBD	
Open Space Improvement	North/South pedestrian corridor - Hannings Ln to University Center	31				\$25,021	TBD	
Open Space Improvement	East/West pedestrian corridor - Mt Pella Rd to Cooper Hall	32				\$192,868	TBD	
Open Space Improvement	Wayfinding enhancements - corner of Mt Pella Rd and Hannings Ave	*				\$26,217	Gift and Plant Funds	
Open Space Improvement	Wayfinding enhancements - corner of Mt Pella Rd and University St.	*				\$26,217	Gift and Plant Funds	
Open Space Improvement	University Center north and south Courtyard Upgrade	29				\$74,281	TBD	
Infrastructure Upgrades	Underground electrical power improvements at University Courts location	33					Capital Maintenance / Capital Outlay Request	
Infrastructure Upgrades	Telecommunications data & wifi improvements at University Courts site	34					Auxiliary	
Infrastructure Upgrades	Telecommunications data & wifi improvements near Ag facilities	35					TBD	
Infrastructure Upgrades	Stormwater improvements along Mt Pella and Hannings Avenue	36					Capital Maintenance / Capital Outlay Request	
Infrastructure Upgrades	Stormwater improvements at University Courts location	37					Capital Maintenance / Capital Outlay Request	
Circulation Improvements	Roundabout on the corner of Hannings Lane and Mt Pella Road	38				\$851,795	Partnership with City	
Circulation Improvements	Sidewalk along east side of Mt Pella Road	40				\$1,313,810	Partnership with City	
Circulation Improvements	Sidewalk from Plant Science Complex to Smith Livestock Center	41				\$846,452	TBD	
Circulation Improvements	Sidewalk along north side of Hannings Ln	39				\$564,709	Partnership with City	

*Refer to symbol on Mid Term Map

The list of projects above identify priorities for mid term capital improvements consistent with the timeline of this plan. In addition to the list above, the full report provides estimated project costs, priority ranking, and funding sources per project.



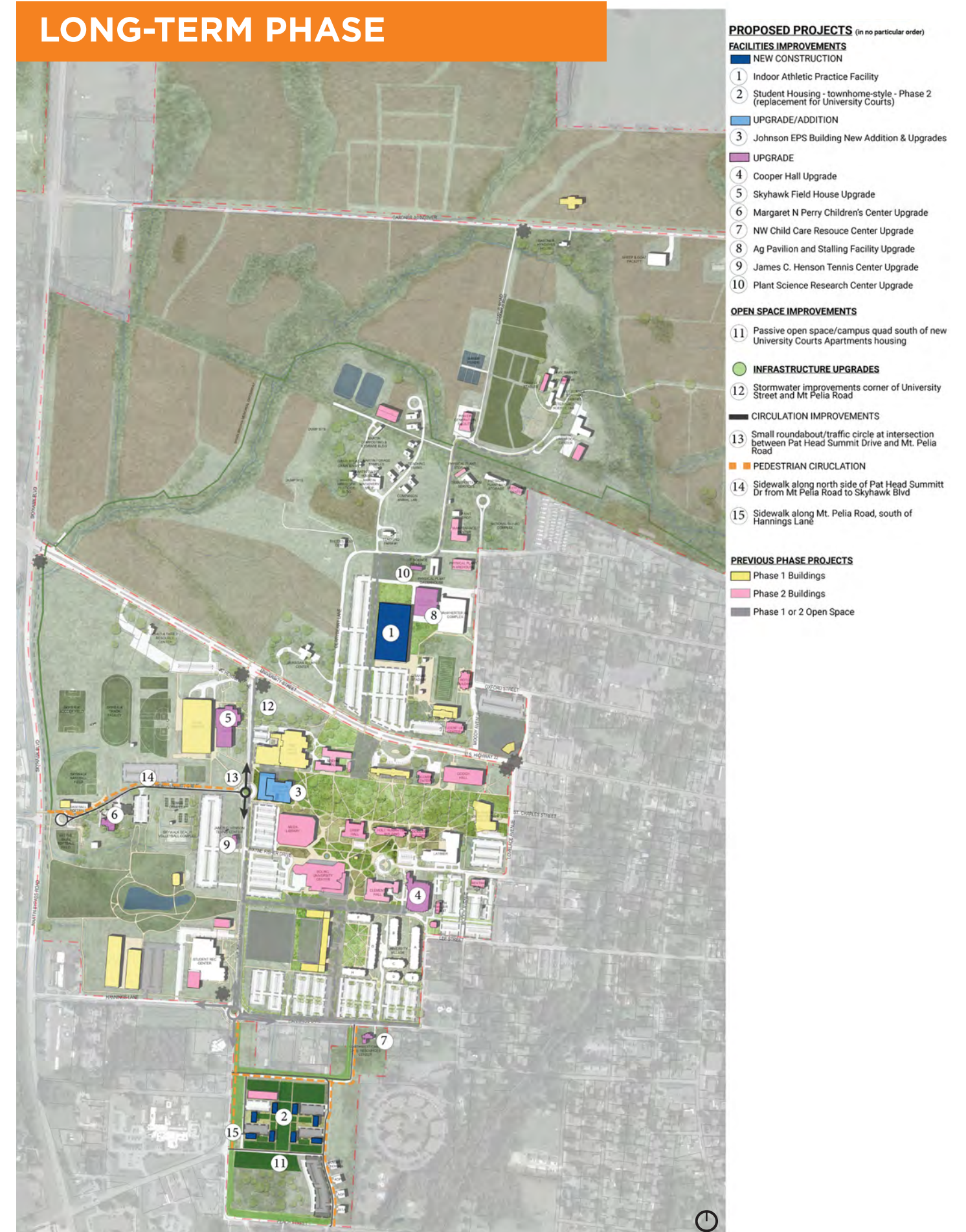
The Master Plan includes phased development and implementation planning that identifies projects assumed to be completed in the specified time frames as funding and functional needs allow. Anticipated development to be considered in ten years and beyond include:

PHASE III - LONG TERM (10 + YEARS)

Project Type	Project Recommendations	Key	Demolition GSF	Renovation GSF	New Construction GSF	Cost/SF	Budget	Source
New Construction	Student Housing - Phase II Townhomes (replacement for University Courts)	2			6,400		\$9,648,313	Auxiliary and Bond
New Construction	Indoor Athletic Practice Facility	1			157,277		\$54,317,353	Gift
New Construction (Upgrade/Addition)	Johnson EPS Building New Addition & Upgrades	3		20,000	52,600	\$300	\$63,113,948	Gift
Upgrade	Cooper Hall Upgrade	4					\$29,380,059	Auxiliary
Upgrade	Skyhawk Field House Upgrade	5				\$337	\$10,633,500	Capital Maintenance / Capital Outlay Request
Upgrade	Margaret N. Perry Children's Center Upgrade	6				\$337	\$1,698,100	Capital Maintenance / Capital Outlay Request
Upgrade	NW Child Care Resource Center Upgrade	7					\$1,042,630	Capital Maintenance / Capital Outlay Request
Upgrade	Ag Pavilion and Stalling Facility Upgrade	8				\$60	\$8,828,500	Capital Maintenance / Capital Outlay Request
Upgrade	James C. Henson Tennis Center Upgrade	9					\$787,028	Gift
Upgrade	Plant Science Research Center Upgrade	10				\$337	\$1,234,368	Capital Maintenance / Capital Outlay Request
Upgrade	Kathleen & Tom Elam Center Upgrade (including pool to indoor turf field conversion)	16				\$337	\$31,510,500	Capital Maintenance (mall glass), Lighting (plant funds), indoor turf field/closing pool (TBD)
Open Space Improvement	Passive Open Space/Campus Quad south of new University Courts Townhomes site	11						TBD
Infrastructure Upgrades	Stormwater improvements corner of University Street and Mt. Pelia Road	12						Capital Maintenance / Capital Outlay Request
Circulation Improvements	Sidewalk on north side of Pat Head Summit Dr - Mt. Pelia Rd to Skyhawk Blvd	14					\$564,709	Auxiliary
Circulation Improvements	Small roundabout/traffic circle - Pat Head Summit Dr and Mt. Pelia Road	13					\$851,795	Partnership with City
Circulation Improvements	Sidewalk along Mt. Pelia Road, south of Hannings Lane	15					\$1,170,055	Partnership with City

The list of projects above identify priorities for long term capital improvements consistent with the timeline of this plan. In addition to the list above, the full report provides estimated project costs, priority ranking, and funding sources per project.

LONG-TERM PHASE



MASTER PLAN COMMITTEES

EXECUTIVE TEAM

Dr. Keith Carver, Chancellor
Amy Belew, Chief Information Officer, Information Tech Services
Dr. Philip Cavalier, Provost and Senior Vice Chancellor, Academic Affairs
Dr. Charley Deal, Vice Chancellor, University Advancement
Edie Gibson, Senior Advisor to the Chancellor
Bud Grimes, Vice Chancellor, Office of University Relations
Tony Hopson, UT Director of Capital Projects
Ann Taylor Joiner, Associate General Counsel
Dr. Andy Lewter, Vice Chancellor, Student Affairs
Dr. James Mantooth, Executive Director, Office of Student Engagement
Dr. Marquis Orlando McCloud, Chief Diversity and Inclusion Officer
Kurt McGuffin, Vice Chancellor and Director of Athletics
Petra McPhearson, Senior Vice Chancellor, Finance and Administration
Alisha Melton, Interim Executive Director of Research, Outreach, and Economic Development
Austin Oakes, UT Assistant Vice President, Capital Projects
Dr. Victoria Seng, Associate Provost, Academic Affairs
Dr. Anderson Starling, President of Faculty Senate

WORKING GROUP

INTERNAL CORE TEAM

Dr. Laura Foltz, Special Assistant to the VC for Finance and Administration for Strategic Initiatives
Brad Burkett, Interim Director, Physical Plant
Dana Hagan, Coordinator III, Physical Plant
Tony Hopson, UT Director of Capital Projects
Petra McPhearson, Senior Vice Chancellor for Finance and Administration

REMAINING WORKING GROUP MEMBERS

John Abel, Assistant Vice Chancellor Student Affairs and Dean of Students
Erica Bell, Director of Regional Centers and Online Programs
Danelle Fabianich, Senior Associate Athletic Director and Senior Woman Administrator (SWA)
Adam Foster, UT Specialist II, Capital Projects
Heather Kingery, Manager, Office of Disability Services and UTM Testing Center
Andrew Larkins, Employee Relations Council member, Student Services Coordinator, Academic Records
Rion McDonald, Director of Institutional Research
Alisha Melton, Interim Director, Research Grants and Contracts

MASTER PLAN FOCUS GROUPS

FACILITIES / PHYSICAL PLANT STAFF EXPERIENCE

Petra McPhearson, Senior Vice Chancellor, Finance and Administration
Amy Belew, Chief Information Officer, Information Tech Services
Monte Belew, Director, Public Safety
Brad Burkett, Interim Director, Physical Plant Administration
Danelle Fabianich, Assistant Athletic Director, Senior Woman Administrator
Adam Foster, UT Specialist II, Capital Projects
Dana Hagan, Physical Plant Administration
Tony Hopson, UT Director of Capital Projects
Gina McClure, Assistant Vice Chancellor, Student and Residential Life
Dr. Eric Pelren, Professor, Department of Agriculture and Geosciences, Interested in Sustainability
Holly Rowan, Environmental Health and Safety
Eric Simmons, Assistant Director, Campus Recreation
Dr. Wesley Totten, Professor and Chair, Department of Agriculture and Geosciences
Carol Williams, Director, Management and Budget Reporting

ACADEMIC EXPERIENCE

Dr. Phil Cavalier, Provost and Senior Vice Chancellor, Academic Affairs
Dr. Lynn Alexander, Dean, College of Humanities and Fine Arts
Dr. Chris Baxter, Professor and Chair, Department of Accounting, Finance, Economics, and Political Science; Budget and Economic Concerns Committee Chair
Erica Bell, Director of Regional Centers and Online Programs
Dr. Erik Nordberg, Dean, College Library
Dr. Shadow Robinson, Dean, College of Engineering and Natural Sciences
Dr. Anderson Starling, President of Faculty Senate
Dr. Ahmad Tootoonchi, Dean, College of Business and Global Affairs
Cynthia West, Dean, College of Education, Health, and Human Performance
Dr. Adam Wilson, Director of Online Delivery
Dr. Todd Winters, Dean, College of Agriculture and Applied Sciences

STUDENT EXPERIENCE

Dr. Andy Lewter, Vice Chancellor for Student Affairs
Heather Kingery, Manager of Disability Services and Testing Center
Ryan Martin, Assistant Director for Residence Life
Dr. Marquis Orlando McCloud, Chief Diversity and Inclusion Officer
Anthony Prewitt, Assistant Director of Multicultural Affairs
Trace Stenz, Campus Recreation Intramurals Coordinator
Rachel Stephens, Assistant Director of Student Life
Jacquelyn Taylor Johnson, Assistant Vice Chancellor for Alumni Relations and Annual Giving



**BRIEF
HISTORY
AND CAMPUS
OVERVIEW**

ABOUT THE CHANCELLOR

Dr. Carver began his duties as the 11th chancellor of The University of Tennessee at Martin on January 3, 2017.

During his administration, UT Martin has developed a five-year university Strategic Plan for growth and development; compiled a 52% six-year graduation rate, up from a 50% graduation rate in 2016; achieved a 36% increase in graduate students since 2019; reached a 70.0% freshman-to- second-year retention rate; secured 5,143 donors to the university in 2019-20, the highest number in UT Martin history; received the largest donor commitment to the university in 2021; and established dual-enrollment partnerships with Jackson State Community College, Dyersburg State Community College, and Southwest Tennessee Community College.

His tenure includes the addition of multiple new programs to the academic catalog, including a new bachelor's degree program in Agricultural Business; a 3+3 Legal Studies concentration for English and Political Science majors in partnership with the UT College of Law; a 3+1 transfer track in partnership with the UT Health Science Center's School of Pharmacy; concentrations in Data Science and Digital Hardware and embedded systems in the Department of Computer Science; a concentration in mechatronics in the Department of Engineering; and concentrations in Higher Education Leadership, Special Education and literacy in the master's degree program for Educational Studies. New programs approved in 2021 by the UT Board of Trustees included master's degrees in sport coaching and performance and criminal justice, and bachelor's degree programs in cybersecurity, veterinary science and technology, and cell and molecular biology.



During his administration, the UT Martin athletics program has grown to include 500 student-athletes on campus, added beach volleyball as a women's sport, and installed a new playing surface at Hardy M. Graham Stadium.

Dr. Carver has worked with the UT System for 24 years and served as executive assistant to the UT president from January 2011-December 2016 before accepting the post at UT Martin. Prior to his position with the UT System, Carver held various positions on the UT campuses in Knoxville, Martin, and Memphis, which included serving as interim vice chancellor for development and alumni affairs at the UT Health Science Center in Memphis and as assistant vice chancellor for development at UT Martin. He holds a bachelor's degree in sociology from the University of Memphis, and a master's degree in college student personnel and educational leadership, and a doctoral degree from UT Knoxville.

He and his wife, Hollianne, are the parents of a daughter, Carson, and two sons, Jack Thomas ("J.T.") and Britton. The Carver family lives in Martin and has West Tennessee roots in Henderson and Crockett counties.



HISTORY

Looking to the future, the University of Tennessee at Martin brings promise for a vision of a modern intellectual destination for students across West Tennessee.

The University of Tennessee at Martin traces its origins to 1900 and the establishment of the Hall-Moody Institute. Built on a site donated by Ada Gardner Brooks at what was then the edge of town, and named for two locally prominent Baptist ministers, Hall-Moody was a denominational school offering a wide range of studies. The full thirteen-year course taught students from the primary grades through what now would be considered the first years at a modern college level. A name change to the “Hall-Moody Normal School” in 1917 followed the role the school came to pursue as teacher training became its major focus. Finally, after the curriculum was standardized to meet state requirements five years later, the school became “Hall-Moody Junior College.” Declining enrollments and financial difficulties caused the Tennessee Baptist Convention to consolidate Hall-Moody with a similar institution, Union University, in Jackson in 1927.

The Hall-Moody Junior College closed its operations on June 1, 1927. The first Executive Officer (Chancellor), C. Porter Claxton, had his hands full. Personally responsible for virtually everything about the new campus, his duties ranged from recruiting students to buying a lawnmower. On September 2, a faculty of fourteen began classes for 120 students at the Tennessee Junior College (shortly the University of Tennessee Junior College), most of whom were returning Hall-Moody students.

The 1960s brought to campus a new generation of students with higher expectations and greater demands. The campus population jumped from 1,123 students in 1960 to 4,197 in 1969. Course selection increased and new programs developed. More students required expanded housing, and the decade saw the largest construction boom in the school’s history. Carter’s Motor Inn in Martin, later known as Shannon Hall, was purchased to temporarily house students while newer buildings were constructed. A series of new dormitories were built during the sixties, which included McCord, Austin Peay, Ellington, Cooper and Browning residency halls. Along with dormitories came apartment complexes which included the Grove Apartments and University Courts. The need for expanded office space and classrooms for new programs led to the construction of the Engineering-Physical Science Building, the Physical Education/Convocation Center, Paul Meek Library, and the Holt Humanities Building. Other facilities built to support the burgeoning student body and faculty included a remodeled Football Stadium, the Boling University Center, a new steam plant and Maintenance Center, and an official residence for the chancellor.



“From the founding in 1900 of Hall-Moody Institute, through the establishment in 1927 of UT Junior College, to today’s status as a comprehensive public university, UT Martin is committed to preparing students for success in the global economy.”

The University of Tennessee at Martin has been a fixture in the West Tennessee educational landscape since its founding as a private institution in 1900. From its roots as a branch campus for the University of Tennessee, UT Martin has grown into a comprehensive university with 6,700 students and multiple locations across West Tennessee and the premier, four-year university in the region.

Since UTM launched the first campus-wide Strategic Planning project in more than three decades in January 2017, the University has been highly engaged and interactive in disseminating the course for the following five years, highlighting critical priorities and provided clear methods for measuring progress. Driven by Chancellor Dr. Keith S. Carver, Jr.’s vision to make UT Martin “a hub – the cultural, intellectual and social center for the region,” the University has continued to drive towards accomplishing their Strategic Plan goals, while engaging students, faculty, staff, administration, and the community with the mission of their core values.

STRATEGIC PLANNING

The Master Plan responds to the policy directions set by the University and the changing needs of the students and faculty in this post-pandemic educational environment. The Strategic Plan is used to guide this Master Plan.

Following The University of Tennessee at Martin’s (UTM) Five-Year Strategic Plan for 2018-2023, the Master Plan focused on their core values and key goals:

CORE VALUES:

- Academic Program Excellence
- Student Experience and Success
- Inclusion
- Advocacy and Service

STRATEGIC PLAN KEY GOALS:

- Goal I:** Prepare graduates to be responsible, informed and engaged citizens in their workplaces and the larger community.
- Goal II:** Recruit, retain and graduate students prepared for careers, professions and life.
- Goal III:** Ensure a campus that is open, accessible and welcoming to all.
- Goal IV:** Promote strategic, sustainable and responsible stewardship of human, financial and capital resources in support of University goals and objectives.
- Goal V:** Improve the vitality and prosperity of West Tennessee and beyond and increase the visibility of UTM through service and advocacy.



The University of Tennessee at Martin educates and engages responsible citizens to lead and serve in a diverse world.

UT Martin’s Mission Statement

CAMPUS OVERVIEW

The campus supports 58 existing academic and support buildings on a 320-acre main campus with 680 acres of teaching and research lands.

The main campus is located in Northwest Tennessee about 125 miles northeast of Memphis, 150 miles northwest of Nashville and 60 miles north of Jackson. Educational Outreach teaching centers in Jackson, Parsons, Ripley, Selmer, and Somerville Center and dual-enrollment course offerings in Tennessee high schools, bring UT Martin academic programs to people across West Tennessee. An overview of each of the five Regional Centers is provided below.

UT Martin offers more than 100 academic areas of study within 18 undergraduate degree programs and five graduate degrees. UT Martin is home to UT Online, the University of Tennessee's online programs for both undergraduate and graduate education.



Figure 1: Map of the State of Tennessee showing the regional impact The University of Tennessee at Martin and its surrounding Regional Center have throughout Western Tennessee.

Jackson Center:

Since 1992, Jackson Center has been offering classes and programs in the Jackson area and is located within the Ned R. McWherter Center on the Jackson State Community College campus. The partnership allows students to start at Jackson State Community College and then enroll at UT Martin to complete their degree without leaving the Jackson State campus, improving transfer pathways and four-year graduation success.

This center offers flexibility in undergraduate courses in agriculture, business administration, criminal justice, education, history, social work, political science, psychology, interdisciplinary studies, and Military Science and Leadership that support a bachelor's degree. Graduate-level courses are also available at the center, as well as non-credit professional development, personal enrichment, and youth courses and programs.

Parsons Center:

UT Martin's fourth off-campus site, The Parsons Center, began classes in 2007 and offers a variety of undergraduate courses. This 29,000 square foot tech advanced space is a result of the joint construction project by the Ayers Foundation, City of Parsons and Decatur County. More than 80 specialized program courses include criminal justice, education, history, interdisciplinary studies, political science, psychology, and nursing. General education undergraduate courses are also available designed to accommodate students who wish to begin working toward a degree close to home.

Ripley Center:

Opened in 2005, the UT Martin Ripley Center offers a wide array of general education undergraduate courses for students to begin a degree without going too far from home. The Ripley and Lauderdale County Communities and local businesses provide more than \$50,000 in scholarships to UTM Ripley Center Students. The state-of-the-art facility includes general classroom space, nursing, science, and computing labs, distance learning classrooms, conference rooms, student lounge and snack bar, administrative offices, library resource center, and lecture hall.

Selmer Center:

In cooperation with McNairy County and the City of Selmer, the UT Martin McNairy County Center/Selmer opened in 1998. This center offers general education and undergraduate courses supporting bachelor's degree requirements in more than 80 specialized programs. The center also offers non-credit courses during the year and can design training to meet needs of individual businesses and industries.

Somerville Center:

Located within Somerville, this UT Martin regional center offers a general education and undergraduate courses supporting bachelor's programs in more than 80 specialized programs.

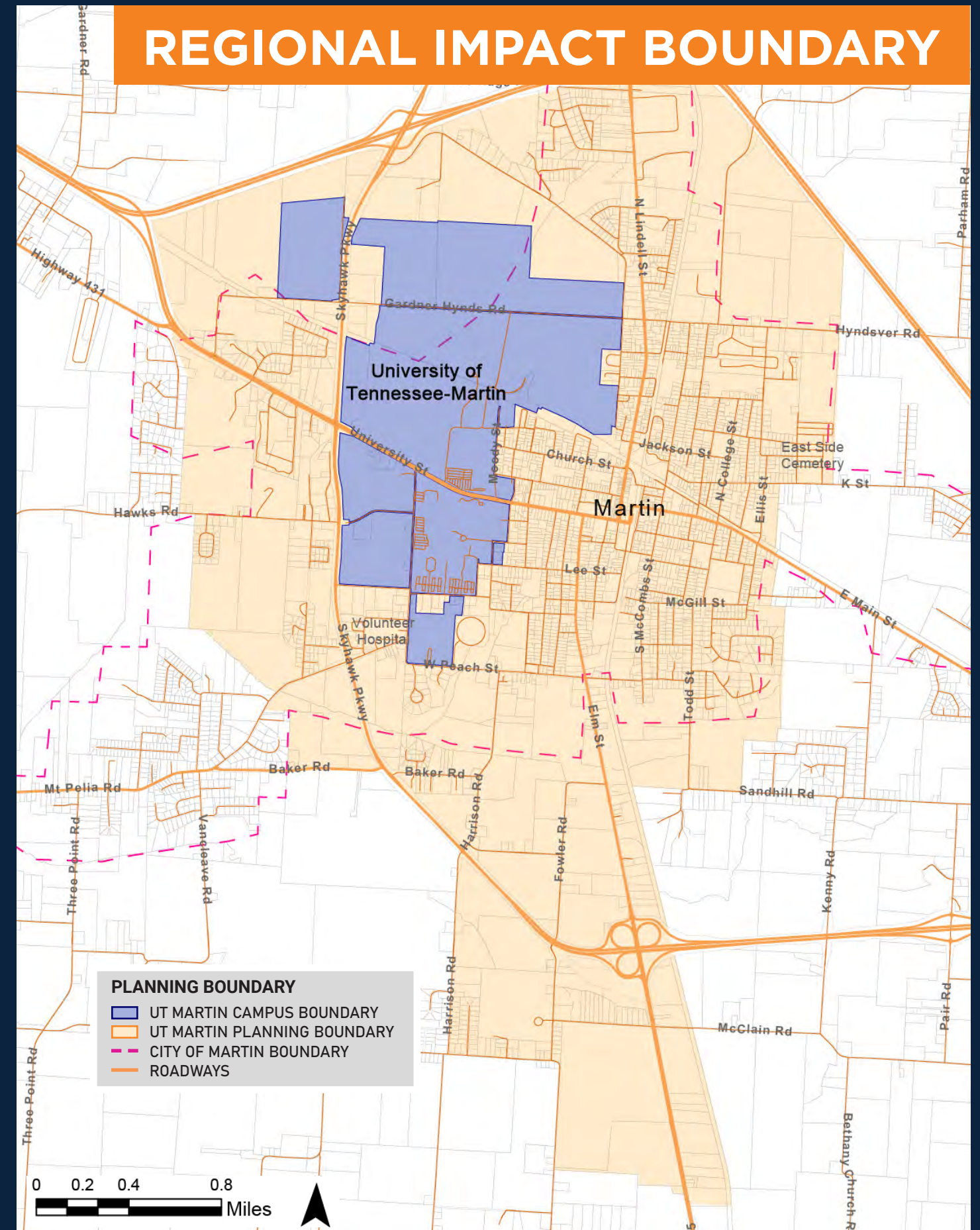


Figure 2: Map of UT Martin's campus planning boundary showing the approximate reach within the region surrounding the main campus.

MASTER PLAN GUIDELINES AND COMPONENTS

The Tennessee Higher Education Commission (THEC) coordinates and supports the efforts of higher education institutions throughout the State of Tennessee. THEC has established guidelines for master planning at the institution level. The guidelines outline each of the components that are required within the plan. Overall, Master Plans should address physical needs in the context of student retention and success, as well as statewide higher education goals and policies. The THEC Guidelines include Space Needs, Enrollment, Facilities Conditions, Site Considerations, Design Guidelines, Land Acquisition, Infrastructure, Student Services, Housing and Dining, Security, Athletics and Recreation, Implementation, and Capital Planning.

The Master Plan is consistent with UTM's current Strategic and Academic Plans, linking the master plan's identified goals in implementable physical form. In addition, the THEC Guidelines provide organization for the variety of important quantitative and qualitative data collected throughout the analysis, engagement, and concept development portions of the master planning process.

UTM leadership and the planning team integrated the guidelines and components throughout the master planning process. The full report details each component according to THEC requirements.



THEC COMPONENTS

Per the full report, the Executive Summary provides a summary that includes key objectives for the master plan and recommended solutions and this chapter encapsulates the brief history and campus overview of the entire UT Martin campus. Below lists the remaining key THEC components that will be included throughout the remainder of the report.



ENROLLMENT

Projections include a timeline of five to 10 years, supported by demographics and history for consideration in the development of the annual capital budget.



FACILITIES CONDITION

This plan identifies high-level conditions and areas for further evaluation, including recommended actions to maintain and upgrade facilities programs.



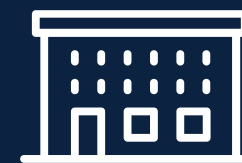
LAND ACQUISITION

UT-Martin has not identified needed land acquisitions/disposal to support the future vision of the campus described herein.



INFRASTRUCTURE

General condition and age of the existing infrastructure systems includes comparison between current demand and current capacity with future demand.



HOUSING & DINING

Needs include student centers and related student service facilities.



SECURITY

Consideration for site security, campus access and access to buildings, recreation / athletic fields and related public areas.



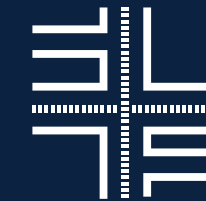
ONGOING CAPITAL IMPROVEMENT PLANS

Five year plan including capital outlay, capital maintenance, and major disclosed projects.



SPACE NEEDS

E&G space inventory and analysis aligns with the THEC Space Guidelines, and includes alternatives with national standards and best practices in determining future space needs.



SITE CONSIDERATIONS

Site plans analyze existing relationships between campus systems and features, including parking, and proposes improvements that address deficiencies.



DESIGN GUIDELINES

Major campus design objectives articulate and address approaches to implementing outcomes through architecture, landscape design, transportation, and historic preservation.



STUDENT SERVICES

Considerations for one-stop-shops to support student needs and related items of student interest, including housing, dining and recreation.



ATHLETICS & RECREATION

Improvements to existing athletic, intramural and recreational facilities as well as academic athletic facilities for student wellbeing.



IMPLEMENTATION AND COST

All recommended projects are prioritized and identified per near/mid/long term phasing to support the development of the annual capital budget.

“The University of Tennessee at Martin educates and engages responsible citizens to lead and serve in a diverse world.”

- University of Tennessee at Martin Mission Statement

ENROLLMENT

Fall term 2021 provides the baseline data for the study. On-ground full-time equivalent (FTE) enrollment, courses taught, and faculty and staff were used as a basis to establish the relative quantities of space needed at the base year. If the historical enrollment is increasing, a linear trend was used to project forward and if enrollment is decreasing a logarithmic trend line was used to moderate the decline. The analysis applied the option with the most favorable results.

The Master Plan projections show an increase in on-ground student enrollment of 21.6% aspirational growth between Fall 2021 and Fall 2031, driven primarily by new program initiatives and historic demographic enrollment trends by each department. The THEC Master Plan Guidelines require a comparison of current and prior Master Plan enrollment projections, but the 2010 Master Plan Update did not include any projections.

Future enrollment projections were developed based on enrollment data between 2011 and 2021, but without taking 2020 into account due to the effects of the COVID-19 pandemic. Enrollment projections were developed for each department and combined to create the overall total. For departments that experienced growth during the target years, a linear trend was used to project forward. For those departments that experienced a decrease in enrollment, a logarithmic trend line was used to moderate the decline.

Below shows university-wide enrollment (Table 1) as well as the enrollment on the Main Campus (Table 2). For the purposes of enrollment projections and space calculations, only the on-ground enrollment on the Main Campus was considered, but the full enrollment numbers are provided here for context.

Table 1: The University of Tennessee at Martin Total Historical FTE Enrollment

STUDENT ENROLLMENT	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
TOTAL	6,993	6,750	6,541	6,275	6,001	5,667	5,717	5,581	5,645	5,605	5,185

Figure 1: Total Historical Institution-Wide FTE On-Ground Enrollment

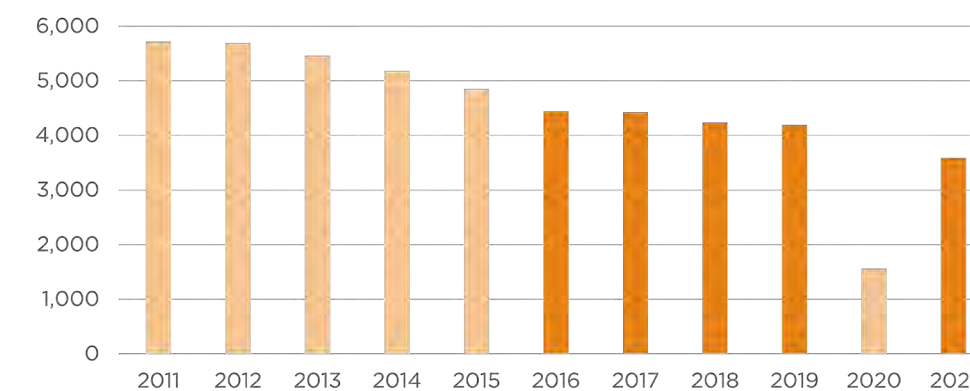


Table 2: Main Campus Historical FTE Enrollment

2016-2019 & 2021 were used to determine enrollment projections

STUDENT ENROLLMENT	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 (1)	2021
ON-GROUND (FTE)	5,719	5,692	5,459	5,182	4,850	4,438	4,420	4,233	4,193	1,562	3,585
ONLINE (FTE)	453	464	497	497	563	615	723	786	828	3,469	1,142
TOTAL (FTE)	6,172	6,155	5,955	5,679	5,414	5,053	5,142	5,019	5,021	5,031	4,727

(1) Fall 2020 is shown here for information purposes only. Because 2020 was an anomaly due to the pandemic the on ground/online mix is skewed and has been excluded from the enrollment projection trend analysis.

PROJECTED ENROLLMENT

NEW PROGRAM INITIATIVES:

Several approved or planned undergraduate, graduate and support programs were identified by the University that will have a positive impact on enrollment recruitment and retention. It is assumed that the majority of the courses associated with these initiatives will be lecture based and would be taught in classrooms or on-line. However, where teaching or research laboratory needs are identified, an estimated square feet need is included. Office space requirements are based on the number of additional personnel identified by the University using the THEC guideline factors. These space needs are reflected in the future estimates.

Table 3: Summary of New Academic Program Initiatives

COLLEGE / DEPARTMENT / PROGRAM INITIATIVE	
College of Agriculture and Applied Sciences	
Program	Family and Consumer Sciences
Degree	Food Science
College of Business and Global Affairs	
Degree	Data Analytics
Degree	MS Human Resources Management
College of Education, Health & Behavioral Sciences	
Program	Behavioral Sciences
Degree	MS Criminal Justice
Program	Education Studies
Degree	MS Education Autism
Program	Health and Human Performance
Degree	Master of Sport Coaching and Performance
College of Engineering and Natural Sciences	
Program	Biological Sciences
Degree	Cellular/Molecular Biology
Program	Computer Science
Degree	Cybersecurity
Program	Engineering
Degree	Construction Management
College of Humanities and Fine Arts	
Program	Communications
Degree	Strategic Communications
Program	Music
Degree	Masters in Music Education

In order to predict realistic space for the future campus plan, faculty and staff numbers are also included in regards to certain space types. For administrative units, the greatest future space shortage will be in the Student Affairs Division resulting from an expansion of student housing to address the planned enrollment growth and the Campus Wide shared space grouping that includes a significant expansion of athletic space. Those numbers will be further addressed within the Space Needs Assessment.

The following table shows enrollment projections by college for the Main Campus. These represent the sum of individual department enrollment projections and reflect the overall combined growth rate of 21.6%.

Table 4: Summary of Projected Enrollment by College - Main Campus

COLLEGE	CURRENT (2021) ON - GROUND FTE	PROJECTED (2031) ON - GROUND FTE	DIFFERENCE	PERCENT DIFFERENCE
COLLEGE OF AGRICULTURE & APPLIED SCIENCES	598	872	274	45.8%
COLLEGE OF BUSINESS & GLOBAL AFFAIRS	424	486	62	14.6%
COLLEGE OF EDUCATION, HEALTH & BEHAVIORAL SCIENCES	742	724	-18	-2.4%
COLLEGE OF ENGINEERING & NATURAL SCIENCES	862	1,239	377	43.7%
COLLEGE OF HUMANITIES & FINE ARTS	807	893	86	10.6%
GENERAL STUDIES	152	147	-5	-3.29%
TOTALS MAIN CAMPUS	3,585	4,361	776	21.6%

With the addition of the new programs summarized in Table 3, an additional 259 FTE (310 headcount/83.5% average FTE to headcount ratio) have been added to the projections developed through the trend analysis for a total increase of 776 FTE or 21.6% over the ten-year planning period.

These results represent an aspirational goal of the University for on-ground future enrollments based on proposed new programs and demographic trends by department. It assumes an increase of approximately 77 FTE, on average, added each year over the planning period of the master plan.

SPACE NEEDS ASSESSMENT

The space needs in this analysis are based on the THEC space planning guidelines with an alternative modeling process based on a blending of several planning methodologies including many of the THEC guideline criteria; adaptation of innovative space planning approaches developed at other universities; application of accepted conventional space formulas and guidelines that have been tested and formulas and criteria developed by the consultants for space types not addressed by conventional approaches. Planning assumptions provide the direction for student enrollment, personnel changes, and potential new programs. Interviews with the Deans and Vice Chancellors were conducted to review results, verify data, discuss space use, and provide program related data used to refine the modeling process.

The analysis identifies the current and future space needs by type and departmental assignment as compared to existing facilities. The findings from the study will be used to manage current space, assist with the development of future capital projects and provide data to be used in developing the overall campus master plan.

The space need requirements include square feet calculations for each room type and vary according to program requirements within specific disciplines. The calculated need incorporates various factors including the size and amount of equipment used, acceptable utilization factors (i.e., station area, station occupancy ratios, and room utilization rates), number of occupants of each space, etc. The analysis compares the existing inventory of assignable square feet (ASF) to the modeled need to identify possible gaps identified as a surplus or deficit of space by room type and assignment. These results may be used to develop future solutions through realignments, repurposing of existing space or new construction.

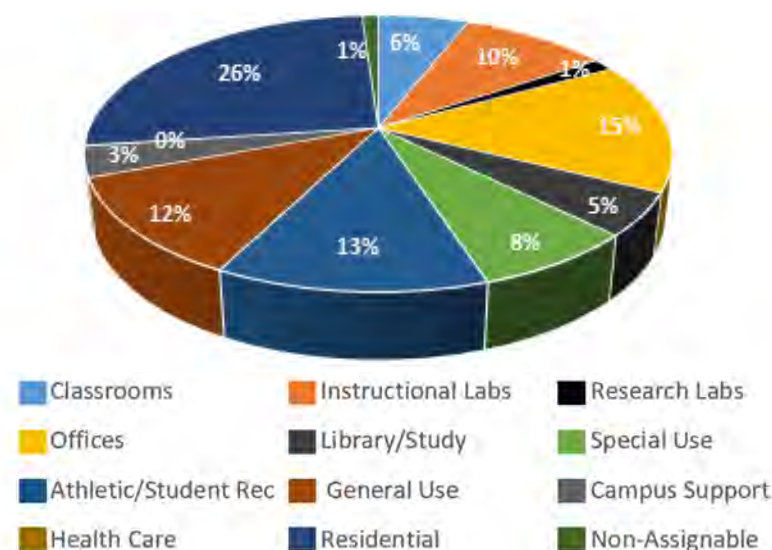
On-ground full-time equivalent (FTE) enrollment, courses taught, and faculty and staff were used as a basis to establish the relative quantities of space needed at the base year. The amount of space required is compared to the existing space on campus to identify a surplus or deficit of space by room type and assignment.

EXISTING SPACE

An existing space inventory of the Main Campus was collected and validated as part of the planning process and totals 1.59 million assignable square feet. Room use, seating capacity, and departmental assignment were verified during the data collection phase.

Table 5: Summary of Existing Space

SPACE TYPE	ASF	% of ASF
CLASSROOMS	94,911	6%
INSTRUCTIONAL LABS	154,495	10%
RESEARCH LABS	22,706	1%
OFFICES	245,220	15%
LIBRARY / STUDY	80,380	5%
SPECIAL USE	121,432	8%
ATHLETIC / STUDENT REC.	201,555	13%
GENERAL USE	187,858	12%
CAMPUS SUPPORT	57,172	4%
HEALTH CARE	1,132	0%
RESIDENTIAL	415,388	26%
NON-ASSIGNABLE	17,208	1%
EXISTING SPACE	1,599,457	100%



SPACE TYPES

For space planning purposes, full-time equivalent student counts were calculated using a conversion factor of 15 credit hours per undergraduate student and 12 credit hours per graduate student. In addition, the instructional day/week for the University is from 8 AM until 10 PM, Monday through Friday. For modeling purposes, it is assumed that peak utilization occurs during the daytime hours of 8:00 AM to 4:30 PM and this timeframe has been used in this study.

Space Type Descriptions:

- **Classrooms:** Category includes all space used for scheduled, non-laboratory instruction for all academic units (classrooms, seminar rooms, lecture halls). Also, includes rooms allocated as classroom service/support space.
- **Instructional Laboratories:** Category includes rooms characterized by special purpose equipment or special configuration that ties instruction to a particular discipline or closely related group of disciplines. Includes labs with scheduled use, open labs, and service space as an extension of the activities in the class labs.
- **Research Laboratories:** Category includes laboratories and services space used for non-class/research activities.
- **Offices:** Category includes the office and work areas for academic and administrative personnel along with office service space (conference, files/copy, lounge waiting, storage).
- **Library/Study:** Category includes the study, stack, processing, and archive spaces.
- **Special Use:** This category includes several space use categories that are sufficiently specialized in their primary activity or function to merit a unique space code. Area and rooms for athletic activity, media production, non-health clinical activities, demonstration, and animal and plant shelters are included. Also includes interview rooms, counseling, tutoring and testing rooms.
- **General Use:** This category is characterized by a broader availability to faculty, students, staff or the public. General Use facilities comprise a campus' general service or functional support system (e.g., assembly, exhibition, dining, relaxation, merchandising, recreation, general meetings and day care).
- **Support Facilities:** This category includes facilities which provide centralized space for various auxiliary support systems and services of a campus and help keep all institutional programs and activities operational. Included are centralized areas for computer-based data processing, shop services, general storage and supply, vehicle storage, and other central services such as shipping and receiving and duplication services.
- **Health Care:** Category includes rooms to provide patient care.
- **Residential:** Category includes housing facilities for students.
- **Unused/Inactive Areas:** Rooms available for assignment to an organizational unit or activity but unassigned at the time of the study.

PROJECTED SPACE NEEDS

Based on the planning assumptions detailed in the previous section of this report and the THEC Space Planning Guidelines, the current and projected THEC calculated space needs are summarized in Table 6 below. Comparative results from an alternative space analysis is also included in this summary. The following table summarizes current (2021) and future (2031) needs on the Main Campus by space type according to the THEC Space Guidelines and an alternative space model developed for the Master Plan for comparative results. Deficits (shown in red numbers) indicate a need for additional space.

Table 6: Projected Space Needs - THEC Model

SPACE CATEGORY	EQUIV FICM	EXISTING E&G ASSIGNABLE SQUARE FEET (ASF)	THEC SPACE NEEDS MODEL - MAIN CAMPUS (ASF)				ALTERNATIVE MODEL NEED ANALYSIS - MAIN CAMPUS (ASF)	
			THEC MODEL CURRENT NEED	CURRENT SURPLUS (DEFICIT)	THEC MODEL PROJECTED NEED	10-YEAR PROJECTED SURPLUS (DEFICIT)	ALT MODEL 10-YEAR PROJECTED NEED	ALT MODEL 10-YEAR PROJECTED SURPLUS (DEFICIT)
CLASSROOMS	100	94,911	51,414	43,497	71,934	22,977	80,189	14,722
LAB/STUDIOS	210, 215	125,453	85,425	40,028	117,344	8,109	149,810	(24,357)
OPEN LABS	220, 225	29,042	17,925	11,117	22,825	6,217	33,309	(4,267)
RESEARCH	250, 255	22,706	26,378	(3,672)	46,720	(24,014)	100,234	(77,528)
OFFICES	300	236,036	132,164	103,872	139,098	96,938	178,626	57,410
LIBRARY	400	80,380	56,018	24,362	55,537	24,843	82,409	(2,029)
PHYSICAL ED.	520, 523, 525	157,316	80,235	77,081	115,971	41,345	169,316	(12,000)
TOTAL		745,844	449,559	296,285	569,429	176,415	793,893	(48,049)

PROJECTED SPACE NEEDS: ADDITIONAL SPACE TYPES

The following table summarizes current (2021) and future (2031) needs on the Main Campus for additional space types not included in the THEC Space Guidelines, non-E&G space. These numbers are based on the consultant's space model. Deficits (shown in red numbers) indicate a need for additional space.

Table 7: Additional Space Needs Analysis: Main Campus

SPACE CATEGORY	EQUIV FICM	EXISTING E&G ASSIGNABLE SQUARE FEET (ASF)	CURRENT NEED - MAIN CAMPUS (ASF)		PROJECTED NET NEED - MAIN CAMPUS (ASF)	
			CURRENT NEED	CURRENT SURPLUS (DEFICIT)	10-YEAR PROJECTED NEED	10-YEAR PROJECTED SURPLUS (DEFICIT)
SPECIAL USE SPACE	500	128,619	131,464	(2,845)	150,579	(21,960)
ATHLETIC SPACE	520	201,555	201,555	0	353,136	(151,581)
OTHER GENERAL USE SPACE	600	7,297	7,297	0	7,297	0
ASSEMBLY SPACE	610	86,888	73,256	13,632	103,599	(16,711)
EXHIBITION SPACE	620	4,517	3,494	1,023	4,252	265
FOOD/DINING SPACE	630	27,979	27,841	138	31,741	(3,762)
LOUNGE SPACE	650	13,175	10,766	2,409	16,500	(3,325)
MERCHANDISING SPACE	660	10,653	9,730	923	11,500	(847)
RECREATION SPACE	670	11,827	11,827	0	14,327	(2,500)
MEETING SPACE	680	25,522	8,708	16,814	23,191	2,331
SUPPORT SPACE	700	59,169	68,814	(9,645)	86,587	(27,418)
HEALTH CARE SPACE	800	1,132	1,397	(265)	3,500	(2,368)
RESIDENTIAL SPACE	900	415,388	415,388	0	459,111	(43,723)
TOTAL		836,405	814,221	22,184	1,265,320	(271,599)

- All numbers are shown in assignable square feet
 - Existing E&G space calculation includes new Latimer Building, update to Hall-Moody and reassignment Clement Hall and Johnson EPS Building
 - Projected need incorporates program needs from the following projects: TEST Hub, Fine Arts Building addition, new College of Business Administration Building, Meat Processing Facility, and Beef Cattle Teaching and Demonstration Facility
 - Gap analysis does not include ASF lost due to upgrades of existing buildings

PRIORITY PROJECTS

Projected future space needs calculations assume that the following priority projects have been implemented by 2031.

- Fine Arts Addition
- Business Administration Building
- Tennessee Entrepreneurship, Science, and Technology (TEST) Hub
- Meat Processing Facility
- Beef Cattle Teaching and Demonstration Facility
- Proposed housing demolition

STUDENT LIFE ASSESSMENT

As part of the Master Planning process, there was a planning and needs assessment for student life facilities that included four focus areas: student housing, dining, student centers, and student recreation and wellness facilities. The process included the review of existing facilities and operations, strategic visioning with the University's key stakeholders, student focus groups, needs assessment / programming, and facility concept development.

The following specific space needs were identified related to student life based on conversations with the University.

- Boling University Center addition, including North and South courtyard upgrades
- Phased Student Housing replacements and upgrades
- Student Recreation Center's pool addition
- Kathleen and Tom Elam Center renovation (with indoor turf field addition)
- New Student Health & Counseling Center
- Pacer Pond Pavilion
- Elam Center Outdoor Basketball Courts
- Intramural and Club Sports Fields near Student Housing
- Gateway opportunities at entry points to campus
- Outdoor Amphitheater including seating and programmable space at the current Grove Apartments site

FACILITIES CONDITIONS

From the University's origins tracing back to 1900 through today, the campus has continued to evolve over the last century.

Some of the original facilities still utilized on campus include the McCombs Center and Sociology Building, the Student Life Center, and Crisp Hall, which showcase the historical significance of the campus and provided as a guideline for the campus' design aesthetic. Since then, the campus has added 58 academic and support buildings within the 320-acres of the main campus' academic core and the 680 acres of teaching and research lands.

Since the institution's establishment in Martin, the number of campus facilities had doubled by 1931 but was halted at the beginning of the Great Depression, which slowed enrollment and the development of new facilities. During the 1950s, post-World War II, steady enrollment growth began again, and the construction of new facilities began to shape the current-day main campus. From there, programs continued to expand, and by 1951, the state legislature passed House Bill 264, which designated the institution as a four-year university and renamed the former junior college the University of Tennessee, Martin Branch.

Once the institution was designated as a four-year university, more classrooms, offices, and living quarters were built to meet the new standards required for a four-year university. The 1960s introduced a new generation of students, jumping the student population from 1,123 students in 1960 to 4,197 by 1969. Course selection increased, new programs developed, and students required expanded housing. That decade saw the most significant construction boom in the school's history, which shaped the modern-day campus it is today.

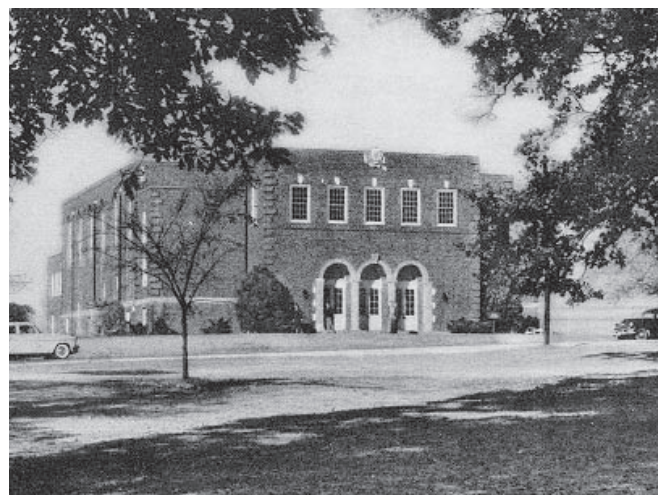
Per THEC requirements, a sustainability matrix was developed to assess the current and future condition of all the facilities on the Main Campus (see Table 8). This matrix ranks the condition of each facility within a three and five-year timeframe. Facilities that ranked at either a C or D rating are slated for improvements and upgrades within the ten-year timeframe of the Master Plan and included within the project lists.



University of Tennessee at Martin, Crisp Hall, built in 1930



University of Tennessee at Martin, McCombs Center, built in 1929



University of Tennessee at Martin, Student Life Center, built in 1930

FACILITIES IMPROVEMENTS

UPGRADE

ACADEMIC/RESEARCH FACILITIES

- ROTC Building
- Meek Library Renovation (with Dining Option)
- Sociology Building
- Graves Stables Renovation
- Holt Humanities Building
- Clement Hall Renovation
- Biology Greenhouse Renovation
- McCombs Center Renovation
- Student Life and Leadership Center Renovation
- Crisp Hall Renovation
- Brehm Hall Renovation
- Ag Pavilion and Stalling Facility Renovation
- Student Activities Pavilion Renovation
- Sheep and Goat Barn Renovation
- Plant Science Research Center Renovation
- Gooch Hall Remodel
- Repurpose Student Health and Counseling Center Facility

ADMINISTRATION

- Hall-Moody Administration Building Remodel

STUDENT SERVICE FACILITIES

- Perry Day Care Renovation
- Child & Family Resource Center Renovation

ATHLETIC/RECREATION FACILITIES

- Henson Tennis House Renovation
- Elam Center Remodel

HOUSING FACILITIES

- University Courts Demolition and Replacement
- Ellington Hall Demolition and Replacement
- Grove Apartments Demolition
- Browning Hall Demolition and Replacement
- Cooper Hall Renovation

PHYSICAL PLANT FACILITIES

- Power Generation Facility Renovation
- Heating Plant Renovation
- Physical Plant Warehouse Renovation
- Physical Plant Storage Renovation
- South Chiller Plant Renovation
- Physical Plant Renovation
- Recycling Center Renovation
- Maintenance Complex (3) Renovation

NEW CONSTRUCTION/ADDITION

ACADEMIC/RESEARCH FACILITIES

- Beef Cattle Teaching and Demonstration Facility
- Blaylock Inspirational Oracle
- New Business Building
- Test Hub
- Meat Processing Facility
- Enlarge Surgery Suite at Veterinary Complex
- Student Activities Pavilion
- Student Health Center
- University Center
- Fine Arts Renovation and Addition
- Kennel Update and Expansion
- Johnson EPS Building Upgrades

ATHLETIC/RECREATION FACILITIES

- Baseball Indoor Batting Facility
- Indoor Athletic Practice Facility
- Bob Carroll Football Building Renovation and Addition
- Student Rec Center Pool Addition

HOUSING FACILITIES

- Student Housing - Replacement for Ellington and Browning Hall
- Student Housing - Phase 1 Replacement for University Courts
- Student Housing - Phase 2 Replacement for University Courts

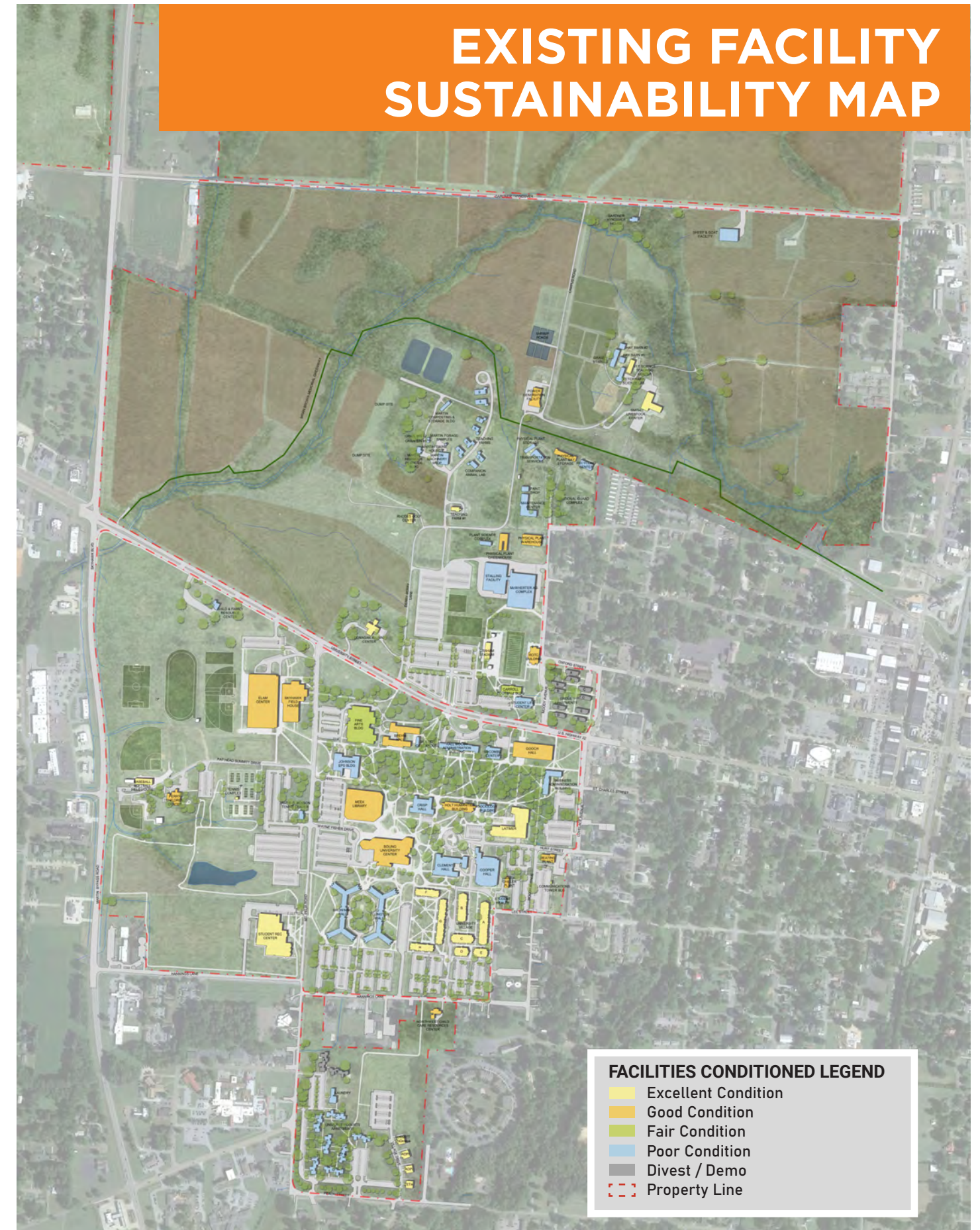
STUDENT SERVICES

- New Student Health and Counseling Center
- NW Child Care Resource Center Renovation and Addition

Table 8: UTM Facility Sustainability Matrix

Physical Building Condition Rating	Program Suitability Rating				
	5 - Vacant. No Functional Program Occupancy	4 Poor	3 Fair	2 Good	1 Excellent
A Excellent - <i>New, continue normal maintenance</i>					Reelfoot Field Pavilion
B Good - <i>Continue normal maintenance and minor systems renovations</i>			Fine Arts Carroll Football	Alumni Center Teaching Farm Bldg #1 (Diagnostic) Vet Science Teaching Center University Village A-H Rhodes Golf Center Smith Livestock Center	Sorority Lodges (4) Student Rec Center Tennis Complex Baseball/Softball FH Graham Stadium Pressbox
C Fair - <i>Moderate to Major Building Systems Renovations</i>	Business Administration McCombs Center	Ag Pavilion and Stalling Rodeo Land Cooper Hall Henson Tennis House Child & Fam Resource Student Life Center Maintenance Complex (3) Recycling Center Physical Plant Storage Gardner-Hynds House Samburg Structures (4) Sheep & Goat Barn Other Farm Structures Equine Property	Brehm Hall Humanities Meek Library Power Generation Facility University Center Heating Plant Northwest Childcare Physical Plant Warehouse South Chiller Plant Physical Plant Bay Storage (half leased)		
D Poor - <i>Major Building Systems Replacements and Renovations, or Demo</i>	Clement Hall Crisp Hall Sociology Building Browning Hall Ellington Hall University Courts (laundry,C-J) Beef Cattle Barn	Biology Greenhouse Johnson EPS Plant Science Research Center Student Health Veterinary Science Lab Hall Moody Administration Graves Stables National Guard Bldg (leased)	Elam Center Fieldhouse Gooch Hall Perry Day Care ROTC Building Phys Plant Greenhouse		
V- Divest/ Demo	University Courts A&B Grove Apartments (all)				

Condition/Program	
A1, A2, B1, B2	Good condition, good program fit, continue routine maintenance.
C1, C2, D1, D2	Candidates for major building renovations, good fit of programs to buildings, "keepers"
A3, A4, B3, B4	Major programmatic facility improvements are needed in good buildings, and/or relocation of programs; building design or configuration is affecting program delivery
C3, C4, D3, D4	Major programmatic and building conditions improvements required; candidates for demo/divest or significant improvements.
A5, B5, C5, D5	Occupy or divest
V1, V2, V3, V4	Schedule demo/divest plans and relocations of occupants.
V5	Schedule demo/divest plans.



SITE CONSIDERATIONS

The following key themes informed the vision, recommendations, and the development framework of the Campus Master Plan. These themes include:

CREATE A VIBRANT CAMPUS ENVIRONMENT

Creating a vibrant campus life is a key element of the campus master plan. The Plan reviewed existing space use data, campus spaces, facilities, and campus landscape to create a framework for integrating existing and proposed facilities into a vibrant UTM Campus.

Six key elements are key to creating a vibrant campus environment. They include reviewing building edges and relationships with neighborhoods, creating “third spaces” for student life and collaboration, and campus landscape (which in this case is an arboretum). This is also important to review in the context of new land acquisitions to the north and southeast.

One of the major elements of a vibrant campus environment is to address student and residential living space needs, and critical adjacencies. The Campus Master Plan provides a strategy to maintain existing critical adjacencies between student residential halls, student life facilities, and athletic and recreational amenities within the campus.

ADDRESS EXISTING AND FUTURE CAMPUS NEEDS FOR THE FACILITIES AND INFRASTRUCTURE

The Master Plan integrates the findings of the facility conditions assessments, and feedback received through the campus planning outreach and engagement process to address the existing and future needs for facilities, spaces, and campus infrastructure. This includes a review of the existing space’s qualitative space needs and quantitative issues. A BIM model is created for the campus that can become part of the UTM’s decision-making process for the facilities and infrastructure needs.

INTEGRATING THE CAMPUS CORE

The Master Plan provides a development framework to accommodate growth while integrating various parts of the campus into a cohesive whole. The Plan emphasizes connectivity (programmatic, and pedestrian) between the core

campus and the campus areas to the north and west of the campus.

- Visibility to the Campus Core / Campus Quad and Arboretum – The Campus Plan preserves the existing campus arboretum – the campus quad.
- New academic buildings
- Creation of additional identifiable programmable open spaces throughout the campus.
- Green infrastructure

EXPAND PEDESTRIAN REALM AND REVIEW PARKING / PARKING ACCESSIBILITY, AND WALKABILITY

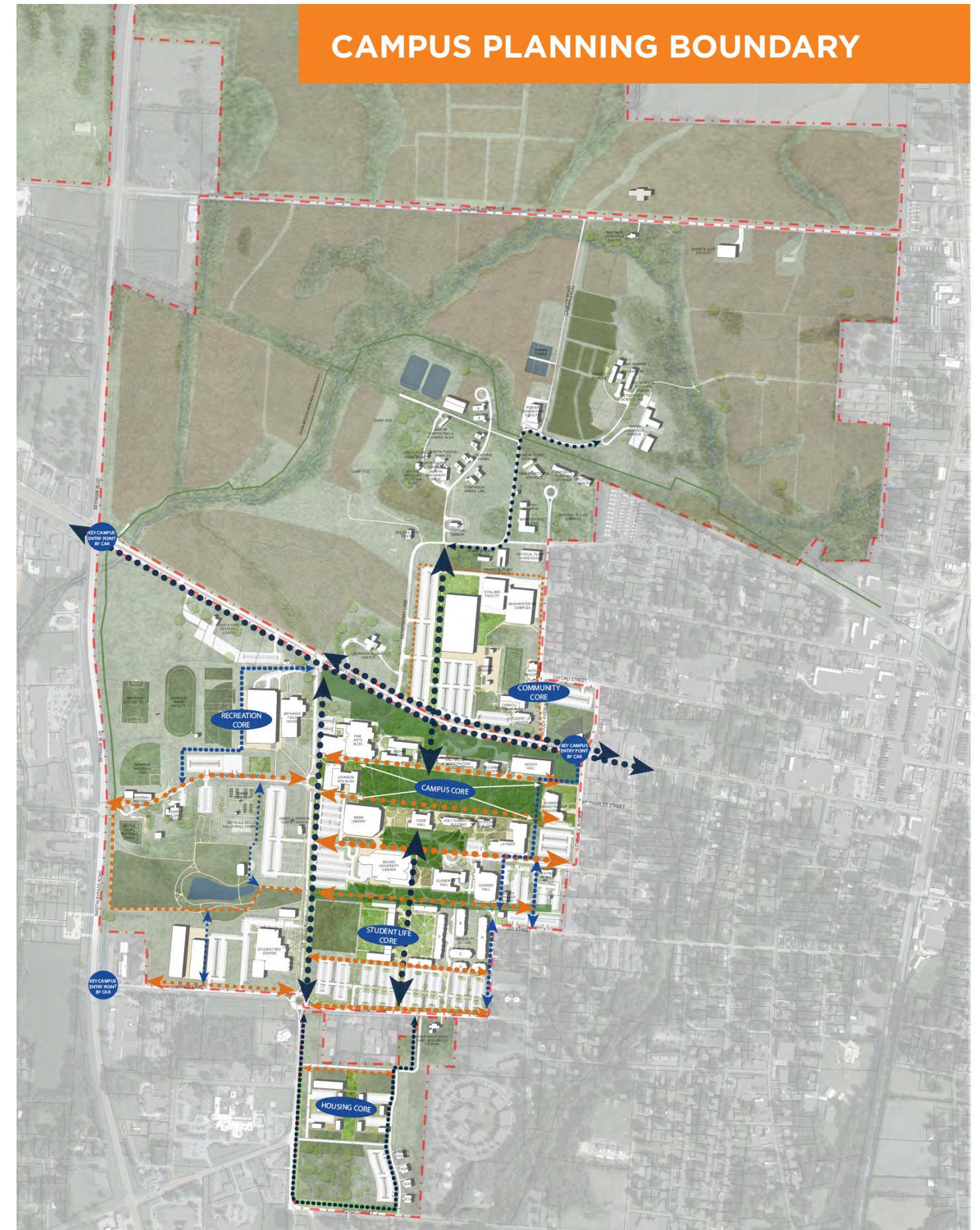
The Master Plan showcases opportunities to improve pedestrian access and safety throughout the campus, including an assessment of parking and ADA accessibility. Universal access is an important aspect to the UT Martin core value in terms of inclusivity and student success.

- Expand the pedestrian realm
- Partnership with the City for street related work
- Increase walkability and improve pedestrian safety
- Complete streets
 - Converting Mount Pelia Road into a pedestrian and bike-friendly boulevard
 - Traffic calming on University Street

VISIBILITY AND IDENTITY

The Master Plan aims to bold campus edges that create a positive, consistent identity and a sense of campus placemaking. Through the integration of gateways, wayfinding, and signage, the University can continue to develop a bold sense of place and local identity within the region. Gateways highlight entry among the edges and serve as the formal transition between campus and the surrounding area, welcoming millions of visitors and users every year. Wayfinding and signage will be allocated throughout the campus in pedestrian and automotive scales to provide a sense of place and directional flow for students, faculty, staff, and visitors.

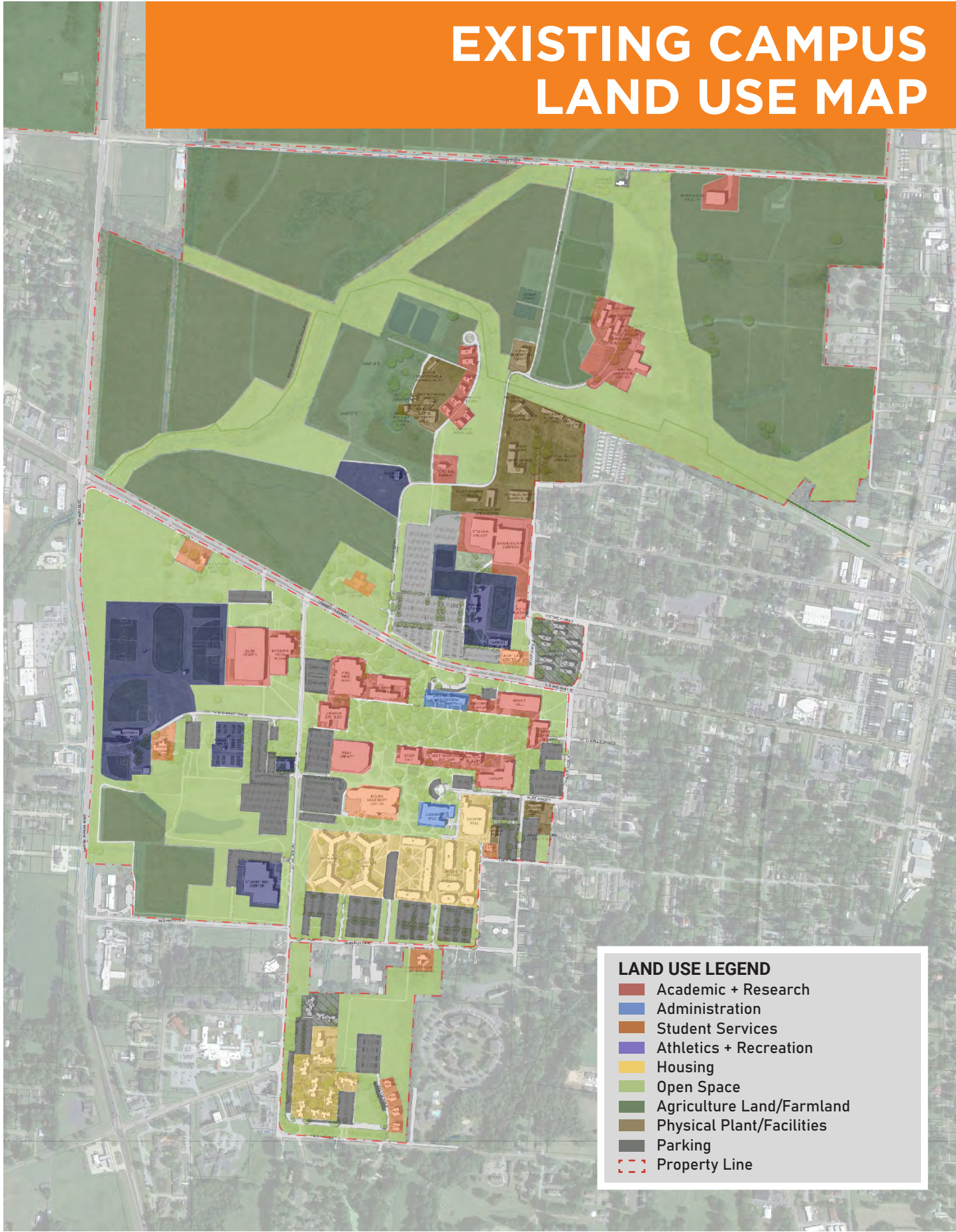
CAMPUS PLANNING BOUNDARY



SITE CONSIDERATIONS CONTINUED

LAND USE

The existing land use provides a collegiate environment for students, faculty, staff and visitors on campus. There are pockets of space generally assigned to areas such as residential spaces, academics, agricultural lands, student life space, administration, open space, and facilities. There are many open spaces, especially near Pacer Pond that are enjoyed on campus for recreational walking trails. The northern end of campus includes more the of the agricultural and veterinary programs, as well as farm and grazing land.



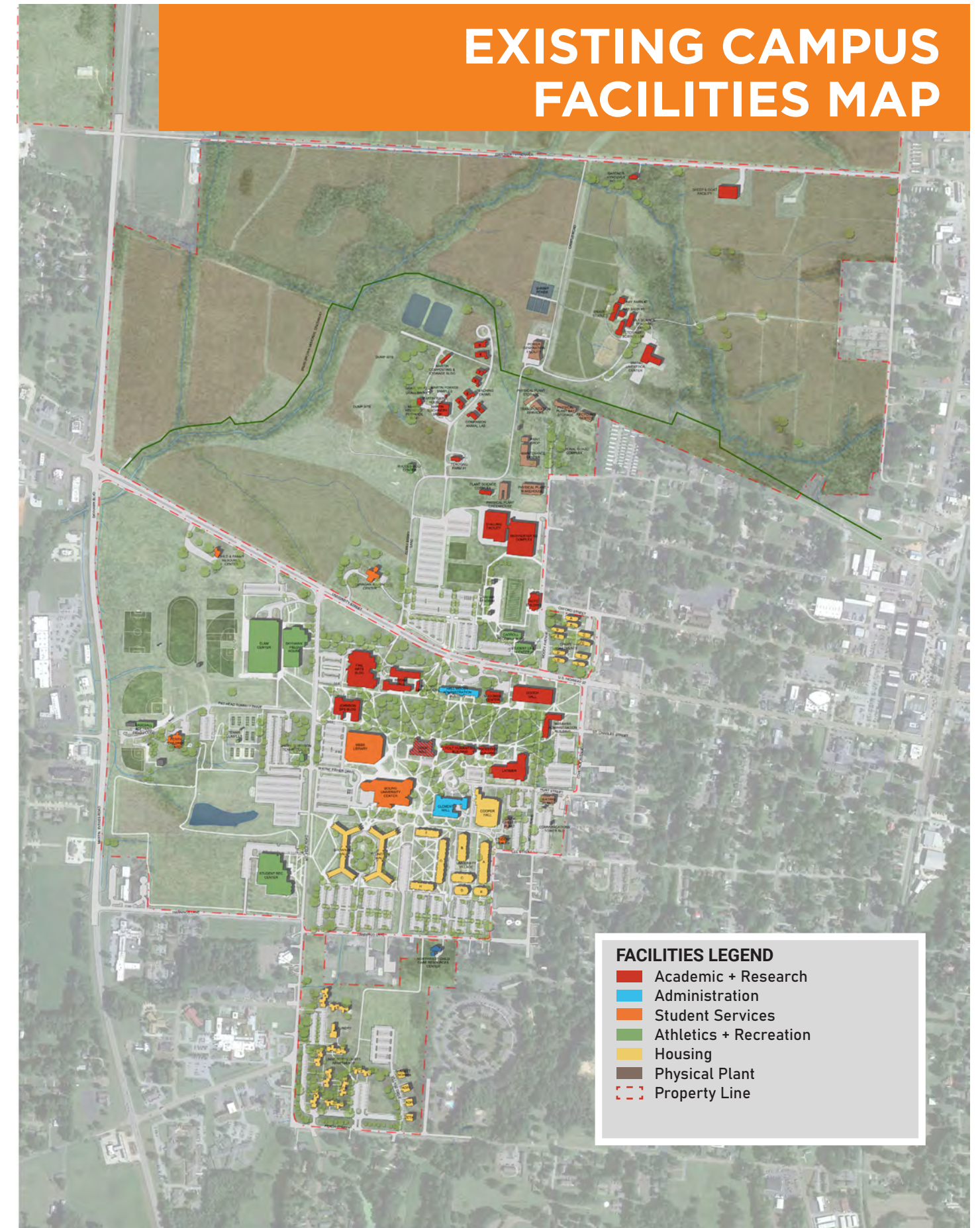
SITE CONSIDERATIONS CONTINUED

FACILITIES

The University of Tennessee at Martin currently has a variety of facilities at various levels of deferred maintenance. Many buildings serve as multi-purpose or department spaces, while others, like residence halls, remain focused on one building use type. A few highly visited buildings on campus include Boling University Center, that supports the main dining areas of campus, the Student Rec Center that boasts updated interiors and spaces, as well as the Administration Building and Crisp Hall, has some of the oldest facilities on campus. The University has plenty of unoccupied space and open areas that could be used for future development.

During concept development engagement workshops, the most important facility improvements for the future vision plan included the following:

- Provide a location for a more prominent Welcome Center on campus
- Keep the initial location for the TEST hub from the initial design since it was tested to be the most favorable
- Priority to move the Student Health Center and make it more centralized location for ease of access for all students
- Provide more visible location of the Multicultural Center to provide visibility on campus



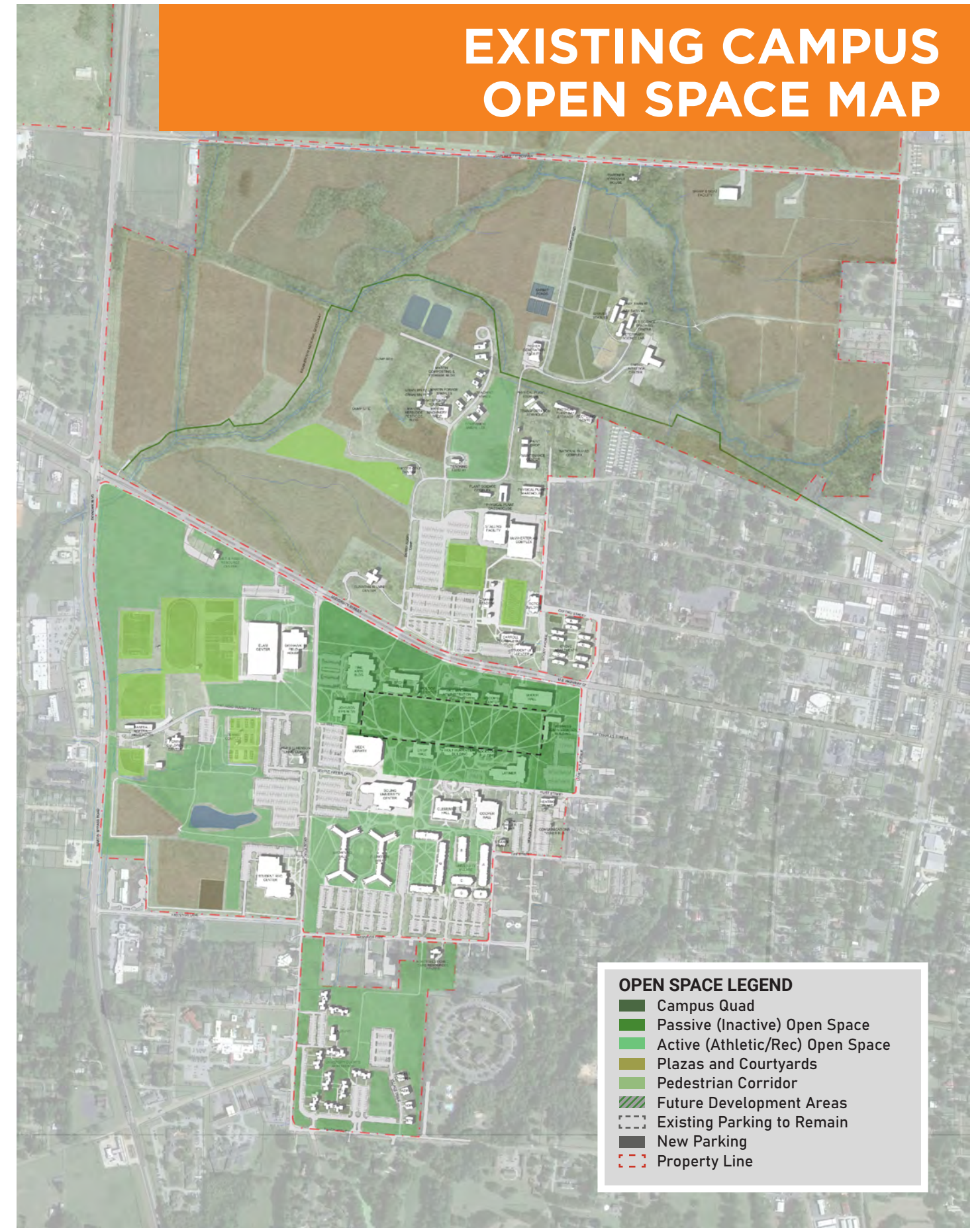
SITE CONSIDERATIONS CONTINUED

OPEN SPACE

The open areas on campus offers a wide range of space types that provide a different variety of passive or active landscape spaces. One of the most desirable areas on campus is the central Campus Quad, which boasts mature trees, paths, and few seating options. There are fitness trails on the west of campus near Pacer Pond, which are also highly utilized. Other green or outdoor areas, especially near the residential buildings, are used for students when they are not attending classes. A large request heard during listening sessions for this Master Plan was to include in the future more areas of shade and further courtyard spaces near buildings for short break areas between classes and meal times. With the campus being so vast, there is ample space for improvement in open space and site furnishings.

During concept development engagement workshops, the most important open space improvements for the future vision plan included the following:

- Gateway and signage improvements at all campus entry locations to provide sense of place and direction
- Develop amphitheater at the current Grove Apartments site as a programmed outdoor space not only for events but for student, faculty, and staff social space
- Create a more welcoming outdoor environment with shade and seating within the campus core



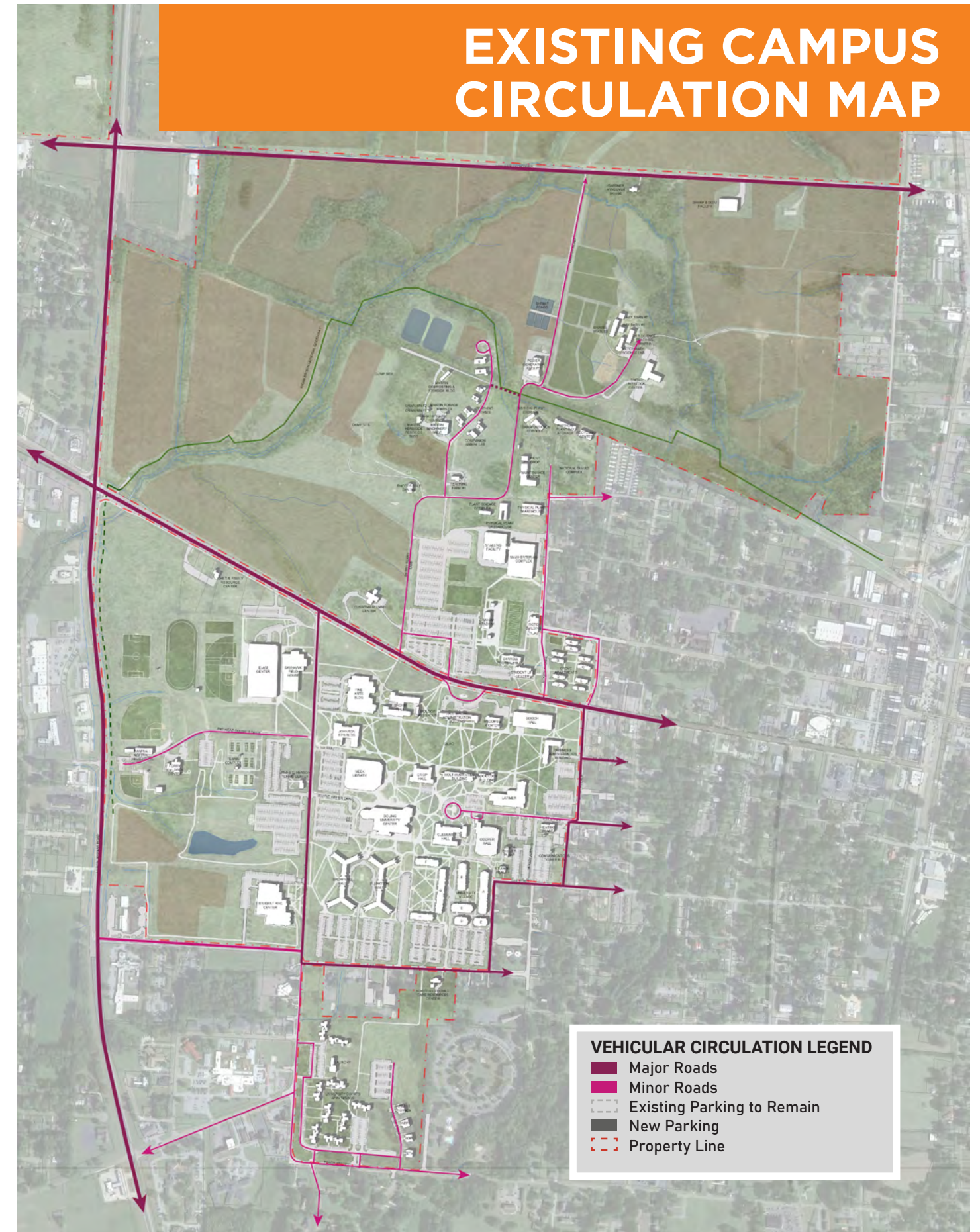
SITE CONSIDERATIONS CONTINUED

CIRCULATION

As part of a major goal for the ten-year vision of the University, circulation plays a major concern for students, faculty, staff, and visitors. The need for less traffic through campus, more wayfinding, and signage, as well as more integrated and connected pedestrian circulation throughout campus, would improve the overall campus circulation. The recent improvements along University Street in partnership with the City of Martin have provided crosswalk safety advancements improving the campus' sense of place; however, crosswalk needs continue throughout all edges of the campus for both automotive and pedestrian accessibility.

During concept development engagement workshops, the most important circulation improvements for the future vision plan included the following:

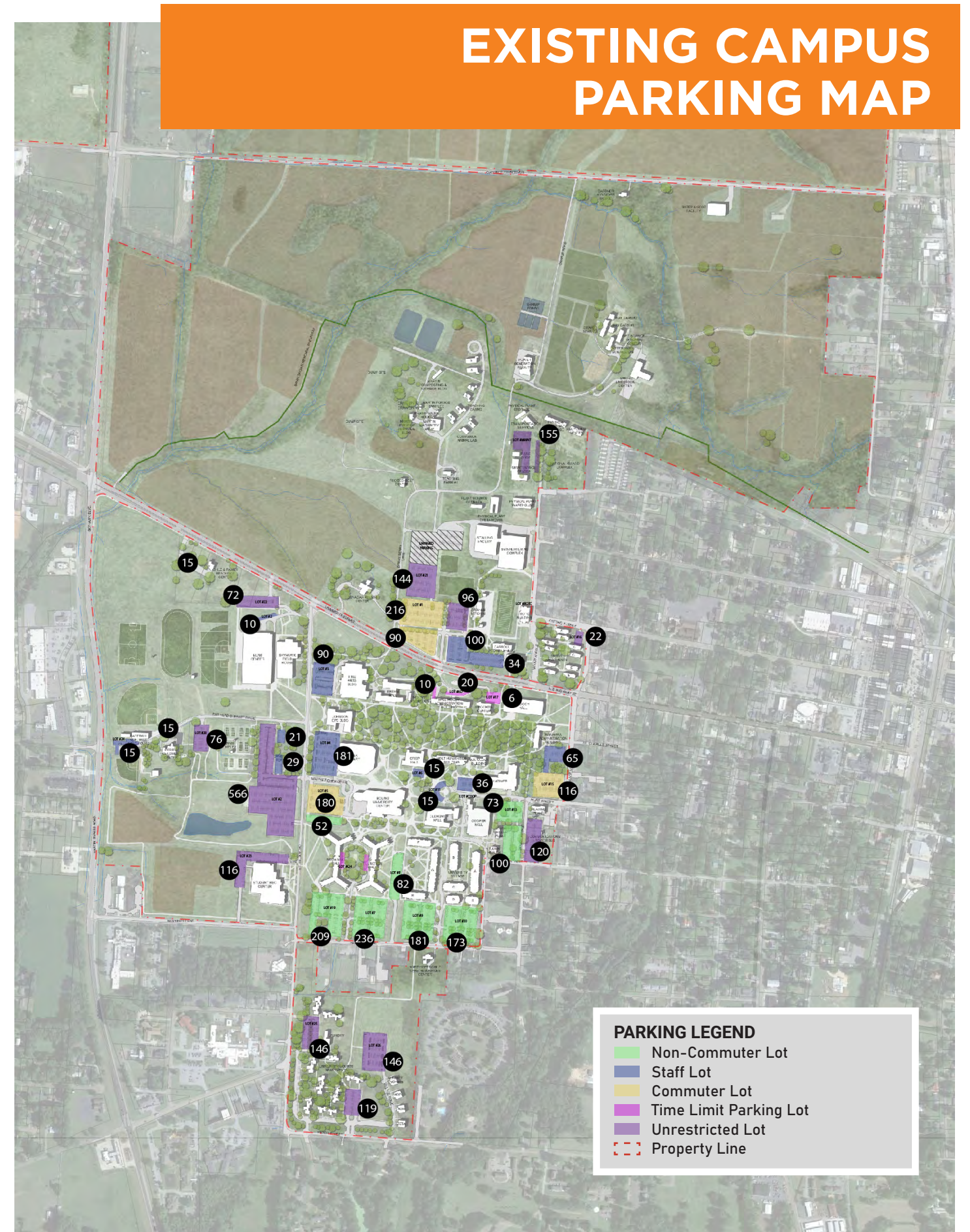
- Integrate different traffic calming design ideas along Mt. Pelia Road to improve pedestrian circulation, including the installation of roundabouts, wider sidewalks, prominent crosswalks, and more landscaping
- Improve connectivity from the northern portion of campus (agricultural facilities and Brian Brown Greenway) to the southern portion of campus (University Courts Apartments) that provides safe and accessible pedestrian circulation
- Reevaluate campus parking utilization and priority



SITE CONSIDERATIONS CONTINUED

PARKING

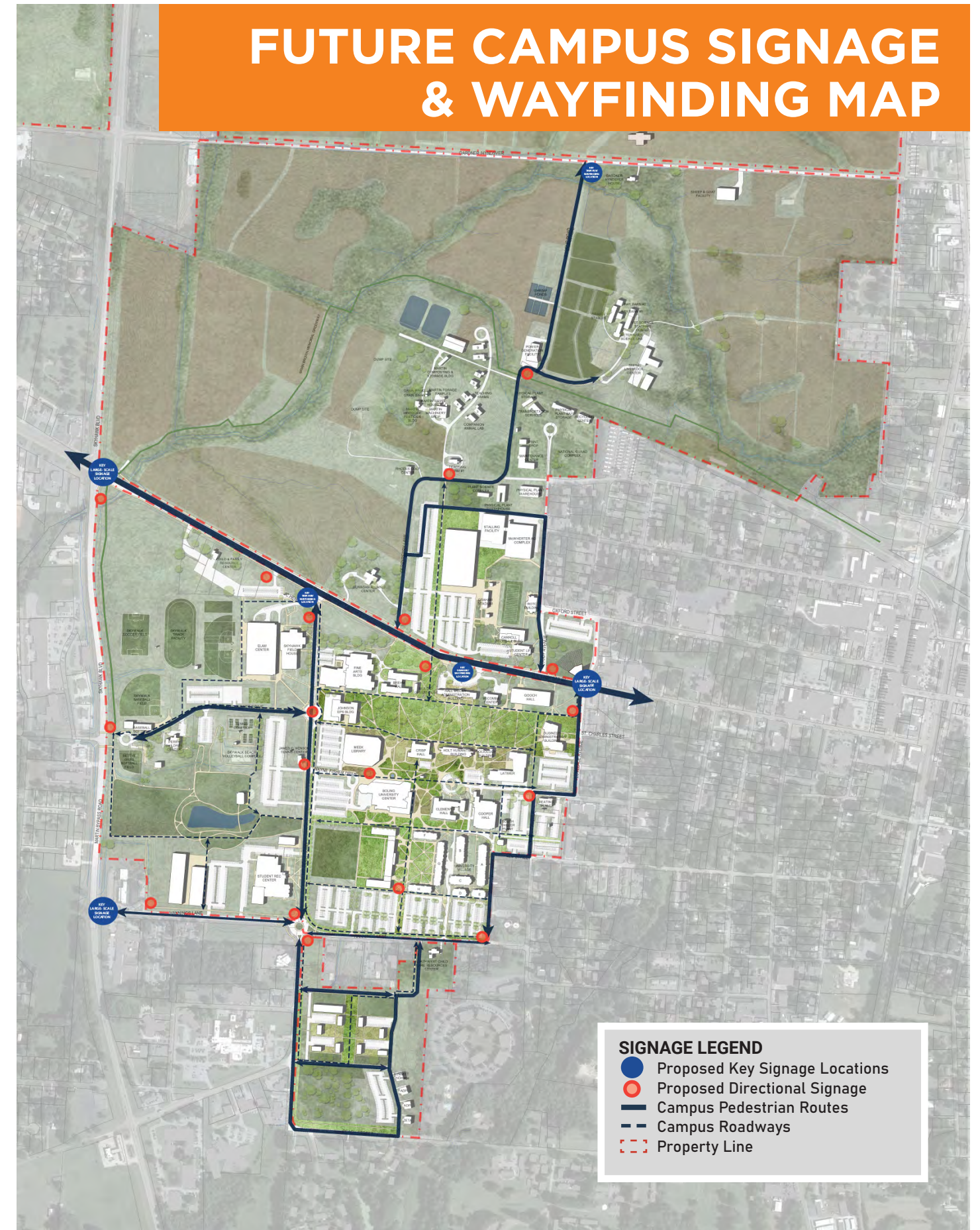
Currently, there is an abundance of parking on campus, however, there is a perceived deficit based on lack of connectivity and wayfinding from an automotive and pedestrian vantage point. The perceived deficit generally can be attributed to limited parking near main doors of buildings and the current mind-set of students on campus driving versus walking or biking while on campus. Large parking lots are available near the Football Stadium, to the west of Mount Pelia, and south of the current residents halls. There are also various other parking lots throughout campus, and in proposed changes to campus, parking will not be limited.



SITE CONSIDERATIONS CONTINUED

SIGNAGE

While there are some great monument signs portraying UT Martin colors and pride, there is room for increased branding and signage opportunities as the campus exists today. The main areas on campus that are provided signage is the thoroughfare of University Street with pedestrian crossings, light pole flags, and monuments/pillar signs. There are also some informational and building name signs scattered throughout the campus. A signage and wayfinding plan should be developed to guide students, staff, and visitors on campus.



2

MASTERPLAN FRAMEWORK

FUTURE CAMPUS VISION

The Master Plan development was based on listening to the needs of campus stakeholders, and an analysis of campus space needs and physical site conditions, with the intent to address each of the planning principles and planning objectives.


A major driver of the plan is the further development of **a campus where students and staff feel supported and inspired to be their best**. To achieve this, organization of the site plan is designed to support success within the themes developed during workshops:

- Connectivity and Accessibility
- Community
- Academic Success
- Facilities and Infrastructure
- Student Life and Amenities
- Open Space, Athletics, and Recreation

VISION DEVELOPMENT

The Master Plan reflects the total assumed need for a full build-out which includes the Tennessee Entrepreneurship, Science, and Technology (TEST) Hub, College of Business and Global Affairs replacement facility, and the Fine Arts Addition.


BIG IDEAS THEMES




Connectivity + Accessibility
Integrate campus edges with the campus core to create a cohesive, well-connected pedestrian-friendly campus environment.



Community
Create a sense of place for the campus and enhance the town and gown relationship with the surrounding community.



Academic Success
Align the Master Plan with the Strategic Plan and Academic Plan / Integrate past plans and stakeholder engagement to deliver live/learn/work experiences as an anchor institution.



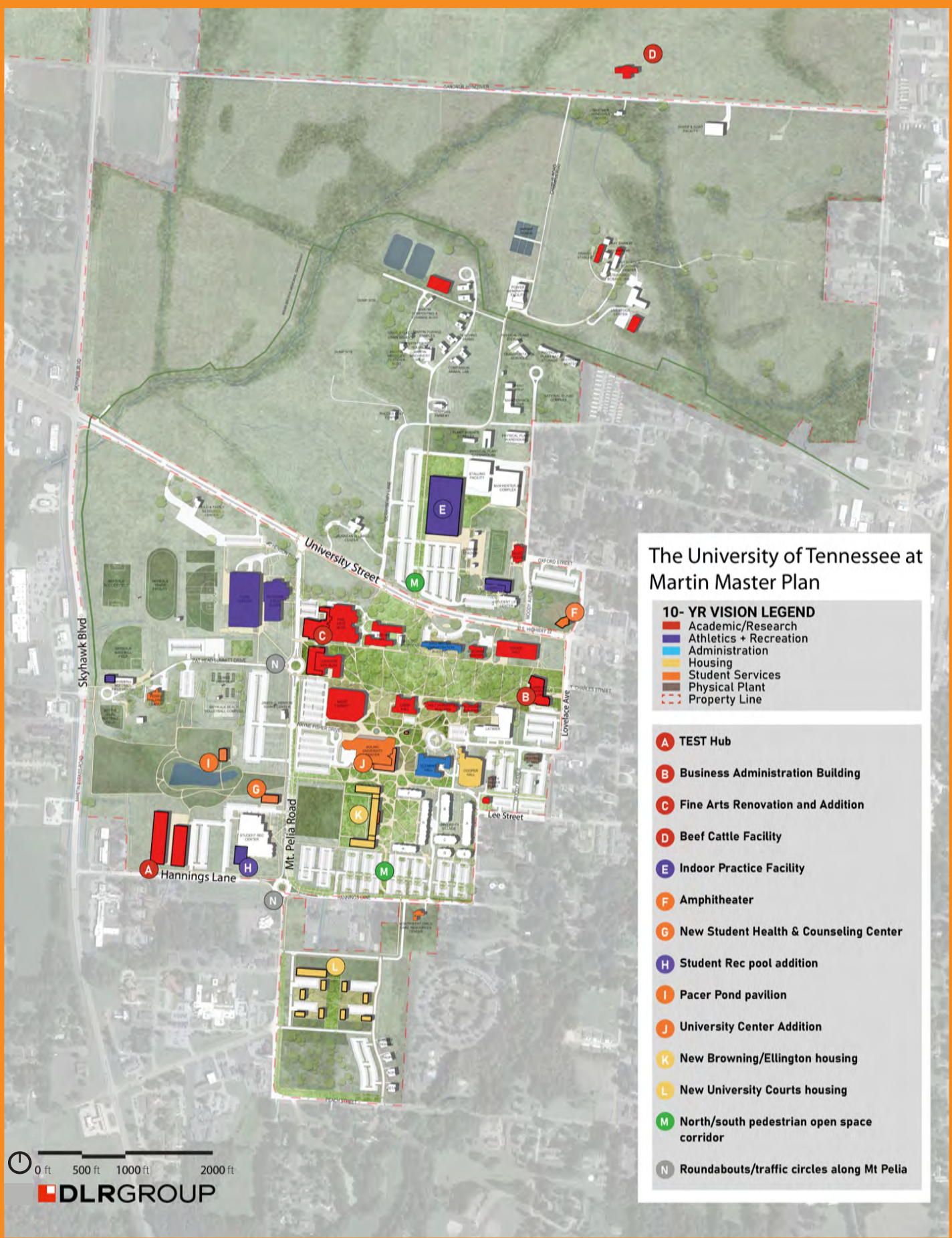
Facilities + Infrastructure
Utilize and maintain current facilities on campus to their fullest capability and update infrastructure to sustain growth for years to come.



Student Life and Amenities
Create a vibrant campus life and campus community through student-focused activities, programs, and amenities.



Open Space, Athletics, and Recreation
Integrate campus core, the Quad, and green spaces, expand pedestrian realm and connect student life and activities, cohesion of campus pathways and connectors.



DESIGN GUIDELINES

The pressure to use campus resources efficiently and effectively across all institutional property requires looking at the campus as a system of parts. Interconnecting campus planning and design issues resolve challenges and provide solutions that promote equity, inclusion, sustainability, resiliency, overall wellness, and mobility across all physical infrastructure. Design guidelines together with sound urban design principles can align institutional facilities, open space, and utilities with mission, vision, values, programs, and finances. The campus master plan recommendations and the development framework integrate the following design guidelines. These design guidelines and planning and design principles can be used as an integral part of the campus development and in the implementation of campus projects.



CREATING AUTHENTIC “THIRD PLACES” - Places and Spaces for Collaborative Learning, Research, and Innovation

Collaborative learning, research, and innovation happen everywhere on campus. The key is to create authentic “third places” across the campus that foster spontaneous conversations, idea-sharing, interdisciplinary collaboration, and partnerships.

- Collaborative Learning and Research Spaces within the Library, University Center, Recreation Center, and other such facilities.
- Shared Spaces and Social Hubs – Creating social shared hubs for learning within all new and existing facilities.
- Intentional Density and Mixing of Uses

MERGING CAMPUS EDGES - *Stitching the Campus into the Community Fabric*

The changing physical, financial, societal, and environmental context in the last two decades requires campus edges to be active, welcoming, and integrated with the community. Town and gown can thrive together and create inclusive prosperity for students, faculty, staff, employees, and residents.

- Innovation Districts and Campus Precincts – Recognize various precincts of the campus such as the agricultural precinct, core campus precinct, innovation HUB, athletic and recreational precinct, etc.
- Active Edges and Contextual Design
- Invitational Partnerships and Community Amenities

FOCUSING ON CAMPUS LANDSCAPE - A Variety and Hierarchy of Open Space, Programming, and Public Realm Design

Campus facilities and infrastructure are glued together by their landscape and open space structure. A variety and hierarchy of open spaces, activities, and programming are essential for campus vibrancy, placemaking, and learning. They provide opportunities for social interaction, free speech, cultural expression, respite, and recreation.

- Open Space Network and Programming
- Placemaking
- Blue/Green Infrastructure and Stormwater Management
- Public Realm, Signage and Wayfinding, and Landscape Design Guidelines

ENHANCING A SENSE OF CAMPUS COMMUNITY - *Identity and Character that Encourage Diversity and a Sense of Belonging*

Because the need to increase equity and ensure inclusion within the full campus experience is more critical than ever before, they create room for diverse communities to express themselves freely. To support a multicultural institution, the campus must have a welcoming spirit, flexible space for personal expression, and public art that embraces the richness of all stakeholders. Students, faculty, and staff must be able to “see themselves” in the physical campus setting.

- Campus Character and Identity
- Historic Preservation
- Development Framework and Urban Design Guidelines

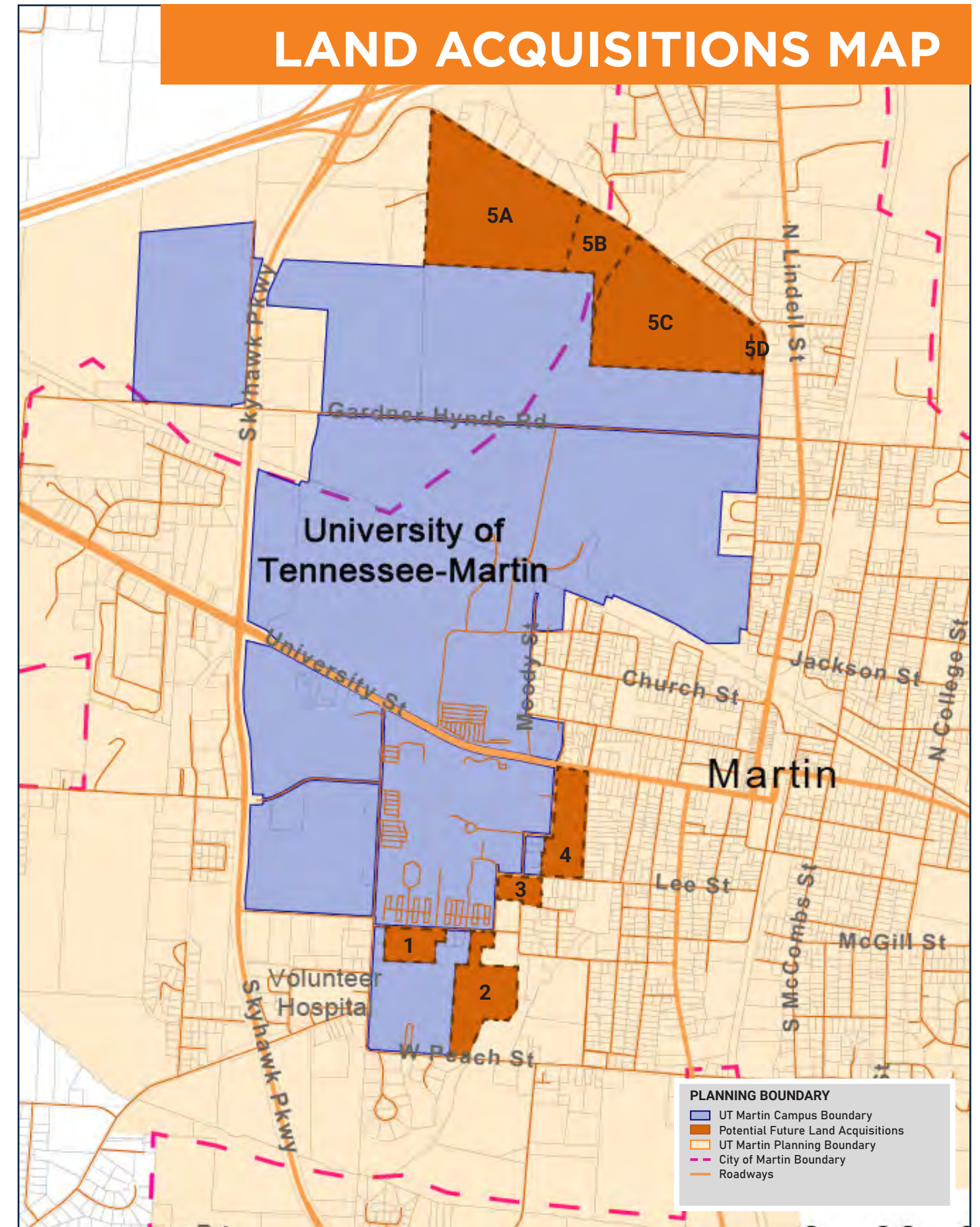
BUILDING ON A HUMAN SCALE - A Development Framework that Restores the Pedestrian Experience

As campuses struggle to reduce parking demand and cope with issues of pedestrian safety, students and communities demand new approaches to campus movement and mobility. Strategies that focus on Transportation Demand Management (TDM), transit, bicycles, and shared mobility to create a pedestrian-oriented environment are now a necessary component of campus planning and design.

- Supportive Pedestrian Environment
- Multi-modal Circulation and Parking
- Human-scale and Character of Campus Facilities

LAND ACQUISITIONS

Like the 2015 Master Plan Refinement, land acquisition of the group of parcels within the highlighted areas on the map to the right (1, 2, 3, and 4) would allow future building footprints, enhanced campus edges, and strategic locations for new and displaced parking. In addition, acquiring parcels 5 A-D would support the University's Agriculture program into the future for years to come beyond this 10-year timeframe. The land acquisition of the several parcels mentioned would provide opportunities to continue expanding academic programs. While there is no current plan to acquire these properties, the campus is open to additional partnership opportunities as funding allows.



INFRASTRUCTURE

MECHANICAL

Future additions and renovations to the campus facilities must have sufficient utility capacity to meet current and additional requirements without compromising functionality, cost, maintainability, reliability, and the ability to be adapted and upgraded without substantial rework for a phased implementation of additional venues over the next decade.

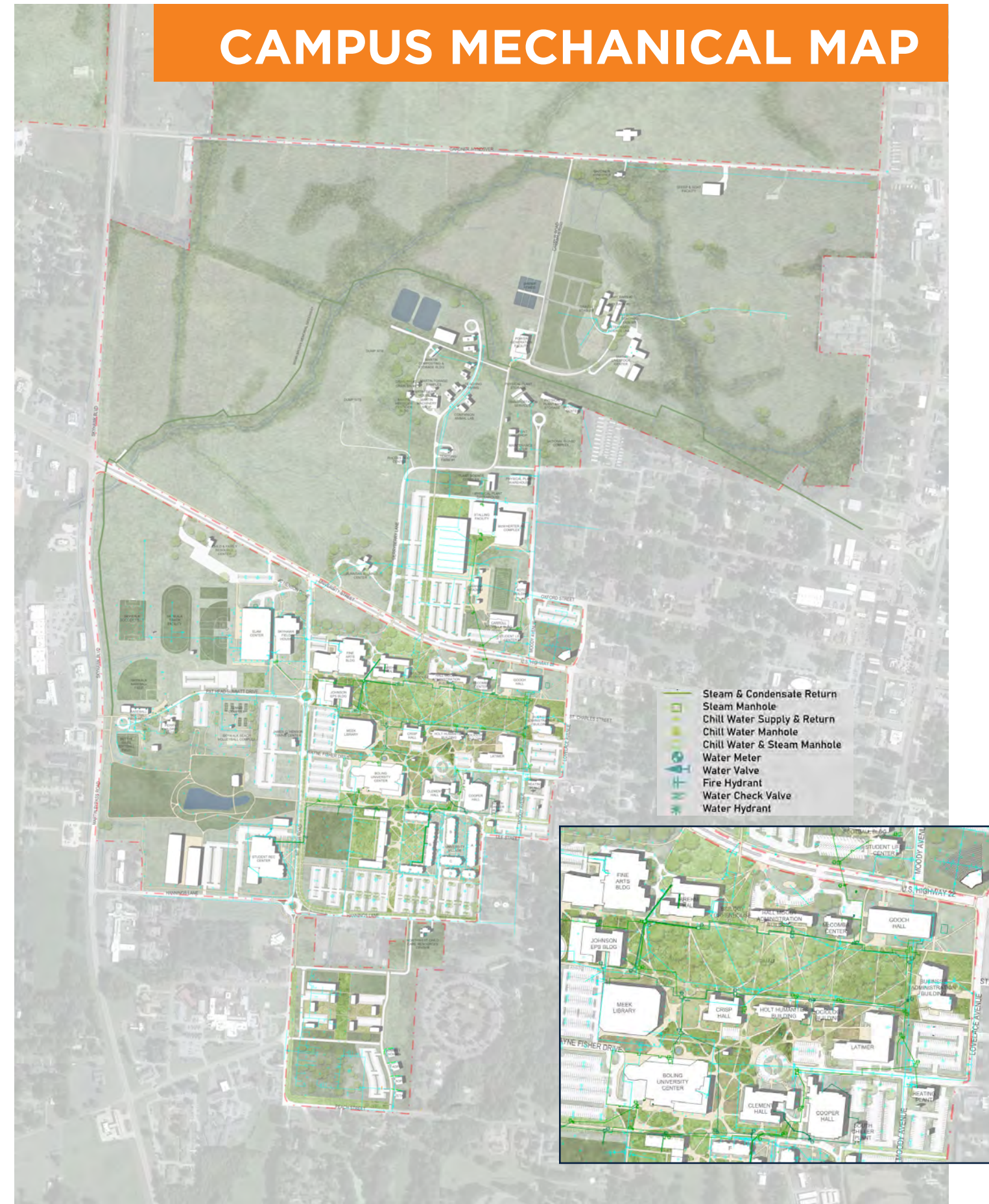
Upon review of proposed new building additions and renovations, the master planning team recommends the following impacts on heating and chilled water systems:

- **TEST Hub** – It is estimated that approximately 180 to 220 tons of cooling will be required. Heating demand is expected to run from approximately 2,700 Mbh to 2,800 Mbh. Based on the site map, it appears steam and chilled water mains would have to be extended to the building from an existing line at the NE corner of the Student Rec. Bldg.
- **Business Administration Building** – It is estimated that approximately 150 to 175 tons of cooling will be required. Heating demand is expected to run at approximately 2,200 Mbh. Existing chilled water and steam/condensate mains enter the NW corner of the existing facility.
- **Fine Arts Reno and Addition** – It is estimated that approximately 145 to 175 tons of cooling will be required. Heating demand is expected to run at approximately 2,200 Mbh. A chilled water & steam main exists at the SW corner of the existing facility; however, the entry point may need to be modified to avoid interference with the new addition. Existing stub-ups are located inside the existing facility, but the capacity needs to be verified.
- **Beef Cattle Facility** – It is estimated that approximately 30 to 35 tons of cooling will be required. Heating demand is expected to run at approximately 450 Mbh. According to the site map, there is no existing steam or chilled water in the area. It would be expensive to run a new line. As such, UTM should consider independent heating and cooling systems such as that provided by a high-efficiency, condensing boiler and package units specific to the new building.
- **Indoor Athletic Practice Facility** - Depending on indoor ambient operating requirements, it is estimated that approximately 525 to 630 tons of cooling will be required. This can be scaled back some if slightly higher ambient conditions are permitted. Heating demand is expected to run from approximately 6,000 Mbh to 6,500 Mbh. Chilled

water would have to be piped to the building, so package units may be more cost-efficient. Steam can be provided from the adjacent Stalling Facility.

- **New Student Health & Counseling Center** – It is estimated that approximately 30 to 35 tons of cooling will be required. Heating demand is expected to run at approximately 435 Mbh. A chilled water main already exists in the area commencing off of Mt. Pelia Road. From the site map, there is existing steam that can be tapped just to the East of Mt. Pelia Road.
- **Student Rec. Pool Addition** – It is recommended that a stand-alone, packaged rooftop system be considered for the natatorium design. Units can be costly and vary considerably depending on the design of the building. Care should be taken to address tight humidity control as well as indoor air quality and condensation mitigation strategies. Cooling and heating loads will be highly dependent on the pool design, including, but not limited to the following: pool deck wetted area, water temperature, ambient air temperature, outside air quantity delivered to the space, and swimmer activity levels. A packaged, DX system will eliminate the need for exposing piping to the corrosive environment. An existing steam line to the Student Life Building can be used, if steam is used for heating.
- **University Center Addition** – It is estimated that approximately 65 to 80 tons of cooling will be required. Heating demand is expected to run at approximately 1,000 Mbh. A chilled water main already exists on the East side of Bolling University Center. From the site map, there is existing steam that can be tapped from the South or extended from points along the West and SW portions of the existing building without interfering with the new footprint addition.
- **New Browning / Ellington Housing** – Based on a proposed 260-bed addition (at 450 GSF/bed), a “conservative” cooling estimate for the residential spaces is approximately 300 to 335 tons depending on the outside air delivery system used. The heating load can be approximated at 4,500 to 5,000 Mbh. There are (2) two existing chilled water mains that could be utilized from the old Ellington building. The existing steam line to the North would have to be modified to prevent interference with the Northern portion of the new building footprint.
- **University Courts Housing Replacement** – It is unclear what the new GSF of this complex is, however, if we assume the new areas are added in like kind, a “conservative” estimate for the residential spaces is approximately 330 to 375 tons depending on the outside air delivery system used. The heating load can be approximated at 5,200 to 6,000 Mbh, however additional assessments would need to be performed. Due to the lack of existing chilled water and steam lines in this area, heat pumps and/or electric DX units need to be installed in the apartments.

CAMPUS MECHANICAL MAP



INFRASTRUCTURE (CONTINUED)

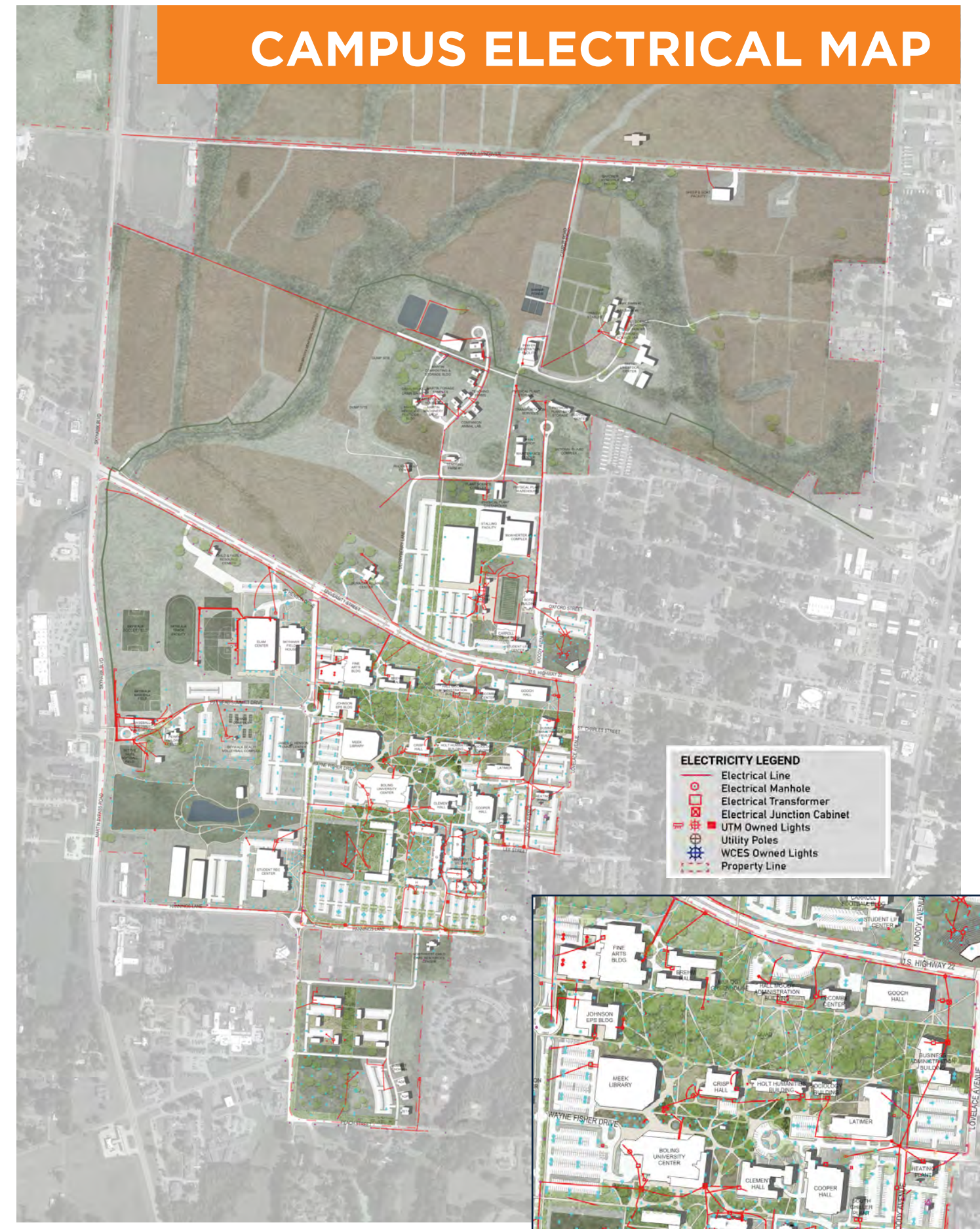
ELECTRICAL

The utility service for the existing campus buildings comes from Weakley County Municipal Electrical System. This includes the pad-mounted and pole-mounted utility transformers. The majority of the campus is fed from an electrical loop, supplied and managed by Weakley County Municipal Electrical System. In addition, the Campus has a cogeneration facility with four (4) 2.2MW generators plus space to add two (2) additional generators. The current load on the system is estimated at around 6MW. Campus buildings are served by the Weakley County Municipal Electrical System. The utility will provide building transformers for new buildings and renovations to buildings requiring upgrades to electrical service. These transformers shall be pad-mounted based on the current utility guidelines for the Campus. The existing cogeneration plant has available capacity to serve additional buildings/structures on the campus power loop.

The current campus walkway lighting fixtures were installed around 2012. Potential upgrade opportunities are provided below:

- a. Consider replacement of the existing light metal halide fixtures with new LED lights, mounted on the existing light poles.
- b. Install new pedestrian scale light fixtures at all new/proposed pathways based on Master Plan objectives to provide accessible pathways throughout campus.
- c. Provide additional pedestrian scale lighting at select locations to enhance outdoor safety and security.

Consider adding additional EVC stations for electric cars around campus including near residential/housing facilities.



INFRASTRUCTURE (CONTINUED)

PLUMBING

According to the facility assessment (conducted in 2020), the overall plumbing systems are in fair condition. While the buildings need plumbing upgrades, all of the buildings appear to be well maintained.

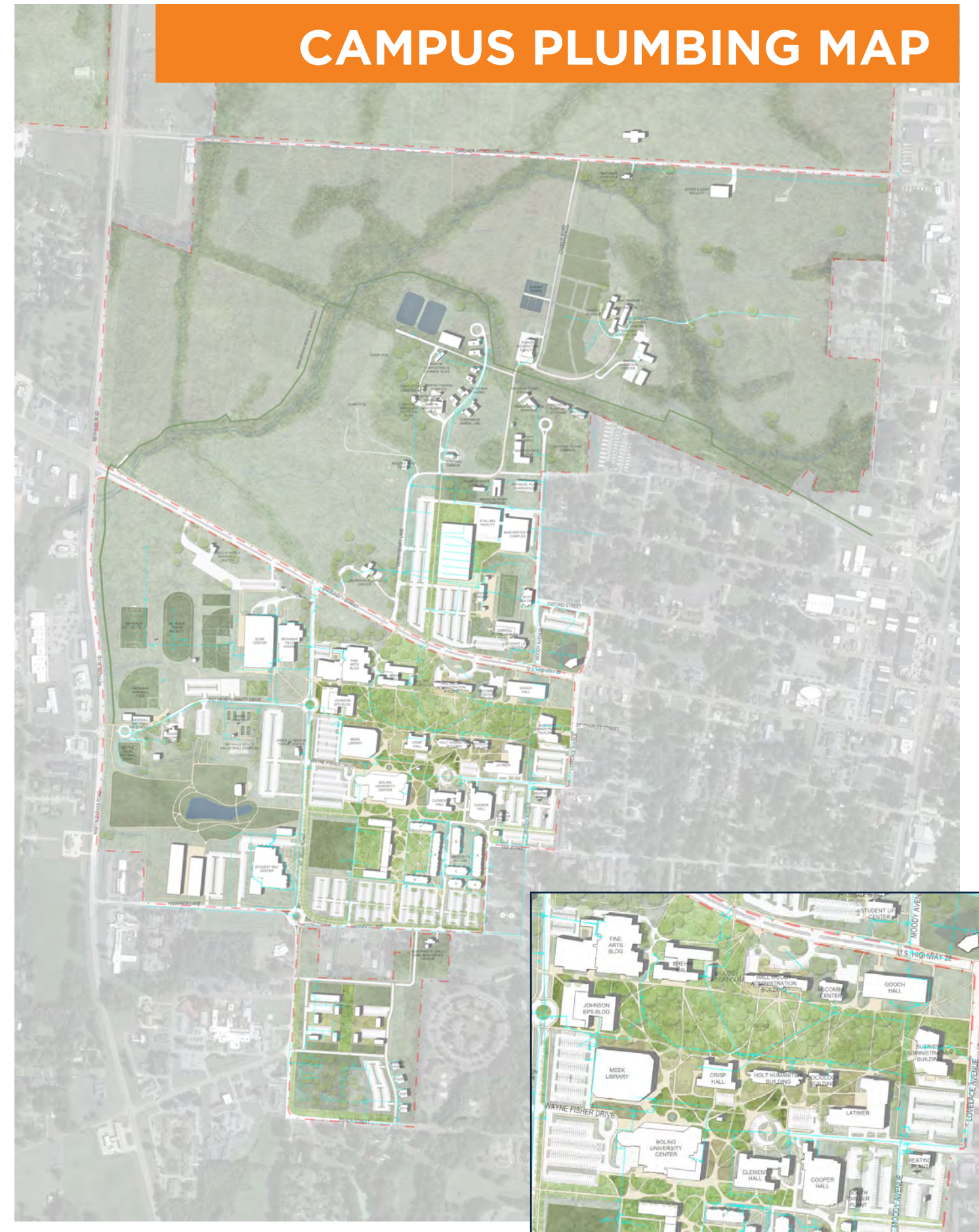
The following proposed new buildings/additions would require the following site modifications:

- Student Health Center -The proposed is very close to an existing fire water loop. Consider shifting the building to the north or rerouting the loop.
- Indoor Athletic Facility - The proposed location is over the existing practice field. According to the site utility map, there are underground water lines under the practice field. This may be irrigation piping or water supply lines for RV parking during sporting events at Graham Stadium.
- University Center Addition - The existing building's main water entrance and grease interceptor are located where the proposed addition will be located. These infrastructural items would need to be relocated.
- Fine Arts Building Addition - The existing building's water main entrance is located in the proposed location of the addition. The water main would need to be relocated.
- Student Rec Center Pool Addition - The existing fire main loop is located in the proposed location of the addition. The fire loop would need to be relocated.
- Student Activities Pavilion & Surgery Suite at Vet Complex - There may be need to upgrade water and sanitary infrastructure due to ongoing additions/expansions over the years.
- University Courts Housing Replacement - Converting the existing apartment units to dormitories, while increasing the total capacity, may require upgrades to the existing water and sanitary infrastructure.

FIRE PROTECTION

Some of the older buildings do not have sprinkler systems because they were not required at the time they were constructed. In order to provide sprinkler systems to those buildings, a new fire main and pump would need to be added. Should code require it, sprinkler systems could easily be added to some buildings that already have fire risers as part of a future capital maintenance project.

CAMPUS PLUMBING MAP



INFRASTRUCTURE (CONTINUED)

CENTRAL PLANTS AND OTHER MECHANICAL SYSTEMS

Central Plants and Other Mechanical Systems

The campus is currently served by (2) two 20,000 HP boilers and a single 40,000 boiler. A detailed assessment of the existing campus load is recommended to compare the existing part load with that of new building additions and their estimated heat load. In total, the current chiller infrastructure supports a combined load of approximately 5,000 tons. As with the steam systems, a detailed assessment of the existing campus chiller part load would be helpful, as the new estimated cooling loads account for approximately 35.1% to 41.2% of the currently-available chiller capacity. Several of the existing chillers utilize the refrigerant, R-123. This refrigerant has been phased out as of January 1, 2020, however, it will continue to be produced to service existing equipment until 2030. These chillers range in age from 18 - 25 years old and represent approximately 69% of available plant capacity. It is recommended that a cost/benefit analysis be performed to compare subsequent cost increases in stockpiles of R-123 with replacement equipment using more advanced refrigerants. Similarly, a portion (31%) of the chiller infrastructure uses R-134A which is being phased out beginning January 1, 2024, however that ban is for “new” chillers and it is expected that existing equipment will be allowed to continue running off R-134A manufactured for the remainder of the equipment’s useful service life.

Other Mechanical Systems

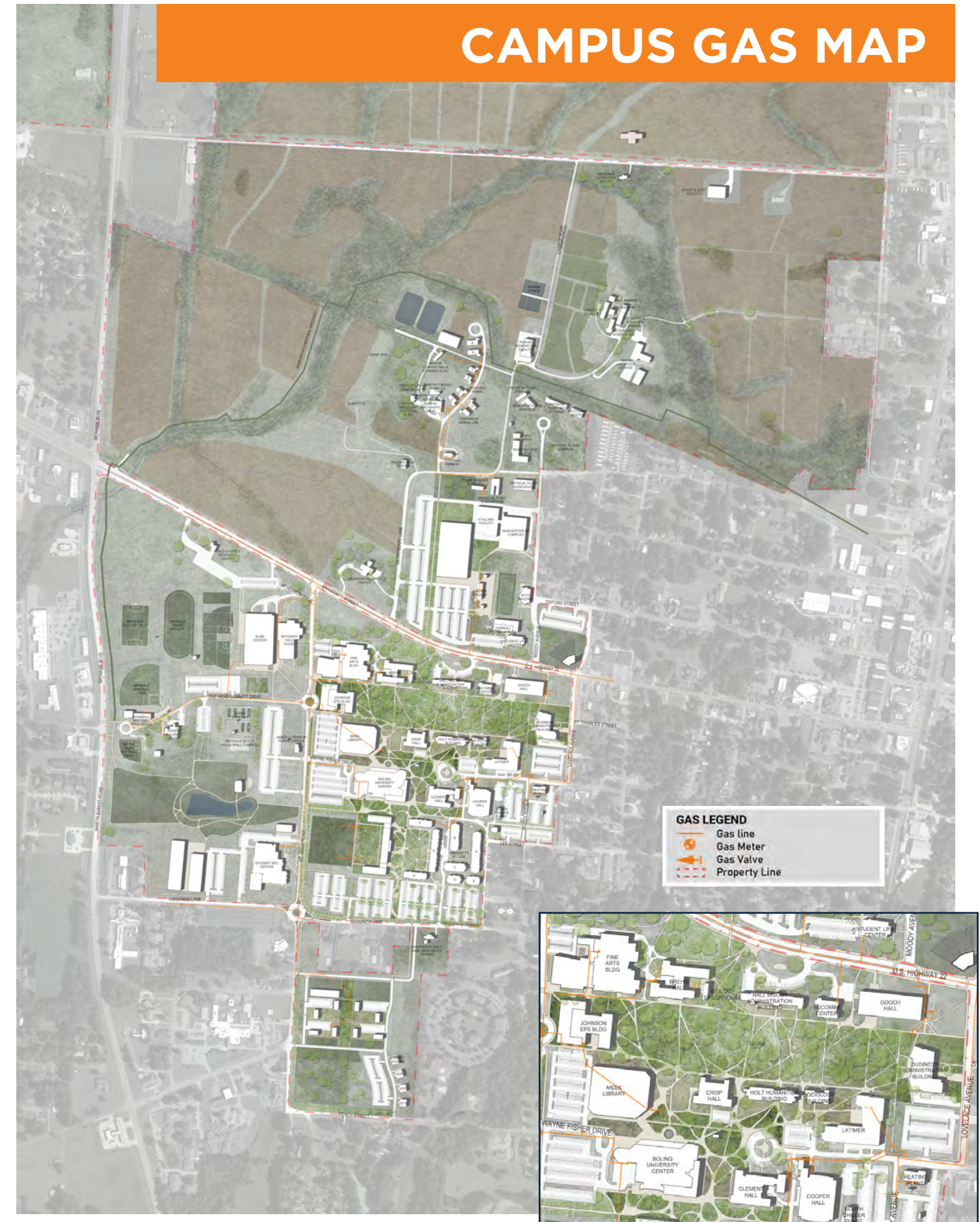
According to the facility assessment (conducted in 2020), the overall mechanical systems are in fair condition. Existing equipment is a hybrid of aging rooftop units, air handling units, fan coil units, unit heaters, heat recovery systems, variable air volume

terminal boxes, ductless split systems, and heat pumps. These systems should be upgraded and/or replaced based on their age and useful service life as recommended by ASHRAE. Many of the rooftop units are still operating with R-22 refrigerant. It is now illegal to import or manufacture R-22 as of January 1, 2020. While reserves of R-22 are still available for existing systems, the price per pound has become prohibitively expensive. Such systems should be replaced with newer equipment using more environmentally-friendly refrigerants. To the extent possible, replacement with equipment should consider energy-saving technologies such as direct drives with electronically-commutated (ECM) fan motors or variable frequency drives (VFDs) to allow modulation at part load. Particularly for variable air volume systems, controls should be upgraded to include static pressure reset strategies and/or chilled water reset functions to save energy. It is recommended that building-specific sub-metering be employed so UTM can track energy use more precisely and troubleshoot potential issues prior to a problem occurring. All equipment should have factory or field-installed direct digital controllers so equipment can be properly programmed to operate under ever-more stringent requirements of the International Energy Conservation Code (IECC).

GAS

Based on recent facility assessments conducted in 2020, the existing gas infrastructure is described as being “good”. A more in-depth assessment is recommended to understand the existing condition of gas piping. Where replacement is needed for underground pipe and /or new underground additions, the use of polyethylene piping is recommended.

CAMPUS GAS MAP



INFRASTRUCTURE (CONTINUED)

TELECOMMUNICATIONS

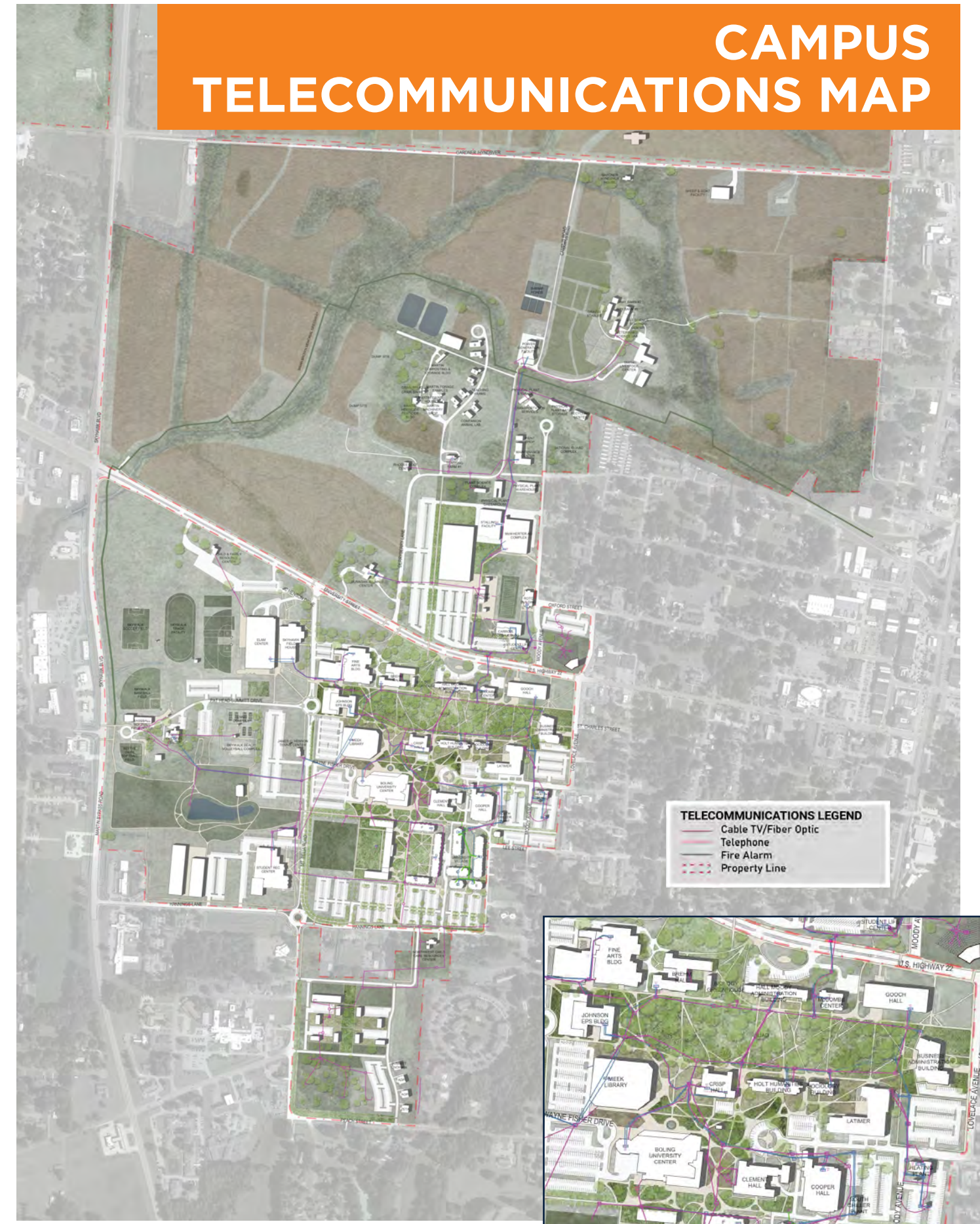
All Academic and Support Buildings are served by data, fire alarms, and telephone connections. Housing facilities also have additional cabling for television.

The campus-wide communication services continue to be expanded and will allow for tie-ins to all new buildings on the campus. The communications infrastructure will be extended as required for new campus facilities and buildings. Areas of the far north & far south do not have data available at this time, but there are plans to extend connections to service the areas as they are improved.

SECURITY

The existing Campus security includes several solar-powered emergency call boxes located throughout the Campus. Also, consider adding “blue” LED lights at all call stations to make them more visible. There are existing security cameras on campus with more proposed.

Classroom security hardware has been changed so that doors can be locked from the inside without entering the corridor in case of an active shooter situation.



STUDENT SERVICES

BOLING UNIVERSITY CENTER ASSESSMENT

The Boling University Center is home to student services and amenities as well as an asset to the broader University and local communities. The main program elements include:

- Foodservice (Skyhawk Dining Hall, The Food Court, The Hanger, and On the Fly Market)
- Campus Bookstore (Barnes & Noble)
- Computer Store
- Welcome Center
- Legislative Chamber
- Philips Watkins Auditorium
- Russell Duncan Ballroom
- Meeting Rooms
- Career Planning and Development
- Office of Student Life

Recommendations include adding the following program elements to the Boling University Center:

- Student Lounge (3,000 NSF)
- Study Space (3,000 NSF)
- Multicultural Center (1,125 NSF)
- E-Gaming Lounge (3,000 NSF)
- Disability Services (2,600 NSF)
- Foodservice (potential addition of 100 seats unless accommodated elsewhere on campus)

STUDENT RECREATION CENTER ASSESSMENT

Student Recreation Center is a 95,000-square-foot comprehensive indoor recreation facility offering the following program elements:

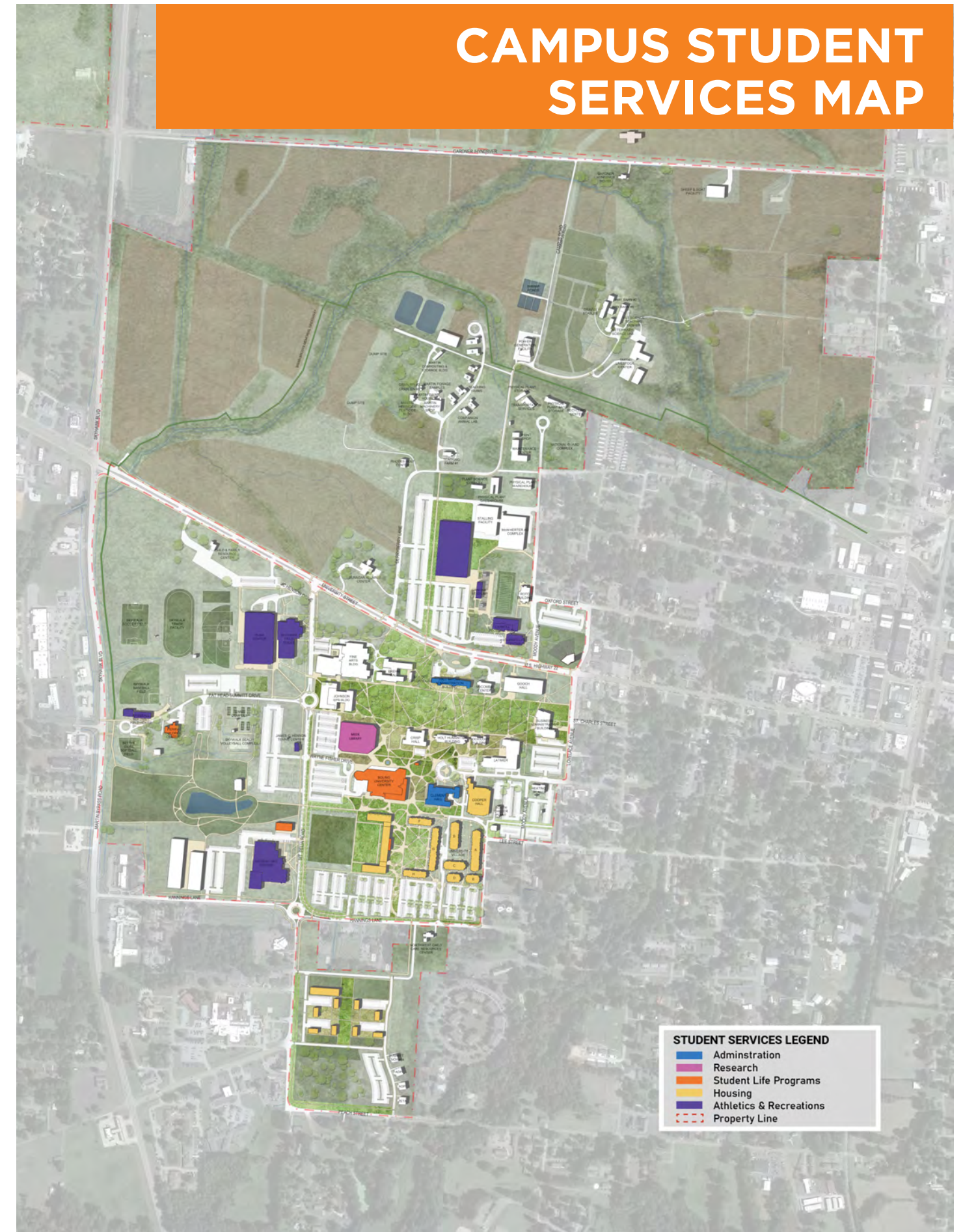
- Four-court (basketball courts) gymnasium
- Indoor jogging track
- Fitness Center and Cardio Mezzanine (weight and fitness areas)
- Stretching/TRX area
- Group fitness room
- Cycle Suite (fitness classroom with group cycling equipment)
- Three racquetball courts
- Leisure recreation area (passive rec: table tennis, billiards, shuffleboard, foosball)
- Locker rooms
- Lobby/lounge
- Classroom
- A 50-meter recreation indoor swimming pool is available at the Elam Center

The facility's gross area exceeds the NIRSA (National Intramural and Recreational Sports Association) standard of approximately 10-12 gross square feet per student (headcount).

ADDITIONAL STUDENT LIFE PROGRAM ELEMENTS INCLUDED IN PROPOSED PLAN

The following additional student life programmatic improvements are to be included in the Master Plan:

- New Student Health & Counseling Center (5,200 NSF) to replace the existing facility
- Pacer Pond Pavilion (outdoor programming space)
- Outdoor Basketball Courts near Elam Center
- Intramural and Club Sports Fields near Student Housing
- Gateway Multipurpose Open Space and Amphitheater (site of demolished Grove Apartments)



HOUSING AND DINING

HOUSING

Currently, UTM operates an on-campus student housing program consisting of approximately 2,255 beds located in six residential complexes outlined below:

- Ellington Hall and Browning Hall are older residence halls with semi-suite units and, primarily, double occupancy
- Cooper Hall offers full-suites consisting of four double-occupancy bedrooms, a living room, and a bathroom
- University Village I and University Village II offer apartment-style one-, two-, three-, and four-bedroom units with either private or shared bedrooms
- University Courts is a student and family-friendly apartment complex that offers one, two, and three-bedroom units. Internet, cable, and water are included in the semester rent. Residents are responsible for their own electricity. Each apartment has a kitchen, living area, and a bathroom

Based on the average historical capture rate (beds occupied/on-ground FTE enrollment) of 38% extrapolated over the projected 2031 enrollment of 4,500 FTEs, the housing system should offer no less than 1,700 beds. In discussion with UTM's leadership, the total targeted number of beds within the housing system was increased to 1,800.

The Master Plan developed a planning scheme that will achieve the desired 1,800 beds.

- Demolish Browning Hall (loss of 528 beds),
- Demolish Ellington Hall (loss of 520 beds),
- Demolish University Courts (in phases; loss of 161 beds)

This planning concept would cause a reduction of the bed count to 1,046 and the need to supply 754 new beds. These beds should be provided in suite-style or apartment-style units. Ultimately this plan is more comprehensive and, therefore, results in better strategic outcomes for the UTM's housing program.

DINING

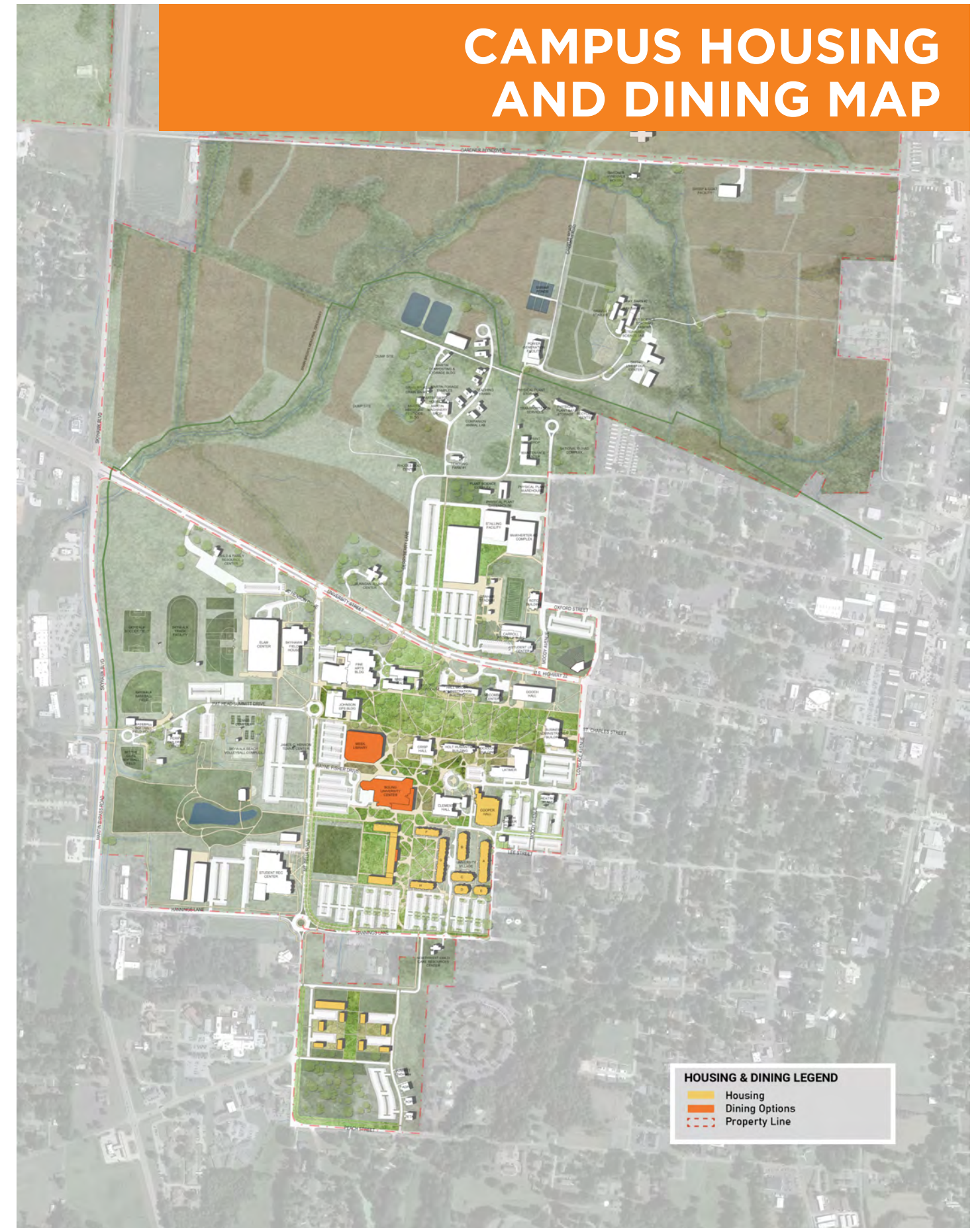
UTM's current dining program operates the following main dining venues on campus:

- Skyhawk Dining Hall provides community-style dining ("all you care to eat") and serves, primarily, meal plan customers
- The Food Court offers three retail dining options including Chick-Fil-A, Sandella's Café, and Mein Bowl
- The Hanger is a coffee shop that proudly serves Starbucks as well as other beverages and pastries
- On the Fly is a convenience store serving snack items and on-the-go food items
- To Go dining in Gooch Hall
- A new Sodexho space within Latimer and also Business Admin buildings

Based on the review of on-campus dining operations and discussion with UTM's administrations, the proposed Master Plan concluded the following:

- The community-style dining offerings will be sufficient to serve the student population in the future.
- The retail offerings lack sufficient seating capacity but recommends an additional 100 seats that could be implemented as an expansion of The Food Court capacity or provision elsewhere on campus, ideally in the Paul Meek Library.
- Additional Simply-To-Go locations should be considered to provide more accessibility to food service outside of Boling University Center.

CAMPUS HOUSING AND DINING MAP

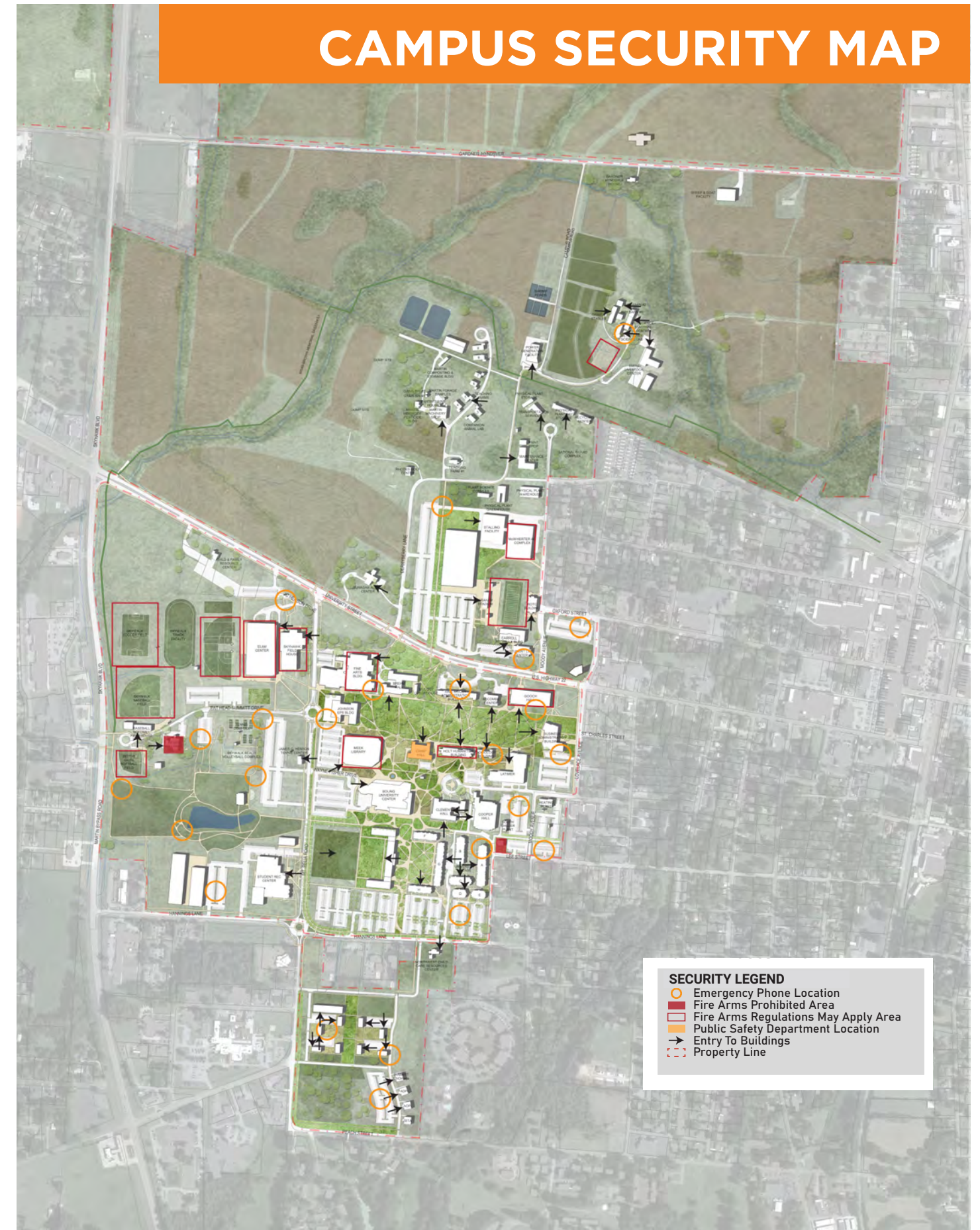


SECURITY

The University of Tennessee at Martin remains one of the safest Universities in the state when compared with other four-year institutions of higher education. The campus is a security-intensive environment with control systems, areas of refuge, material storage, and many other physical and technology-based security approaches.

UTM publishes the Annual Security and Fire Report with crime prevention tips, emergency response procedures, parking and traffic regulations, and other information. In 2021, UTM launched a new mobile safety app for students and employees on the main campus to easily communicate with the UT Martin Department of Public Safety to share emergency and non-emergency information.

The existing Campus security includes several solar-powered emergency call boxes located throughout the Campus. In addition to the existing emergency call boxes located throughout the Campus, additional call boxes are proposed including one additional location along the Fitness Trail. Also, consider adding “blue” LED lights at all call stations to make them more visible.

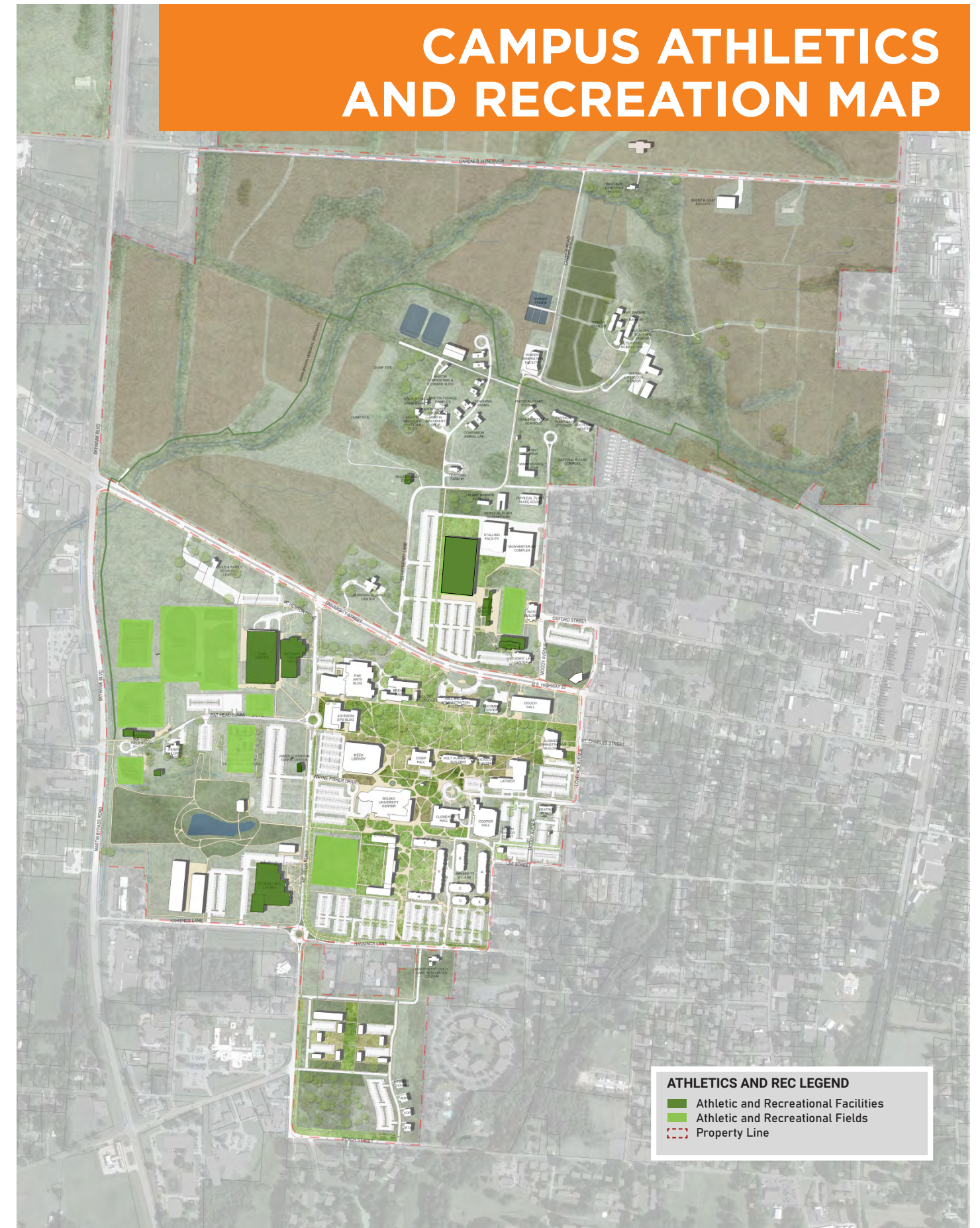


ATHLETICS AND RECREATION

The University of Tennessee at Martin currently is home to athletic and recreational facilities that include Skyhawk Fieldhouse, Elam Center, Football Stadium, the Bob Carroll Football Building, and Student Recreation Center, as well as the fitness trail and surrounding recreational fields. As an intricate and valuable student life aspect of the campus, the proposed future recreational facilities will not only help provide ample amenities to meet student needs but also provide an opportunity to involve the community more.

The major changes to the current athletic and recreation on the campus include the addition of the Indoor Athletic Facility, updates to the Elam Center, and the pool addition to the Student Recreation Center. The addition of intramural fields near the new student housing where Ellington Hall presently resides adds increased visibility to on-campus student activities and recreation. The integration of the Pacer Pond Pavilion and Amphitheater will also provide additional amenities for possible student recreational events.

A goal for the future of athletics and recreation on campus is to provide a variety of safe, enjoyable, and functional on-campus recreation and outdoor areas and open spaces on campus promoting well-being and the health of campus users in line with enrollment projections. As student enrollment increases or changes, so will the demand for recreation and open space.



3

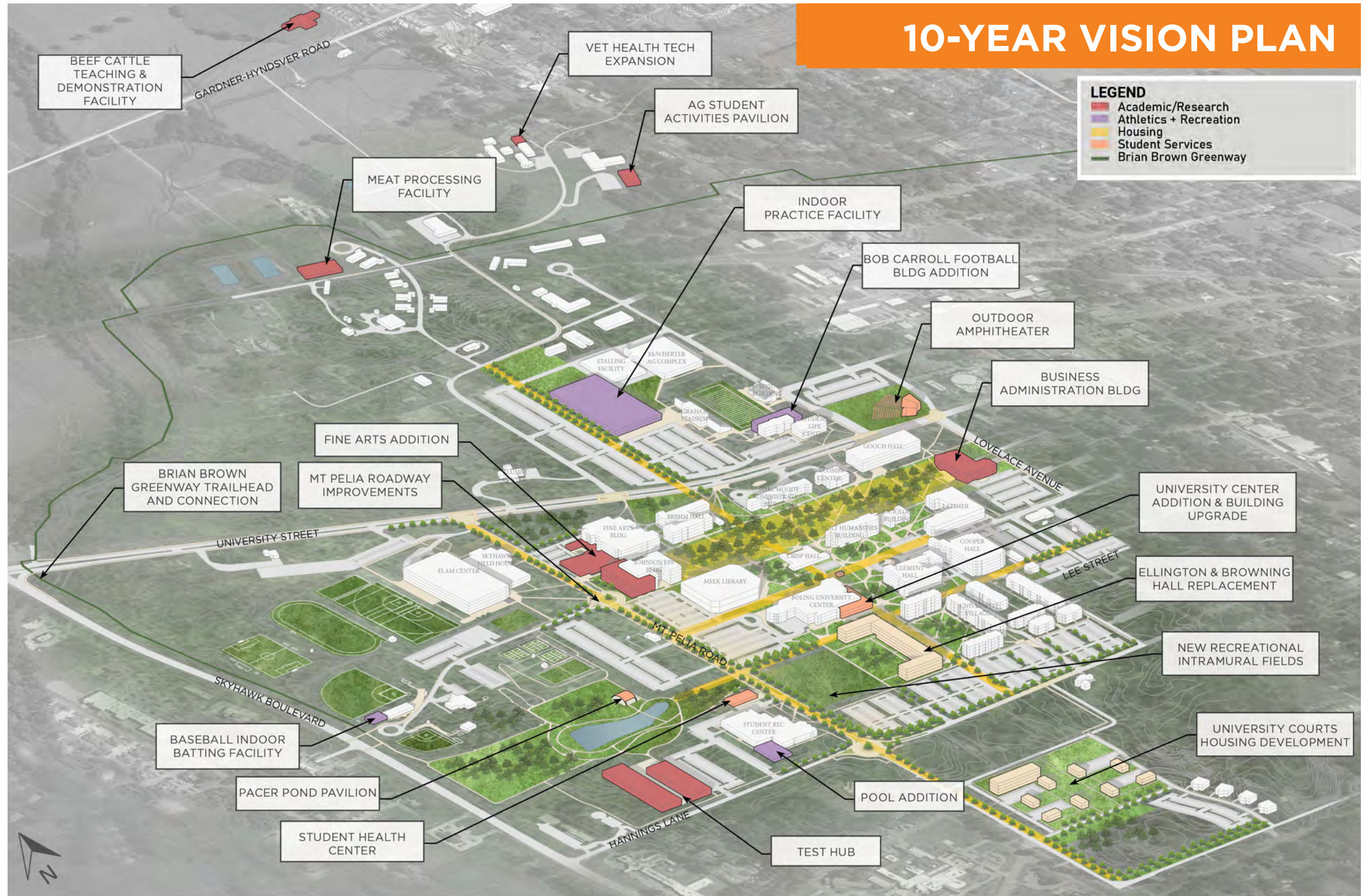
PHASING AND IMPLEMENTATION

IMPLEMENTATION PLAN

This section explores a growth-oriented phasing scenario for full build-out of the campus plan. As it is impossible to predict actual phasing, with funding often unknown and program needs continually evolving, this study is seen as a “test” to ensure the plan is feasible.

The phasing strategies described in the pages to follow would allow for implementation of the long-term vision. Phasing includes programmatic “chess-moves” of major functions along with phased internal open space and infrastructure improvements including multi-mobility circulation and improvements on campus. Ultimately, the phased development in this “test” assumes one single move for every unit to a permanent location as phasing occurs. Any future planning efforts should recognize this study as a working tool for selecting sites that can catalyze the planned outcome described in this plan.

The phasing is broken up into three sequential stages: short term (0-5 years), mid term (6-10 years) and long term (10+ years). This provides a basis for developing assumptions around the bundling, sequencing and enabling of specific moves to achieve the described goal and objectives of the plan. Further study is recommended to determine functional considerations and to verify cost impacts with each significant project.



IMPLEMENTATION TABLE AND COSTS

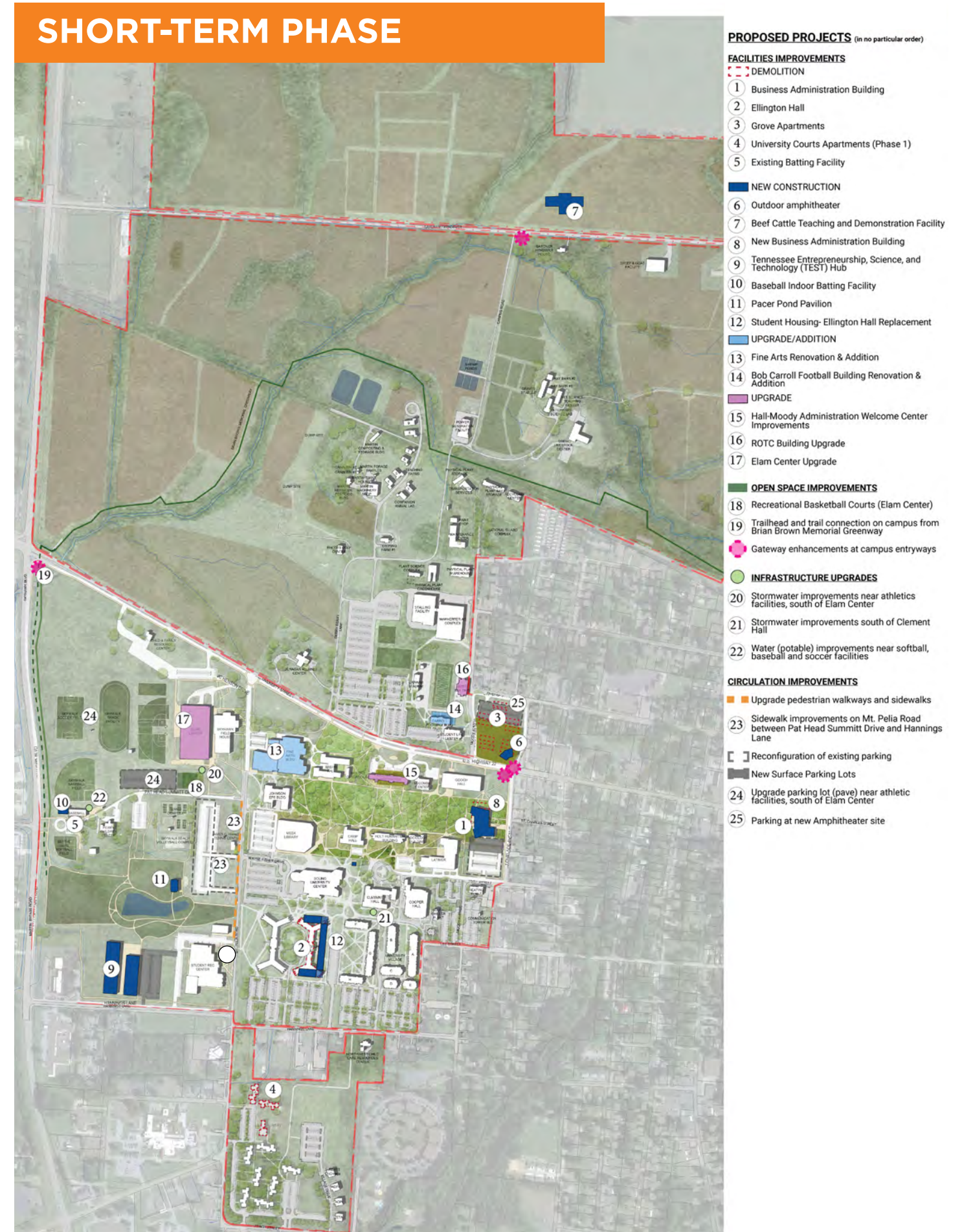
Growth-oriented implementation begins as the near-term development plan identifies a potential sequence of projects assumed to be completed in the following phases, as funding becomes available. As it is impossible to predict actual phasing, with funding often unknown and program needs continually evolving, this study is seen as a “test” to ensure the plan is feasible. This provides a basis for developing assumptions around the bundling, sequencing, and enabling of specific projects in order to achieve the described goals, themes, and objectives of this plan.

Project Type	Project Recommendations	Key	Demolition GSF	Renovation GSF	New Construction GSF	Cost/SF	Budget	Source
Demolish	Demolish Existing Baseball Batting Facility	5	(2,324)				\$71,449	Gift funds
Demolish	Demolish Ellington Hall	2	(105,829)				\$4,602,739	Auxiliary and Bond
Demolish	Demolish Grove Apartments	3	(65,700)				\$1,500,000	State Appropriations and Plant Funds
Demolish	Demolish Business Building	1	(38,846)				\$1,424,468	Capital Maintenance / Capital Outlay Request
Demolish	Demolish University Courts Apartments (Bldg A, B and Laundry)	4	(31,400)				\$102,074	Auxiliary and Bond
New Construction	Tennessee Entrepreneurship, Science, and Technology (TEST) Hub	9			54,300		\$19,160,000	State Appropriations
New Construction	New Business Administration Building	8			62,688		\$50,000,000	Gift and Capital Outlay Request
New Construction	Beef Cattle Teaching and Demonstration Facility	7			8,333		\$5,000,000	Gift and Capital Outlay Request
New Construction	Baseball Indoor Batting Facility	10			4,700		\$622,000	Gift
New Construction	Pacer Pond Pavilion	11			6,000		\$817,721	TBD
New Construction	Outdoor Amphitheater - programmed open space with seating	6			8,000		\$3,207,853	TBD
New Construction	Student Housing (replacement for Ellington Hall)	12			210,000		\$129,284,305	Auxiliary and Bond
New Construction (Upgrade/Addition)	Fine Arts Renovation & Addition	13		8,400	50,000		\$47,000,000	Gift and Capital Outlay Request
New Construction (Upgrade/Addition)	Bob Carroll Football Building Renovation & Addition	14		18,317	14,000		\$6,230,000	Gift
Upgrade	Baseball Track & Field Facility Upgrade	10					\$6,950,000	TBD
Upgrade	ROTC Building Upgrades	16		14,973		\$337	\$2,649,000	Capital Maintenance / Capital Outlay Request
Upgrade	Hall-Moody Administration Building Upgrade - Welcome Center & Courtyard	15		41,348			\$13,087,627	TBD
Upgrade	Kathleen & Tom Elam Center Upgrade (including indoor turf field conversion)	17		148,315		\$337	\$2,360,000	Capital Maintenance (mall glass), Lighting (plant funds), indoor turf field/closing pool (TBD)
Open Space Improvement	Gateway enhancements at corner of Skyhawk Blvd. & University St.	*					\$78,650	Gift and plant funds
Open Space Improvement	Gateway enhancements at corner of University St. & Lovelace Ave.	*					\$26,217	Gift and plant funds
Open Space Improvement	New recreational outdoor basketball courts near Elam Center	18					\$183,517	TBD
Open Space Improvement	Trailhead and trail connection to Brian Brown Memorial Greenway	19					\$20,536	TBD
Infrastructure Upgrades	Campus Fire Alarm Upgrades	n/a					\$1,850,000	Capital Maintenance / Capital Outlay Request
Infrastructure Upgrades	Stormwater improvements south of Clement Hall	21						Capital Maintenance / Capital Outlay Request
Infrastructure Upgrades	Stormwater improvements near athletics facilities, south of Elam Center	20						Capital Maintenance / Capital Outlay Request
Infrastructure Upgrades	Water (potable) improvements near softball, baseball and soccer facilities	23						TBD
Circulation Improvements	Sidewalk along west side of Mt. Pelia Road between Pat Summit Dr and Student Rec Center entry	25					\$329,457	Partnership with City
Circulation Improvements	Pave parking lot near athletic facilities, south of current rec fields and track	24			200 stalls		\$1,585,435	Auxiliary

*Refer to symbol on Near Term Map

The list of projects above identifies priorities for near term capital improvements consistent with the timeline of this plan. In addition to the list above, the full report provides estimated project costs, priority ranking, and funding sources per project.

SHORT-TERM PHASE



- PROPOSED PROJECTS** (in no particular order)
- FACILITIES IMPROVEMENTS**
- 1 DEMOLITION
 - 1 Business Administration Building
 - 2 Ellington Hall
 - 3 Grove Apartments
 - 4 University Courts Apartments (Phase 1)
 - 5 Existing Batting Facility
 - NEW CONSTRUCTION
 - 6 Outdoor amphitheater
 - 7 Beef Cattle Teaching and Demonstration Facility
 - 8 New Business Administration Building
 - 9 Tennessee Entrepreneurship, Science, and Technology (TEST) Hub
 - 10 Baseball Indoor Batting Facility
 - 11 Pacer Pond Pavilion
 - 12 Student Housing- Ellington Hall Replacement
 - UPGRADE/ADDITION
 - 13 Fine Arts Renovation & Addition
 - 14 Bob Carroll Football Building Renovation & Addition
 - UPGRADE
 - 15 Hall-Moody Administration Welcome Center Improvements
 - 16 ROTC Building Upgrade
 - 17 Elam Center Upgrade
 - OPEN SPACE IMPROVEMENTS
 - 18 Recreational Basketball Courts (Elam Center)
 - 19 Trailhead and trail connection on campus from Brian Brown Memorial Greenway
 - 20 Gateway enhancements at campus entryways
 - INFRASTRUCTURE UPGRADES
 - 20 Stormwater improvements near athletics facilities, south of Elam Center
 - 21 Stormwater improvements south of Clement Hall
 - 22 Water (potable) improvements near softball, baseball and soccer facilities
 - CIRCULATION IMPROVEMENTS
 - 23 Upgrade pedestrian walkways and sidewalks
 - 23 Sidewalk improvements on Mt. Pelia Road between Pat Head Summitt Drive and Hannings Lane
 - 24 Reconfiguration of existing parking
 - 24 New Surface Parking Lots
 - 24 Upgrade parking lot (pave) near athletic facilities, south of Elam Center
 - 25 Parking at new Amphitheater site

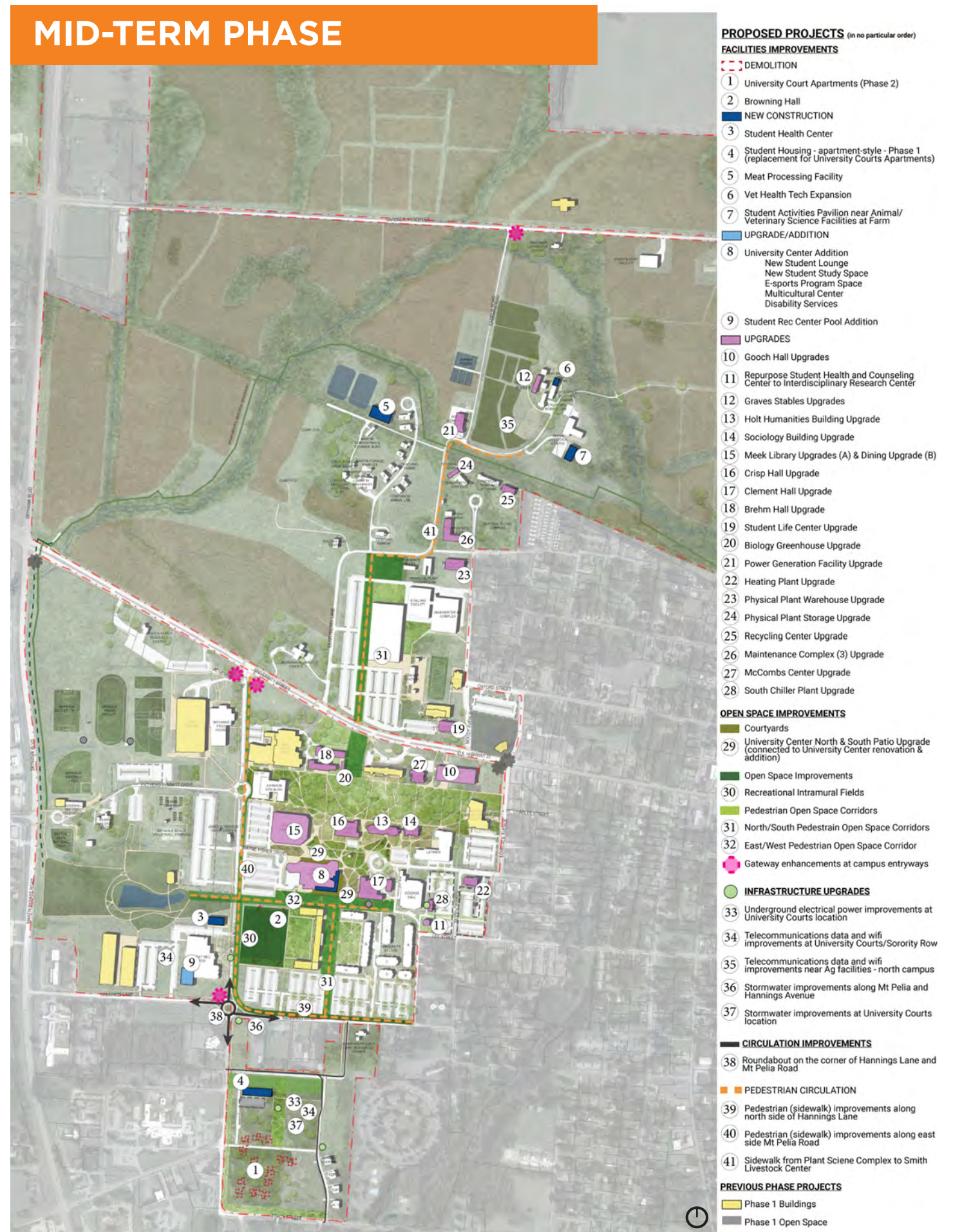
The Master Plan includes phased development and implementation planning that identifies projects assumed to be completed in the specified time frames as funding and functional needs allow. Anticipated development to be considered in six to ten years include:

PHASE II - MID TERM (6-10 YEARS)

Project Type	Project Recommendations	Key	Demolition GSF	Renovation GSF	New Construction GSF	Cost/SF	Budget	Source
Demolish	Demolish University Courts Apartments (C, D, E, F, G, H, I, J)	1	(105,600)				\$3,706,886	Auxiliary and Bond
Demolish	Demolish Browning Hall	2	(106,100)				\$3,723,725	Auxiliary and Bond
New Construction	New Student Health Center	3			8,700		\$5,724,089	Gift, Student Fees, Bond
New Construction	Meat Processing Facility	5			16,700		\$9,263,439	Gifts
New Construction	Vet Health Tech Expansion	6			3,000		\$2,263,263	TBD
New Construction	Student Housing - Phase I Apartments (University Courts Apts. replacement)	4			62,500		\$42,445,562	Auxiliary and Bond
New Construction	Student Activities Pavilion near Animal/Veterinary Science Facilities at Farm	7			8,600		\$2,444,547	TBD
New Construction (Upgrade/Addition)	Boling University Center Addition (and building upgrade)	8		11,100	20,200	\$337	\$27,061,700	Gift
New Construction (Upgrade/Addition)	Student Rec Center Pool Addition	9			16,000		\$1,207,719	Student Fees, Bond
Upgrade	Repurpose Student Health & Counseling Center to Interdisciplinary Research Cntr	11		3,465		\$337	\$1,096,755	TBD
Upgrade	Gooch Hall Upgrade	10				\$220	\$575,000	TBD
Upgrade	Graves Stables Upgrade	12				\$786,642	TBD	
Upgrade	Holt Humanities Building Upgrades	13				\$305	\$4,065,600	Capital Maintenance / Capital Outlay Request
Upgrade	Sociology Building Upgrades	14		8,300		\$337	\$4,600,000	Capital Maintenance / Capital Outlay Request
Upgrade	Meek Library Upgrades (and dining option)	15				\$337	\$25,308,500	Capital Maintenance / Capital Outlay Request
Upgrade	Meek Library Dining Upgrade	15		3,900				Auxiliary
Upgrade	Crisp Hall Upgrades	16				\$220	\$5,425,852	Capital Maintenance / Capital Outlay Request
Upgrade	Clement Hall Upgrade	17		45,00		\$220	\$9,000,000	Capital Maintenance / Capital Outlay Request
Upgrade	Brehm Hall Renovation	18				\$220	\$734,000	Capital Maintenance / Capital Outlay Request
Upgrade	Student Life and Leadership Center Upgrade	19				\$7925,757	Capital Maintenance / Capital Outlay Request	
Upgrade	Biology Greenhouse Upgrade	20				\$220	\$479,000	Capital Maintenance / Capital Outlay Request
Upgrade	McCombs Center Upgrade	27				\$337	\$5,350,000	Capital Maintenance / Capital Outlay Request
Upgrade	Power Generation Facility Upgrade	21				\$300	\$4,628,800	Revenue (TVA) and Plant Funds
Upgrade	Heating Plant Upgrade	22				\$2,648,062	Capital Maintenance / Capital Outlay Request	
Upgrade	South Chiller Plant Upgrade	28					Capital Maintenance / Capital Outlay Request	
Upgrade	Physical Plant Warehouse Upgrade	23				\$3,578,731	Capital Maintenance / Capital Outlay Request	
Upgrade	Physical Plant Storage Upgrade	24				\$1,091,317	Capital Maintenance / Capital Outlay Request	
Upgrade	Recycling Center Upgrade	25				\$1,926,174	Capital Maintenance / Capital Outlay Request	
Upgrade	Maintenance Complex (3) Upgrade	26				\$4,195,084	Capital Maintenance / Capital Outlay Request	
Open Space Improvement	New intramural recreational fields (near Browning Hall demolition site)	30				\$1,568,788	TBD	
Open Space Improvement	North/South pedestrian corridor - University St to Plant Science Complex	31				\$25,021	TBD	
Open Space Improvement	North/South pedestrian corridor - Hannings Ln to University Center	31				\$25,021	TBD	
Open Space Improvement	East/West pedestrian corridor - Mt Pella Rd to Cooper Hall	32				\$192,868	TBD	
Open Space Improvement	Wayfinding enhancements - corner of Mt Pella Rd and Hannings Ave	*				\$26,217	Gift and Plant Funds	
Open Space Improvement	Wayfinding enhancements - corner of Mt Pella Rd and University St.	*				\$26,217	Gift and Plant Funds	
Open Space Improvement	University Center north and south Courtyard Upgrade	29				\$74,281	TBD	
Infrastructure Upgrades	Underground electrical power improvements at University Courts location	33					Capital Maintenance / Capital Outlay Request	
Infrastructure Upgrades	Telecommunications data & wifi improvements at University Courts site	34					Auxiliary	
Infrastructure Upgrades	Telecommunications data & wifi improvements near Ag facilities	35					TBD	
Infrastructure Upgrades	Stormwater improvements along Mt Pella and Hannings Avenue	36					Capital Maintenance / Capital Outlay Request	
Infrastructure Upgrades	Stormwater improvements at University Courts location	37					Capital Maintenance / Capital Outlay Request	
Circulation Improvements	Roundabout on the corner of Hannings Lane and Mt Pella Road	38				\$851,795	Partnership with City	
Circulation Improvements	Sidewalk along east side of Mt Pella Road	40				\$1,313,810	Partnership with City	
Circulation Improvements	Sidewalk from Plant Science Complex to Smith Livestock Center	41				\$846,452	TBD	
Circulation Improvements	Sidewalk along north side of Hannings Ln	39				\$564,709	Partnership with City	

*Refer to symbol on Mid Term Map

The list of projects above identify priorities for mid term capital improvements consistent with the timeline of this plan. In addition to the list above, the full report provides estimated project costs, priority ranking, and funding sources per project.



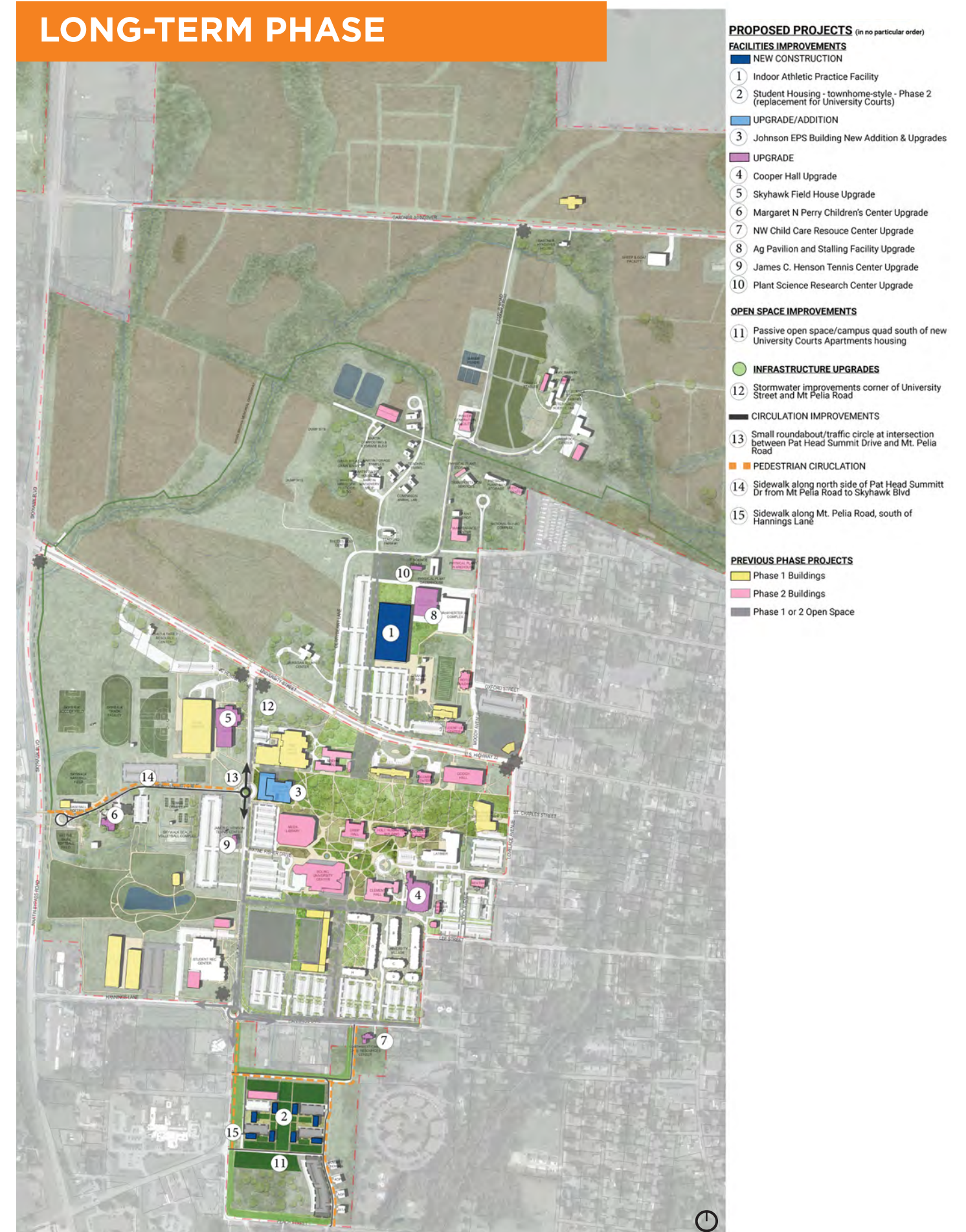
The Master Plan includes phased development and implementation planning that identifies projects assumed to be completed in the specified time frames as funding and functional needs allow. Anticipated development to be considered in ten years and beyond include:

PHASE III - LONG TERM (10 + YEARS)

Project Type	Project Recommendations	Key	Demolition GSF	Renovation GSF	New Construction GSF	Cost/SF	Budget	Source
New Construction	Student Housing - Phase II Townhomes (replacement for University Courts)	2			6,400		\$9,648,313	Auxiliary and Bond
New Construction	Indoor Athletic Practice Facility	1			157,277		\$54,317,353	Gift
New Construction (Upgrade/Addition)	Johnson EPS Building New Addition & Upgrades	3		20,000	52,600	\$300	\$63,113,948	Gift
Upgrade	Cooper Hall Upgrade	4					\$29,380,059	Auxiliary
Upgrade	Skyhawk Field House Upgrade	5				\$337	\$10,633,500	Capital Maintenance / Capital Outlay Request
Upgrade	Margaret N. Perry Children's Center Upgrade	6				\$337	\$1,698,100	Capital Maintenance / Capital Outlay Request
Upgrade	NW Childcare Resource Center Upgrade	7					\$1,042,630	Capital Maintenance / Capital Outlay Request
Upgrade	Ag Pavilion and Stalling Facility Upgrade	8				\$60	\$8,828,500	Capital Maintenance / Capital Outlay Request
Upgrade	James C. Henson Tennis Center Upgrade	9					\$787,028	Gift
Upgrade	Plant Science Research Center Upgrade	10				\$337	\$1,234,368	Capital Maintenance / Capital Outlay Request
Upgrade	Kathleen & Tom Elam Center Upgrade (including pool to indoor turf field conversion)	10				\$337	\$31,510,500	Capital Maintenance (mall glass), Lighting (plant funds), indoor turf field/closing pool (TBD)
Open Space Improvement	Passive Open Space/Campus Quad south of new University Courts Townhomes site	11						TBD
Infrastructure Upgrades	Stormwater improvements corner of University Street and Mt. Pelia Road	12						Capital Maintenance / Capital Outlay Request
Circulation Improvements	Sidewalk on north side of Pat Head Summit Dr - Mt. Pelia Rd to Skyhawk Blvd	14					\$564,709	Auxiliary
Circulation Improvements	Small roundabout/traffic circle - Pat Head Summit Dr and Mt. Pelia Road	13					\$851,795	Partnership with City
Circulation Improvements	Sidewalk along Mt. Pelia Road, south of Hannings Lane	15					\$1,170,055	Partnership with City

The list of projects above identify priorities for long term capital improvements consistent with the timeline of this plan. In addition to the list above, the full report provides estimated project costs, priority ranking, and funding sources per project.

LONG-TERM PHASE



APPENDIX

SPACE ANALYSIS REPORT



**Campus Master Plan
Space Analysis
Final Report
July 12, 2022**

**Comprehensive Facilities Planning, Inc.
www.cfp-planners.com**

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Overview

Comprehensive Facilities Planning, Inc., in association with DLR Group, conducted a space needs analysis for the University of Tennessee at Martin (UTM) as part of its campus master plan. The assessment addresses the space needs for the Martin main campus only. The analysis identifies the current and future space needs by type and departmental assignment as compared to existing facilities. The findings from the study will be used to manage current space, assist with the development of future capital projects and provide data to be used in developing the overall campus master plan.

Fall term 2021 provides the baseline data for the study. On-ground full-time equivalent (FTE) enrollment, courses taught, and faculty and staff were used as a basis to establish the relative quantities of space needed at the base year. The amount of space required is compared to the existing space on campus to identify a surplus or deficit of space by room type and assignment.

Space Needs Calculation Methodology

The methodology to quantify and measure the University's space needs uses a formula-based modeling process that applies the following data: facilities space inventory, personnel, class schedule, credit hours, and library collections. The space needs in this analysis are based on the THEC space planning guidelines with an alternative modeling process based on a blending of several planning methodologies including many of the THEC guideline criteria; adaptation of innovative space planning approaches developed at other universities; application of accepted conventional space formulas and guidelines that have been tested and formulas and criteria developed by the consultants for space types not addressed by conventional approaches. Planning assumptions provide the direction for student enrollment, personnel changes, and potential new programs. Interviews with the Deans and Vice Chancellors were conducted to review results, verify data, discuss space use, and provide program related data used to refine the modeling process.

Key steps in the assessment process include:

- Document and verify the existing space inventory by room type and departmental assignment;
- Identify and confirm current space utilization patterns to establish a baseline reference;
- Develop 10-year enrollment projections for use in estimating future space needs;
- Develop space needs by department based on current and projected enrollments;
- Develop space needs calculations based on the THEC Space Planning Guidelines, Revised 2013 and apply other appropriate space guidelines and methodologies for estimating space needs for each academic and administrative department; and
- Provide data to assist in developing informed decisions for the management of the University's space resources and as input into an updated future campus master plan.

The space need requirements include square feet calculations for each room type and vary according to program requirements within specific disciplines. The calculated need incorporates various factors including the size and amount of equipment used, acceptable utilization factors (i.e., station area, station occupancy ratios, and room utilization rates), number of occupants of each space, etc. The analysis compares the existing inventory of assignable square feet (ASF) to the modeled need to identify possible gaps identified as a surplus or deficit of space by room type and assignment. These results may be used to develop future solutions through realignments, repurposing of existing space or new construction.

Limitations of the Study

This study was developed through a data-driven modeling process based on a "snapshot in time" of conditions found and reported. Although conditions may change continuously during the study, this snapshot provides a reasonable baseline for conducting the assessment. The study is a quantitative analysis only, all usable space was included regardless of its condition or suitability.

Further, the space needs assessment is a process for estimating the amount of space that is required for the delivery of services, addressing current conditions and accomplishment of the University's mission. *Reliability of the findings depends on several factors including the quality and completeness of the base data and the appropriateness of the planning assumptions used in structuring the model.* The planning assumptions used in the study are presented in the following section. The study is being conducted to inform decisions for managing space and master planning and is not intended to replace any detailed facility programming assessments.

The findings in this report are presented in assignable square feet (ASF) which is defined as the area measured within the interior walls of a room and can be assigned to a specific function or use. Converting assignable square feet to gross square feet for determining the size of potential future facilities would need to be determined for a specific project.

Space Planning Assumptions

The following general planning assumptions form a framework to calculate and analyze the space needs for UTM. These assumptions provide guiding principles critical to developing the results of this study.

1. Data Sources

Basic data used in this study were provided by Physical Plant (space inventory), Human Resources (personnel); Registrar (class schedule and credit hour data) and collections data from the Meek Library. Data regarding current research activity was provided by the Office of Research, Outreach and Economic Development. The comparative space data was augmented with several planned capital projects in process including system upgrades to Clement Hall and the Hall-Moody Administration Building; reassigned space in the Johnson EPS Building and the new Latimer Science and Engineering Building. Fall term 2021 was used as the baseline for the study. *Note: Any changes in space, omissions or interpretive inaccuracies will have a minimal effect on the study's results.*

This study is limited to space assigned to the academic and administrative departments located on the main campus in Martin. The regional centers located in Jackson, Ripley, Somerville, Parsons, McNairy and Selmer are excluded.

Building support facilities (e.g., mechanical rooms, corridors, etc.), leased space and non-university operations are not part of the scope of this study.

2. The space needs calculations were based on the Tennessee Higher Education Commission (THEC) Space Allocation Guidelines (revised 2013). Also, nationally recognized space planning guidelines and the applied experience of the space analysis consultants were used to create an alternative space needs model and address needs for space types not covered by the THEC guidelines. In several cases in the alternative model the THEC guidelines were blended with the consultant's criteria to provide factors determined to be most appropriate. The modified guidelines and criteria were applied for identifying space needs at the

department level. These blended guidelines may have been modified further to fit the culture and operations of UTM academic departments.

3. The planning period for this study is ten years to the year 2031.

4. **Personnel Assumptions and Projections:**

- a. Personnel data used in the analysis includes all filled positions from the Fall 2021 term.
- b. Future staffing needs were identified by stakeholders and additions related to new academic programs.
- c. This process yielded a net future increase of 18 full-time faculty lines to address the planned enrollment growth related to new program initiatives.

A summary of the current and projected personnel included in this analysis is presented in Table 1.

Table 1: Personnel Summary

Position Type	Current FTE	Current Headcount	Projected Headcount	Difference from Current
Chancellor	1.0	1	1	0
Vice Chancellor	6.0	6	6	0
Dean	6.0	6	6	0
Associate/Assistant Dean/VP	4.0	4	5	1
Director/Chair	42.4	53	53	0
Assistant Director	26.0	26	26	0
Head Coach	11.5	15	16	1
Faculty (1)	209.1	214	232	18
Instructors, Lecturers, Visiting Faculty	86.2	90	90	0
Adjunct Faculty	56.6	209	210	1
Administrative Staff	259.3	279	283	4
Research Staff	2.0	2	2	0
Assistant Head Coach	19.7	21	23	2
Clerical Staff	59.3	64	64	0
Graduate Assistants	12.2	23	23	0
Graduate Research Assistants	5.5	10	10	0
Personnel without Office (2)	107.5	157	157	0
Student Worker	155.3	685	685	0
Totals	1,069.5	1,865	1,892	27

(1) Includes two faculty lines for Biology related to enrollment growth, stretch expectations and new programs.

(2) Indicates positions not requiring office workstation space such as maintenance, custodial, grounds and security personnel.

5. **New Program Initiatives:** Several approved or planned undergraduate, graduate and support programs were identified by the University that will have a positive impact on enrollment recruitment and retention. Where a new program has additional space implications, the estimated space need is reflected in Table 2. It is assumed that the majority of the courses associated with these initiatives will be lecture based and would be taught in classrooms or on-line. However, where teaching or research laboratory needs are identified, an estimated square feet need is included. Office space requirements are based on the number of additional personnel identified by the University using the THEC guideline factors. These space needs are reflected in the future estimates.

Table 2: Summary of New Academic Program Initiatives

College / Department / Program Initiative	On-Campus Enrollment	On-Line Enrollment	Faculty Growth	Staff Growth	Space Needs (ASF)			
					Offices	Instruct Labs	Research Labs	Total
College of Agriculture and Applied Sciences								
Family and Consumer Sciences								
Food Science	50		2	2	728	1,950	900	3,578
College of Business and Global Affairs								
Data Analytics	40		2	0	390	0	0	390
MS Human Resources Management		45	2	0	390	0	0	390
College of Education, Health & Behavioral Sciences								
Behavioral Sciences								
MS Criminal Justice		25	1	0	195	0	0	195
Education Studies								
MS Education Autism		25	1	0	195		0	195
Health and Human Performance								
Master of Sport Coaching and Performance		25	1	0	195	0	0	195
College of Engineering and Natural Sciences								
Biological Sciences								
Cellular/Molecular Biology	50		0	0	0	0	0	0
Computer Science								
Cybersecurity	50		3	0	585	0	0	585
Engineering								
Construction Management	120		1	0	195	0	0	195
College of Humanities and Fine Arts								
Communications								
Strategic Communication		40	2	0	390	700	0	1,090
Music								
Masters in Music Education		10	1	0	195	0	0	195
Totals	310	170	16	2	3,458	2,650	900	7,008

6. **Enrollment Assumptions:** Enrollment projections were developed based on an eleven-year historical on-ground and online student enrollment data provided by the University for the years 2011 through 2021. A summary of the historical enrollment data by campus site, year and instructional level is presented in Appendix A. The Fall 2021 semester serves as the base year for future student enrollment projections. If the historical enrollment is increasing, a linear trend was used to project forward and if enrollment is decreasing a logarithmic trend line was used to moderate the decline. The analysis applied the option with the most favorable results.

Two modifications to the process were recommended by the University: 1) The academic year 2010-2011 had the highest student FTE enrollment numbers ever and then the University's enrollment declined significantly in 2016 thus establishing a new baseline. Using the timeframe of 2016-2021 was one adjustment applied because it was believed the shorter historical timeframe would yield a more accurate long range projection since the enrollment profile was significantly different from 2011 to 2016; and 2) The Department of Agriculture, Geosciences and Natural Resources has three distinct academic programs managed by a single department. However, the enrollment trends for each program are different and aggregating them together presents a skewed long-term projection result. Therefore, the historical enrollment data for this department was separated to produce projections by program area. The analysis incorporated these modifications to produce a revised assessment for the future enrollment projections for UTM. The aggregated main campus enrollment growth developed using this process is 21.6%. *Note: this aggregate campus enrollment growth factor has been applied for estimating the space needs for the English & Modern Foreign Languages and Mathematics and Statistics departments because of their concentration of general education offerings supporting the entire University.*

With the addition of the new programs summarized in Table 2, an additional 259 FTE (310 headcount/83.5% average FTE to headcount ratio) have been added to the projections developed through the trend analysis for a total increase of 776 FTE or 21.6% over the ten-year planning period.

These results represent an aspirational goal of the University for on-ground future enrollments based on proposed new programs and demographic trends by department. It assumes an increase of approximately 77 FTE, on average, added each year over the planning period of the master plan.

A summary of the projected enrollments resulting from the enrollment analysis is summarized by College below. Appendix A presents these projections by department.

Table 3: Summary of Projected Enrollment by College - Main Campus

College	On-Ground Headcount -2021	On-Ground FTE - 2021	Projected FTE - 2031	Difference	Percent Difference
College of Agriculture and Applied Sciences	994	598	872	274	45.8%
College of Business and Global Affairs	669	424	486	62	14.6%
College of Education, Health & Behavioral Sciences	1,485	742	724	-18	-2.4%
College of Engineering and Natural Sciences	589	862	1,239	377	43.7%
College of Humanities and Fine Arts	558	807	893	86	10.6%
General Studies	0	152	147	-5	-3.29%
Totals Main Campus	4,295	3,585	4,361	776	21.6%

Space Modeling Criteria

I. General

- a. The space needs calculations use a combination of THEC and other recommended criteria based on nationally recognized space planning guidelines and the practical experience of the space planning consultants. Where appropriate, adjustments were made to the calculations to conform to the culture and practices of the University.
- b. For space planning purposes, full-time equivalent student counts were calculated using a conversion factor of 15 credit hours per undergraduate student and 12 credit hours per graduate student.
- c. The instructional day/week for the University is from 8 AM until 10 PM, Monday through Friday. For modeling purposes, it is assumed that peak utilization occurs during the daytime hours of 8:00 AM to 4:30 PM and this timeframe has been used in this study.
- d. Existing space allocations for certain types of space where formula-based criteria do not exist are assumed to be sufficient unless, after review on a case-by-case basis, a need for additional space has been identified. Typically, these space types include non-library student study areas.

2. Classrooms

- a. Classroom space is assumed by definition to be general purpose and can be shared or used by any academic discipline. Therefore, this space type has been analyzed by applying a uniform set of utilization goals across the University.
- b. The following THEC utilization goals were used in developing the classroom space needs: 30 Weekly Room Hours (WRH) for scheduled use for an instructional week of 7 AM to 5 PM - Monday through Friday and 60% station occupancy in scheduled rooms. A contrasting calculation is included in the

alternative model assessment applying a WRH goal of 24.3 using a 38-hour instructional week and a 68% station occupancy expectation. Also, a larger average station size of 24 assignable square feet was used as compared with the THEC average guideline of 19.4 assignable square feet per student station and current University average of 20.7 ASF. It is assumed the larger station size provides more flexibility in the learning environment and is more suitable to modern instructional practices. These factors are modeling averages that may vary as related to existing usage patterns and conditions.

3. Instructional Laboratories

- a. Instructional laboratory needs are included for individual academic programs as required. The calculated square feet need is based on utilization goals and discipline specific teaching station sizes. Two space needs calculations were made for each program: one based on the consultant’s guidelines and one based on the THEC space planning guidelines.
- b. Consultant’s Utilization Guidelines:
 - i. Lower Division Labs – 24 hours per week of use with 80% of the stations occupied.
 - ii. Upper Division Labs- 15 hours per week of use with 80% of the stations occupied.
- c. THEC Space Planning Guidelines:
 - i. Lower Division Labs – 20 hours per week of use with 80% of the stations occupied.
 - ii. Upper Division Labs- 15 hours per week of use with 75% of the stations occupied.
- d. In most cases THEC station sizes were used along with related lab service space factors.
- e. In most cases the consultant’s analysis is lab specific while the THEC approach is organized around program codes (CIP).
- f. Projected need is based on the percent of expected enrollment change calculated based on the enrollment trend analysis.
- g. Alternate model recommended laboratory space needs in most cases are a blending of the two approaches.
- h. An enrollment growth capacity estimate is developed to identify underutilized labs or those with scheduled use less than planning expectations.

4. Research Space

- a. For planning purposes, the following assumptions were used in the analysis for research space:
 - i. The number of tenure track faculty in research lab disciplines identified by the University currently engaged in lab-based research are assumed to be the only faculty who will require such space. For planning future space needs it is assumed all tenure track faculty should be conducting research.
 - ii. Personnel conducting their research in offices were not provided any additional space above the typical office space needs calculation.
- b. Research space needs are determined through a two-step process to estimate needs for lab-based research and student engagement research:
 - I. The number of tenure track faculty in research lab disciplines identified by the University currently engaged in lab-based research are assumed to be the only faculty who will require such space.

- II. The assignable square feet (ASF) space allowances prescribed by THEC by type of researchers are shown in Table 4 below and are applied to estimate a discipline-specific research lab space allocation.
- III. UTM is a regional university that has a key focus/objective of providing opportunities for student engagement particularly in research-related activities. To recognize this need, a collaboration space needs factor is applied to accommodate student engagement research activities. To estimate this need the following factors have been used:
 - o Each tenure-track faculty will be involved in student engagement research;
 - o Each tenure-track faculty will have five undergraduate researchers associated with them to form a team of six researchers, and;
 - o A space factor of 40 assignable square feet (ASF) per researcher is used to estimate the square foot need for this type of space.
- c. Certain laboratory space is classified as “special use” labs that may not be assigned to a specific faculty or researcher. These are typically shared spaces that are functionally unique usually because of specialized equipment. Unless otherwise noted, these existing spaces are assumed to be sufficient.

Table 4: Research Space Modules

College / Department	Faculty	PhD / Non-Faculty	GRA / GTA	Undergrad
College of Agriculture and Applied Sciences				
Agriculture, Geosciences & Natural Resources	450	225	75	50
Family and Consumer Sciences	300	150	75	50
Food Science	450	225	75	50
College of Engineering and Natural Sciences				
Biological Sciences	450	225	75	50
Chemistry & Physics	450	225	75	50

5. Office Space

Office space needs were developed by identifying all personnel requiring office space, private or shared, and applying a uniform set of office module guidelines prescribed by THEC to the appropriate position type. The THEC office space modules applied are identified in Table 5.

Table 5: Office Space Modules

Position Type	ASF Module
Chancellor	350
Vice Chancellor	240
Dean	180
Associate/Assistant Chancellor or Dean	150
Director/Chair	150
Assistant Director	130
Head Coach	150
Faculty	150
Instructors, Lecturer & Visiting Faculty	100
Adjunct Faculty	50
Studio Faculty	225 - 250
Administrative Staff	130
Clerical/Technical Staff	120
Technician	100
Graduate Teaching Assistants	60
Graduate Research Assistants	40
Post Docs	150
Student Worker	10

- a. Faculty or staff with appointments 50% or greater require a full office module.
 - b. It is assumed adjunct faculty share office space and no more than 25% of the adjuncts are on campus at any one time.
 - c. Student workers are assumed to be working and on campus at 25% time.
 - d. Office space is provided for contract or other non-University employees who have administrative duties.
 - e. Office space is not provided for inactive, emeriti faculty.
 - f. In accordance with the THEC guidelines, a factor of 30% of the calculated office need was applied to determine office service space needs for all departments. This factor assumes to address needs for office service space (files, work areas, etc.), conferencing space and office lounge space. Supplemental office support space above the normal office service allocation was provided for departments requiring waiting rooms, processing areas, and special storage/file needs (e.g., evidence rooms, long-term files storage). Units requiring waiting areas typically interact with the public or students like student services departments. In addition, departments that have unique storage needs which exceed the typical office service allocation (i.e., long-term) may be provided with a supplemental allocation.
 - g. For large, open-landscape offices which provide access to adjacent offices, it is assumed that 30% of the assignable square feet within these rooms are used for interior circulation to the other offices. This interior circulation space is identified separately from the office ASF to present a more realistic comparison with the calculated office need.
- 6. Library/Study Space**
- a. Library stack space is based on the reported collections that are converted to bound volume equivalents. The stack space factors used in both THEC and alternate models are identical.
 - b. The THEC study space estimates are derived through several steps to identify the number of reading/study stations. This method identifies approximately 14% of the on-ground student FTE

to count in the calculation with a range of 25 to 35 ASF per station used to determine the square foot need. The alternative model assumes 25% of the on-campus FTE students require seating at any one time with an average station size of 30 ASF applied.

- c. An allocation of 12.5% of the aggregated calculated need for reading/study and stack spaces is used to determine the technical services space needs. Most office space needs for the Library are calculated based on the number of staff requiring office space. However, it is assumed that work stations for Technical Services staff are accommodated through the Technical Services formula criteria and a separate office calculation has not been included for these positions. The Technical Services factors are identical for each model.
- d. The THEC methodology does not estimate space needs specifically for archival space. The alternate model includes a calculation for archives based on the number of lineal feet of collections and a space factor of .62 per lineal foot plus allowances for reading and processing room.
- e. The alternate model identifies study rooms not assigned to the Library separately with a non-library room use code under the appropriate department assignment and are not included in the comparative inventory related to the main library calculation. Non-library study space needs are derived assuming 10% of a department's FTE students are counted with a station size of 25 ASF.

7. Athletics/Recreation

- a. Athletic/recreation space needs are addressed using a base square feet amount to provide activity space plus an ASF allowance per FTE student. It is assumed current operating conditions, whereby intercollegiate athletic and student recreation are separate functions, will continue for the foreseeable future.
- b. The current number of student athletes is approximately 433. Expanding the existing track program and Women's Lacrosse may add up to another 100 student athletes in the future. The assessment assumes these programs will be added and have been factored into the model.
- c. A calculation for "other" recreational spaces (i.e., aerobics rooms, game rooms, TV areas and social gathering areas) that are typically found in a student center have been estimated separately.

8. Food Facilities

- a. The Food Facilities category includes dining halls, cafeterias, and snack bars which directly serve students, faculty and staff as part of the Dining Services operations. The factors used to calculate these needs include using 60% of the FTE students and 15% of the faculty and staff and a space factor of 12 ASF.

9. Student Lounge

- a. Student lounge space is calculated within the Campus Wide shared space category. A space factor of 2 ASF per Student FTE factor is used for calculating the needs for this space type. It is assumed that each student contributes to a student lounge need that would be distributed throughout the campus.
- b. Student lounges located in a residence hall have been classified as part of the Residential Space room use category and are assumed to be adequate.

10. Other General Use Space

- a. Several other categories typically grouped as general use space are included in the modeled space needs including: Assembly and Meeting Rooms. A square foot per student FTE factor based on the consultants past experience has been applied to generate these needs.

- b. Merchandising space is estimated by using a factor of 2 ASF per student FTE.
- c. Meeting space facilities that are part of a conference center operation are identified separately and are assumed to be sized appropriately for their function.
- d. Recreation space located in a residence hall has been classified as part of the Residential Space room use category and is assumed to be adequate.

11. Support Space

- a. The Support Space category provides space for various centralized support operations and services for the campus (such as shops, storage, central services like a central mail room, and telecommunications areas). The need for this type of space is determined as a percentage of the calculated need for the entire campus.

12. Student Health

- a. Student Health and Counseling space is estimated by applying a factor of 1.15 ASF per student FTE and modified by reducing the total calculation by the calculated office space needs.

13. Residential Space

- a. It is assumed that in the long term the on-campus University housing will be reduced by approximately 20% , from 2,255 to 1,800 beds. Browning Hall, Ellington Hall and University Courts Apartments will be replaced with new housing units totaling 784 beds. An assignable square foot factor of 325 ASF per bed (450 gross square feet) has been applied to estimate this future new space.

Existing Space

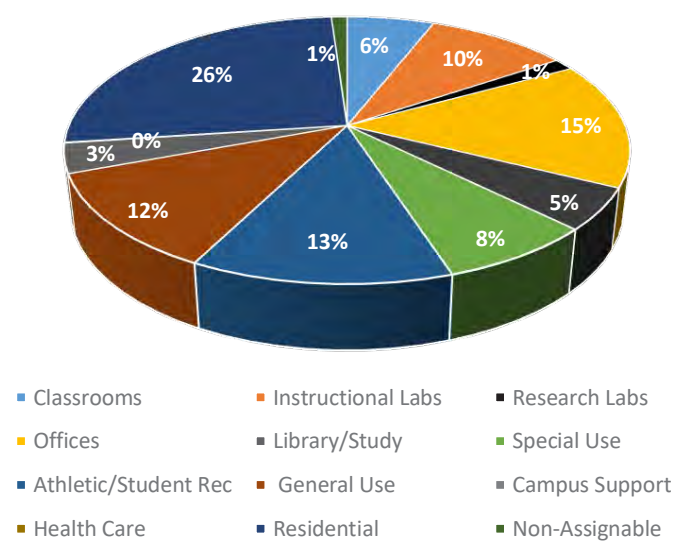
Martin Campus

The existing space inventory of the Martin Main Campus was collected and validated as part of the assessment process. As part of this process the room use, seating capacity and departmental assignment in the inventory was verified during the data collection phase.

The total assignable space inventory (ASF) used in this study for the Martin campus is 1.59 million square feet summarized by room type in Table 6 below. The University’s average ASF/FTE is 446 for the Main Campus.

Table 6: Summary of Existing Space

Space Type	ASF
Classrooms	94,911
Instructional Labs	154,495
Research Labs	22,706
Offices	245,220
Library/Study	80,380
Special Use	121,432
Athletic/Student Rec.	201,555
General Use	187,858
Campus Support	57,172
Health Care	1,132
Residential	415,388
Non-Assignable	17,208
Existing Space	1,599,457



Regional Campuses

The five regional campuses have a total of 71,202 ASF. Table 7 below summarizes their inventories by space type.

Table 7: Summary of Regional Centers Space Inventory (ASF)

FICM Category	Space Type	UT Martin Jackson Center	UT Martin McNairy / Selmer Center	UT Martin Parsons Center	UT Martin Ripley Center	UT Martin Somerville Center	Totals
100	Classrooms	1,124	6,302	10,972	10,716	5,324	34,438
210/220	Instructional Laboratories	0	3,027	3,762	3,035	2,406	12,230
300	Offices	1,449	2,037	2,722	2,934	3,162	12,304
400	Library Space	0	997	1,287	1,156	149	3,589
630	Food Facilities	0	0	251	646	0	897
650	Lounge Space	0	1,534	578	1,868	2,895	6,875
660	Merchandising Space	0	0	110	136	0	246
600	Other General Use Space	0	0	0	299	0	299
700	Support Facilities	0	0	0	0	324	324
	Totals	2,573	13,897	19,682	20,790	14,260	71,202

Space Type Descriptions:

Classrooms: Category includes all space used for scheduled, non-laboratory instruction for all academic units (classrooms, seminar rooms, lecture halls). Also, includes rooms allocated as classroom service/support space.

Instructional Laboratories: Category includes rooms characterized by special purpose equipment or special configuration that ties instruction to a particular discipline or closely related group of disciplines. Includes labs with scheduled use, open labs, and service space as an extension of the activities in the class labs.

Research Laboratories: Category includes laboratories and services space used for non-class/research activities.

Offices: Category includes the office and work areas for academic and administrative personnel along with office service space (conference, files/copy, lounge waiting, storage).

Library/Study: Category includes the study, stack, processing, and archive spaces.

Special Use: This category includes several space use categories that are sufficiently specialized in their primary activity or function to merit a unique space code. Area and rooms for athletic activity, media production, non-health clinical activities, demonstration, and animal and plant shelters are included. Also includes interview rooms, counseling, tutoring and testing rooms.

General Use: This category is characterized by a broader availability to faculty, students, staff or the public. General Use facilities comprise a campus’ general service or functional support system (e.g., assembly, exhibition, dining, relaxation, merchandising, recreation, general meetings and day care).

Support Facilities: This category includes facilities which provide centralized space for various auxiliary support systems and services of a campus and help keep all institutional programs and activities operational. Included are centralized areas for computer-based data processing, shop services, general storage and supply, vehicle storage, and other central services such as shipping and receiving and duplication services.

Health Care: Category includes rooms to provide patient care.

Residential: Category includes housing facilities for students.

Unused/Inactive Areas: Rooms available for assignment to an organizational unit or activity but unassigned at the time of the study.

THEC Space Needs Calculations

Based on the planning assumptions detailed in the previous section of this report and the THEC Space Planning Guidelines, the current and projected THEC calculated space needs are summarized in Table 8 below. Comparative results from an alternative space analysis is also included in this summary.

Table 8: THEC Space Needs – Current and Projected

Space Category	Equiv FICM	Existing E & G Assignable Square Feet (ASF)	THEC Space Needs Model				Alternative Space Needs Model	
			Current ASF Need		Projected ASF Need		Projected ASF Need	
			THEC Model Main Campus	Difference from Existing	THEC Model Main Campus (1)	Difference from Existing	Alternative Model - Main Campus (1)	Difference from Existing
I-Classrooms	1xx	94,911	51,414	43,497	71,934	22,977	80,189	14,722
II-Lab/Studio	210, 215	125,453	85,425	40,028	117,344	8,109	149,810	(24,357)
III-Open Lab	220, 225	29,042	17,925	11,117	22,825	6,217	33,309	(4,267)
IV-Research	250, 255	22,706	26,378	(3,672)	46,720	(24,014)	100,234	(77,528)
V-Office	3xx	236,036	132,164	103,872	139,098	96,938	178,626	57,410
VI-Library	4xx	80,380	56,018	24,362	55,537	24,843	82,409	(2,029)
Vii-Physical Education	520, 523, 525	157,316	80,235	77,081	115,971	41,345	169,316	(12,000)
Totals		745,844	449,559	296,285	569,429	176,415	793,893	(48,049)

The detailed THEC formula-driven projected space needs are presented in the sections below. *Note: the tables below reflect the original formula calculations. Any adjustments and supplemental programmed space needs that have been added to Table 8 are noted in the summary results.* Summary results and brief explanations of the differences between the two models are also presented.

Classrooms:

Table 9 shows the details related to the THEC projected classroom space needs.

Table 9: Projected THEC Space Needs - Classrooms

Hours Use per Week: 30		Calculated Classroom Projected Need					
Class Size	Sections	Weekly CR Hours	Stations	ASF/Station	ASF per CR	Number of CR	Total ASF
1-8	148	408.1	12	26	312	14	4,368
9-14	157	453.0	20	25	500	16	8,000
15-20	161	461.5	30	21	630	16	10,080
21-26	210	602.0	40	18	720	21	15,120
27-32	78	229.6	50	18	900	8	7,200
33-47	95	279.4	60	18	1,080	10	10,800
48-74	22	65.0	100	17	1,700	3	5,100
75-126	2	7.3	150	16	2,400	1	2,400
>=127	0	0.0	275	14	3,850	0	0
Total Classrooms and NASF:						89	63,068

Summary Results:

- The THEC model calculates a future need for 63,068 ASF compared to the current supply of 94,911 ASF (including the Latimer Building). After adjusting the original THEC calculation to account for the College of Business and Global Affairs and including in the future needs 17,790 ASF of programmed space for the Test Hub and College of Business Building the total projected needs shown in Table 8 is 71,938 ASF.
- The alternative analysis' calculation indicates a need for 80,189 ASF.
- The THEC calculation includes many more small classrooms compared to the consultants' calculation. This difference in rooms needed in the smaller size ranges results in less square feet from the THEC model. Also, part of the classroom ASF difference between the two models is a result from the average station sizes being used. The alternate model applies an average station size of 24 ASF which is approximately 24% larger than the THEC average station size.**

Class Labs:

Table 10 shows the details related to the projected class lab space needs.

Table 10: Projected THEC Space Needs - Class Labs

THEC Guidelines						Projected Space Needs						
Level	THEC Group	NASF / Station	Support Allocation	Stat Util.	Hrs. per Week	Enroll.	Sections	Weekly Lab Hours	Number of Labs	Lab NASF	Support NASF	Total NASF
LD	A	150	40%	80%	20	0	0	0.0	0	0	0	0
LD	B	100	35%	80%	20	354	28	76.7	4	6,800	2,380	9,180
LD	C	75	30%	80%	20	422	28	81.6	5	7,125	2,138	9,263
LD	D	60	25%	80%	20	1,480	99	215.1	11	12,540	3,135	15,675
LD	E	40	20%	80%	20	535	37	98.7	5	3,600	720	4,320
UD	A	150	40%	75%	15	263	20	43.8	3	8,100	3,240	11,340
UD	B	100	35%	75%	15	469	36	108.0	8	14,400	5,040	19,440
UD	C	75	30%	75%	15	534	49	133.5	9	10,125	3,038	13,163
UD	D	60	25%	75%	15	534	58	146.9	10	7,200	1,800	9,000
UD	E	40	20%	75%	15	626	50	141.5	10	7,200	1,440	8,640
						Totals			77,090	22,930	100,020	

Summary Results:

- The THEC methodology produces a future calculated need for teaching labs of 100,020 ASF. After adjusting the original THEC calculation to account for the College of Business and Global Affairs and included in the future needs is 23,516 ASF of programmed space for the Fine Arts Addition, Business Administration Building, Meat Processing Facility and Beef Cattle Teaching and Demo Facility for a total of 117,344 ASF.**
- The alternative model produces a need of 149,810 ASF.**
- Some of the key differences for the results produced between the two methods are identified below:
 - For a typical instructional week, the THEC class lab guidelines apply uniform utilization rates of 20 hours per week for lower division courses and 15 hours per week for upper level labs. The alternative calculations use a range from 15 hours to 30 hours per week depending on the discipline but does not differentiate by course level.
 - The THEC Model uses an 80% station occupancy for lower division labs and 75% for upper division labs. The alternative model uses 80% for all labs.
 - The THEC methodology determines a required number of labs within five teaching lab discipline (CIP) groupings (A through E) and by level (lower and upper). For any fractional number of labs produced (i.e., 2.25) for each group the number of labs is rounded up. The alternative model

estimates the lab needs by department and program and applies more judgement in certain cases where a modification to utilization expectations may offer a reasonable and achievable solution.

Open Labs:

Table 11 shows the details related to the projected open lab space needs.

Table 11: Projected THEC Space Needs - Open Labs

Student FTE Enrollments		Open Lab Space Factor	Total ASF Need
On-Ground	4,361	5	21,805
Online	1,593	0	0

Summary Results:

- The THEC model allocates 5 square feet per FTE student for the total student enrollment. It is assumed this is an upper limit for the open lab type space need.
- The THEC calculation generates a projected need of 21,805 ASF. Also, included in the future needs is 1,020 ASF of programmed space for the Test Hub for a total of 22,285 ASF.**
- The alternative model's allocation for open labs is 33,309 ASF.**
- The alternative model applies the THEC factor at the department level and assumes:
 - there is no open lab need for departments with no existing labs.
 - for units which have existing open labs, if the calculated need is less than the current ASF, the existing space is assumed to be adequate.
 - for departments with existing open lab space the calculated need is used if the calculation exceeds the existing.

Research Labs:

Table 12 shows the details related to the projected open lab space needs.

Table 8: Projected THEC Space Needs - Research

Research Personnel							
Personnel Category	Discipline Group - FTE				Research Lab NASF	Lab Support NASF	Total Labs + Support NASF
	A	B	C	D			
Faculty	1.00	26.00	3.00	3.00			
PhD., Post Doc	0.00	0.00	0.00	0.00			
Non Faculty	0.00	28.00	0.00	5.00			
GRA/GTA	0.00	0.00	0.00	0.00			
Undergrad	0.00	28.00	0.00	0.00			
Visitor/Adjunct	0.00	0.00	0.00	0.00			

Research Lab						
Personnel Category	Research Lab NASF per FTE			Research Lab NASF	Lab Support NASF	Total Labs + Support NASF
	A	B	C			
Faculty	600	450	300	13,200	4,605	17,805
PhD., Post Doc	300	225	150	0	0	0
Non-Faculty	300	225	150	6,300	2,205	8,505
GRA/GTA	100	75	75	0	0	0
Undergrad	50	50	50	1,400	490	1,890
Visitor/Adjunct	300	225	150	0	0	0
Support Allocation	40%	35%	30%			
Total Research Lab NASF						28,200

Research Office				
Personnel Category	Research Office NASF per FTE	Research Office NASF	Office Support NASF	Total Offices + Support NASF
	D			
Faculty	50	150	30	180
PhD., Post Doc	50	0	0	0
Non Faculty	50	250	50	300
GRA/GTA	50	0	0	0
Undergrad	50	0	0	0
Visitor/Adjunct	50	0	0	0
Support Allocation	20%			
Total Research Office NASF				480

Summary Results:

- The THEC model calculates a future need of 28,680 ASF for research lab space compared to the current supply 22,706 ASF. Also, included in the future needs is 18,040 ASF of programmed space for the Test Hub for a total of 46,720 ASF.**
- The alternative model generates a need of 100,234 ASF of which 24,880 ASF is related to space classified as research labs.**
- The primary variation from the THEC model is that the alternative model includes a provision for a research collaboration space factor to provide for a flexible space allowance to accommodate what is identified as student engagement research activities for both STEM and non-STEM programs.

Offices:

Table 13 shows the details related to the projected office and office support space needs calculation.

Table 13: Projected THEC Space Needs - Offices

Personnel Category	Total FTE	NASF / FTE	Total NASF
President, Chancellor	1.0	350	350
Provost, Vice President	6.0	240	1,440
Dean	6.0	180	1,080
Assoc. Dean, Dept Chair	43.4	150	6,510
Professor, Assoc., Asst.	226.0	150	33,906
Other Faculty	113.8	100	11,380
Professional Staff	305.5	130	39,715
Clerical	54.3	120	6,516
Staff, Technician	0.0	100	0
GTA, Headcount	23.0	60	1,380
GRA, Headcount	10.0	40	400
Other Students	155.0	10	1,550
Other	0.0	100	0
Subtotal NASF			104,227
Support Allocation		30%	31,269
Total Office NASF			135,496

- The THEC office space needs methodology uses a square foot module per faculty, staff or student worker requiring office space. This calculation is supplemented with a 30% service factor to estimate office support space. The two calculated needs identify the total space allocation for office space.

- **The THEC process produces a projected calculated need of 135,496 ASF. After adjusting the original THEC calculation to account for the College of Business and Global Affairs, included in the future needs is 17,083 ASF of programmed space for the Test Hub, Multicultural Center and the College of Business and Global Affairs for a total of 139,098 ASF.**
- **The alternative model generates a need for 178,626 ASF.**
- The alternative methodology applies the THEC criteria to generate the office space needs with the following exceptions:
 - Supplemental office support space exceeding the normal office service allocation is provided for departments requiring waiting rooms, processing areas, and special storage/file needs (e.g., evidence rooms, long term files storage).
 - The comparative space inventory used in the consultant’s analysis includes some department storage space, whereas the THEC model does not.
 - For large, open-landscape offices which provide access to adjacent offices it is assumed 30% of the assignable square feet within these rooms is used for interior circulation to these other offices. This interior circulation space has been deducted from the room’s square feet size. This adjustment presents a more realistic comparison between the inventoried space and the calculated office need.
 - The THEC office needs methodology excludes any operations identified as auxiliary service. For UTM that includes the departments of Auxiliary Services, Bookstore, Campus Recreation, Dining Services, Housing, Traffic Management, Computer Store and Telecommunications Auxiliary. The alternative analysis includes these units.

Library/Study:

Table 14 shows the details related to the projected library/study space needs.

Table 14: Projected THEC Space Needs – Library/Study

Basic Data		Stack Space Calculation			
Volume Equivalents	332,342				
Volumes in Compact Shelving	969	Volumes	NASF Per Volume	Total NASF	
Cartographic Collection	2,735	First 150,000 Volumes	150,000	0.10	15,000
On Ground Student FTE	4,361	Next 150,000 Volumes	150,000	0.09	13,500
Online Student FTE	1,593	Next 300,000 Volumes	31,373	0.08	2,510
On Campus Living Headcount	1,800	Compact Shelving	969	0.03	30
Total Student Enrollment On Ground (HC)	5,222	Cartographic Collection	2,735	0.02	55
Headcount to FTE Conversion Factor	0.84	Total Stack Space			31,095
Estimated FTE Living On Campus	1,504	Reading/Study Space Calculation			
		Seat Type	No. Of Stations	NASF per Station	Total NASF
		Standard	270	25	6,739
		Enhanced/Group	150	35	5,242
		Reserved/Assignable	120	35	4,193
		Group Study	60	35	2,097
		Total Reading/Study Space			18,271
		Technical Service Space			
		Subtotal Books and Reader Space			49,366
		Technical Services Space			12.5% 6,171
		Total Library and Study NASF			
		55,537			

Summary Results:

- **The THEC model calculates 55,537 ASF for library/study space compared to the current inventory of 80,380 ASF.**
- **In contrast, the alternative model’s calculation identifies a need of 82,409 ASF.**
- Some key differences include:
 - The inventory includes archival space but the THEC model does not calculate a need for this space type, while the alternative process addresses this need.
 - The alternative model uses a reading/study factor for accommodating 20% of the student FTE in comparison with the THEC factor of about 14%.

Physical Education/Recreation:

Table 15 shows the details related to the projected Physical Education/Recreation space needs.

Table 15: Projected THEC Space Needs – Physical Education/Recreation

On Ground Projected Student FTE	4,361
Minimum NASF for Institutions >4,000 FTE	68,000
Additional NASF per FTE	11
Institution Minimum NASF	68,000
Per FTE Allocation	47,971
Total Physical Education/Recreation NASF	115,971

Summary Results:

- The THEC calculation for physical education/recreation space for UTM applies a minimum allowance of 68,000 ASF and adds 11 ASF per FTE student.
- **The future THEC space need is therefore 115,971 ASF.**
- Since the existing space assigned to Health and Human Performance (72,556 ASF) and Student Recreation (84,760 ASF) exceeds the THEC calculation, **the alternative model assumes the current space is adequate but includes a need for a replacement recreational swimming pool of approximately 12,000 ASF.**

Alternative Space Needs Analysis

In this section of the study an alternative modeling option is presented for consideration by UT Martin for future planning. This alternative approach builds the space needs calculations from the department/program level and the results are then aggregated to the subdivision, college or division level. This granular approach therefore provides more specific space needs estimates for developing future capital project proposals. The modeling process is also based on a blending of several planning methodologies including many of the THEC guideline criteria (i.e., teaching lab modules, open labs space factor); adaptation of innovative space planning approaches developed at other universities (University of West Florida student engagement research space); application of accepted conventional space formulas and guidelines that have been tested and refined by the consultants over time; and creation of formulas and criteria by the consultants for space types not addressed by conventional approaches (i.e., calculations for tutoring, testing and archival space). In addition, the THEC model does not address all space types. The alternative analysis applies other planning factors and guidelines to estimate needs for many of the non- E & G spaces such as assembly, food services, student lounge, meeting room and residential space. This model presents the University with a more comprehensive process covering all space categories.

The followings sections of the report present the details and results of this alternative space needs analysis process. The remainder of the report is divided into three primary sections. The first section presents the current and projected space needs calculations for the whole campus by division and major space type. The second section presents the calculated space needs by department and space type within each Academic College or Division. And the third part presents a more in depth analysis of the major space types including current utilization statistics.

Section I: Campus Space Needs

Summary Space Needs by Division

The following summary table presents the current and future calculated space need compared to the existing space by major division and subdivision or college. For purposes of this study a separate grouping labelled Campus Wide Space is identified that includes spaces that are considered to be shared resources (classrooms, athletic/recreation, assembly, meeting room, exhibition, food/dining, lounge, merchandising and support facilities).

Table 16: Alternative Model - Summary of Space Needs by Division/College

Division/Subdivision or College	Existing Space (ASF)	Current		Projected	
		Calculated ASF Need	Difference From Existing	Calculated ASF Need	Difference From Existing
Chancellor	58,825	53,742	5,083	68,284	(9,459)
Finance and Administration	36,753	27,076	9,677	27,076	9,677
Provost					
College of Agriculture and Applied Sciences	214,905	215,687	(782)	251,777	(36,872)
College of Business and Global Affairs	14,893	22,067	(7,174)	33,863	(18,970)
College of Education, Health & Behavioral Sciences	34,269	44,590	(10,321)	45,655	(11,386)
College of Engineering and Natural Sciences	111,098	109,942	1,156	120,782	(9,684)
College of Humanities and Fine Arts	81,563	88,021	(6,458)	123,065	(41,502)
Enrollment Services and Student Engagement	18,170	13,283	4,887	13,575	4,595
Provost	99,098	87,109	11,989	117,256	(18,158)
Provost Subtotals	573,996	580,700	(6,704)	705,973	(131,977)
Student Affairs	461,851	441,530	20,321	494,056	(32,205)
University Advancement	4,340	2,921	1,419	2,921	1,419
Campus Wide Space	463,692	391,466	72,226	596,478	(132,786)
Totals by Division/Subdivision or College	1,599,457	1,497,435	102,022	1,894,788	(295,331)

Summary Results:

- The University’s Main Campus’ facilities used in this study consist of just under 1.6 million assignable square feet of space (ASF).
- The current calculated guideline space needs indicate a net aggregate surplus. However, five of the divisions/colleges show a calculated shortage. All of the academic colleges indicate a shortage with the College of Education, Health & Behavioral Sciences having the greatest need (deficit). The calculated needs for the administrative support divisions indicate the net overall space currently assigned is adequate.
- The projected calculated guideline space needs indicate a net deficit of 295,331 ASF or 18.5% more than existing. In the projected scenario, the Colleges of Humanities and Fine Arts and Agriculture and Applied Sciences will have the largest future space shortages among the academic areas. For administrative units, the greatest future space shortage will be in the Student Affairs Division resulting from an expansion of student housing to address the planned enrollment growth and the Campus Wide shared space grouping that includes a significant expansion of athletic space.

The University-wide results shown above in Table 16 present a broad, aggregated overview that can distort some of the more salient findings when looking from a more granular level. Table 17 displays the space needs by departmental assignment to identify the ten departments with the greatest needs (deficits) in both the current and projected scenarios.

Table 17: Alternative Model - Departments with the Greatest Calculated Space Needs

Department	Existing ASF	Current		Department	Existing ASF	Projected	
		Guideline Needs	Difference from Existing			Guideline Needs	Difference from Existing
Athletics	36,974	44,480	(7,506)	Office of Housing	416,619	454,762	(38,143)
College of Business & Global Affairs	14,893	22,143	(7,250)	Music	24,048	53,089	(29,041)
Educational Studies	6,155	11,934	(5,779)	Academic Affairs	951	26,477	(25,526)
English & Modern Foreign Lang.	6,892	11,472	(4,580)	Agri., Geosciences & Natural Res.	185,810	206,932	(21,122)
Agri., Geosciences & Natural Res.	185,810	189,613	(3,803)	College of Business & Global Affairs	14,893	33,871	(18,978)
Chemistry & Physics	24,915	28,604	(3,689)	Athletics	36,974	45,247	(8,273)
Mathematics and Statistics	5,355	8,816	(3,461)	Educational Studies	6,155	12,369	(6,214)
History and Philosophy	2,664	5,934	(3,270)	Computer Sciences	3,921	9,520	(5,599)
Engineering	19,041	21,977	(2,936)	English & Modern Foreign Lang.	6,892	11,472	(4,580)
Behavioral Sciences	2,918	5,540	(2,622)	Engineering	19,041	23,022	(3,981)

Summary Results:

- Under current conditions Athletics (without athletic activity space) generates the greatest calculated space need.
- In the future, with the replacement housing planned, the Office of Housing will have the largest space shortage.
- There are 18 departments with space shortages exceeding 500 ASF in the current scenario and 23 in the future.
- Note: the single area with the greatest overall future need is under the Campus Wide category. Since this is not a department but a grouping of shared spaces it is not shown in Table 17.

Summary Space Needs by Space Type

The following table summarizes the current and future calculated space need for the alternative model compared to the existing space inventory by room type category. Detailed assessments of these room type categories are presented in the Space Needs by Major Space Type section of this report.

Table 18: Alternative Model - Summary of Space Needs by Space Type

Space Type	Existing Space (ASF)	Current		Projected	
		Calculated ASF Need	Difference From Existing	Calculated ASF Need	Difference From Existing
100 Classrooms	94,911	58,716	36,195	80,189	14,722
210 Teaching Labs	125,453	115,945	9,508	149,810	(24,357)
220 Open Labs	29,042	30,545	(1,503)	33,309	(4,267)
250 Research Labs	22,706	77,328	(54,622)	100,234	(77,528)
300 Offices	236,036	165,531	70,505	178,626	57,410
400 Library/Study	80,380	72,942	7,438	82,409	(2,029)
500 Special Use Facilities	128,619	131,464	(2,845)	150,579	(21,960)
520 Athletic/Recreation Space	201,555	201,555	0	353,136	(151,581)
600 Other General Use Space	7,297	7,297	0	7,297	0
610 Assembly Facilities	86,888	73,256	13,632	103,599	(16,711)
620 Exhibition Space	4,517	3,494	1,023	4,252	265
630 Food Facilities	27,979	27,841	138	31,741	(3,762)
650 Lounge Space	13,175	10,766	2,409	16,500	(3,325)
660 Merchandising Space	10,653	9,730	923	11,500	(847)
670 Recreation	11,827	11,827	0	14,327	(2,500)
680 Meeting Rooms	25,522	8,708	16,814	23,191	2,331
700 Support Facilities	59,169	68,814	(9,645)	86,587	(27,418)
800 Health Care Facilities	1,132	1,397	(265)	3,500	(2,368)
900 Residential Space (1)	415,388	415,388	0	459,111	(43,723)
Surge Space	4,891	4,891	0	4,891	0
Unfinished (2)	6,713	0	6,713	0	6,713
Unused (3)	5,604	0	5,604	0	5,604
Totals - By Space Type	1,599,457	1,497,435	102,022	1,894,788	(295,331)
Total Surpluses					87,045
Total Deficits					(382,376)
Gross Square Feet (Deficit)					(637,293)

(1) Future residential inventory removes University Courts, Browning and Ellington and adds 754 Beds (1,800 total beds).
 (2) The Unfinished space is located in Clement Hall.
 (3) Inactive (Unused) space in Clement Hall, Administration and Holt Humanities.

Summary Results:

Overview

- The total current net calculated need for all space type categories indicates overall the existing inventory is adequate. Some space types indicate shortfalls while other surpluses indicating there may be a disproportionate distribution of space among the room type categories.
- It is likely that some of the calculated surpluses may not be feasible options (such as offices) for addressing future space needs. Therefore, for planning purposes, the cumulative projected need (deficit) is shown as a more realistic depiction of the overall need. This analysis identifies a cumulative deficit of 382,376 ASF (without counting offsetting surpluses), which converts to an estimated 637,293 gross square feet.
- Note: the gross square foot conversion figure is presented to provide a contextual reference of the possible total build-out if additional space is developed to meet the projected needs.

Classrooms:

- The existing Classroom space is sufficient to meet both current and future enrollments. The supply could accommodate a potential enrollment growth of up to 25% so it is sufficient to address the planned growth of 21.6%. This growth potential estimate is based on achieving the recommended utilization goals.

Teaching Labs:

- The current calculated space needs for teaching labs identifies, in the aggregate, the existing space is adequate.
- With the planned enrollment growth and implementation of new academic programs a deficit of 24,357 ASF, or 19.4% more than the existing is identified. Some of the key needs identified include:
 - Agriculture, Geosciences & Natural Resources shows the largest projected space shortfall of about 17,155 square feet. This is related to additional support for existing programs and the programmed development of a Meat Processing Facility and Beef Cattle Teaching and Demonstration Facility.
 - Family and Consumer Sciences may need an additional 1,950 square feet to support a new program in Hospitality Management.
 - Future programmed needs for the College of Business and Global Affairs will include a new Finance Trading Center, a Professional Sales Lab, Visualization Lab and a Writing Lab.
 - Biology Sciences might be able to handle future needs in about 2,000 fewer square feet.
 - Computer Science could justify two additional labs, about 2,000 additional square feet, to support the Cyber Security program.
 - Communications could justify an additional 700 square feet lab to support the new Strategic Communications program.
 - An additional lab in Visual and Theatre Arts for Dance and a studio for Chamber Music/Jazz Recital are included with the proposed Fine Arts Addition.

Open Labs:

- The current calculated space needs for open labs identifies a deficit of 1,503 ASF or 5.2% more than existing.
- The future shortfall will be 4,267 ASF or 14.7% more than existing.

Research Space:

- Research space needs include both a calculation for lab-based space and a new, proposed component designated as student engagement:
 - The current calculated research space needs indicate a net deficit of 5,786 ASF or 240% more than existing. A shortfall of 5,786 ASF for lab-based research space was identified. This is more than 10.6% of the overall deficit with the remaining need identified being for student engagement research space which is currently not provided.
 - With the planned enrollment growth and commensurate increase in faculty, the research space need is estimated to grow to a deficit of approximately 77,500 ASF, with additional lab-based space needs consisting of about 25,000 ASF. The projected lab-based needs include programmed space in the new Test Hub facility.

Office Space:

- The existing office inventory totals 236,036 assignable square feet (ASF) of space classified as either office or office support. This breaks down to 153,767 ASF in 862 offices and 82,269 ASF in office support space (53.5% of the office space).
 - The overall current guideline calculation for office space indicates a net surplus of 70,505 ASF, which is reduced under the projected need to 57,410 ASF.
 - The total square feet of offices per FTE is 195 ASF and per headcount 155. Both averages are greater than many of the planning modules used and prescribed by THEC and is a contributing factor towards the calculated surplus. Another factor is the ratio of office service space to office space which is 53.5%. The THEC modeling factor for office service is 30%.

Library/Study:

- The current calculated space needs for the Meek Library indicate the existing space is sufficient overall, while the future needs indicate a net deficit of 2,029 ASF or 2.5 % more than its existing space.
- Additional space for the archives is indicated both currently and in the future. The increase in the future deficit is the result of a planned 25% growth in the archival collection.

Athletics/Student Recreation:

- The projected space needs for Athletics/Student Recreation include a replacement swimming pool, currently located in the Elam Center, with a 12,000 ASF pool developed as an addition to the Student Recreation Center. The old swimming pool in the Elam Center will be repurposed as a new turf court. In addition, the future needs include athletic activity space programmed for the Bob Carroll Addition/Renovation and Indoor Football Practice Facility projects.

Assembly/Exhibition:

- Existing space classified as assembly and exhibition is adequate.
- The future deficit associated with assembly space are related to the planned addition to the Fine Arts Building.

Student Services Space:

- With the exception of meeting rooms, several student service space categories, although adequate currently indicate shortages in the future:
 - Future food services space is recommended is to increase by about 3,900 ASF in space adjacent to the Meek Library.
 - An increase in Student Lounge space by about 3,300 ASF which would be located in the Boling Center.
 - With the planned growth, approximately 850 additional square feet in merchandising space may be needed.

Campus Support:

- The calculated needs for campus support space indicates a deficit of 9,645 ASF or 16.3% more than the existing inventory with a projected deficit of 27,418 ASF.

Health Facilities:

- This space type relates to the operations of Student Health and Counseling. In the future it is recommended the existing building housing the operations be replaced with a 5,200 ASF facility. The currently assigned space is deficient by approximately 2,400 ASF in treatment space (which is shown in the above summary). The existing facility will be repurposed to meet other needs.

Residential:

- Future residential space needs include replacement housing units for Browning Hall, University Courts Apartments and Ellington Hall by replacing a total of 754 beds and resulting in a net increase of 43,723 ASF more than the existing inventory.

Section 2: Departmental Space Needs by Division

Academic Colleges

College of Agriculture and Applied Sciences

The College of Agriculture and Applied Sciences **occupies 214,905 assignable square feet located in 34 facilities:** Beef Cattle Barn (3,702 ASF), Brehm Hall (13,830 ASF), Child & Family Resource Center (1,820 ASF), Companion Animal Lab (1,997 ASF), Gardner-Hyndsvor House (1 ASF), Gooch Hall (11,687 ASF), Graham Stadium (218 ASF), Graves Stables (4,500 ASF), Johnson EPS Bldg. (15,517 ASF), Martin Composting & Storage Building (2,500 ASF), Martin Forage Samples (113 ASF), Martin Grain Bin #1 (114 ASF), Martin Grain Bin #2 (114 ASF), Martin Hawks House (1,769 ASF), Martin Hay Barn #1 (1,371 ASF), Martin Hay Barn #2 (1,395 ASF), Martin Swine Houses & Shelters (72 ASF), McWherter Agriculture Complex (61,965 ASF), NW Child Care Resource Center (2,676 ASF), Perry Children's Center (7,589 ASF), Plant Science Research Center (2,943 ASF), ROTC Building (3,882 ASF), Sheep & Goat Facility (3,600 ASF), Smith Livestock Center (12,697 ASF), Stalling Facility (39,442 ASF), Teaching Farm Bldg. #1 (Diagnostics Lab) (1,982 ASF), Teaching Farm Bldg. #4 (Hogs) (1,662 ASF), Teaching Farm Bldg. #5 (Hogs) (2,312 ASF), Teaching Farm Bldg. #6 (1,97 ASF), Teaching Farm Bldg. #7 (Biofuels) (1,796 ASF), Teaching Farm Bldg. #8 (WBIO) (3,603 ASF), Teaching Farm Bldg. #9 (Fisheries) (3,603 ASF), Veterinary Science Laboratory (722 ASF) and Veterinary Science Teaching Center (1,902 ASF).

*The College's inventory also has 30,157 assignable square feet that includes: classroom, assembly, lounge, merchandising, shop and hazardous material storage space. For this study these spaces have been classified as a campus wide resource and analyzed separately. **Therefore, the existing space in the tables below reflects offices, office support, instructional and research labs, armory, animal quarters, field buildings, equine space, study and other support space types.***

The College consists of three academic units: Agriculture, Geosciences & Natural Resources, Family and Consumer Sciences and Military Science and Leadership. The Dean's Office and Margaret N. Perry Children's Center are support units.

The College's calculated space needs are summarized by department and space type in Tables 19 and 20.

Table 19: Alternative Model - College of Agriculture and Applied Sciences - Summary of Space Needs by Department

Department	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Agri., Geosciences & Natural Resources	185,810	189,613	(3,803)	185,810	222,169	(36,359)
Dean, Coll. of Agriculture & Applied Sciences	1,441	611	830	1,441	611	830
Family and Consumer Sciences	16,183	15,608	575	16,183	19,097	(2,914)
Margaret N. Perry Children's Center	7,589	7,950	(361)	7,589	7,950	(361)
Military Science and Leadership	3,882	1,905	1,977	3,882	1,950	1,932
Total Assignable Square Feet	214,905	215,687	(782)	214,905	251,777	(36,872)

- A new Food Science program under Family and Consumer Science will be implemented in the future that will include two additional faculty and two additional staff positions plus a new food science teaching lab.
- Additional cattle sheds related to the Beef Cattle Teaching and Demonstration Facility are also identified.

College of Business and Global Affairs

The College of Business and Global Affairs occupies **14,893 assignable square feet located in 2 facilities:** the Business Administration Building (13,370 ASF) and Gooch Hall (1,473 ASF).

The College's inventory has 1,267 assignable square feet that includes classroom and lounge space. For this study these spaces have been classified as a campus wide resource and analyzed separately. **Therefore, the existing space in the tables below reflect offices, office support, instructional and research labs space.**

The College consists of two departments: Center for Global Education and Experience and College of Business & Global Affairs.

The College's calculated space needs are summarized by department and space type in Tables 21 and 22.

Table 20: Alternative Model - College of Agriculture and Applied Sciences - Summary of Space Needs by Space Type

Space Category	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Offices	14,784	11,554	3,231	14,784	12,114	2,671
Office Support	11,771	4,827	6,944	11,771	5,040	6,731
Instructional Labs	32,456	30,435	2,021	32,456	53,868	(21,412)
Research Labs	7,196	19,229	(12,033)	7,196	20,040	(12,844)
Animal Qtrs.	52,494	52,494	0	52,494	52,494	0
Armory	72	72	0	72	72	0
Day Care	7,297	7,297	0	7,297	7,297	0
Equine Arena	53,294	53,294	0	53,294	53,294	0
Field Buildings	16,521	16,521	0	16,521	26,474	(9,953)
Greenhouses	1,895	2,020	(125)	1,895	2,631	(736)
Non Library Study Room	2,505	3,325	(820)	2,505	3,835	(1,330)
Smith Livestock Center	12,850	12,850	0	12,850	12,850	0
Residential	1,770	1,770	0	1,770	1,770	0
Total Assignable Square Feet	214,905	215,687	(782)	214,905	251,777	(36,872)

Table 21: Alternative Model - College of Business and Global Affairs - Summary of Space Needs by Department

Department	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF (1)	Surplus (Deficit)
Center for Global Education and Experience	1,423	711	712	1,423	0	1,423
College of Business & Global Affairs	13,470	21,356	(7,886)	13,470	33,863	(20,393)
Total Assignable Square Feet	14,893	22,067	(7,174)	14,893	33,863	(18,970)

Summary Results:

- The current calculated net space needs for the College of Agriculture and Applied Sciences indicate a marginal deficit of 782 ASF. However, there is a disproportionate distribution of space within the existing inventory with space shortages in certain categories and surplus space in others.
- Among the four units, the Department of Agriculture, Geosciences & Natural Resources has the largest net current space shortage of 3,803 ASF or 2% more than existing. An examination of the different space types identifies a deficit in research space that is 167% more than their existing inventory and a shortage in study space.
- Office service and office space is short in the Margaret N. Perry Children's Center by just over 360 ASF. The total existing space for Family and Consumer Sciences is adequate but they have a calculated deficit of 1,788 ASF in research space.
- The College's projected calculated space needs indicate a net deficit of 36,872 ASF or 17.2 % more than existing space.
- The Department of Agriculture, Geosciences & Natural Resources has a significant future space shortage of 36,359 ASF or 19.6% more than existing. In addition to the research and study space shortages the department will require 19,462 ASF more in instructional lab space, additional greenhouse space and 1,330 ASF more in study space. The instructional lab needs also include programed space needs related to the Meat Processing Facility and Beef Cattle Teaching and Demonstration Facility.

Table 22: Alternative Model - College of Business and Global Affairs - Summary of Space Needs by Space Type

Space Category	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF (1)	Surplus (Deficit)
Offices	9,486	8,093	1,393	9,486	10,071	(585)
Office Support	1,639	2,632	(993)	1,639	4,192	(2,553)
Instructional Labs	3,422	3,422	0	3,422	5,220	(1,798)
Research Labs	0	7,920	(7,920)	0	8,880	(8,880)
Community Area/Meeting Rooms	0	0	0	0	4,075	(4,075)
Team Rooms/Study Rooms	0	0	0	0	1,425	(1,425)
Unused	346	0	346	346	0	346
Total Assignable Square Feet	14,893	22,067	(7,174)	14,893	33,863	(18,970)

(1) With the exception of the student engagement research space the future needs summarized above are the result of a detailed building programming process. Key results are presented below.

Summary Results:

- The current calculated net space needs for the College of Business and Global Affairs indicate a deficit of 7,174 ASF or 48.1% more than existing. Additional office support, instructional labs an research space contribute to this shortfall. The student engagement research need is the largest part of this overall deficit.
- The College's net projected space deficit will increase to 18,970 ASF or approximately 127% more than existing.

- The College has developed a detailed program plan for the construction of a new facility to replace their existing building. The space requirements identified in the program plan have been incorporated into the projected needs under the Fall 2031 future need in Tables 21 and 22. Key results are highlighted below:
 - Not shown in these tables but accounted for in the campus wide classroom needs is the College’s portion of that total need which is 13,640 ASF in eleven classrooms.
 - The programmed needs include 5,228 ASF of instructional labs including a Financial Markets Learning Lab.
 - The Center for Global Education and Experience is to be housed in the new facility and is shown as part of the College’s future space needs. The new Data Analytics and Human Resources programs will require four future faculty. The College also plans to add a new Associate Dean. These office needs along with the rest of the College totals 14,263 ASF or 3,138 more than existing.
 - Although not part of the programmed space needs the College’s allowance for student engagement research space is shown in the table above.
 - The programmed needs include 4,075 ASF is meeting room space that includes a community gathering space and an executive board room.

College of Education, Health & Behavioral Sciences

The College of Education, Health & Behavioral Sciences occupies **34,269 assignable square feet located in 5 facilities:** Elam Center (3,883 ASF), Gooch Hall (20,947 ASF), Holt Humanities Building (3,062 ASF), Skyhawk Fieldhouse (3,459 ASF and the Sociology Building (2,918 ASF).

The College’s inventory has 73,798 assignable square feet that includes classroom and athletic/recreation space. For this study these spaces have been classified as a campus wide resource and analyzed separately. Therefore, the existing space in the tables below reflects only offices, office support, instructional and research lab and study space.

The College consists of five academic departments: Behavioral Sciences, Educational Studies, Health and Human Performance, Nursing and Psychology. The Dean, College of Education, Health & Behavioral Sciences is the one support unit. The College’s calculated space needs are summarized by department and space type in Tables 23 and 24.

Table 23: Alternative Model - College of Education, Health & Behavioral Sciences - Summary of Space Needs by Department

Department	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Behavioral Sciences	2,918	5,207	(2,289)	2,918	5,402	(2,484)
Dean, College of Educ., Health & Behavioral Sciences	4,731	2,866	1,865	4,731	2,866	1,865
Educational Studies	6,155	11,934	(5,779)	6,155	12,369	(6,214)
Health and Human Performance	7,342	8,761	(1,419)	7,342	9,196	(1,854)
Nursing	10,061	12,035	(1,974)	10,061	12,035	(1,974)
Psychology	3,062	3,788	(726)	3,062	3,788	(726)
Total Assignable Square Feet	34,269	44,590	(10,321)	34,269	45,655	(11,386)

Table 24: Alternative Model - College of Education, Health & Behavioral Sciences - Summary of Space Needs by Space Type

Space Category	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Offices	12,625	13,250	(625)	12,625	13,700	(1,075)
Office Support	6,887	5,974	913	6,887	6,109	778
Instructional Labs	14,346	14,346	0	14,346	14,346	0
Research Labs	0	10,080	(10,080)	0	10,560	(10,560)
Non Library Study Room	411	941	(530)	411	941	(530)
Total Assignable Square Feet	34,269	44,590	(10,321)	34,269	45,655	(11,386)

Summary Results:

- The current calculated net space needs for the College of Education, Health and Behavioral Sciences indicates a deficit of 10,321 ASF or 30.1% more than existing. All of the academic departments have estimated space shortages. Most of this need is attributed to the student engagement research space need.
- Among the five units the Department of Education Studies has the largest net current space shortage of 5,779 ASF or about 94% more than existing. About 42% of this deficit is in office and office service space with the remainder student engagement research space.
- The College’s projected calculated space needs indicate a net deficit of 11,386 ASF or 33.2% more than existing space. The student engagement research space need is the largest space type deficit.
- Most of the increase in the deficit is related to the addition of new masters level academic programs in Education Autism (Education Studies), Criminal Justice (Behavioral Sciences) and Sports Coaching (Health and Human Performance). Three new faculty lines are included in the future needs.

College of Engineering and Natural Sciences

The College of Engineering and Natural Sciences occupies **111,098 assignable square feet located in 8 facilities:** Biology Greenhouse (400 ASF), Brehm Hall (15,037 ASF), Coal House (98 ASF), Dwelling (864 ASF), Johnson EPS Bldg. (34,579 ASF), Latimer Science and Engineering Building (57,193 ASF), Reelfoot Field Station Pavilion (900 ASF) and Shop Bldg. (2,027 ASF).

The College’s inventory has 21,019 assignable square feet that includes classrooms, exhibition and hazardous waste storage. For this study these spaces have been classified as a campus wide resource and analyzed separately. Therefore, the existing space in the tables below reflect offices, office support, instructional and research labs, animal quarters, greenhouses, study and testing space.

The College consists of five academic units: Biological Sciences, Chemistry & Physics, Computer Science, Engineering and Mathematics and Statistics. The one support unit is the Dean, College of Engineering and Natural Sciences. The College’s calculated space needs are summarized by department and space type in Tables 25 and 26.

Table 25: Alternative Model - College of Engineering and Natural Sciences - Summary of Space Needs by Department

Department	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Biological Sciences	50,462	39,820	10,642	50,462	45,817	4,645
Chemistry & Physics	24,915	27,789	(2,874)	24,915	27,789	(2,874)
Computer Sciences	3,921	5,230	(1,309)	3,921	8,680	(4,759)
Dean, Coll. of Engineering and Natural Sciences	7,404	6,311	1,093	7,404	6,311	1,093
Engineering	19,041	21,977	(2,936)	19,041	23,022	(3,981)
Mathematics and Statistics	5,355	8,816	(3,461)	5,355	9,164	(3,809)
Total Assignable Square Feet	111,098	109,942	1,156	111,098	120,782	(9,684)

Table 26: Alternative Model - College of Engineering and Natural Sciences - Summary of Space Needs by Space Type

Space Category	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Offices	19,540	12,065	7,476	19,540	13,095	6,446
Office Support	6,546	4,373	2,173	6,546	4,682	1,864
Instructional Labs	61,866	56,399	5,467	61,866	62,781	(915)
Research Labs	15,510	28,100	(12,590)	15,510	29,994	(14,484)
Animal Quarters	378	1,466	(1,088)	378	1,890	(1,512)
Greenhouses	400	1,253	(853)	400	1,592	(1,192)
Non Library Study Room	5,459	4,888	571	5,459	5,349	110
Wellness Room	106	106	0	106	106	0
Residential	864	864	0	864	864	0
Testing Room	429	429	0	429	429	0
Total Assignable Square Feet	111,098	109,942	1,156	111,098	120,782	(9,684)

Summary Results:

- The current calculated net space needs for the College of Engineering and Natural Sciences indicate the overall existing space is adequate. With the exception of Biological Sciences, all of the academic departments have estimated space shortages. However, there is a disproportionate distribution of space within the existing inventory with space shortages in certain categories and surplus space in others.
- *Note: the reassignment of space in the Johnson EPS Building reflects only new departmental assignments and no repurposing of the use of the rooms was identified at the time of this study. The room uses reflected here in the comparative space data, therefore, are how rooms were being used prior to the completion of the Latimer Building. Because of this some of the results shown here may be distorted and will change when any repurposing is completed. This may be particularly true with Biological Sciences.*
- The largest space type need is related to the student engagement research space in all departments. The calculated need for Biological Sciences indicates a shortage of animal quarters and greenhouse space
- The College’s projected calculated space needs indicate a net deficit of 9,684 ASF or 8.7% more than existing space.
- The student engagement research space need is still the largest space type deficit. In the future space needs additional instructional laboratory space is identified for Computer Science and Mathematics and Statistics. Additional study space in Engineering and Mathematics and Statistics is needed.
- New academic programs in Cybersecurity and Construction Management will require four new faculty lines. Two additional faculty will be needed for Biological Sciences to address enrollment growth in existing programs.

College of Humanities and Fine Arts

The College of Humanities and Fine Arts occupies **81,563 assignable square feet located in 5 facilities:** Elam Center (3,070 ASF), Fine Arts Building (54,798 ASF), Gooch Hall (10,694 ASF), Holt Humanities Building (10,946 ASF) and Physical Plant Warehouse (2,055 ASF).

The College’s inventory has 10,535 assignable square feet of classrooms, lounge, exhibition and shop space. For this study this space has been classified as a campus wide resource and analyzed separately. Therefore, the existing space in the tables below reflects office and office support, instructional and research labs, library, art gallery, media, study and performance space.

The College consists of five academic departments: Communications, English & Modern Foreign Languages, History and Philosophy, Music and Visual and Theatre Arts. The Dean, Humanities and Fine Arts and the Office of Interdisciplinary Studies are support units. *Note: WLJT-TV has been exempted from this analysis.* The College’s calculated space needs are summarized by department and space type in Tables 27 and 28.

Table 27: Alternative Model - College of Humanities and Fine Arts - Summary of Space Needs by Department

Department	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Communications	9,779	10,723	(944)	9,779	12,293	(2,514)
Dean, Humanities and Fine Arts	1,390	403	987	1,390	403	987
English & Modern Foreign Languages	6,892	11,472	(4,580)	6,892	11,472	(4,580)
History and Philosophy	2,664	5,934	(3,270)	2,664	5,934	(3,270)
Music	24,048	24,141	(93)	24,048	53,089	(29,041)
Office of Interdisciplinary Studies	915	887	28	915	887	28
Visual and Theatre Arts	35,875	34,461	1,414	35,875	38,986	(3,111)
Total Assignable Square Feet	81,563	88,021	(6,458)	81,563	123,065	(41,502)

Table 28: Alternative Model - College of Humanities and Fine Arts - Summary of Space Needs by Space Type

Space Category	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Offices	17,034	13,695	3,340	17,034	14,155	2,879
Office Support	7,933	5,730	2,203	7,933	5,869	2,065
Instructional Labs	36,857	36,857	0	36,857	40,853	(3,996)
Research Space	0	12,000	(12,000)	0	12,720	(12,720)
Library	517	517	0	517	517	0
Art Gallery	0	0	0	0	300	(300)
Music Concert and Recital Halls	0	0	0	0	27,152	(27,152)
Multimedia	4,442	4,442	0	4,442	4,442	0
Non Library Study Room	907	907	0	907	907	0
Theater Performance Facility	13,873	13,873	0	13,873	16,150	(2,277)
Total Assignable Square Feet	81,563	88,021	(6,458)	81,563	123,065	(41,502)

Summary Results:

- The current calculated net space needs for the College of Humanities and Fine Arts indicate a net deficit of 6,458 ASF or 7.9% more than existing space. With the exception of Visual and Theatre Arts and the Dean’s Office, all of the academic departments have estimated space shortages.
- The largest space type current need is related to the student engagement research space in all departments.
- The College’s projected calculated space needs indicate a net deficit of 41,022 ASF or 50.3% more than existing space.

- New academic programs in Strategic Communication and Music Education will require four new faculty lines. The Strategic Communications program will require a lab. These needs are included in the projected space needs.
- The College has developed a detailed program plan for the construction of a new addition to the Fine Arts Building. The space requirements identified in the program plan have been incorporated into the projected needs under the Fall 2031 future need in Tables 27 and 28. Key results from the plan are highlighted below:
 - The programmed needs include a 1,348 ASF Chamber Music/Jazz Recital studio and a 1,948 ASF Dance Movement studio.
 - A 622 seat Concert Hall and a 144 seat Recital Hall will be developed for the Department of Music.
 - Additional space will be created and incorporated with the Harriet Fulton Theater for enhancing and expanding learning, exhibition and exchange facilities for the Visual Arts.

Administrative and Academic Support Divisions

Chancellor Division

The Chancellor Division occupies **58,825 assignable square feet located in 24 facilities**: Alumni Center (185 ASF), Baseball-Softball Field House (1,818 ASF), Carroll Football Building (2,865 ASF), Clement Hall (1,979 ASF), Crisp Hall (6,040 ASF), Elam Center (4,556 ASF), Equine Property Building #1 (2,022 ASF), Equine Property Building #2 (914 ASF), Equine Property Building #3 (864 ASF), Equine Property Building #4 (1,037 ASF), Equine Property Building #5 (195 ASF), Equine Property Building #6 (10,400 ASF), Equine Property Building #7 (580 ASF), Equine Property Building #8 (1,620 ASF), Equine Property Building #9 (870 ASF), Gooch Hall (805 ASF), Graham Stadium (124 ASF), Hall-Moody Administration Building (8,026 ASF), Meek Library (4,363 ASF), Rhodes Golf Center (392 ASF), ROTC Building (3,370 ASF), Skyhawk Fieldhouse (4,216 ASF), Student Life Center (671 ASF) and Tennis House (913 ASF).

Also, the division inventory has 52,779 assignable square feet that includes athletic, food facilities, lounge, merchandising, meeting rooms, central computer/telecommunications and central service space. For this study these spaces have been classified as campus wide resources and analyzed separately. **Therefore, the existing space in the tables below reflects offices, office support, instructional labs, armory, field buildings, meeting rooms, media, study and residential space.**

The division consists of five operational units: Athletics, Equity & Diversity, Information Technology Services, Office of the Chancellor and the Office of University Relations. The Division’s calculated space needs are summarized by department and space type in Tables 29 and 30.

Table 29: Alternative Model - Chancellor Division - Summary of Space Needs by Department

Department	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Athletics	36,974	37,480	(506)	36,974	52,022	(15,048)
Equity & Diversity	936	169	767	936	169	767
Information Technology Services	13,187	11,814	1,373	13,187	11,814	1,373
Office of the Chancellor	4,258	1,703	2,555	4,258	1,703	2,555
Office of University Relations	3,470	2,577	893	3,470	2,577	893
Total Assignable Square Feet	58,825	53,742	5,083	58,825	68,284	(9,459)

Table 30: Chancellor’s Division - Summary of Space Needs by Space Type

Space Category	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Offices	21,202	18,480	2,722	21,202	21,745	(543)
Office Support	11,073	8,712	2,361	11,073	8,889	2,184
Instructional Labs	3,851	3,851	0	3,851	3,851	0
Armory	2,905	2,905	0	2,905	2,905	0
Field Buildings	16,285	16,285	0	16,285	16,285	0
Meeting Rooms	0	0	0	0	9,000	(9,000)
Multimedia	831	831	0	831	831	0
Study/Lounge	611	611	0	611	2,711	(2,100)
Other (All Purpose)	45	45	0	45	45	0
Residential	2,022	2,022	0	2,022	2,022	0
Total Assignable Square Feet	58,825	53,742	5,083	58,825	68,284	(9,459)

Summary Results:

- The current calculated net space needs for the Chancellor’s Division indicate the existing space is adequate. Athletics is the only department with a net space shortage. The existing space assigned to all of the other units is sufficient.
- Current needs for Athletics include some additional offices.
- The Armory space is the Skyhawk Rifle Range and the field buildings are related to the rodeo program. It is assumed these facilities are adequate.
- The projected calculated space needs indicate a net deficit of 9,459 ASF or 16.1% more than existing space.
- Some of the additional space need is a result of adding a new head coach and assistant coach for a future women’s lacrosse team; a throw coach for an expanded track and field team; and a new compliance officer.
- The future needs include programmed space in the Bob Carroll Addition and Indoor Football Practice Facility. This includes additional offices, meeting rooms and study/lounge space. Athletic activity and support space related to these facilities is reported in this study under the Campus Wide Space needs.

Finance and Administration Division

The Finance and Administration Division occupies **36,753 assignable square feet located in 15 facilities**: Boling University Center (1,352 ASF), Clement Hall (14,187 ASF), Communications Tower Bldg. (1 ASF), Crisp Hall (3,242 ASF), Gooch Hall (90 ASF), Hall-Moody Administration Building (6,747 ASF), Maintenance Center (4,047 ASF), McCombs Center (444 ASF), Motor Pool (392 ASF), Paint Shop (129 ASF), Physical Plant Greenhouse (4,903 ASF), Physical Plant Warehouse (342 ASF), Power Generation Facility (349 ASF), ROTC Building (396 ASF) and Skyhawk Fieldhouse (132 ASF).

Also, the division’s inventory has 121,960 assignable square feet that includes Classrooms, Central Storage, Food Facilities, Lounge, Merchandising, Shop and Vehicle Storage, Central Service campus support space. For this study these spaces have been classified as a campus wide resource and analyzed separately. **Therefore, the existing space in the tables below reflect offices, office support, conference food service, greenhouses and meeting rooms space.** The division consists of nine operational units: Bookstore, Bursar, Business Services, Campus Police, Dining Services, Finance and Administration, Human Resources, Physical Plant and Skyhawk Printing and Mail Services. The Division’s calculated space needs are summarized by department and space type in Tables 31 and 32.

Table 31: Alternative Model - Finance and Administration Division - Summary of Space Needs by Department

Department	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Bookstore	180	572	(392)	180	572	(392)
Bursar	2,383	1,891	492	2,383	1,891	492
Business Services	1,897	1,067	830	1,897	1,067	830
Campus Police	3,242	2,506	736	3,242	2,506	736
Dining Services	1,172	1,421	(249)	1,172	1,421	(249)
Finance and Administration	2,035	1,830	205	2,035	1,830	205
Human Resources	2,467	3,154	(687)	2,467	3,154	(687)
Physical Plant	23,377	14,283	9,094	23,377	14,283	9,094
Skyhawk Printing and Mail Services	0	351	(351)	0	351	(351)
Total Assignable Square Feet	36,753	27,076	9,677	36,753	27,076	9,677

Table 32: Alternative Model - Finance and Administration Division - Summary of Space Needs by Space Type

Space Category	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Offices	13,271	10,818	2,453	13,271	10,818	2,453
Office Support	6,252	5,568	684	6,252	5,568	684
Conference/Meeting Food Service	693	693	0	693	693	0
Greenhouses	4,651	4,651	0	4,651	4,651	0
Meeting Room	0	455	(455)	0	455	(455)
Surge Space	4,891	4,891	0	4,891	4,891	0
Unfinished Space	6,713	0	6,713	6,713	0	6,713
Unused	282	0	282	282	0	282
Total Assignable Square Feet	36,753	27,076	9,677	36,753	27,076	9,677

Summary Results:

- The current calculated net space needs for the Finance and Administration Division indicate the overall existing space is adequate.
- However, there are four departments with some office and office support needs: Bookstore, Dining Services, Human Resources and Skyhawk Printing and Mail Services. The Campus Police could use a meeting room.
- Note: there is 6,713 ASF classified as “Unfinished” located in Clement Hall and is assigned to Physical Plant. This space is being reserved here but is available for future development and use by other University departments. If this space is excluded from the comparative analysis the calculated surplus is reduced to 2,964 ASF.
- The University has also set aside about 4,900 ASF in Clement Hall to use as future surge space. It is assumed the use of this space as surge space will be reserved for the foreseeable future.

Provost Division

The Provost Division occupies **117,268 assignable square feet located in 7 facilities**. Furthermore, for the purposes of this study the departments are organized into two subdivision groupings: Enrollment Services and Student Engagement and the Provost. The data and results below are presented in these groups.

Enrollment Services and Student Engagement

The Enrollment Services and Student Engagement subdivision **occupies 18,170 assignable square feet located in 3 facilities**: Clement Hall (16,242 ASF), Gooch Hall (1,628 ASF) and Physical Plant Warehouse (293 ASF).

The subdivision’s inventory has 726 assignable square feet classified as Student Lounge space. For this study these spaces have been classified as a campus wide resource and analyzed separately. **Therefore, the existing space in the tables below reflect offices, office support, lab and testing space.**

The subdivision consists of seven operational units: Admissions Office, Disability Services, Financial Aid and Scholarships, One Stop Shop, Registrar and Academic Records, Student Engagement Administration and the Student Success Center.

Table 33: Alternative Model - Enrollment Services & Student Engagement - Summary of Space Needs by Department

Department	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Admissions Office	4,607	3,140	1,468	4,607	3,140	1,468
Disability Services	1,863	908	955	1,863	1,200	663
Financial Aid & Scholarships	2,283	2,122	161	2,283	2,122	161
One Stop Shop	2,090	2,090	0	2,090	2,090	0
Registrar and Academic Records	3,776	2,249	1,527	3,776	2,249	1,527
Student Engagement Administration	1,257	757	500	1,257	757	500
Student Success Center	2,294	2,017	277	2,294	2,017	277
Total Assignable Square Feet	18,170	13,283	4,887	18,170	13,575	4,595

Table 34: Alternative Model - Enrollment Services and Student Engagement - Summary of Space Needs by Space Type

Space Category	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Offices	16,087	9,801	6,287	16,087	9,801	6,287
Office Support	914	2,313	(1,399)	914	2,313	(1,399)
Instructional Labs	755	755	0	755	755	0
Testing Room	414	414	0	414	706	(292)
Total Assignable Square Feet	18,170	13,283	4,887	18,170	13,575	4,595

Summary Results:

- The current calculated net space needs for the Enrollment Services and Student Engagement Subdivision indicate the overall existing space is adequate.
- With the exception of a few offices assigned to the Registrar and Academic Records in Gooch Hall, the remainder of the space is located in Clement Hall. The Clement Hall space has recently undergone a systems upgrade but has not been reconfigured spatially. Therefore, rooms remain their original sizes which are larger than the space modeling criteria used in this analysis thus creating a calculated surplus. The number of offices is sufficient for the number of staff with no real surplus of office space. The offices are just oversized.
- The One Stop Shop located in Clement Hall is staffed by various departments and is assumed to be adequate.

Provost

The Provost subdivision **occupies 99,098 assignable square feet located in 4 facilities**: Gooch Hall (3,503 ASF), Hall-Moody Administration Building (4,231 ASF), McCombs Center (2,847 ASF) and Meek Library (88,517 ASF). *The subdivision’s inventory has 5,063 assignable square feet classified as Classrooms, Student Lounge and Campus Meeting Room space. For this study these spaces have been classified as a campus wide resource and analyzed*

separately. Therefore, the existing space in the tables below reflect offices, office support, instructional labs, library, meeting, media and museum space.

The subdivision consists of nine operational units: Academic Affairs (includes Graduate Studies), College Library, Curriculum and Assessment, Honors Program, Office of Research, Outreach and Economic Development, RCOP Administration, RCOP Outreach Online and SACS Accreditation.

Table 35: Alternative Model - Provost Subdivision - Summary of Space Needs by Department

Department	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Academic Affairs	951	1,467	(516)	951	22,147	(21,196)
College Library	88,517	79,818	8,699	88,517	89,285	(768)
Curriculum & Assessment	1,334	494	840	1,334	494	840
Honors Program	2,847	1,460	1,387	2,847	1,460	1,387
Research, Outreach & Economic Development	2,012	1,495	517	2,012	1,495	517
RCOP Administration	1,776	1,519	257	1,776	1,519	257
RCOP Outreach Online	1,054	585	469	1,054	585	469
SACS Accreditation	607	271	336	607	271	336
Total Assignable Square Feet	99,098	87,109	11,989	99,098	117,256	(18,158)

Table 36: Alternative Model - Provost - Summary of Space Needs by Space Type

Space Category	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Offices	10,472	7,222	3,251	10,472	8,842	1,631
Office Support	4,376	3,075	1,301	4,376	3,075	1,301
Instructional Labs	425	425	0	425	1,445	(1,020)
Research Labs	0	0	0	0	18,040	(18,040)
Library	79,863	72,425	7,438	79,863	81,892	(2,029)
Meeting Rooms	1,096	1,096	0	1,096	1,096	0
Multimedia	1,166	1,166	0	1,166	1,166	0
Museum	1,700	1,700	0	1,700	1,700	0
Total Assignable Square Feet	99,098	87,109	11,989	99,098	117,256	(18,158)

Summary Results:

- The current calculated net space needs for the Provost Subdivision indicate the overall existing space is adequate.
- For reporting purposes, the space assigned to UTM for the new Test Hub facility as identified in the facility program plan has been assigned to the Provost. The projected space needs for the subdivision include the Test Hub resulting in the subsequent space deficit.
- The Library space deficit is additional future space for the University Archives.
- The Museum space is the Houston Gordon Museum and Governor’s McWherter’s Office space within the Meek Library special collections area.
- Classroom space programmed for the Test Hub facility have been incorporated with the campus wide space needs.

Student Affairs Division

The Student Affairs Division occupies 461,851 assignable square feet located in 25 facilities: Boling University Center (20,081 ASF), Browning Hall (65,712 ASF), Clement Hall (4,276 ASF), Cooper Hall (62,057 ASF), Elam Center (678 ASF), Ellington Hall (68,774 ASF), Hall-Moody Administration Building (2,057 ASF), Skyhawk Fieldhouse (191 ASF), Sorority Lodge 2 - A D Pi (1,494 ASF), Sorority Lodge 3 - A O Pi (2,051 ASF), Sorority Lodge 4 – Zeta (1,494 ASF), Student Health Center (2,568 ASF), Student Life Center (3,104 ASF), Student Recreation Center (9,486 ASF), Summitt Chi Omega House (2,048 ASF), University Courts Apartments (69,942 ASF), University Village Building A (51,040 ASF), University Village Building B (33,988 ASF), University Village Building C (26,496 ASF), University Village Building D (17,100 ASF), University Village Building E (17,100 ASF), University Village Building F (34 ASF), University Village Building G (66 ASF) and University Village Building H (34 ASF).

Also, the Division’s space inventory has 133,639 assignable square feet that includes Athletics and Recreation, Assembly, Food Services, Student Lounge Service, Merchandising, Campus Meeting Rooms, Shops, Central Storage Central Service space. For this study these spaces have been classified as a campus wide resource and analyzed separately. Therefore, the tables below reflect offices, office support, ballroom, demonstration, meeting rooms, study rooms, recreation, residential and treatment space.

The division consists of seven operational units: Career Planning and Development, Office of Housing, Student Affairs, Student Health and Counseling Services, Student Life, Student Recreation Center and the University Center.

Table 37: Alternative Model - Student Affairs Division - Summary of Space Needs by Department

Department	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Career Planning & Development	2,927	1,402	1,525	2,927	1,402	1,525
Office of Housing	416,619	411,039	5,580	416,619	454,762	(38,143)
Student Affairs	2,057	1,795	262	2,057	1,795	262
Student Health & Counseling Services	2,568	3,087	(519)	2,568	5,190	(2,622)
Student Life	16,015	9,456	6,559	16,015	10,656	5,359
Student Recreation Center	10,355	7,933	2,423	10,355	10,433	(78)
University Center	11,310	6,817	4,493	11,310	9,817	1,493
Total Assignable Square Feet	461,851	441,530	20,321	461,851	494,056	(32,205)

Table 38: Alternative Model - Student Affairs Division - Summary of Space Needs by Space Type

Space Category	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Offices	12,272	7,623	4,649	12,272	8,823	3,449
Office Support	22,889	6,952	15,937	22,889	6,952	15,937
Ballroom	4,774	4,774	0	4,774	4,774	0
Conference/Meeting Food Service	124	124	0	124	124	0
Demonstration Facilities	1,385	1,385	0	1,385	1,385	0
Meeting Room-Departmental	591	591	0	591	591	0
Non Library Study Room	1,457	1,457	0	1,457	4,457	(3,000)
Recreation (Game rooms,e-gaming)	7,053	7,053	0	7,053	9,553	(2,500)
Residential	410,174	410,174	0	410,174	453,897	(43,723)
Treatment	1,132	1,397	(265)	1,132	3,500	(2,368)
Total Assignable Square Feet	461,851	441,530	20,321	461,851	494,056	(32,205)

Summary Results:

- The current calculated net space needs for the Student Affairs Division indicate the overall existing space assigned is adequate.
- The projected calculated space needs indicate a net deficit of 32,205 ASF or about 7% more than existing space.
- The projected space needs incorporate several additional space needs that were independently assessed during the master plan as follows:
 - Student Housing (Residential Space): includes replacement housing units for Browning Hall, University Courts Apartments and Ellington Hall replacing a total of 754 beds. This proposal will demolish 206,641 ASF and replace it with 245,050 ASF for a net increase of 38,209 ASF more than the existing inventory.
 - Student Health and Counseling: this proposal will replace the existing Student Health Center with a 5,200 ASF facility to house both Health Services and the Counseling Center. The existing facility is deficient by approximately 2,400 ASF in treatment space and will be repurposed to meet other needs.
 - An additional 3,000 ASF of study space is recommended for inclusion with the Boling Center.
 - The future deficit shown for 2,500 ASF in recreation space is to provide an area for e-gaming activities.

University Advancement Division

The University Advancement Division **occupies 4,340 assignable square feet located in 3 facilities:** Alumni Center (1,722 ASF), Hall-Moody Administration Building (2,060 ASF) and McCombs Center (558 ASF).

The division consists of two operational units: UTM Alumni Affairs and UTM Development.

Table 39: University Advancement Division - Summary of Space Needs by Department

Department	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
UTM Alumni Affairs	1,722	920	802	1,722	920	802
UTM Development	2,618	2,001	617	2,618	2,001	617
Total Assignable Square Feet	4,340	2,921	1,419	4,340	2,921	1,419

Table 40: University Advancement Division - Summary of Space Needs by Space Type

Space Category	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Offices	2,605	1,640	965	2,605	1,640	965
Office Support	1,177	723	454	1,177	723	454
Residential	558	558	0	558	558	0
Total Assignable Square Feet	4,340	2,921	1,419	4,340	2,921	1,419

Summary Results:

- The current and projected calculated net space needs for the University Advancement Division indicate the existing space is adequate.

Section 3: Space Needs by Major Space Type

Classroom Analysis

Overview

The focus of the classroom analysis was to examine the current utilization and determine the number and size of rooms needed to support the enrollment demand. Fall term 2021 served as the basis for the analysis. Basic data collected included the Fall 2021 and Spring 2020 class schedules and the classroom space inventory that identified the Building Name, Room Number, Number of Seats, and Square Foot Amount for each room. This information was used to develop the utilization analysis and to establish the relative quantities of space needed to support the current and future demand for classrooms. The amount of classroom space required is compared to the current classroom supply to determine if the University has the correct number of classrooms, seats, and square footage to meet the instructional demand. Several key utilization goals and measurements used in the analysis are described below.

Average Weekly Room Hours (Avg. WRH): The Average Weekly Room Hours is the average number of hours that classrooms are scheduled per week. Classroom guidelines suggest classrooms should be used 60%-70% of available hours with 70% considered maximum capacity. The actual Avg. WRH is compared to this guideline to measure how efficiently the rooms are currently scheduled and to determine the correct number of classrooms: *64% utilization of the available hours is recommended (e.g., a standard 8am-5pm, M-F is 45 available hours; therefore, 64% is 28.5 Avg. WRH).*

Station Occupancy (SO%): Station Occupancy Percent, a measurement of how many seats are filled while a room is in use, this is the second metric. Classroom guidelines suggest that on average 65%-75% of a classroom’s seats should be filled. The actual SO% is compared to the SO% goal to determine how well the seats are utilized.

Weekly Student Contact Hours (WSCH): The Weekly Student Contact Hours or instructional demand is the scheduled face time a student spends in class multiplied by the number of students enrolled in the class. By using the total WSCH instructional demand, and the utilization goals set for Avg. WRH and SO%, the number of seats needed to fulfill instructional demand are computed.

Assignable Square Feet Per Seat (ASF/Seat): Classroom guidelines suggest 20-25 square feet should be allocated per student station or seat. This guideline is an average that allows for a variety of classroom seating configurations from a lecture hall, that typically requires fewer square feet per station, to a computer classroom or a collaborative learning classroom which typically require more square feet per station. An institution’s total square footage need is therefore calculated by multiplying the number of seats required times the square foot per seat goal.

Utilization Assumptions

- Class schedule data in this report is based on the Fall 2021 term. It is assumed this data is complete and correct.
- Based on the findings presented in this report the recommended planning assumptions are:
 - Average WRH Goal: 24.3 Daytime
 - Station Occupancy Goal: 68%
 - ASF/Seat: 24

- 21.6% Enrollment Growth Projection

Summary of Findings

- **Classroom Supply:** During Fall 2021 there were 89 classrooms in use. The average ASF/Seat (square foot per student station) of 19.6 is below the recommended guideline of 20-25 square feet per station. Known changes to the classroom supply include the addition of 19 classrooms in the new Latimer Science and Engineering Building.
- **Classroom Utilization:** Classrooms are scheduled from 8 AM to 4 PM with a half hour break on Thursday from 12:30 AM to 1:00 PM and Friday classes ending at 3:00 PM. This scheduling practice allows 38 hours available for scheduling during the daytime hours. A good utilization goal or expectation is defined as 64% of the available hours which translates into 24.3 Average Weekly Room Hours for the daytime. For Fall 2021 the daytime Avg. WRH of 21.6 for the 89 classrooms is below the suggested rate of 24.3 Avg. WRH and reflects an excess supply of classroom space. However, the 77 rooms classified as General Use classrooms were close to the goal at 23.4 Avg. WRH while the 12 departmental classrooms were scheduled at only 10.6 Avg. WRH. Furthermore, 11 of the classrooms had ten hours or less of scheduled use.
- **Station Occupancy:** The Fall 2021 Station Occupancy (SO%) of 48.8% is well below the recommended goal of 68%. This indicates that classrooms are oversized for the current class sizes.
- **Classroom Needs:**
 - **Consultant:** Using the recommended daytime rate of 24.3 Avg. WRH (64% of the available hours), 68% Station Occupancy, and 24 ASF per Seat calculates a need of 80 rooms, 2,446 seats, and 58,716 square feet (ASF) compared to the Fall 2021 supply of 89 rooms, 3,831 seats, and 75,262 ASF. Using the 21.6% enrollment growth factor calculates a need of 87 classrooms, 2,975 seats, and 71,399 ASF compared to the future supply of 114 room, 4,477 seats, and 92,284 ASF.
 - **THEC:** The THEC model calculates 73 classrooms and 51,414 ASF. *THEC suggests many more small classrooms compared to the CFP calculation which results in less square feet.*

Table 41: Alternative Model - Classroom Needs Summary

	Rooms	Seats	ASF	Service ASF
Fall 2021 Supply	89	3,831	75,262	
Future Supply *	114	4,477	92,284	2,677
Calculation Fall 2021	80	2,446	58,716	
Calculation 21.6% Growth	87	2,975	71,399	
THEC Calculation	73		51,414	

*The Future Supply includes the 6 classrooms identified as No Usage and listed in Appendix C.

Classroom Supply

Table 42 summarizes all rooms identified as a classroom in the space inventory.

Table 42: Alternative Model - Classroom Summary

In Use 2021	Room Type	Room Type Description	Rooms	Seats	ASF	ASF/Seat
Y	110	Classroom-General Use	77	3,474	66,238	19.1
Y	111	Classroom-Departmental	12	357	9,024	25.3
Total In Use			89	3,831	75,262	19.6
Future	Room Type	Room Type Description	Rooms	Seats	ASF	ASF/Seat
Y	110	Classroom-General Use	96	3,935	79,682	20.2
Y	111	Classroom-Departmental	12	357	9,024	25.3
Total In Use			108	4,292	88,706	20.7
N	110	Classroom-General Use	3	89	1,512	17.0
N	111	Classroom-Departmental	3	96	2,066	21.5
N	115	Classroom Service-General Use	18	3	2,627	
Total No Usage			24	188	6,205	
Grand Total			132	4,480	94,911	

Summary Results:

- **Fall 2021 In Use:** 89 classrooms had scheduled use for Fall 2021. These rooms are the basis for the classroom utilization/needs analysis. There were 77 general use classrooms (Room Type 110), and 12 classrooms considered departmentally controlled. The total average ASF/Seat (square foot per student station) of 19.6 is slightly below the recommended guideline of 20-25 square feet per station.
- **Future In Use:** The total classrooms available for use will rise to 108 with the addition of 19 classrooms in the new Latimer Science and Engineering Building. Please note that several changes were accounted for in the Johnson EPS building.
- **No Usage:** After a review there were still six rooms coded as classrooms that had no scheduled use in Fall 2021. Business Administration Building, Room 16 is scheduled in Spring 2020 but nothing for Fall 2021. Gooch 121 was divided and classes are only scheduled in 1 of the rooms. Gooch 206 is used for Non-Degree. Gooch 223 & 224 belong to Department of Accounting, Finance, Economics and Political Science. McCombs 2 is used by the Honors program.

See Appendices B and C for a complete listing of these rooms.

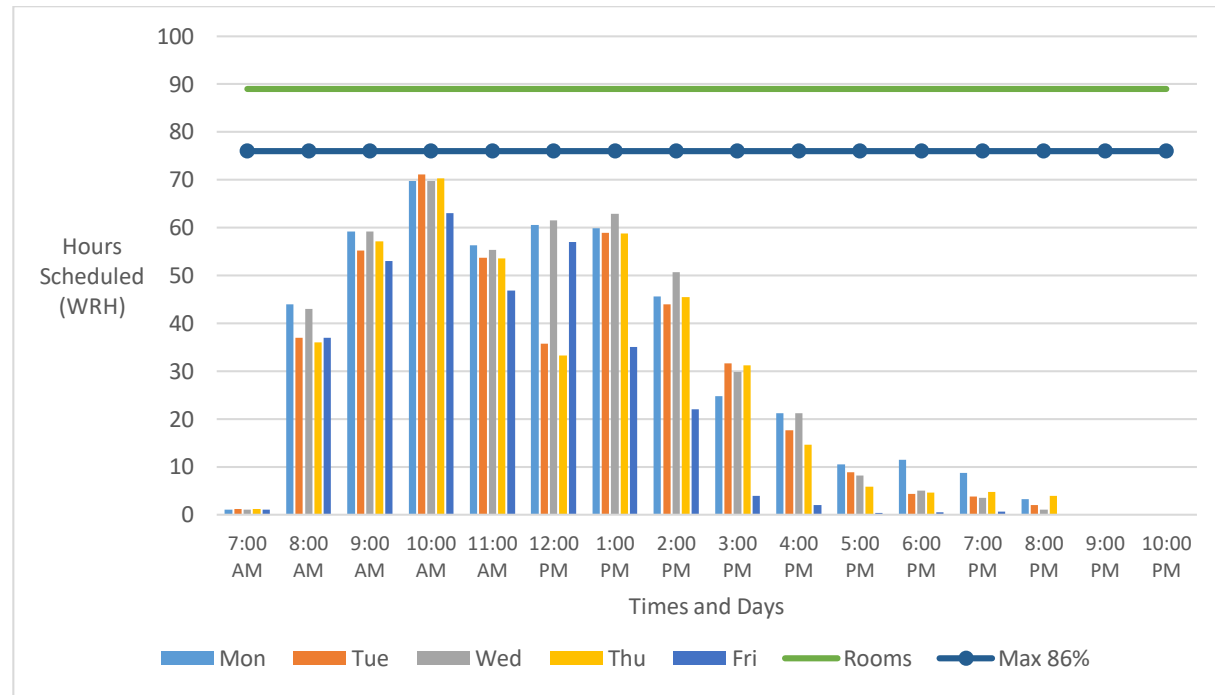
Classroom Time by Day

The Time by Day chart illustrates how class hours are currently distributed across days and times. This helps to identify the normal hours of operation to use for utilization and classroom needs purposes and to show how well classes are distributed through the hours and days to maximize utilization of the available rooms.

- The hours shown in the Time by Day table are calculated by summing all individual class hours **including class change times**. Based on the beginning and end times, the summarized hours for all classes are then distributed into the appropriate bars for the chart. For example, a class that meets TR from 8:00 AM to 9:15 AM will contribute 60 minutes to 8:00 AM on TR and 30 minutes to 9:00 AM on TR (15 minutes are added for the class change time).
- The Max 86% line is 86% of the total rooms available. This threshold typically represents the point where classroom demand exceeds supply. Inefficiencies caused by variant class times, single day classes,

undesirable classrooms, etc., are factors that impact why the Max 86% threshold is below the available rooms. *Please note that this line only represents the potential peak scheduling capacity to handle prime times. The Average WRH goal (64% of available hours), which helps determine how many classrooms are needed, allows for peak times and lower use times during the course of the day.*

Table 43: Alternative Model - Classroom Time by Day-All Classrooms - Fall 2021



Summary Results:

- Classes essentially end by 4 PM with a half hour break on TR and Friday ending at 3 PM. This scheduling practice allows 38 hours available for scheduling during the daytime hours. **Good utilization is defined as 64% of the available hours is 24.3 Average Weekly Room Hours (Avg. WRH) for daytime use.** The calculated classroom needs in this report are presented for both this current scheduling practice with an expectation of 24.3 Avg. WRH for the daytime hours and the THEC daytime calculation which uses all classes starting between 7 AM and 5 PM with an expectation of 30 Avg. WRH.
- The scheduled hours approach the Max 86% during the most popular MWF 10:00 AM to 10:50 AM, and the TR 9:30 am to 10:45 am time block. The chart indicates that there is classroom availability during most of the other time blocks.

Classroom Time Blocks

The Time Blocks table shows the number of class sections offered for each of the standard scheduling time blocks.

Table 44: Alternative Model - Scheduled Time Blocks – Fall 2021

Time Block	Begin	End	Mon	Tue	Wed	Thu	Fri	Sections	
								Fall 2019	Spring 2020
Day-050 Min-MWF	8:00	8:50	M		W		F	34	31
Day-050 Min-MWF	9:00	9:50	M		W		F	50	55
Day-050 Min-MWF	10:00	10:50	M		W		F	61	55
Day-050 Min-MWF	11:00	11:50	M		W		F	45	46
Day-050 Min-MWF	12:00	12:50	M		W		F	54	20
Day-050 Min-MWF	13:00	13:50	M		W		F	33	30
Day-050 Min-MWF	14:00	14:50	M		W		F	20	22
Day-050 Min-MWF	15:00	15:50	M		W		F	3	2
Day-050 Min-MWF	16:00	16:50	M		W		F	1	
Day-075 Min-MW	8:00	9:15	M		W			4	
Day-075 Min-MW	9:30	10:45	M		W			3	4
Day-075 Min-MW	11:00	12:15	M		W			4	7
Day-075 Min-MW	13:00	14:15	M		W			15	12
Day-075 Min-MW	14:30	15:45	M		W			11	7
Day-075 Min-MW	16:00	17:15	M		W			6	2
Day-075 Min-TR	8:00	9:15		T			R	30	31
Day-075 Min-TR	9:30	10:45		T			R	56	51
Day-075 Min-TR	11:00	12:15		T			R	47	43
Day-075 Min-TR	13:00	14:15		T			R	46	38
Day-075 Min-TR	14:30	15:45		T			R	20	20
Day-075 Min-TR	16:00	17:15		T			R	7	5

Summary Results:

- This data emphasizes how the MWF 10:00 AM to 10:50 AM and the TR 9:30 AM to 10:45 AM time blocks are the most popular and drive the classroom need. Table 37 shows how the 4:00 PM (16:00) time blocks for both MW and TR have very little usage.

Classroom Time Block Summary

The Time Block Summary table shows the number of class sections that met in the standard time blocks and those that did not meet in the standard blocks.

Table 45: Alternative Model - Time Block Summary – Fall 2021

College	Total	Standard	Non-Standard	% Standard
AGRI	79	57	22	72.2%
BUS	85	82	3	96.5%
EDUC	113	88	25	77.9%
ENG	208	172	36	82.7%
HUM	206	192	14	93.2%
PO	7	6	1	85.7%
Total	698	597	101	85.5%

Summary Results:

- 85.5% of the daytime sections scheduled met the standard time blocks. As a general rule if 86% of classes meet in the standard blocks then utilization goals can be achieved. As the use of the standard blocks falls below 86% the non-standard class meetings will start to significantly impact the ability to efficiently schedule classes.

Classroom Utilization

Tables 46 and 47 illustrate the current daytime hours utilization (Avg. WRH) and Station Occupancy (SO%). The Average WRH and Station Occupancy (SO%) is compared to the recommended utilization rates of 24.3 Avg. WRH and 68% Station Occupancy.

Table 46: Alternative Model - Classroom Utilization – Spring 2020 and Fall 2021

Term	Rooms	Daytime: 8:00 am-4:00 pm				All Hours			
		WRH	Avg WRH	SO%	WSCH	WRH	Avg. WRH	SO%	WSCH
Spring 2020	89	1,758.0	19.8	54.5%	41,205.8	1,942.1	21.8	53.3%	44,561.3
Fall 2021	89	1,925.4	21.6	48.8%	40,425.9	2,112.2	23.7	47.5%	43,139.9
Goal/Capacity			24.3	68.0%			36.0	68.0%	

Summary Results:

- Avg. WRH of 21.6 for Fall 2021 is below the goal of 24.3 which suggests a surplus of classrooms. Station Occupancy of 48.8% for Fall 2021 is well below the goal of 68% indicating overall classroom may be oversized for current enrollments.

Classroom Utilization by Type

Table 47: Alternative Model - Classroom Utilization by Type - Fall 2021

Room Type	Description	Rooms	WRH	Avg. WRH	SO%	Seats	ASF	ASF/Seat
110	Classroom-General Use	77	1,798.7	23.4	47.4%	3,474	66,238	19.1
111	Classroom-Departmental	12	126.8	10.6	52.6%	357	9,024	25.3
	Total	89	1,925.4	21.6	48.8%	3,831	75,262	19.6
	Goals			24.3	68.0%			20-25

Summary Results:

- The 77 General Use classrooms were utilized at 23.4 Avg. WRH for Fall 2021 which is only slightly below the goal of 24.3. However, the 12 departmental classrooms, scheduled at 10.6 Avg. WRH, are utilized well below the goal and therefore reduce the total Avg. WRH down to 21.6.

Classroom Utilization by Building

The Classroom Utilization by Building table below shows the distribution of classrooms around the campus and how well each building is utilized.

Table 48: Alternative Model - Daytime Utilization by Building – Fall 2021

Bldg. Num	Building	Rooms	WRH	Avg. WRH	SO%	Seats	ASF	ASF / Seat	Hrs. Avail 24.3
50310300	Brehm	3	98.3	32.8	49.0%	193	3,745	19.4	(25.4)
50310500	Johnson	12	330.4	27.5	39.8%	582	11,585	19.9	(38.8)
50310800	Gooch	15	263.8	17.6	41.3%	706	14,230	20.2	100.7
50310900	McCombs	3	20.8	6.9	78.3%	52	1,362	26.2	52.1
50311200	Holt	28	655.4	23.4	50.3%	1,178	21,255	18.0	25.0
50311400	Arts	6	104.0	17.3	48.5%	217	5,339	24.6	41.8
50311500	Skyhawk	4	82.7	20.7	58.9%	165	3,205	19.4	14.5
50311600	Elam	1	14.8	14.8	64.3%	30	962	32.1	9.5
50311900	Sociology	3	64.5	21.5	58.0%	110	1,680	15.3	8.4
50312100	Graham	4	25.0	6.3	50.8%	151	2,492	16.5	72.2
50312800	ROTC	1	12.3	12.3	32.7%	25	1,100	44.0	12.1
50315000	Business Adm	7	213.8	30.5	43.8%	357	6,437	18.0	(43.7)
50365400	Vet Science Teach	1	23.2	23.2	64.2%	40	1,154	28.9	1.1
50366100	Power	1	16.5	16.5	55.0%	25	716	28.6	7.8
	Total	89	1,925.4	21.6	48.8%	3,831	75,262	19.6	237.3
	Goals			24.3	68%			20-25	

Summary Results:

- Note: Since the Expected Average Weekly Room Hour goals are an average, it is expected that some buildings may be used above the goal and some below the goal.**
- Many of the buildings are scheduled near or above the Avg. WRH goals, however, very low usage in the three rooms in McCombs and four classrooms in Graham drag down the utilization average. Station Occupancy (SO%) is consistently low across the buildings.
- Available Hours 24.3: This column calculates availability for the building by multiplying the number of rooms times the recommended rate of 24.3 hours to calculate a total hour availability and then subtracting the current hours of use. Therefore, the column reflects how many hours are still available if the building's classrooms could be used at the recommended Avg. WRH rate. The calculation shows a total of 237.3 hours are still available in the 89 classrooms (i.e., 79 more 3 hour classes could be scheduled).

Classroom Utilization by Size

The classroom utilization by size chart shows the distribution of rooms, weekly room hours, and utilization statistics by room size range.

Table 49: Alternative Model - Classroom Utilization by Size – Fall 2021

Size Range (Seats)	Rooms	WRH	Avg. WRH	SO%	Min WRH	Max WRH	Seats	ASF	ASF / Seat
1-12	1	-	-	0.0%	-	-	10	310	31.0
13-20	7	64.2	9.2	64.3%	3.0	13.5	124	3,810	30.7
21-30	26	539.6	20.8	54.9%	8.0	37.2	739	18,241	24.7
31-40	23	481.1	20.9	48.1%	3.0	32.2	825	16,591	20.1
41-50	11	287.3	26.1	54.4%	14.0	36.2	529	10,272	19.4
51-60	8	201.1	25.1	51.6%	6.0	32.7	436	8,129	18.6
61-100	11	310.0	28.2	38.5%	20.1	36.3	739	12,310	16.7
101-150	0	-	-	0.0%	-	-	-	-	N/A
>=151	2	42.0	21.0	19.9%	15.0	27.0	429	5,599	13.1
Total	89	1,925.4	21.6	48.8%	-	37.2	3,831	75,262	19.6

Summary Results:

- The eight smallest rooms (1-20 seats) have the lowest Avg. WRH use. Gooch 117 (182 Seats) and Holt 121 (247 Seats) have very low SO%. ANSC (Animal Science) is the only large class in Gooch, while the largest class has 47 enrolled in Holt.
- Min WRH: This column shows the room that had the lowest use for the size range (e.g., one of the seven rooms of 13-20 seats had only 3.0 hours of use). Overall, there were 11 classrooms that had less than 10 hours of use.

Classroom Space Needs

The number of classrooms, seats, and square footages (ASF) are calculated based on utilization expectations (see Factors Used columns). The table below shows the classroom supply and utilization statistics from Fall 2021 on the first line. The current calculated classroom needs, based on the Factors Used, is shown on the second line.

Table 50: Alternative Model - Classroom Needs Summary

Scenario	Enroll Growth %	WRH	WSCH	Classroom Needs			Factors Used		
				Rooms	Seats	ASF	Avg WRH	SO%	ASF/Seat
Fall 2021		1,925	40,426	89.0	3,831	75,262	21.6	48.8%	19.6
Calculated Need	0.0%			80.0	2,446	58,716	24.3	68.0%	24.0
Potential Growth	25.0%	2,118	50,532	88.0	3,058	73,395	24.3	68.0%	24.0
Enroll Growth	21.6%	2,092	49,158	87.0	2,975	71,399	24.3	68.0%	24.0

Summary Results:

- Calculated Need:** 80 rooms, 2,446 seats, and 58,716 square feet (ASF) are calculated compared to the In Usage Fall 2021 supply of 89 rooms, 3,831 seats, and 75,262 ASF.
- Potential Growth:** With the Fall 2021 supply of 89 rooms and 3,831 seats a 25% potential growth capacity is calculated if the Average WRH goal and Station Occupancy goals are met. This assumes a combination of providing both more class offerings and more students per class.
- Enrollment Growth:** To meet the planned 21.6% enrollment growth suggests that 87 classrooms, 2,975 seats, and 71,399 ASF would be needed to support that level of growth. *Note: the future calculated classroom need shown above is based on strictly the consultant's formula-based methodology. The overall projected classroom need shown in Tables 8 and 18 adds in the programmed classroom space for*

the Test Hub facility and the new College of Business and Global Affairs replacement building. The total classroom space needs for future planning therefore is 80,189 ASF.

- Overall:** The 11 classrooms with less than 10 hours of scheduled use in Fall 2021 inflate the current rooms, seats, and ASF.

Classroom Needs by Size Range

The number of classrooms needed by size is calculated by summarizing the hours scheduled by the actual class enrollments (i.e., not the size of the room where the class was scheduled) and dividing by the expected Avg. WRH goal (24.3 for daytime) to derive how many classrooms are needed in each of the size ranges. *The Best Fit columns in Table 51 show how many rooms are needed with some flexibility built into the model and is therefore a theoretical best fit of classroom sizes to class sizes.*

Table 51: Alternative Model - Classroom Needs by Size Range

Size Range (Seats)	Fall 2021 Rooms	Future Rooms	Current Need		THEC		21.6% Growth	
			Best Fit Rooms	Difference Current-Best	Best Fit Rooms	Difference Current-Best	Best Fit Rooms	Difference Current-Best
1-12	1	3	1	0	12	(11)	2	(1)
13-20	7	8	12	(5)	13	(6)	12	(5)
21-30	26	35	31	(5)	13	13	34	(8)
31-40	23	29	19	4	17	6	21	2
41-50	11	13	11	0	7	4	12	(1)
51-60	8	8	4	4	8	0	4	4
61-100	11	10	1	10	2	9	1	10
101-150	0	0	1	(1)	1	(1)	1	(1)
>150	2	2	0	2	0	2	0	2
Total	89	108	80	9	73	16	87	2

Summary Results:

- Both the consultants model and the THEC model suggest more smaller classrooms and less larger rooms.

Classroom Needs THEC

The Tennessee Higher Education Commission (THEC) classroom model uses goals of 30 Avg. WRH for daytime and 60% Station Occupancy. The WRH are divided into size ranges to identify numbers of classrooms and square foot allocation.

Table 52: Current Classroom Needs THEC

Class Size	Sections	Hours per Week:				Number of CR	Total NASF	Current NASF	Current CR	
		Weekly CR Hours	Stations	ASF/Station	NASF per CR					
1-8	122	335.59	12	26	312	12	3,744	310	1	
9-14	129	372.53	20	25	500	13	6,500	3,810	7	
15-20	132	379.55	30	21	630	13	8,190	18,241	26	
21-26	173	495.04	40	18	720	17	12,240	16,591	23	
27-32	64	188.83	50	18	900	7	6,300	10,272	11	
33-47	78	229.81	60	18	1,080	8	8,640	8,129	8	
48-74	18	53.49	100	17	1,700	2	3,400	12,310	11	
75-126	2	6.00	150	16	2,400	1	2,400	-	-	
>=127	0	0.00	275	14	3,850	0	-	5,599	2	
Total Classrooms and NASF							73	51,414	75,262	89

Summary Results:

- The THEC model calculates a current need for 73 classrooms and 51,414 ASF compared to the Fall 2021 supply of 89 classrooms and 75,262 ASF, and the consultant’s calculation of 80 classrooms and 58,716 ASF.

Table 53: Projected Classroom Needs THEC

Hours per Week:						30	Growth: 21.6%		
Class Size	Sections	Weekly CR Hours	Stations	ASF/ Station	NASF per CR	Number of CR	Total NASF	Current NASF	Current CR
1-8	148	408.08	12	26	312	14	4,368	310	1
9-14	157	453.00	20	25	500	16	8,000	3,810	7
15-20	161	461.53	30	21	630	16	10,080	18,241	26
21-26	210	601.97	40	18	720	21	15,120	16,591	23
27-32	78	229.62	50	18	900	8	7,200	10,272	11
33-47	95	279.45	60	18	1,080	10	10,800	8,129	8
48-74	22	65.04	100	17	1,700	3	5,100	12,310	11
75-126	2	7.30	150	16	2,400	1	2,400	-	-
>=127	0	0.00	275	14	3,850	0	-	5,599	2
Total Classrooms and NASF:						89	63,068	75,262	89

Summary Results:

- The THEC model calculates a projected need for 89 classrooms and 63,068 ASF compared to the Fall 2021 supply of 89 classrooms and 75,262 ASF, and the consultant’s calculation of 87 classrooms and 71,399 ASF.
- Note: the future calculated classroom need shown above is based strictly on the THEC formula-based model. The overall projected classroom need shown in Table 8 adds in the programmed classroom space for the Test Hub facility and the new College of Business and Global Affairs replacement building. The total classroom space needs for future planning therefore is 71.934 ASF.**

Supplemental Classroom Data

The Room versus Class Size data displayed in Table 54 illustrates the class enrollment versus the scheduled room seat capacity. The cells are the percentage of class hours meeting in the rooms in a size range. The shaded areas are a perfect match of class size to room size while the cells to the left of the shaded cells are where class sizes are less than optimal for the size of the room.

Table 54: Alternative Model - Room Size versus Class Size

Size Range (Seats)	Rooms	Class Size								
		1-12	13-20	21-30	31-40	41-50	51-60	61-100	101-150	>=151
1-12	1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
13-20	7	61.9%	33.3%	4.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
21-30	26	36.7%	28.6%	34.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
31-40	23	34.7%	28.8%	31.8%	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%
41-50	11	15.7%	17.6%	39.2%	15.7%	10.8%	1.0%	0.0%	0.0%	0.0%
51-60	8	8.8%	20.6%	35.3%	16.2%	17.6%	1.5%	0.0%	0.0%	0.0%
61-100	11	20.4%	17.6%	26.9%	16.7%	11.1%	4.6%	2.8%	0.0%	0.0%
101-150	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
>150	2	7.1%	21.4%	14.3%	14.3%	35.7%	0.0%	0.0%	7.1%	0.0%

Summary Results:

- 34.7% of the class hours meeting in the twenty-three 31-40 seat rooms had enrollments of 1-12 students. This helps illustrate how the current supply of rooms may be over-sized for the current class sizes.

Table 55 identifies the Unit Hours by Building compared to the classroom hours scheduled in each building by academic division.

Table 55: Alternative Model - Academic Unit/College All Hours Scheduled by Building-Fall 2021

Building	Rooms	Avg. WRH	AGRI	BUS	EDUC	ENG	HUM	PO	Total
Arts	6	18.8					112.8		112.8
Brehm	3	35.7	64.3			36.8	6.0		107.2
Business Adm	7	35.1	2.9	230.7			12.0		245.6
Elam	1	14.8			14.8				14.8
Gooch	15	19.7	22.9	30.9	108.8	9.0	123.8		295.4
Graham	4	10.1	13.0		14.4		13.0		40.4
Holt	28	25.0			77.4	301.5	321.3		700.3
Johnson	12	28.7	61.8			267.9	15.0		344.7
McCombs	3	6.9						20.8	20.8
Power	1	17.5	17.5						17.5
ROTC	1	16.6	13.6		3.0				16.6
Skyhawk	4	23.9			77.7	9.0	9.0		95.7
Sociology	3	24.4			67.3	6.0			73.3
Vet Science Teach	1	27.2	27.2						27.2
Total	89	23.7	223.2	261.6	363.4	630.2	612.9	20.8	2,112.2

Instructional Laboratory Analysis

Overview

The laboratory space needs were determined as follows:

- The calculated square feet need is based on utilization goals and discipline specific teaching station sizes. Two space needs calculations were made for each program: one based on the consultant’s guidelines and the other on the THEC space planning guidelines.
- Consultant’s Utilization Guidelines:
 - Lower Division Labs - 24 to 30 hours per week of scheduled use with 80% of the stations occupied.
 - Upper Division Labs - 15 to 20 hours per week of scheduled use with 80% of the stations occupied.
- THEC Space Planning Guidelines:
 - Lower Division Labs – 20 hours per week of use with 80% of the stations occupied.
 - Upper Division Labs - 15 hours per week of use with 75% of the stations occupied.
- In most cases THEC station sizes were used along with related lab service space factors.
- In most cases the consultant’s analysis is lab specific while the THEC approach is organized around program codes (CIP).
- Recommended laboratory space needs, in most cases, are a blending of the two approaches. If additional labs are not justified the existing space is assumed to be sufficient if the teaching station sizes are within expectations.
- Future lab needs are based on the percent enrollment change estimates developed by the enrollment trend analysis summarized in the Planning Assumptions section of this report and detailed in Appendix A.

Summary of Future Space Needs by College and Department

The following tables summarize the teaching labs and lab support space by department after the completion and occupancy of the Latimer Science and Engineering Building.

- The current teaching lab count and current ASF.
- Teaching capacity is based on section limits not necessarily inventory station counts.
- The ASF/Station is the current ASF divided by the teaching capacity. In most cases these are aligned with THEC station sizes and service factors.
- Utilization Fall 2021: The Weekly Room Hours-Day (hours per week of daytime scheduled use) and station occupancy percentage are based on scheduling data reported for the department using the rooms in the Fall 2021 term.
 - Appendix E provides detailed utilization for each room scheduled in Fall 2021 based on the departmental assignment at that time.
- The enrollment growth percent is the expected changed in enrollments based on the trend analysis described in the Planning Assumption section of this report.
- The Current and Future Need Recommendations in most cases are a blending of the calculations based on the THEC Guidelines and the Consultant’s process as outlined above.
 - If the calculated need is within an acceptable range of the existing space the assumption is the existing space is sufficient to meet the long-term need.

See Appendix D for a comparison of the detailed calculations by produced by both methods.

Table 56: Alternative Model - Summary of Teaching Lab Space Needs by College

College	Space Inventory Data				Utilization Fall 2021			Current Need		Future Need		
	Current Teaching Lab Count	Existing ASF	Teaching Capacity	ASF/Station	Weekly Room Hrs.-Day	Station Occupancy %	Growth %	Recommended ASF Need	Difference from Current ASF	Recommend No. of Teaching Labs	Recommended ASF need	Difference from Existing ASF
College of Agriculture and Applied Sciences	23	32,456	399	81.3	17.2	48%	36%	30,435	2,021	26	53,868	(21,412)
College of Business and Global Affairs	3	3,422	107	32.0	15.7	59%	7%	3,422	0	7	5,220	(1,798)
College of Educ., Health & Behavioral Sciences	7	14,346	253	56.7	14.2	53%	-2%	14,346	0	20	14,346	0
College of Engineering and Natural Sciences	31	61,866	792	78.1	12.4	60%	28%	56,399	5,467	48	62,781	(915)
College of Humanities and Fine Arts	17	36,857	390	94.5	13.7	49%	11%	36,857	0	46	40,853	(3,996)
Other	2	5,548	44	126.1	6.0	60%		5,031	517	7	6,051	(503)
Main Campus Total	83	154,495	1,999	77.3	14.1	50%	15%	146,490	8,005	154	183,119	(28,624)

Table 57: Alternative Model - Summary of Teaching Lab Space Needs by Academic Department

College / Department	Space Inventory Data				Utilization Fall 2021			Current Need		Future Need		
	Current Teaching Lab Count	Existing ASF	Teaching Capacity	ASF/Station	Weekly Room Hrs. - Day	Station Occupancy %	Growth %	Recommended ASF	Difference from Current ASF	Recommend No. of Teaching Labs	Recommended ASF	Difference from Existing ASF
College of Agriculture and Applied Sciences												
Agri., Geosciences & Natural Resources	19	26,252	309	85.0	20.3	49%	38%	24,231	2,021	20	45,714	(19,462)
Family and Consumer Sciences	4	6,060	90	67.3	9.5	43%	25%	6,060	0	5	8,010	(1,950)
Military Science and Leadership	0	144	0	0.0	0.0	0%	0%	144	0	1	144	0
Total CAAS	23	32,456	399	81.3	17.2	48%	36%	30,435	2,021	26	53,868	(21,412)
College of Business and Global Affairs												
Totals CBGA	3	3,422	107	32.0	15.7	59%	7%	3,422	0	7	5,220	(1,798)
College of Education, Health & Behavioral Sciences												
Nursing	3	6,105	181	33.7	14.4	53%	1%	6,105	0	3	6,105	0
Health and Human Performance	1	3,922	25	156.9	14.6	43%	0%	3,922	0	3	3,922	0
Psychology/Behavioral Sciences	1	2,000	20	100.0	20.2	43%	1%	2,000	0	11	2,000	0
Educational Studies	2	2,319	27	85.9	10.7	85%	-13%	2,319	0	3	2,319	0
Total CEHBS	7	14,346	253	56.7	14.2	53%	-2%	14,346	0	20	14,346	0
College of Engineering and Natural Sciences												
Dean, Coll. of Eng. & Natural Sciences	0	4,849	0	0.0	0.0	0%	0%	4,849	0	11	4,849	0
Biological Sciences	16	23,637	362	65.3	16.3	65%	25%	17,621	6,016	13	21,575	2,062
Chemistry & Physics	7	14,283	196	72.9	35.8	0%	-18%	14,283	0	7	14,283	0
Engineering	6	16,099	192	83.8	6.3	33%	96%	16,099	0	11	16,099	0
Computer Sciences	2	2,126	42	50.6	0.0	0%	135%	2,100	26	4	4,200	(2,074)
Mathematics and Statistics	0	872	0	0.0	0.0	0%	23%	1,447	(575)	2	1,775	(903)
Total CENS	31	61,866	792	78.1	12.4	60%	28%	56,399	5,467	48	62,781	(915)
College of Humanities and Fine Arts												
English & Modern Foreign Languages	2	2,605	46	56.6	16.5	63%	23%	2,605	0	4	2,605	0
Communications	1	729	16	45.6	20.8	77%	9%	729	0	2	1,429	(700)
Visual and Theatre Arts	8	16,784	141	119.0	12.3	55%	2%	16,784	0	10	20,080	(3,296)
Music	6	16,739	187	89.5	13.5	39%	8%	16,739	0	30	16,739	0
Total CHFA	17	36,857	390	94.5	13.7	49%	11%	36,857	0	46	40,853	(3,996)
Chancellor												
Information Technology Services	1	3,851	26	148.1	6.0	87%	0%	3,851	0	4	3,851	0
Enrollment Services and Student Engagement												
Student Success Ctr	1	755	18	41.9	6.0	35%	0%	755	0	1	755	0
Provost												
College Library/Academic Affairs	0	425	0	0.0	0.0	0%	0%	425	0	2	1,445	(1,020)
Unassigned		517										
Main Campus Total	83	154,495	1,999	77.3	14.1	50%	15%	146,490	8,005	154	183,119	(28,624)

Summary Results:

- The aggregated current net need indicates the existing space is sufficient, with the projected need indicates a deficit of 28,624 ASF.
- Agriculture, Geosciences & Natural Resources shows a space shortfall of 19,462 square feet. This is for lab support, open lab space, a new Meat Processing Facility and a Beef Cattle Teaching and Demonstration Facility.

- Family and Consumer Sciences may need an additional 1,950 square foot lab to support a new program in Hospitality Management.
- Biology Sciences might be able to handle future needs in about 2,000 fewer square feet.
- Computer Science could justify two additional labs of about 2,000 square feet to support the Cyber Security program,
- Communications could justify an additional 700 square feet lab to support the new Strategic Communications program.
- A new Chamber Music/Jazz Recital studio will be added for Music.
- A new Dance studio will be constructed as part of the Fine Arts Addition to consolidate the program with the other programs in the building.

Research Space

As a regional university, research UTM is involved with both undergraduate research activity and sponsored grant programs. Both of these types of research activity directions require a different focus regarding the types of space needed. The University currently has a total of 22,706 assignable square feet classified as research laboratories that focus on the needs of the sponsored grants programs. The existing inventory also includes research support space including prep areas and special use rooms such as microscopy labs and collections. These spaces are primarily directed as faculty labs.

However, the student engagement focus for undergraduate research is both a high impact practice and related to workforce development with at least three benefits for students:

- Conducting of research
- Presentation of research (communication)
- Sharing research with external audiences

Space to provide students with this experience is limited or lacking in most academic departments. The need is for spaces that are functionally flexible and can enhance faculty and student team/collaborative learning. The dual research space calculation methodology described below is intended to address University research focuses and identify the space requirements of each.

Departments engaged in laboratory-based research are provided an allocation of space for each tenure track faculty (identified as a principal investigator). The recommended assignable square feet (ASF) space allowances are presented in the Space Planning Assumptions and are applied to estimate a discipline-specific research laboratory space allocation. This allocation is based on a team concept where the space requirements of all research personnel that may be associated with a Principal Investigator (PI) including research staff, graduate research assistants and undergraduates, are accommodated by this allowance.

To recognize the need for student engagement research a collaboration space needs factor is applied to accommodate student engagement research activities. To estimate this need the following factors have been applied:

- Each tenure-track faculty will be involved in student engagement research,

- Each tenure-track faculty will have five undergraduate researchers associated with them to form a team of six researchers: and
- A space factor of 40 assignable square feet (ASF) per researcher is used to estimate the square foot need for this type of space.

Table 58 summarizes the calculated research space needs for faculty research labs and student engagement collaborative research space by academic college. Appendix F shows the calculated needs by department.

Table 58: Alternative Model - Summary of Research Space Needs

College/Space Type	Existing ASF	Current		Projected	
		Guideline ASF	Surplus (Deficit)	Guideline ASF	Surplus (Deficit)
College of Agriculture and Applied Sciences					
Research Labs	7,196	12,872	(5,676)	13,472	(6,276)
Student Engagement Research	0	6,320	(6,320)	6,520	(6,520)
College of Agriculture and Applied Sciences Totals	7,196	19,192	(11,996)	19,992	(12,796)
College of Business and Global Affairs					
Student Engagement Research	0	7,920	(7,920)	8,880	(8,880)
College of Education, Health & Behavioral Sciences					
Student Engagement Research	0	10,080	(10,080)	10,560	(10,560)
College of Engineering and Natural Sciences					
Research Labs	15,510	15,620	(110)	16,074	(564)
Student Engagement Research	0	12,480	(12,480)	13,920	(13,920)
College of Engineering and Natural Sciences Totals	15,510	28,100	(12,590)	29,994	(14,484)
College of Humanities and Fine Arts					
Student Engagement Research	0	12,000	(12,000)	12,720	(12,720)
Provost					
Research Labs (Test Hub)	0	0	0	18,040	(18,040)
Totals-Research Labs	22,706	28,492	(5,786)	47,586	(24,880)
Totals-Student Engagement Research Space	0	48,800	(48,800)	52,600	(52,600)
Totals - Research Space	22,706	77,292	(54,586)	100,186	(77,480)

Summary Results:

- The current calculated research space needs indicate a net deficit of 54,586 ASF or 240% more than existing. A shortfall of 5,786 ASF for lab-based research space was identified. This is more than 10.6% of the overall deficit with the remaining need being for student engagement research space which is currently not provided.
- With the planned enrollment growth and commensurate increase in faculty, the research space need is estimated to grow to a deficit of approximately 77,500 ASF, with additional lab-based space needs consisting of about 25,000 ASF.
- The future research lab space needs include just over 18,000 ASF of programmed space for the Test Hub facility: 14,140 ASF for the Fabrication Lab and 3,900 ASF for Team Labs and storage space.
- The academic department with the largest projected space need for research lab space is Agriculture, Geosciences & Natural Resources with a deficit of 6,276 ASF or 87.2% more than existing.
- The academic department with the greatest need for the proposed student engagement space is the College of Engineering and Natural Sciences with a need for 13,920 ASF.

Office Space

The existing office inventory totals 236,036 assignable square feet (ASF) of space classified as either office or office support. There are 862 total offices at 153,767 ASF and 82,269 ASF in office support space (53.5% of the office space). The average office size is 178.6 ASF.

The office space need is calculated by multiplying the number of authorized positions (including vacancies) by an office square foot module designated for each position. The THEC office modules have been used in the analysis and identified in the planning assumptions. Also, for the purposes of the study, current personnel were grouped into similar position type categories based on title or job responsibilities. As with the other space needs presented in this study, the office space calculation is compared to the total assigned office space to determine either shortages or surpluses. Table 58 summarizes the current and projected office and office support space needs by division and subdivision/college.

Table 59: Alternative Model - Summary of Office Space Needs

Division/Subdivision or College	Office Type	Number of Rooms	Existing ASF	Current Needs		Projected Needs	
				Guideline ASF	Difference from Existing	Guideline ASF	Difference from Existing
Chancellor	Offices	103	21,202	18,480	2,722	21,744	(542)
	Office Support	65	11,073	8,712	2,361	8,889	2,184
Finance and Administration	Offices	71	13,271	10,818	2,453	10,818	2,453
	Office Support	48	6,252	5,568	684	5,568	684
Provost							
Coll. of Agriculture and Applied Sciences	Offices	83	14,784	11,554	3,231	12,114	2,671
	Office Support	69	11,771	4,827	6,944	5,040	6,731
Coll. of Business and Global Affairs	Offices	56	9,486	8,093	1,393	10,071	(585)
	Office Support	12	1,639	2,632	(993)	4,192	(2,553)
Coll. of Education, Health & Behav. Sciences	Offices	79	12,625	13,250	(625)	13,700	(1,075)
	Office Support	38	6,887	5,974	913	6,109	778
Coll. of Engineering and Natural Sciences	Offices	135	19,540	12,065	7,476	13,095	6,446
	Office Support	33	6,546	4,373	2,173	4,682	1,864
Coll. of Humanities and Fine Arts	Offices	102	17,034	13,695	3,340	14,155	2,879
	Office Support	30	7,933	5,730	2,203	5,869	2,065
Enrollment Services & Student Engagement	Offices	61	16,087	9,801	6,287	9,801	6,287
	Office Support	3	914	2,313	(1,399)	2,313	(1,399)
Provost	Offices	60	10,472	7,222	3,251	10,042	430
	Office Support	31	4,376	3,075	1,301	3,075	1,301
Student Affairs	Offices	61	12,272	7,623	4,649	7,623	4,649
	Office Support	100	22,889	6,952	15,937	6,952	15,937
Advancement	Offices	15	2,605	1,640	965	1,640	965
	Office Support	13	1,177	723	454	723	454
Campus Wide	Offices	36	4,389	375	4,014	375	4,014
	Office Support	6	812	38	775	38	775
Totals - Office Space		1,310	236,036	165,531	70,505	178,626	57,411
Totals - Offices		862	153,767	114,612	39,155	125,175	28,592
Totals - Office Support		448	82,269	50,918	31,351	53,450	28,819

Summary Results:

- The guideline calculation for office space indicates a net current surplus of 70,505 ASF.
- The ratio of current FTE faculty and staff per station is .79 and per room the ratio is .94. Both ratios indicate the current inventory is adequate and being less than 1.0 explains some of the surplus calculated.

- The total square feet of offices per FTE is 195 ASF and per headcount is 155. Both averages are greater than many of the planning modules used and prescribed by THEC and may be another reason for the calculated surplus.
- The other contributing factor towards the calculated overall office surplus is the ratio of office service space to office space which is 53.5%. The THEC modeling factor for office service is 30%.
- The planned growth in personnel along with programmed space, results in the calculated projected office space needs showing the surplus is reduced to 57,411 ASF.

Although the aggregated calculated need indicates a surplus of office space, when examining individual units there are 17 departments that have future office space deficits identified. Table 60 below lists the top ten in rank order for both the current and future scenarios.

Table 60: Alternative Model - Departments with Greatest Office Space Needs

Department	Current			Department	Projected		
	Existing ASF	Guideline Needs	Difference from Existing		Existing ASF	Guideline Needs	Difference from Existing
Educational Studies	3,836	6,255	(2,419)	Coll. of Business & Global Affairs	9,702	14,263	(4,561)
English & Modern Foreign Lang.	4,004	5,224	(1,220)	Athletics	14,982	18,930	(3,948)
Human Resources	2,467	3,154	(687)	Educational Studies	3,836	6,450	(2,614)
History and Philosophy	2,664	3,294	(630)	English & Modern Foreign Lang.	4,004	5,224	(1,220)
Academic Affairs	951	1,467	(516)	Human Resources	2,467	3,154	(687)
Athletics Administration	14,982	15,488	(506)	Engineering	2,658	3,318	(660)
Bookstore	180	572	(392)	History and Philosophy	2,664	3,294	(630)
Margaret N. Perry Children's Ctr	292	653	(361)	Academic Affairs	951	1,467	(516)
Skyhawk Printing & Mail Svcs.	0	351	(351)	Bookstore	180	572	(392)
Chemistry & Physics	2,819	3,133	(314)	Margaret N. Perry Children's Ctr	292	653	(361)

Summary Results:

- Educational Studies and English and Modern Foreign Languages are the two departments that have the largest current office space shortages.
- Under the projected space needs scenario, the College of Business and Global Affairs has the largest deficit and followed by Athletics.

Library/Study Space

The calculated needs for library/study space in the Meek Library are based on the following factors:

Stack Space:

- The library stack area is determined by multiplying the number of volume equivalents by a space factor. We are using a factor of .10 ASF per volume for volumes for the first 150,000 volumes, .09 ASF for the next 150,000 volumes, etc. This includes space for aisles between stacks, aisles between range ends, and general access space for the stacks. These criteria accommodate approximately 8 volumes per lineal feet and an 85% fill rate.

Reading/Study Space:

- The reading/study space is determined by the percent of students that may typically use the library at peak times during the day or evening to determine the number of persons requiring

reading/study space. This percent normally ranges between 7.5 and 20 percent depending on the type and location of the institution.

From existing seating statistics information received from the Library, modifications to the study use factor were incorporated. For this analysis the following student use FTE factors were applied: 25%.

Technical/Processing Service Space:

- Processing room space needs that support the overall library operation are determined as a percent of the total calculated need for library space. A factor of 12.5% has been used.

Archives:

- A separate calculation for archival space is provided that is not part of the THEC model. The calculation of archives space applies the following factors:
 - Lineal Feet (LF) of collections = .62 times the LF.
 - Number of record storage boxes = .62 times the count of boxes.
 - Number of archival storage boxes = .51 times the count of boxes.
 - Reading Room = minimum space factor of 250 ASF.
 - Processing room space needs that support the archives operation are determined as a percent of the total calculated need for archive space. Use 15 percent as the norm.

Table 61 provides additional details of the calculated space need for the library/study space located in the Meek Library.

Table 61: Alternative Model - Summary of Library/Study Detailed Space Needs : Meek Library

Space Type	Existing ASF	Current		Projected	
		Guideline ASF	Surplus (Deficit)	Guideline ASF	Surplus (Deficit)
Stack Space	44,056	31,142	12,914	31,142	12,914
Reading/Study Space	24,625	26,914	(2,289)	33,773	(9,148)
Technical Service Space	5,947	7,370	(1,423)	8,227	(2,280)
Archives	5,235	7,000	(1,765)	8,750	(3,515)
Totals Library/Study *	79,863	72,425	7,438	81,892	(2,029)

* The music program has space classified as library that is not included in the summary above.

Summary Results:

- The current calculated space needs for the Meek Library indicate the existing space is sufficient overall.
- When subdivided into the various library space categories the calculated needs compared to the existing space possibly present skewed results because of how the space is classified in the University’s inventory. For example, a need for additional reading/study space is identified and there is surplus stack space. In actuality there may be a blending of spaces between these categories. If not, the study need could be satisfied through repurposing some of the stack space.
- Additional space for the archives is indicated both currently and in the future. The increase in the future deficit is the result of a planned 25% growth in the archival collection.
- With the planned enrollment growth and projected archive collections, the future calculated space needs indicate a net deficit of 2,029 ASF or 2.5 % more than its existing space.

- The University also has 11,350 ASF classified as study space that is not housed in the Meek Library and is assigned to various academic departments. An additional 1,750 ASF is recommended in the future. *Note: the recommendations for the Boling Center also have an additional 3,000 ASF of study space (see results for the Student Affairs Division).*

Other Space Types

Other major space type categories include spaces that are general purpose and, in many cases, shared resources for the University. Throughout this report much of this space has been referenced as being included in the modeling category identified as Campus Wide Space. With the exception of the Campus Support categories, much of this space is related to student life/student service functions.

The projected space calculations incorporate several additional space needs that were independently assessed during the master planning process as follows: Athletics/Student Recreation, Assembly, Food/Dining, Student Lounge, Merchandising and Meeting Rooms. Current and projected results are identified below.

A summary of these Other Space groupings is presented in Table 62.

Table 62: Alternative Model - Summary of Other Space Needs

Space Category	Fall 2021			Fall 2031		
	Existing ASF	Guideline ASF	Surplus (Deficit)	Existing ASF	Guideline ASF	Surplus (Deficit)
Athletic /Student Recreation	201,555	201,555	0	201,555	353,136	(151,581)
Assembly	19,721	6,089	13,633	19,721	7,003	12,718
Exhibition	2,817	1,794	1,023	2,817	2,252	565
Food/Dining	27,162	27,024	138	27,162	30,924	(3,762)
Student Lounge	13,175	10,766	2,410	13,175	16,500	(3,325)
Merchandising	10,653	9,730	923	10,653	11,500	(847)
Meeting Rooms	23,835	6,566	17,269	23,835	7,974	15,861
Support Facilities	59,169	68,814	(9,645)	59,169	86,587	(27,418)
Total Assignable Square Feet	358,087	332,338	25,749	358,087	515,876	(157,789)

Summary Results:

Athletics/Student Recreation:

- The projected space needs for Athletics/Student Recreation recommends a replacement swimming pool for the facility currently located in the Elam Center, with a 12,000 ASF pool developed as an addition to the Student Recreation Center. The old swimming pool in the Elam Center will be reused by Athletics for a new turf court. In addition. The overall deficit also includes just under 139,600 ASF of athletic activity and support space programmed for the Bob Carroll Addition/renovation and the Indoor Football Practice Facility.

Assembly:

- Existing general assembly space was found to be sufficient. *Note: other assembly space and needs for areas such as performance facilities are assigned to their respective departments.*

Exhibition:

- The calculated need for campus exhibition space found the existing inventory to be sufficient.

Food/Dining:

- The current food/dining space is at capacity.
- Should the planned enrollment growth occur, additional food service space is recommended increasing by about 3,900 ASF in an area adjacent to the Meek Library.

Student Lounge:

- About 40% of the space classified as student lounge is located in the Boling Center. The projected need recommends an increase in Student Lounge space in Boling Center by about 3,000 ASF.

Merchandising:

- Merchandising space is adequate for the current student enrollment. With the planned growth in the future an additional 850 ASF may be needed.

Meeting Rooms:

- Existing campus meeting room space is sufficient.

Campus Support:

- The calculated needs for campus support space indicates a deficit of 9,916 ASF or 16.8% more than the existing inventory.
- The projected deficit is 18,582 ASF or 31.4% more than existing.

Appendices

Appendix A: Enrollment Projections by College/Department

Appendix B: Classroom Utilization by Building and Room

Appendix C: Classrooms with No Scheduled Usage

Appendix D: Teaching Lab Space Needs Calculation Details

Appendix E: Teaching Lab Utilization

Appendix F: Research Space Needs Calculation Details

Appendix A: Enrollment Projections by College/Department

A key part of the master plan space analysis is to quantify the University's space needs for the long-term to the year 2031. A primary task in this process is to conduct an analysis to determine the University's projected enrollment changes and potential growth over the next ten years. These projections have been factored in estimation of the future space needs.

The enrollment projections were developed based on eleven years of historical on-ground and online student enrollment data provided by the University for the years 2011 through 2021. The Fall 2021 semester serves as the base year for the future student enrollment projections. The trend analysis process used was undertaken in two stages: (1) If the historical enrollment is increasing, a linear trend was used to project forward and, (2) if enrollment is decreasing a logarithmic trend line is used to moderate the decline. This analysis applied the option with the most favorable results. This assessment resulted in projections based on departmental enrollments.

A review of these initial results was conducted on December 9, 2021 with representatives from the University. Two modifications to the process were recommended: 1) The academic year 2010-2011 had the highest student FTE enrollment numbers ever and then the University's enrollment declined significantly in 2016 thus establishing a new baseline. Using the timeframe of 2016-2021 was recommended because it was believed the shorter historical timeframe would yield a more accurate long-range projection since the enrollment profile was significantly different from 2011 to 2016; and 2) The Department of Agriculture, Geosciences and Natural Resources has three distinct academic programs managed by a single department. However, the enrollment trends for each program are different and by aggregating them together skewed long term projection results may be produced. It was therefore suggested that the historical enrollment data for this department be separated to produce projections by program area. Program specific data was provided by the Office of Institutional Research using the Classification of Program (CIP) code designation. These recommended changes to the enrollment projections analysis methodology were incorporated producing a revised assessment for the future enrollments for UTM.

A summary of the historical enrollment data used in this process is shown below in Table 63 for the Main Campus. The historical enrollments for the other regional sites are shown for information purposes only.

Table 63: UTM Campus Historical Student FTE Enrollments

Campus	Instructional Method	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020(1)	2021
Main Campus	On Ground	5,719	5,692	5,459	5,182	4,850	4,438	4,420	4,233	4,193	1,562	3,585
	On Line	453	464	497	497	563	615	723	786	828	3,469	1,142
	Totals	6,172	6,155	5,955	5,679	5,414	5,053	5,142	5,019	5,021	5,031	4,727
Regional Centers												
Jackson Center	On Ground	7	14	29	41	48	61	47	16	20	10	18
	Online	2	2	1	0	6	3	0	3	6	17	1
	Totals	9	15	30	41	54	65	47	19	26	28	19
Parsons Center	On Ground	158	131	167	244	245	244	244	268	253	94	200
	Online	0	0	7	0	0	0	0	0	0	118	1
	Totals	158	131	174	244	245	244	244	268	253	212	201
Ripley Center	On Ground	223	178	165	165	125	115	68	55	53	13	25
	Online	0	0	0	0	0	0	0	0	0	31	0
	Totals	223	178	165	165	125	115	68	55	53	44	25
Selmer Center	On Ground	306	151	133	103	98	103	95	76	69	38	53
	Online	0	0	0	0	0	0	0	0	0	32	1

Campus	Instructional Method	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020(1)	2021
	Totals	306	151	133	103	98	103	95	76	69	70	54
Somerville Ctr.	On Ground	0	0	0	4	7	8	40	48	70	32	45
	Online	0	0	0	0	0	0	0	0	0	19	0
	Totals	0	0	0	4	7	8	40	48	70	51	45
Other	On Ground	125	119	83	39	59	78	81	96	153	170	114
	Online	1	0	0	0	0	0	0	0	0	0	0
	Totals	126	119	83	39	59	78	81	96	153	170	114
Totals - Regional Ctrs.	On Ground	819	593	577	596	581	610	575	559	618	358	455
	Online	3	2	8	0	6	3	0	3	6	217	3
	Totals	821	595	585	596	588	614	575	562	624	575	458
All Campuses	On Ground	6,537	6,285	6,036	5,778	5,432	5,049	4,994	4,792	4,811	1,920	4,040
	Online	456	465	505	497	569	618	723	789	834	3,685	1,145
	Totals	6,993	6,750	6,541	6,275	6,001	5,667	5,717	5,581	5,645	5,605	5,185

(1) Fall 2020 data is shown here for information purposes. Because this year was an anomaly due to the pandemic regarding the on ground versus online mix this year was excluded from the enrollment projections analysis process.

The detailed projection results from this process are summarized in the table below by college and department. Included in this summary are the projections developed through the trend analysis process along with the additional enrollments identified for the new academic program initiatives. These growth rates have been applied in developing the calculated projected space needs for the alternative model. **Note: These results represent an aspirational goal of the University for on-ground future enrollments based on proposed new programs and demographic trends by department. It assumes an increase of approximately 77 FTE, on average, added each year over the planning period of the master plan.**

Table 64: Enrollment Projections by Department – Main Campus

College /Department	Student Level	2021 FTE Baseline FTE Enrollments			2031 Recommended FTE Enrollments			
		On Ground	Online	Total	On Ground	Online	Total	Percent Difference
Agriculture & Applied Sciences								
Ag, Geosciences, & Natural Res								
Agriculture (1)	GR on ground	2		2	2		2	0.0%
	UG on ground	408		408	614		614	50.5%
	GR-online		16	16		25	25	56.3%
	UG online		112	112		233	233	108.0%
Geosciences								
	GR on ground							
	UG on ground	82		82	88		88	7.3%
	GR-online							
	UG online		15	15		20	20	33.3%
Natural Resources								
	GR on ground							
	UG on ground	47		47	39		39	-16.4%
	GR-online		5	5		5	5	0.0%
	UG online		0	0		2	2	200.0%
Family and Consumer Sciences								
	GR on ground	4		4	6		6	50.0%
	UG on ground (2)	55		55	110		110	100.0%

College /Department	Student Level	2021 FTE Baseline FTE Enrollments			2031 Recommended FTE Enrollments			
		On Ground	Online	Total	On Ground	Online	Total	Percent Difference
	GR-online		6	6		6	6	0.0%
	UG online		24	24		33	33	37.5%
Military Science & Leadership	UG				13		13	1300.0%
Agriculture & Applied Sciences Totals		597	179	776	872	324	1,196	54.1%
Business & Global Affairs								
Acct, Fin, Econ & Pol Sci	GR on ground				11		11	1100.0%
	UG on ground	253		253	280		280	10.7%
	GR-online		53	53		79	79	49.1%
	UG online		75	75		108	108	44.0%
Mgmt., Mktg & Info Systems	GR on ground	15		15	12		12	-20.0%
	UG on ground (3)	156		156	183		183	17.3%
	GR-online (4)		41	41		124	124	202.4%
	UG online		96	96		145	145	51.0%
Business & Global Affairs Totals		425	263	688	485	456	941	36.8%
Education, Health & Behavioral Sciences								
Behavioral Sciences/Psychology	UG on ground	254		254	257		257	1.2%
	UG online		69	69		91	91	31.9%
	GR online (5)	0		0		21	21	2100.0%
Educational Studies	GR on ground	12		12	11		11	-8.3%
	UG on ground	152		152	131		131	-13.8%
	GR-online (6)		212	212		264	264	24.5%
	UG online		38	38		42	42	10.5%
Health and Human Performance	UG on ground	255		255	255		255	0.0%
	GR-online (7)		6	6		27	27	350.0%
	UG online		7	7		6	6	-14.3%
Interdisciplinary Studies	UG online		7	7		7	7	0.0%
Nursing	UG on ground	69		69	70		70	1.4%
	UG online		12	12		12	12	0.0%
Education, Health & Behav Sciences Totals		743	350	1,093	725	470	1,194	9.2%
Engineering & Natural Sciences								
Biological Sciences (8)	UG on ground	284		284	397		397	39.8%
	UG online		35	35		36	36	2.9%
Chemistry and Physics	UG on ground	163		163	134		134	-17.8%
Computer Science (9)	UG on ground	39		39	83		83	112.8%
	UG online		3	3		3	3	0.0%
Engineering (10)	UG on ground	87		87	270		270	171.3%
	UG online		2	2		0	0	-100.0%
Mathematics and Statistics (11)	UG on ground	289		289	355		355	3.1%
	UG online		49	49		96	96	95.9%
Undeclared	UG			0			0	
Engineering & Natural Sciences Totals		862	89	951	1,239	135	1,338	31.1%

College /Department	Student Level	2021 FTE Baseline FTE Enrollments			2031 Recommended FTE Enrollments			
		On Ground	Online	Total	On Ground	Online	Total	Percent Difference
General Studies								
General Studies	UG on ground	131		131	128		128	-2.3%
	UG online		6	6		9	9	50.0%
Honors Programs	UG on ground	21		21	19		19	9.5%
General Studies - Honors Programs Totals		152	6	158	147	9	156	-1.3%
Humanities & Fine Arts								
Communications (12)	GR on ground	2		2	4		4	100.0%
	UG on ground	124		124	133		133	7.2%
	GR on line		8	8		14	14	75.0%
	UG online		18	18		61	61	238.8%
English & Modern Foreign Lang (11)	UG on ground	292		292	360		360	23.3%
	UG online		59	59		120	120	103.4%
History and Philosophy	UG on ground	186		186	184		184	-1.1%
	UG online		105	105		104	104	
Music	UG on ground	78		78	85		85	9.0%
	UG online		9	9		13	13	44.4%
	GR online (13)					8	8	8000.0%
Visual and Theatre Arts	UG on ground	125		125	127		127	1.6%
	UG online		15	15		21	21	
Humanities & Fine Arts Totals		806	214	1,020	893	341	1,234	21.0%
Campus Totals		3,585	1,101	4,685	4,361	1,735	6,060	29.3%

Notes:

- (1) Stretch enrollment growth rate for the new Vet Technology degree program of approximately 108% increase applied.
- (2) Includes new Food Science program.
- (3) Includes new Data Analytics Program
- (4) Includes new MS Human Resources Management program.
- (5) Includes new MS in Criminal Justice program
- (6) Includes new MS Educational Autism
- (7) Includes new Master of Sports Coaching and Performance program.
- (8) Stretch enrollment growth rate for the Biological Sciences program of approximately 25% increase applied. Also includes new program in Cellular/Molecular Biology.
- (9) Includes new Cybersecurity program.
- (10) Stretch enrollment growth rate for Engineering program of approximately 95% increase applied. Also, includes new Construction Management program.
- (11) The University's aggregate enrollment growth rate of 23% is applied for Math and English because of their general education role.
- (12) Includes new Strategic Communications program.
- (13) Includes new Masters in Music Education program.

Appendix B: Classroom Utilization by Building and Room

The following table presents a detailed listing of all of the scheduled classrooms. The eleven rooms highlighted in tan have Weekly Room Hour (WRH) use less than 10 hours.

Table 65: Classroom Utilization by Building and Room

Inventory Data							Fall 2021			Spring 2020		
Bldg. #	Bldg. Abbr.	Room	Type	ASF	Seats	ASF / Seat	Day WRH	SO%	All WRH	Day WRH	SO%	All WRH
50310300	Brehm	107	111	1,148	50	23.0	36.2	41.0%	42.2	29.9	66.0%	29.9
50310300	Brehm	258	110	1,725	93	18.5	35.2	45.0%	35.2	28.0	44.0%	32.8
50310300	Brehm	259	110	872	50	17.4	27.0	66.0%	29.8	30.0	91.0%	30.0
50310500	Johnson	103	210	920	70	13.1	27.5	40.0%	29.6	21.2	45.0%	24.2
50310500	Johnson	112	110	962	50	19.2	24.3	36.0%	24.3	29.5	35.0%	29.5
50310500	Johnson	119	110	980	30	32.7	28.0	38.0%	30.0	24.0	47.0%	24.0
50310500	Johnson	120	250	840	36	23.3	29.2	38.0%	29.2	22.2	35.0%	22.2
50310500	Johnson	2	110	812	39	20.8	26.0	27.0%	27.0	25.1	36.0%	25.1
50310500	Johnson	202	110	960	61	15.7	36.3	41.0%	39.4	33.3	55.0%	36.4
50310500	Johnson	204	110	1,401	63	22.2	29.0	43.0%	30.0	26.8	59.0%	26.8
50310500	Johnson	207	110	1,060	50	21.2	25.8	56.0%	25.8	22.0	55.0%	22.0
50310500	Johnson	219	110	948	53	17.9	30.0	55.0%	30.0	26.0	49.0%	29.1
50310500	Johnson	227	110	943	65	14.5	24.0	25.0%	24.0	17.0	24.0%	21.2
50310500	Johnson	317	110	681	36	18.9	21.2	32.0%	22.2	18.2	21.0%	21.2
50310500	Johnson	7	110	1,078	29	37.2	29.0	27.0%	33.2	21.0	55.0%	21.0
50310800	Gooch	117	110	1,960	182	10.8	15.0	27.0%	16.4	15.0	25.0%	16.4
50310800	Gooch	121	111	958	25	38.3	11.4	38.0%	14.5	0.0	0.0%	0.0
50310800	Gooch	207	110	767	40	19.2	13.8	58.0%	13.8	15.8	59.0%	15.8
50310800	Gooch	209	111	625	20	31.2	8.9	42.0%	8.9	15.0	77.0%	15.0
50310800	Gooch	216	111	1,425	40	35.6	24.0	36.0%	25.1	27.0	35.0%	27.0
50310800	Gooch	222	110	820	30	27.3	13.0	70.0%	15.0	0.0	0.0%	0.0
50310800	Gooch	228	110	811	40	20.3	18.0	48.0%	26.3	15.2	47.0%	24.3
50310800	Gooch	230	110	770	36	21.4	19.7	53.0%	22.5	12.7	41.0%	17.7
50310800	Gooch	231	110	714	36	19.8	17.7	53.0%	20.5	9.7	66.0%	14.8
50310800	Gooch	232	110	590	30	19.7	17.5	47.0%	17.5	0.0	0.0%	0.0
50310800	Gooch	233	110	577	30	19.2	23.1	50.0%	23.1	12.0	56.0%	13.0
50310800	Gooch	311	110	736	32	23.0	24.0	56.0%	30.0	30.0	65.0%	30.0
50310800	Gooch	316	110	928	61	15.2	26.8	31.0%	29.8	23.8	22.0%	26.8
50310800	Gooch	324	110	1,109	30	37.0	9.0	38.0%	9.0	22.0	17.0%	22.0
50310800	Gooch	336	110	1,440	74	19.5	21.8	36.0%	22.9	14.1	52.0%	17.1
50310900	McCombs	10	111	350	16	21.9	6.0	66.0%	6.0	0.0	0.0%	0.0
50310900	McCombs	18	111	616	20	30.8	3.0	135.0%	3.0	5.8	118.0%	5.8
50310900	McCombs	3	110	396	16	24.8	11.8	73.0%	11.8	5.8	94.0%	5.8
50311200	Holt	115	110	576	24	24.0	8.0	54.0%	8.8	8.9	44.0%	8.9
50311200	Holt	116	110	576	34	16.9	24.0	51.0%	24.0	26.0	52.0%	29.8
50311200	Holt	117	110	553	36	15.4	30.0	60.0%	30.0	27.0	64.0%	30.1
50311200	Holt	120	110	570	20	28.5	13.5	54.0%	13.5	7.5	60.0%	7.5
50311200	Holt	121	110	3,639	247	14.7	27.0	13.0%	30.0	33.0	16.0%	33.0
50311200	Holt	203	110	903	63	14.3	20.9	51.0%	20.9	18.0	42.0%	18.0
50311200	Holt	206	110	903	56	16.1	21.0	49.0%	21.0	30.0	68.0%	30.0
50311200	Holt	208	111	310	10	31.0	0.0	0.0%	2.0	19.5	42.0%	20.1
50311200	Holt	210	110	480	29	16.6	25.2	45.0%	26.2	28.5	44.0%	30.0

Inventory Data							Fall 2021			Spring 2020		
Bldg. #	Bldg. Abbr.	Room	Type	ASF	Seats	ASF / Seat	Day WRH	SO%	All WRH	Day WRH	SO%	All WRH
50311200	Holt	212	110	593	24	24.7	24.0	66.0%	24.0	29.0	73.0%	29.0
50311200	Holt	213	110	897	46	19.5	30.0	61.0%	30.0	32.0	71.0%	32.8
50311200	Holt	214	110	593	39	15.2	14.3	47.0%	14.3	19.9	40.0%	19.9
50311200	Holt	215	110	901	49	18.4	32.0	61.0%	32.8	27.0	62.0%	30.0
50311200	Holt	304	110	596	30	19.9	26.0	58.0%	30.2	13.4	67.0%	13.4
50311200	Holt	305	110	919	52	17.7	25.8	56.0%	26.8	15.7	58.0%	15.7
50311200	Holt	306	110	596	30	19.9	15.0	70.0%	15.0	6.2	64.0%	6.2
50311200	Holt	307	110	913	59	15.5	26.7	44.0%	26.7	23.8	61.0%	23.8
50311200	Holt	308	110	593	25	23.7	31.0	76.0%	31.0	9.5	88.0%	9.5
50311200	Holt	310	110	593	30	19.8	30.0	68.0%	36.2	30.0	73.0%	30.0
50311200	Holt	312	110	593	28	21.2	27.0	79.0%	27.0	15.0	78.0%	15.0
50311200	Holt	314	110	625	32	19.5	21.0	61.0%	21.0	21.0	65.0%	21.0
50311200	Holt	405	110	581	30	19.4	37.2	63.0%	38.4	30.0	55.0%	30.0
50311200	Holt	407	110	578	33	17.5	21.0	45.0%	23.0	18.0	46.0%	20.1
50311200	Holt	408	110	856	30	28.5	21.0	36.0%	21.0	29.8	62.0%	29.8
50311200	Holt	409	110	581	30	19.4	24.0	49.0%	26.0	21.0	47.0%	21.0
50311200	Holt	412	110	578	30	19.3	26.4	72.0%	26.4	33.0	79.0%	33.0
50311200	Holt	414	110	578	32	18.1	32.2	63.0%	41.1	26.3	69.0%	40.3
50311200	Holt	416	110	581	30	19.4	21.2	72.0%	33.0	28.2	62.0%	39.1
50311400	Arts	102	110	776	16	48.5	12.0	53.0%	12.0	12.0	75.0%	12.0
50311400	Arts	142	110	1,389	55	25.3	29.3	70.0%	35.2	29.7	78.0%	32.5
50311400	Arts	244	110	642	32	20.1	18.3	28.0%	18.3	12.8	22.0%	12.8
50311400	Arts	245	110	716	33	21.7	15.3	24.0%	15.3	12.3	25.0%	12.3
50311400	Arts	246	110	1,339	65	20.6	20.1	21.0%	23.1	20.0	53.0%	20.0
50311400	Arts	258	110	477	16	29.8	9.0	26.0%	9.0	11.8	35.0%	14.7
50311500	Skyhawk	2056	110	825	45	18.3	17.8	58.0%	21.0	20.8	55.0%	26.7
50311500	Skyhawk	2059	110	930	45	20.7	26.8	66.0%	29.8	26.7	62.0%	33.0
50311500	Skyhawk	2060	110	825	45	18.3	14.0	48.0%	17.8	26.7	53.0%	26.7
50311500	Skyhawk	2063	110	625	30	20.8	24.0	62.0%	27.1	13.0	56.0%	18.8
50311600	Elam	2001	110	962	30	32.1	14.8	64.0%	14.8	16.3	83.0%	16.3
50311900	Sociology	100	110	771	50	15.4	20.7	66.0%	23.6	31.0	76.0%	40.9
50311900	Sociology	101	110	529	35	15.1	28.8	47.0%	34.7	23.4	46.0%	32.9
50311900	Sociology	102	110	380	25	15.2	15.0	58.0%	15.0	18.0	72.0%	23.9
50312100	Graham	211	111	514	32	16.1	6.0	55.0%	7.0	7.3	43.0%	15.5
50312100	Graham	212	111	924	57	16.2	6.0	54.0%	12.0	9.0	66.0%	15.0
50312100	Graham	213	111	549	30	18.3	10.0	39.0%	10.0	2.0	60.0%	2.0
50312100	Graham	214	111	505	32	15.8	3.0	78.0%	22.3	7.3	42.0%	16.3
50312800	ROTC	202	111	1,100	25	44.0	12.3	33.0%	13.9	14.7	26.0%	19.8
50315000	Business Adm	135	110	966	52	18.6	29.7	47.0%	32.5	23.8	54.0%	26.8
50315000	Business Adm	201	110	850	61	13.9	32.7	39.0%	35.7	29.7	60.0%	32.7
50315000	Business Adm	203	110	901	63	14.3	35.7	50.0%	38.7	22.1	38.0%	22.1
50315000	Business Adm	207	110	840	40	21.0	29.7	46.0%	30.7	29.7	52.0%	29.7
50315000	Business Adm	220	110	632	40	15.8	20.8	38.0%	20.8	17.8	60.0%	17.8
50315000	Business Adm	33	110	1,081	49	22.1	32.7	41.0%	41.5	26.8	52.0%	35.7
50315000	Business Adm	36	110	1,167	52	22.4	32.7	38.0%	38.6	29.7	42.0%	29.7
50365400	VetScienceTeach	101	110	1,154	40	28.8	23.2	64.0%	27.2	23.2	59.0%	24.2
50366100	Power	102	110	716	25	28.6	16.5	55.0%	17.5	15.3	46.0%	16.4

Appendix C: Classrooms with No Scheduled Use

After a review there were still six rooms coded as classrooms that had no scheduled use in Fall 2021. These rooms are summarized in Table 66 below.

Table 66: Classrooms with No Scheduled Use

Bldg. #	Building	Room	Type	Seats	ASF	CFP and UTM Comments
50310800	Gooch	121A	111	25	952	CFP: The class file has classes in 121B, changed to 121. Divided room. Only 1 room has usage.
50310800	Gooch	206	111	51	767	UTM: Debbie Mount uses this for non-degree programs.
50310800	Gooch	223	110	21	450	UTM: Gooch 223 & 224 belong to Department of Accounting, Finance, Economics and Political Science. I can't get in touch with any faculty of staff from Business Administration.
50310800	Gooch	224	110	24	441	UTM: Gooch 223 & 224 belong to Department of Accounting, Finance, Economics and Political Science. I can't get in touch with any faculty of staff from Business Administration.
50310900	McCombs	2	111	20	347	UTM:McCombs 2 is used by John Glass & the Honors Program. I don't know why it doesn't have classes scheduled in it.
50315000	Business Adm	16	110	44	621	CFP: Scheduled in Spring 2020 but nothing for Fall 2021. UTM: Business Admin 16 is definitely a classroom that is utilized. I have no idea why it wouldn't have classes scheduled but I know that classes meet in there. Floorplan attached.

Appendix D: Teaching Lab Space Needs Calculation Details

The following table summarizes the calculated need by department and space type for the current and future need using the consultant's method compared with the THEC guidelines.

Table 67: Alternative Model - Teaching Lab Space Needs

College/Department	Space Inventory Data						Utilization Fall 2021		Current Need			Future Need		Recommended			
	Space Type	Current Teaching Lab Count	Existing ASF	Teaching Capacity	ASF/Station	W/H/Day	Station Occupancy %	Alternative Model	THEC Model	Enrollment Growth %	Alternative Model	THEC Model	Current ASF Need	Difference from Existing ASF	Recommend No. o Labs	Future ASF Need	Difference from Existing ASF
College of Agriculture & Applied Sciences																	
Agri., Geosciences & Natural Resources	Teaching Labs	19	20,394	309	66.0	203.3	49%	16,230	23,120		20,205	32,020	16,230	4,164	20	35,205	(14,811)
	Service	14	4,448	0	0.0	0.0	0%	5,305	7,906		6,792	11,261	5,305	(857)	0	6,792	(2,344)
	Open Labs	3	1,410	0	0.0	0.0	0%	2,696	2,696		3,717	3,717	2,696	(1,286)	0	3,717	(2,307)
Agri., Geosciences & Nat. Resources	Total	19	26,252	309	85.0	20.3	49%	24,231	33,722	38%	30,714	46,998	24,231	2,021	20	45,714	(19,462)
Family & Consumer Sciences																	
	Teaching Labs	4	5,141	90	57.1	38.1	43%	5,400	4,350		5,400	5,400	5,141	0	5	7,091	(1,950)
	Service	3	919	0	0.0	0.0	0%	1,350	1,155		1,350	1,530	919	0	0	919	0
	Open Labs	0	0	0	0.0	0.0	0%	0	295		0	370	0	0	0	0	0
Family & Consumer Sciences	Total	7	6,060	90	67.3	9.5	43%	6,750	5,800	25%	6,750	7,300	6,060	0	5	8,010	(1,950)
Military Science & Leadership																	
	Total	1	144	0	0.0	0.0	0%	55	55	0%	144	65	144	0	1	144	0
Totals CAAS		23	32,456	399	81.3	17.2	48%	31,036	39,577	36%	37,608	54,363	30,435	2,021	26	53,868	(21,412)
College of Business and Global Affairs																	
	Teaching Labs	3	2,764	77	35.9	47.1	59%	2,695	4,240		2,695	4,240	2,764	0	5	5,220	(2,456)
	Service	0	0	0	0.0	0.0	0%	0	848		0	848	0	0	0	0	0
	Open Labs	2	658	30	21.9	0.0	0%	849	2,122		906	2,265	658	0	2	0	658
College of Business and Global Affairs	Total	5	3,422	107	32.0	15.7	59%	3,544	7,210	7%	3,601	7,353	3,422	0	7	5,220	(1,798)
College of Education, Health & Behavioral Sciences																	
	Teaching Lab	3	4,121	120	34.3	23.2	51%	5,100	7,200		5,100	7,200	4,121	0	3	4,121	0
	Service	0	0	0	0.0	0.0	0%	1,530	2,160		1,530	2,160	0	0	0	0	0
	Open Lab	0	1,984	61	0.0	0.0	0%	346	346		346	348	1,984	0	0	1,984	0
Nursing	Total	11	6,105	181	33.7	14.4	53%	6,976	9,706	1%	6,976	9,708	6,105	0	3	6,105	0

College/Department	Space Inventory Data						Utilization Fall 2021		Current Need		Future Need		Recommended				
	Space Type	Current Teaching Lab Count	Existing ASF	Teaching Capacity	ASF/Station	MPH-Day	Station Occupancy %	Alternative Model	THEC Model	Enrollment Growth %	Alternative Model	THEC Model	Current ASF Need	Difference from Existing ASF	Recommend No. o Labs	Future ASF Need	Difference from Existing ASF
Health & Human Performance	Teaching Lab	1	1,779	25	71.2	14.6	43%	1,875	2,220		1,875	2,220	1,779	0	1	1,779	0
	Service	2	634	0	0.0	0.0	0%	563	600		563	600	634	0	0	634	0
Health and Human Performance	Open Lab	2	1,509	0	0.0	0.0	0%	1,275	1,275		1,276	1,276	1,509	0	2	1,509	0
	Total	5	3,922	25	156.9	14.6	43%	3,713	4,095	0%	3,714	4,096	3,922	0	3	3,922	0
Psychology/Behav.I Sciences	Teaching Lab	1	580	20	29.0	20.2	43%	800	960		800	960	580	0	1	580	0
	Service	0	0	0	0.0	0.0	0%	160	192		160	192	0	0	0	0	0
	Open labs	10	1,420	0	0.0	0.0	0%	1,270	1,270		1,285	1,285	1,420	0	10	1,420	0
Psychology/Behavioral Sciences	Total	11	2,000	20	100.0	20.2	43%	2,230	2,422	1%	2,245	2,437	2,000	0	11	2,000	0
Educational Studies	Teaching Labs	2	1,377	27	51.0	21.4	85%	1,380	2,080		1,380	2,080	1,377	0	2	1,377	0
	Service	2	707	0	0.0	0.0	0%	321	416		321	416	707	0	0	707	0
	Open Labs	1	235	0	0.0	0.0	0%	820	820		710	710	235	0	1	235	0
Educational Studies	Total	5	2,319	27	85.9	10.7	85%	2,521	3,316	13%	2,411	3,206	2,319	0	3	2,319	0
Totals CEHBS		32	14,346	253	56.7	14.2	53%	15,439	19,539	-2%	15,345	19,447	14,346	0	20	14,346	0
College of Engineering & Natural Sciences																	
Dean, Coll. of Engineering & Natural Sciences	Project /Maker Space	11	4,849	0	0.0	0.0	0%	0	0	0%	7,816	0	4,849	0	11	4,849	0
Biological Sciences	Teaching Labs	16	17,435	362	48.2	16.3	65%	12,960	9,060		15,840	11,040	12,960	4,475	11	15,840	1,595
	Service	17	4,939	0	0.0	0.0	0%	3,240	2,265		3,960	2,760	3,240	1,699	0	3,960	979
	Open Labs	2	1,263	0	0.0	0.0	0%	1,421	1,421		1,775	1,775	1,421	(158)	2	1,775	(512)
	Total	35	23,637	362	65.3	16.3	65%	17,621	12,746	25%	21,575	15,575	17,621	6,016	13	21,575	2,062
Chemistry & Physics	Teaching Labs	7	10,580	196	54.0	35.8	68%	7,650	12,690		7,650	12,690	10,580	0	7	10,580	0
	Service	7	3,703	0	0.0	0.0	0%	2,160	3,600		2,160	3,600	3,703	0	0	3,703	0
	Open Labs	0	0	0	0.0	0.0	0%	0	0		0	0	0	0	0	0	0
	Total	14	14,283	196	72.9	35.8	0%	9,810	16,290	18%	10,625	16,290	14,283	0	7	14,283	0
Engineering	Teaching Labs	6	9,050	192	47.1	37.8	33%	9,180	3,525		9,180	5,025	9,050	0	6	9,050	0
	Service	9	2,260	0	0.0	0.0	0%	2,754	1,058		2,754	1,508	2,260	0	0	2,260	0
	Open Labs	4	1,822	0	0.0	0.0	0%	869	435		1,700	850	1,822	0	4	1,822	0
	Project Space	1	2,967	0				2,967	2,967		2,967	2,967	2,967		1	2,967	

College/Department	Space Inventory Data						Utilization Fall 2021		Current Need		Future Need		Recommended				
	Space Type	Current Teaching Lab Count	Existing ASF	Teaching Capacity	ASF/Station	MPH-Day	Station Occupancy %	Alternative Model	THEC Model	Enrollment Growth %	Alternative Model	THEC Model	Current ASF Need	Difference from Existing ASF	Recommend No. o Labs	Future ASF Need	Difference from Existing ASF
Engineering	Total	19	16,099	192	83.8	6.3	33%	15,770	7,984	96%	16,601	10,350	16,099	0	11	16,099	0
Computer Sciences	Teaching Labs	2	2,126	42	50.6	0.0	0%	2,100	3,960	0%	4,200	7,080	2,100	26	4	4,200	(2,074)
	Service	0	0	0	0.0	0.0	0%	0	990	0%	0	1,770	0	0	0	0	0
	Open Labs	0	0	0	0.0	0.0	0%	0	193	135%	0	455	0	0	0	0	0
Computer Sciences	Total	2	2,126	42	50.6	0.0	0%	2,100	5,143		4,200	9,305	2,100	26	4	4,200	(2,074)
Mathematics & Statistics	Total	2	872	0	0.0	0.0	0%	868	1,447	23%	1,065	1,775	1,447	(575)	2	1,775	(903)
	Totals CENS	83	61,866	792	78.1	12.4	60%	46,170	43,611	28%	61,882	53,295	56,399	5,467	48	62,781	(915)
College of Humanities and Fine Arts																	
English & Modern Foreign Lang.																	
English & Modern Foreign Lang.	Teaching Labs	2	1,124	46	24.4	33.0	63%	1,380	2,780		1,380	2,780	1,124	0	2	1,124	0
	Service	0	0	0	0.0	0.0	0%	0	595		0	595	0	0	0	0	0
	Open Labs	2	1,481	0	0.0	0.0	0%	1,459	1,459		1,800	1,800	1,481	0	2	1,481	0
English & Modern Foreign Lang.	Total	4	2,605	46	56.6	16.5	63%	2,839	4,834	23%	3,180	5,175	2,605	0	4	2,605	0
Communications	Total	1	729	16	45.6	20.8	77%	640	3,105	9%	640	4,360	729	0	2	1,429	(700)
Visual & Theatre Arts																	
Visual & Theatre Arts	Metal & Jewelry	1	1,407	15	93.8	11.8	63%	1,050	0		1,050	0	0	0	0	0	0
	Sculpture	1	1,449	15	96.6	6.0	73%	975	0		975	0	0	0	0	0	0
	Acting	1	1,849	16	115.6	9.6	37%	1,600	0		1,600	0	0	0	0	0	0
	Printmaking	1	1,447	20	72.4	14.8	68%	1,200	0		1,200	0	0	0	0	0	0
	Painting	1	2,004	20	100.2	6.0	55%	1,200	0		1,200	0	0	0	0	0	0
	Graphic Design	1	1,739	15	115.9	20.8	48%	1,050	0		1,050	0	0	0	0	0	0
Visual & Theatre Arts	Drawing	1	1,634	20	81.7	18.0	73%	1,300	0		1,300	0	0	0	0	0	0
	Dance	1	0	20	145.7	11.7	19%	0	0		1,948	1,948	0	0	1	1,948	(1,948)
	Teaching Labs	8	14,443	141	102.4	98.7	55%	8,375	8,900		10,323	8,900	14,443	0	8	14,443	0
Visual & Theatre Arts	Service	8	1,876	0	0.0	0.0	0%	2,594	3,040		2,594	3,040	1,876	0	0	1,876	0
	Open Lab	1	465	0	0.0	0.0	0%	625	625		637	637	465	0	1	465	0
Visual & Theatre Arts	Total	17	16,784	141	119.0	12.3	55%	11,593	12,565	2%	13,554	12,577	16,784	0	10	18,732	(1,948)
Music																	
Music	Teaching Labs	6	10,483	187	56.1	81.0	39%	9,850	8,190		11,198	8,190	10,483	0	7	11,831	(1,348)
	Service	4	3,010	0	0.0	0.0	0%	2,955	2,433		2,955	2,433	3,010	0	0	3,010	0
	Practice	23	3,246	0	0.0	0.0	0%	3,028	391		3,281	637	3,246	0	23	3,246	0
	Total	33	16,739	187	89.5	13.5	39%	15,833	11,014	8%	17,434	11,260	16,739	0	30	18,087	(1,348)

College/Department	Space Inventory Data							Utilization Fall 2021		Current Need		Future Need		Recommended			
	Space Type	Current Teaching Lab Count	Existing ASF	Teaching Capacity	ASF/Station	WRH-Day	Station Occupancy %	Alternative Model	THEC Model	Enrollment Growth %	Alternative Model	THEC Model	Current ASF Need	Difference from Existing ASF	Recommend No. o Labs	Future ASF Need	Difference from Existing ASF
Totals - CHFA	55	36,857	390	94.5	13.7	49%	30,905	31,518	11%	34,808	33,373	36,857	0	46	40,853	(3,996)	
Chancellor																	
Information Technology Services																	
Teaching Lab	1	805	26	31.0	6.0	87%	1,040	1,392		1,040	1,392	805	0	1	805	0	
Service	0	0	0	0.0	0.0	0%	0	0		0	0	0	0	0	0	0	
Open Labs	3	3,046	0	0.0	0.0	0%	3,046	0		3,046	0	3,046	0	3	3,046	0	
Information Tech Svcs.	Total	4	3,851	26	148.1	6.0	4,086	1,392	0%	4,086	1,392	3,851	0	4	3,851	0	
Enrollment Svcs. & Student Engagement																	
Student Success Ctr.																	
Teaching Lab	1	755	18	41.9	6.0	35%	720	384		720	384	755	0	1	755	0	
Service	0	0	0	0.0	0.0	0%	0	77		0	77	0	0	0	0	0	
Open labs	0	0	0	0.0	0.0	0%	0	0		0	0	0	0	0	0	0	
Student Success Ctr.	Total	4	755	18	41.9	6.0	720	461	0%	720	461	755	0	1	755	0	
Provost																	
College Library	Open Lab	1	425	0	0.0	0.0	425	425	0%	425	425	425	0	1	425	0	
Academic Affairs	Open Comp.Lab	0	0									0	0	1	1,020	(1,020)	
Unassigned			517														
Main Campus Totals																	
Teaching Labs	82	102,957	1,878	55.2	0.0	0%	89,375	98,156		98,330	115,961	94,292	8,665	85	125,949	(22,992)	
Service	70	22,496	30	0.0	0.0	0%	22,931	25,891		25,138	31,346	21,654	843	0	23,861	(1,365)	
Open Labs / Mikospace	56	29,042	91	0.0	0.0	0%	22,019	15,275		32,896	18,391	30,545	(2,020)	69	33,309	(4,267)	
Total	208	154,495	1,999	77.3	0.0	0%	134,325	139,322	15%	156,364	165,698	146,490	7,488	154	183,119	(28,624)	

Appendix E: Teaching Lab Space Utilization

The following table displays the room-by-room utilization for Fall 2021 and Spring 2020. With the completion of the Latimer Science and Engineering Building several of these rooms have been reassigned as noted in the last column.

- There were 62 rooms used and scheduled on average about 14 hours a week during the day (WRH-Day) with about 50 to 55% of the stations occupied.
- Seven rooms were scheduled more than 25 hours during the day Fall term while only two were schedule more than 25 hours Spring term.

Table 68: Teaching Lab Utilization

College / Department	Space Inventory Data (Fall 2021)							Fall 2021				Spring 2020				New Assignment
	Building	Room	Square Feet	Level	Inventory Capacity	Teaching Capacity	ASF/Station	WRH-All	WRH-Day	Station Occupancy %	Growth Potential %	WRH-All	WRH-Day	Station Occupancy %	Growth Potential %	
COLLEGE OF AGRICULTURE AND APPLIED SCIENCES																
Agriculture, Geosciences & Natural Resources																
	Brehm	202	700	UD	30	32	21.9	35.2	35.2	59%	-	29.1	28.6	57%	-3%	
	Brehm	204	700	UD	30	34	20.6	27.1	27.1	46%	29%	21.1	21.1	46%	39%	
	Brehm	219	1,071	LD	50	25	42.8	22.4	18.9	40%	61%	17.1	17.1	59%	47%	
	Johnson	203	939	LD	32	20	47.0	2.0	2.0	25%	97%	6.1	6.1	43%	86%	
	Johnson	206	936	LD	32	22	42.5	20.5	20.5	78%	17%	24.6	24.6	85%	-8%	
	Johnson	228	1,005	UD	32	20	50.3	21.5	21.5	16%	78%	16.2	16.2	43%	57%	
	Johnson	221	546	LD	15	15	36.4	7.1	7.1	78%	71%	11.0	11.0	58%	67%	
	McWherter	104/105	5,448	LD	50	51	106.8	24.3	24.3	37%	54%	20.2	18.7	43%	58%	
	Vet Sci/Lab	101	585	UD	40	22	26.6	26.6	26.6	51%	29%	24.4	24.4	44%	44%	
		106	963	UD	20	24	40.1	20.2	20.2	64%	19%	17.2	17.2	59%	36%	
	Totals	10	12,893		331	265	48.7	206.8	203.3	49%		186.9	184.9	54%		
	Averages							20.7	20.3	49%		18.7	18.5	54%		
Family and Consumer Sciences																
	Gooch	310	910	LD	19	15	60.7	4.2	2.6	70%	91%	4.1	4.1	70%	85%	
	Gooch	315	1354	UD	50	30	45.1	17.8	17.1	23%	75%	16.8	16.8	59%	38%	
	Gooch	322	1756	UD	22	30	58.5	12.0	12.0	68%	49%	11.0	10.6	25%	83%	
	Gooch	328	1121	UD	18	15	74.7	6.5	6.5	39%	84%	16.5	16.5	52%	46%	
	Totals CAAS	4	5141		109	90	57.1	40.5	38.1	43%		48.4	48.0	49%		
	Averages							10.1	9.5	43%		12.1	12.0	49%		
	TOTALS CAAS	14	22,779		440	355	64.2	17.7	17.2	48%		16.8	16.6	53%		
COLLEGE OF BUSINESS AND GLOBAL AFFAIRS																
	Business Adm	102	311	UD	16	12	25.9	2.8	2.8	50%	91%	6.0	6.0	113%	58%	
	Business Adm	227	1383	UD	40	35	39.5	29.5	29.5	61%	-	20.8	20.8	58%	24%	
	Business Adm	25	1070	UD	25	30	35.7	14.8	14.8	54%	50%	14.7	14.7	69%	36%	
	TOTALS CBGA	3	2764		81	77	35.9	47.1	47.1	59%		41.5	41.5	25%		
	Averages							14.4	14.4	53%		13.0	12.0	51%		
COLLEGE OF EDUCATION, HEALTH & BEHAVIORAL SCIENCES																
Nursing																
	Gooch	120	1449	UD	20	35	41.4	15.7	15.7	59%	42%	12.3	9.2	63%	64%	

Space Inventory Data (Fall 2021)								Fall 2021				Spring 2020				New Assignment
College / Department	Building	Room	Square Feet	Level	Inventory Capacity	Teaching Capacity	ASF/Station	WRH-All	WRH-Day	Station Occupancy %	Growth Potential %	WRH-All	WRH-Day	Station Occupancy %	Growth Potential %	
	Gooch	132	726	UD	48	25	29.0	4.2	4.2	53%	86%	8.5	8.5	76%	60%	
	Gooch	133	1946	LD	71	60	32.4	23.2	23.2	51%	38%	18.3	18.3	47%	55%	
	Totals	3	4121		139	120	34.3	43.1	43.1	53%		39.1	36.0	54%		
	Averages							14.4	14.4	53%		13.0	12.0	54%		
Health and Human Performance																
	Skyhawk	1081	1779	UD	30	25	71.2	16.1	14.6	43%	61%	13.1	13.1	41%	66%	
Psychology/Behavioral Sciences																
	Holt	313	580	UD	35	20	29.0	20.2	20.2	43%	46%	18.3	17.0	53%	44%	
Educational Studies																
	Gooch	210	887	UD	10	15	59.1	14.7	14.7	97%	11%	0.0	0.0	0%	100%	
	Gooch	226	490	UD	14	12	40.8	6.7	6.7	51%	79%	2.8	2.8	67%	88%	
	Totals	2	1377		24	27	51.0	21.4	21.4	85%		2.8	2.8	67%		
	Averages							10.7	10.7	85%		1.4	1.4	67%		
	TOTALS CEHBS	7	7,857		228	192	40.9	14.4	14.2	53%		10.5	9.8	50%		
COLLEGE OF ENGINEERING AND NATURAL SCIENCES																
Biological Sciences																
General Biology																
	Brehm	230	788	LD	24	24	32.8	23.5	23.5	45%	45%	20.5	20.5	92%	2%	AGNR
	Brehm	232	884	LD	24	24	36.8	11.2	11.2	53%	69%	16.4	16.4	84%	28%	AGNR
	Brehm	235	928	LD	24	24	38.7	17.2	17.2	68%	39%	12.2	12.2	80%	49%	AGNR
	Brehm	237	930	LD	24	24	38.8	27.6	27.6	77%	11%	16.4	16.4	87%	26%	AGNR
	Sub Totals	4	3,530		96	96	36.8	79.6	79.6	62%		65.5	65.5	87%		
Zoology																
	Brehm	127	788	LD	24	16	49.3	30.5	29.0	82%	24%	36.7	32.1	93%	-55%	
	Brehm	141	851	UD	20	16	53.2	14.2	14.2	58%	49%	21.1	19.1	70%	17%	
	Brehm	229	684	UD	30	16	42.8	12.2	12.2	60%	55%	6.2	6.2	87%	66%	
	Sub Totals	3	2,323		74	48	48.4	56.8	55.3	71%		64.0	57.3	84%		
Molecular																
	Brehm	130	799	UD	16	12	66.6	8.1	8.1	79%	60%	8.1	8.1	75%	62%	
Botany																
	Brehm	137	817	UD	21	20	40.9	4.1	3.6	32%	93%	8.2	7.7	58%	72%	
Microbiology																
	Brehm	136	950	LD	20	16	59.4	16.4	16.4	72%	26%	20.4	18.9	75%	11%	
	Averages	10	8,419		227	192	43.8	16.5	16.3	65%		16.6	15.7	83%		
Chemistry & Physics																
	Johnson	223	1,124	LD	16	16	70.3	8.2	8.2	80%	66%	12.3	12.3	78%	50%	AGNR
	Johnson	224	1,375	LD	24	24	57.3	16.4	16.4	72%	39%	17.3	17.3	59%	47%	BIOL
	Johnson	226	984	LD	24	24	41.0	11.2	11.2	56%	67%	20.3	20.3	45%	53%	CW
	Johnson	305	1,558	0	60	60	26.0									BIOL
	Johnson	306	924	0	20	20	46.2									BIOL
	Johnson	307	962	0	16	16	60.1									BIOL
	Johnson	314	1,697	0	48	48	35.4									BIOL

Scheduled in classrooms

Space Inventory Data (Fall 2021)								Fall 2021				Spring 2020				New Assignment
College / Department	Building	Room	Square Feet	Level	Inventory Capacity	Teaching Capacity	ASF/Station	WRH-All	WRH-Day	Station Occupancy %	Growth Potential %	WRH-All	WRH-Day	Station Occupancy %	Growth Potential %	
	Johnson	330	1,344	0	24	24	56.0									BIOL
	Johnson	332	1,360	0	24	24	56.7									BIOL
	Totals	3	11,328		256	256	0.0	35.8	35.8	68%		50.0	50.0	56%		
	Averages							11.9	11.9	68%		16.7	16.7	56%		
Engineering																
	Johnson	125	1,225	LD	25	20	61.3	9.2	7.5	37%	86%	9.2	7.5	62%	76%	BIOL
	Johnson	8	1,625	UD	18	20	81.3	3.0	2.5	30%	95%	8.1	7.0	43%	81%	AGNR
	Johnson	1	928	UD	0	15	61.9	2.0	2.0	47%	94%	5.8	5.8	27%	90%	AGNR
	Johnson	102	951	UD	26	24	39.6	13.3	11.7	36%	74%	11.4	10.8	69%	53%	AGNR
	Johnson	108	2,884	UD	30	29	99.4	3.1	3.1	28%	95%	6.0	5.0	40%	88%	
	Johnson	111	938	UD	24	24	39.1	12.1	11.0	30%	79%	0.0	0.0	0%	100%	BIOL
	Totals	6	8,551		123	132	64.8	42.6	37.8	33%	21%	40.5	36.2	53%	(20%)	
	Averages							7.1	6.3	33%		8.1	7.2	53%		
	Total CENS	19	28,298	0	606	580	48.8	12.8	12.4	60%		13.5	12.8	72%		
COLLEGE OF HUMANITIES AND FINE ARTS																
English & Modern Foreign Languages																
	Holt	118	570	UD	24	24	23.8	27.0	27.0	66%	26%	24.1	21.5	70%	37%	
	Holt	119	554	LD	22	22	25.2	6.0	6.0	45%	89%	6.0	6.0	45%	89%	
	Totals	2	1,124	0	46	46	24.4	33.0	33.0	63%		30.1	27.5	65%		
	Averages							16.5	16.5	63%		15.0	13.8	65%		
Communications																
	Gooch	308	729	UD	0	16	45.6	20.8	20.8	77%	33%	24.0	24.0	79%	21%	
Visual and Theatre Arts																
Metal & Jewelry Arts																
	Arts	156	1,407	UD	16	15	93.8	11.8	11.8	63%	53%	12.0	12.0	80%	40%	
Sculpture																
	Arts	161	1,449	UD	16	15	96.6	6.0	6.0	73%	73%	12.0	12.0	83%	38%	
Acting																
	Arts	167	1,849	LD	20	16	115.6	9.6	9.6	37%	82%	5.7	5.7	47%	86%	
Printmaking																
	Arts	259	1,447	LD	20	20	72.4	14.8	14.8	68%	47%	18.0	18.0	62%	42%	
Painting																
	Arts	261	2,004	UD	20	20	100.2	6.0	6.0	55%	79%	6.0	6.0	40%	85%	
Graphic Design																
	Arts	267	1,739	UD	16	15	115.9	20.8	20.8	48%	37%	33.0	33.0	61%	(26%)	
Drawing																
	Arts	270	1,634	LD	20	20	81.7	18.0	18.0	73%	31%	12.0	12.0	55%	66%	
Dance																
	Elam	3033	2,914	UD	30	20	145.7	14.8	11.7	19%	86%	20.3	14.8	66%	39%	
	Totals	8	14,443		158	141	102.4	101.9	98.7	55%		118.9	113.5	63%		
	Averages							12.7	12.3	55%		14.9	14.2	63%		
Music																
Percussion Rehearsal																
	Arts	118	1,797	UD	50	20	89.9	8.2	8.2	77%	61%	7.7	6.2	47%	82%	
Choral Rehearsal																
	Arts	122	2,676	UD	122	50	53.5	14.4	14.4	24%	78%	17.3	12.3	32%	75%	
Band Rehearsal																
	Arts	136	3,721	UD	150	75	49.6	22.8	22.8	41%	42%	17.5	17.5	20%	78%	
	Arts	224	642	LD	0	10	64.2	10.3	10.3	57%	70%	14.8	14.8	69%	47%	
	Arts	240	543	LD	0	12	45.3	13.7	13.7	42%	70%	10.9	10.9	63%	64%	
	Arts	243	1,104	LD	20	20	55.2	12.3	11.7	31%	81%	12.1	11.5	36%	78%	
	Totals	6	10,483		342	187	56.1	81.6	81.0	39%		80.1	73.1	31%		

Space Inventory Data (Fall 2021)								Fall 2021				Spring 2020				New Assignment				
College / Department	Building	Room	Square Feet	Level	Inventory Capacity	Teaching Capacity	ASF/Station	WRH-All	WRH-Day	Station Occupancy %	Growth Potential %	WRH-All	WRH-Day	Station Occupancy %	Growth Potential %					
Averages								13.6	13.5	39%		13.4	12.2	31%						
TOTALS CHFA								17	26,779	0	546	390	68.7	14.0	13.7	49%	14.9	14.0	49%	
CHANCELLOR																				
Information Technology Services																				
	Gooch	212	805	0	26	26	31.0	6.0	6.0	87%	68%	3.0	3.0	42%	92%					
ENROLLMENT SERVICES AND STUDENT ENGAGEMENT																				
	Student Success Ctr																			
	Gooch	325	755	0	18	18	41.9	6.0	6.0	35%	87%	8.3	8.3	62%	68%					
ALL SCHEDULED TEACHING LABS TOTALS		62	90,037		1,945	1,638	55.0	891.8	872.9	50%		868.0	833.7	55%						
AVERAGES								14.4	14.1			14.0	13.4							

Appendix F: Research Space Needs Calculation Details

Table 69: Alternative Model - Research Space Needs Detailed Calculations

College/ Department	Space Type	Existing ASF	Current		Projected	
			Guideline ASF	Surplus (Deficit)	Guideline ASF	Surplus (Deficit)
COLLEGE OF AGRICULTURE AND APPLIED SCIENCES						
Agriculture, Geosciences & Natural Resources	Research Labs	6,984	11,672	(4,688)	11,672	(4,688)
	Student Engagement Research	0	5,520	(5,520)	5,520	(5,520)
Family and Consumer Sciences	Research Labs	212	1,200	(988)	1,800	(1,588)
	Student Engagement Research	0	800	(800)	1,000	(1,000)
College of Agriculture and Applied Sciences Totals		7,196	19,192	(11,996)	19,992	(12,796)
COLLEGE OF BUSINESS & GLOBAL AFFAIRS						
	Student Engagement Research	0	7,920	(7,920)	8,880	(8,880)
COLLEGE OF EDUCATION, HEALTH & BEHAVIORAL SCIENCES						
Behavioral Sciences	Student Engagement Research	0	2,160	(2,160)	2,160	(2,160)
Educational Studies	Student Engagement Research	0	3,360	(3,360)	3,600	(3,600)
Health and Human Performance	Student Engagement Research	0	1,680	(1,680)	1,920	(1,920)
Nursing	Student Engagement Research	0	1,920	(1,920)	1,920	(1,920)
Psychology	Student Engagement Research	0	960	(960)	960	(960)
College of Education, Health & Behavioral Sciences Totals		0	10,080	(10,080)	10,560	(10,560)
COLLEGE OF ENGINEERING AND NATURAL SCIENCES						
Biological Sciences	Research Labs	8,355	8,125	230	8,535	(180)
	Student Engagement Research	0	3,600	(3,600)	4,080	(4,080)
Chemistry & Physics	Research Labs	7,155	6,595	560	6,595	560
	Student Engagement Research	0	3,120	(3,120)	3,120	(3,120)
Computer Sciences	Research Labs	0	900	(900)	945	(945)
	Student Engagement Research	0	720	(720)	1,440	(1,440)
Engineering	Student Engagement Research	0	2,640	(2,640)	2,880	(2,880)
Mathematics and Statistics	Student Engagement Research	0	2,400	(2,400)	2,400	(2,400)
College of Engineering and Natural Sciences Totals		15,510	28,100	(12,590)	29,995	(14,485)
COLLEGE OF HUMANITIES AND FINE ARTS						
Communications	Student Engagement Research	0	1,440	(1,440)	1,920	(1,920)
English & Modern Foreign Languages	Student Engagement Research	0	3,360	(3,360)	3,360	(3,360)
History and Philosophy	Student Engagement Research	0	2,640	(2,640)	2,640	(2,640)
Music	Student Engagement Research	0	3,120	(3,120)	3,360	(3,360)
Visual and Theatre Arts	Student Engagement Research	0	1,440	(1,440)	1,440	(1,440)
College of Humanities and Fine Arts Totals		0	12,000	(12,000)	12,720	(12,720)
PROVOST						
	Test Hub Fabrication Lab	0	0	0	14,140	(14,140)
	Test Hub Lab Storage	0	0	0	1,500	(1,500)
	Test Hub Team Labs	0	0	0	2,400	(2,400)
Provost Totals		0	0	0	18,040	(18,040)
Totals - Research Space		22,706	77,292	(54,586)	100,187	(77,481)

STUDENT LIFE ASSESSMENT REPORT

Introduction

Wachalski Advisory, Inc. (“WA”) is a real estate consulting practice providing a wide range of capital planning and project implementation services to higher education institutions across the United States. In the Spring of 2021, WA was retained by University of Tennessee at Martin (“University”, “UTM”), as a sub-consultant to DLR Group, to provide planning and needs assessment for student life facilities as part of a campus-wide master plan (“Project”). The facility types in WA’s scope included: 1) student housing, 2) dining, 3) student center, and 4) student recreation / wellness. During the course of the Project, WA provided the following services:

- Review of existing facilities and operations,
- Strategic visioning with the University’s key stakeholders,
- Student focus groups,
- Needs assessment / programming, and
- Facility concept development.

This report outlines WA’s process, findings, and recommendations.

Student Housing

UTM operates an on-campus student housing program consisting of approximately 2,255 beds located in six residential complexes, as shown in the exhibit below:

Total Bedspace Counts			
Academic Year	19/20 Beds	20/21 Beds	21/22 Beds
Browning Hall	528	528	528
Ellington Hall	520	520	520
Cooper Hall	272	272	272
University Village II	387	387	387
University Village I	387	387	387
University Courts 1 Bedroom	51	51	51
University Courts 2 Bedroom	98*	98*	98
University Courts 3 Bedroom	12*	12*	12
Total	2255	2255	2255

Exhibit 1. Student Housing Capacity

- Ellington Hall and Browning Hall are older residence halls with semi-suite units and, primarily, double occupancy.
- Cooper Hall offers full-suites consisting of four double-occupancy bedrooms, a living room, and a bathroom.
- University Village I and University Village II offer apartment-style two-, three-, and four-bedroom units with either private or shared bedrooms.
- University Courts is a student and family-friendly apartment complex that offers one, two, and three-bedroom units. All apartments are unfurnished but include a refrigerator and stove. Internet, cable, and water are included in the semester rent. Residents are, however, responsible for their own electricity. Each apartment has a kitchen, living area, and a bathroom.

UTM requires that students enrolled with less than 45 completed credit hours before the first day of classes sign an academic-year lease. The following exemptions are available:

- Students who will be 21 before the first day of classes of their first term of enrollment are automatically exempt from the requirement to live on campus.
- Students may also be exempt from the requirement to live on campus while they live in the principal residence of a parent or legal guardian within the surrounding counties.

The historical system-wide occupancy rates in the mid 70% range (excluding the COVID-19 pandemic year of 2020/21) suggest that UTM’s housing system offers too many beds relative to the student enrollment.

Furthermore, based on the average historical capture rate (beds occupied/on-ground FTE enrollment) of 38% extrapolated over the projected 2031 enrollment of 4,500 FTE’s, WA determined that the housing system should offer no less than 1,700 beds (see exhibit below). In discussion with UTM’s leadership, the total targeted number of beds within the housing system was increased to 1,800.

	Historical								Projected 2031
	2012	2013	2014	2015	2016	2017	2018	2019	
On Ground (FTE)	5,695	5,463	5,186	4,853	4,442	4,422	4,235	4,195	4,500
On-line (FTE)	469	501	503	569	620	730	795	833	
Total (FTE)	6,164	5,964	5,689	5,422	5,062	5,153	5,030	5,028	
Beds Occupied (Fall Term)	2,112	1,995	1,896	1,807	1,654	1,661	1,662	1,755	1,706
FTE Capture Rate (as % of FTE)	37%	37%	37%	37%	37%	38%	39%	42%	38%

Exhibit 2. Historical Student Housing Capture Rates and Projected Bed Quantity

WA developed two potential schemes to achieve the desired 1,800 beds.

Scheme 1

- Demolish Browning Hall (loss of 528 beds),
- Demolish University Courts (in phases; loss of 161 beds), and
- De-densify/renovate Ellington Hall (loss of 26 beds, 5% of capacity).

This approach would cause a reduction of the bed count to 1,540 and the need to supply **260 new beds**. These beds should be provided in suite-style or apartment-style units.

Scheme 2

- Demolish Browning Hall (loss of 528 beds),
- Demolish Ellington Hall (loss of 520 beds), and
- Demolish University Courts (in phases; loss of 161 beds)

Scheme 2 would cause a reduction of the bed count to 1,046 and the need to supply **754 new beds**. These beds should be provided in suite-style or apartment-style units.

Scheme 2 is more comprehensive and, therefore, results in better strategic outcomes for the UTM’s housing program.

Dining

UTM dining program operates the following main dining venues at the Boling University Center:

- Skyhawk Dining Hall provides community-style dining (“all you care to eat”) and serves, primarily, meal plan customers. The seating capacity of this venue is 448.
- The Food Court offers three retail dining options including Chick-Fil-A, Sandella’s Café, and Mein Bowl. The Food Court’s seating capacity is limited to 68.
- The Hanger is a coffee shop that proudly serves Starbucks as well as other beverages and pastries. The Hanger offers 8 seats.
- On the Fly is a convenience store serving snack items, energy drinks, sandwiches, salads, desserts, fresh fruit cups, and veggie cups.

In addition, prior to the COVID-19 pandemic, UTM operated Captain’s Coffee (coffee shop) in the Paul Meek Library and Simply-To-Go (grad-and-go venue) in Gootch Hall. As of spring of 2022, these two venues have not reopened.



Exhibit 3. Foodservice Venues at Boling University Center

All incoming freshmen at UTM with 30 earned hours or less who live in University housing are required to purchase a meal plan for each of their first two semesters. Transfer students with less than 30 earned credit hours when entering the University are also required to purchase a meal plan. In the fall of 2021, UTM sold 874 mandatory meal plans and 838 non-mandatory meal plans.

During focus groups, participants raised the following issues related to the campus dining services:

- Not enough options on campus (especially with the Library and Gooch outlets closed now),
- Limited options on weekends,
- Limited fruit and vegetable offerings,
- Quality of food depends on a day,
- Too many meals on the meal plans,
- Inexpensive options are available off campus (\$10 buffet, fast food),
- C-Store in the Library would be a great idea (due to operating hours),
- Coffee has to be brought back to the Library.

Based on the review of on-campus dining operations and discussion with UTM’s administrations, WA concluded the following:

- The community-style dining offerings will be sufficient to serve student population in the future.
- The retail offerings lack sufficient seating capacity. WA recommends an additional 100 seats that could be implemented as an expansion of The Food Court capacity or provision elsewhere on campus, ideally in the Paul Meek Library.

- Additional Simply-To-Go locations should be considered to provide more accessibility to foodservice outside of Boling University Center.

Boling University Center

The Boling University Center is home to student services and amenities as well as an asset to the broader University and local communities. The main program elements include:

- Foodservice (Skyhawk Dining Hall, The Food Court, The Hanger, and On the Fly Market),
- Campus Bookstore (Barnes & Noble),
- Computer Store,
- Welcome Center,
- Legislative Chamber,
- Philips Watkins Auditorium,
- Russell Duncan Ballroom,
- Meeting Rooms,
- Career Planning and Development, and
- Office of Student Life.

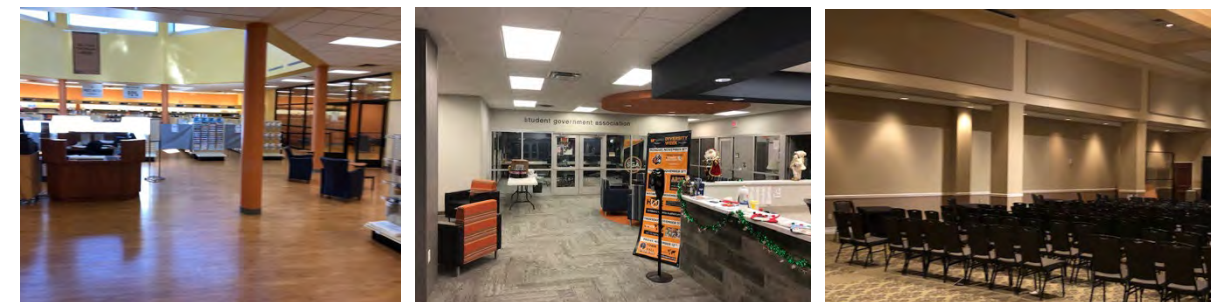


Exhibit 4. Boling University Center: (from the left) Bookstore, Office of Student Life, and Russell Duncan Ballroom.

Focus group participants interviewed by WA brought up the following key issues related to the program and operations of the University Center:

- Student traffic tends to concentrate on the lower level of the building while the upstairs area is not utilized by students very often.
- Most of student traffic in the building is transactional due to the presence of foodservice facilities and the Bookstore.
- Generally, there is limited awareness of programs and activities among students.
- The building does not offer a student-friendly environment and amenities such as informal hang-out spaces and lounges.
- Students enjoy the outdoor area north of the building.

During the tour of the building and conversations with UTM administration, WA revealed additional issues including:

- Positive programmatic relationship with and physical proximity to the Paul Meek Library.
- Importance of the Ballroom to the entire campus and broader off-campus community.
- Underutilization of certain parts of the building (Bookstore, Lobby and surrounding areas upstairs).
- Lack of “see and be seen” space in the building.

Based on its analysis, WA recommends adding the following program elements to the Boling University Center:

- Student Lounge (3,000 NSF),
- Study Space (3,000 NSF),
- Multicultural Center (1,125 NSF),
- E-Gaming Lounge (3,000 NSF),
- Disability Services (2,600 NSF), and
- Foodservice (potential addition of 100 seats unless accommodated elsewhere on campus)

Student Recreation Center

Student Recreation Center is a 95,000-square-foot comprehensive indoor recreation facility offering the following program elements:

- Four-court (basketball courts) gymnasium,
 - Indoor jogging track,
 - Fitness Center and Cardio Mezzanine (weight and fitness areas),
 - Stretching/TRX area,
 - Group fitness room,
 - Cycle Suite (fitness classroom with group cycling equipment),
 - Three racquetball courts,
 - Leisure recreation area (passive rec: table tennis, billiards, shuffleboard, foosball),
 - Locker rooms,
 - Lobby / lounge, and
 - Classroom.
- In addition, a 50-meter recreation indoor swimming pool is available at the Elam Center.

The facility gross area exceeds the NIRSA (National Intramural and Recreational Sports Association) standard of approximately 10-12 gross square feet per student (headcount).

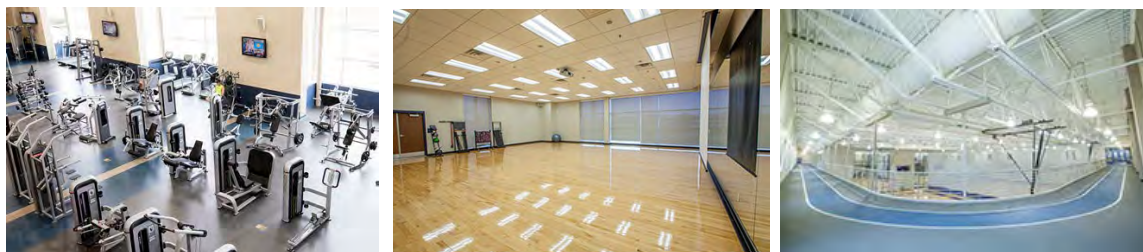


Exhibit 5. Student Recreation Center: (from the left) Fitness Center, Groups Fitness Room, and Indoor Jogging Track.

During the planning process, WA received the following input from students:

- The Student Recreation Center is a highlight of campus tours (in addition to University Village II), it is a “big deal,” a big part of student life offerings.
- The facility offers great amenities and students utilize it quite frequently.
- In addition to amenities, the programmatic offerings (group exercise classes, etc.) are very good.
- The building can be intimidating to students and some of them patronize off-campus health clubs such as The Sideline and Fitness 1440

Based on the needs analysis, WA recommendations include only improvements to the aquatic offerings:

- Adding a 25-yard, 8-lane indoor swimming pool to the Student Recreation Center (11,500 NSF including water tank, deck, lifeguard room, storage and filtration/mechanical room), and
- Converting the Elam Center pool space into a multi-purpose indoor turf field.

Additional Student Life Program Elements

WA identified the following additional student life programmatic improvements to be included in the Master Plan

- New Student Health & Counseling Center (5,200 NSF) to replace the existing facility,
- Pacer Pond Pavilion (outdoor programming space),
- Updated University Center South Courtyard/Pavilion (outdoor programming space),
- Outdoor Basketball Courts near Elam Center,
- Intramural and Club Sports Fields near Student Housing, and
- Gateway Multipurpose Open Space and Amphitheater (site of demolished Grove Apartments).

END OF REPORT