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SECTION ONE  Background and Campus Plan Overview

Chattanooga State Community College (ChSCC) was founded in 1965 in downtown Chattanooga as Chattanooga State Technical Institute, the state’s first such school. Since its inception, the institution has supplied the region’s technical workforce consisting mostly of engineering technology and computer science.

In 1973, the Institute became Chattanooga State Technical Community College and was defined by the state as providing comprehensive one and two-year occupational, college parallel, continuing education, and community service programs. Chattanooga State’s mission expanded further in 1981 to include vocational education when the legislature merged the State Area Vocational Technical School in Chattanooga with the College. This mission distinguishes the College from any other state campus in Tennessee.

Over time the College grew and developed, adding a variety of programs. In the mid 1980’s, the College absorbed a nursing school and health science education was added to the curriculum. Healthcare is the area’s largest industry and since then, health science education has increased with an additional nineteen programs in nursing and allied health.

Growth in the 1980’s continued with the opening of satellite operations in three surrounding counties as well as two sites in Hamilton County. The College also expanded its support of local industry through extensive training activities. For the past fifteen years, the College has served as the largest and most comprehensive training resource in the region. In 2009, the College was selected to operate the Volkswagen Training Academy, the training center for the Volkswagen’s North American assembly plant.

In 2009, the College was re-named Chattanooga State Community College. In early 2011, an adjacent property on the northwest area of campus known as Olan Mills, was purchased by the College. The Olan Mills building, now known as CETAS, has been and continues to be renovated for College and related programs. The building currently is utilized by the Wacker Institute which is a partnership between the College’s Engineering Technology Division and Wacker Polysilicon North America. Space has also been renovated for the STEM School Chattanooga which is a Hamilton County Department of Education magnet high school. An area of the building is currently being designed to allow the relocation of all of the Engineering department.

In 2013, the Tennessee Technology Center was renamed the Tennessee College of Applied Technology (TCAT). The name change better describes the mission of the College.

The institution is an open-entry, postsecondary institution offering over 50 majors of study toward these degrees and certificates and is a comprehensive, regionally accredited community college in the Tennessee Board of Regents College System. The College offers two-year programs that result in AAS degrees as well as transfer programs to colleges and universities within the state and nationwide. The TCAT is one of the largest in the state with a fast growing student enrollment. It offers 29 one-year programs with selected programs available at satellite campuses.

This institution has the largest postsecondary enrollment, approximately 10,000 students, in the Tri-State area as well as the largest training function in East Tennessee and is considered the most comprehensive community college in Tennessee — in curriculum and service to the community.

The campus of 146 acres lies adjacent to the Tennessee Riverpark. The Riverwalk parallels the river and extends eight miles to downtown Chattanooga.

The Tennessee Board of Regents campus plan policy recommends a new plan every five years. The last plan was complete in 2010/2011. This plan is an update. The objective of this initiative has been to develop a plan for the future that addresses facility needs, both building and site, for the next fifteen years. The resulting updated Campus Plan, summarized in this report, describes physical resources that exist, the additional facilities or improvements that will be required, and how the College foresees addressing these projected needs.

The Campus Plan represents much more than a layout for determining sites for future buildings. It also reflects Chattanooga State Community College’s vision to focus on academic excellence related to the needs of the state and region. With a steadily increasing student population and a range of academic programs, ChSCC hopes to continue a leadership role in helping the region fulfill its promise. These goals are described in Section Two under “Mission, Goals, and Objectives”. 
CAMPUS PLAN OVERVIEW

The Campus Plan provides a framework for decision-making that embodies a point of view regarding all aspects of the campus. These include land use, building use, pedestrian and vehicular circulation, parking, hydrology/topography, landscape, campus design, development constraints and opportunities, and sequence.

Please see Drawing 1.1 on page 3. This drawing is a rendered air view of the campus reflecting the Campus Plan concept. The various projects can be completed in the near term, some in the midterm, and others in the long term. Below is a summary of key projects with brief descriptions of each. Other projects will be initiated as funds permit.

**Drawing 1.1 Site Number Key**
1. New Student Services Center
2. New Technical Studies Building
3. Future Academic Building
4. Industrial Lab
5. Continued Renovation of CETAS
6. Renovation of Starnes for Dinning and Student Life
7. Renovation of Health, Fitness Athletic Center
8. Renovation of vacated dining area for Classrooms and Support
9. Construction of Horticultural Complex (currently being designed)
10. Potential Site for Art
11. Site for 3D printed house — Living Lab for Assisted Manufacturing students

All Student Service related offices will relocate to the new Student Services Center [1] along Amnicola Highway. This location essentially creates a new “front door” to the campus and a visual presence. The new building will provide space for Admissions and Records, Testing, Bursar, Financial Aid, Call Center, Dual Enrollment and Collegiate High Admissions, Continuing Ed space, and small informal student meeting spaces.

The new Technical Studies Building [2] will be a resource for both the College and the TCAT.

As the enrollment grows, there will be a need for additional academic space and the Future Academic Building [3] is a place holder for that growth. [4] an Industrial Lab as part of the TCAT.

A section of the Center for Engineering, Arts & Sciences Building (CETAS) [5] is currently being designed and then renovated for the relocation of the remaining Engineering program from the Center for Advanced Technology.

Once the Student Services Center is constructed, the Starnes Student Center [6] can be renovated as a true student center providing dining/food services, bookstore, meeting rooms, study activities, student clubs, Counseling and Career Services, Disabilities Office, Multicultural Affairs, Veteran Affairs, student gathering spaces of various sizes and configurations, a game room, etc.

The consolidation of student services offices also frees up space in the Health, Fitness, Recreation Center [7] which can be renovated for recreational programs.

The current student dining space [8] can be renovated for classrooms and academic programs.

A Horticultural Complex and Greenhouse [9] will be constructed southwest of the TCAT and will function as a lab and support space for the TCAT.

A potential site for Art [10] is located near the Riverwalk.

A pull-off at the main entrance to campus can be provided with a Campus Directory kiosk with a campus map to aid in wayfinding.

The first 3D Printed House [11] will be sited on campus. The 1,000-square foot building is the result of a competition offered by Branch Technology, a Chattanooga construction firm. The winning design was created by WATG Urban Architecture Studio. The building, consisting of 3D printed plastic and carbon panels, will be prefabricated at Branch Technology and constructed on campus.

In addition to these projects, there are a variety of circulation and parking improvements including the elimination of one-way roads and the redesign and expansion of parking areas.

Pedestrian sidewalks are created or extended, particularly around the lake. Outdoor seating and gathering spaces are created to foster interaction and discussion. Lighting and signage will be created to help with wayfinding and security, and overall landscaping is improved.

ChSCC’s infrastructure will require upgrading and expansion. The chilled and hot water central plant is at capacity. In addition, the plant’s electrical system is inadequate to accommodate the additional load. A new transformer and upgrade will be required.

This proposed campus plan is on land presently owned by the College and does not depend on acquisition. The College is presently landlocked and land-shy. Of the 146 acres that the College owns, approximately 90 acres are within the floodplain.

See also the section on First Priority Projects.
CHATTANOOGA STATE COMMUNITY COLLEGE 2016 Campus Master Plan

Drawing 1.1: CAMPUS MASTER PLAN

LEGEND

Existing Buildings
Potential Building Location
Drainage and Retention
Open Space

River

1. New Student Services Center
2. New Technical Studio Building
3. Future Academic Building
4. New Performing Arts Building
5. Continued Renovation of CETS
6. Renovation of Science for Dining and Student Life
7. Renovation of Health, Fitness, Athletic Center
8. Renovation of student dining area for classrooms & support
9. Construction of Performing Arts Center/ Integrated Arts Complex
10. Potential Site for Art
11. 3D Printed Living Laboratory

SCALE: 1" = 400'-0"
SECTION TWO Terms of Reference

MISSION, GOALS, AND OBJECTIVES

ChSCC’s mission is to provide the Tri-State area with program offerings that apply directly to workforce development related to the region’s business, industry, and communities. The current drivers and opportunities for programmatic needs are linked to transportation and energy.

The College’s mission commits to the following:

Purpose:
Transform the lives of individuals and develop the capacities of business, industry and the communities within the Chattanooga State service area and beyond through the power of technical and postsecondary education.

Standing:
Chattanooga State is nationally recognized for entrepreneurial initiatives, excellence in student support, curricular innovation, use of technology, and responsiveness to its community. The College is a leader in community, economic and workforce development, the use of advanced technologies in instruction, life-transforming support services based on a culture of care for all students and employees, and maintaining an environment of open access to learning where high academic standards and personal integrity are prized. Chattanooga State affords equal opportunity to all persons.

Commitments:
Chattanooga State is committed to these objectives:

- Selecting and supporting faculty and staff members known for superior teaching, applied research and professional service.
- Encouraging all employees to grow personally and professionally and create community awareness of their capabilities.
- Providing educational programs and services that are of high quality, timely, created through scholarly program design and are responsive to community needs.
- Instilling a desire for lifelong learning and a love of knowledge in all members of the College family.
- Fostering a climate of success for all students through counseling, support groups, financial aid, career planning, advisement, library facilities, laboratories, tutoring, co-curricular activities, sports and recreation.
- Ensuring that all of these mission commitments are publicly accountable and accomplished through the careful utilization of resources, strategic planning, financial controls, employee professional development, public/private partnerships, and alternative funding, where possible.

2015-2025 Strategic Plan Key Priorities

For the 2015-2025 cycle, the Strategic Planning Oversight Committee identified four key priorities:

1. Access
2. Student Success
3. Quality
4. Resourcefulness and Efficiency

The Tennessee Board of Regents and its institutions will continue the Strategic Planning Process by developing indicators and benchmarks that reflect each of the key priorities. A brief introduction to each key priority is listed below.

Access
Chattanooga State Community College strives to increase the number and diversity of students it serves. The College will broaden opportunities for those who wish to develop their professional skills, enrich their lives and engage with the workforce of the future. It will engage those who have been historically underrepresented and underserved in their pursuit of post-secondary credentials.

Chattanooga State will optimize gateways to higher learning through the effective use of technology, the promotion of learning partnerships within the College and across the community, the development of our off-site campuses, and a commitment to the development and delivery of programs and services to meet the evolving needs of our stakeholders.

Student Success
Chattanooga State Community College will structure credential and degree programs so that students may successfully graduate in a timely and cost-effective manner. The College will build and nurture partnerships with regional secondary schools to enhance student preparedness and early college credit opportunities. We will focus on student engagement and persistence through comprehensive and dynamic academic and student support services.

By aligning degree pathways within the College and awarding credit for prior learning, the time to degree will be accelerated for all learners, especially returning students and those seeking advanced degrees. Students will be provided with guided research and real world learning opportunities. To further foster student success, the College will explore and apply new technologies and technology-based delivery methods to enhance teaching, experiential learning, and student achievement.

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Quality
To achieve excellence in our mission, Chattanooga State Community College must provide high quality academic programs, faculty, services and facilities at all levels. The College will sustain academic rigor and be committed to continuous quality improvement processes to help students acquire and retain the knowledge, skills, and abilities they need to become creative employees, dynamic leaders and conscientious citizens. Recognizing the quality expectations of a global marketplace and society, the College, its faculty, and our students will cultivate forward-looking research, explore creative expression in the arts, and engage in public service activities that aspire to world-class students.

The quality of academic programs will be measured by student performance and assessment as well as accreditation and formal review procedures. Quality assurance will be sustained through ongoing professional growth opportunities, integrated institutional effectiveness activities, and regular satisfaction responses from graduates and employers. Together these processes will promote initiatives for continuous quality improvement of learning objectives, teaching and assessment of student achievement.

Resourcefulness and Efficiency
Chattanooga State Community College seeks to achieve its mission through innovation and judicious use of resources. The College will seek to identify alternate revenue enhancements and efficiently use our resources to sustain quality and to provide access for a growing number of students.

The College is committed to continuously identifying additional financial resources through alumni giving, endowments, grants, foundations and private fund-raising. Other external sources such as federal, state, and local governments plus business and community partnerships will also be targeted to provide further financial support for operations, research, equipment, and construction.
CAMPUS ANALYSIS

Drawing 2.1: COLLEGE PROPERTY AND LOCATION

Chattanooga State Community College is located in the city of Chattanooga. Drawing 2.1 shows the campus colored light green.

The campus is located approximately five miles from downtown Chattanooga in an industrial area and in a floodplain. The Tennessee River, the city's Riverwalk, and Riverpark are to the north of the campus. Amnicola Highway is to the south, a railroad line and Chickamauga Dam to the east, and industry to the west.

In addition to the main campus, the College has two satellite locations:

- The Kimball Campus in South Pittsburg offers professional training in Welding, Industrial Maintenance, and General Education core courses for Associate Degree programs.
- The Dayton Campus in Dayton offers courses for continuing education, general education, online courses, transitional studies, and early college/dual enrollment.

The Sequatchie campus is no longer in operation and the College considers it to be surplus. At an appropriate time, it will be placed for sale.

East Campus is located at 715 Lee Highway in Chattanooga and once the programs are relocated to the main campus, this too, will be sold.
Drawing 2.1: COLLEGE PROPERTY AND LOCATION

College Property and Location

LEGEND

- Limited Access
- Highways
- Secondary Roads
- Highway Ramp
- Railroad
- Rivers and Streams
- State Line
- Lake
- Campus
- City Limits

SCALE: 1" = 400' - 0"
Drawing 2.2: LAND OWNERSHIP

College-owned land is colored light orange on this drawing. The boundaries of this campus are Amnicola Highway on the south and Tennessee Valley Authority (TVA) on the east with a railroad traveling in a north-south direction along this boundary. Directly across Amnicola to the south are several commercial properties. The north side of the campus is bound by the city's Riverwalk and Riverpark along the Tennessee River.

The College owns 146 acres of contiguous land of which 90 acres, or 62 percent, are within a floodplain.

For a 10,600 student enrollment, the campus is landlocked and land shy. There are adjacent properties, shown as pink, which would be beneficial to the campus if they could be acquired. However, this Master Plan does not depend on land acquisition. The situation will be exacerbated when the College reaches a planned enrollment of 14,000 students.
Drawing 2.3: LAND USE AND CONTEXT

This drawing shows use of land on the ChSCC campus and on adjacent properties. ChSCC's core campus, as well as areas surrounding academic buildings, is colored dark red. Campus open spaces are denoted by green and include areas on the west side of campus surrounding the CBIH building and the north side of campus along the Tennessee River. Athletic and recreation areas are light green and visually extend the open space. The several drainage and retention areas, which must be preserved, are shown in light blue. The areas surrounding the campus support facilities are colored purple.

A significant amount of land, approximately 24 acres, is designated to surface parking and the map shows the landlocked campus with little space to convert to parking in the academic core area.

Industrial areas are shown in brown.
Drawing 2.3: LAND USE AND CONTEXT

Land Use and Context

LEGEND

- River
- Athletic / Recreation
- Open Space / Vegetation
- Student Corridor
- Drainage and Retention
- Buildings
- Support Facilities
- Parking / Roads
- Industrial Zoning
- City of Chattanooga, Electric Power Board
- Railroad

SCALE: 1" = 400'-0"

CHATTANOOGA STATE COMMUNITY COLLEGE: 2016 CAMPUS MASTER PLAN
Drawing 2.4: PREDOMINANT USE

Academic buildings, colored red, are clustered mainly on the northern half of the campus with the academic core located in the northeast quadrant. Major exceptions are the Health Science Center facility located on the southwest side and the CBH building on the west side of campus. A mixed use academic building is the recently acquired Olan Mills building which currently houses several College programs, TCAT programs, a Hamilton County regional magnet high school with an emphasis on science, technology, engineering and math, and a sophisticated testing area for a commercial enterprise.

The Kolwyck Library, colored purple, is also in the core of campus.

Administrative use is indicated in blue. The CBH is a mixed-use building which houses administrative offices. The Starnes Student Center located in the core of campus, is also a mixed-use facility partially occupied by administrative offices. The Ray C. Albright Omniplex in the northeast quadrant is mixed-use with a relatively small presence of administrative offices.

Student Life buildings are light green. The Paul Starnes Student Center houses the College bookstore and outdoor lounge area adjacent to it. The Omniplex building accommodates the cafeteria on the southwest corner of the facility. The amphitheater is centrally located in the heart of the campus core area and adjacent to both student life facilities.

Athletic and recreation facilities are brown and all of these facilities are in the southeast quadrant of campus along with outdoor fields and courts.

Physical plant support services are colored gray, and most are located on the north edge of campus adjacent to the city’s Tennessee Riverwalk.
Drawing 2.5: PEDESTRIAN CIRCULATION

Paved surfaces dedicated to pedestrian walks are solid red on this drawing. Potential conflicts between pedestrian and automobiles are outlined in blue. There are several dotted red lines that denote unpaved, ad hoc paths, etched into the landscape to provide more direct or convenient routes. A bicycle path located on the city's Tennessee Riverwalk is shown with a dashed green line.

The circle superimposed on the map represents a five-minute walking distance from the center to the outer edges, based on a walking rate of three miles per hour. The circle is centered on the entrance to the Instructional Materials Center (IMC), which houses the Kolwyck Library, the center of academic activity. Distances between buildings that are within the circle can be walked in ten minutes or less. This measure is the usual break between two consecutive classes. All of the buildings, with the exception of the CBIH and CETAS buildings, are within the circle.

ADA access is shown with a green circle and a non-compliant ADA location is shown with a yellow circle.

Some pedestrian-automobile conflicts are related to the north side of the lake in front of the Bond Humanities building and the bus stop. This area and others could be ameliorated with sidewalks or by limiting campus access to all but emergency and service vehicles.
Pedestrian Circulation

LEGEND

- Buildings
- Bicycle Facility / Trail
- Primary Pedestrian Movement
- Secondary Pedestrian Movement
- Pedestrian / Vehicular Conflict
- ADA Access
- Not ADA Compliant

SCALE: 1" = 400' – 0"

Drawing 2.5: PEDESTRIAN CIRCULATION
Drawing 2.6: VEHICULAR CIRCULATION AND PARKING

Drawing 2.6 shows the existing roadway and bus route systems. The campus buildings are shown as tan in color. The main access to ChSCC is Amnicola Highway and is highlighted in yellow. One-way campus roads, including the main entrance onto campus, are colored red and are shown with directional arrows. Two-way campus roads, including the secondary entrance onto campus to access the CBH and the 2011 purchased property, are orange in color and are shown with two-way directional arrows. Parking lots are shown in gray with the capacity for each lot shown — number of general parking spaces and the number of ADA parking spaces. The addition of both types of spaces is the total provided in that particular lot.

Most of the campus is served with one-way drive lanes. Many of the drives have parallel and angled parking on both sides of the drive which creates vehicular movement conflicts as vehicles navigate the parking spaces within the main drive lanes. These vehicular circulation deficiencies will be resolved when a two-way system is implemented in the new campus plan.

The College provides one campus bus route, shown by the black dotted lines. The bus route begins at the main campus entrance, proceeds to the bus stop (shown with a yellow circle) near the Bond Humanities building on the north side of the lake, and then exits the campus.

A defined service entrance to a building is shown with a dark blue circle.

All campus parking is provided on surface lots. Due to insufficient parking space, vehicles park on street shoulders, grass, tops of curbs, parking lot aisles, curbed islands, handicapped striped zones, and in “no parking” zones, etc. Vehicles also park extending into traffic lanes.

The number of vehicular parking spaces in the lots adjacent to the Center for Advanced Technology, the Child Development Center, and the Business & Information Systems building appear inadequate. Because the lots are in need of total replacement, it is recommended that parking be increased through the construction of a multi-story parking structure. The location of a parking structure, however, can only be accommodated through land acquisition. Additional educational or administrative facilities could be built above the parking structure to take advantage of the views to the Tennessee River.

There are currently 3,110 parking spaces on campus for approximately 10,600 students.

There are several ADA parking and building accessibility non-compliance issues. An area where there is no dedicated ADA parking is shown with a red circle. A review of the total number of ADA parking spaces provided, based on a percentage of spaces provided for each lot, needs to be assessed, as well as building access requirements versus existing conditions. Several ramps and accessible routes appear to be non-compliant with current ADA standards.
Drawing 2.6: VEHICULAR CIRCULATION AND PARKING

3,048 Spaces
62 ADA Spaces

3,110 Total Parking Spaces

Vehicular Circulation and Parking

LEGEND
- Buildings
- Parking
- One-Way Street
- Two-Way Street
- Annicola Highway
- Parking Spaces
- ADA Parking Spaces
- Bus Stop
- Service Entrance
- No Dedicated ADA Parking
- CARTA Bus Route
Drawing 2.7: LANDSCAPE AND OPEN SPACE

The College campus is characterized by several open areas that serve as open landscape between buildings, drainage and retention areas, and athletic fields. Much of the existing core campus is open green space with interspersed parking lots. The new Campus Plan will identify landscapes and open spaces that will be preserved and new open spaces that will be created.

Drawing 2.7 shows existing landscape elements and open spaces, as well as existing parking lots. Open spaces are colored in green with wooded areas and tree lines in dark green. Athletic and recreation areas are shown in light green. The baseball and softball fields and intramural fields are included in this category. Drainage and retention areas are colored light blue with campus buildings tan in color.

The college has developed an outdoor sculpture garden, known as the “Outdoor Museum of Art” and will be enhanced and strengthened in the campus plan.
Drawing 2.7: LANDSCAPE AND OPEN SPACE
Drawing 2.8: HYDROLOGY / TOPOGRAPHY

Drawing 2.8 illustrates hydrology drainage and the range of topographic elevations on the campus. Darker colors indicate lower elevations and lighter tones indicate higher. Each color gradation represents a 10 foot change in grade.

The topography falls from the north and northeast area of the campus to the southeast, south, southwest, and northwest. The low elevation occupies most of the campus and lies in a 100-year flood zone. There are several retention ponds indicated within red-dashed lines.

Most of the campus is drained by surface flow from the drives and parking lots to the existing wetlands, creeks, and lake. There is very little pretreatment of storm water runoff prior to entering streams. All future buildings and construction should be elevated at or above the base-flood elevation, or flood-proofed below the base-flood elevation.

Providing Best Management Practices (BMP) pretreatment at areas that discharge directly into streams should be considered. BMP’s for the campus should be consistent with those found in the “Storm Water BMP Manual and Best Management Practices, City of Chattanooga”.

Overall the campus appears to have many areas of quantity storage that eventually overflows to the river.

It is recommended elevating future construction and mechanical equipment above the base flood elevation, and water tight connections for sanitary sewer manholes.
SECTION THREE  Campus Plan

RIGHT-SIZING

In determining the amount of space that should be provided on the ChSCC campus, the quality of programs needs to be assessed. One method for determining if program quality is being compromised due to insufficient space is to right-size ChSCC’s space needs. Several methods were used. The amount of space at ChSCC was compared to the amounts at other Tennessee Board of Regents (TBR) community colleges and the Tennessee Higher Education Commission’s (THEC) Space Allocation Guidelines. In addition, teaching space usage, faculty office sizes, and space assigned to selective departments were analyzed.

PEER COMPARISONS

Contrasting the amount of space at ChSCC to space at similar state institutions administered by the TBR is a way to put the College’s facility resources into perspective. A comparison with 12 peer state community colleges is summarized in Table 3.1. In this analysis, the total Education and General net assignable square feet (NASF) per campus is compared. This data shows that ChSCC has 408,952 NASF.

But this picture is misleading. Firstly, ChSCC has a larger enrollment than most other TBR community colleges. Secondly, unlike other community colleges in the system, ChSCC has a Technology Center imbedded on the campus and integrated into the curriculum and use of space.

A better peer comparison is space per student shown in Table 3.2. The 12 community colleges have a total mean of 95.3 NASF/student. In comparison, ChSCC’s has a total of 69 NASF/student.

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Table 3.1:  Education and General (E&G) NASF

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<td>21,84</td>
<td>21,84</td>
<td>21,84</td>
<td>21,84</td>
<td>21,84</td>
<td>2,59</td>
</tr>
<tr>
<td>900</td>
<td>1,81</td>
<td>3,46</td>
<td>564</td>
<td>-</td>
<td>1,81</td>
<td>3,46</td>
<td>564</td>
<td>-</td>
<td>1,81</td>
<td>3,46</td>
<td>564</td>
<td>-</td>
<td>1,81</td>
<td>0.59</td>
</tr>
<tr>
<td>Totals</td>
<td>184,04</td>
<td>252,82</td>
<td>207,28</td>
<td>308,22</td>
<td>341,47</td>
<td>341,47</td>
<td>487,56</td>
<td>514,99</td>
<td>475,41</td>
<td>533,68</td>
<td>475,41</td>
<td>533,68</td>
<td>475,41</td>
<td>20,97</td>
</tr>
</tbody>
</table>

Table 3.2:  E & G NASF/student

<table>
<thead>
<tr>
<th></th>
<th>ChSCC</th>
<th>CoSCC</th>
<th>DSCC</th>
<th>JSCC</th>
<th>MSCC</th>
<th>NaSCC</th>
<th>NeSCC</th>
<th>PSCC</th>
<th>RSCC</th>
<th>STCC</th>
<th>VSCC</th>
<th>WSCC</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>600</td>
<td>21.2</td>
<td>11.1</td>
<td>27.9</td>
<td>16.3</td>
<td>16.3</td>
<td>24.4</td>
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</tr>
<tr>
<td>200</td>
<td>16.7</td>
<td>13.7</td>
<td>39.5</td>
<td>36.5</td>
<td>15.2</td>
<td>12.5</td>
<td>27.4</td>
<td>21.2</td>
<td>21.2</td>
<td>13.7</td>
<td>39.5</td>
<td>36.5</td>
<td>15.2</td>
<td>27.4</td>
</tr>
<tr>
<td>800</td>
<td>20.8</td>
<td>16.7</td>
<td>28.9</td>
<td>21.8</td>
<td>16.3</td>
<td>13.8</td>
<td>19.8</td>
<td>15.6</td>
<td>25.2</td>
<td>20.8</td>
<td>16.7</td>
<td>28.9</td>
<td>21.8</td>
<td>16.3</td>
</tr>
<tr>
<td>300</td>
<td>3.5</td>
<td>2.2</td>
<td>10.5</td>
<td>3.9</td>
<td>6.2</td>
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<td>6.2</td>
</tr>
<tr>
<td>500</td>
<td>6.2</td>
<td>7.4</td>
<td>11.5</td>
<td>7.4</td>
<td>4.8</td>
<td>2.2</td>
<td>1.7</td>
<td>11.5</td>
<td>7.4</td>
<td>6.2</td>
<td>7.4</td>
<td>11.5</td>
<td>7.4</td>
<td>4.8</td>
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<td>700</td>
<td>4.0</td>
<td>7.1</td>
<td>8.8</td>
<td>6.6</td>
<td>5.3</td>
<td>4.9</td>
<td>7.1</td>
<td>8.8</td>
<td>6.6</td>
<td>4.0</td>
<td>7.1</td>
<td>8.8</td>
<td>6.6</td>
<td>5.3</td>
</tr>
<tr>
<td>900</td>
<td>2.3</td>
<td>3.6</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
| Totals | 77.7  | 72.1  | 122.5 | 108.6 | 68.3  | 55.8  | 116.4 | 77.7 | 130.3 | 114.4 | 63.5  | 136.6 | 91.1  | 69.0  

---
If ChSCC were to increase their NASF to be equal to the mean of its twelve peer institutions, it would need to add 157,300 NASF or 253,800 GSF to the campus. That amount of square footage is the equivalent of 5 to 6 new buildings. See Table 3.3 below.

Table 3.3: Peer Comparison – NASF/Student

13 Community Colleges in the TBR System

Mean NASF/FTE Student

ChSCC Existing NASF/FTE Student
CLASSROOM USAGE
The College scheduled 57 classrooms on campus during the Fall 2015. These rooms represent 8 percent of the total space on campus. This category includes seminar rooms, classrooms, and auditoriums in which the Registrar schedules classes. There are several ways to analyze these spaces. Measures include how intensively they are being used, if they are the appropriate size for the scheduled class, and if the size is adequate for the number of students given the desired seating style.

The intensiveness of use is in terms of usage hours per week. The target is 30 hours per week. ChSCC’s mean classroom usage is about 18 hours per week in the 9 buildings where classrooms are located. Of the 57 classrooms, 3 reached or exceeded the target of 30 hours per week during the day period.

The next measure is the seat occupancy — the size of the section relative to the capacity of the classroom. The target seat occupancy is 60 percent, compared to the average of 70 percent at ChSCC. Essentially, this means that there are 10% more students in a classroom than guidelines suggest.

The classroom size is determined by the desired seating style. More square feet per station is required to accommodate a table-and-chair arrangement than for a tablet-arm chair. In addition, the NASF per station for each type gradually decreases as the capacity increases. The mean area per station at ChSCC is 24 NASF, which is in the middle of the appropriate size range depending on the desired teaching style. Based on emerging data relative to how students learn, there is an increasing preference for the table-and-chair seating style.

FACULTY OFFICES
The mean size of a faculty office is 138 NASF and range in size from 54 NASF to over 300 NASF. The THEC guidelines suggests that the size of an average faculty office should be 120 NASF. Any office with less than 100 NASF for a full time faculty member is considered substandard. There are 49 offices below 100 NASF.
SPACE ALLOCATION GUIDELINES

Another measure to determine adequacy of space, is to apply the THEC Space Guidelines to the campus space inventory. However, since ChSCC is a unique campus within the system because it includes a TCAT integrated into the college and utilizes some college space, a special guideline will be developed for this state institution only. TCAT students utilize the Health Sciences building and CETAS and library as well as student services’ spaces such as the cafeteria and Enrollment Services Center. There are diminishing needs for TCAT classrooms because they are sharing with the college. The current THEC Space Guideline assumes there are two separate institutions — so therefore no sharing of space. The special guideline needs to reflect a result that includes spaces shared between the two entities. At this point, though, the guidelines maintain the current guidelines as if they were two separate institutions.

In Table 3.4, there are 7 categories of space shown for the college and 3 for the TCAT. The Existing NASF shown is the combination of the college and the TCAT space on campus. ChSCC has 395,881 NASF of space on the main campus in these 7 categories. THEC guidelines support 467,431 NASF. Looking ahead, the campus enrollment is expected to reach 14,000 students in ten or fifteen years. At that time, with the THEC Space Guidelines applied, the campus will need to have 585,129 NASF. The difference between the existing square footage and the formula guidelines is almost 190,000 NASF which translates into 306,500 GSF. That total gross is the equivalent of 5 to 8 new buildings.

Table 3.4: THEC Guidelines versus Existing NASF – 9,400 HC students

<table>
<thead>
<tr>
<th>THEC FORMULA SPACES</th>
<th>Guidelines CC</th>
<th>Guidelines TCAT</th>
<th>CC + TCAT</th>
<th>EXISTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLASSROOM</td>
<td>35,504</td>
<td>23,000</td>
<td>58,504</td>
<td>74,181</td>
</tr>
<tr>
<td>LAB / STUDIO</td>
<td>133,917</td>
<td>121,966</td>
<td>255,883</td>
<td>156,821</td>
</tr>
<tr>
<td>LAB, OPEN</td>
<td>18,808</td>
<td>18,808</td>
<td>10,144</td>
<td></td>
</tr>
<tr>
<td>OFFICE</td>
<td>-</td>
<td>8,164</td>
<td>-</td>
<td>113,111</td>
</tr>
<tr>
<td>LIBRARY / STUDY</td>
<td>21,661</td>
<td>21,661</td>
<td>10,144</td>
<td></td>
</tr>
<tr>
<td>PHYSICAL ED / REC.</td>
<td>11,285</td>
<td>11,285</td>
<td>10,144</td>
<td></td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>314,301</strong></td>
<td><strong>153,130</strong></td>
<td><strong>467,431</strong></td>
<td><strong>395,569</strong></td>
</tr>
</tbody>
</table>

In Table 3.5, the same categories of space are shown for the college and the TCAT with the Existing NASF on campus. ChSCC has 395,881 NASF of space on the main campus in these 7 categories. THEC guidelines support 467,431 NASF. Looking ahead, the campus enrollment is expected to reach 14,000 students in ten or fifteen years. At that time, with the THEC Space Guidelines applied, the campus will need to have 585,129 NASF. The difference between the existing square footage and the formula guidelines is almost 190,000 NASF which translates into 306,500 GSF. That total gross is the equivalent of 5 to 8 new buildings.

Table 3.5: THEC Guidelines versus Assumed Growth to 14,000 HC students

<table>
<thead>
<tr>
<th>THEC FORMULA SPACES</th>
<th>Guidelines CC</th>
<th>Guidelines TCAT</th>
<th>CC + TCAT</th>
<th>EXISTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLASSROOM</td>
<td>46,132</td>
<td>23,000</td>
<td>69,132</td>
<td>74,181</td>
</tr>
<tr>
<td>LAB / STUDIO</td>
<td>181,836</td>
<td>127,504</td>
<td>309,340</td>
<td>156,821</td>
</tr>
<tr>
<td>LAB, OPEN</td>
<td>26,331</td>
<td>26,331</td>
<td>10,144</td>
<td></td>
</tr>
<tr>
<td>OFFICE</td>
<td>128,171</td>
<td>8,164</td>
<td>136,335</td>
<td>113,111</td>
</tr>
<tr>
<td>LIBRARY / STUDY</td>
<td>28,193</td>
<td>28,193</td>
<td>20,774</td>
<td></td>
</tr>
<tr>
<td>PHYSICAL ED / REC.</td>
<td>15,798</td>
<td>15,798</td>
<td>20,538</td>
<td></td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>426,461</strong></td>
<td><strong>158,668</strong></td>
<td><strong>585,129</strong></td>
<td><strong>395,569</strong></td>
</tr>
</tbody>
</table>

| DIFFERENCE | 189,560 |
FIRST PRIORITY PROJECTS
The following are first priority projects that the College considers the highest of priorities to improve the college campus and to provide the intellectual and social resources required for its students.

STUDENT SERVICES CENTER
The goal is to create a single location for the range of student services that the College provides and to consolidate their offices, programs, and units in a new building designed specifically for their functions.

Currently, student services are located in several buildings on campus requiring students to go from one building to the next in search of the services that they need. This “one-stop” concept has been growing on many campuses and has shown to have a positive affect on retention as a result.

In addition to making the student services experience more efficient it also leads to organizational efficiencies as well as the potential for shared space and resources. By having a single point of service, cross-trained staff can help students navigate the various services that are available. The experience on other campuses is that student satisfaction will be positive.

The Starnes Student Center functions primarily—not for student life activities—but as a student services building. There is insufficient space in the building to be able to create for the College the “one-stop” concept. Student Services will move to a planned new facility sized to allow the consolidation of the various offices on campus.

All Student Services offices will relocate to a new Student Services Center along Amnicola Highway. This location essentially creates a new “front door” to the campus and a visual campus presence. The new building will provide space for Admissions, Advising, Enrollment, financial aid and a bursar’s office, Student Activities, Dean of Students, Judicial Affairs, Multicultural Affairs, student clubs and organizations, and Veterans Affairs.

REORGANIZATION & RELOCATION OF PROGRAMS
The cafeteria located in the Omniplex will be moved to the space vacated in the Stares Student Center by the creation of the new Student Services Building. The vacated cafeteria space can be renovated for classrooms and other academic needs. Other dining options will be developed in locations outside of Starnes. There is an existing café in the CBH and there can be another café in the new Student Services Building.

The College is planning to relocate several programs from the satellite campuses to the main campus as well as relocating programs from the main campus.

The acquisition of the Olan Mills property and renovation of the facility into a multipurpose resource for the College, TCAT, and the Chattanooga community has been a positive factor in the development of the campus. The building currently is utilized by the Wacker Institute which is a partnership between the College’s Engineering Technology Division and Wacker Polysilicon North America. In addition, space has been renovated for one TCAT and Engineering courses. Space has also been renovated for the STEM School Chattanooga which is a Hamilton County Department of Education magnet high school.

A section of the building is currently being designed to allow the relocation of the remaining Engineering program from the Omniplex to CETAS.
CIRCULATION IMPROVEMENTS AND PARKING
The campus circulation, both vehicular and pedestrian, is in need of improvement. Currently, most of the campus is served with one-way drive lanes. The one-way drive loop around the perimeter of the campus serves as the only route to navigate the entire campus by vehicle and is too long and unwieldy. It is recommended that all one-way drive lanes be eliminated. A new road east of the expanded TCAT would greatly improve circulation without impeding on campus green areas. Access to the rear of the TCAT must be maintained.

A pull-off at the main entrance to campus, that includes a displayed campus map and new way-finding signage, should be installed.

Pedestrian circulation will be improved by providing more sidewalks that flow from building to building. Completion of the sidewalk on the north side of the lake is important as well as other pedestrian paths around the campus.

A garage is preferable to increase parking on a land-shy and land-locked campus where two thirds of the campus land is located on floodplains. Surface lots will either be added or enlarged and located on the campus perimeter.

LAND ACQUISITION
With 68 percent of the campus acreage in a floodplain, and insufficient parking, land acquisition is a high priority. There are potential land acquisitions to the south of the campus.

BEYOND PRIORITY PROJECTS
- General academic improvements including classroom upgrades and faculty offices
- Continued circulation and parking improvements
- Space for intramural fields for soccer and other recreational uses
- Two new academic buildings for future needs are indicated in the plan, one of which could be designed for the sciences bringing them in close proximity to Engineering in CETAS and providing the program with state-of-the-art labs.
CAMPUS MASTER PLAN

Drawing 3.2 – The illustrative Campus Master Plan is a rendered air view of the campus as it might look when all the Campus Plan projects are complete. This vision of the Chattanooga State Community College campus expresses all of the ideas discussed above, collected from the many on-campus interviews, discussions, and review sessions.

The Campus Plan concept is illustrated on this drawing. It shows buildings prescribed by the programmatic analysis and landscapes that were conceived through the campus design process. The architects for each of the construction projects will determine final building form and position on each site. The College will also influence the final physical resolution of the campus plan, as projects may need to be redirected in response to changing academic and programming requirements. Funding opportunities will also be a factor in the realization of the campus plan, both in sizing and sequencing.

The objective to a campus plan is to not only locate buildings that will be required over time to support current and projected academic and student life activities, but to also take advantage of the opportunity to strengthen and enhance the physical image of the campus with these new construction projects.
## APPENDIX A: ESTIMATED PROJECT COSTS

<table>
<thead>
<tr>
<th>Project: New Construction</th>
<th>Estimated Construction Cost</th>
<th>Estimated Project Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic/Student Services Building</td>
<td>$17.5 M to $24.5 M</td>
<td>$21.9 M to $30.6 M</td>
</tr>
<tr>
<td>Academic Building - Technical Studies (Future)</td>
<td>$15.0 M to $20.0 M</td>
<td>$18.7 M to $25.0 M</td>
</tr>
<tr>
<td>Academic Building (Future)</td>
<td>$12.5 M to $17.5 M</td>
<td>$15.6 M to $21.8 M</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project: Renovation</th>
<th>Estimated Construction Cost</th>
<th>Estimated Project Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>CETAS</td>
<td>$11.1 M to $14.8 M</td>
<td>$14.4 M to $19.2 M</td>
</tr>
<tr>
<td>Omniplex Building</td>
<td>$1.5 M to $2.1 M</td>
<td>$1.9 M to $2.8 M</td>
</tr>
<tr>
<td>Student Center</td>
<td>$8.8 M to $12.2 M</td>
<td>$11.4 M to $15.9 M</td>
</tr>
<tr>
<td>Health, Fitness &amp; Athletics</td>
<td>$1.4 M to $1.9 M</td>
<td>$1.8 M to $2.5 M</td>
</tr>
</tbody>
</table>

- Convert one-way drives to two-way | $197,000 – $224,000 |
- Resurface parking lot at Business/Child Dev. | $342,000 – $369,000 |
- New parking lot at Health & Fitness and Advanced Technology | $260,000 – $287,000 |
- New connecting road at Shipping/Receiving | $102,000 – $129,000 |
- Construct 3 Roundabouts | $631,000 – $658,000 |
- New pedestrian sidewalks | $308,000 – $335,000 |
- Landscaping and irrigation budget | $420,000 – $448,000 |
- Campus information kiosk | $70,000 – $97,000 |
- Various utility infrastructure projects | $135,000 – $189,000 |
- New 1,000 car parking deck if land can be acquired | $18,000 – $25,000/space |