COLUMBIA STATE COMMUNITY COLLEGE MASTER PLAN

Prepared by **TSW >>** February 2017


32

COLUMBIA STATE COMMUNITY COLLEGE MASTER PLAN

// ACKNOWLEDGEMENTS

THE PLANNING TEAM WOULD LIKE TO THANK:

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Columbia State President

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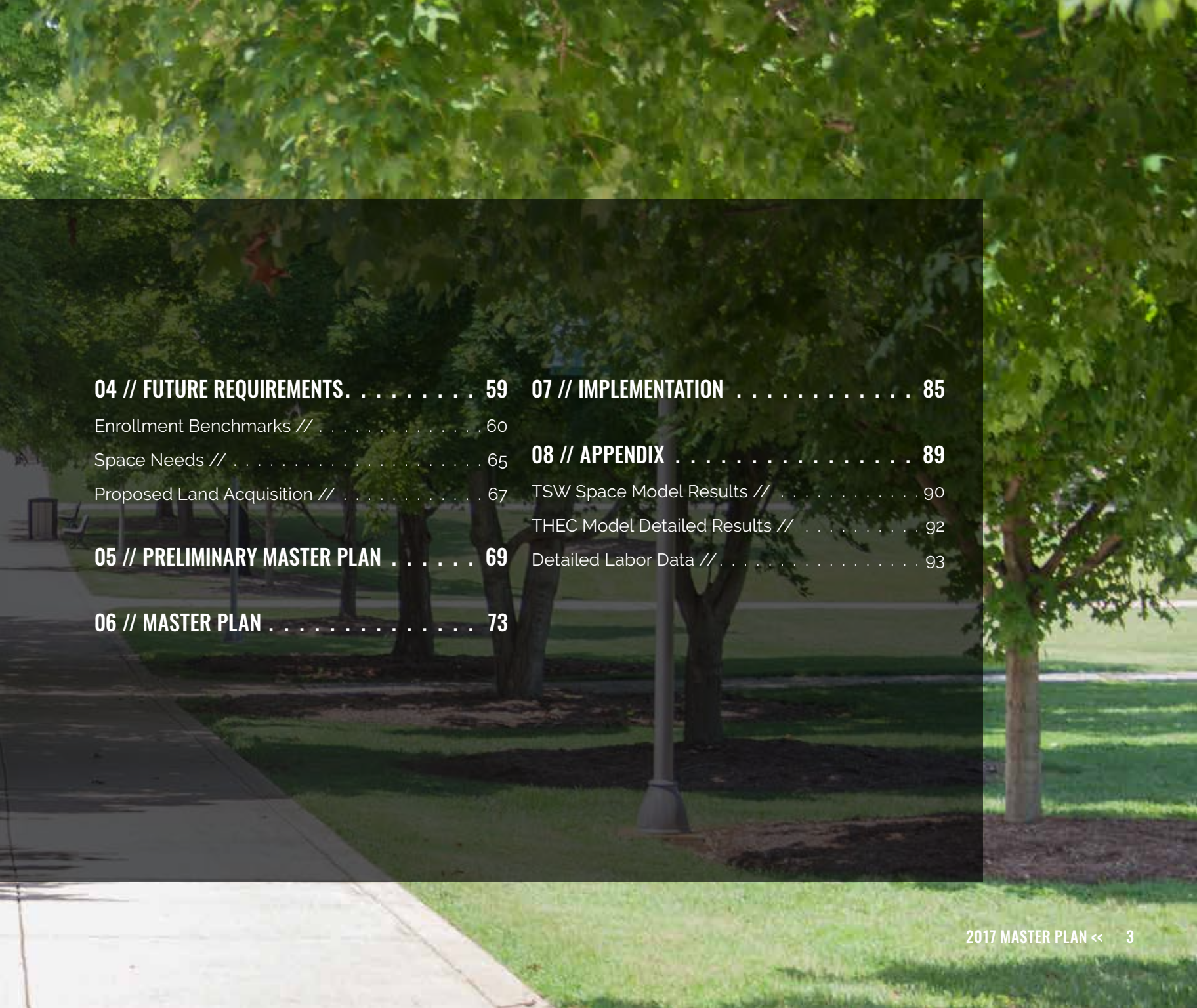
The Columbia State administrators, faculty, and students who gave their input

This Master Plan was developed by TSW, in conjunction with SSR Engineers

SBC PROJECT NO. 166/015-01-2013

// CONTENTS



00 // EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Columbia State Community College was the first community college in Tennessee. The Columbia Campus opened 50 years ago in 1967.

This Master Plan focuses primarily on the Columbia Campus. Rapid growth at the Williamson County Campus has led to new facilities which opened in the Fall of 2016 and so were not analyzed as part of this effort.

The quality of teaching and other spaces on the Columbia Campus reflects a significant need for improved space. Several key buildings have very outdated interiors, furnishings, and building systems.

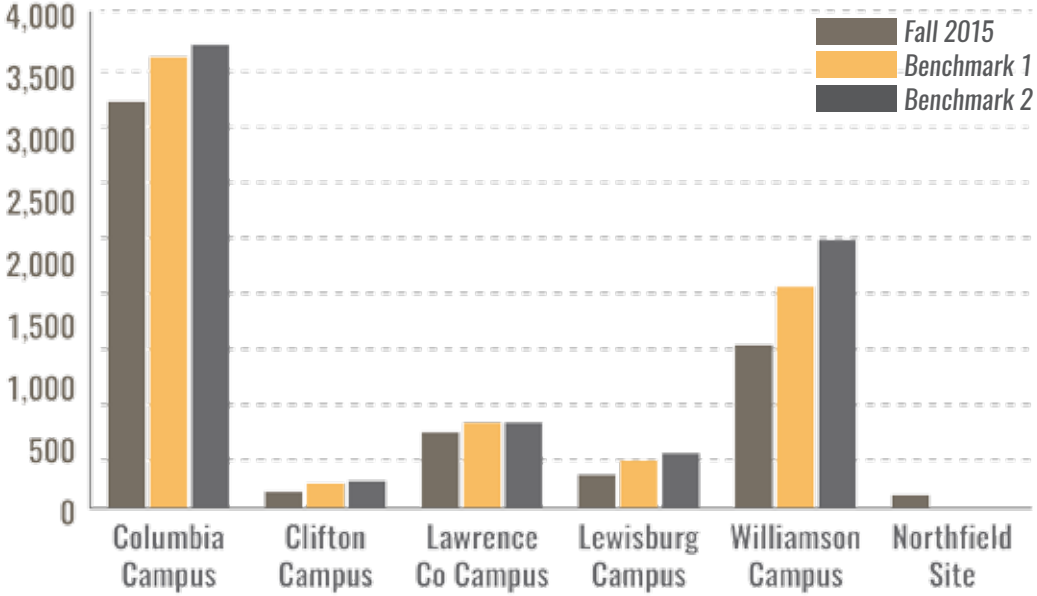
A number of improvements are recommended for the Columbia Campus, as shown on pages 8-9. The proposed Allied Health Building will replace, upgrade, and expand currently inadequate space for the College's allied health programs.

DEMOGRAPHIC CONTEXT

A detailed demographic and labor market analysis is provided on pages 22-33. Key findings are as follows:

- Projected population growth is concentrated in the northeastern half of the service area
- Population growth could increase enrollment 7% over next five years
- Participation rate is lower than peer colleges, especially in rural areas
- Areas of high educational need and high unemployment are more rural
- Service area is generally well served by existing campuses

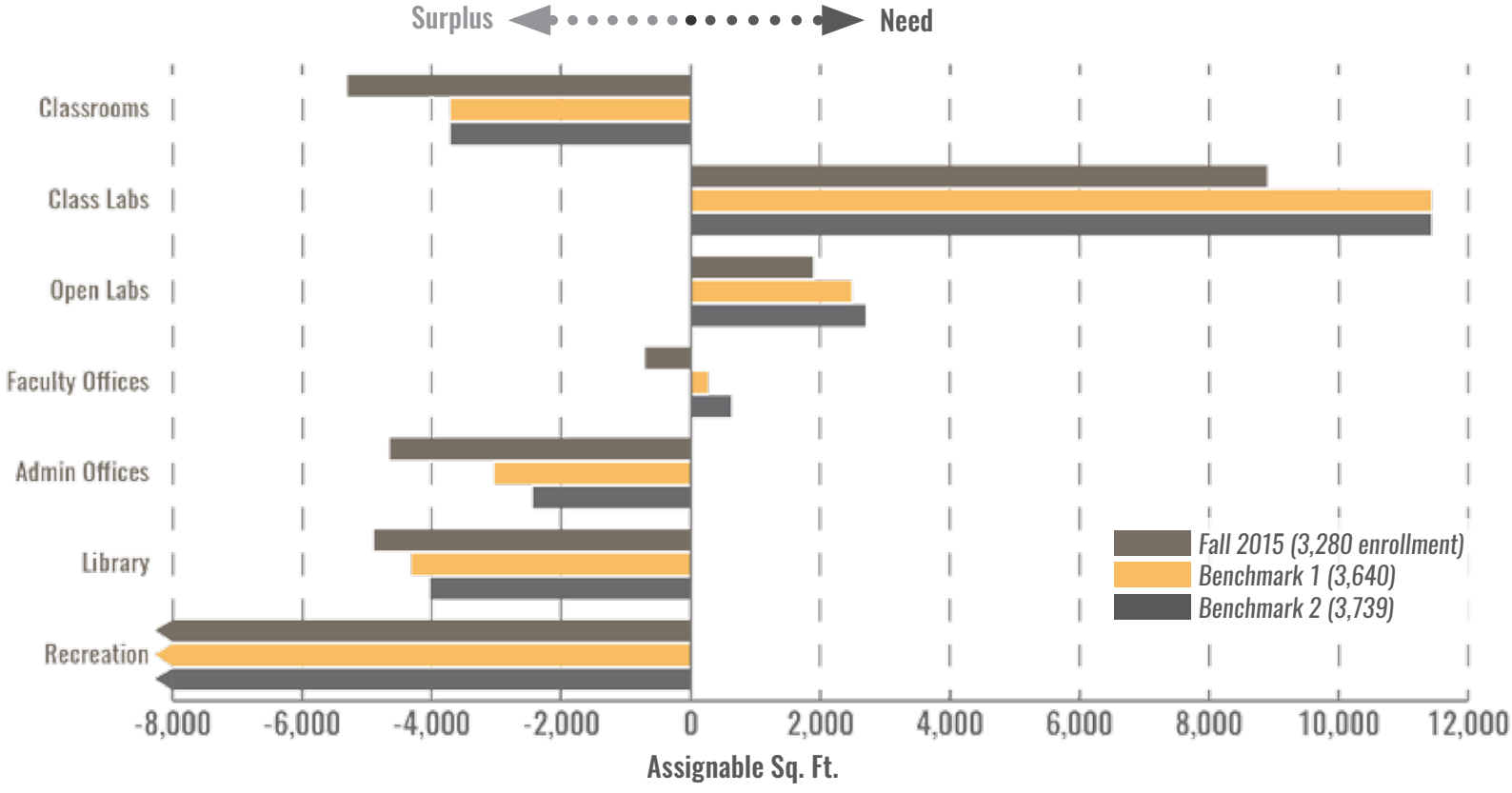
>> ENROLLMENT GROWTH BENCHMARKS BY CAMPUS (HEADCOUNT)

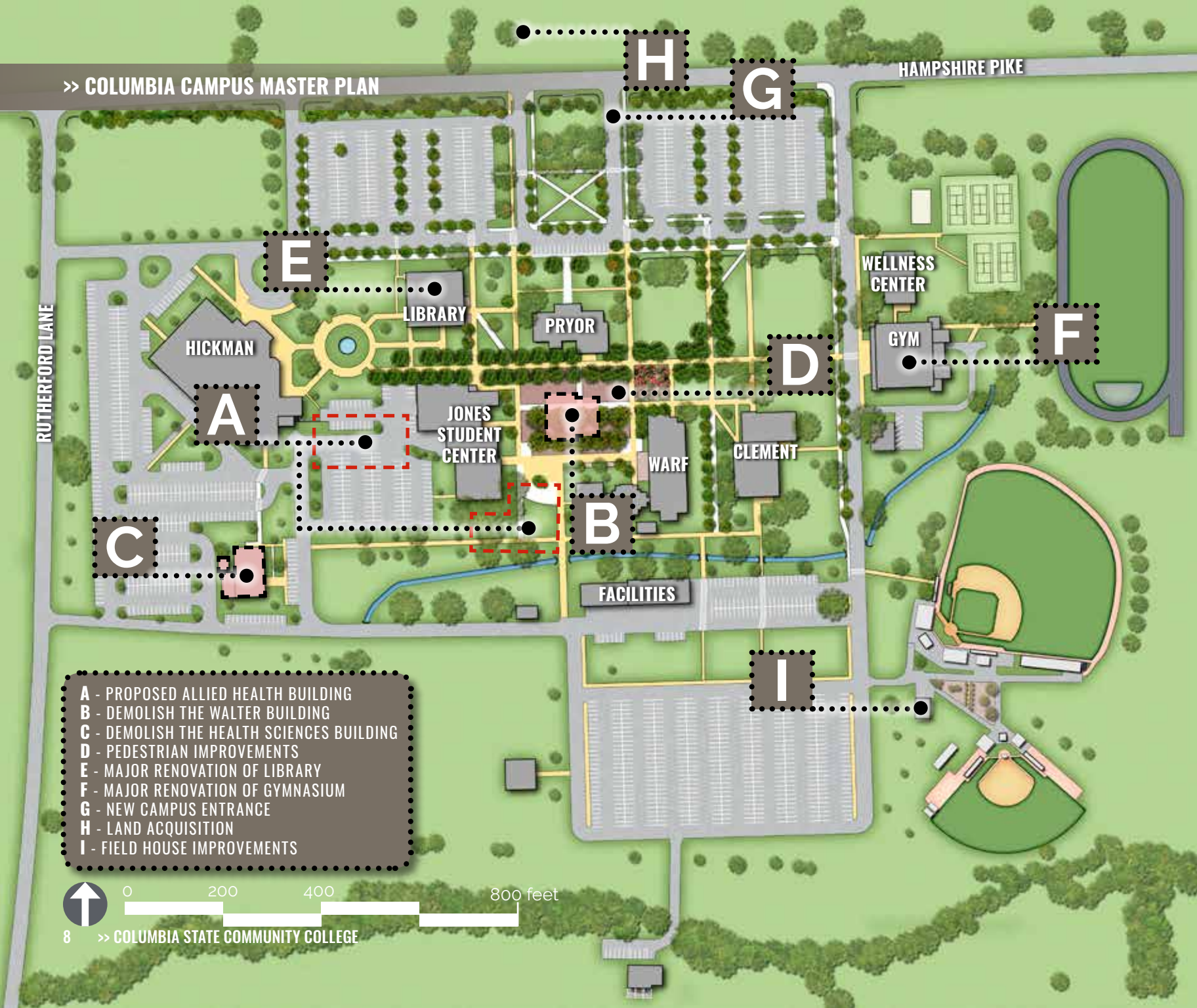


SPACE NEEDS: COLUMBIA CAMPUS

A detailed space analysis was conducted based on THEC space standards (see pages 60-66). Key findings are as follows:

- There is a need for additional lab space.
- While the quantity of some types of space is adequate, the quality of labs, classrooms, gymnasium, and library space is inadequate.
- Seats in classrooms are well occupied, but labs are not.
- Classroom and lab utilization is good, except on Fridays, after 3:00 p.m., and for some special disciplines.




H
G
HAMPSHIRE PIKE
E
WELLNESS CENTER
LIBRARY
PRYOR
RUTHERFORD LANE
HICKMAN
GYM
F
D
A
JONES STUDENT CENTER
WARF
CLEMENT
B
C
FACILITIES
I
A - PROPOSED ALLIED HEALTH BUILDING
B - DEMOLISH THE WALTER BUILDING
C - DEMOLISH THE HEALTH SCIENCES BUILDING
D - PEDESTRIAN IMPROVEMENTS
E - MAJOR RENOVATION OF LIBRARY
F - MAJOR RENOVATION OF GYMNASIUM
G - NEW CAMPUS ENTRANCE
H - LAND ACQUISITION
I - FIELD HOUSE IMPROVEMENTS
0
200
400
800 feet

A. PROPOSED ALLIED HEALTH BUILDING

There is currently a need for lab space on the Columbia Campus, a need that is expected to continue to grow with enrollment. In order to meet this need, and provide adequate and consolidated teaching space for existing health programs, a proposed Allied Health Building should be constructed in one of two locations as shown at left.

B. DEMOLISH THE WALTER BUILDING

This building has a number of facilities issues that make it inadequate for continued academic use and difficult to renovate. Once the Allied Health Building is opened, this building should be demolished.

C. DEMOLISH THE HEALTH SCIENCES BUILDING

This building has a number of facilities issues that make it inadequate for continued academic use and difficult to renovate. Once the Allied Health Building is opened, this building should be demolished.

D. PEDESTRIAN IMPROVEMENTS

A number of improvements should be made as shown on the plan at left to facilitate circulation, provide needed outdoor gathering spaces, and modernize the look of the campus.

E. LIBRARY MAJOR RENOVATION

The existing library should be modernized to create a true learning hub, improve student success, and create a better impression for potential students.

F. GYMNASIUM MAJOR RENOVATION

The Wellness Center was recently renovated, but the adjacent gymnasium, known as the Webster Athletic Center, needs substantial upgrades to be usable.

G. NEW CAMPUS ENTRANCE

An additional entrance should be created from Hampshire Pike to campus.

H. LAND ACQUISITION

Land across Hampshire Pike should be acquired as shown on page 67.

I. FIELD HOUSE IMPROVEMENTS

Improvements should be made to the existing baseball and softball field house.

FACILITIES IMPROVEMENTS

A number of upgrades to building systems are also recommended to buildings not covered by the major renovations and other projects above. These are listed on page 83.

"When a community college rises from a once empty field, the country expands not outward, but upward."

- Lady Bird Johnson

01 // HISTORY & OVERVIEW

>> QUICK FACTS

>> PREVIOUS MASTER PLAN

>> DEGREE PROGRAMS OFFERED

>> HISTORIC TIMELINE

>> DEMOGRAPHIC CONTEXT

QUICK FACTS //

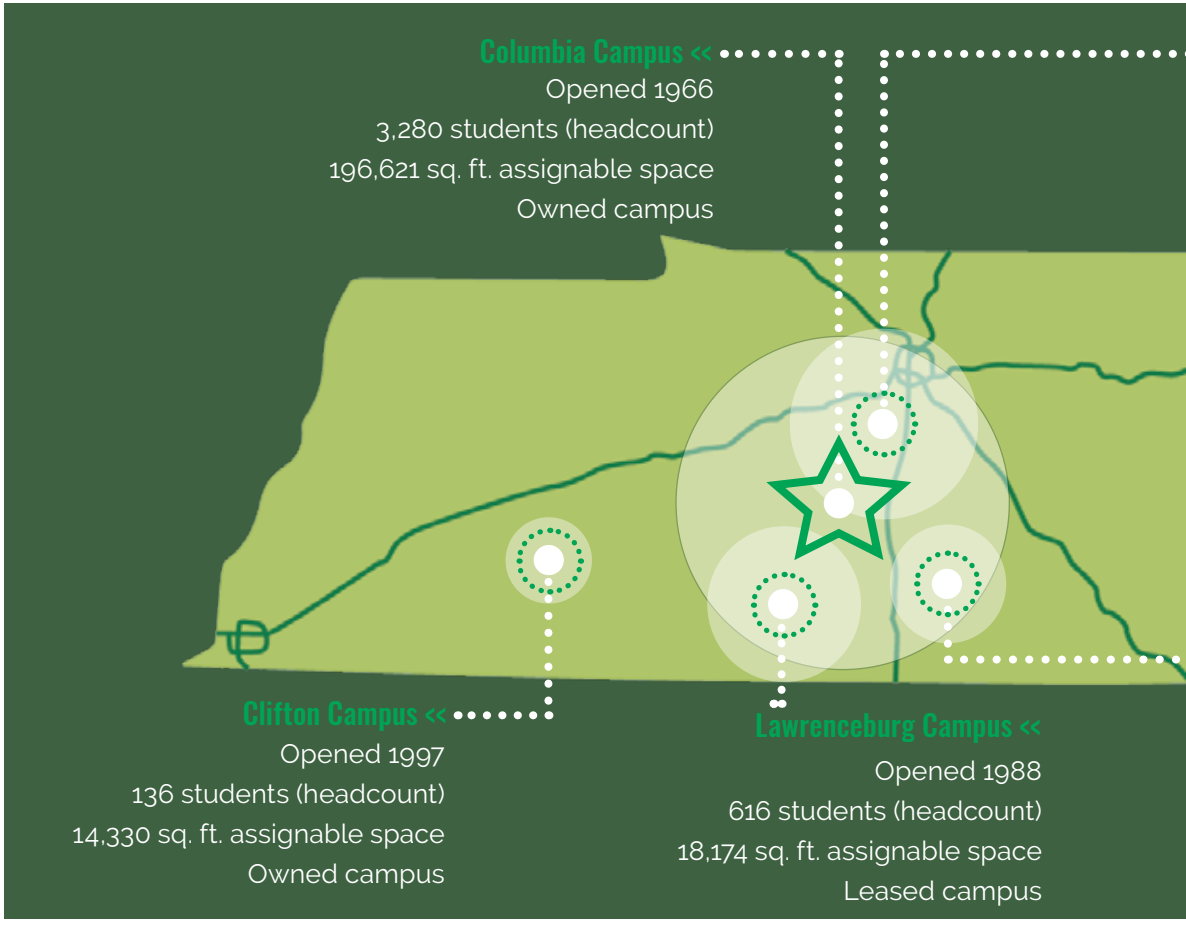
COLLEGE HISTORY

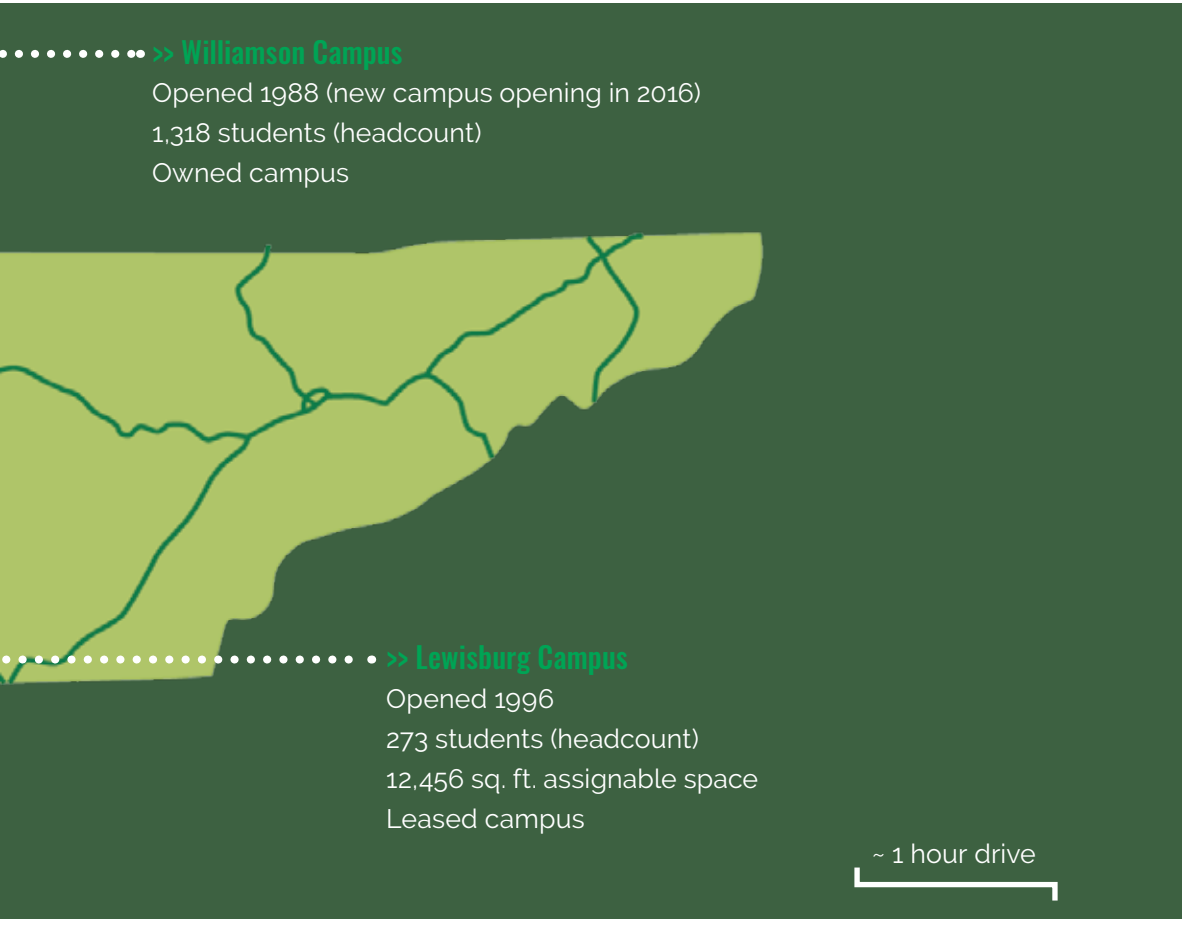
The State Board of Education approved Columbia as the location for the first community college in the state of Tennessee. The ground breaking for the Columbia Campus occurred in October of 1965 on the historic Hickman Farm and opened to an enrollment of 363 students in the fall of 1966. On March 15, 1967, Lady Bird Johnson and President Lyndon B. dedicated the newly built campus in front of more than 8,000 people.

Columbia State Community College is composed of five campuses: Columbia, Williamson, Lawrenceburg, Lewisburg, and Clifton.

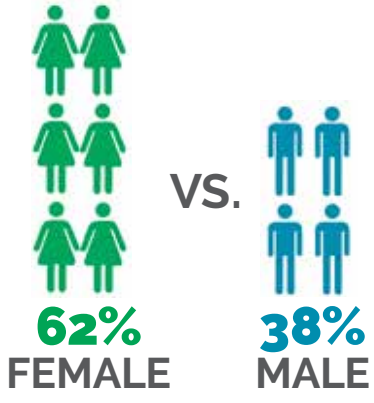
Columbia State students are slightly younger in age and less diverse than the statewide average for public community colleges in Tennessee. According to the Tennessee Board of Regents 2014 Enrollment Fact Book, 74% of Columbia State's student body is under 25 years of age (compared to 70% statewide).

>> PROPORTION OF STUDENTS ENROLLED AT EACH CAMPUS OR SITE IN FALL 2015





The student body is approximately 83% white and 7% black (compared to 74% and 17% statewide). 62% of students are female and 38% are male (compared to 60% and 40% statewide).



Columbia State's 65% retention rate is the highest among Tennessee community colleges (compared to 59% statewide). In addition, Columbia State has the second highest percentage of Tennessee Promise students (16% of total enrollment, compared to only 11% statewide).

PREVIOUS MASTER PLAN //

Columbia State's most recent master plan was prepared by RM Plan Group in 2002 and updated in 2005. Due to the absence of funding, a number of the recommendations of the plan have not been completed. They include:

- Construction of a new 70,000 sq. ft. Instructional / Technology Center and pedestrian plaza
- Conversion of the Walter Building to a Teaching Learning Center
- Conversion of Health Sciences Building to offices
- Addition to Maintenance Building to provide campus-wide storage
- New Livestock Station
- Expanded parking lots
- Pedestrian mall to connect to southern parking lot
- Underground piping improvements

Recommendations completed include:

- New Facility for Williamson Campus
- Renovations of the Library basement and the Jones Student Center

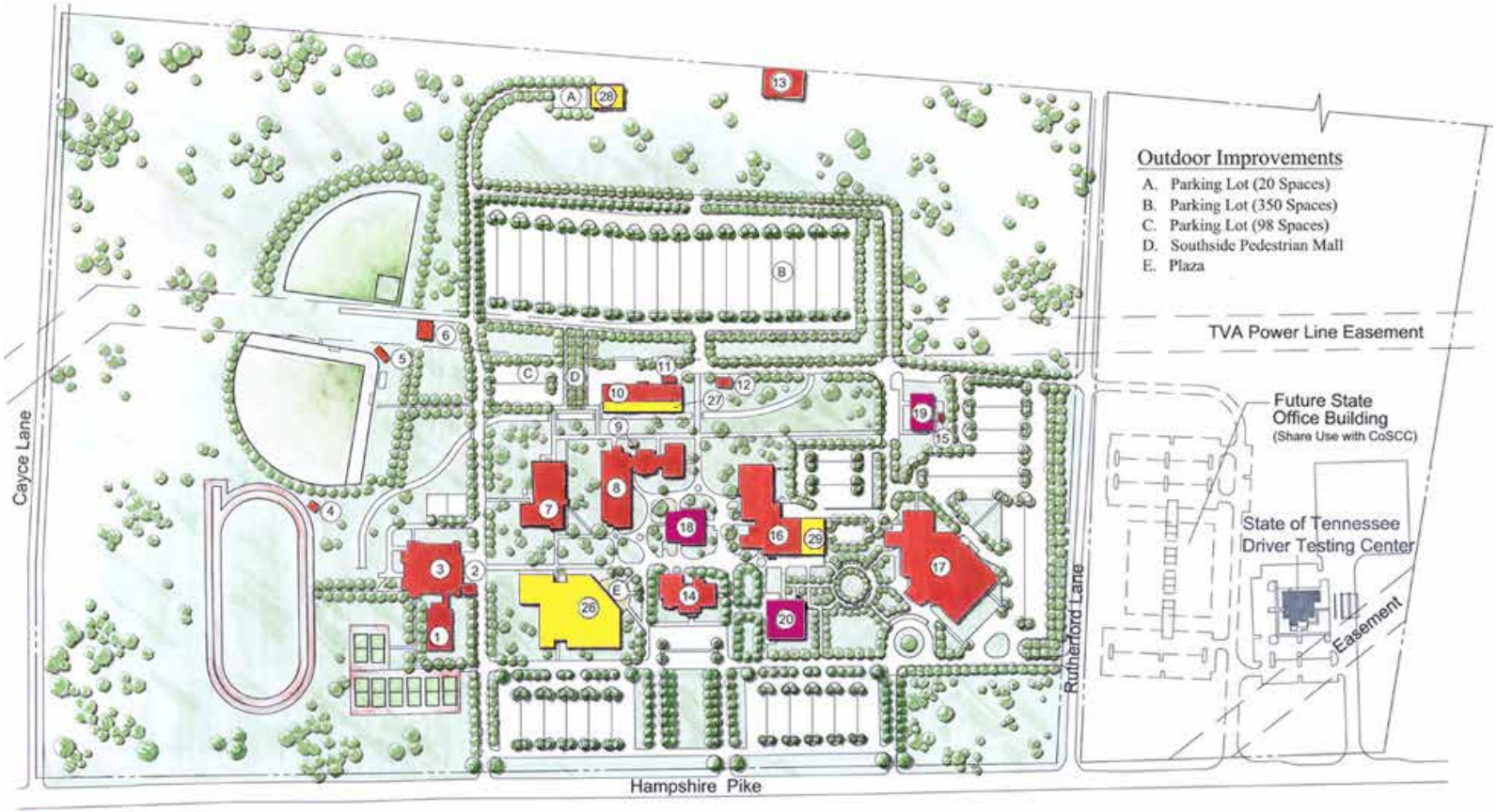
This previous plan was based on a projected enrollment of 3,500 FTE.

Image courtesy Bauer Askew Architecture

The new Williamson County campus opened in Fall 2016

2000 Columbia State Master Plan for Columbia Campus

>> 2000 COLUMBIA STATE MASTER PLAN



Existing Buildings

1. Natatorium 2. Guard House 3. Webster Athletic Center 4. Athletic Storage 5. Pressbox 6. Athletic Storage Facility
7. Clement Building 8. Warf Science Building 9. Greenhouse 10. Maintenance / Power Building 11. Cooling Tower
12. Maintenance Equipment Storage Building 13. Barn (not used) 14. Administration Building
15. Animal Holding Building 16. Jones Student Center 17. Hickman Humanities Building

Existing Bldg. Conversion

18. Nursing Education Building Conversion 19. Health Sciences Building Conversion
20. Finney Library Lower Level Conversion

Proposed Bldg. / Addition

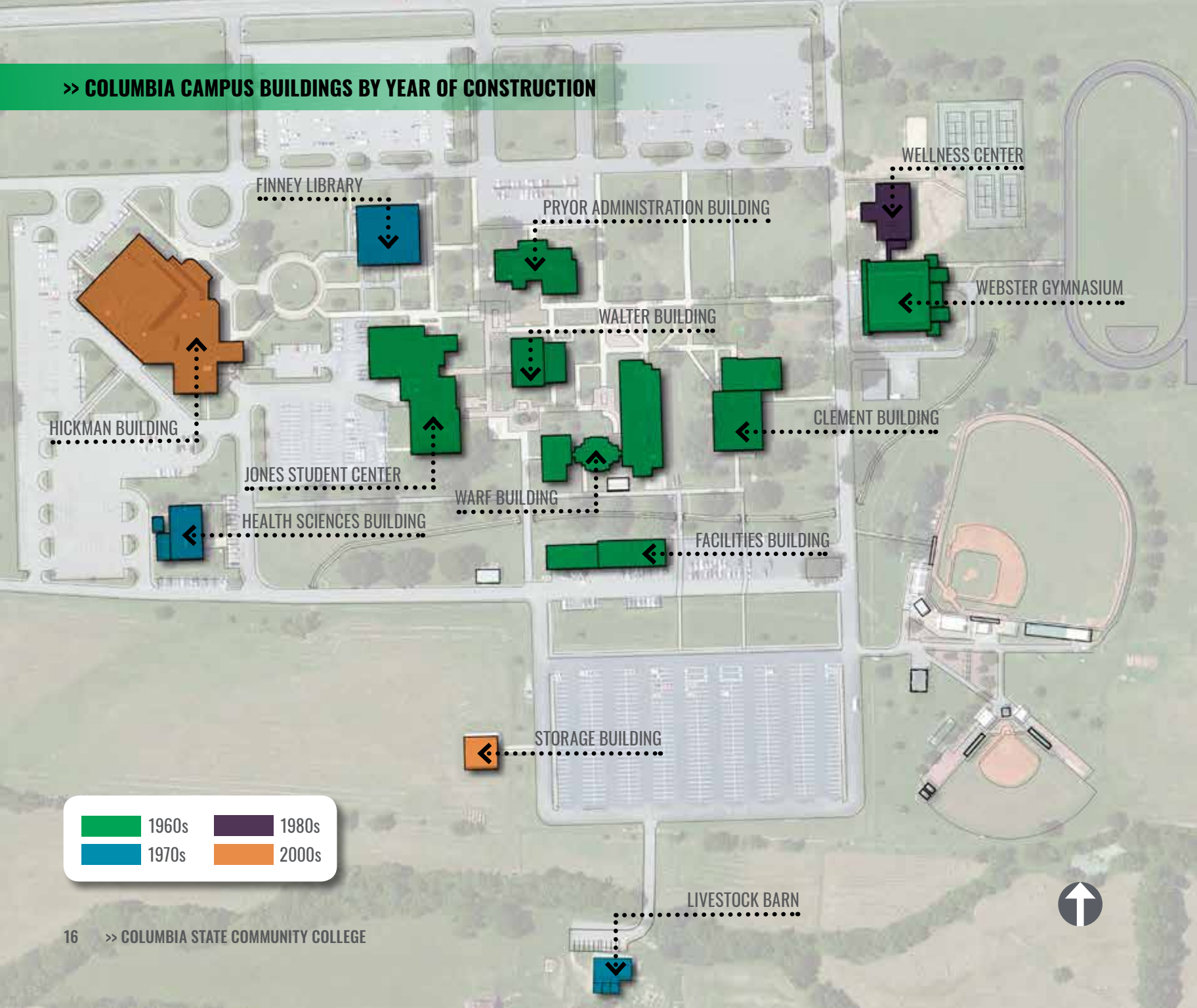
26. Instructional / Technology Center 27. Maintenance Building Addition 28. Livestock Station
29. Student Center Addition

Phase I
Campus Master Plan
COLUMBIA STATE
rm plan group • nashville

north

Scale 1"=125'

>> COLUMBIA CAMPUS BUILDINGS BY YEAR OF CONSTRUCTION




COLUMBIA STATE COMMUNITY COLLEGE
CS
Columbia State

DEGREE PROGRAMS OFFERED //

ASSOCIATE OF APPLIED SCIENCE (TECHNICAL DEGREES)

- Adv. Integrated Industrial Tech.
- Business
- Criminal Justice Technology
- Early Childhood Education
- General Technology
- Health Sciences
- Information Systems Technology
- Medical Informatics
- Nursing
- Radiologic Technology
- Respiratory Care
- Veterinary Technology

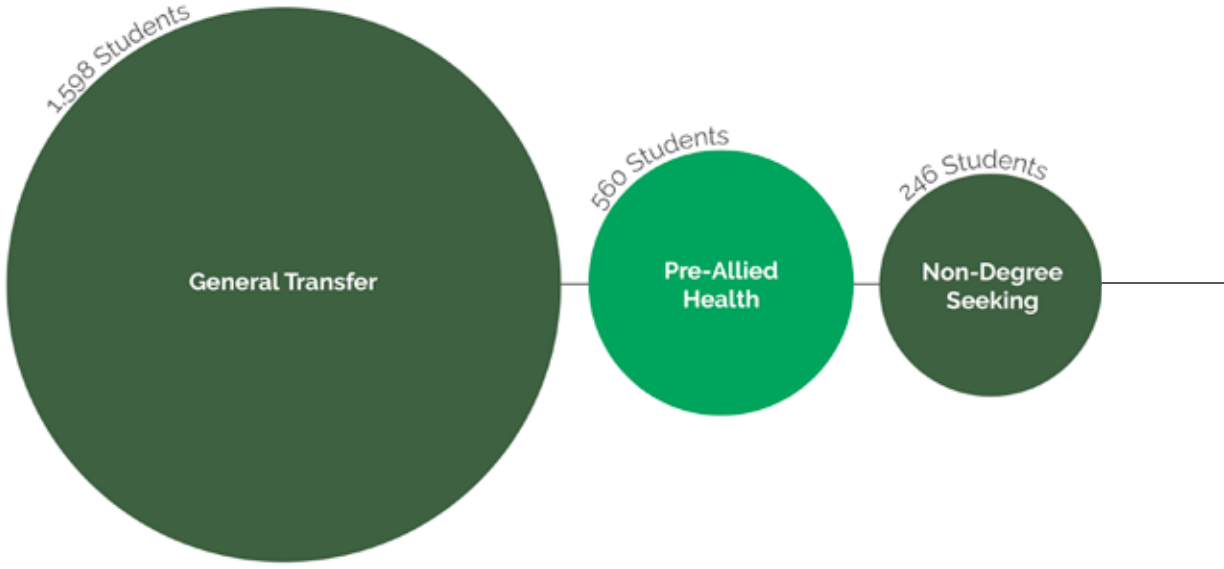
TECHNICAL CERTIFICATES

- Adv. Emergency Medical Technician
- Adv. Integrated Industrial Technology
- Basic Early Childhood Education
- Business Technical Certificate
- Commercial Entertainment
- Computed Tomography
- Emergency Medical Technician (basic)
- Film Crew Technology
- Paramedic

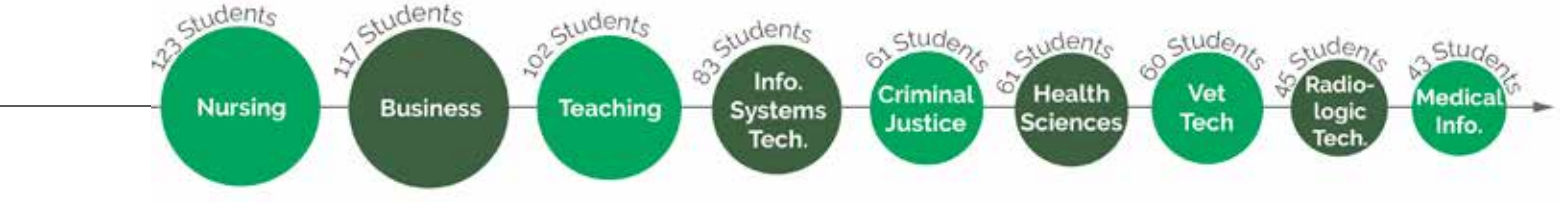
ASSOCIATE OF ARTS ASSOCIATE OF SCIENCE (TRANSFER DEGREES)

- Accounting
- Agriculture
- Art (Studio)
- Biology
- Business Administration
- Chemistry
- Commercial Entertainment
- Criminal Justice
- Early Childhood Education
- Economics - Business
- Engineering, Civil
- Engineering, Mechanical
- English

<< HIGHEST ENROLLMENT BY MAJOR AT COLUMBIA CAMPUS (FALL 2015 HEADCOUNT)



Exercise Science	Mass Communication	Psychology
Foreign Language	Mathematics	Public Relations
General Transfer (No Emphasis)	Music	Social Work
Geography	Physics	Sociology
Graphic Design	Political Science	Speech Communication
History	Pre-Health Professions	Teaching K-6
Humanities	Pre-Occupational Therapy	Theatre Arts
Information Systems	Pre-Physical Therapy	



TIMELINE //

50 YEARS OF SUCCESS IN THE MAKING

Mid 1960s

363 students begin classes in the fall of 1966

Late 1960s

First 44 Columbia State students graduate in 1968

Mid 1970s

Women's Lady Charger Basketball and Softball Teams begin in late 1970s

Late 1970s to 1980s

1990s to Mid 2000s

TODAY

The Williamson, Lawrence, Lewisburg, and Clifton Campuses open between 1987 and 1997

New Williamson Campus opens Summer 2016

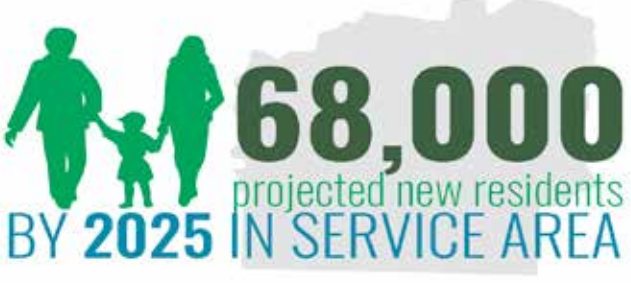
DEMOGRAPHIC CONTEXT //

Master planning should not occur in isolation, but should be informed by an institution's regional context and demographic trends. First among these is the forecasted population growth in the service area.

The map on the following page shows the projected population growth over the next decade by county in Columbia State's service area. Williamson County is projected to be the third fastest growing county in the state between 2015 and 2025. Maury and Marshall Counties are also projected to be in the top quartile of growth during that period. Overall, Columbia State's nine-county service area is expected to add approximately 68,000 residents over the next decade.

POPULATION DISTRIBUTION

The dot map on page 24 shows existing concentrations of residents within the region, where each dot represents 50 people. This population distribution, combined with projected population growth, suggests that Columbia State's existing campuses are well located along the axis of population that roughly follows U.S. Highway 31. This means Columbia State is well poised to serve existing residents and capture projected growth, especially the population growth that is concentrated in the northeastern portion of the service area.



>> RELATIONSHIP OF MASTER PLAN TO REGIONAL CONTEXT

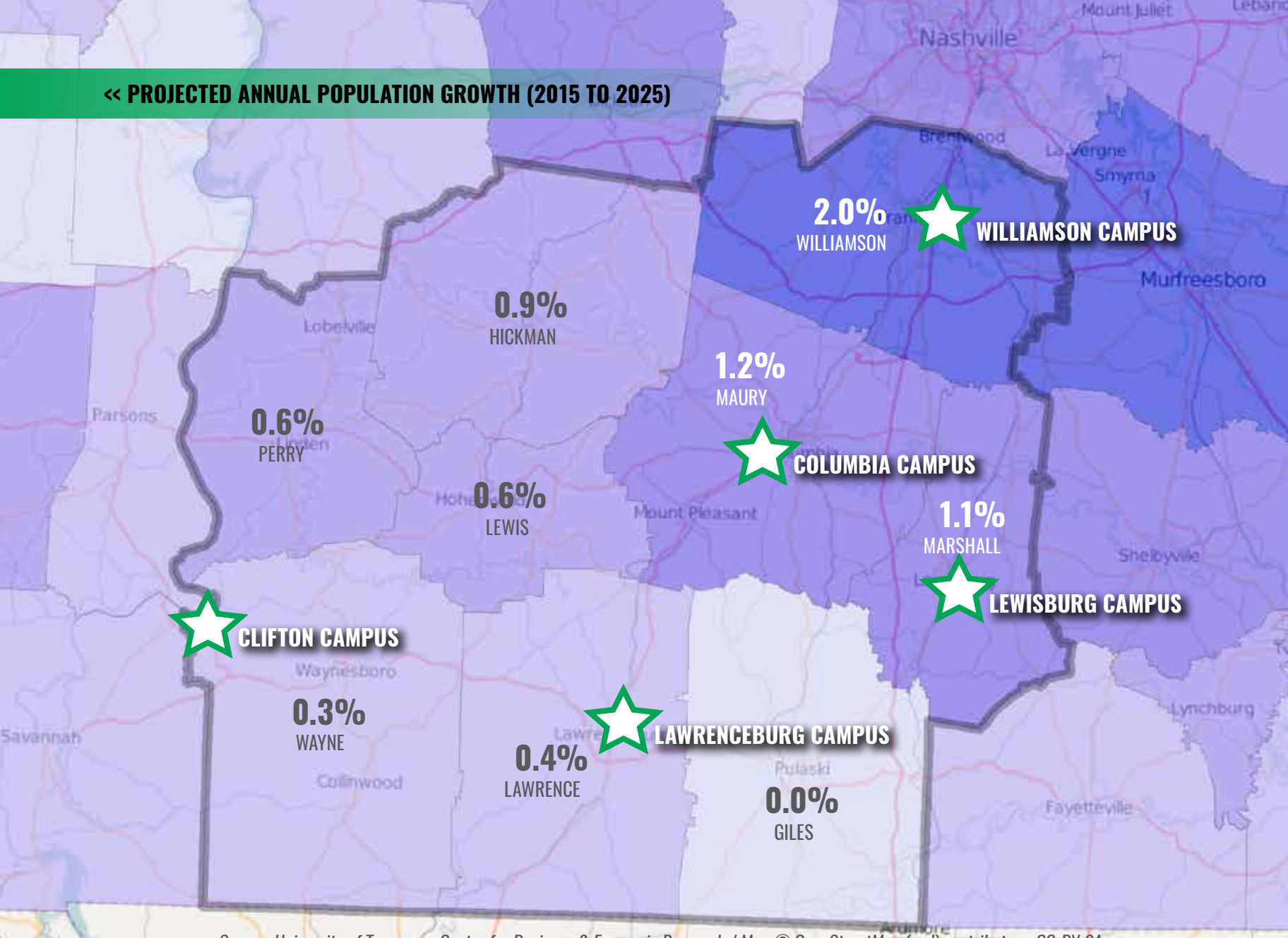
REGIONAL LABOR CONTEXT

ACADEMIC PLAN

MASTER PLAN

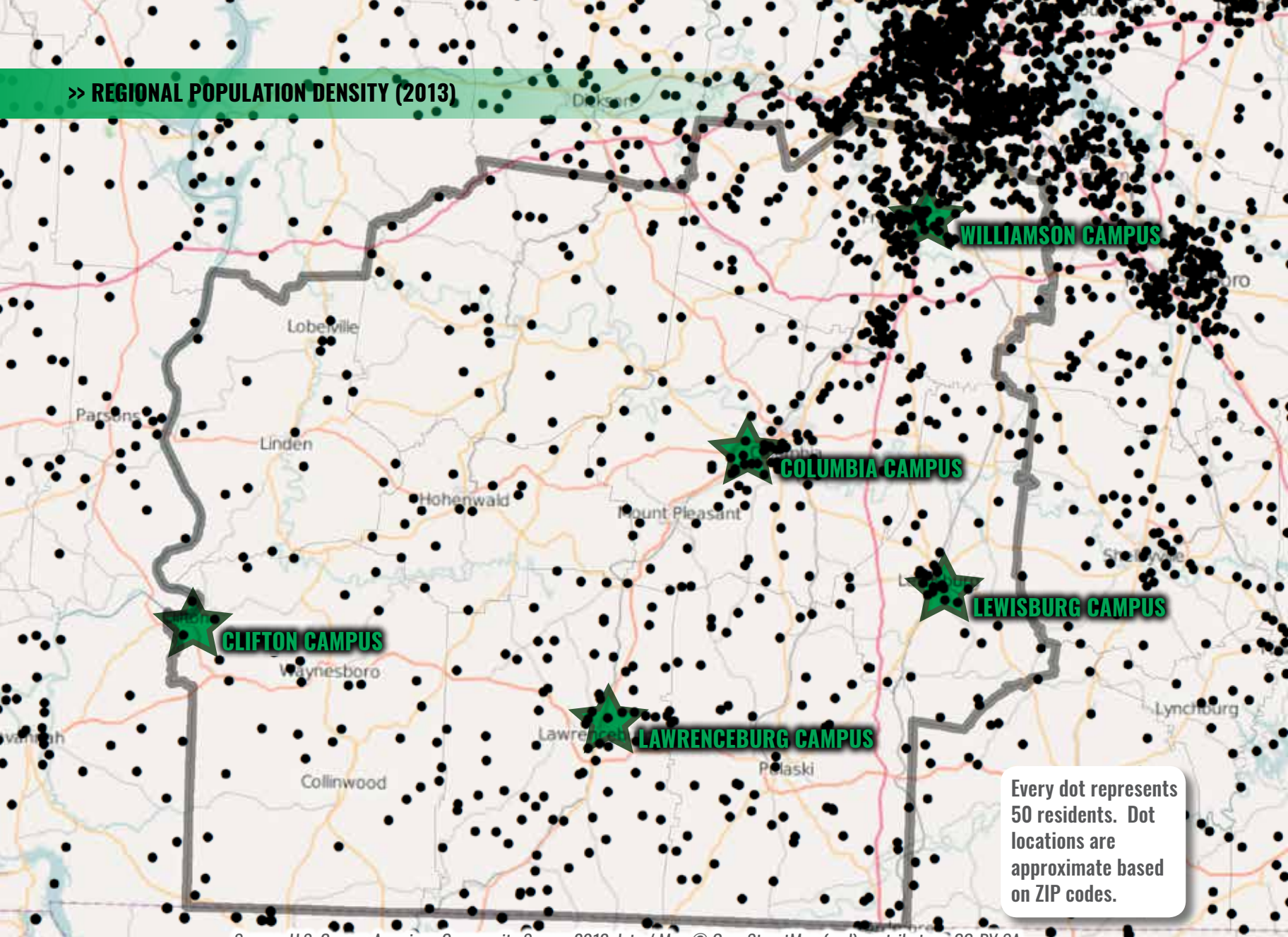
Projected Annual Population Growth by County in Columbia State Service Area (2015 to 2025)

<< PROJECTED ANNUAL POPULATION GROWTH (2015 TO 2025)



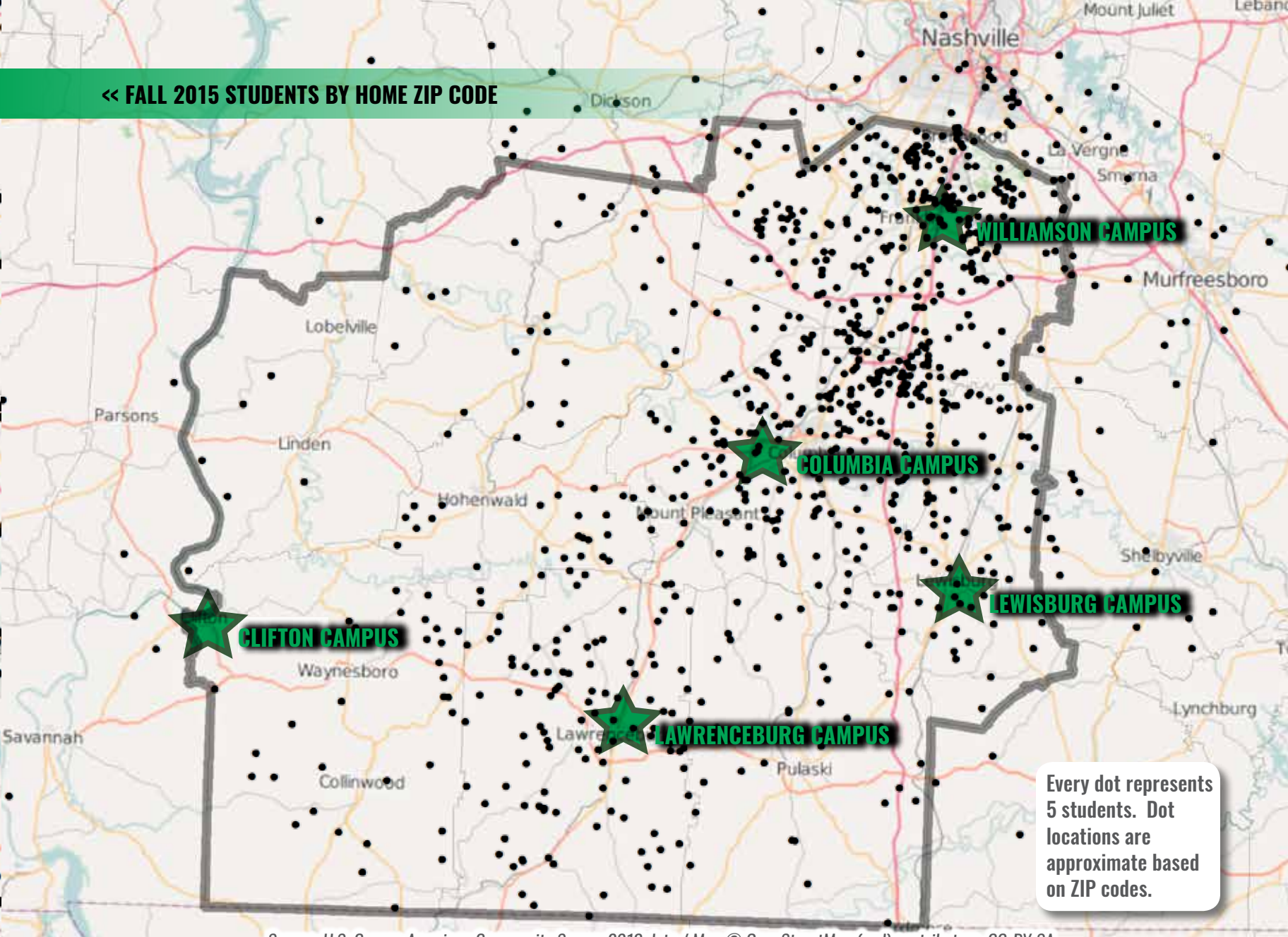
Source: University of Tennessee Center for Business & Economic Research / Map © OpenStreetMap (and) contributors, CC-BY-SA

>> REGIONAL POPULATION DENSITY (2013)



Source: U.S. Census American Community Survey 2013 data / Map © OpenStreetMap (and) contributors, CC-BY-SA

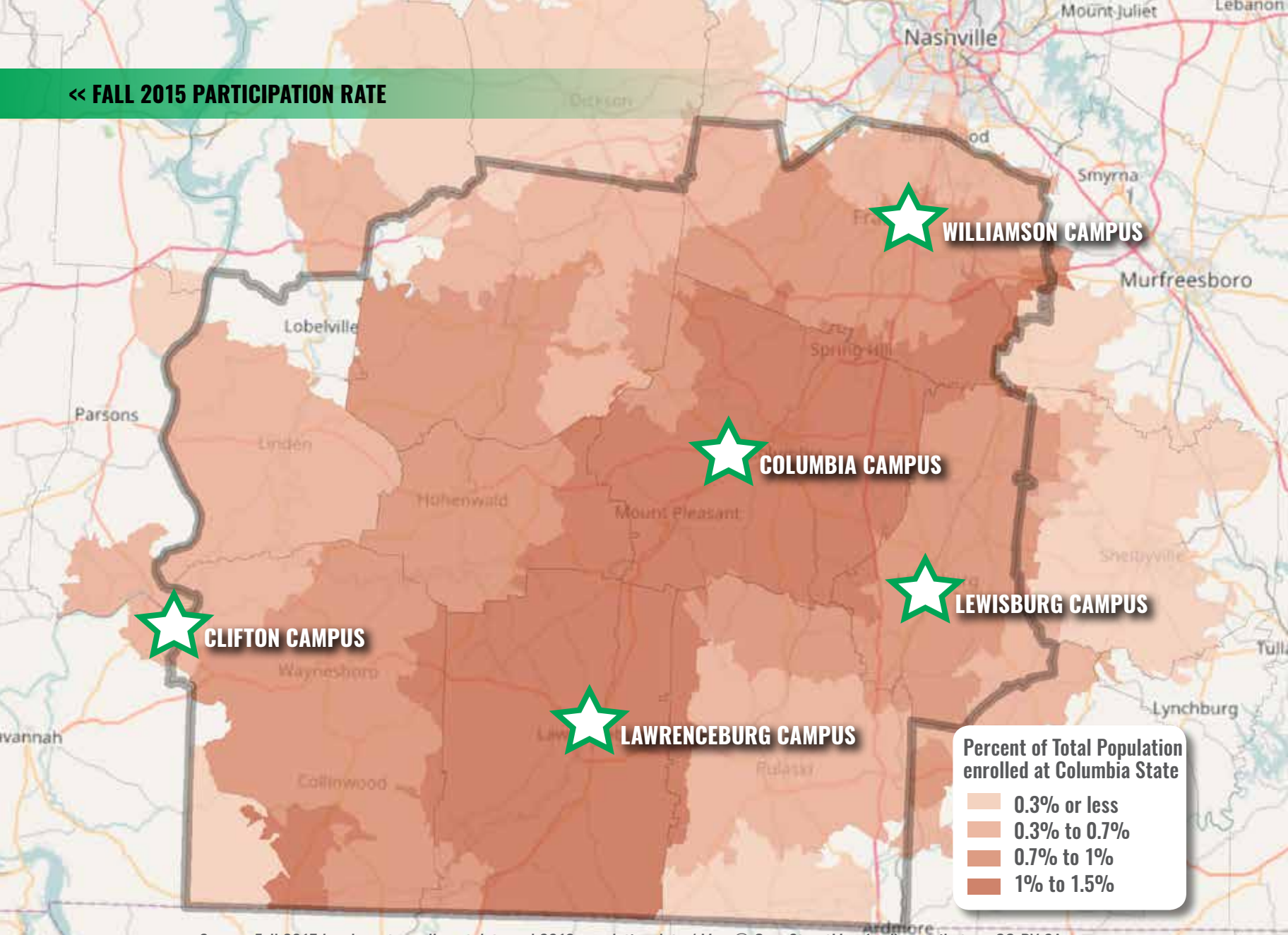
<< FALL 2015 STUDENTS BY HOME ZIP CODE



Every dot represents 5 students. Dot locations are approximate based on ZIP codes.

Source: U.S. Census American Community Survey 2013 data / Map © OpenStreetMap (and) contributors, CC-BY-SA

<< FALL 2015 PARTICIPATION RATE



Source: Fall 2015 headcount enrollment data and 2012 population data / Map © OpenStreetMap (and) contributors, CC-BY-SA

PARTICIPATION RATE

An institution's participation rate is a measure of its market penetration and is expressed as its total headcount enrollment divided by the total population in its service area. This rate provides a guide to the growth opportunities of the College. Participation rate does not consider age as a comparative measure.

Within its service area, participation rates at Columbia State vary, as shown in the map on the previous page. This map is based on the home residence of current students on all campuses. Darker areas indicate zip codes where a higher percentage of the population is enrolled at Columbia State. In general, participation is highest in Maury and Lawrence Counties and, as would be expected, lowest in the most rural areas located farthest from a Columbia State campus.

Interestingly, participation rates as of Fall 2015 are low in Williamson County. This lower rate is associated with the condition of the facilities in 2015 and the expectation of potential students in Williamson County.

It is difficult to define or measure the "need" for postsecondary educational credentials in a given area. Diverse factors contribute to the need for higher education.

Perhaps the single best measure of need for higher education is the percentage of residents who have graduated high school or have a GED, but have not yet started college. The map on the following page shows areas of high need for higher education, indicating the potential for additional market capture by Columbia State.

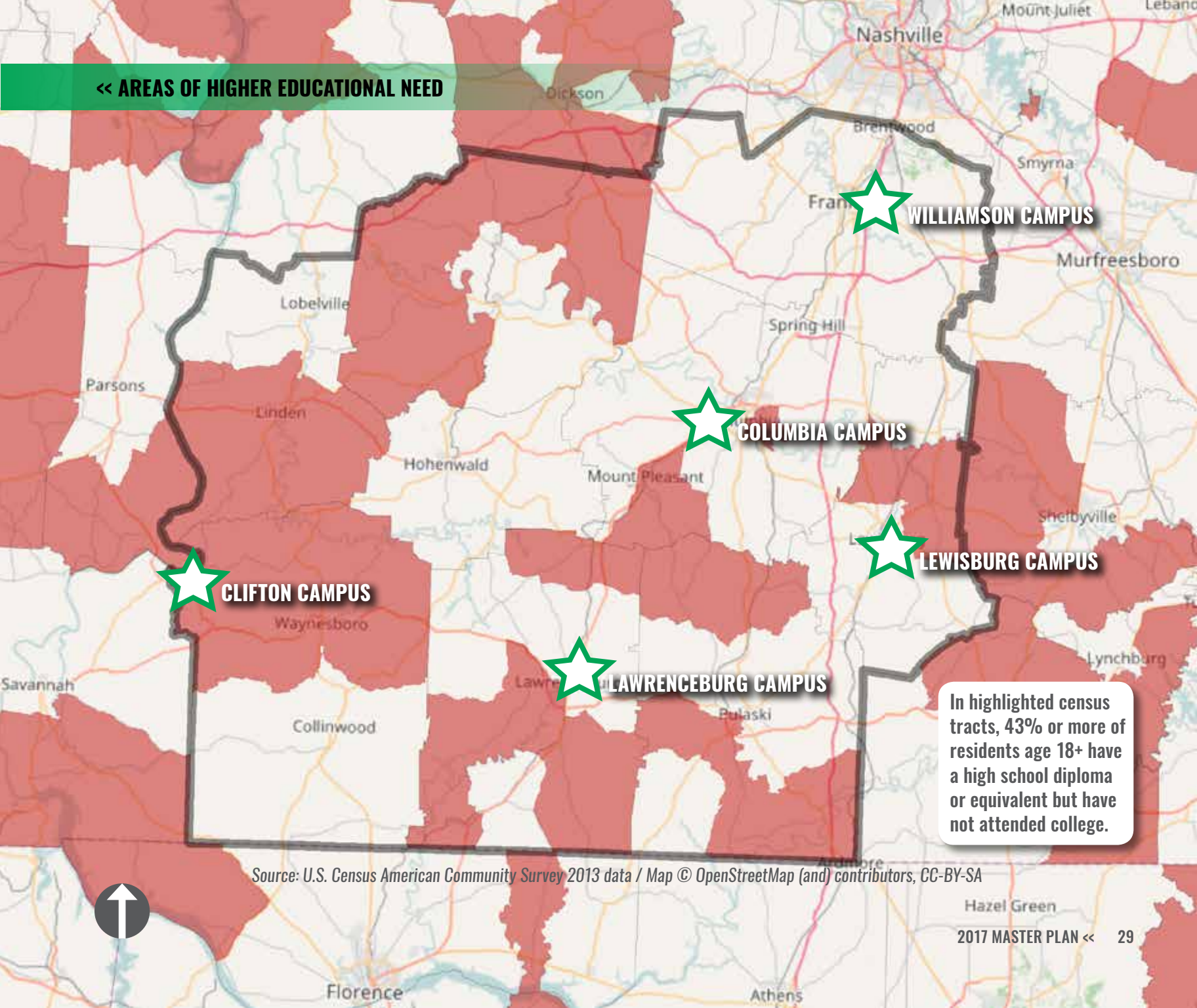
Rural areas show the most need for higher education, and unemployment is also highest in these areas, indicating the need for job training. However, the total population within these areas is low, so most of the existing population in need of higher education is likely already within a reasonable drive of an existing Columbia State campus.

DEMOGRAPHIC CONCLUSIONS

- Projected population growth is concentrated in northeastern half of service area
- Population growth could increase enrollment 7% over next five years
- Participation rate is lower than peer colleges, especially in rural areas
- Areas of high educational need and high unemployment are more rural
- Service area is generally well served by existing campuses

Right: Areas of Higher Educational Need in Columbia State Service Area

<< AREAS OF HIGHER EDUCATIONAL NEED

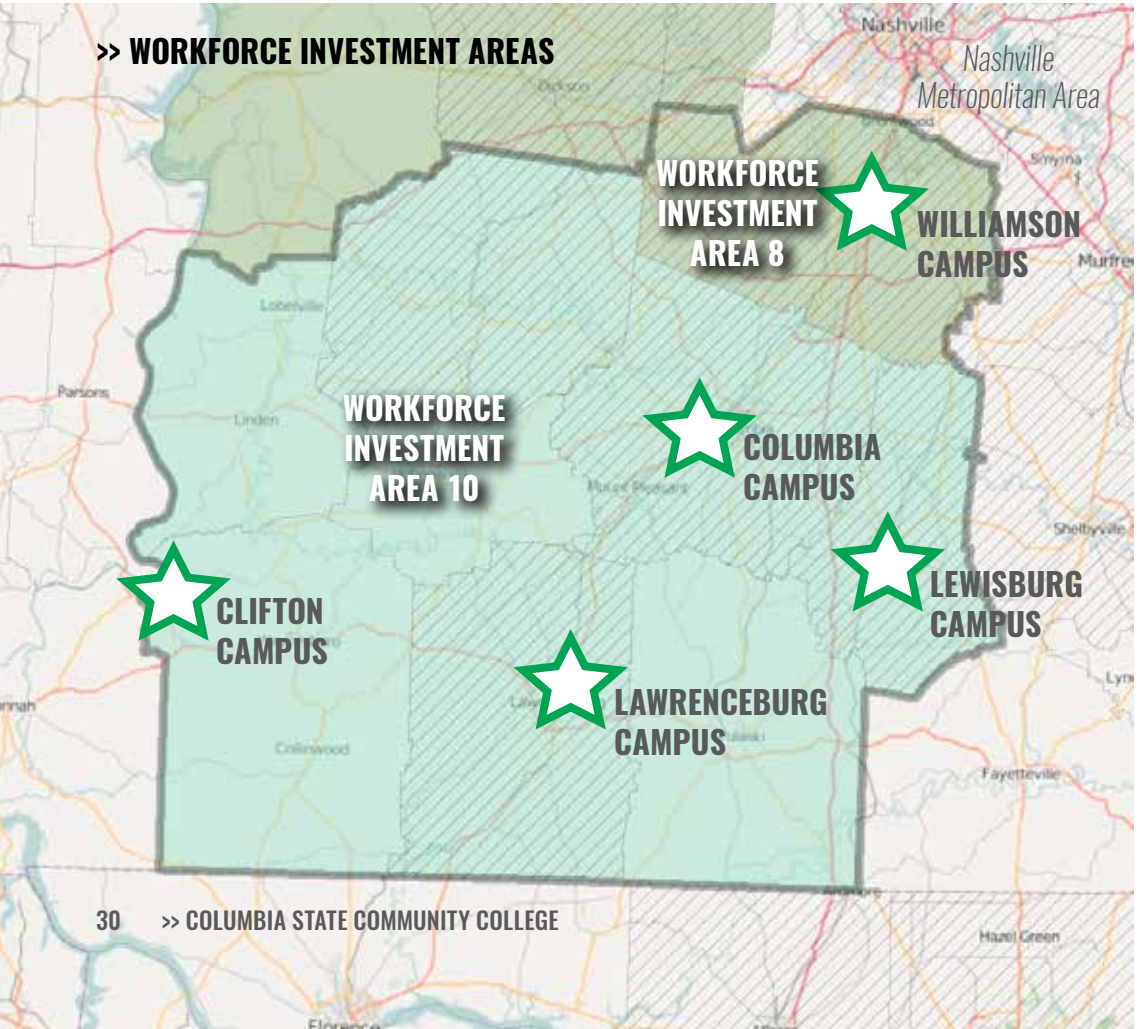


In highlighted census tracts, 43% or more of residents age 18+ have a high school diploma or equivalent but have not attended college.

Source: U.S. Census American Community Survey 2013 data / Map © OpenStreetMap (and) contributors, CC-BY-SA

REGIONAL JOB PROJECTIONS

An important part of the development of a campus Master Plan is an understanding of regional job projections. Regionally, data is analyzed for the two Workforce Investment Areas designated by the State of Tennessee that intersect Columbia State's service area. Nearly all of the service area is within Workforce Investment Area 10, but Williamson County is within Workforce Investment Area 8, which is more strongly influenced by the Nashville economy.



Job sectors with a significantly greater share of the job base than the statewide average:

WORKFORCE INVESTMENT AREA 8

FINANCE & INSURANCE

PROFESSIONAL, SCIENTIFIC, & TECHNICAL SERVICES

MANAGEMENT OF COMPANIES & ENTERPRISES

WORKFORCE INVESTMENT AREA 10

MANUFACTURING

Source: U.S. Census OnTheMap 2014 data

REGIONAL LABOR DATA

The Tennessee Department of Labor provides job outlook grade levels for each Workforce Investment Area in the state. These are broken down by industry clusters, which consist of jobs in closely related fields. Data for some industry clusters is only available at the statewide level.

A comparison of existing industry clusters to existing Columbia State programs was completed. Detailed data is provided in the Appendix on pages 93-99. The letter grade job outlook in all industry clusters takes into consideration the following factors:

- Growth rate in the industry cluster relative to the statewide growth rate for that industry cluster
- Number of annual job openings
- Supply demand ratio (the ratio of graduates of programs in all related higher education programs to the number of job openings)

While the regional job projections are based on data from historical and existing job markets, it is important to note that they may not correspond with the specific jobs that Columbia State graduates pursue. This is because of how jobs are grouped, as well as the fact that some of the data on graduates and job openings may be related to four-year programs and not directly relate to the demand for those with certificates or Associate's degrees. Job groupings and program competencies are in continuous transition to meet the changing specialty and related career entry requirements.

Furthermore, economies are constantly in flux, and localized/regional data such as potential growth in specific industries or expansions of major employers and job skill requirements may not be not recognized in labor market data. For this reason, the ultimate recommendations of this Master Plan are based on a larger picture of job outlook based on online surveys and interviews conducted with Columbia State faculty, staff, and administrators.

In general, most workforce clusters have an excellent, very good, or favorable job outlook, indicating that the regional economy is growing and that Columbia State graduates are entering fields with job growth and with more jobs than college graduates. Those programs with competitive job markets are mostly competitive statewide. The AiiT program falls into multiple categories because of the diverse fields in which its graduates are employed.

Since graduates of an Associate Transfer Program can go on to pursue a wide range of degrees that may lead to an even wider range of employment possibilities, it is not possible to correlate transfer degrees with regional industry clusters.

>> WIA 8 REGIONAL JOB OUTLOOK: TWO-YEAR DEGREES & CERTIFICATES

EXCELLENT

Business
Early Childhood Education*
Health Sciences
Medical Informatics
Nursing*
Veterinary Tech
AiiT
Tomography
EMT
Paramedic

VERY GOOD

AiiT††

COMPETITIVE

AiiT††
Criminal Justice Tech
Commercial Entertainment*
Film Crew Tech*
Music*

FAVORABLE

Information Systems*
Radiologic Tech

UNGRADED

Respiratory Care**

Source: Tennessee Department of Labor & Workforce Development
Note: Ungraded workforce clusters have either a negative job growth rate, fewer than 11 annual job openings, or no related academic programs in the workforce investment area
**All data for this workforce cluster is based on statewide projections, since regional data is not available. However, the Nashville Technology Council and area employers have identified Information Technology as a very high need for the Nashville region.*
*** The regional health care industry supports this program and has identified a growing need as exemplified by 100% placement of Columbia State's graduates from this program.*
††Data for this program is based on two workforce clusters, since graduates are employed in diverse manufacturing fields.

>> WIA 10 REGIONAL JOB OUTLOOK: TWO-YEAR DEGREES & CERTIFICATES

EXCELLENT

Early Childhood*
Medical Informatics
EMT
Paramedic

FAVORABLE

Information Systems*
Nursing
Radiologic Tech
Respiratory Care
Veterinary Tech

COMPETITIVE

Criminal Justice*
Commercial Entertainment*
Film Crew Tech*

VERY GOOD

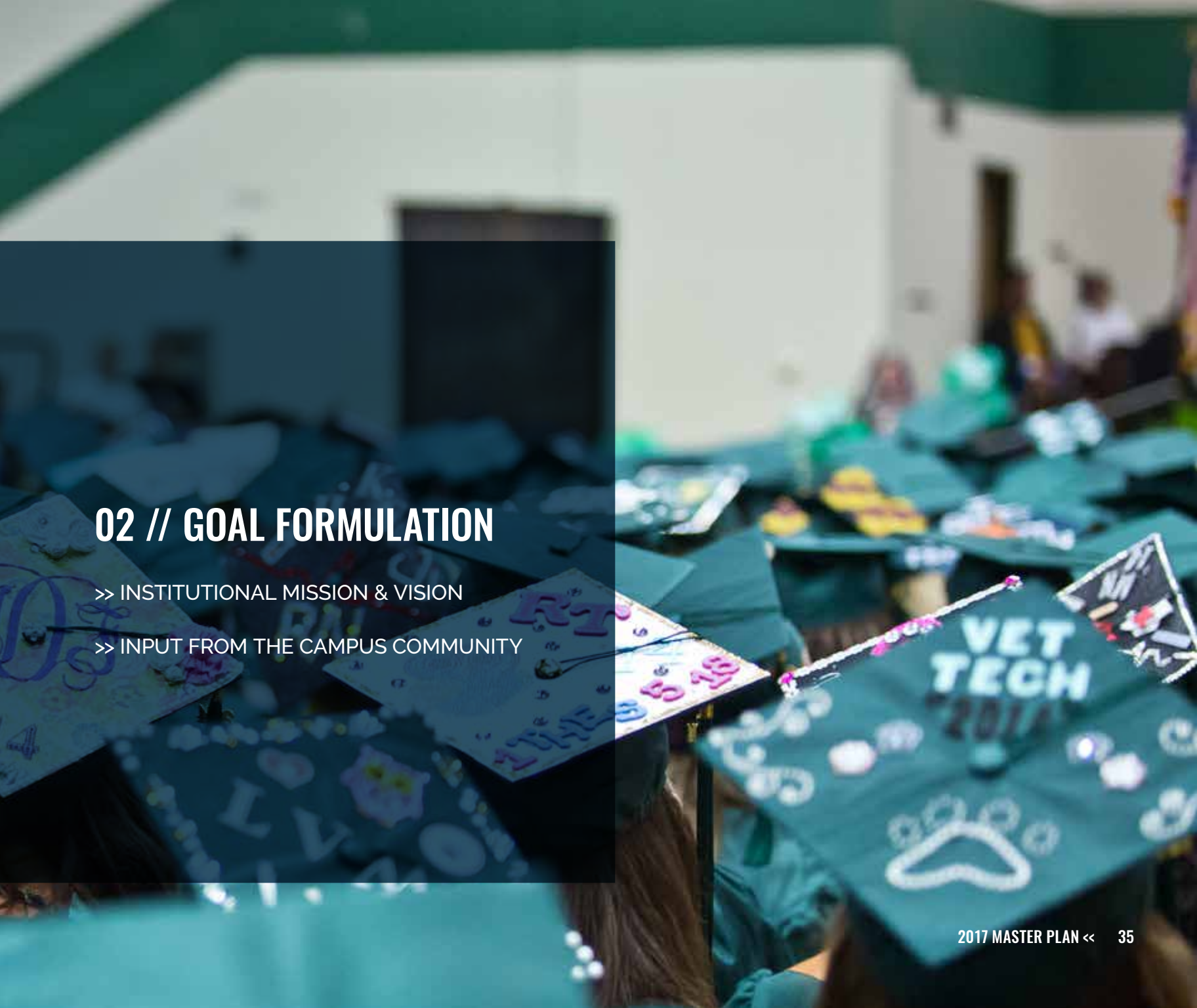
AiiT[††]*
Business
Health Science

UNGRADED

AiiT[††]
Computed Tomography***

Source: Tennessee Department of Labor & Workforce Development
Note: Ungraded workforce clusters have either a negative job growth rate, fewer than 11 annual job openings, or no related academic programs in the workforce investment area
**All data for this workforce cluster is based on statewide projections, since regional data is not available. However, the Nashville Technology Council and area employers have identified Information Technology as a very high need for the Nashville region.*
[††]Data for this program is based on two workforce clusters, since graduates are employed in diverse manufacturing fields.
****The regional health care industry supports this program, has identified a growing need, and has been integral in its development.*


"Our mission is to nurture success and positively change lives through our teaching, learning, and service."



02 // GOAL FORMULATION

>> INSTITUTIONAL MISSION & VISION

>> INPUT FROM THE CAMPUS COMMUNITY

INSTITUTIONAL MISSION AND VISION //

Columbia State's 2015 to 2025 Strategic Plan is a concise statement of the institution's mission, vision, and goals. This Master Plan lays out the facilities improvements necessary to support the Strategic Plan and ensure objectives are met.

MISSION

Columbia State Community College nurtures success, and positively changes lives through teaching, learning, and service.

We are committed to the core values of excellence, learning, success, integrity, access, leadership, responsibility, diversity, service, and community. These values guide and direct Columbia State as we pursue our vision.

VISION

Columbia State Community College will be the "1st Choice" for those seeking post-secondary learning and hailed as outstanding by students, community partners, and national benchmarks.

Student Success is our cause! Student success at Columbia State is defined as the completion of educational, professional, and personal goals resulting from increased knowledge and skills. Success encourages lifelong learning, promotes responsible citizenship, and enhances the quality of life for self and others.

COLLEGE GOALS

In order for Columbia State to achieve the institution's mission and vision, five strategic goals; enrollment, quality, student success, resourcefulness, and community were defined.

GOAL 1 // ENROLLMENT

Columbia State will increase the number and diversity of students served.

- Actively support the growth of student enrollment.
- Deliberately be innovative in the delivery of classes including online, mobile, and traditional.

- Create a streamlined admissions process.
- Create a college that allows students to interact with a global environment similar to the one they will be entering.

GOAL 2 // QUALITY

Columbia State will provide and maintain high quality academic programs, faculty, staff, services, and facilities.

- Strengthen the focus on academics and teaching.
- Create/adopt more educational pathways leading to employment in the community using active industry participation to generate industry specific programs including certificates, degrees, and industry certifications.
- Ensure students view innovation, academic challenge, and student engagement as positive experiences at Columbia State.
- Commit to and demonstrate effective customer service internally and externally.
- Reevaluate department processes and procedures to determine if they are student-friendly and modify as possible and/or needed.
- Maintain facilities that are up-to-date at all locations and provide a comfortable learning environment.
- Cultivate an atmosphere of collegiality, transparency, open communications, and appreciation between departments and employees.

GOAL 3 // STUDENT SUCCESS

Columbia State will increase the number of citizens with diplomas, certificates, and degrees in our nine-county service area.

- Ensure the availability of services to help students succeed.
- Refine procedures for workplace experience and service learning that result in effective placement learning.

- Encourage student engagement by assisting students in taking active roles in the college and its communities.

GOAL 4 // RESOURCEFULNESS

Columbia State will work to identify and enhance alternate revenue sources and continue to efficiently use all available resources.

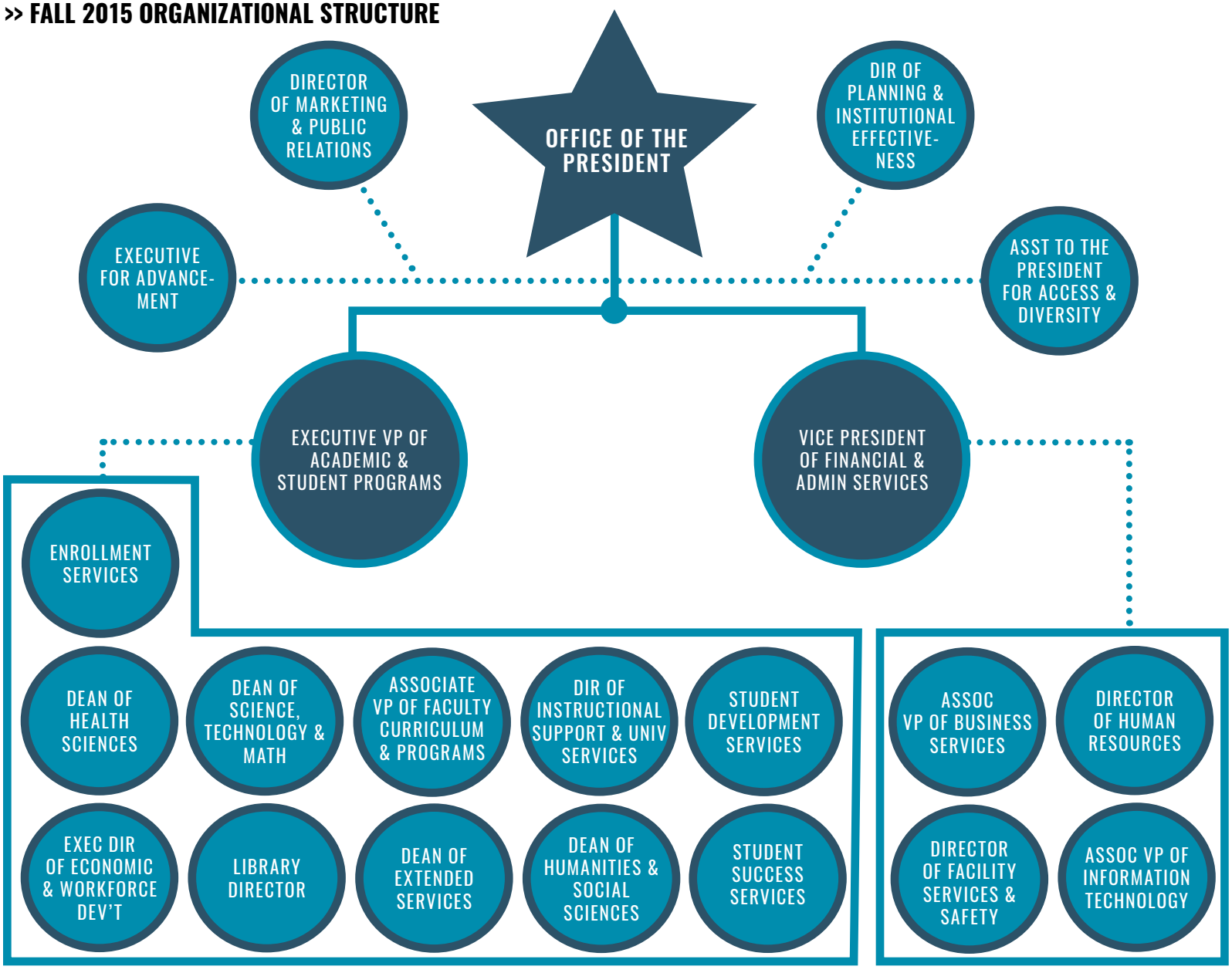
- Grow public financial support of Columbia State to advance the Columbia State Foundation as a leader among community college foundations in the southeast.
- Develop and implement processes and procedures for cross-campus involvement resulting in grants for enhanced college services and programs.
- Review and modify processes and procedures to become more efficient and effective.
- Continue to develop and practice fiscally conservative practices and procedures.

GOAL 5 // COMMUNITY

Columbia State will be an active participant in the development and growth of its service area.

- Provide easily accessible information to the college's constituents.
- Continue to actively build relationships with alumni to encourage engagement with and support of the college.
- Develop innovative and responsive technical and educational training (credit and non-credit) programs so that Columbia State is recognized as the go to place for employees, worker training, and professional development.
- Increase community involvement through projects and hosting of events.
- Increase recruitment and outreach throughout the nine county service area.

>> FALL 2015 ORGANIZATIONAL STRUCTURE



INPUT FROM THE CAMPUS COMMUNITY //

One of the most vital aspects of this master planning process is the input received from students, faculty, administrators, and staff. Online surveys, combined with individual interview and focus groups, allowed the master planners to understand in detail the needs and desires of the campus community.

ONLINE SURVEYS

A web-based survey invited students to share their thoughts on the quality of classrooms, labs, and other indoor and outdoor spaces, as well as provide input on safety, parking, and other general issues.

A separate web-based survey allowed Columbia State administrators and deans to provide input on their space needs, rank photos of indoor and outdoor spaces from other colleges, and give general comments on the campus and how to improve it.

HIGHEST VOTED SURVEY IMAGES AMONG FACULTY & STAFF

CLASSROOMS WITH FLEXIBLE ARRANGEMENTS

SEMI-OPEN OFFICE AREAS WITH PRIVACY

INFORMAL GATHERING SPACES

Image courtesy Champlain College Dublin

>> STUDENT SURVEY RESPONSES

What one word would you use to describe the Columbia Campus today?

What one word would you use to describe what it could become in the future?

FACULTY, ADMINISTRATOR, & STAFF COMMENTS

More outdoor lighting

More quality teaching spaces

AiiT program at Columbia campus?

Campus has institutional feel

New Health Sciences building

More office and storage space

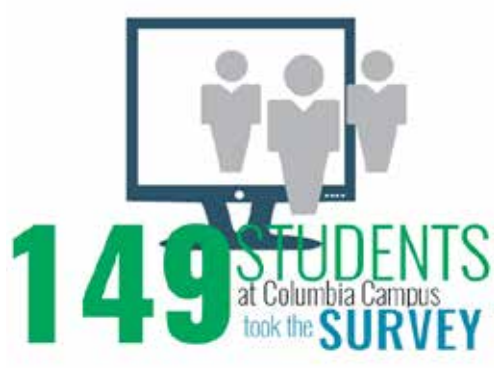
Aging infrastructure

ADA compliance

More adjunct faculty office space

More lab storage space

STUDENT COMMENTS



STUDENT COMMENTS

54%
VERY SAFE / SAFE

38%
NEUTRAL

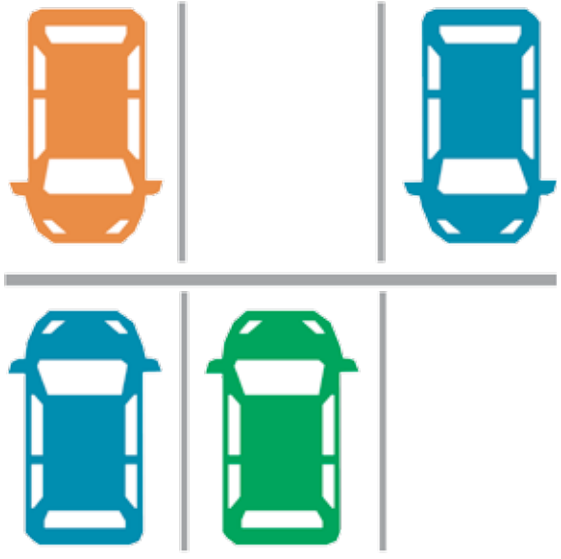
8%
UNSAFE / VERY UNSAFE

How safe do you feel on campus?

85%
NEVER / OCCASIONALLY

10%
ONLY A FEW TIMES A WEEK

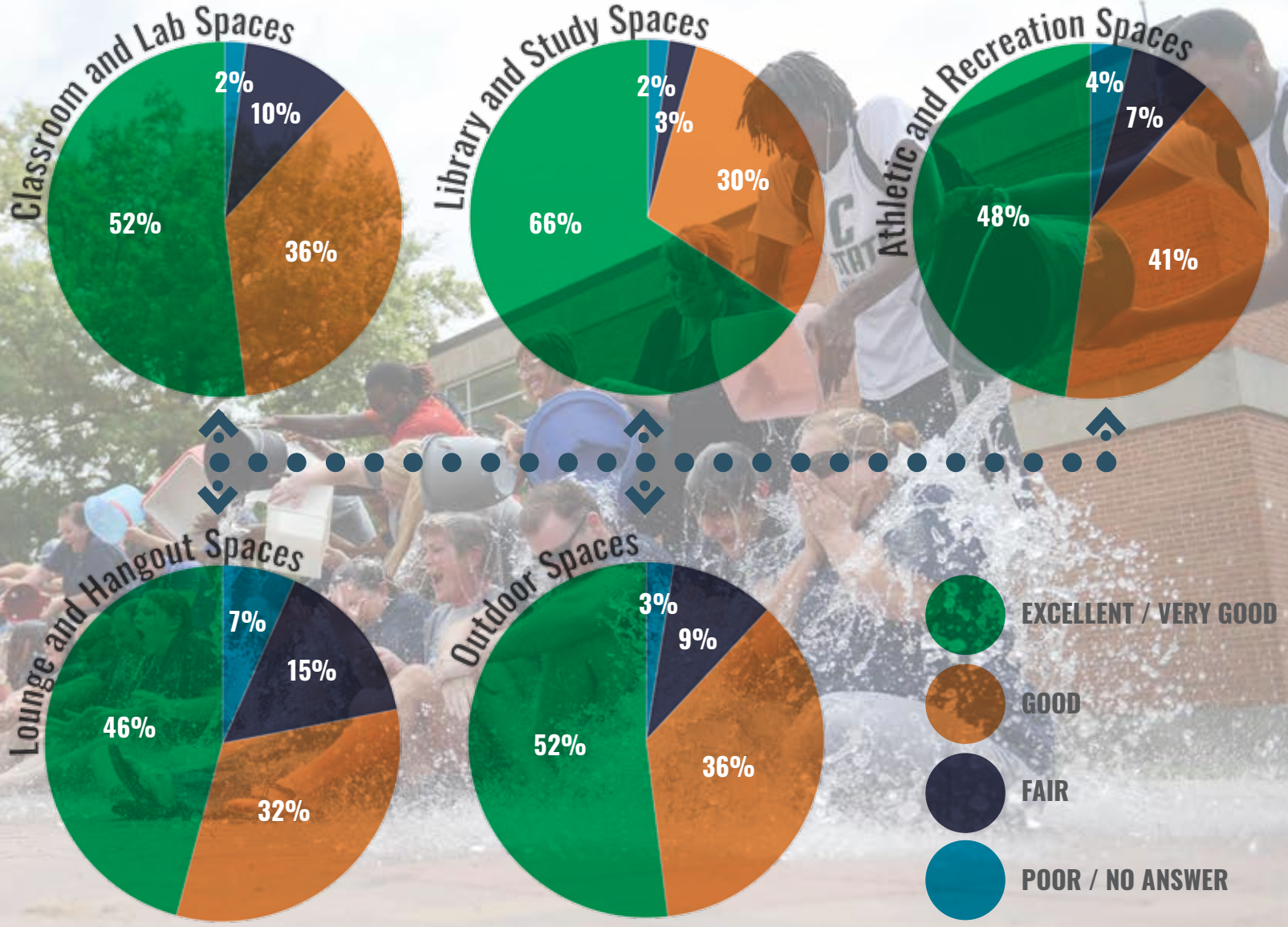
5%
YES, EVERYDAY

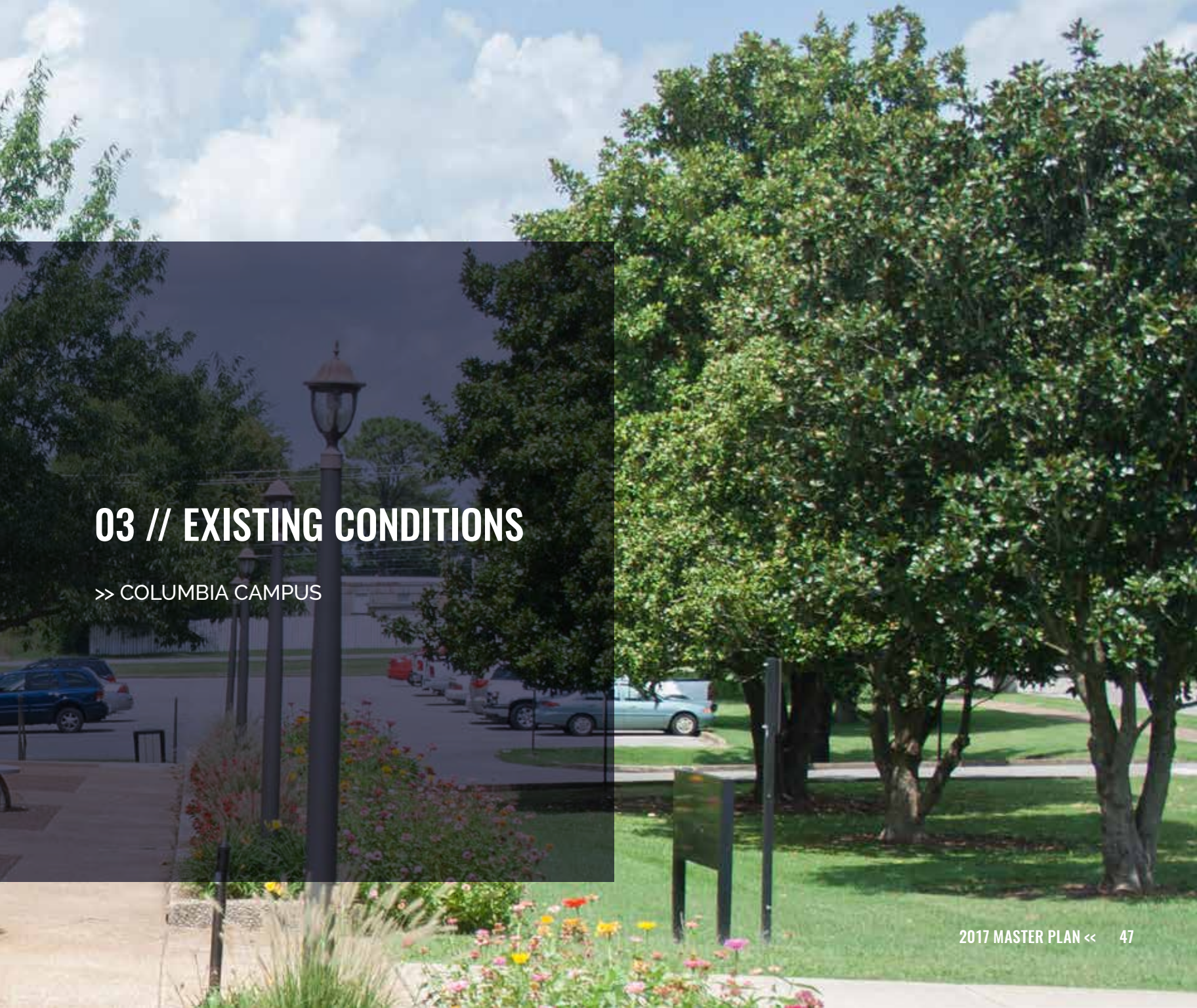


Do you have trouble finding on-campus parking?

Q. HOW WOULD YOU DESCRIBE THE QUALITY OF...

STUDENT COMMENTS





03 // EXISTING CONDITIONS

>> COLUMBIA CAMPUS

COLUMBIA CAMPUS //

Columbia State Community College's Columbia Campus is located approximately four miles west of downtown Columbia, 12 miles west of Interstate 65, and 40 miles south of Nashville.

The campus is located in a rural setting and surrounded by agricultural or residential land, with a mobile home park located north of the campus across Hampshire Pike.

NATURAL SYSTEMS

The Columbia Campus is approximately 700 feet above sea level. Drainage flows east to west and north to south on a gentle slope.

The large lawn area north of the Hickman Building and along Hampshire Pike serves as a stormwater detention area. Natural swales follow Hampshire Pike and Rutherford Lane. A concrete channel captures water and runs from the baseball field west to a large field just south of the Health Sciences Building.

>> COLUMBIA CAMPUS CONTEXT

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

>> COLUMBIA CAMPUS OVERVIEW

ENTRY POINTS

The Columbia Campus has three entry points from Hampshire Pike. A central entry road leads to the Pryor Administration Building and the westernmost entry road, which serves the Hickman Building and nearby areas. The easternmost entrance has a ceremonial entry road flanked by attractive monument signs that leads to the Webster Gymnasium. Most campus traffic uses this entrance, given that it is the first entrance encountered when coming from town, and that it leads to two major parking lots. The campus can also be accessed from the south via Rutherford Lane.

OPEN SPACE FRAMEWORK

A series of large and small open spaces helps contribute to a verdant Columbia Campus. The heart of campus is surrounded on most sides by a buffer of undeveloped land. Several large open spaces serve as stormwater detention or potential future building sites, and smaller open spaces interspersed between campus buildings provide areas for sitting, socializing, engaging, and reflecting.

The successful outdoor spaces do not always relate well to existing indoor spaces. This is partially due to historic buildings with utilitarian designs that were not necessarily meant to have an aesthetic appeal or connect with their surroundings.

LANDSCAPING

Some of the most prestigious college campuses in the United States are defined by simple but elegant landscaping. The Columbia Campus follows this formula, using a well defined system of walkways, hardwood trees, and open lawns. The tree canopy is a healthy mix of young and mature trees of a variety of species. Shrubs and ground covers are occasionally used as an accent.

The most iconic landscaping consists of rows of maple trees that create a ceremonial approach to the Gymnasium. Another unique landscape feature is the concrete

drainage channel, which has an aged patina and is flanked by hardwoods. This forms an attractive element on campus.

GATHERING PLACES

A number of small outdoor seating areas are provided throughout campus, anchored by three primary spaces that are used by students, faculty, and staff throughout the year.

- The seating plaza in front of the Warf Building is the largest such area on campus.
- The plaza outside the Jones Student Center provides a student gathering area and a collegiate feel for the campus.
- The circular area east of the Hickman Building provides a number of tables, seating walls, and a sculpture.

Informal indoor gathering spaces are limited, and consist of the dining area in the Jones Student Center, open study areas in the library, and some benches or smaller areas in academic buildings.

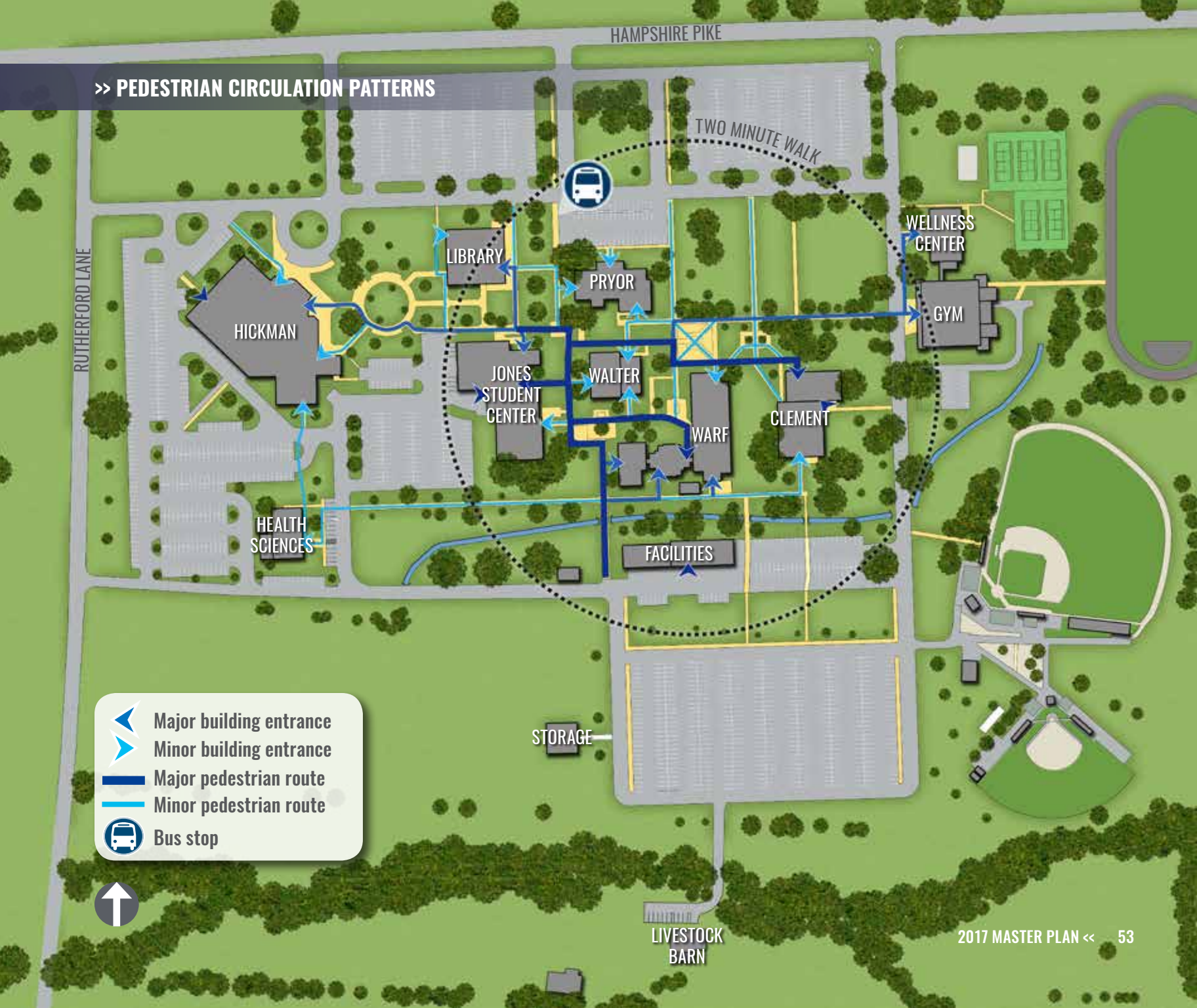
PEDESTRIAN CIRCULATION

In classic campus design fashion, the Columbia Campus consists of a pedestrian-only core, with access roads and parking lots on the perimeter. This provides a pleasant, safe, and walkable heart to the campus.

Potential conflict points between vehicles and pedestrians are in front of the Gymnasium and Wellness Center, as well as between the core of campus and the major parking lots, although no pedestrian safety issues were reported.

Once inside the campus, all buildings are within a few minutes' walk, and most buildings are located along a

>> PEDESTRIAN CIRCULATION PATTERNS



central east-west pedestrian spine that makes finding buildings easy. Due to the modernist architecture, building entrances are not always well defined and may be hard to find or seem like secondary entrances.

VEHICULAR CIRCULATION & PARKING

Most vehicles enter the campus from Hampshire Pike. Vehicular circulation is focused on a few primary roads within the campus that interconnect and have few points of conflict with pedestrians. Large parking lots to the north, south, or west of the campus core provide a parking space within a two minute walk of every building.

Based on calculations using conservative parking demand estimates from the Institute of Transportation Engineers, there is currently a surplus of parking spaces on the Columbia Campus.

Through a grant, hourly bus service known as the Mule Town Trolley is provided to the Columbia Campus by the South Central Area Transit Service. Buses travel from the Finney Library on campus to Riverwalk Park in downtown Columbia, with connections to other points in the region. Continuation of this service is based on ridership and future grant opportunities.

SECURITY

Most students, faculty, staff, and administrators reported that they feel safe or very safe on campus. Lighting in the interior of the Columbia Campus, however, is not adequate at night.

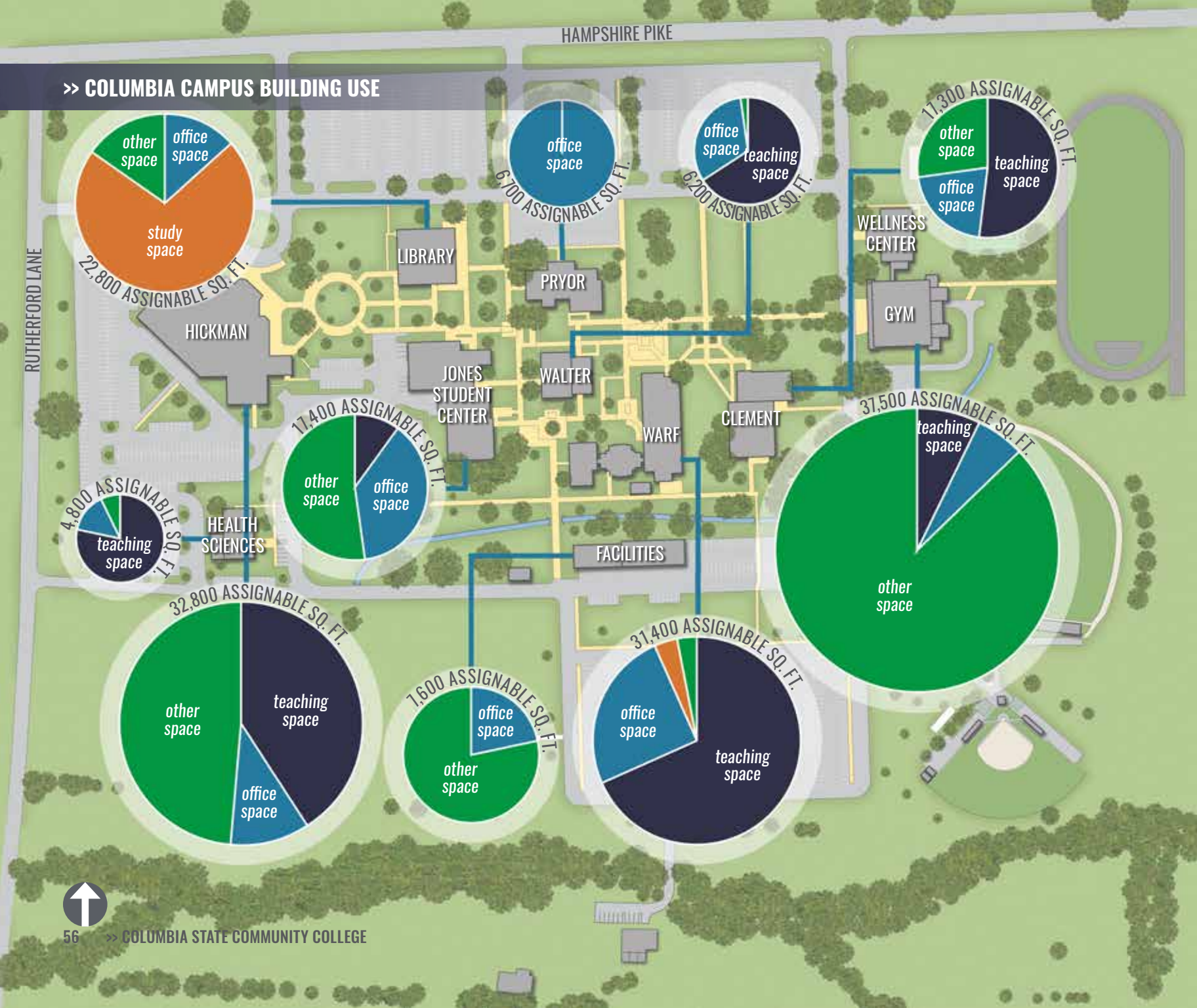
BUILDING CONDITION

While most buildings on the Columbia Campus were constructed in the 1960s, in general, the existing infrastructure for each building appears to be in fair to good condition. Several equipment upgrades have been made over the past 15 years and facilities staff has done a very good job of maintaining each system.

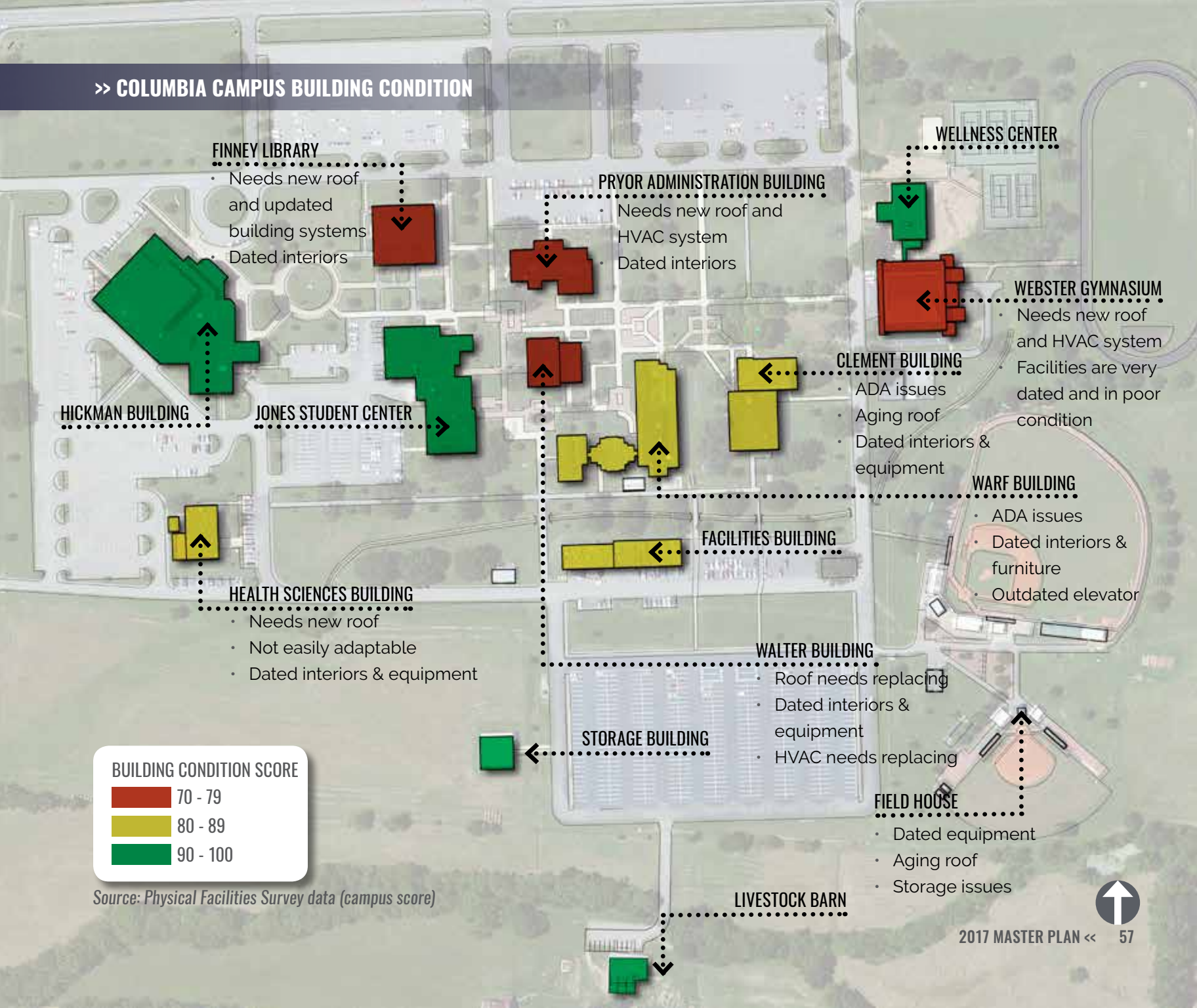
>> FALL 2015 PARKING SURPLUS


>> VEHICULAR CIRCULATION PATTERNS
HAMPSHIRE PIKE
RUTHERFORD LANE
LIBRARY
PRYOR
HICKMAN
JONES STUDENT CENTER
WALTER
WARF
CLEMENT
WELLNESS CENTER
GYM
HEALTH SCIENCES
FACILITIES
STORAGE
LIVESTOCK BARN
Major vehicular entrance
Minor vehicular entrance
Major vehicular pathway
Minor vehicular pathway
Pedestrian crossing

>> COLUMBIA CAMPUS BUILDING USE



>> COLUMBIA CAMPUS BUILDING CONDITION



Source: Physical Facilities Survey data (campus score)

04 // FUTURE REQUIREMENTS

>> ENROLLMENT PROJECTIONS

>> SPACE NEEDS

>> LAND ACQUISITION

ENROLLMENT BENCHMARKS //

Since 1979, Columbia State's enrollment has grown 2.8% annually on average. Fall 2015 enrollment was nearly back to the Fall 2009 peak during the Great Recession.

Many factors can affect future enrollment growth, some of which (such as national economic trends) are difficult to project. For this reason, this Master Plan has established two growth benchmarks. If growth occurs as expected, particularly at the new Williamson County campus, Benchmark 1 could be achieved in the near term. Benchmark 2 is a more long range projection developed for planning purposes.

Faculty and staff are expected to grow at the same rate as the student body, to preserve Columbia State's small class sizes and intimate college feel. However, due to funding, the number of adjunct faculty is expected to grow at a faster rate than full-time faculty. These will require space to advise students and provide out of class support needed for student success.

ENROLLMENT GROWTH BENCHMARKS BY CAMPUS

HEADCOUNT	COLUMBIA CAMPUS	CLIFTON CAMPUS	LAWRENCEBURG CAMPUS	LEWISBURG CAMPUS	WILLIAMSON CAMPUS	NORTHFIELD SITE	TOTAL
Fall 2015	3,280	136	616	273	1,318	109*	5,732
Benchmark 1	3,640	202	689	386	1,787	0*	6,682
Benchmark 2	3,739	224	689	442	2,163	0*	7,233
FTE							
Fall 2015	2,037	81	328	142	750	92*	3,428
Benchmark 1	2,200	90	350	175	950	0*	3,765
Benchmark 2	2,260	100	350	200	1,150	0*	4,060

*The Northfield site is proposed to be closed, with all students being relocated to the Columbia Campus

>> HISTORIC INSTITUTION-WIDE ENROLLMENT GROWTH (HEADCOUNT)

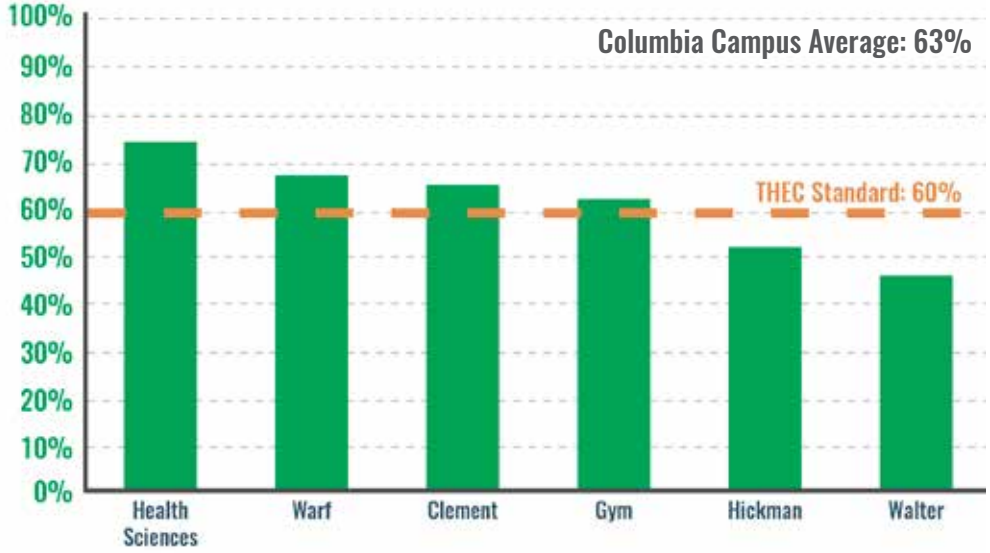
STATION OCCUPANCY

Station occupancy shows the percentage of seats or lab stations filled, based on Fall 2015 enrollment. Most buildings on the Columbia Campus are at or above the THEC standard.

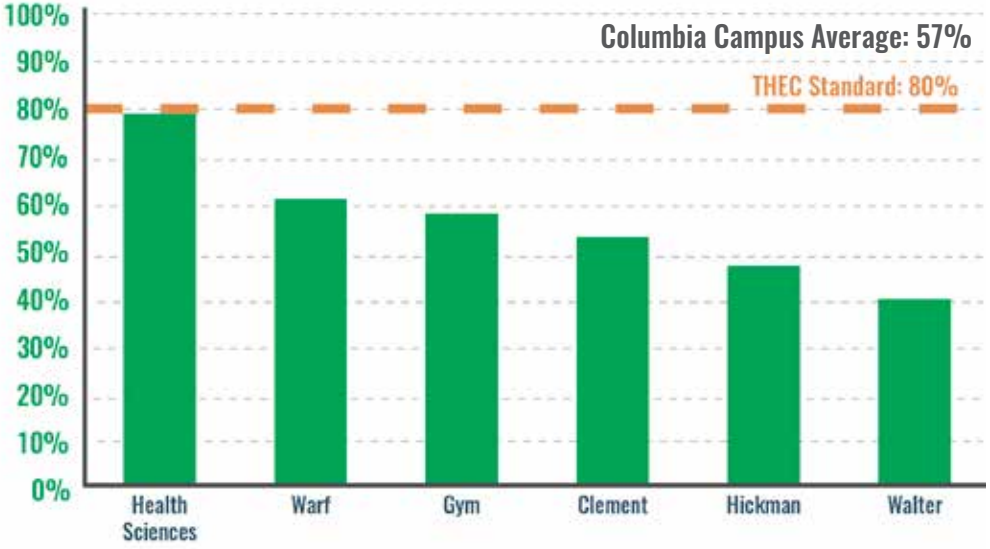
The Hickman Building's lower station occupancy is likely due to the presence of the theater, music, and art programs, which are not always able to fill all seats on small campuses, but remain an important part of Columbia State's academic mission.

The lower occupancy numbers for the Walter Building are due to low enrollment limitations imposed on several health science courses by external constraints (e.g. clinical capacity, market demand balance, and accreditation standards).

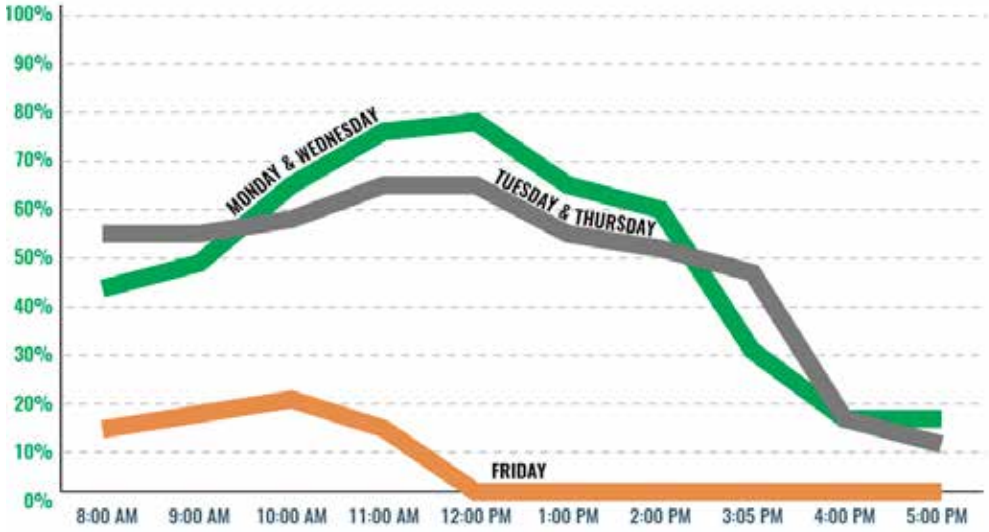
>> AVERAGE CLASSROOM STATION OCCUPANCY



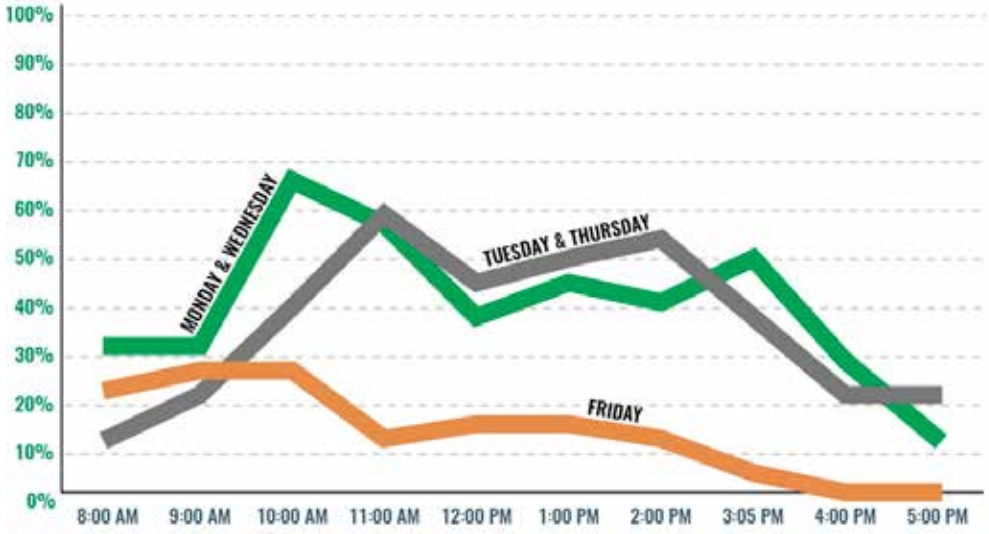
>> AVERAGE LAB STATION OCCUPANCY



>> PERCENT OF CLASSROOMS ON COLUMBIA CAMPUS WITH SCHEDULED COURSES



>> PERCENT OF LABS ON COLUMBIA CAMPUS WITH SCHEDULED COURSES



ROOM UTILIZATION

While there is no THEC standard for what percent of classrooms and labs should be scheduled, utilization numbers on the Columbia Campus are low before 10:00 a.m. and after 2:00 p.m. Due to scheduling of labs and concentration of classes on a two-day schedule for completion purposes (concentrated schedules), many classrooms are not occupied on Fridays.

Some specialized labs are difficult to fill on small campuses given the limited number of sections. For instance, it may be easy to fill a mathematics lab due to the large number of sections, while a health sciences lab may only have a few sections. Nevertheless, there is likely still potential to increase room utilization as enrollment grows in the future.

Another factor is the blocking of classrooms for specialty programs that need classroom space at various unscheduled times.

SPACE MODELING AS A TOOL

Any space model should be considered a tool for understanding current and future space needs, not as a precise indicator of exact needs. For the sake of this Master Plan, results of the model are considered alongside information gleaned during interviews with the campus community to provide a more complete picture of needs.

It is also important to remember that the model addresses only the quantity and not the quality of spaces. In certain older buildings, the age of certain facilities may detract from their effective use.

Columbia State is the oldest public community college in Tennessee. Its primary instructional buildings date to the 1970s. There has been little renovation and even though the space model identifies quantity of space, it does not reflect quality and usability. Today's education climate requires facilities that are modern, with technology for instruction and student use. Classrooms, hallways, and the campus should and must be engaging and project an image of success.

All areas are given in net assignable square feet, which does not include spaces such as hallways and restrooms that are necessary to serve assignable spaces.

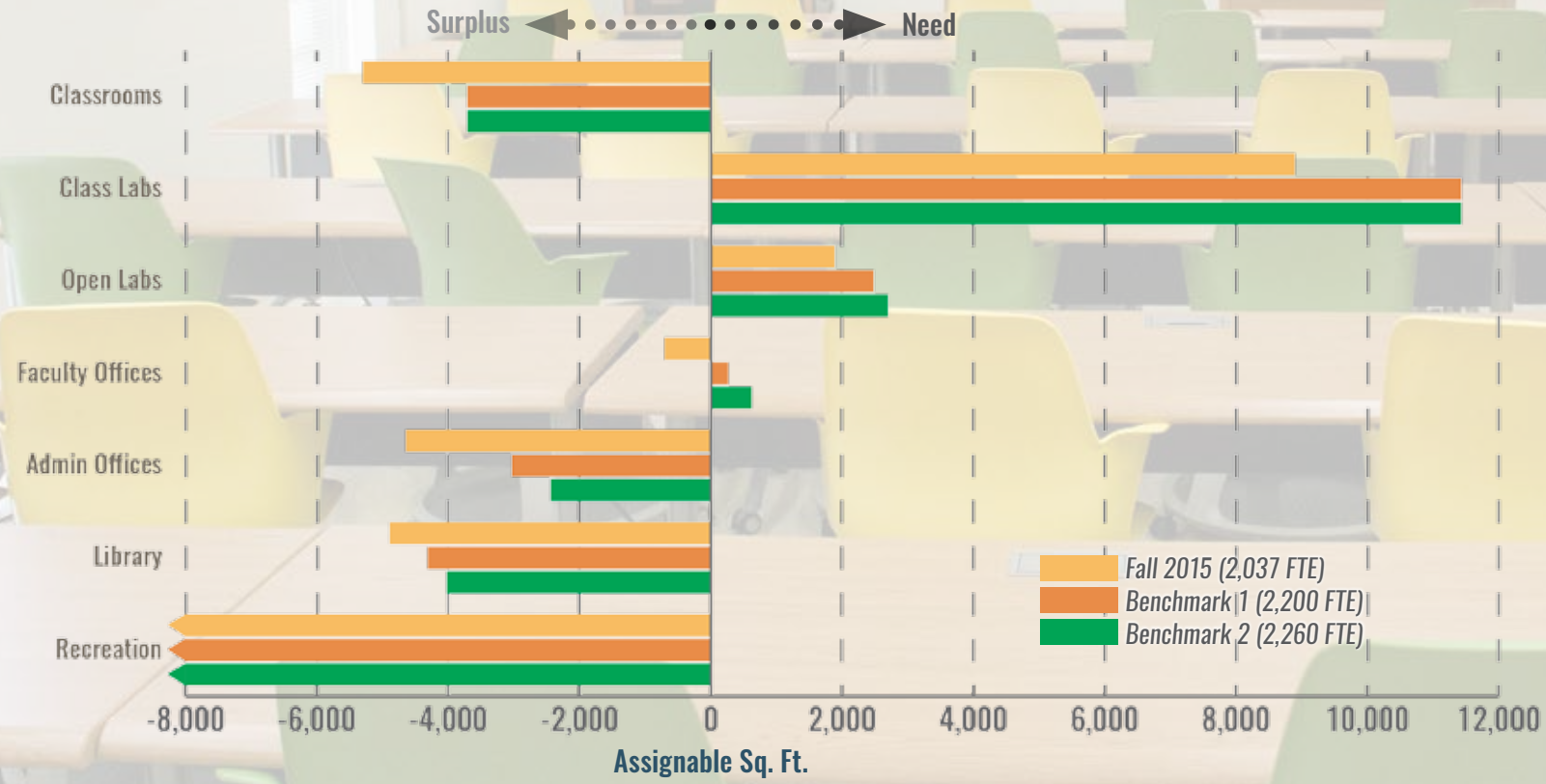
Results of the master planning consultant's proprietary model are shown for comparison in the Appendix, which also provides background on the assumptions and calculations involved in space modeling.

SPACE NEEDS //

Existing and future space needs were calculated using data on courses, rooms, employee counts, and other information provided by Columbia State, combined with the growth benchmarks shown on page 61. These needs are based on the Tennessee Higher Education Commission (THEC) space model. Detailed results are provided in the Appendix on page 92. Key findings are as follows:

- There is a need for additional lab space on the Columbia Campus.
- While the quantity of some types of space is adequate, the quality of labs, classrooms, gymnasium, and library space on the Columbia Campus is inadequate.
- Seats in classrooms are well occupied, but labs are not.
- Classroom and lab utilization is good, except on Fridays, after 3:00 p.m., and for some special disciplines.

>> SPACE NEEDS: COLUMBIA CAMPUS

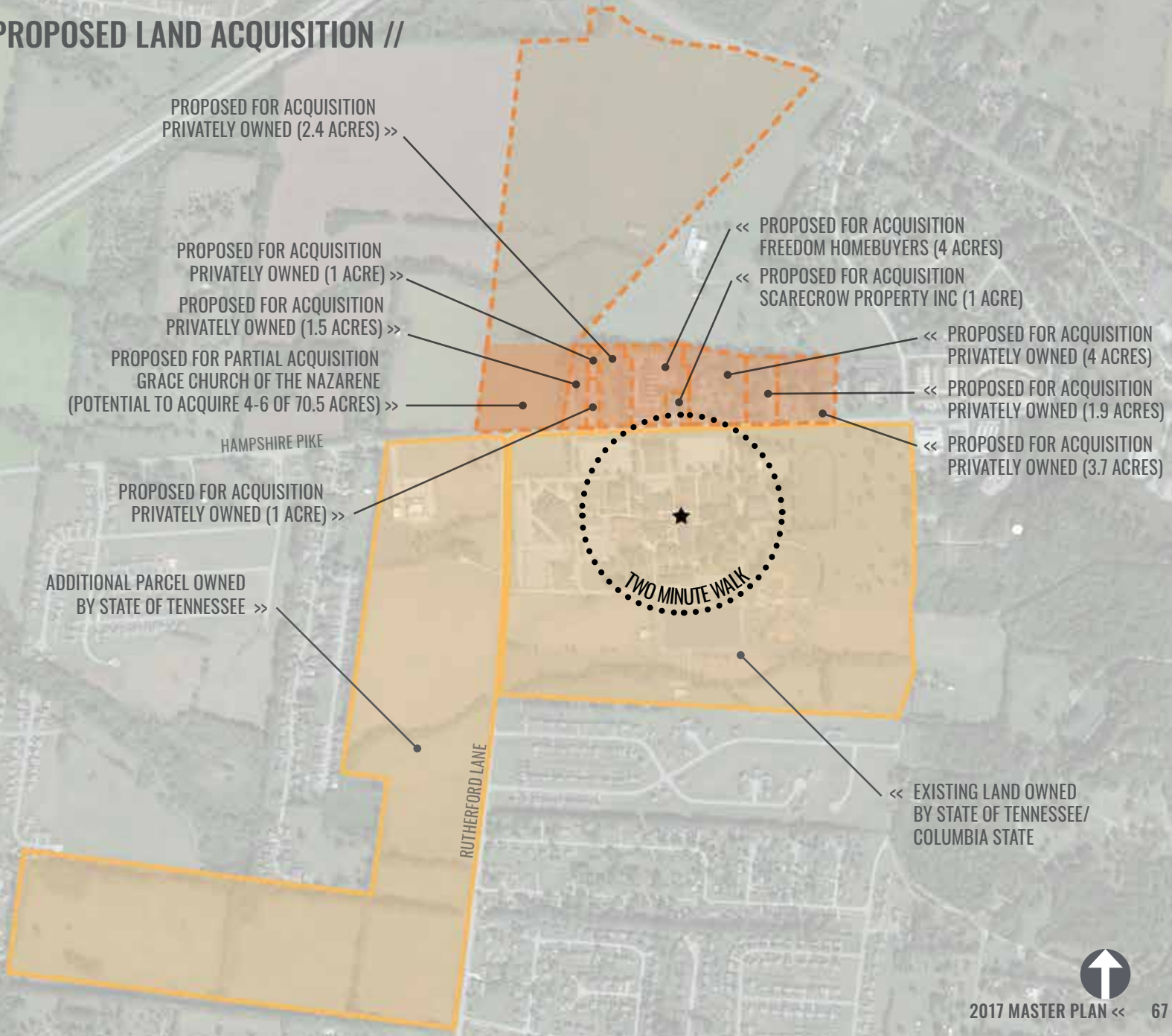


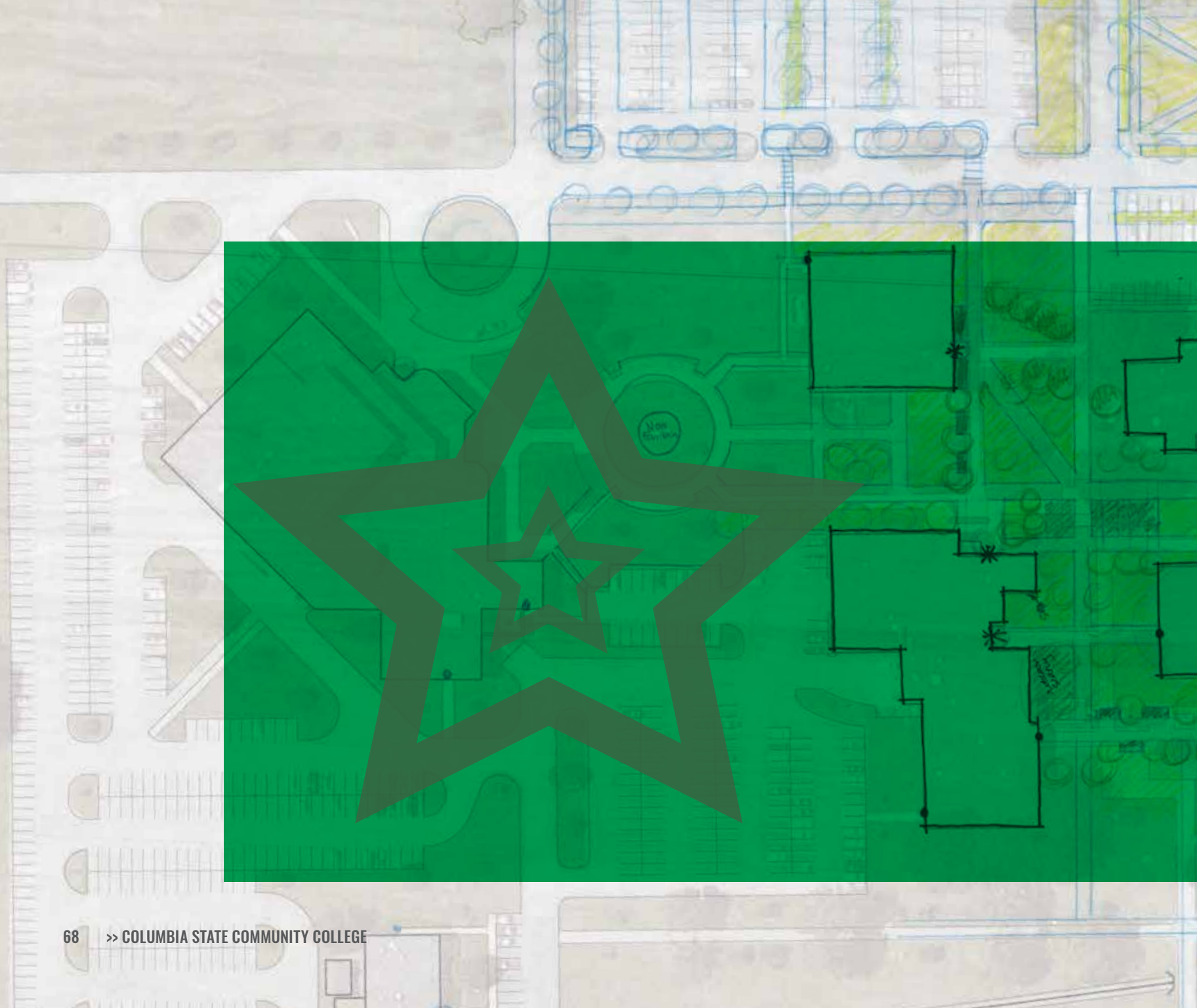
OFFICE SPACE

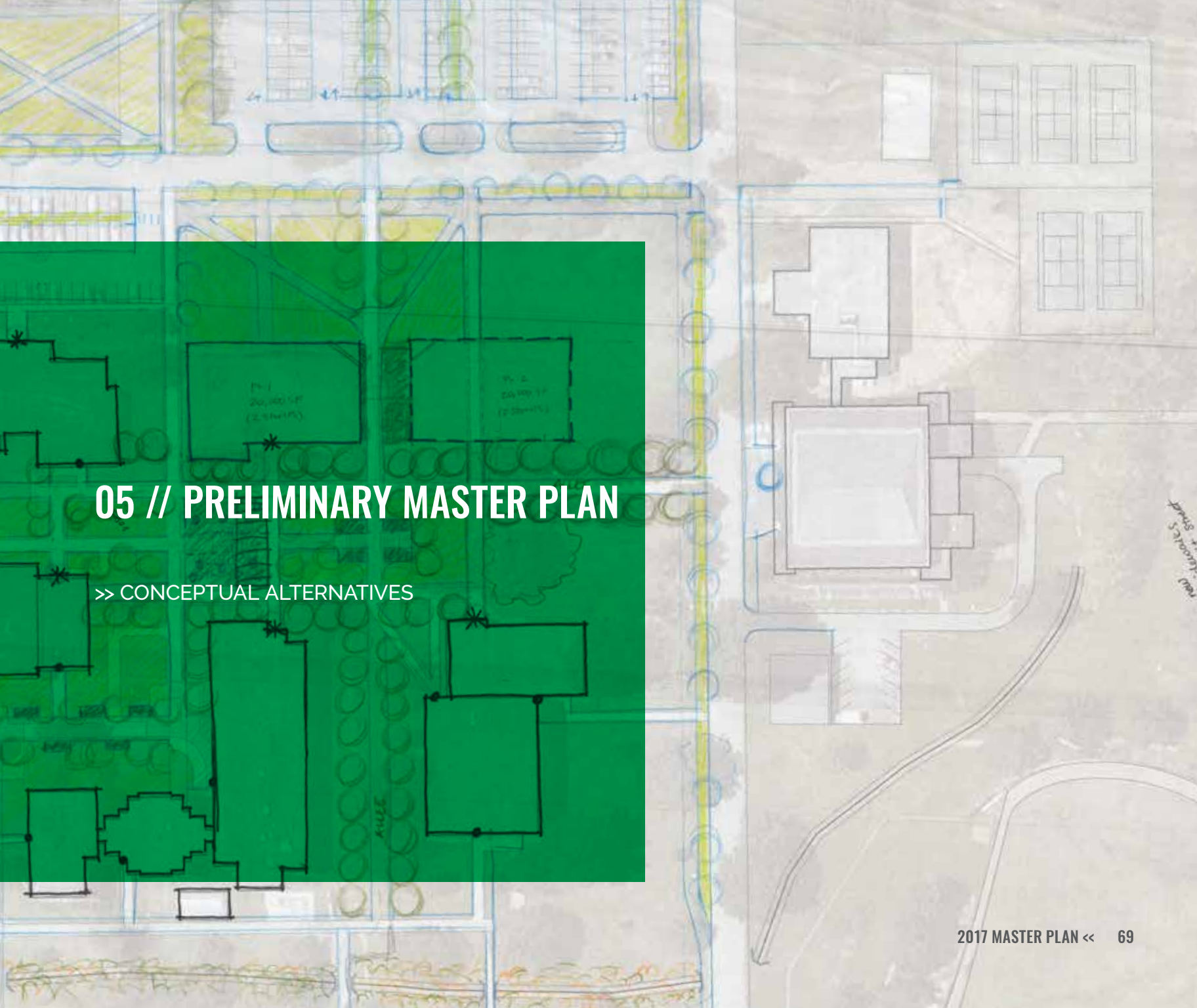
While the THEC space model shows that the quantity of office space on the Columbia Campus is more than adequate, a number of individual offices are not ideal. For instance, some faculty offices are located in offices formerly used by administrative assistants and that serve as cut-throughs to other offices and therefore lack privacy.

Other offices are located in storage closets. Many offices are not conducive to meeting with students. The majority need renovation in that they are 1970s vintage.

PROPOSED LAND ACQUISITION //







05 // PRELIMINARY MASTER PLAN

>> CONCEPTUAL ALTERNATIVES

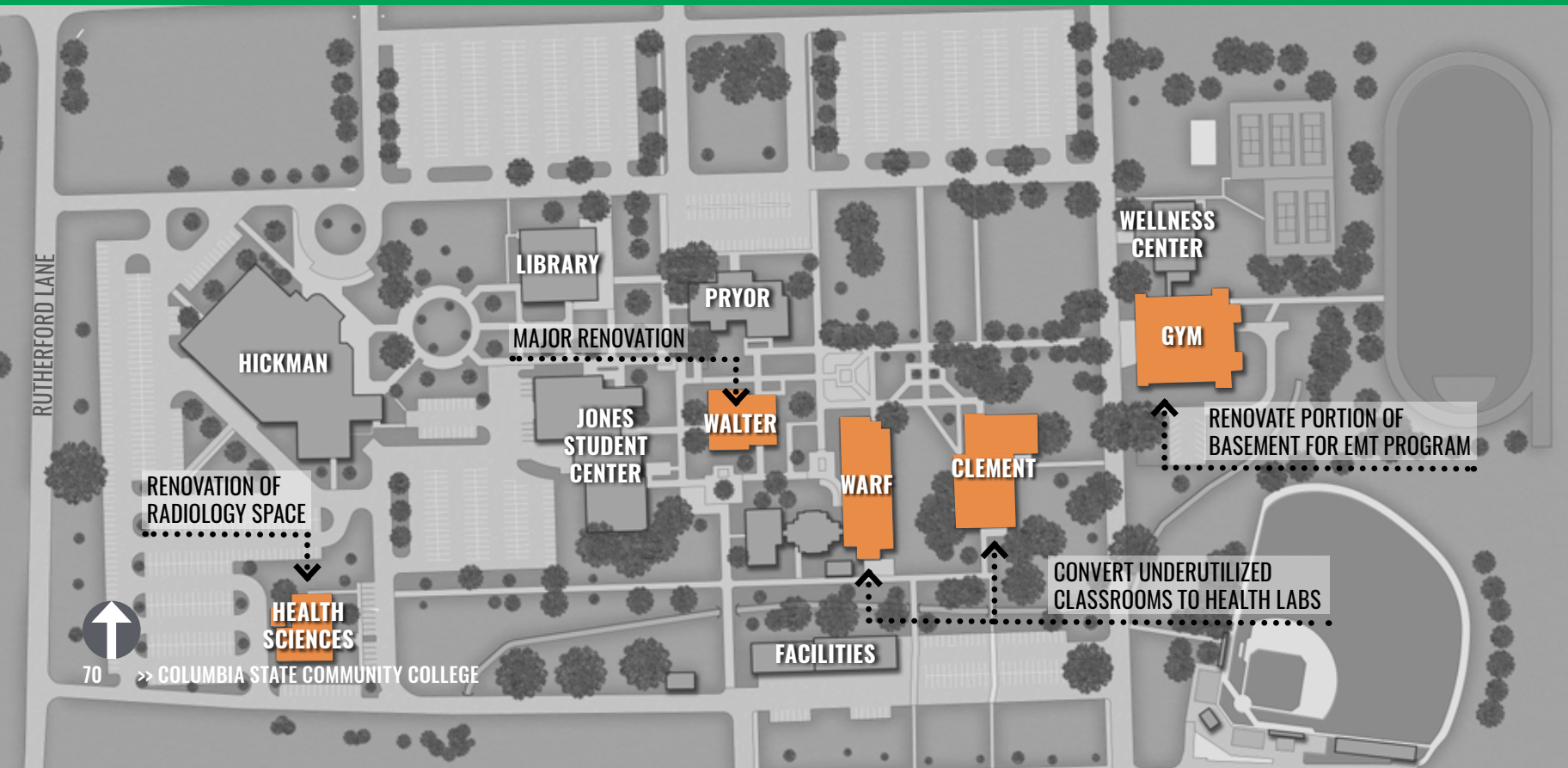
CONCEPTUAL ALTERNATIVES //

Several alternatives were considered to meet future needs on the Columbia Campus. They were ultimately considered not feasible, and the final plan outlined in the next chapter was chosen.

RENOVATION ALTERNATIVE

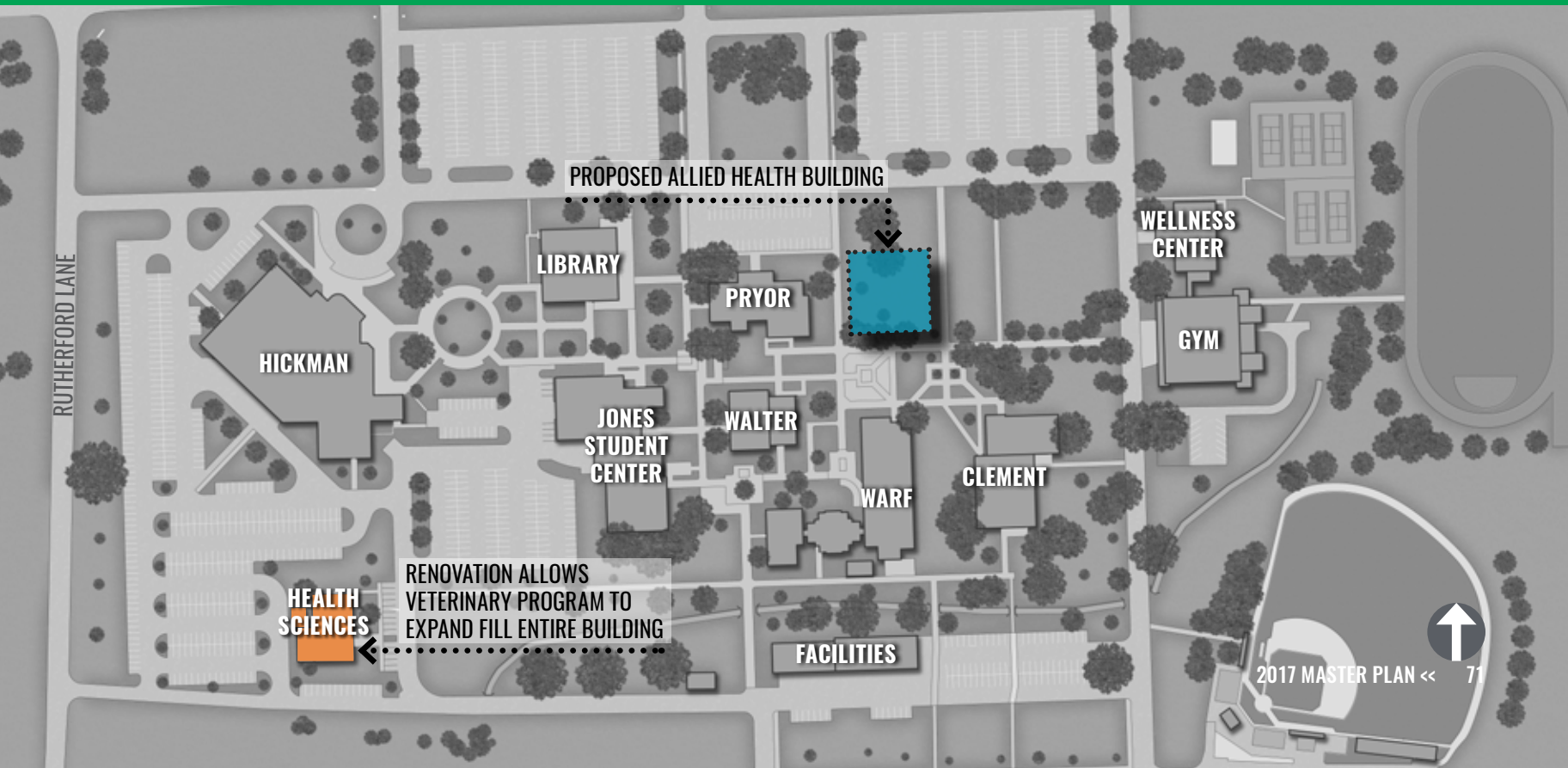
In order to provide modern teaching space for the Allied Health programs and increase the amount of lab space based on the needs shown in the THEC model, this alternative proposed several renovations as shown below. This plan was ultimately deemed not feasible for the following reasons:

- Does not meet all space needs (would still be short approximately 3,000 sq. ft. of lab space)
- Does not provide space for proposed new allied health programs
- Does not provide space for nursing simulation labs
- Does not provide cost effective instructional synergy between Allied Health programs
- Quality of space in renovated older buildings would be less than ideal
- Walter renovation cost would be similar to new construction cost
- Gym basement not ideal space
- Lack of adjacencies



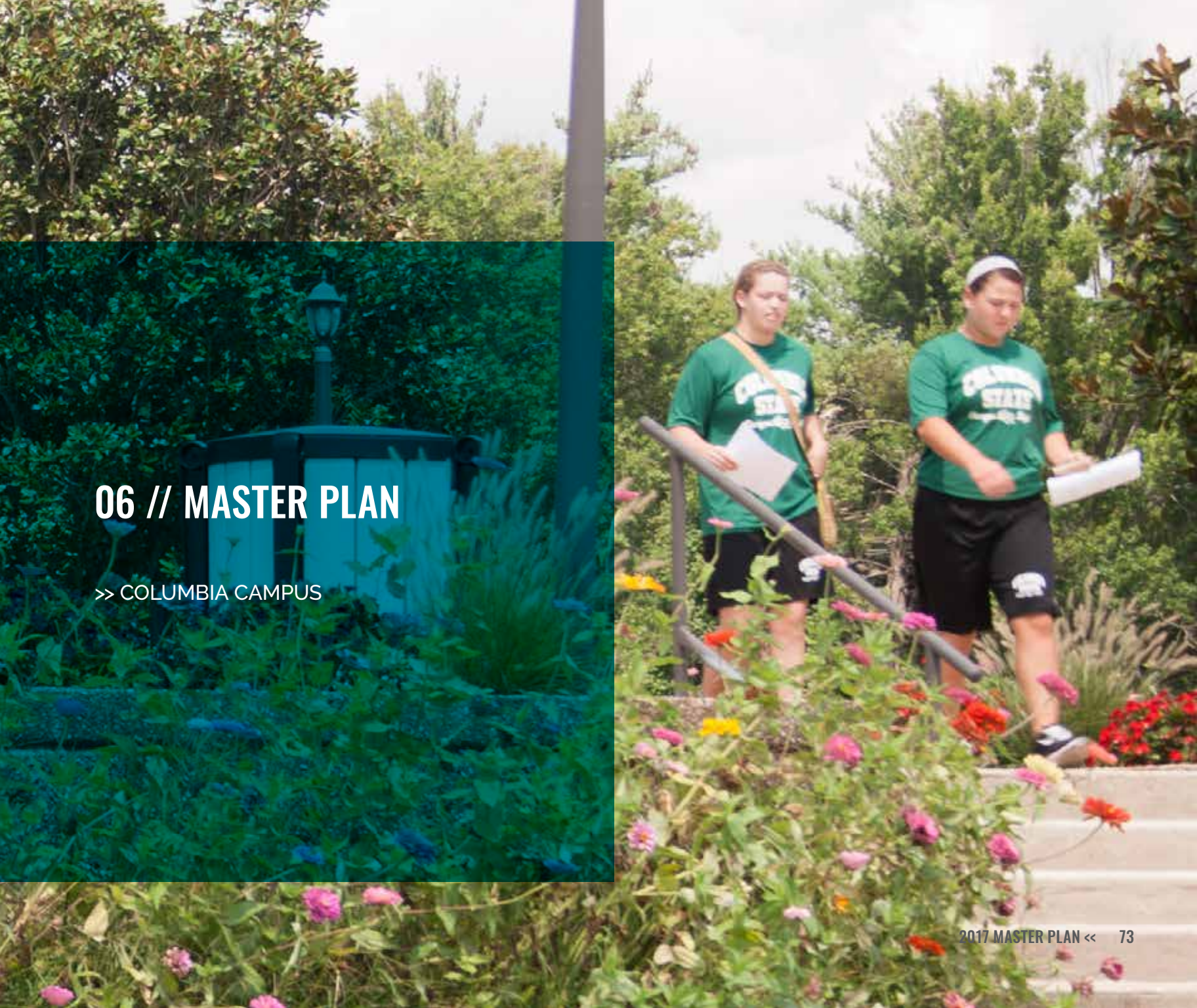
NEW BUILDING ALTERNATIVE

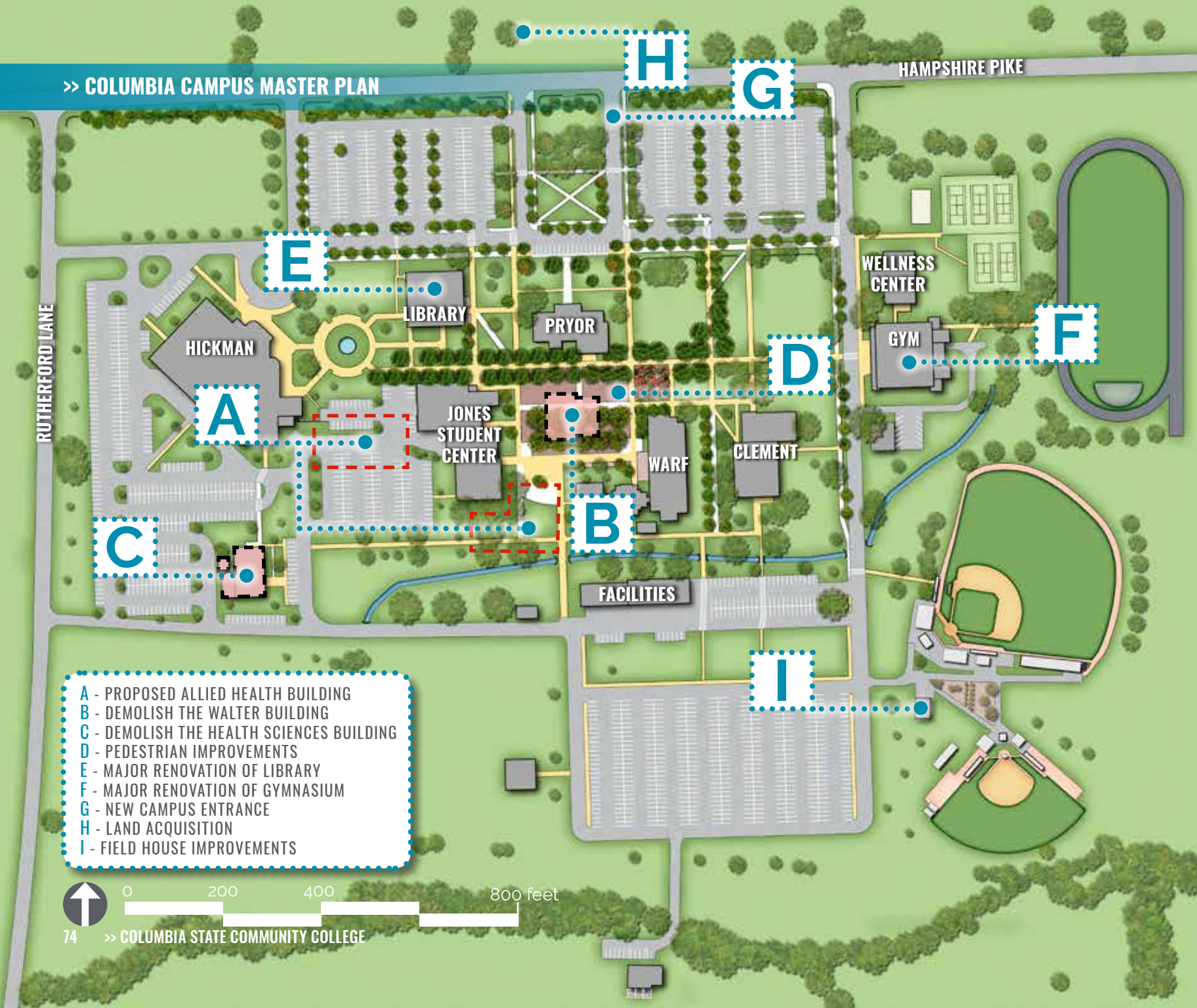
Another alternative considered is shown below. This option would renovate the Health Sciences Building so that the Veterinary program would have ample, modern space, and construct a new Allied Health Building adjacent to the Pryor Administration Building to house the following Allied Health programs: Medical Informatics, Nursing, Respiratory, and Radiology Programs, EMT/Paramedic program (relocated from Northfield Campus), and the proposed Occupational Therapy & Public Health programs. This plan was ultimately deemed not ideal and was refined into the preferred concept plan shown in the following chapter.



06 // MASTER PLAN

>> COLUMBIA CAMPUS




H
G
HAMPSHIRE PIKE
E
WELLNESS CENTER
LIBRARY
PRYOR
HICKMAN
GYM
F
D
RUTHERFORD LANE
A
JONES STUDENT CENTER
WARF
CLEMENT
B
C
FACILITIES
I
A - PROPOSED ALLIED HEALTH BUILDING
B - DEMOLISH THE WALTER BUILDING
C - DEMOLISH THE HEALTH SCIENCES BUILDING
D - PEDESTRIAN IMPROVEMENTS
E - MAJOR RENOVATION OF LIBRARY
F - MAJOR RENOVATION OF GYMNASIUM
G - NEW CAMPUS ENTRANCE
H - LAND ACQUISITION
I - FIELD HOUSE IMPROVEMENTS
0
200
400
800 feet

A

PROPOSED ALLIED HEALTH BUILDING

There is currently a need for additional lab space on the Columbia Campus, a need that is expected to continue to grow with enrollment. In order to meet this need, a proposed Allied Health Building should be constructed in one of two locations as shown at left and should:

- Provide needed modern lab space, bringing the quality of the teaching space up to that on other community college campuses and allowing the college to attract new students
- Provide office and other spaces that need to be adjacent to Allied Health teaching spaces
- Consolidate Allied Health programs into a single building to allow for better collaboration

B

DEMOLISH THE WALTER BUILDING

The Walter Building has a number of facilities issues that make it inadequate for continued academic use:

- Inefficient room layout and structural walls prevent the creation of adequately sized teaching spaces
- Small windows and lack of gathering space make it unwelcoming
- The roof has reached the end of its life and needs replacing
- Interior finishes, furniture, and equipment are dated
- HVAC system has reached the end of its life and needs replacing

It would be extremely costly and difficult to correct these issues by renovation. For this reason, it is recommended that the Walter Building (which totals 9,000 gross square feet) be demolished.

The demolition would remove approximately 1,400 square feet of classrooms, 2,700 square feet of labs, and 2,000 square feet of offices. These spaces would then be replaced in the proposed Allied Building.

C

DEMOLISH THE HEALTH SCIENCES BUILDING

The existing Health Sciences Building has a number of facilities issues that make it inadequate for continued use:

- Inefficient floor plan creates spaces that are difficult to use for teaching
- The roof has reached the end of its life and needs replacing
- Interior finishes, furniture, and equipment are dated
- Building is not equipped with fire sprinklers

For this reason, it is recommended that the Health Sciences Building be demolished once the Radiologic Technology and Veterinary programs relocate to the proposed Allied Health Building

D

PEDESTRIAN IMPROVEMENTS

With the demolition of the Walter Building and the construction of the new Allied Health building, a number of pedestrian improvements will be required in order to facilitate circulation, provide needed outdoor gathering spaces, and modernize the look of the campus to attract new students.

- New walkways should be created where shown in white on page 74 to reflect desire lines between buildings and improve lighting for nighttime safety
- Improvements between the Student Center and Library, and between the Warf and Clement Buildings, should tie these pairs of buildings together
- A pedestrian plaza at the Warf Building's north entrance should include a seating wall and eliminate the existing step
- The existing allée of trees should be continued into the heart of campus
- The existing rose garden should be preserved and relocated
- A decorative brick wall should be constructed to define the lawn south of the northeast parking lot

Image courtesy Tulane Public Relations

E

MAJOR RENOVATION OF LIBRARY

The John W. Finney Memorial Library is located centrally on campus and remains structurally sound, but is infrequently used. It should be modernized to create a true learning hub, improve student success, and create a better impression for potential students.

The existing highly flexible floor plan will allow for new furniture, finishes, stack space, and collaborative learning spaces. Building systems should also be updated as follows:

- HVAC upgrades to second floor to replace VAV boxes and controls
- Plumbing upgrades to replace original fixtures
- Upgrade life safety and security lighting
- Replace roof
- Install new fire sprinkler system

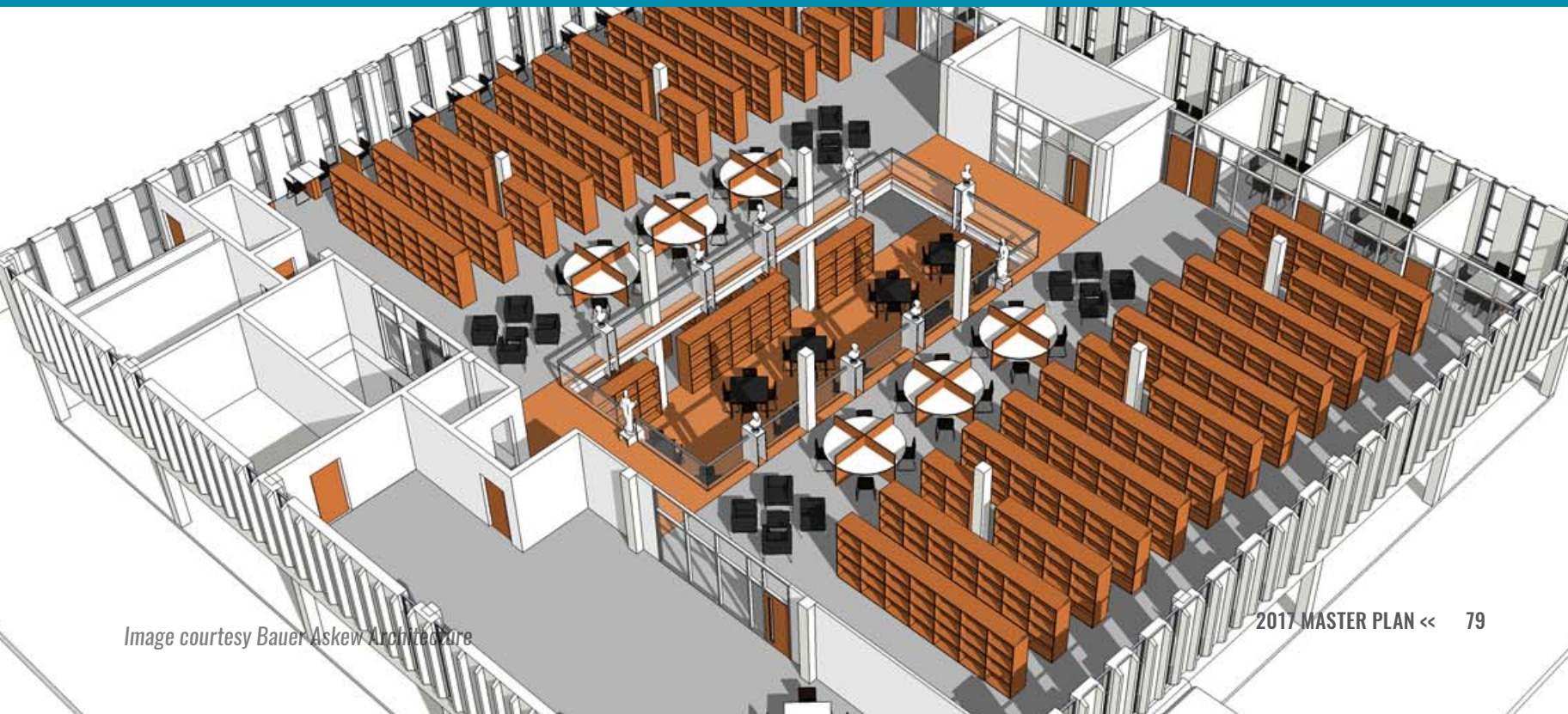


Image courtesy Bauer Askew Architecture

F

MAJOR RENOVATION OF GYMNASIUM

The Wellness Center was recently renovated, but the adjacent gymnasium, known as the Webster Athletic Center, needs substantial upgrades to be usable.

- The basement is divided into a number of small rooms that are difficult to use, and locker rooms that are duplicated for various athletic programs and home vs. away; these should be modernized and combined
- Interior finishes, furniture, and equipment are very dated
- Lighting is inadequate
- Fan coil units and air handler units should be replaced
- Add chilled water units, associated duct work/devices, and upgrade HVAC controls to gymnasium
- Plumbing upgrades to restrooms, showers, and laundry facilities
- Upgrade electrical switch gear and add additional circuits
- Replace roof
- Install new fire sprinkler system

G

NEW CAMPUS ENTRANCE

An additional entrance should be created to the Columbia Campus off of Hampshire Pike. While existing driveways serve traffic well, this new entrance would allow for improved access to the northeastern parking lot. It would also provide an improved gateway to the campus, especially for visitors and those traveling to the Pryor Administration Building.

H

LAND ACQUISITION

Land across Hampshire Pike should be acquired as available, as shown on page 67. This land could be used for additional parking, the relocated AiiT program, or another purpose to be determined. The acquisition of lots across the front of the campus will provide for campus security. Currently, one lot contains housing that some consider less than desirable. The College has experienced several threats and other issues associated with this housing.

FIELD HOUSE IMPROVEMENTS

Improvements should be made to the existing baseball and softball field house to upgrade equipment, replace the roof, provide athlete locker rooms, and add storage space.

FACILITIES RECOMMENDATIONS

A number of upgrades to building systems are also recommended to buildings not covered by the major renovations and other projects above.

PRYOR BUILDING

- Replace HVAC unit and controls, which are original to the building
- Replace roof
- Upgrade fire protection systems
- Interior upgrades
- Communication/security lockdown upgrades
- Update original plumbing fixtures

WARF BUILDING

- Plumbing upgrades to replace original fixtures
- Upgrade electrical switch gear and add additional circuits
- Update interior finishes, furniture, and equipment
- Install new fire sprinkler system
- Upgrade elevator
- Communication/security lockdown upgrades

JONES STUDENT CENTER

- Replace roof

WALTER BUILDING

- Update interior finishes, furniture, and equipment
- Replace multi-zone air handler unit and upgrade HVAC controls
- Plumbing upgrades to replace original fixtures
- Upgrade electrical switch gear and add additional circuits
- Install new fire sprinkler system

CLEMENT BUILDING

- Update interior finishes, furniture, and equipment
- Replace auditorium air handler unit, upgrade HVAC controls, test and balance building
- Upgrade electrical switch gear and add additional circuits
- Install new fire sprinkler system
- Communication/security lockdown upgrades

INFRASTRUCTURE

- A study of underground utilities should be conducted to prioritize repair of the aging heating/cooling loop and sewer mains
- Central heating plant repairs

07 // IMPLEMENTATION

>> IMPLEMENTATION CHECKLIST

IMPLEMENTATION CHECKLIST //

The implementation checklist provides cost estimates and a rough timeline for each of the recommendations described above. It is intended to serve as an overview of the capital improvements required at Columbia State Community College.

Recommended projects are based on a long-term vision for the future of the college and were developed through conversations with college administrators and the Tennessee Board of Regents, as well as input from students and faculty. Cost estimates are based on industry standards.

Priorities and the details of implementation may change based on future realities, as long as they remain within the general needs and plan outlined in this Master Plan.

IMPLEMENTATION CHECKLIST AND COST ESTIMATES

COLUMBIA CAMPUS RECOMMENDED PROJECT	PRIORITY	ROUGH COST* ESTIMATE	FUNDING SOURCE
A. New Allied Health Building	Medium Term	$15.7M	State Capital Outlay, Private, Columbia State
B. Walter Building Demolition	Medium Term	$100,000	State Capital Outlay, Columbia State
C. Health Sciences Building Demolition	Medium Term	$50,000	State Capital Outlay, Private, Columbia State
D. Pedestrian Improvements	Medium Term	$3M	State Capital Outlay, Private, Columbia State
E. Library Major Renovation	Medium Term	$6.2M	State Capital Outlay, Private, Columbia State
F. Gymnasium Major Renovation	Long Term	$2.1M	State Capital Outlay, Private, Columbia State
G. New Campus Entrance	Long Term	$100,000	Columbia State
H. Land Acquisition	Long Term	market value	Columbia State
I. Field House Improvements	Long Term	$450,000	State Capital Maintenance
Facilities Upgrades: Pryor Building	Long Term	$250,000	State Capital Maintenance
Facilities Upgrades: Warf Building	Medium Term	$300,000	State Capital Maintenance
Facilities Upgrades: Jones Student Center	Medium Term	$275,000	State Capital Maintenance
Facilities Upgrades: Walter Building	Medium Term	$200,000	State Capital Maintenance
Facilities Upgrades: Clement Building	Medium Term	$350,000	State Capital Maintenance
Facilities Upgrades: Infrastructure	Medium Term	TBD	State Capital Maintenance

**Rough total project cost*

08 // APPENDIX

>> TSW SPACE MODEL RESULTS

>> THEC MODEL DETAILED RESULTS

>> DETAILED LABOR DATA

TSW SPACE MODEL RESULTS //

While the Tennessee Higher Education Commission (THEC) space model is considered the authority for the sake of this Master Plan, space needs were also calculated using a proprietary space model developed by master planning consultants TSW, in order to verify and provide an additional perspective on THEC model results.

The results of both models are generally consistent with each other and confirm a future need for some types of space on the Columbia Campus. The TSW model uses FTE and contact hour data to generate needs in most cases, while the THEC model calculates needs in terms of course sections. For this reason, there is a rounding effect in the THEC model that is particularly evident in needs calculations for smaller campuses.

Data for the proprietary model was provided by the College, and edited to remove evening and weekend classes, courses with an enrollment of only 1 or 2, and online classes. Growth benchmarks are the same as those shown on page 61.

Net space needs assume that no buildings are built, although it is expected that the new building would come online before benchmark 2.

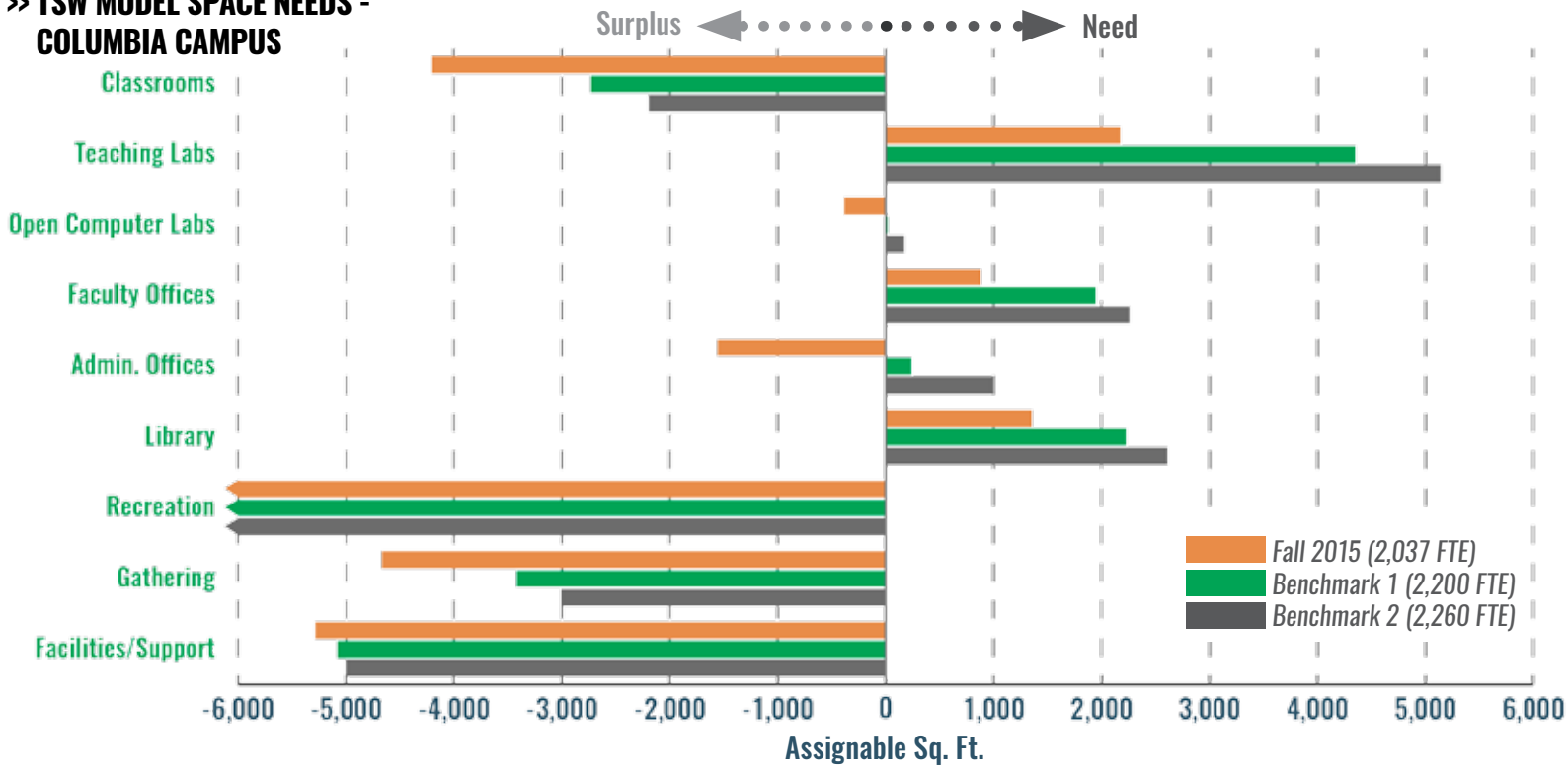
Modeled needs are based on hard data. A number of factors are not reflected in the model or its calculated needs. These include comprehensive scheduling for full loads; student attendance patterns for enrollment and completion purposes; rural or urban campus location; and other factors that relate to student enrollment, success, and completion.

**Gathering spaces include assembly space, food service space, student lounges, bookstore space, and meeting rooms*
***Facilities/support space includes maintenance shop space, central storage areas, and vehicle garages*

TSW MODEL SPACE NEEDS - COLUMBIA CAMPUS (NET ASSIGNABLE SQUARE FEET)

	CLASSROOMS	TEACHING LABS	OPEN COMPUTER LABS	FACULTY OFFICES
Fall 2015 Space Needs	18,273	27,031	5,093	13,650
Fall 2015 Space Available	22,475	24,857	5,478	12,766
Net Space Needed: Fall 2015	-4,202	2,174	-385	884
Net Space Needed: Growth Benchmark 1	-2,735	4,350	22	1,947
Net Space Needed: Growth Benchmark 2	-2,196	5,142	172	2,259

>> TSW MODEL SPACE NEEDS - COLUMBIA CAMPUS



ADMIN. OFFICES	LIBRARY	PHYS. ED./ RECREATION	GATHERING SPACES*	FACILITIES/ SUPPORT**
23,138	18,859	15,185	27,887	11,538
24,698	17,504	29,512	32,555	16,824
-1,560	1,355	-14,327	-4,668	-5,286
240	2,226	-13,152	-3,422	-5,082
990	2,613	-13,212	-3,009	-5,087

THEC MODEL DETAILED RESULTS //

The table below shows the detailed results of the THEC model, which are shown in graphic form on page 65.

THEC MODEL SPACE NEEDS - COLUMBIA CAMPUS (NET ASSIGNABLE SQUARE FEET)

	CLASS-ROOMS	LAB / STUDIO	OPEN LAB	OFFICE	LIBRARY	PHYS. ED.
Fall 2015 Space Needs	17,182	33,756	7,370	32,122	12,613	4,422
Fall 2015 Space Available	22,475	24,857	5,478	37,464	17,504	29,512
Net Space Needed: Fall 2015	-5,293	8,899	1,892	-5,342	-4,891	-25,090
Net Space Needed: Growth Benchmark 1	-3,713	11,440	2,484	-2,758	-4,311	-24,735
Net Space Needed: Growth Benchmark 2	-3,713	11,440	2,701	-1,813	-4,028	-24,605

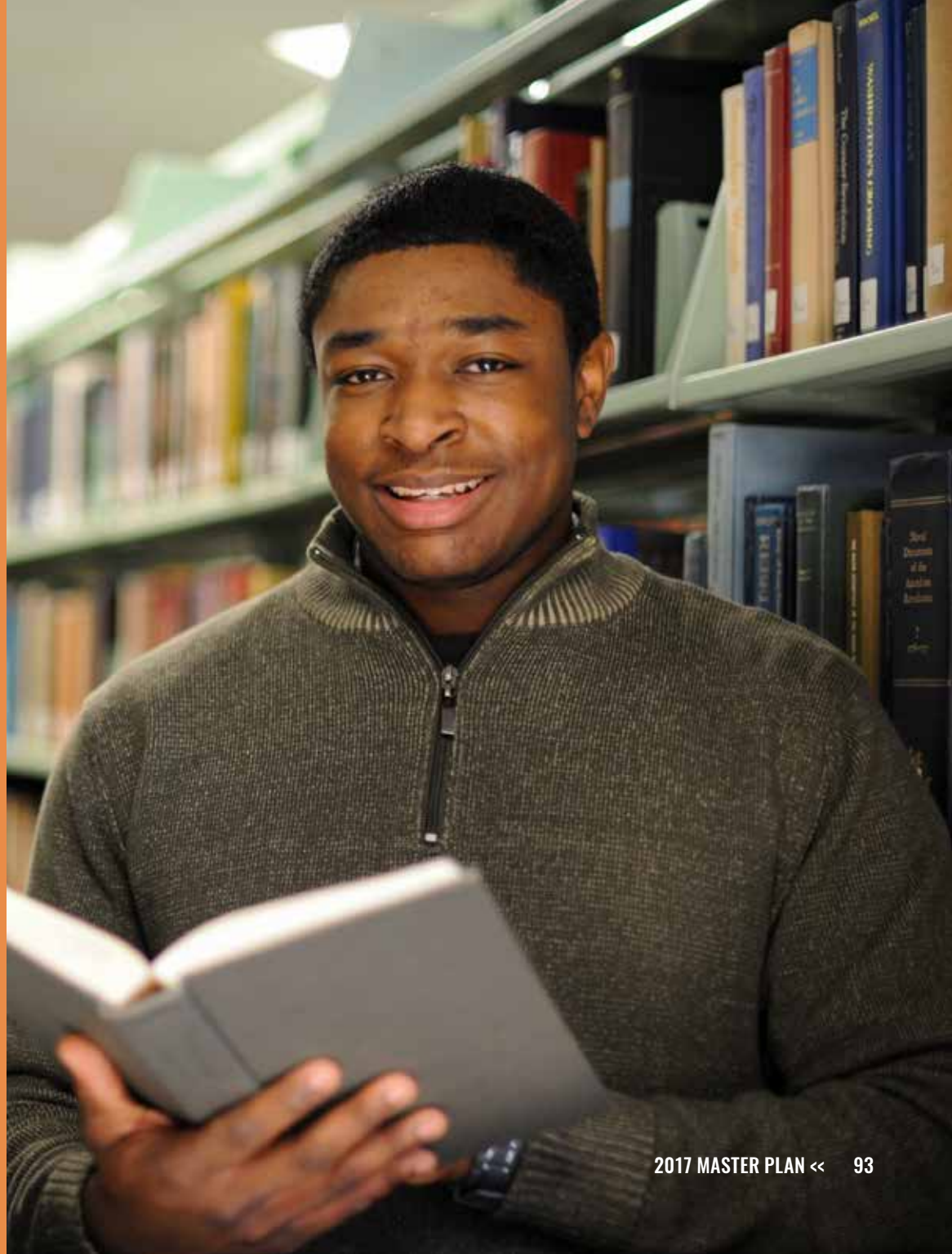
DETAILED LABOR DATA //

The tables on the following pages show detailed employment projection data, which is summarized above on pages 32-33.

Many workforce clusters include jobs that require more than an Associates degree and may reflect the larger job field beyond those jobs for which Columbia State graduates are eligible.

Transfer degree programs are not included in this list because graduates go on to continue their education rather than immediately entering the workforce.

According to this data, all industry demand clusters related to Associate of Applied Science degree and technical certificate programs taught at Columbia State are projected to grow between 2014 and 2022 except for Veterinary Technology (in WIA 10 only) and some workforce clusters correlated to AiiT (also in WIA 10). Overall, growth projections are higher in Workforce Investment Area 8 due to the rapidly growing Nashville economy.



WORKFORCE INVESTMENT AREA 8: EMPLOYMENT PROJECTIONS (ASSOCIATE OF APPLIED SCIENCE DEGREES)

DEGREE PROGRAM	ASSOCIATED WORKFORCE CLUSTER	PROJECTED AVERAGE ANNUAL GROWTH RATE (2014-2022)**	PROJECTED SUPPLY/ DEMAND RATIO (RATIO OF GRADUATES TO JOBS)	JOB OUTLOOK
Advanced Integrated Industrial Technology (AiiT)	Prod. Design, Ops, and Maint. - Operations & Maint. / Engineering Technology	0.9%ǂ / 1.7%	0.34ǂ / 2.93	B - Very Goodǂ / D - Competitive
Business	Admin. & Information Support	2.4%	0.11	A - Excellent
Criminal Justice Technology	Law Enforcement	0.9%ǂ	1.75ǂ	D - Competitiveǂ
Early Childhood Education	Teacher Training Services—Pre-K-Early Childhood Education	3.8%ǂ	0.25ǂ	A - Excellentǂ
General Technology	various	varies	varies	varies
Health Sciences	Administrative & Information Support	2.4%	0.11	A - Excellent
Information Systems Technology	Web/Multimedia Management, Programming	1.3%ǂ	1.01ǂ	C - Favorableǂ
Medical Informatics	Medical Assistants	5.8%	0.84	A - Excellent
Nursing	Nursing (RN)	4.4%	0.44	A - Excellent
Radiologic Technology	Radiation Therapy	n/aǂǂ	0.56	C - Favorable
Respiratory Care	Respiratory Therapy	2.3%	3.30	U - Ungraded*
Veterinary Tech.	Veterinary Technology	3.1%	0.22	A - Excellent

Source: Tennessee Department of Labor & Workforce Development
**Ungraded workforce clusters have either a negative job growth rate, fewer than 11 annual job openings, or no related academic programs in the workforce investment area*
***The statewide average annual growth rate for jobs in all sectors during this period is projected to be 1.1%*
ǂAll data for this workforce cluster is based on statewide projections, since regional data is not available
ǂǂNo data on jobs is available for this workforce cluster

WORKFORCE INVESTMENT AREA 8: EMPLOYMENT PROJECTIONS (TECHNICAL CERTIFICATES)

DEGREE PROGRAM	ASSOCIATED WORKFORCE CLUSTER	PROJECTED AVERAGE ANNUAL GROWTH RATE (2014-2022)**	PROJECTED SUPPLY/ DEMAND RATIO (RATIO OF GRADUATES TO JOBS)	JOB OUTLOOK
Advanced Emergency Medical Technician	Emergency Medical Tech.	2.8%	5.07	C - Competitive (adjusted)‡‡
Advanced Integrated Industrial Technology (AiiT)	Electrical, Electronic Equip. Repairers	2.3%	0.56	A - Excellent
Basic Early Childhood Education	Early Childhood Development and Services Career	2.5%‡	0.34‡	A - Excellent‡
Business Technical Certificate	Accounting Administrative Support	2.7%	0.06	A - Excellent
Commercial Entertainment	Business Management	1.1%‡	2.53‡	D - Competitive‡
Computed Tomography	Medical Imaging - Radiography	4.9%	n/a	A - Excellent
Emergency Medical Technician - Basic	Medical Assistants	5.8%	0.84	A - Excellent
Film Crew Technology	Dramatic Arts	0.9%‡	2.68‡	D - Competitive‡
Music	Dramatic Arts	0.9%‡	2.68‡	D - Competitive‡
Paramedic	Medical Assistants	5.8%	0.84	A - Excellent

Source: Tennessee Department of Labor & Workforce Development
**Ungraded workforce clusters have either a negative job growth rate, fewer than 11 annual job openings, or no related academic programs in the workforce investment area*
***The statewide average annual growth rate for jobs in all sectors during this period is projected to be 1.1%*
‡All data for this workforce cluster is based on statewide projections, since regional data is not available
‡‡Based on the number of job openings, an outlook grade would not be assigned, but placement rates indicate that those trained as EMTs find jobs in related fields.

WORKFORCE INVESTMENT AREA 10: EMPLOYMENT PROJECTIONS (ASSOCIATE OF APPLIED SCIENCE DEGREES)

DEGREE PROGRAM	ASSOCIATED WORKFORCE CLUSTER	PROJECTED AVERAGE ANNUAL GROWTH RATE (2014-2022)**	PROJECTED SUPPLY/ DEMAND RATIO (RATIO OF GRADUATES TO JOBS)	JOB OUTLOOK
Advanced Integrated Industrial Technology (AiiT)	Prod. Design, Ops, and Maint. - Operations & Maint. / Engineering Technology	0.9%‡ / -1.7%	0.34‡ / 0.00	B - Very Good‡ / U - Ungraded*
Business	Administrative & Information Support	0.6%	0.48	B - Very Good
Criminal Justice Technology	Law Enforcement	0.9%‡	1.75‡	D - Competitive‡
Early Childhood Education	Teacher Training Services—Pre-K-Early Childhood Education	3.8%‡	0.25‡	A - Excellent‡
General Technology	various	varies	varies	varies
Health Sciences	Administrative & Information Support	0.6%	0.48	B - Very Good
Information Systems Technology	Web/Multimedia Management, Programming	1.3%‡	1.01‡	C - Favorable‡
Medical Informatics	Medical Assistants	1.5%	n/a	A - Excellent
Nursing	Nursing (RN)	2.1%	2.13	C - Favorable
Radiologic Technology	Radiation Therapy	0.0%	0.00	C - Favorable
Respiratory Care	Respiratory Therapy	1.3%	0.00	C - Favorable
Veterinary Tech.	Veterinary Technology	-3.2%	5.00	C - Favorable

Source: Tennessee Department of Labor & Workforce Development
**Ungraded workforce clusters have either a negative job growth rate, fewer than 11 annual job openings, or no related academic programs in the workforce investment area*
***The statewide average annual growth rate for jobs in all sectors during this period is projected to be 1.1%*
‡All data for this workforce cluster is based on statewide projections, since regional data is not available

WORKFORCE INVESTMENT AREA 10: EMPLOYMENT PROJECTIONS (TECHNICAL CERTIFICATES)

DEGREE PROGRAM	ASSOCIATED WORKFORCE CLUSTER	PROJECTED AVERAGE ANNUAL GROWTH RATE (2014-2022)**	PROJECTED SUPPLY/ DEMAND RATIO (RATIO OF GRADUATES TO JOBS)	JOB OUTLOOK
Advanced Emergency Medical Technician	Emergency Medical Tech.	1.5%	n/a	A - Excellent
Advanced Integrated Industrial Technology (AiiT)	Electrical, Electronic Equip. Repairers,	-1.1%	2.10	U - Ungraded*
Basic Early Childhood Education	Early Childhood Development and Services Career	2.5%†	0.34†	A - Excellent†
Business Technical Certificate	Accounting Administrative Support	1.1%	n/a	B - Very Good
Commercial Entertainment	Business Management	1.1%†	2.53†	D - Competitive†
Computed Tomography	Medical Imaging - Radiography	1.9%	n/a	U - Ungraded*
Emergency Medical Technician - Basic	Medical Assistants	1.5%	n/a	A - Excellent
Film Crew Technology	Dramatic Arts	0.9%†	2.68†	D - Competitive†
Music	Dramatic Arts	0.9%†	2.68†	D - Competitive†
Paramedic	Medical Assistants	1.5%	n/a	A - Excellent

Source: Tennessee Department of Labor & Workforce Development
**Ungraded workforce clusters have either a negative job growth rate, fewer than 11 annual job openings, or no related academic programs in the workforce investment area*
***The statewide average annual growth rate for jobs in all sectors during this period is projected to be 1.1%*
†All data for this workforce cluster is based on statewide projections, since regional data is not available

EMPLOYMENT BY INDUSTRY SECTOR (2014)

	WIA 8	WIA 10	TENNESSEE
Agriculture, Forestry, Fishing & Hunting	0.2%	0.4%	0.3%
Mining, Quarrying, & Oil & Gas Extraction	0.2%	0.2%	0.1%
Utilities	0.6%	1.0%	0.6%
Construction	4.9%	3.7%	4.1%
Manufacturing	11.5%	20.7%	12.5%
Wholesale Trade	3.9%	3.9%	4.7%
Retail Trade	13.2%	12.6%	11.7%
Transportation & Warehousing	2.0%	2.7%	5.2%
Information	2.0%	1.2%	1.7%
Finance & Insurance	5.5%	4.1%	3.9%
Real Estate & Rental & Leasing	1.2%	1.0%	1.3%
Professional, Scientific, & Technical Services	7.4%	1.7%	4.5%
Management of Companies & Enterprises	2.8%	0.5%	1.4%
Administration & Support, Waste Management & Remediation	5.9%	6.5%	7.4%
Educational Services	9.5%	9.6%	8.7%
Health Care & Social Assistance	12.8%	14.3%	14.2%
Arts, Entertainment, & Recreation	1.1%	0.5%	1.1%
Accommodation & Food Services	9.3%	7.8%	9.1%
Other Services (excluding Public Administration)	2.5%	2.0%	2.6%
Public Administration	3.4%	5.6%	4.9%

Source: U.S. Census On The Map

ADDITIONAL LABOR DATA //

In addition to the Tennessee Department of Labor shown above, Columbia State also provided the following labor data from EMSI and other internal and national sources.

RESPIRATORY THERAPY TECHNICIAN

For Respiratory Therapy Technician jobs within 50 miles of 38401:

- 83 technicians employed
- Expected 14.5% increase in next 4 years
- 13% are over the age of 55 and will probably retire soon
- 5 estimated annual job openings
- Median wage $19.41/hour

For Respiratory Therapist jobs within 50 miles of 38401:

- 1,150 therapists are employed
- Expected increase of 13% in next 4 years
- 20% are over the age of 55 and will probably retire soon
- 71 Estimated annual job openings
- Median wage $24.03/hour

LOCAL INDUSTRY EXPANSIONS

There are now over 1,000 open IT positions with IST in the greater Nashville area.

GM has announced a projected increase of 750 workers and US Tile is expected to hire 100 within the next year.

HEALTH CARE GRADUATES JOB PLACEMENT

The figures below represent the first four years and graduates of all Health Sciences programs combined (Radiologic Technology, Veterinary Technology, Nursing, EMS, and Respiratory Care). These data show positive job placement rates and the market demand for health care graduates.

Graduates who seek employment and are placed in field within one year of program completion:

- 97% 2011-12
- 97% 2012-13
- 90% 2013-14
- 99% 2014-15

Image courtesy Alex Proimos

THEC SPACE MODEL ASSUMPTIONS

The model calculates classroom space needs based on the number of classroom contact hours, combined with assumptions about the number of stations (seats) per room and the number of square feet needed for each station. Based on these assumptions, classroom sizes vary from 312 square feet for small seminar rooms to more than 1,000 square feet for larger lecture rooms. The model assumes a station utilization rate of 60% and assumes that classrooms are scheduled for 30 hours per week (Monday through Friday between 7:00 a.m. and 5:00 p.m.). A 30% support allocation is included for storage space and the like.

Class lab space is calculated based on the number of lab sections, total enrollment in those sections, and weekly student contact hours. These are combined with assumptions about station size, which vary based on the type of lab. The model assumes a station utilization rate of 80% and assumes that class labs are scheduled for 20 hours per week (Monday through Friday between 7:00 a.m. and 5:00 p.m.). A 30% support allocation is included for storage space, prep rooms, and the like. Open computer lab calculations are based on the simple assumption of 5 square feet of open lab space per FTE student.

Office space calculations assume individual offices and a certain number of square feet per FTE faculty member or administrative employee. Office size assumptions vary from 200 square feet or more for senior administration to 120 square feet for a full-time faculty member and 90 square feet for adjunct faculty. A 30% support allocation is included for storage space, conference rooms, break rooms, and the like.

Library space calculations are based on total volume equivalents for stack space and FTE student enrollment for study space, plus an allowance for service space.

Physical education and recreation space calculations are based on the simple assumption of 3 square feet of space per FTE student.

COURSE DATA EDITS

All data for the model was provided by the college, and a number of edits were made as follows. Classes with enrollment less than or equal to 2 students were removed. Courses that did not fall at least partially within the 7:00 a.m. to 5:00 p.m., Monday through Friday window were also removed from the calculations. Internet courses and courses taught at sites not owned by the college were also not included.

Finally, edits were made to count all courses that need special equipment (including computers) as labs, even if they were listed in the course catalog as lecture courses. Labs were also assigned to one of five space use groups to account for varying station sizes for different types of labs. This was done according to CIP code or based on reasonable assumptions.

For future growth benchmarks, straight-line growth projections are assumed, without accounting for the subtleties of new course sizes, the number of new courses, and the specific numbers of required faculty and administrators.