SECTION 1 EXECUTIVE SUMMARY .................................................................................................................. 1
CAMPUS PLAN OVERVIEW ............................................................................................................................... 2
DYERSBURG, DYER COUNTY ........................................................................................................................... 3
  Drawing 1.1: CAMPUS PLAN CONCEPT – DYERSBURG, DYER COUNTY .............................................................. 5
JIMMY NAIFEH CENTER, TIPTON COUNTY ..................................................................................................... 6
  Drawing 1.2: CAMPUS PLAN CONCEPT – COVINGTON, TIPTON COUNTY ......................................................... 7
SECTION 2 TERMS OF REFERENCE .................................................................................................................. 7
  PLANNING PROCESS ........................................................................................................................................... 8
  Figure 2.1: MASTER PLANNING DIAGRAM ..................................................................................................... 8
  MISSION, VISION, GOALS, AND OBJECTIVES ................................................................................................. 8
CAMPUS ANALYSIS – DYERSBURG, DYER COUNTY ....................................................................................... 10
  SITE CONTEXT ................................................................................................................................................ 10
  Drawing 2.1: SITE CONTEXT ......................................................................................................................... 10
  LAND USE AND CONTEXT ............................................................................................................................... 12
  Drawing 2.2: LAND USE AND CONTEXT ...................................................................................................... 13
  LAND OWNERSHIP ....................................................................................................................................... 14
  Drawing 2.3: LAND OWNERSHIP .................................................................................................................. 15
  PREDOMINANT USE ....................................................................................................................................... 16
  Drawing 2.4: PREDOMINANT USE .................................................................................................................. 17
  PEDESTRIAN AND BICYCLE CIRCULATION ................................................................................................. 18
  Drawing 2.5: PEDESTRIAN AND BICYCLE CIRCULATION ............................................................................ 19
  VEHICULAR CIRCULATION AND PARKING ................................................................................................. 20
  Drawing 2.6: VEHICULAR CIRCULATION AND PARKING ............................................................................ 21
  HYDROLOGY AND TOPOGRAPHY ..................................................................................................................... 22
  Drawing 2.7: HYDROLOGY AND TOPOGRAPHY ......................................................................................... 23
  LANDSCAPE AND OPEN SPACE ..................................................................................................................... 24
  Drawing 2.8: LANDSCAPE AND OPEN SPACE ............................................................................................. 25
CAMPUS ANALYSIS – JIMMY NAIFEH CENTER AT TIPTON COUNTY ............................................................. 26
  SITE CONTEXT ................................................................................................................................................ 26
  Drawing 2.9: SITE CONTEXT ......................................................................................................................... 27
  LAND USE AND CONTEXT ............................................................................................................................... 28
  Drawing 2.10: LAND USE AND CONTEXT .................................................................................................... 29
  LAND OWNERSHIP ....................................................................................................................................... 30
  Drawing 2.11: LAND OWNERSHIP ................................................................................................................ 31
PREDOMINANT USE .............................................................................................................................................. 32
  Drawing 2.12: PREDOMINANT USE ................................................................................................................ 33
PEDESTRIAN AND BICYCLE CIRCULATION ...................................................................................................... 34
  Drawing 2.13: PEDESTRIAN AND BICYCLE CIRCULATION ............................................................................ 35
VEHICULAR CIRCULATION AND PARKING ...................................................................................................... 36
  Drawing 2.14: VEHICULAR CIRCULATION AND PARKING ............................................................................ 37
HYDROLOGY AND TOPOGRAPHY ..................................................................................................................... 38
  Drawing 2.15: HYDROLOGY AND TOPOGRAPHY ......................................................................................... 39
LANDSCAPE AND OPEN SPACE ..................................................................................................................... 40
  Drawing 2.16: LANDSCAPE AND OPEN SPACE ............................................................................................. 41
CENTER ANALYSIS – GIBSON COUNTY CENTER .......................................................................................... 42
  Drawing 2.17: GIBSON CENTER ANALYSIS ................................................................................................ 43
DATA ANALYSIS .................................................................................................................................................. 44
RIGHT SIZING ..................................................................................................................................................... 44
PEER COMPARISONS ......................................................................................................................................... 44
  TABLE 2.1: TBR Campus Peer Comparison – NASF/Student ............................................................................ 44
  FIGURE 2.1: TBR Campus Peer Comparison – NASF/Student – 13 Community Colleges in the TBR System ........................................................................................................................................ 44
CLASSE ROOM USAGE ....................................................................................................................................... 45
SPACE ALLOCATIONS ........................................................................................................................................ 46
  PROJECTIONS ................................................................................................................................................... 47
  TABLE 2.2: SPACE ALLOCATION GUIDELINES ............................................................................................. 47
SECTION 3 CAMPUS PLAN ................................................................................................................................. 48
  Drawing 3.1: ILLUSTRATIVE MASTER PLAN – DYERSBURG, DYER COUNTY .................................................. 49
  Drawing 3.2: ILLUSTRATIVE MASTER PLAN – JIMMY NAIFEH CENTER, TIPTON COUNTY ...................... 49
POTENTIAL COST RANGES .................................................................................................................................. 49
  Table 3.1: Building Project Costs .......................................................................................................................... 49
  Table 3.2: Non-Building Project Costs – Main Campus .................................................................................. 49
  Table 3.3: Non-Building Project Costs – Jimmy Naifeh Center ........................................................................ 49
APPENDIX ............................................................................................................................................................. 53
  UTILITIES, SITE INFRASTRUCTURE, AND COSTS .............................................................................................. 54

DOBER LISKEY MATHEY Creating Campus Solutions
LOSE & ASSOCIATES, INC. / I.C. THOMAISON ASSOCIATES, INC.
Section 1  Executive Summary

In 1957 the Tennessee Legislative Council received a report on higher education in Tennessee which reflected the need for additional higher education opportunities to be provided for the average Tennessean. In 1963 the State Board of Education developed plans for the establishment of a group of community colleges to serve those areas without access to higher education, with a goal to have an institution of higher education within 50 miles of each Tennessee. Admission to these colleges was not to be restrictive to recent high school graduates, but was to be an open-entry opportunity with colleges serving a whole community.

As a result, northwest Tennessee benefitted when in 1967 the State Board of Education selected Dyersburg for the location of the second community college in West Tennessee. Dyersburg State Community College (DSCC) is centrally located in the college’s seven-county service area on more than 115 acres.

A second location was opened 1991 in Gibson County at Trenton, known as the Gibson County Center. This Center contains a one story building which houses an Early Childcare program and as well as Emergency Medical Technology/Paramedic programs. Gibson has seen an increase in enrollment and there are space needs for computer labs as well as labs to support the childcare program. The Center houses six smart classrooms; an interactive television (distance learning via videoconferencing) classroom; a mathematics lab; a general purpose computer lab; a Learning Resource Center; and a combination science classroom/lab. In addition, the Center has a large commons area and a bookstore.

Other DSCC centers were opened in 1973 in Tipton County at various high schools. In Covington the third DSCC location known as the Jimmy Naifeh Center, and Phase I of this Center’s construction, was completed in 1996 and Phase II was completed in 1998. The State Building Commission approved a Master Plan for the Jimmy Naifeh Center in the year 2000. The plan called for construction of over 157,000 square feet by the year 2020. The Industrial Board of the City of Covington donated 38 acres of property adjacent to the existing 64-acre Covington site in 2001. In 2007, Phase III was completed with the opening of a new academic building which accommodates an expanded Nursing and Allied Health program, as well as an auditorium, a Learning Resource Center, and a tutoring lab. In 2008 the State Building Commission approved funds for a new facility, Phase IV, which will house a Student Center and a new combined resource—a Learning Resource Center and the Tipton County Public Library.

Both satellite locations offer Associate of Science and Associate of Applied Science degree programs.

Across the Dyersburg campus and the two centers there are approximately 3,800 students enrolled in Criminal Justice, Nursing and Allied Health, Business and Technology, transfer and college preparatory programs. Learning is enhanced by a variety of campus organizations, service learning opportunities, and sports programs. The college also serves the community by offering a variety of continuing education courses, cultural events, and on-line degree programs.

In January 2010, the state of Tennessee passed the Complete College Tennessee Act (CCTA), a comprehensive reform agenda that seeks to transform public higher education through changes in academic, fiscal, and administrative policies at the state and institutional level. At the center of these reforms is the need for more Tennesseans to be better educated and trained, while also acknowledging the state’s diminished fiscal capacity to support higher education.

The CCTA requires higher education to establish a direct link between the state’s economic development and its educational system. The overarching goal is to have Tennessee meet the projected national average in educational attainment by 2025. With this goal in mind, the Tennessee Board of Regents Master Plan policy recommends a new plan every five years. During the past year, Dyersburg State Community College has engaged in a comprehensive campus planning process. 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 Master 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 Master Plan represents much more than a layout for determining sites for future buildings. It also reflects the 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, DSCC hopes to continue a leadership role in helping the region fulfill its promise. These goals are described in Section Two under “Mission, Vision, Goals, and Objectives”.

In 1991 the Tennessee Legislative Council received a report on higher education in Tennessee which reflected the need for additional higher education opportunities to be provided for the average Tennessean. In 1963 the State Board of Education developed plans for the establishment of a group of community colleges to serve those areas without access to higher education, with a goal to have an institution of higher education within 50 miles of each Tennessee. Admission to these colleges was not to be restrictive to recent high school graduates, but was to be an open-entry opportunity with colleges serving a whole community.

As a result, northwest Tennessee benefitted when in 1967 the State Board of Education selected Dyersburg for the location of the second community college in West Tennessee. Dyersburg State Community College (DSCC) is centrally located in the college’s seven-county service area on more than 115 acres.

A second location was opened 1991 in Gibson County at Trenton, known as the Gibson County Center. This Center contains a one story building which houses an Early Childcare program and as well as Emergency Medical Technology/Paramedic programs. Gibson has seen an increase in enrollment and there are space needs for computer labs as well as labs to support the childcare program. The Center houses six smart classrooms; an interactive television (distance learning via videoconferencing) classroom; a mathematics lab; a general purpose computer lab; a Learning Resource Center; and a combination science classroom/lab. In addition, the Center has a large commons area and a bookstore.

Other DSCC centers were opened in 1973 in Tipton County at various high schools. In Covington the third DSCC location known as the Jimmy Naifeh Center, and Phase I of this Center’s construction, was completed in 1996 and Phase II was completed in 1998. The State Building Commission approved a Master Plan for the Jimmy Naifeh Center in the year 2000. The plan called for construction of over 157,000 square feet by the year 2020. The Industrial Board of the City of Covington donated 38 acres of property adjacent to the existing 64-acre Covington site in 2001. In 2007, Phase III was completed with the opening of a new academic building which accommodates an expanded Nursing and Allied Health program, as well as an auditorium, a Learning Resource Center, and a tutoring lab. In 2008 the State Building Commission approved funds for a new facility, Phase IV, which will house a Student Center and a new combined resource—a Learning Resource Center and the Tipton County Public Library.

Both satellite locations offer Associate of Science and Associate of Applied Science degree programs.

Across the Dyersburg campus and the two centers there are approximately 3,800 students enrolled in Criminal Justice, Nursing and Allied Health, Business and Technology, transfer and college preparatory programs. Learning is enhanced by a variety of campus organizations, service learning opportunities, and sports programs. The college also serves the community by offering a variety of continuing education courses, cultural events, and on-line degree programs.

In January 2010, the state of Tennessee passed the Complete College Tennessee Act (CCTA), a comprehensive reform agenda that seeks to transform public higher education through changes in academic, fiscal, and administrative policies at the state and institutional level. At the center of these reforms is the need for more Tennesseans to be better educated and trained, while also acknowledging the state’s diminished fiscal capacity to support higher education.

The CCTA requires higher education to establish a direct link between the state’s economic development and its educational system. The overarching goal is to have Tennessee meet the projected national average in educational attainment by 2025. With this goal in mind, the Tennessee Board of Regents Master Plan policy recommends a new plan every five years. During the past year, Dyersburg State Community College has engaged in a comprehensive campus planning process. 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 Master 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 Master Plan represents much more than a layout for determining sites for future buildings. It also reflects the 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, DSCC hopes to continue a leadership role in helping the region fulfill its promise. These goals are described in Section Two under “Mission, Vision, Goals, and Objectives”. 
CAMPUS PLAN OVERVIEW

The 2012 Master Plan reflects input from the many DSCC constituents who have participated in the planning process. It provides a framework for decision-making that embodies a point of view regarding all aspects of the campus. These include site context, land use, land ownership, building use, pedestrian and vehicular circulation, parking, hydrology/topography, landscape and open space, data analysis, campus design, development constraints and opportunities, and sequence.

The Master Plan described in this report is summarized here by brief descriptions of key projects indicated on Drawing 1.1 and Drawing 1.2 on the following pages. These drawings reflect the Master Plan concepts for the main campus in Dyersburg, Dyer County and both centers—the Jimmy Naifeh Center in Tipton County and the Gibson County Center. The DSCC Gibson County Center concept is described in Section Three. The projects are clustered relationally with some to be completed in the near term, some in the mid-term, and others in the long term. Projects will be initiated as funds permit.

Two scenarios were developed—one based on a full time equivalent (FTE) enrollment projection of 2,878 and the other based on a 3,626 FTE student enrollment. This Master Plan shows future needs based on a 3,626 FTE student enrollment—1,860 at Dyersburg, 1,636 at the Jimmy Naifeh Center, and 130 at the Gibson County Center. These FTE numbers exclude on-line students. These projections should be reviewed periodically to ensure validity of assumptions.
DYERSBURG, DYER COUNTY

Drawing 1.1 shown on page 5 is a drawing reflecting the Dyersburg Campus Concept Plan. The projects are clustered relationally with some to 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.

A. Math/Academic Wing Expansion

The Learning Resource Center (LRC) recently created more student space due to increased enrollment; this growth trend is estimated to continue into the next several years requiring an expansion of the facility.

B. Academic Building

A future academic building is located north of the LRC.

C. Potential Quad Space

Redesign of the parking area between the LRC/Math Building and the Science Building will create a landscaped quad, improve pedestrian circulation, and provide outdoor furnishings for student gathering.

D. Student Center and Campus Activities Center Addition

The current Student Center is designed for student services and student life functions. All student services are available in a one-stop operation which includes admissions, advising, registration, and financial aid. The Student Center is insufficient to service current enrollment, and with future increased enrollment the need will be greater for additional staffing. The Student Center includes a testing center whose size is insufficient for current and future enrollment growth. An open computer lab services student career exploration and is now proving insufficient and more computer lab space will be required with future growth.

The Campus Activities Center is adjacent to the Student Center and is lacking much-needed activity space. Because of this space deficiency, there is a lack of engagement with students and participation is low.

In an effort to integrate and create a more cohesive commuter campus, a new comprehensive Student Center and Campus Activities Building addition positioned between the two facilities is proposed. It is important that the campus have a focal point as well as student gathering spaces. This addition will be a resource for one-stop student services as well as student life activities. It will include the Student Government Association, student clubs, recreational activities, and food service.

E. Outdoor Amphitheater

Creation of an outdoor amphitheater will support the Performing Arts and student life. This structure will be directly adjacent to the proposed Arts and Science Building.

F. Arts and Sciences Academic Building

A future academic building will support the sciences and arts programs.

G. Physical Plant Facility Expansion

A building addition on the north end of the existing Physical Plant facility will accommodate storage needs.

H. Agriculture Pavilion

This structure is located adjacent to approximately four to five acres of land intended for demonstration plots to support the Agriculture program. This structure’s function will complement the greenhouse operation located adjacent to the Gymnasium.

I. Soccer Field

A new soccer field will be created on the north central campus border.

J. Sports Lighting Installation

Lighting will be installed at the existing baseball field located on the southeast corner of campus. Another installation will be at the softball field found at the north campus border. The softball field improvements also include new concession, press box, restrooms, and storage.
K. Campus Entrance Landscape Enhancement

Landscape improvements at the campus entrance area and parking lot will enhance the main campus gateway and preserve open space.

L. Parking Lot Landscape Improvements

Enhance existing parking areas in three locations—west of future Academic Building “B”, east of the Dale F. Glover Education Building, and west of the future soccer field on the north campus border.

M. Athletic Expansion Areas

Expand these areas located west of the existing baseball field.

N. Future Parking

Create two additional parking lots—one to the west of the Student Center on the western campus edge and one on the south and west campus border.

O. Recreation and Parking Expansion

Future recreation fields and parking expansion are located on the east border at the secondary campus entrance.

P. Parking Improvements

Existing gravel lot will be upgraded and landscaped.

Q. Potential Land Acquisition

This parcel is owned by the Loyal Order of Moose located on the north campus border. Purchase of this land will give the College contiguous campus land between the Security Bank Community Learning Center to the east on the north edge of campus and wooded space to the west. This acquisition will allow the College to expand parking to serve the softball field activities.

R. Potential Land Acquisition

These parcels are located on the south central campus border adjacent to existing and planned parking. Acquisition of these properties will extend contiguous campus property.

S. Potential Future Development

Potential future development for College support use.

T. Expanded Vehicular Connection

The vehicular connection between the Maintenance Building and the softball field will be expanded and resurfaced.
Drawing 1.1: CAMPUS PLAN CONCEPT – DYERSBURG, Dyer County

Drawing 1.1 Site Letter Key

A. Math/Academic Expansion Wing
B. Academic Building
C. Potential Quad Space
D. Student Center and Campus Activities Center Expansion
E. Outdoor Amphitheater
F. Arts and Sciences Academic Building
G. Physical Plant Facility Expansion
H. Agriculture Pavilion
I. Soccer Field
J. Sports Lighting Installation
K. Campus Entrance Landscape Enhancement
L. Parking Lot Improvements
M. Athletic Expansion Areas
N. Future Parking
O. Recreation and Parking Expansion
P. Parking Improvements
Q. Potential Land Acquisition
R. Potential Land Acquisition
S. Potential Future Development
T. Expanded Vehicular Connection
JIMMY NAIFEH CENTER, TIPTON COUNTY

Drawing 1.2 shown on page 7 reflects the Jimmy Naifeh Center, Tipton County Concept Plan. The projects are clustered relationally with some to 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.

A, B, C. Academic Buildings

Due to the academic growth of Allied Health programs including Nursing, Physical Therapy, Health Informatics, as well as advanced manufacturing training and other programs soon to be developed, these buildings will house enrollment growth. Phase IV includes a Student Activities, Student Service Center with food service, as well as a combined resource—a new Learning Resource Center and the Tipton County Public library.

D. Vehicular Connection

Development of a two-way vehicular connection between U.S. Highway 51, the Jimmy Naifeh Building, and parking northeast of the Phase IV facility.

E. Vehicular Connection

Development of a two-way vehicular connection between parking at the Phase IV facility and Holly Grove Road to the north.

F. Vehicular Connection

Development of a two-way vehicular connection continuing between Academic Building parking and Holly Grove Road.

G. Potential Academic Expansion

This area will be located just north of the potential A, B, C academic buildings continuing to the north campus edge.

H. Potential Athletic Expansion

Athletic expansion is planned for the north side of the Center east of the Agriculture demonstration plots.

I. Agriculture Pavilion

This structure will support a greenhouse environment and will be located adjacent to approximately four to five acres of land on the north side of the property intended for demonstration plots to support the Agriculture program.

J. Future Parking

There will be three additional parking lots—one lot to the west of the Jimmy Naifeh Center will be expanded and two areas northeast of the Phase IV facility parking lot will be created.

K. Vehicular Connection

Development of a two-way vehicular connection between the Athletic expansion area of campus and Holly Grove Road.

L. Vehicular Connection

Development of a two-way vehicular connection between the Athletic expansion area of campus and the proposed Agriculture pavilion.
Drawing 1.2: CAMPUS PLAN CONCEPT – COVINGTON, TIPTON COUNTY

- A. Academic Building
- B. Academic Building
- C. Academic Building
- D. Vehicular Connection
- E. Vehicular Connection
- F. Vehicular Connection
- G. Potential Academic Expansion
- H. Potential Athletic Expansion
- I. Agriculture Pavilion
- J. Future Parking
- K. Vehicular Connection
Section 2 Terms of Reference

PLANNING PROCESS

The planning process at DSCC was collegial and participatory. There were five steps, or phases, which are described graphically in Figure 2.1. The foundation for the planning was an understanding of the College’s mission and vision. Preliminary assumptions were identified based on these factors.

The process consists of five steps or phases beginning with a discussion of aspirations and vision. The second phase consists of three studies and analyses—academic, building, and campus. A summary of needs makes up the third phase which is based on the analyses, peer comparisons, student enrollment data, and other factors. Phase four is an exploration of alternatives for meeting the College’s needs. The fifth and final phase is the Campus Plan documentation.

The project’s primary consultant was DOBER LIDSKY MATHEY (DLM). Campus and environs analysis and mapping were addressed by Lose & Associates, Inc. Assessment of college-wide utility infrastructure was provided by I.C. Thomasson Associates, Inc.

DSCC’s space inventory was the basis for these studies and for comparisons to peer institutions and THEC space standards.
MISSION, VISION, GOALS, AND OBJECTIVES

MISSION STATEMENT

The mission for Dyersburg State Community College follows:

"Dyersburg State Community College uses learner-centered instruction to expose students to the best historical and contemporary ideas to help them create effective solutions to future challenges. Dyersburg State Community College serves seven counties adjacent to or near the Mississippi River in West Tennessee where there are enormous opportunities to improve education attainment, employment levels in high-skilled jobs, and per capita income. An open-access, learning-centered institution, Dyersburg State anticipates and responds to the educational needs of individuals through strategic planning and continuous improvement processes. In doing so, the College provides leadership in public service activities, workforce development projects, and educational collaborations designed to cultivate integrity and self worth, to embrace lifelong learning, to promote diversity, and to improve the community at large by producing educated and productive members of society. Moreover, to improve the quality of life in the communities served, the College is strongly committed to developing and promoting civic and cultural opportunities, as well as economic and community development initiatives through partnerships with business and industry.

Dyersburg State Community College offers the following:

- Associate degrees for transfer to four-year institutions;
- Associate of Applied Science degrees, as well as certificates, that respond to emerging career opportunities in health care and technologies;
- A Learning Support Program that enhances the skills necessary for success in college-level courses;
- An Honors Program that expands students' thinking and achievement;
- A Continuing Education Program that provides educational opportunities for children and adults;
- Seamless transition among institutions through articulation agreements with area high schools, Tennessee Technology Centers, four-year institutions, and through Tennessee Transfer Pathways;
- A variety of student support services designed to increase the opportunity for success, as well as services to provide access to federal and state financial aid and locally-funded scholarships;
- Increased access to education via technology-assisted instruction, distance learning offerings, and course offerings at convenient locations at the Gibson County Center, and the Jimmy Naifeh Center at Tipton County.

The accomplishment of this mission depends on a faculty and staff who are flexible, highly skilled, technology oriented and learner centered.

Dyersburg State Community College remains committed to the education of a non-racially identifiable student body and promotes diversity and access without regard to race, gender, religion, national origin, age, disability, or veteran status."

VISION STATEMENT

Dyersburg State Community College's vision:

"Dyersburg State Community College will elevate the region’s educational attainment thereby enhancing the quality of life in West Tennessee."
Campus Analysis – Dyersburg, Dyer County

SITE CONTEXT

Dyersburg State Community College campus is located in the city of Dyersburg in Dyer County. Located in West Tennessee, the city of Dyersburg is the gateway to Middle America. Dyersburg is a regional retail, medical, employment and cultural center for more than 300,000 people who live in a tri-state area that includes Tennessee, Arkansas and Missouri. The campus covers approximately 115 acres and is centrally located in the college’s seven-county service area. The campus is approximately one mile north of downtown Dyersburg. The campus is shown in dark green on Drawing 2.1.

The drawing inset shows that in addition to the Dyersburg campus, the College has two centers. The Jimmy Naifeh Center in Covington, Tipton County is located approximately 50 miles south from the Dyersburg campus. A second center, the Gibson County Center, is found in Trenton located approximately 30 miles east of the main campus.
LAND USE AND CONTEXT

This drawing shows use of land on the Dyersburg campus and on adjacent properties.

Drawing 2.2 shows the core campus and student corridor surrounding academic buildings in dark red. Campus open spaces are denoted in dark green. Campus buildings are shown in a tan color. A college-leased property is colored yellow. Parking and roadways are shown in white. Athletic/Recreation areas are highlighted in lime green and visually extend the open space. Support facilities are shown in gray.

The map includes three adjacent, non-College properties—Okeena Park bordering the west side of campus shown in light green, the Baptist Collegiate Ministries land and building east of Okeena Park colored orange, and the Loyal Order of Moose property on the central northern campus border colored light blue.

The campus is bounded to the north, west, and south by residential use colored light yellow and is the predominant land use surrounding the campus. Hospital and medical use to the east is shown in pink and limited trade and services use to the south is brown. Dyersburg High School property to the north is colored tan.

Drainage and retention areas are drawn in blue.

This map shows that all campus buildings are located on the western half of campus, with use on the eastern side for athletic, recreational, and leased property.
LAND OWNERSHIP

College-owned land is colored yellow on Drawing 2.3. The campus is essentially landlocked by existing roads, a public park, well-established residential neighborhoods, and the public high school. There are relatively few opportunities for future expansion of the core campus. The borders of the campus are Lake Road and Okeena Park on the west. Country Club Road defines a portion of the north property line along with the Loyal Order of Moose and Dyersburg High School. The east is bound by Parr Avenue and to the south by West Parkview Street and residential properties on West Tickle Street.

The College leases a portion of their land to the Dyer County Health Department located on the eastern border of campus and this is shown in pink.

A potential land acquisition for the College is the Loyal Order of Moose property on the north central edge of campus and is shown in blue. Two other parcels are located on the south and west borders and are colored blue.

The current size of the Dyersburg campus is approximately 115 acres of contiguous land. The College has several opportunities to add facilities on campus without acquiring additional property. However, because of the limited opportunities to expand the campus, any opportunity to acquire an adjacent property should be carefully considered.
PREDOMINANT USE

Predominant use of buildings for the Dyersburg campus is shown on Drawing 2.4 with the campus buildings color-coded in six distinct categories.

Academic buildings, colored red, are clustered mainly on the western side of campus. These are the Security Bank Community Learning Center in the northwest corner of the campus which supports Continuing and Adult Education; the E.B. Eller Administration Building found on the southwest corner of the campus is a mixed-use facility with several classrooms; the Mathematics Building is located rear of the Learning Resource Center (LRC) on the southeast area of campus; and the Dale F. Glover Education Center just east of the LRC supports the Humanities, Sciences, and Nursing; the Student Center north of the LRC is a mixed-use building housing a testing space. The E.H. Lannom, Jr. Gymnasium houses classrooms and faculty offices. There is an academic presence in the larger Physical Plant facility north of the gymnasium which accommodates the Emergency Medical Services program.

The Learning Resource Center is colored lavender and is found on the southwest side of campus.

Administrative use is shown in blue. The E.B. Eller Administration Building is mixed use and contains administrative offices. The Student Center located in the center of the western area of the campus houses administrative functions that support student financial services, admissions, records, registration, and advising. Adjacent to the Student Center is the Campus Activities Building which also houses administrative functions.

Student Life use is indicated in green. The Campus Activities Building houses the bookstore, offices, and recreational activities. The Student Center is east of the Campus Activities Building and houses student services, a student lounge and café.

Athletic facilities are found east of the Student Center and are indicated in brown. The E.H. Lannom, Jr. Gymnasium houses physical education functions as well as basketball for both women and men. The baseball field found in the southeast corner of the campus contains a press box, shown in brown.

Physical Plant operations are colored gray and are located in the center of the campus property, just north of the Lannom Gymnasium.

The campus has two distinct areas—west and east—with the west containing most of the College’s facilities and the east containing athletic playing fields and walking trails, as well as a DSCC leased property (not highlighted on this drawing).
Drawing 2.4: PREDOMINANT USE

Legend:
- Academic
- Administrative
- Athletic / Recreation
- Student Life
- Library
- Support Services

SCALE: 1" = 400' = 0"
PEDESTRIAN AND BICYCLE CIRCULATION

Pedestrian movement on paved surfaces, trails, bicycle paths, and potential pedestrian/vehicular conflicts are shown on Drawing 2.5.

Paved surfaces designated as pedestrian walkways are colored red. Blue lines and circles indicate pedestrian/vehicular conflict. The orange dashed lines represent paved trails on campus, and an extensive paved trail begins in the southwest corner of campus and continues north into Okeena Park. There is also an existing nature trail through the wooded area on the northeast side of campus indicated in a solid brown delineation.

Areas that are not ADA compliant are indicated with yellow colored circles. Campus buildings are colored tan.

The circle superimposed on the map demonstrates a five-minute walking distance from the center to the circle’s edge and ten minutes from edge to edge, based on a walking rate of three miles per hour. The circle is centered on the Learning Resource Center, a hub of academic activity. Distances between College 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 College buildings on the Dyersburg campus are within this circle, demonstrating that this is a very walkable campus.

There is one significant gap in pedestrian connectivity within the core campus. An alternative route, such as a pedestrian bridge, would connect the buildings on the east and west sides of the central campus green space. This connection would be desirable between the Student Center and the E. H. Lannom, Jr. Gymnasium. Opportunities also exist to enhance pedestrian connectivity between the campus core and the softball field to the north as well as the baseball field and Parr Avenue to the east.

Speed bumps are being used in conjunction with pavement striping to reduce vehicular speed and mitigate vehicular/pedestrian conflicts and bolder pavement striping of pedestrian cross walks could further contribute to motorist awareness in these areas. Pedestrians from the campus core currently must walk through a parking lot to access the Security Bank Community Learning Center. A dedicated pedestrian pathway along the edge of the parking area would help to reduce vehicular/pedestrian conflicts.
Drawing 2.5: PEDESTRIAN AND BICYCLE CIRCULATION
VEHICULAR CIRCULATION AND PARKING

Drawing 2.6 shows existing roadway systems and parking.

Primary access to DSCC is along West Parkview Street and Parr Avenue, both highlighted in yellow. There are two secondary access points—on Country Club Road north of the Security Bank Community Learning Center and on Parr Avenue just south of the College leased property. All existing campus roadways are a two-way system colored magenta. Lake Road is a five-lane arterial adjacent to the west side of campus and is shown in orange.

Campus buildings are shown in a tan color. All defined building service entrances are shown with blue colored circles.

Parking is shown in gray. All campus parking is provided on surface lots with a total of 902 marked spaces, which include 39 ADA compliant spaces for 1,511 students (as of the fall of 2011) plus faculty and staff. There are two unmarked gravel lots, one each at the baseball and softball fields. There are on-street parking spaces available along the two-way campus roadway between Lannom Gymnasium and Glover Education Center.

Yellow-colored circles indicate that no ADA dedicated parking is available. These areas are found in the lots at the E.B. Eller Administration Building, the Maintenance Building, the large lot south of the E.H. Lannom, Jr. Gymnasium, and both baseball and softball field lots. Each building has designated ADA parking located at each ADA compliant entrance, with the exception of the Maintenance Building. At the time of this report publication, the Maintenance Building is slated for ADA enhancements according to the 2011 ADA Campus Audit Plan.
HYDROLOGY AND TOPOGRAPHY

This map illustrates hydrology drainage and the range of topographic elevations on the campuses. Darker colors indicate lower elevations and lighter tones indicate higher elevations. College buildings are shown in white.

On Drawing 2.7 each color gradation represents a ten foot change in grade. The topography at the main campus falls from the south to the north with over sixty feet of elevation change across the campus. There are two main conveyances in the core of the campus that travel northwest to a single outfall under Greenway Street. Regional detention in this southwest quadrant has previously been installed by the College to reduce peak flow rates leaving the campus.

All of the buildings on the main campus are situated along the ridgelines and drain via subsurface storm sewer and surface drain to the main conveyances and discharge to the southwest. Several areas around the site were experiencing erosion due to high velocities associated with the steep slopes on campus.

The City of Dyersburg is a state of Tennessee MS4 (Municipal Separate Storm Sewer System) and as such is required by the EPA under authority of the Tennessee Water Control Act to meet certain water quality requirements. The new MS4 permit which became effective on October 1, 2010 has increasingly stringent requirements for treatment of the first one inch of rainfall. In order to help comply with this requirement, LID (Low Impact Design), capture and reuse, evapotranspiration and infiltration will play a much larger role in stormwater design from this point forward.

Managing stormwater close to the source by introducing pervious pavements, tree canopies and green space in the impervious parking areas will reduce the amount of stormwater runoff generated on the campus and provide water quality benefits. Individual rain gardens that function to capture the first flush of stormwater pollutants should be considered on the campus. A series of rain gardens that capture the runoff from the parking lots and cascade down the slope should be considered. Rain gardens must be appropriately sized based on the contributing drainage areas and the campus should consult the Low Impact Development Stormwater Management Manual prepared for Nashville and Davidson County for further information.

1 "The Conveyance Zone is the portion of the Special Flood Hazard Area that is utilized to convey water during the occurrence of the base flood.” Department of Public Works and Engineering Planning & Development Services Division, City of Houston, Texas

2 "The combination of two separate processes whereby water is lost on the one hand from the soil surface by evaporation and on the other hand from the crop by transpiration is referred to as evapotranspiration.” Natural Resources Management and Environment Department

There is no FEMA mapped floodplain present on the main campus and as such should not be limited to development from a regulatory floodplain perspective. There are no wetlands according to the National Wetland Inventory maps.
Drawing 2.7: HYDROLOGY AND TOPOGRAPHY
LANDSCAPE AND OPEN SPACE

Drawing 2.8 illustrates existing campus landscape elements and open spaces, drainage and retention areas, vegetation and tree lines, and athletic/recreation fields.

Open spaces are colored in green and wooded areas and tree lines shown in dark green. Athletic and recreation areas are indicated in light green. Drainage areas are colored blue with campus buildings shown in tan. Campus entry signage is colored red. There are two signage locations—one on Lake Road at Okeena Park and the second is located on Parr Avenue on the east campus edge. The signage on Lake Road might be better located closer to the campus primary entrance.

The Dyersburg campus is a former municipal golf course and is distinguished by vast open areas that serve as open landscape between buildings, drainage areas, and athletic fields located on the periphery. Much of the existing core campus is open green space interspersed with parking lots. There are a few well-defined areas that are ideal for passive use such as the courtyard between the Learning Resource Center and the Mathematics Building. The landscaped walkway between the Campus Activities Building and the Student Center is ideal for creating a student gathering area with outdoor furnishings. All of the campus buildings and paved parking are located on the eastern half of campus. The northeastern quadrant of the campus is largely undeveloped and defined by heavily forested hillsides with a few large open fields to the north.
Drawing 2.8: LANDSCAPE AND OPEN SPACE
Center Analysis – Jimmy Naifeh Center at Tipton County

SITE CONTEXT

DSCC Jimmy Naifeh Center at Tipton County is located in the city of Covington in central Tipton County and three miles southwest of downtown. The city is located in a county of West Tennessee that is located along the Mississippi River and is a part of the Memphis metropolitan area. It is found along U.S. Highway 51 which is a north-south highway connecting Mississippi, Tennessee, Kentucky, and Illinois.

The Jimmy Naifeh Center is approximately 104 acres of contiguous land and contains a combination of academic buildings, large areas of open space, campus support service buildings and associated parking and infrastructure systems.

Drawing 2.9 shows the Center highlighted in dark green.
Drawing 2.9: SITE CONTEXT

DYERSBURG STATE COMMUNITY COLLEGE: 2012 CAMPUS MASTER PLAN - JIMMY NAIFEH CENTER
LAND USE AND CONTEXT

Drawing 2.10 shows use of land on the DSCC Jimmy Naifeh Center and the immediate surroundings. The core of the Jimmy Naifeh Center, as well as areas surrounding academic buildings, is colored dark red. Un-programmed campus open spaces are denoted in dark green. College buildings are shown in tan.

The Center is bounded to north and west predominantly by residential land uses shown in gray and comprised mostly of single family homes. To the northwest across Holly Grove Road, the predominant land use is agriculture indicated in light green. To the east of the Jimmy Naifeh Center the land use is a mix of medical office colored pink and commercial colored blue. To the south across U.S. Highway 51, the predominant use is commercial.
LAND OWNERSHIP

College-owned land is colored yellow is shown on Drawing 2.11. The College is bounded to the north by Holly Grove Road, to the west by an established neighborhood, to the south by U.S. Highway 51, and to the east by established commercial, medical, and residential areas.

Potential land acquisition is shown in blue and is located in the northwest corner of the Center’s property.

The Jimmy Naifeh Center is essentially landlocked by existing roads, well-established residential neighborhoods, and established commercial developments with relatively few opportunities for future expansion of the campus. However, less than half of the college’s land holdings at the Center have been developed leaving adequate room for building expansion in the future.
**PREDOMINANT USE**

Predominant use of buildings is shown on this drawing. The campus buildings are color-coded in five distinct categories.

The Jimmy Naifeh Center is shown on **Drawing 2.12**. This Center contains two facilities with a third building approved and underway, known as Phase IV.

The Jimmy Naifeh Building is located to the south side of the campus and is a mixed-use facility colored partially red for academic, partially green for student life functions, and partially blue for administrative operations.

The Academic Building is located northwest of the Jimmy Naifeh Building and it supports a mixture of uses—academic, library, and special use—the auditorium.

The Phase IV building will house academic functions, a student center, and a combined resource that includes the Learning Resource Center and Tipton County Public Library.
PEDESTRIAN AND BICYCLE CIRCULATION

Paved surfaces devoted to pedestrian walkways are colored red, while future walks are shown in yellow as seen on Drawing 2.13. Blue lines and circles represent pedestrian/vehicular conflicts.

Campus buildings are colored tan, while the future Phase IV building is shown in white. All areas are ADA compliant.

The circle superimposed on the map demonstrates a five-minute walking distance from the center to the circle’s outer edge and ten minutes from edge to edge, based on a walking rate of three miles per hour. The circle is centered on the Academic Building, which contains a Learning Resource Center and is a hub 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 at the Jimmy Naifeh Center are within the circle, with ample area within the circle for future buildings.

Speed bumps are being used in conjunction with pavement striping to reduce vehicular speed and mitigate vehicular/pedestrian conflicts. Bolder pavement striping of pedestrian cross walks would further contribute to motorist awareness in these areas.

Future pedestrian and bicycle trails will be developed to connect the campus with the City’s planned trails to downtown. At the time of this report publication, the City’s design is underway and to be completed in the near future.
Drawing 2.13: PEDESTRIAN AND BICYCLE CIRCULATION
VEHICULAR CIRCULATION AND PARKING

Primary access to the Jimmy Naifeh Center at Tipton County is from one of two entrances along U.S. Highway 51 highlighted in orange on Drawing 2.14. All internal roads within the campus are two-way roads and are shown in magenta, with the exception of the one-way rotary drop-off areas on the west side of the Jimmy Naifeh Building and the one-way northwest entrance to the Academic Building.

Defined service entrances are shown with blue-filled circles.

All campus parking is provided on surface lots. Parking is distributed across the Center with the largest lot located to the west of the Jimmy Naifeh Building. Lots without dedicated ADA compliant parking spaces are designated with a yellow colored circle. There are 751 (includes 64 ADA compliant) marked parking spaces at the Center for approximately 1,150 students (as of fall 2011), faculty and staff.

Current parking configurations are very convenient for students because of their direct adjacency to academic buildings. As future development occurs, parking should continue to be located near the perimeter in order to maintain landscaped and open spaces.
Drawing 2.14: VEHICULAR CIRCULATION AND PARKING
HYDROLOGY AND TOPOGRAPHY

These maps illustrate hydrology drainage and the range of topographic elevations on the campuses. Darker colors indicate lower elevations and lighter tones indicate higher elevations. College buildings are shown in white. All buildings are located on the higher elevations.

Each color gradation on Drawing 2.15 represents a five foot change in grade. The topography at the Jimmy Naifeh Center falls from the northeast to the south with approximately forty feet of total elevation change. Most of the site has gentle slopes with several stormwater conveyances that travel east and south to two common outfalls under U.S. Highway 51.

The Jimmy Naifeh Center, located within the City of Covington city limits, does not fall within a MS4 area regulated by the EPA and should not be required to comply with the new permit requirements. However, implementing stormwater infiltration techniques including the use of native plants and LID (Low Impact Development) techniques should be considered a priority to replenish subsurface aquifers, improve water quality, and reduce the amount of subsurface storm drainage required to drain new facilities.

The conveyance further east is a “blue line” stream on the USGS Quadrangle map and may be regulated as waters of the state. There are no FEMA regulated floodplains located on this property and only a freshwater pond is reflected on the National Wetland Inventory map located near the western entry drive. A jurisdictional water of the state determination should be conducted to determine environmental permitting and stream buffer requirements prior to any development at or near waters of the state.

1 "The Conveyance Zone is the portion of the Special Flood Hazard Area that is utilized to convey water during the occurrence of the base flood." Department of Public Works and Engineering Planning & Development Services Division, City of Houston, Texas
LANDSCAPE AND OPEN SPACE

Drawing 2.16 illustrates that the Jimmy Naifeh Center is characterized by several open areas that serve as open landscape between buildings and large expanses of open space on the periphery. While there are currently only two buildings at the Center, a third building, Phase IV, is slated for construction in the near future. A well-defined courtyard is planned between the existing Academic Building and the Phase IV building and will provide an ideal gathering area for students. The north and eastern quadrants of the campus are undeveloped and defined by forested hedgerows and large, sloping open fields.

The drawing shows existing landscape elements and open spaces, as well as existing parking lots and roadways shown in white. Open spaces are colored in green with wooded areas and tree lines in dark green. Drainage areas are colored blue with existing buildings shown in tan and the future Phase IV construction shown in white. There are currently no dedicated athletic facilities at the Center; however there is a desire to add such facilities in the future.
Drawing 2.16: LANDSCAPE AND OPEN SPACE
Center Analysis – Gibson County Center

This drawing describes several physical characteristics of the Center.

The DSCC Gibson County Center is located in Trenton, TN in Gibson County with a population of approximately 4,600 people. This Center is located about 30 miles southeast of the DSCC main campus in Dyersburg.

The Center is accessed by Highway 45 to Peabody Drive and is bounded by Peabody Drive to the north and Peabody High School to the east, south, and west.

The Gibson County Center consists of approximately 2.75 acres of land directly adjacent to Peabody High School and contains one single story building, open space, and parking.

The predominant use of this facility is academic as indicated in red. There is also a student life use shown in lime green and it consists of a student lounge and small merchandising area.

Un-programmed open space is shown in green, about one quarter of the parcel.

Vehicular circulation consists of a primary access to the Gibson County Center from U.S. Highway 45 shown in red as a two-way road that connects to Peabody Drive, also shown in red as a two-way road. Vehicular circulation into the Center is a two-way street that connects between Peabody Drive and a two-way street that bounds the south side of the Center’s property. There are plans for a future two-way street connecting to U.S. Highway 45 shown with yellow-dashed lines.

Parking is shown on three surface lots – north and south of the facility. The yellow-filled circle indicates that there is no ADA compliant parking in the south lot and parking totals 115 spaces in addition to 3 ADA compliant spaces located in the smaller of the two north lots.

The blue-filled circle indicates a service entrance on the south end of the building.

A second floor may be added if additional space is needed.
Drawing 2.17: GIBSON CENTER ANALYSIS
Data Analysis

RIGHT SIZING

At Dyersburg State, programs were assessed in order to determine the amount of space that should be provided on the Dyersburg campus and each of the two centers. Right-sizing DSCC’s space needs is one method to determine if programs are being compromised due to insufficient space. Several methods were used. A comparison was made between the space at DSCC and the amounts at other Tennessee Board of Regents (TBR) community colleges as well as with the Tennessee Higher Education Commission’s (THEC) Space Allocation Guidelines. Additionally, teaching space usage and space assigned to selective departments were analyzed.

PEER COMPARISONS

Contrasting the amount of space at DSCC 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 twelve peer state community colleges is summarized in Table 2.1. In this analysis, the total net assignable square feet (NASF) per campus for THEC formula space are compared for teaching, research, office, library, and physical education. This data indicates that DSCC has 151,083 NASF compared with the mean for the twelve community colleges of almost 274,000 NASF. With an outlier in the research space NASF, the median total gives a more accurate comparison of almost 246,000 NASF or 37 percent less than the twelve peers, a significant amount.

This data also shows DSCC with an FTE student enrollment of 2,321, which is 63 percent less than the TBR mean and 48 percent less than the median—substantially less than the 12 peers with the smallest enrollment.

A better peer comparison is space per student also shown in this table. The twelve community colleges have a total mean of almost 57 NASF/student of THEC formula space. However, with an outlier in the research space NASF, the median total gives a more accurate picture of almost 62 NASF/student. In comparison, DSCC’s total of almost 71 NASF/student is 9 percent more than the community colleges’ median.
CLASSE Room USAGE

There are a total of 36 classrooms at DSCC—18 at Dyersburg, 13 at Covington, and 5 at Trenton. These are teaching spaces that include seminar rooms, classrooms, and auditoriums in which the Registrar schedules classes. Analyses of these spaces are done in several ways. 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. All data is based on the fall of 2011.

Scheduled hours per week describe the intensiveness of use. The THEC target is 30 hours per week and all three locations were below the target. The Dyersburg campus mean classroom usage was about 20 hours per week, with two of the four buildings above 20 hours—the Math Building has the most with more than 25 hours. The heaviest day time classroom utilization occurred Monday through Friday between noon and 1 PM and 9:30 AM to noon on alternating days Monday through Friday. These same time periods also had the highest station utilization between 43 and 68 percent. At the Jimmy Naifeh Center the mean was about 21 hours for the two buildings, with the Jimmy Naifeh Building having more than 25 scheduled hours per week for its classrooms. The heaviest classroom usage took place between 8 AM and 1 PM at alternating times Monday through Friday and to 3 PM on Thursday. In these same class periods station utilization was between 41 and 72 percent. The Gibson County Center’s mean utilization was about 10 hours for its 5 classroom spaces—with the highest day time utilization occurring between 8-9 AM on Monday, Wednesday, and Friday with 65 to 69 percent station utilization.

The next measure is the seat occupancy—the size of the course section relative to the capacity of the classroom. The target seat occupancy is 60 percent, compared to the average of the three DSCC locations at 77 percent. At the Dyersburg campus the average usage was 71 percent. The smaller classrooms, those for 20 to 39 students, had average seat occupancies between 76 to 80 percent, significantly higher than the normative standards suggest. There are 5 medium-sized classrooms seating 40 to 49, which were close to target at 62 percent. There is one large space seating 60 and was well below the target at 33 percent. This data shows that two thirds of the classroom inventory was being used above capacity and most of the remainder was at target seat occupancy. At the Jimmy Naifeh Center, all 13 classrooms scheduled in the fall of 2011 were at 71 percent occupancy, well above the target. The Gibson County Center’s smallest classrooms seating 10 to 19 and the one space seating 20 to 29 had average seat occupancies of 137 to 145 percent, considerably more than the normative standards and impossible unless there are more seats in the space than the record shows. The largest classrooms which seat 30 to 39 had a mean occupancy of 63 percent, close to the suggested target.

The classroom size is determined by the desired teaching style. For room capacities of up to 40 seats, tablet-arm chair seating requires 18 to 22 NASF per student and table-and-chair seating 22 to 30 NASF. The NASF per station for each type gradually decreases as the capacity increases. The mean area per station at DSCC overall is about 22.7 NASF.

The Dyersburg campus averages 19.8 with the largest station size found in the smallest classroom size of 20 to 29 stations at 21 NASF per station and the smallest station size located in the medium size classroom seating 40 to 49 at 18 NASF—all suitable for tablet-arm chair seating but not sufficient for table-and-chair seating. The Jimmy Naifeh Center averages about 18 NASF—the minimum normative standard for tablet-arm chairs and insufficient for table-and-chair if accommodating the same seating amount. Gibson County has a mean of about 46 NASF per station within a range of 33 to 65 NASF per station, all higher than the normative standards for tablet-arm chair and table-and-chair seating styles. Based on national data relative to how students learn, there is a preference for the table-and-chair venue.
SPACE ALLOCATIONS

Another measure to determine adequacy of space, is to apply the THEC Space Guidelines to the campus space inventory. Table 2.2 displays the three DSCC locations with their existing education and general (E&G) NASF right-sized according to the THEC space formula. The table shows the difference in square footage after modeling—either surplus or deficient space.

The combined total enrollment for all three locations is 2,130 full time equivalent (FTE) students based on the fall of 2011. The Table 2.2 shows right-sizing applied to this enrollment number:

DYERSBURG – The campus is shown with an FTE enrollment of about 1,350 students based on the fall 2011 enrollment and about 106,500 NASF of E&G space. After the THEC space formula is applied, the modeled NASF need is about 77,000 NASF. This shows a difference of more than 29,000 NASF, or about a 27 percent surplus in space based on the current enrollment.

JIMMY NAIFEH CENTER – With the fall 2011 FTE enrollment of 701, the existing E&G space is about 35,000 NASF based on the Jimmy Naifeh and Academic buildings. After modeling the THEC space formula, the NASF requirement is increased to about 40,500 indicating a 14 percent deficit in space. Phase IV construction will provide about 35,000 NASF of additional E&G space—thus creating growth space of about 29,500 NASF or a 42 percent surplus based on similar enrollment numbers.

GIBSON COUNTY CENTER – The Center has a 123 FTE enrollment with an existing E&G NASF of about 9,600. When the THEC space formula is applied, the space requirement increases to approximately 11,000 NASF indicating a deficit of about 1,250 NASF or about 12 percent. A structural analysis will determine the feasibility of adding a second floor and if it is determined to be feasible, a 44 percent space surplus or almost 8,400 NASF would be created for future growth.
PROJECTIONS

A DSCC combined student FTE enrollment projection to a total of 2,878 across all three locations and separated among the three locations is shown in Table 2.2 with the THEC modeled NASF space:

DYERSBURG – With an increase of about 277 FTE students to 1,582 as part of the overall DSCC 2,878 enrollment projection, the modeled NASF is about 95,000 NASF required. This shows a difference of about 11,700 NASF, or an 11 percent surplus of existing E&G space.

JIMMY NAIFEH CENTER – If the JNC headcount enrollment is increased by 468 FTE students to 1,169, the modeled THEC space requirement is about 65,000 NASF, showing a deficit of almost 30,000 NASF or 46 percent. However, with the completion of Phase IV, there would be a difference of almost 5,100 NASF, or a 7 percent surplus of existing E&G space.

GIBSON COUNTY CENTER – With an increase from 123 to a 127 student FTE enrollment, the modeled THEC space indicates a similar right-sizing deficit of almost 1,300 NASF of space. If the addition of a second floor is allowable, surplus space remains virtually the same as the fall 2011 modeled space requirements.

A DSCC combined student FTE enrollment projection to 3,626 across all three locations with the modeled THEC space formula is also displayed in Table 2.2:

DYERSBURG – With an 1,860 FTE enrollment as part of the overall 3,626 student enrollment projection, the modeled NASF required is about 105,000, indicating that the existing E&G space is sufficient with this enrollment projection. Nevertheless, the campus plan is showing where the College might develop new facilities when the College enrollment grows beyond these numbers.

JIMMY NAIFEH CENTER – A projection to a 1,636 FTE enrollment brings the modeled space requirement to about 88,000 NASF, indicating a deficit of more than 53,000 NASF or about 60 percent more than the existing E&G space in the two built facilities. With the Phase IV facility, the deficit would be reduced to about 18,000 NASF or 21 percent.
Section 3 Campus Plan

Drawings 3.1 and 3.2 – The Illustrative Campus Plan is a view of the campus as it might look when all the Master Plan projects are complete. This vision of the Dyersburg State Community College in Dyer County campus and the Jimmy Naifeh Center in Tipton County expresses all of the ideas discussed in this report collected from the many college interviews, discussions, and review sessions. The Gibson County Center is proposed to expand if a structural analysis determines the addition of a second floor is feasible.

The Master 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 Master 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 Master Plan, both in sizing and sequencing.

The objective to a college master 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 college with these new construction projects.
Drawing 3.2: ILLUSTRATIVE MASTER PLAN – JIMMY NAIFEH CENTER, TIPTON COUNTY

DYERSBURG STATE COMMUNITY COLLEGE
MASTERCPLAN 2013

LOSE & ASSOCIATES, INC. / I.C. THOMASSON ASSOCIATES, INC.
### POTENTIAL COST RANGES

#### Table 3.1: Building Project Costs

<table>
<thead>
<tr>
<th>DSCC Proposed Building Projects</th>
<th>Construction Costs/GSF</th>
<th>Construction Cost Range</th>
<th>Project Cost Multiplier</th>
<th>Project Cost Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concept Letter/Building Name</strong></td>
<td><strong>SIZE (SF)</strong></td>
<td><strong>$</strong></td>
<td><strong>$</strong></td>
<td><strong>1.25</strong></td>
</tr>
<tr>
<td>Dyersburg Campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A – LRC Expansion</td>
<td>7,350</td>
<td>260</td>
<td>345</td>
<td>1,911,000</td>
</tr>
<tr>
<td>B – New Academic Building</td>
<td>37,800</td>
<td>240</td>
<td>355</td>
<td>9,072,000</td>
</tr>
<tr>
<td>D – Student Center Expansion</td>
<td>15,235</td>
<td>240</td>
<td>355</td>
<td>3,656,400</td>
</tr>
<tr>
<td>F – Arts &amp; Sciences Building</td>
<td>39,600</td>
<td>240</td>
<td>355</td>
<td>9,504,000</td>
</tr>
<tr>
<td>G – Physical Plant Expansion</td>
<td>2,000</td>
<td>175</td>
<td>200</td>
<td>350,000</td>
</tr>
<tr>
<td>Jimmy Naifeh Center</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A – New Academic Building</td>
<td>13,500</td>
<td>240</td>
<td>355</td>
<td>3,240,000</td>
</tr>
<tr>
<td>B – New Academic Building</td>
<td>36,400</td>
<td>240</td>
<td>355</td>
<td>8,736,000</td>
</tr>
<tr>
<td>C – New Academic Building</td>
<td>67,750</td>
<td>240</td>
<td>355</td>
<td>16,260,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>219,635</strong></td>
<td></td>
<td></td>
<td><strong>52,729,400</strong></td>
</tr>
</tbody>
</table>

#### Table 3.2: Non-Building Project Costs – Main Campus

<table>
<thead>
<tr>
<th>Project area</th>
<th>Opinion of Probable Cost - Dec. 14, 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Campus</strong></td>
<td><strong>Master Plan</strong></td>
</tr>
<tr>
<td>Project area</td>
<td>Unit</td>
</tr>
<tr>
<td>Retrofit 2-lane roadway</td>
<td>4,024</td>
</tr>
<tr>
<td>New 2-lane roadway</td>
<td>1,029</td>
</tr>
<tr>
<td>New landscaped parking lot</td>
<td>392</td>
</tr>
<tr>
<td>Retrofit existing parking lot with landscape</td>
<td>566</td>
</tr>
<tr>
<td>Monument/gateway signage</td>
<td>2</td>
</tr>
<tr>
<td>LC multipurpose track</td>
<td>1,797</td>
</tr>
<tr>
<td>Soccer Field</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

Opinions of Probable Cost and Materials Estimate

- Estimates of construction quantities and opinion of probable costs provided by us are made on the basis of our experience and the level of design. They represent our best judgment as design professionals. We cannot and do not, however, guarantee that the actual construction quantities or costs will not vary from our quantities and cost estimates. Lose & Associates makes no warranty, expressed or implied, for the accuracy of such opinions as compared to bid or actual costs.

#### Table 3.3: Non-Building Project Costs – Jimmy Naifeh Center

<table>
<thead>
<tr>
<th>Project area</th>
<th>Opinion of Probable Cost - Dec. 14, 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Jimmy Naifeh Center</strong></td>
<td><strong>Master Plan</strong></td>
</tr>
<tr>
<td>Project area</td>
<td>Unit</td>
</tr>
<tr>
<td>Retrofit 2-lane roadway</td>
<td>2,960</td>
</tr>
<tr>
<td>New 2-lane roadway</td>
<td>1,711</td>
</tr>
<tr>
<td>New landscaped parking lot</td>
<td>743</td>
</tr>
<tr>
<td>Monument/gateway signage</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

Opinions of Probable Cost and Materials Estimate

- Estimates of construction quantities and opinion of probable costs provided by us are made on the basis of our experience and the level of design. They represent our best judgment as design professionals. We cannot and do not, however, guarantee that the actual construction quantities or costs will not vary from our quantities and cost estimates. Lose & Associates makes no warranty, expressed or implied, for the accuracy of such opinions as compared to bid or actual costs.
Appendix
I. Existing Campus Conditions – Utilities

Mechanical Systems

Dyersburg Campus

Each Building on campus has its own independent heating and cooling system. The buildings have a mix of Roof Top Units (RTU), Fan Coil Units (FCU) Split Systems, and Water Source Heat Pumps (WSHP). The Student Center, built in 2007, utilizes Ground Source Heat Pumps (WSHP) with a well field located in green space to the east of the building. Renovations in 2005 through 2008 replaced the systems in the buildings that were built in 1969 as part of the original campus. Currently the condition and capacity of the existing systems in each building are adequate for the existing campus size.

Jimmy Naifeh Center

The Naifeh Center has two principal buildings constructed within the past 20 years. The Naifeh Building, built in 1996, has a new chiller and boiler installed in 2011 with an energy management system and heat pipes for reheat for more energy efficient humidity control. The Academic Building, built in 2006, has a DX split system and energy management system.

Gibson County Center

The Gibson County Center has a water source heat pump system, installed in 2009, that provides heating and cooling for most of the building. A DX split system was installed in the same year for computer room cooling. The system has recently added a building automation system (BAS).

Electrical Systems

Dyersburg Campus

The Dyersburg Community College main campus is primary metered from the utility at 13.2 KV. The campus owns the primary power distribution system including padmount transformers and primary underground cables. The primary cables are installed in concrete-encased ductbanks. The transformers and underground distribution have been upgraded recently and the cables have sufficient capacity for expansion. The primary cables are #1/0 awg aluminum.

The primary distribution is a loop system with each building having its own padmount transformer. The loop system can be opened at different areas and tapped into via above ground sectionalizing cabinets, which utilize deadbreak elbows.

Jimmy Naifeh Center

The Naifeh Center primary electrical system originates from one (1) utility riser pole and feeds all the building transformers via underground ductbanks. Sectionalizing cabinets are used to feed and isolate the transformers. The underground distribution system has the capacity to feed future buildings.

Gibson County Center

The Gibson County Center has a pad-mount transformer that is owned and fed from the Utility. The transformer feeds a main service panel inside the building. The TBR survey on record states that the building electrical capacity is sized for future expansion. The transformer would be replaced by the Utility if future building demand increased beyond its capacity.
Communications

The existing DSCC Communication Systems infrastructure is in decent condition and can be easily expanded with each of the proposed construction projects. The infrastructure backbone cable system can be distributed via new and existing duct banks to each of the respective buildings. Both the current copper and fiber optic networks are completely scalable and easily distributed across the campus. The current distribution system allows for scalability and promotes growth on the college campus.

II. Future Campus Requirements – Future Campus Infrastructure Projections

Mechanical

Dyersburg Campus

Based on load characteristics of similar types of campus buildings, the proposed buildings would be expected to have the following projected loads:

<table>
<thead>
<tr>
<th>BUILDING NAME</th>
<th>SIZE (SF)</th>
<th>CLG LOAD (TONS)</th>
<th>HTG LOAD (MBTUH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC Expansion</td>
<td>7,350</td>
<td>21</td>
<td>200</td>
</tr>
<tr>
<td>Student Center Expansion</td>
<td>15,235</td>
<td>44</td>
<td>400</td>
</tr>
<tr>
<td>Physical Plant Expansion</td>
<td>2,000</td>
<td>6</td>
<td>50</td>
</tr>
<tr>
<td>New Academic Bldg</td>
<td>37,800</td>
<td>110</td>
<td>950</td>
</tr>
<tr>
<td>Arts &amp; Sciences</td>
<td>39,600</td>
<td>130</td>
<td>1,000</td>
</tr>
</tbody>
</table>

The proposed additions to the Math/LRC Building and the Student Center will require a system review to determine if the existing HVAC systems have surplus capacity sufficient to carry the new load. Since each of these buildings has been renovated since the 2004 Master Plan recommended expansions, it should be determined whether new HVAC systems were designed with potential future loads in mind. In particular, the geothermal bore field for the Student Center should be looked at in detail. It is very likely that the existing field could carry the additional heating load for the addition since the size is generally determined by the cooling load, and is often double the capacity needed for the heating load. A hybrid system could be utilized to reduce the amount of additional bore field that is required to meet the cooling load. Installing a cooling tower could reduce the amount of new bore field that is required by 25 percent.

The Maintenance building HVAC equipment is all individual units or small split systems. This type of system is easily added to, or the building addition could provide the opportunity to go to a more energy efficient system for the 50 year old building. Variable Refrigerant Flow (VRF) systems are efficient and easily expandable and would be a fit for this building.

Because the two proposed new buildings lie relatively close to the campus’s central valley, the opportunity exists for a geothermal heat pump system for the two buildings. There appears to be enough real estate available for both buildings.

Jimmy Naifeh Center

At the Naifeh Center, the proposed buildings would be expected to have the following projected loads:

<table>
<thead>
<tr>
<th>BUILDING NAME</th>
<th>SIZE (SF)</th>
<th>CLG LOAD (TONS)</th>
<th>HTG LOAD (MBTUH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C - New Academic Bldg</td>
<td>67,750</td>
<td>200</td>
<td>1,700</td>
</tr>
<tr>
<td>A - New Academic Bldg</td>
<td>13,500</td>
<td>40</td>
<td>350</td>
</tr>
<tr>
<td>B - New Academic Bldg</td>
<td>36,400</td>
<td>105</td>
<td>900</td>
</tr>
</tbody>
</table>

Because they are laid out on the same end of campus, the proposed three new buildings could potentially utilize geothermal systems located in front of or behind the building, mirroring the Naifeh Building, depending on how the road is relocated.

Electrical

Dyersburg Campus

The Main Campus primary electrical distribution system can feed the future buildings by tapping into the loop at existing sectionalizing cabinets. The existing underground primary cable has recently been upgraded and has the capacity to carry the future expansions. New underground primary ductbanks will be installed from the sectionalizing cabinets to new pad-mount transformers to feed the new buildings.
Jimmy Naifeh Center

The Jimmy Naifeh Center primary electrical distribution system can feed the future buildings by tapping into existing sectionalizing cabinets. The existing underground primary cable has the capacity to carry the future expansions. New underground primary ductbanks will be installed from the sectionalizing cabinets to new pad-mount transformers to feed the new buildings.

Information Technology

Technology has quickly and furiously become an active part of education over the last 10 years and will only intensify exponentially over the next 10 years. Mobile computing is widely becoming a mainstay in today’s society. With the “Bring Your Own Device” (BYOD) concept being fostered, the college’s wireless infrastructures should be increased to improve capacities throughout. Today’s students are embracing the use of tablets and laptops in the classroom, at their residences, and across campus. Having the tools at their fingertips to conduct up-to-the-minute research is essential in developing productive students. Technical capabilities and how the University utilizes and distributes technology could be a deciding factor for an incoming student.

Jimmy Naifeh Center and Gibson County Center

The current infrastructure and network equipment is scalable and allows for ease of expansion into the new buildings or for basic infrastructure improvements. All future improvements shall utilize fiber optic technology to distribute voice, data, and video traffic throughout the campus. Fiber Optic media will provide the most diversity and allow the campus’ many options when deploying future technologies.

III. Physical Master Plan - Campus Infrastructure

Mechanical

Dyersburg Campus

Because the buildings on campus all have independent systems, there is no infrastructure planning for a central energy plant or steam and chilled water distribution required. General studies indicate that ground source heat pump systems offer an efficient operation that repays its higher front end cost over the life of the equipment. Hybrid systems utilizing a combination of well fields and cooling tower have a lower front end cost and only slightly lower efficiency. If the school elects to utilize a geothermal system for the new buildings proposed, then planning would be required to size and design the bore fields to accommodate the full load and to reserve that real estate as other parking areas or buildings are planned. An area roughly 250 feet by 400 feet would be required depending on the heat transfer characteristics of the soil.

Electrical

Dyersburg Campus

The Dyersburg Campus primary electrical distribution system can feed the future buildings by tapping into the loop at existing sectionalizing cabinets. The existing underground primary cable has recently been upgraded and has the capacity to carry the future expansions. New underground primary ductbanks will be installed from the sectionalizing cabinets to new pad-mount transformers to feed the new buildings.

Jimmy Naifeh Center

The Naifeh Center primary electrical distribution system can feed the future buildings by tapping into existing sectionalizing cabinets. The existing underground primary cable has the capacity to carry the future expansions. New underground primary ductbanks will be installed from the sectionalizing cabinets to new pad-mount transformers to feed the new buildings.
Information Technology

Dyersburg Campus

The existing DSCC Communication Systems infrastructure can be easily expanded with each of the proposed construction projects. The infrastructure backbone cable system can be distributed via new and existing duct banks to each of the respective buildings. The continued use of fiber optic cable to distribute voice, data, video, and security services should be a mandate when moving forward. Increasing the strand count is recommended as each of the respective systems requires more bandwidth and storage fostering independent networks.

Future Copper and Fiber Optics Requirements - Both of the current networks are completely scalable and easily distributed across the campus. As the College expands their technology offerings and solutions and becomes more reliant on the networks for their curriculum, the need for redundancy and survivability increases. An additional study would be required to identify the feasibility of creating a redundant pathway system or a more traditional campus ring network.

The current distribution system allows for scalability and promotes growth on the Main Campus. Like most campus environments, each project has its own unique obstacles to overcome during the building processes. As the campus considers the establishment of utility corridors to support electrical distribution it would be prudent to consider installing telecommunications conduit in conjunction with that project.

IV. Implementation – Cost Estimates for Building, Infrastructure and Site Improvements

Mechanical

Dyersburg Campus

The cost of a conventional HVAC system would not typically be considered an infrastructure cost, but simply a part of the building cost. Based on similar types of systems from other academic settings, the probable cost of the mechanical equipment is estimated as follows:

<table>
<thead>
<tr>
<th>BUILDING NAME</th>
<th>SIZE (SF)</th>
<th>PROPOSED SYSTEM TYPE</th>
<th>EST. COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC Expansion</td>
<td>7,350</td>
<td>CHLR/BLR</td>
<td>$250,000</td>
</tr>
<tr>
<td>Student Center Expansion</td>
<td>15,235</td>
<td>GSHP</td>
<td>$600,000</td>
</tr>
<tr>
<td>Physical Plant Expansion</td>
<td>2,000</td>
<td>VRF</td>
<td>$50,000</td>
</tr>
<tr>
<td>New Academic Bldg</td>
<td>37,800</td>
<td>GSHP</td>
<td>$1,323,000</td>
</tr>
<tr>
<td>Arts &amp; Sciences</td>
<td>39,600</td>
<td>GSHP</td>
<td>$1,388,000</td>
</tr>
</tbody>
</table>

Jimmy Naifeh Center

In the same way, the new buildings’ HVAC would not have associated mechanical infrastructure costs. The probable cost of the mechanical equipment associated with each building is estimated as follows:

<table>
<thead>
<tr>
<th>BUILDING NAME</th>
<th>SIZE (SF)</th>
<th>PROPOSED SYSTEM TYPE</th>
<th>EST. COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>C - New Academic Bldg</td>
<td>67,750</td>
<td>GSHP</td>
<td>$2,710,000</td>
</tr>
<tr>
<td>A - New Academic Bldg</td>
<td>13,500</td>
<td>GSHP</td>
<td>$525,000</td>
</tr>
<tr>
<td>B - New Academic Bldg</td>
<td>36,400</td>
<td>GSHP</td>
<td>$1,274,000</td>
</tr>
</tbody>
</table>

Electrical

Dyersburg Campus

LRC Expansion: Replace the existing padmount transformer with a larger size to feed the expansion. $40,000.

Student Center Expansion: Install a new padmount transformer and tie it into the existing primary loop system. $50,000.

Physical Plant Expansion: No cost. Should be able to feed the expansion from the existing service.

New Academic Building: Install a new padmount transformer and tie it into the existing primary loop system. $50,000.

Arts & Sciences: Install a new padmount transformer and tie it into the existing primary loop system. $50,000.
Cost estimates for tying into the primary electrical distribution system are based on a maximum distance of 100 feet.

**Jimmy Naifeh Center at Tipton County**

New Academic Building C: Install a new padmount transformer and tie it into the existing primary loop system. $60,000.

New Academic Building A: Install a new padmount transformer and tie it into the existing primary loop system. $40,000.

New Academic Building B: Install a new padmount transformer and tie it into the existing primary loop system. $50,000.

Cost estimates for tying into the primary electrical distribution system are based on a maximum distance of 100 feet.

**Gibson County Center**

No cost for primary power. The existing service has the capacity for an expansion.