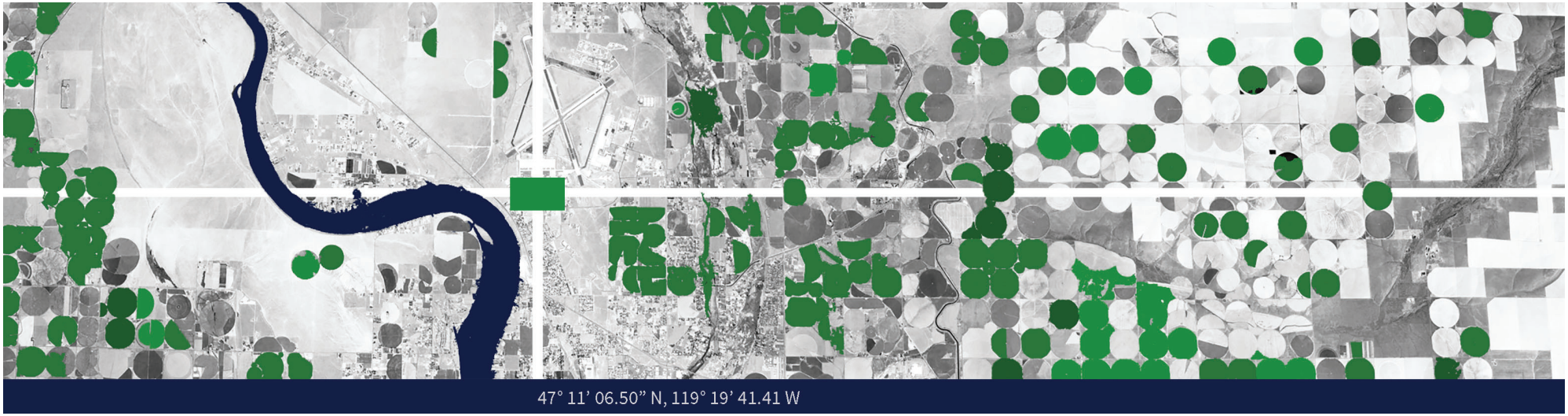
Big Bend
COMMUNITY COLLEGE

MASTER PLAN
2022



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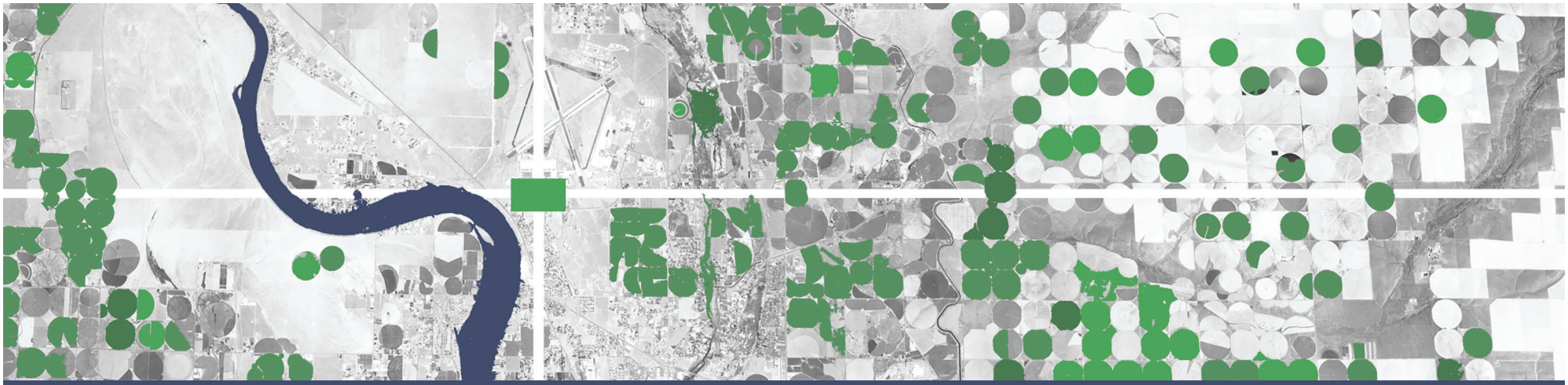

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Overview
MASTER PLAN UPDATE

2022 FACILITY MASTER PLAN UPDATE

A Facility Master Plan is a living document that must be continually updated. When goals are achieved, new goals need to be developed. Over the last 8 years Big Bend Community College (BBCC) has achieved many of the goals outlined in the 2014 update. This 2022 update takes a fresh look at the capital needs of the campus.

It produces a list of goals and priorities based on the changes that are occurring in higher education, Washington State, and throughout the local region. The 2022 Facility Master Plan is influenced through the following:

- BBCC's New Strategic Vision - 2021
- Recent Capital Accomplishments - 2014 through 2021
- Completion of Workforce Education Center (WEC) and Aviation Maintenance Technology (AMT)
- Academic Master Plan - 2017-20
- COVID-19 Global Pandemic

Culture

As a Hispanic Serving Institute (HSI) Big Bend promotes cultural inclusiveness, understanding, and respect by embracing diversity, access, opportunity, and equity. The College is committed to aligning curriculum with the needs of local business, industry, and student interest.

Creating a welcoming and inviting culture for all students is central to Big Bend's culture. The College strives to create an atmosphere where students feel like they belong and that they have access to the resources needed to obtain their educational and career goals.

Flexibility of Space

Capital resources must be flexible to properly assist the College in delivering comprehensive and relevant learning opportunities. Space must be available to offer a full range of credentials, including short-term certificates, workforce degrees, university-transfer degrees, applied bachelor's degrees and apprenticeships.

Inviting space must be available to strengthen and foster relationship building. The role of advisors and instructors has never been more crucial to ensuring student success. Additionally, space must foster the development of learning communities. Space must be available for student clubs, project-based learning, tutoring, and out of the classroom exchanges between students and other students as well as students and instructors.

Identifying and developing strategies to overcome opportunity gaps is as important as increasing inclusion and assisting students in reaching their unique academic goals. Implementing proven strategies such as Guided Pathways and Career Launch programs will increase student outcomes. Space must not only serve instruction but flex or offer strategic adjacencies that allow for students to develop strong relationships with advisors and instructors. Continual high-touch advising and support is needed to increase student outcomes and ensure that every student reaches their individual educational and career goals.

Growing Collaborations

Big Bend must also create strong relationships with surrounding K-12. Through developing and offering multiple annual events and programs to K-12 students, teachers, and counselors the College hopes to increase the awareness. Exposure to the high quality educational and career opportunities that Big Bend offers is an important part of marketing and ultimately raising the service district's higher-education obtainment level.

Accessibility means opening doors by partnering with other colleges and universities. Resources must be available and inviting to assist students in improving their study skills, locating resources, resolving personal issues, making strong career decisions, paying for college, or arranging the details of a smooth college transfer. All of these services must be welcoming and accessible both on campus and online.

Space is needed on campus for music, theater, clubs, intercollegiate sports, and student government. These opportunities provide students with a sense of belonging, achievement, and a chance to make dreams happen. The success of Big Bend's students is Big Bend's standard of accountability.

Recent Capital Accomplishments Include:

- 1400 Upstairs Renovation
- 1400 Downstairs Student Service Renovation
- Campus Re-roofing Projects
- 1700 SIM Center
- 2600 UAS/UAV Outdoor Facility
- 2300 Softball Announcers Booth
- 3700 WEC
- 3200 AMT
- 1100 Wallenstien Improvements
- 2000 New Gym Floor and Bleachers

Academic Master Plan

The Big Bend Community College (BBCC) Academic Master Plan (AMP) 2014-19 was approved by the Board of Trustees May 22, 2014.

The Big Bend Community College (BBCC) Academic Master Plan (AMP) 2014-19 serves as the strategic plan for the college. The plan is titled "Student Success" in order to emphasize the fact that student success is BBCC's number one priority. The AMP is reviewed annually, updated as needed, and re-written every five years, in order to ensure that it remains a living document that is attuned and responsive to the needs of students and our service district.

The AMP outlines BBCC's process for assessing mission fulfillment. This process includes identifying measurable outcomes, setting relevant objectives, and tracking appropriate indicators of success. The results of these assessments are reported annually in a series of monitoring reports. The monitoring reports correspond to BBCC's Core Themes as well as to the Board of Trustees' Ends Statements.

The Academic Master Plan also provides a framework for other strategic planning efforts at the college. These efforts include the Facilities Master Plan and the college marketing plan.

Overview
ACADEMIC MASTER PLAN

Big Bend COMMUNITY COLLEGE

MISSION, VISION, AND VALUES

BBCC has engaged in a collaborative process to review and rewrite its mission statement. This process involved college faculty and staff, as well as students and community members. As a result of this process, BBCC adopted new statements of mission, vision, and values. Starting with these statements, the college then wrote new core themes, outcomes, and objectives; the Board of Trustees updated and revised their ends statements in order to align the college's strategic planning goals with the Board's expectations.

BBCC Mission Statement:
Big Bend Community College
Serve as a Bridge
Stand as a Leader
Support for Success

BBCC Vision Statement:
Be our community's first choice to dream, learn, and succeed

BBCC Guiding Principles:
Honor our Role as a Hispanic-Serving Institution
Advocate for Equity, Inclusion, & Diversity
Embrace our Workplace Norms
Innovate Proactively
Model Integrity
Educate All

BBCC Core Themes:
Student Success
Excellence in Teaching and Learning
Community Engagement

Student Success
- Academic achievement
- Empowerment
- Lifelong learning
- Service to students

Excellence in Teaching & Learning
- Innovation
- Commitment to quality
- High standards
- Continuous improvement

Community Engagement
- Collaboration
- Outreach
- Partnerships
- Improving quality of life

Inclusion & Climate
- Diversity
- Access
- Opportunity
- Equity

Integrity & Stewardship
- Accountability
- Sustainability
- Ethics and honesty
- Resource management

These statements form the foundation of BBCC's mission and strategic planning process. Building on this foundation, the college establishes operational goals in two ways:

- Core themes establish assessable outcomes for mission fulfillment.
- Board of Trustees' ends statements lay out the Board's expectations for meeting the needs of our service district.

These items form the architecture of the AMP as approved by the Board of Trustees and as demonstrated in the following diagram.

Ends Statements:
Describe how the Board expects the college to interact with and have an impact on our service district.

Core Themes:
Address the three broad areas described in the mission and represent the primary measure.

Overview
ACADEMIC MASTER PLAN

Core Themes
The core themes represent BBCC's primary measure of mission fulfillment. There are three core themes:
- Student Success
- Excellence in Teaching & Learning
- Community Engagement

Each core theme is composed of an overarching outcome, one or more specific objectives, and the indicators used to measure success. Each core theme is described separately below.

Student Success
Outcome: BBCC provides access to programs and services that meet the needs of our service district.

Objectives-Indicators

1.1 BBCC provides access to programs and services that meet the educational needs of our students and prospective students.

- 1.1a Inventory of programs, modalities, and services
- 1.1b Service area & student demographic data
- 1.1c Class fill rates, wait lists & cancellation data
- 1.1d Feedback from advisory committees

1.2 Use of services correlates with success, retention, and completion.
- 1.2a Course success, retention and completion rates
- 1.2b Use of service reports
- 1.2c Use of technology & resources

1.3 Students are prepared to graduate and to transfer or to seek employment.
- 1.3a Student Achievement Initiative (SAI) data
- 1.3b Retention & graduation rates
- 1.3c Transfer rates & transfer success rates
- 1.3d Employment & certification rates
- 1.3e Annual Assessment Report

The core theme of student success focuses on access to educational resources, correlating student activity with success, retention, and completion, and assuring that students leave BBCC with the preparation that they need for their next step, whether that is to transfer to a four-year institution or to enter the job market. Both internal and external data are collected annually, reported to the Board of Trustees and the college community, and assessed for effectiveness. The results of these assessments are used to make decisions for budgeting, program changes, and other measures.

Excellence in Teaching and Learning
Outcome: BBCC supports innovation, variety, and creativity; maintains high academic and industry standards; and supports professional development for continued growth.

Objectives-Indicators

2.1 BBCC implements innovation and creativity in programs and services.
- 2.1a Program audit, including best practices
- 2.1b Correlation of practices to success, retention, or completion

2.2 BBCC helps students attain high academic standards.
- 2.2a External certification rates
- 2.2b CCSSE data on academic challenge
- 2.2c NCCBP data on success rates
- 2.2d MRTE data on transfer success
- 2.2e Student/faculty ratio
- 2.2f Annual Assessment Report

2.3 BBCC supports professional development for faculty and staff in order to improve student engagement and outcomes.
- 2.3a Budgets for professional development
- 2.3b Attendance for professional development
- 2.3c Report on Professional/Technical Certification plans

The core theme of excellence in teaching and learning focuses on delivering innovative and successful programs, both in and out of the classroom, in order to help students achieve high academic standards. This requires ongoing professional development for faculty and staff, as well as ensuring that programs have adequate resources to implement best practices effectively. Internal and external data are collected annually, reported to the Board of Trustees and the college community, and assessed for effectiveness. The results of these assessments are used to make decisions for budgeting, program changes, and other measures.

Community Engagement
Outcome: BBCC supports economic development, nurtures community and industry partnerships, and acts as a responsible steward of resources.

Objectives-Indicators

3.1 BBCC works with community and industry partners to support economic development.
- 3.1a Inventory of active partnerships
- 3.1b Report on economic impact

3.2 BBCC works with K-12 & university partners to provide educational opportunities.
- 3.2a Inventory of current dual credit programs
- 3.2b Analysis of partnership opportunities

3.3 BBCC practices responsible use of resources, including fiscal and natural resources.
- 3.3a Budget process is tied to strategic goals
- 3.3b Inventory of sustainable practices is increasing

3.4 BBCC provides an inclusive environment for students, employees, and partners in order to sustain a vibrant community.
- 3.4a Training opportunities increase multicultural awareness and ability
- 3.4b Students, employees and partners report feeling welcome on campus
- 3.4c Data is disaggregated to show equivalent success for all student groups

The core theme of community engagement addresses the college's partnerships with business and industry, K-12 and university partners, as well as other community and technical colleges, and the cultivation of an inclusive campus environment. It also addresses responsible stewardship of natural and fiscal resources. The reporting for community engagement also includes an annual summary report to the Board of Trustees from the Big Bend Community College Foundation on their activities and accomplishments for the year.

Overview
ACADEMIC MASTER PLAN

Board of Trustees' Ends Statements

While the Core Themes address the three broad areas described in the mission statement and represent the primary measure of mission fulfillment, the Board of Trustees also establishes Ends Statements as part of the policy governance process. The Ends Statements give guidance to the president and college personnel with regard to specific areas of policy focus. The Ends Statements describe how the board expects the college to interact with and have an impact on our service district. There are six Ends Statements, as described below.

End 1: Mission

Big Bend Community College delivers lifelong learning through commitment to student success, excellence in teaching and learning, and community engagement.

End 2: Student Success

BBCC provides the diverse population of its entire district with access to opportunities, assists students in completion of their goals, and develops skills for lifelong learning.

End 3: Excellence in Teaching and Learning

BBCC supports innovation, variety, and creativity; maintains high academic and industry standards; and supports professional development for continued growth.

End 4: Community Engagement

BBCC supports economic development by nurturing community and industry partnerships and support to the college to enhance access and service to our district population.

End 5: Integrity and Stewardship

BBCC acts as a responsible steward of resources by promoting accountability, sustainability, ethics and honesty, and prudent resource management to provide quality and affordable resources to the diverse population of our service district.

End 6: Inclusion and Climate

BBCC provides and maintains a climate of inclusiveness for students, employees and partners by maintaining a safe learning environment and promoting cultural inclusiveness, understanding, and respect by embracing diversity, access, opportunity, and equality.

Monitoring Reports

BBCC has established a culture of evidence and uses data and assessment findings to inform planning and decision making. While this culture of evidence takes many forms on a day-to-day basis, the formal structure for tracking and publishing evidence is through the annual AMP monitoring reports. The first three monitoring reports below are compiled by the Institutional Research and Planning Office in conjunction with other college departments and focuses on a specific set of outcomes. The Budget and Safety Monitoring Reports are assembled through the office of Vice President for Financial and Administrative Services. The reports are then presented to the Board of Trustees and distributed to the college community.

The following Monitoring Reports will be presented to the Board of Trustees and the college community on an annual basis:

1. Community Engagement
2. Excellence in Teaching & Learning
3. Student Success/Mission Fulfillment
4. Budget
5. Safety

Additional Strategic Planning Tools

The AMP represents the guiding architecture for strategic planning and mission assessment at BBCC. In conjunction with the AMP, several other strategic documents outline annual goals and outcomes for specific aspects of the college.

Master Plan Background

The Facility Master Plan is a strategic effort to evaluate and identify the physical needs of the campus to support Big Bend's academic mission and strategic vision. The current Facility Master Plan was rewritten in 2013-14 in order to align facility planning with the new mission statement, the Board's Ends Statements, and the AMP.

The Facility Master Plan includes a number of components, including the history of the campus, internal and external needs for facility development and use, an assessment of current space availability and usage, an in-depth assessment of the conditions of current facilities, and a tentative schedule for future development of the physical plan of BBCC.

The Facility Master Plan establishes specific goals for use and development of the physical campus, in order to support the accomplishment of overall strategic planning goals.

Methodologies

This 2022 Facilities Master Plan (FMP) is an update to the 2014 FMP. The updates reflect the evaluation and achievement of BBCC's Facilities progress.

Five Facility Master Plan Goals were developed and a list of major and minor capital improvements were generated and prioritized.

Overview
GOALS & OBJECTIVES

Mission
Big Bend Community College
Serve as a Bridge
Stand as a Leader
Support for Success

Vision
Be our community's first choice to dream, learn, and succeed.

Guiding Principles
Honor our Role as a Hispanic-Serving Institution
Advocate for Equity, Inclusion, & Diversity
Embrace our Workplace Norms
Innovate Proactively
Model Integrity
Educate All

Core Themes
Student Success
Excellence in Teaching and Learning
Community Engagement

GOAL #1
INCREASE STUDENT SUCCESS

Objectives:

1. Provide facilities that engage students in exploration and learning.
2. Create environments that celebrate programs and student success.
3. Encourage college readiness.
4. Provide 21st century facilities, technology, and equipment.
5. Provide resources, real world equipment, and supplies.
6. Create flexibility in the built environment, curriculum, technology, and degree or certificate completion.
7. Partner with other institutions, agencies, and educational providers to streamline processes and increase effectiveness.
8. Provide an appealing environment where students feel like they belong and want to spend time.
9. Provide space and program adjacencies that encourage exploration and expand student exposure.

GOAL #2
OFFER STATE OF THE ART TEACHING AND LEARNING OPPORTUNITIES

Objectives:

1. Provide educational spaces that reflect current and future needs of area businesses and industries.
2. Provide flexible, properly sized, modern classrooms and labs that enhance current and future instructional methodologies.
3. Provide flexible, user-friendly technology campus wide and throughout Big Bend's service district.
4. Provide informal learning areas that encourage student-to-student, student-to-faculty, and faculty-to-faculty interactions.
5. Provide continuous professional development through partnerships.
6. Provide learning space that aligns with real world learning and working environments.
7. Provide space for learning outside the classroom.

Overview
GOALS & OBJECTIVES

GOAL #3
PROVIDE A SAFE, ACCESSIBLE AND SUSTAINABLE CAMPUS

Objectives:

1. Increase security by installing additional lighting, security cameras, and providing 24-hour security and mass notification.
2. For ADA compliance, provide accessibility and fire sprinklers in facilities.
3. Provide safe and accessible computer and tutoring labs throughout campus.
4. Provide technology that is easy to access campus wide.
5. Provide individual and group study areas that are flexible, safe, and secure.
6. Provide useful and aesthetically pleasing signage.
7. Increase use of public transportation.
8. Lower greenhouse admissions.

GOAL #4
CREATE A SENSE OF CAMPUS IDENTITY

Objectives:

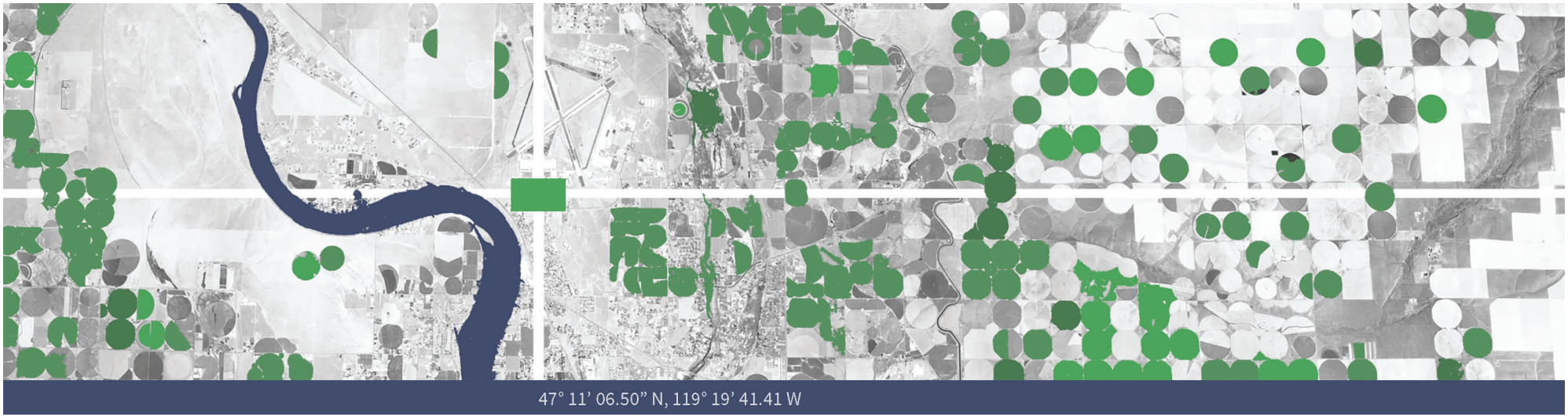
1. Create a user-friendly inviting campus with a central core, special places, and consistent landscaping.
2. Create more prominent entrances.
3. Enhance pedestrian experience.
4. Transform Big Bend's image from that of "The Base" to a provider of excellence in higher education, technical education, and continuing education opportunities.
5. Move from being "Present and Relevant" to "Prominent and Essential."
6. Define the campus edge with peripheral signage.
7. Represent building usage by building design.
8. Provide community recreational and collaborative spaces.
9. Develop image through unification and enforcement of construction standards.
10. Develop facilities that are inviting and reflect the traditions and culture of the campus.

GOAL #5
EXPAND AND ENHANCE PARTNERSHIPS AND COLLABORATION. INCREASE COMMUNITY ENGAGEMENT.

Objectives:

1. Develop facilities that promote and celebrate Big Bend programs.
2. Create a more welcoming campus.
3. Strengthen K-12 outreach programs.
4. Feature Allied Arts and other cultural events.
5. Provide space that allows for regional and statewide meetings and training in a central location.
6. Develop and offer continuing education classes.
7. Design facilities that act as teaching tools.
8. Provide more on-campus events and activities that attract the community to campus.
9. Increase sense of community ownership in the college.
10. Create welcoming exterior gathering and reflection space.

ENVIRONMENTAL SCAN



Environmental Scan
EXTERNAL SCAN

The College Globally

America's workforce no longer stands alone. Competition is global and requiring America to reinvent its competitive edge. Jobs are being outsourced and shrinking our country's middle class. As we move further into the 21st Century, our workforce must align its skills with industry needs in order to compete.

America's workforce must become resilient and increase its technical skills. For decades our system has encouraged four-year degrees and discouraged technical education. Industry has been left without the technical workforce it needs to remain innovative and compete on a global level.

Awareness of high-paying and rewarding careers in technical education and the health industry needs to be increased. Community Colleges must showcase programs and demonstrate to students the rewarding careers available. They must be able to meet the needs of both students and industry simultaneously through the development of collaborative partnerships.

Colleges must provide environments that bring together the following partners:

- K-12
- Community and Technical Colleges
- Four-Year Colleges and Universities
- Local Economic Development Agencies
- Business and Industry

Environments must encourage exploration, innovation and the spirit of entrepreneurship. Space must be available to showcase success stories not only of students but also of local business and industry.

In order to compete globally, great pride must develop. Successful competition requires continual improvement. To give America back its competitive edge, environments and activities that encourage innovation, continual improvement, increased pride and engagement need to be developed at all levels of education. Educators must collaborate and create multiple and modular pathways to career attainment and success.

The College Nationally

As a nation we are striving to improve our educational system while developing our national economy. We are also recognizing the need to collaborate and share resources. This is occurring throughout industry as well as education.
The idea of specialization and clusters is gaining ground by focusing on highly concentrated strengths within regions. Regional clusters produce high-value products and services by concentrating on specific skill sets. Hubs of innovation are occurring in specific areas. Education must position itself to develop and serve innovation hubs and districts effectively as they emerge and grow.

Developing customized trainings or a series of trainings for individual companies will become more common. Students are demanding active, real-life, out-of-the-classroom learning experiences. There will be great demand for internships and apprenticeships. Close relationships between industry and educators must emerge.

Space must be created to unite students, educators, and industry. Celebration of successes should be felt by students, instructors, and those touring the campus. Mixed-use space that encourages out-of-the-classroom conversations should be strategically developed and placed.

Technology will continue to impact higher education. The increased accessibility of alternative learning should be leveraged to strengthen the college and stretch resources. On both a national and global level, courses will be available that instructors can use to increase value. Using this material as a resource will allow instructors to free the time necessary to engage in a more active hands-on learning practice. Instructors will move into an advisor and mentor role.

Learning environments must accommodate this shift. The move from traditional classrooms to active learning centers (ALCs) will impact campus planning for the foreseeable future. Campuses must integrate and provide value to the surrounding community. Colleges are becoming a central resource hub in many areas. Technological advancements and the need for skill upgrades are changing the way people think of education. Learning is becoming lifelong and to some extent recreational. Colleges are creatively designing environments and programs that allow for continual skill upgrades and multiple pathways to degree completion.

The College in Relationship to the State

Big Bend is located in Central Washington between Spokane and Seattle, just off of the main interstate (I 90). It is the ideal place for the two segments of the state to unite when holding conferences or trainings.

BBCC has created a conference center with an inviting cafeteria that allows it to meet the needs of most agendas. The conference center is well used and a valuable asset to the community. BBCC encourages outside industry use of this facility. Student exposure to various industry conferences is beneficial and allows students to gain insight into real world business practices and for instructors to stay at the forefront.

Competition throughout Washington state is leading to more student choice and opportunity. Community colleges throughout the state are developing Applied Bachelor degrees or teaming with four-year institutions to bring opportunities to place-bound students. An example of this is Western Governors University (WGU). WGU Washington is a Washington online university offering bachelor's and master's degrees to working adults.

The state is actively developing online resources to bring down the cost of text books and course materials for students. Washington state is focusing on removing barriers and providing all residents with the opportunity to achieve a college or technical education.

Additionally, Washington state has been systematically building regional K-12 skill centers. Skill centers expose students to technical education at an early age and assist them in developing the skills necessary to enter the workforce or continue their education at the college level.

Unfortunately, resources are scarce and spread pretty thin. Colleges throughout the state operate on continually shrinking budgets. Capital improvements are scarce, and most future capital funding will come from private donations. Creating strong ties with industry and creating sustainable multipurpose space that is easily adaptable to the changes occurring in industry will be mandatory if BBCC is to meet future community needs.

Environmental Scan
EXTERNAL SCAN

The College in Relationship to the Local Region and Workforce

Big Bend, demographically, is a Hispanic Serving Institution. Approximately 40% of its student body speaks English as a second language. Nation wide, college enrollment numbers in 2011 and 2012 went down. But for one group - Hispanics - enrollment actually increased. The 2012 census data shows upward trends in educational attainment and college attendance among Hispanic populations.

To improve service to this population, BBCC must create environments and activities that attract local residents and encourage them to spend time on campus. K-12 students should view the community college as their next educational step. Counselors and K-12 advisors should have space on campus where students can go for advice and information. Space should be easily understood and welcoming. The community college should be a place where people are excited to visit. It should feature and showcase local success stories, so that residents feel connected.

BBCC should provide activities that recruit students and instill pride. Athletics is a prime resource that needs further development. BBCC should host tournaments and offer summer athletic camps. Fitness and wellness courses should be available. College facilities should serve students and community members.

Additionally, the college should be the center of the arts. Theater, drama, and art shows should be featured throughout the year. The lines between college and community need to blur. The community college needs to be the heart and the center of the community. It needs to move from “present and relative” to “prominent and essential.”

College Background

Big Bend’s service district stretches over 4,600 square miles and complements thirteen K-12 school districts. The college believes in a high-tech philosophy.

Student success is at the core of the college’s mission and vision statement. Big Bend is viewed by the local community as their partner in economic development. Special destination programs at BBCC include Aviation, Aviation Maintenance Technology, and Allied Health. The student housing located on campus allow it to serve students from outside the service district.

The college works directly with K-12, Economic Development Agencies, and local ports to increase the economic vitality of the region. Great care is taken to develop programs and outreach methodologies that meet the region’s business and industry requirements.

BBCC is slowly redeveloping its campus from an Air Force base into a welcoming state-of-the-art higher learning environment that encourages learning and the sharing of information. To increase offerings and better serve place-bound students, the college leases space to Central Washington University, so that students can reach their educational goals.

Big Bend is also developing hybrid and e-learning opportunities to overcome distance barriers. Many potential students are unable to attend classes on a day-to-day basis. Through careful research and planning, Big Bend is developing outreach centers and hybrid programs to offer high-quality educational programs to all service-district residents.

The College in Relationship to Current Educational Trends

Instructor roles are quickly moving toward becoming facilitators of learning and may even move more toward a partner or mentor role. They will mentor students and lead them through project-based learning and experiences. Accessing needed resources and working in collaboration with K-12, community, business and industry, and higher education will lead to a more learner-centered educational experience. Learner-centered facilities must:

- Be multi-functional and flexible
- Be quickly adaptable
- Offer accessibility
- Foster interdisciplinary collaborations
- Integrate education and research
- Encourage small and large group interactions outside of the classroom
- Combine academic and student life
- Offer interior and exterior environments for reflection and learning
- Encourage use of technology
- Integrate use of technology
- Encourage wide ranging and cross-disciplinary knowledge
- Lead to increased integration and continuity of the curriculum
- Promote active and collaborative teaching modes
- Increase student engagement
- Increase student-instructor engagement
- Increase student-instructor-industry understanding and engagement
- Increase student-to-student services interactions
- Expose students to new opportunities and possibilities
- Increase student exposure to diversity and different perspectives
- Increase cultural awareness
- Offer hands-on opportunities
- Encourage collaboration with other students, instructors, and employers
- Be inviting places where students want to spend time
- Support alternative learning methodologies
- Be accessible
- Involve and represent the real world

As we move further into the 21st Century, these trends will continue to increase in importance. Students are actively taking control of their education and demanding meaningful and relevant educational experiences. Students no longer want to sit in class and listen to a lecture. They want to be involved in problem solving and meaningful discussions.

The student population is becoming increasingly diverse in race, ethnicity, religion, education, and age. Instructors are serving students from different backgrounds and generations. Millennials expect customized active collaborative learning. Generation X and Baby Boomers are more comfortable with traditional lecture. Instructors must simultaneously incorporate lectures, education experience, student interaction and technology. Facilities must complement modern day instruction by being adaptable, flexible and able to serve multiple purposes.

Technology Impact

Technology has enabled students to learn anytime and anywhere. Students are beginning to demand educational opportunities that bend around their schedules. This is beginning to blur the traditional quarter and semester-based education and call for opportunities that are more in pace with the student’s abilities, prior learning and current schedule. Customizing learning opportunities will occur at all

Environmental Scan
EXTERNAL SCAN

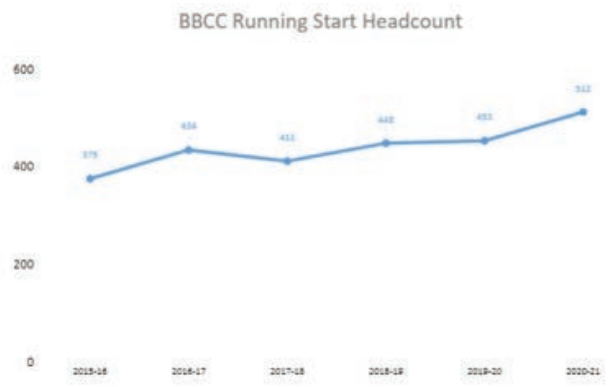
levels. Students will be the leaders of their own learning expedition. Students will learn research skills and how to think, adapt and problem solve critically. They must gain understanding of workplace ethics, global perspectives, cultural awareness, and the need for sustainability.

Utilization of technology will be central to their ability to learn and succeed. Students will continually return to college for skill upgrades and enhancement. The college will need to work with area industry and business to develop pathways to needed skill levels. No longer will colleges be able to operate as stand-alone institutions. They will work with K-12, higher education, surrounding business and industry, and the surrounding community to offer continuity and comprehensive learner-centered educational opportunities. Facilities will need to be developed to accommodate students throughout their lives. Focus will need to be on accessibility, flexibility, serving multiple purposes, and incorporating technology.

Enrollment Trend

Enrollments took a hit as the world dealt with the effects of COVID. One area in which the college is growing is in the number of Running Start students. The number of Running Start students increased 18% from 2016-2017 to 2021-2022.

The college is also seeing an increase in part-time students. Students juggling family, employment, and education are unable to allocate the resources necessary to attend full time.



Upcoming High School Students

Typically, 30% of area high school students choose to start their educational careers at community colleges. Of the 14 school districts in Big Bend service district, 20% of students in six districts choose to attend Big Bend. 32% of Moses Lake School Districts students and 44% of Wilson Creek students choose Big Bend. The following table shows Big Bend's Service District High School Students Attending following high school graduation:

School Districts	2019-20	2020-21
Alm Coul-Hrtln	**6**	3
Ephrata	**47**	**47**
Lake Roosevelt	**0**	**2**
Lind-Ritzville	**4**	**3**
Moses Lake	**118**	**118**
Odessa	**1**	**1**
Othello	**13**	**14**
Quincy	**29**	**34**
Royal	**34**	**21**
Soap Lake	**10**	**6**
Wahluke	**7**	**3**
Warden	**21**	**13**
Washtucna	**0**	**0**
Wilson Creek	**0**	**4**
Total Students From Area High Schools	**290**	**290**

Barriers to Education

Overcoming student barriers to access is essential. Colleges have found that most students discontinue going to school due to financial pressures. Barriers include:

- Financial pressures
- Cost of textbooks
- Cost of tuition
- Work responsibilities
- Family responsibilities
- Developmental courses
- High school preparation weak
- Lack of family encouragement
- Limited English language ability

Top 7 Trends in Community College Education (According to Community College Review)

1. Increased distance learning
2. Greater number of Baccalaureate degrees awarded
3. Increased partnerships between community colleges and four-year institutions
4. Greater recruiting of baby boomers (those over 50)
5. Increased enrollment across different student groups
6. Increased partnerships with business
7. Increased response to globalization

Environmental Scan
DEMOGRAPHICS

Population Growth

Big Bend Community College serves Grant and Adams counties and Odessa School District in Lincoln County. The area consists of over 4,600 square miles. In 2019, between Grant and Adam counties, the population was 117,716.

According to the Washington state Office of Financial Management medium series population projection between the years of 2020 and 2040, Grant County will experience 30.4% (1.52% per year) growth, and Adams County will experience a growth rate of 19.1% (0.95% per year).

Projections of the Total Resident Population 2020 to 2040					
	2020	2025	2030	2035	2040
Grant County	99,123	111,014	115,019	126,072	132,995
Adams County	21,085	21,666	22,832	24,241	25,062
Total	**120,208**	**132,680**	**141,477**	**150,313**	**158,057**

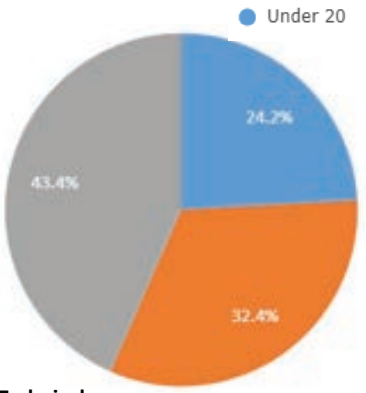
Student Age Profile

Nationally, the average community college student is 29 years old. This average is represented at Big Bend of those attaining their education. See proceeding pie charts for breakdown

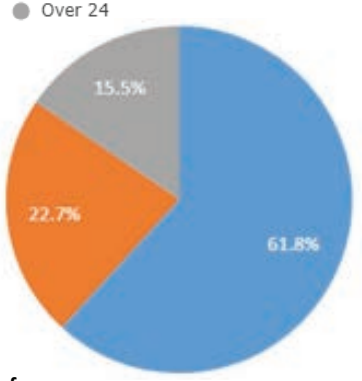
Students Enrollment Full-Time or Part-Time

Technical education students are more likely than transfer students to be enrolled full time. For the 2020-21 calendar year, 40% of transfer students were enrolled part-time and 60% were enrolled full-time.

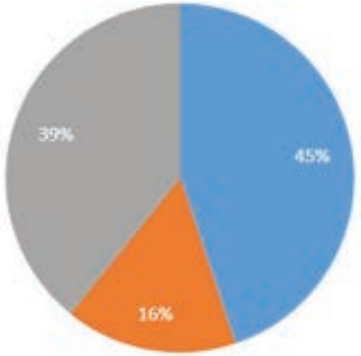
BBCC Student Full-time and Part-time Status by Intent 2020-21				
		FT	PT	
Tansfer	**Students**	**1061**	**713**	**1774**
	Percent	**60%**	**40%**	**100%**
Workforce	**Students**	**689**	**640**	**1329**
	Percent	52%	**48%**	**100%**
Adult Basic Education	**Students**	**34**	**593**	**627**
	Percent	**5%**	**95%**	**100%**



Age of Technical Education Students



Age of Transfer Students



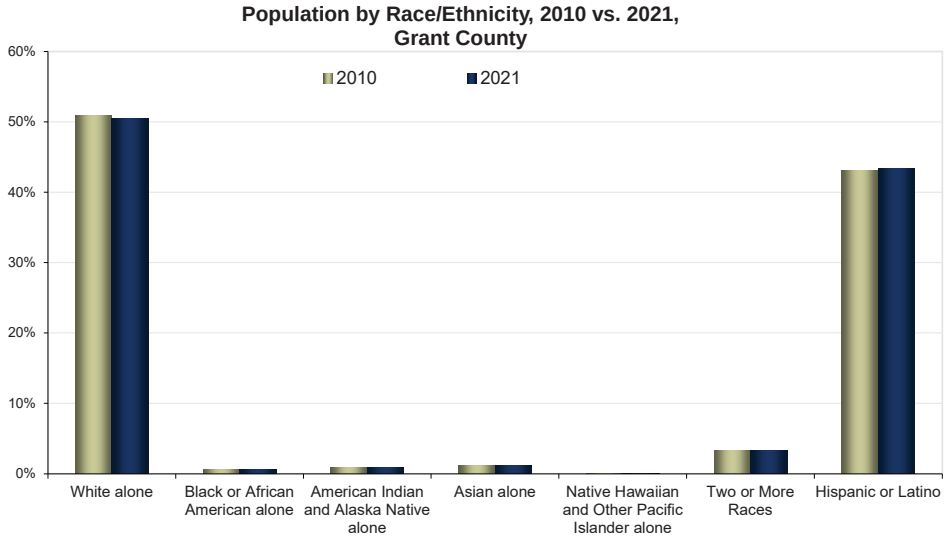
Age of Adult Basic Education Students

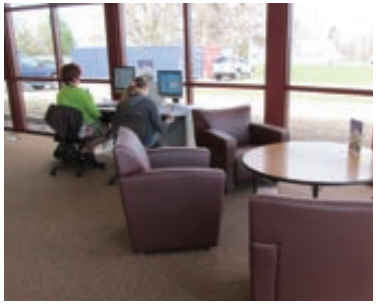
Households By Income (2019 U.S. Census Bureau)

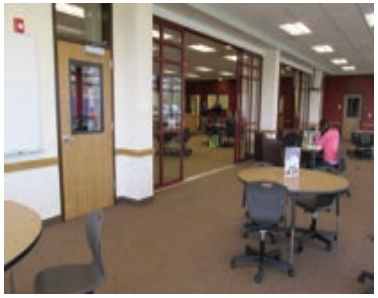
The median per-capita income in 2019 for Big Bend Service District was $23,596 compared to the Washington state average per-capita income of $38,915.

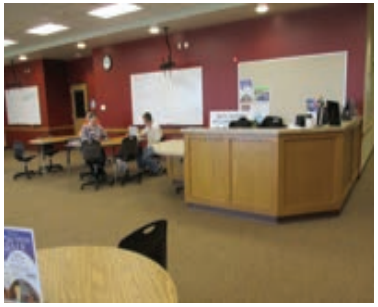
The median household income between the years of 2016-20 for Big Bend Service District was $54,323, considerably lower than the Washington state average of $73,775. Additionally, 14% of Big Bend Service District's population live below the poverty level.

Over 46% of Big Bend Service District's population is of Hispanic or Latino origin, and 40% speak another language other than English in the home.









Environmental Scan
DEMOGRAPHICS

Educational Attainment

Grant and Adams counties have lower than average levels of educational attainment. Unfortunately, the numbers are on a downward trend creating a growing urgency.

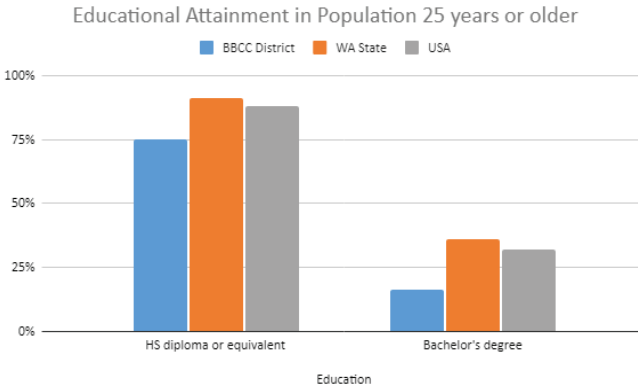
Currently, 75% of Big Bend Service District's population age 25 years and older holds a high school diploma or equivalent. This compares to the state's average rate of 91% and the nation's rate of 88%.

Additionally, in 2019 only 16% of Big Bend Service District's residents age 25 and older hold a bachelor's degree or higher, in comparison to 36% for Washington state residents.

Homeownership

Homeownership in Grant County is 65% with a median value of $159,000. The average house in Washington state is valued at $366,800.

Adams County has a homeownership rate of 63%.



Growing Industries in Grant County

In 2019, the following five (5) employment sectors accounted for over 68.4% of the growth:

- Agriculture
- Local Government
- Manufacturing
- Retail Trade
- Heatlh Services

Growing Industries in Adams County

In 2019, the following industries provided 79.6% of employment in Adams County:

- Agriculture
- Local Government
- Manufacturing
- Health Services
- Retail Trade

Environmental Scan
REGION EMPLOYMENT

Employment in the Region

The Grant County region is known for its excellence in the aerospace industry. It features an airport and landing strip surrounded by an infrastructure and an education system that are positioned for growth. Grant County has been attracting both national and international interest. Companies are relocating or expanding in the region due to the abundance of available land and low electricity rates.

According to the Washington Economic Development Commission (WEDC) and the Workforce Training and Education Coordinating Board, the Grant County region has a competitive advantage in both Agriculture and Food Products. Adams County has a new study that shows distribution centers and food processing are key industries. Central Washington is known as region WDA 8, and the Cluster Methodology recommends that the region focus on developing the following strategic industry clusters:

1. Waste Management and Remediation
2. Health Care Services
3. Physical Science Research and Development
4. Agriculture and Food Processing
5. Advanced Manufacturing
6. Business Support Services

Industry clusters are geographically concentrated in regions and feature several businesses and industries that regularly collaborate to bring products to market. The state's strategy is to concentrate on developing these industries and provide skilled workers to these fields so that they can have a positive effect on increasing productivity and economic growth in other fields.

Grant County Economic Delevelopment Council

The Grant County Economic Development Council (GCEDC) has identified the following Key Industries for the area:

- Aerospace
- Ag/Food Processing
- Data Centers
- Manufacturing
- Retail

GCEDC is actively growing these industries through collaborative efforts with BBCC and surrounding businesses and industries.

Healthcare

Additionally, the region is a healthcare hub and experiencing growth in specialized health services. Demand for radiologists, physical therapists, nutritionists and EMT/Paramedics is on the rise. Technologists capable of servicing various medical types of equipment are also in high demand.

Environmental Scan
EMPLOYMENT OPPORTUNITY

Wage Opportunities

The charts on the right are based on the entire state of Washington but are representative of the wages and opportunities available in the region.

EMPLOYMENT OPPORTUNITIES

Grant and Adams counties will experience an average annual growth rate between 1.3 to 1.7 percent over the next 10 years. Health care and durable good manufacturing are expected to have above average growth (3.1%). Growth will also occur in tourism, wholesale trade, transportation, and warehousing. Research and development is expected to play a major role in the development of new products. In order to secure employment, workers will need skill sets beyond high school. Employers are looking for employees who offer the following:

1. Skilled in a trade
2. Ability to work as a team member
3. Understanding of mathematics
4. Ability to read and write well
5. Understanding and ability to use technology
6. Ability to think critically about complex problems that arise
7. Develop workable solutions and solve problems
8. Understand global implications
9. Apply skills in new settings
10. Exercise a strong sense of ethics and integrity

Employers are stating that there is a disconnect between the skills being taught and the skills they are seeking. Customizing education opportunities to the latest industry requirements will be a continuous effort and will require the college to work hand-in-hand with surrounding industry. Environments will need to foster a collaborative relationship where students, instructors, and industry work together to ensure that the needed skills are infused into the curriculum.

The tables on the following page demonstrate the educational levels needed to secure employment and the projected number of positions opening on an annual basis.

The SBCTC Data Warehouse contains the following student earnings information after their first year of graduating or earning certification:

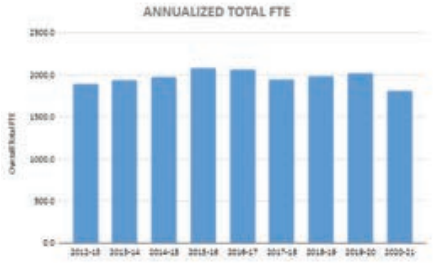
Feild of Study	Median Earnings
ACCOUNTING TECH	23,648.76
ADMIN PROF SERVICES	25,240.54
AGRICULTURE	62,018.04
ASSOC NURSING	70,228.44
AUTOMOTIVE TECH	30,153.11
AVIATION MECH TECH	95,563.03
COMMERCIAL PILOT	26,507.77
CRIMINAL JUSTICE	79,208.47
EARLY CHILD EDUCATION	27,124.24
GENERAL STUDIES	29,651.94
INDUST ELECT TECH	41,168.49
MAINT MECH TECH	56,676.10
MED OFFICE/BILLING	45,879.82
MEDICAL ASSISTANT	25,741.23
SYSTEM ADMIN TRANS	26,241.19
SYSTEM ADMIN	74,536.17
WELD TECH PRODUCT	21,785.31
WELD TECH-PIPE	39,325.26

Environmental Scan
INTERNAL SCAN

Institutional Research
The Institutional Research and Planning Department at Big Bend Community College designs, administers, and analyzes studies and surveys in an effort to track college enrollment, strategic planning progress, institutional effectiveness, educational outcomes, and capital needs. Information gathered is used to assist the college in continual improvement.

Student Enrollment
Over the last few years, the college has monitored the following trends in enrollment:

- Increase in Running Start students
- Average college age is dropping
- Slight decrease in professional-technical education enrollment
- Increase in academic student enrollment
- Increased interest in STEM Programs

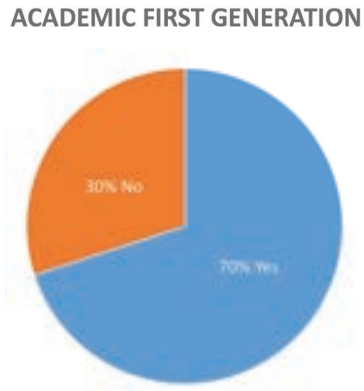


Distance Education
Recognizing the obstacles of time and location, BBCC offers classes during the day and evenings to make education services accessible to working students. Moreover, students may take classes via different distance learning delivery systems, so they do not have travel to Moses Lake. Extension sites and services enable students to continue their education by linking distant service areas to Big Bend's main campus. Courses available at distant learning sites include Adult Basic Education (ABE), General Education Development (GED) preparation, and English as a Second Language (ESL) classes. The local site assists students with getting access to services such as degree planning, registrations, textbook ordering, and scholarship/grant applications.

Partnership sites include:
- Grant County
- Mattawa
- Othello
- Quincy
- Royal City
- Soap Lake
- Warden

Higher Education Opportunities on Campus
Time and distance create barriers to student's achieving four-year degrees. To overcome this barrier, BBCC has teamed with Central Washington University. BBCC also offers a Bachelor of Applied Science in Applied Management (BAS-AM) degree that builds upon the two-year associate degrees.

Central Washington University
CWU-Moses Lake is located at Big Bend Community College in Moses Lake, Washington. This partnership provides the opportunity for students to earn their first two years of a bachelor's degree at Big Bend Community College and stay on campus to complete their bachelor's degree at CWU-Moses Lake.
Programs include:
- BS/BAS Information Technology and Administrative Management
- BS Aviation Management
- BS Professional Pilot
- BS Interdisciplinary Studies - Social Science



Environmental Scan
INTERNAL SCAN

Running Start
The number of students choosing to attend BBCC during their high school years is steadily increasing. BBCC has worked closely with area high schools to create an accessible program that allows students to experience high school life while earning college credits.

Student Services
Student success is the core of Big Bend's Mission. The role of Student Services is to increase student success. Over the last decade improvements have been made to the Administration Building that houses Student Services.

Improvements have focused on creating a welcoming, easily understood, and accessible environment. Currently, doors create an unwelcoming disconnect that is seen as a barrier to increasing contact with students.

Counseling Center
The Counseling Center offers personal, confidential, professional assistance to students. It is open to all BBCC students in all programs. The student may meet with the counselor of his or her choice.

Counselors use a "whole person" approach in their work. Students often find that certain personal issues need to be addressed in order to take full advantage of all the college has to offer. Counselors help students explore options and teach them to make better decisions to further their education.

TRIO-SSS (STUDENT SUPPORT SERVICE)
For over 30 years, the TRIO-SSS-Student Support Service Program at Big Bend Community College has had the pleasure of serving many students by providing academic guidance, as well as the opportunity to participate in social, cultural, and career-related activities.

- The TRIO-SSS Program is designed to assist and encourage students to aspire to achieve their goals and successfully complete their degree programs. The TRIO-SSS team is committed to assisting students with a smooth transition to the next step in their education or career and mapping out the pathway for a successful future. The TRIO-SSS team assists students in overcoming the challenges and barriers of higher education, while giving students the support they need to accomplish their goals

Peer Mentoring Program
BBCC uses peer-to-peer advocacy programs and service learning projects to assist students in adapting and navigating the college system, as well as developing a higher level of engagement with peers, the BBCC campus, and the surrounding community. Mentor programs assist students in their academic and social transition into college. Mentors promote academic excellence, encourage the development of student relationships with other students and staff, raise awareness of campus resources and events, and provide ongoing encouragement and guidance throughout the year.

Tutoring Programs
The Student Success Center (SSC) offers Tutoring Programs that assist students to identify and develop strategies that support learning and enhance academic performance as well as to inspire students to become confident, independent learners prepared to meet academic challenges.

- Peer Tutoring
- Supplemental Instruction

The SSC highly supports students to use every means possible to be successful in a class. Students are encouraged to:

- Make regular use of their instructor's office hours to ask for help working through the things they don't understand.
- Talk to other students in their class about forming a study group. Study rooms are available in the library or the SSC.
- Access other academic resources on campus such as English Skills Lab, Math/Science Resource Center, Supplemental Instruction (SI), and eTutoring.
- Make use of free online BBCC Emporium Resources: Math Model videos, Khan Academy, Purplecow, Math TV.com, etc.

Environmental Scan
INTERNAL SCAN

Job & Career Fair

The Job & Career Fair is a partnering event between Big Bend Community College, Moses Lake WorkSource, WA State Employment Security, SkillSource, Adams County Development Council, Grant County Economic Development Council, and other organizations. The Big Bend Community College Job & Career Fair provides a central location for job seekers to meet employers and a place for visitors to learn about career opportuniities. By participatng in this event, exhibitors have the opportunity to connect with prospective employees who may help their organization reach its staffiing goals.

Residence Halls

Big Bend Community College Residence Halls provide affordable on-campus housing, with a strong emphasis on safety, hygiene, student comfort, and support of academic achievement and success.

Each room is approximately 10' x 16', furnished with two twin extra-long beds, desks, chairs, and generous storage space. Each room has air conditoning.

Student safety is a priority. BBCC has night-time Security Officers within the halls, and the parking area is well monitored with high-resolution security cameras. Each floor also has a Resident Assistant.

Academic Programs

- Accounting
- Adult Basic Education
- English as a Second Language
- G.E.D.
- High School Completion
- I-BEST
- Agriculture
- Aircraft Rescue Fire & Fighting
- Anthropology
- Art
- Automotive Technology
- Aviation
- Aviation Maintenance Technology
- Biology
- Botany
- Business Accounting & Finance
- Business Information Management
- Chemistry
- Commercial Driver's License
- Computer Science
- Criminal Justice
- Distance Learning (eLearning)
- Early Childhood Education
- Economics
- Engineering
- English
- History
- Industrial Electrical Technology
- Manufacturing and Process Technology
- International Students
- Japanese Agricultural Training Program (JATP)
- Mathematics
- Mechatronics
- Medical Assistant
- Simulation Technology
- Music
- Nursing
- Philosophy
- Physical Education
- Physics
- Political Science
- Psychology
- Religious Studies
- Running Start
- Sociology
- Unmanned Aerial Systems (UAS) Technology
- Upward Bound
- Welding

Student Clubs

- Agriculture Club
- Aviation Club
- Aviation Maintenance Club
- Brazilian Jiu-Jitsu Club
- Dungeons & Vikings Club
- Engineering Club
- LDSSA Community
- M.E.Ch.A
- Nursing Club
- Phi Theta Kappa
- Sexuality & Gender Acceptance (SAGA) Community

Technology

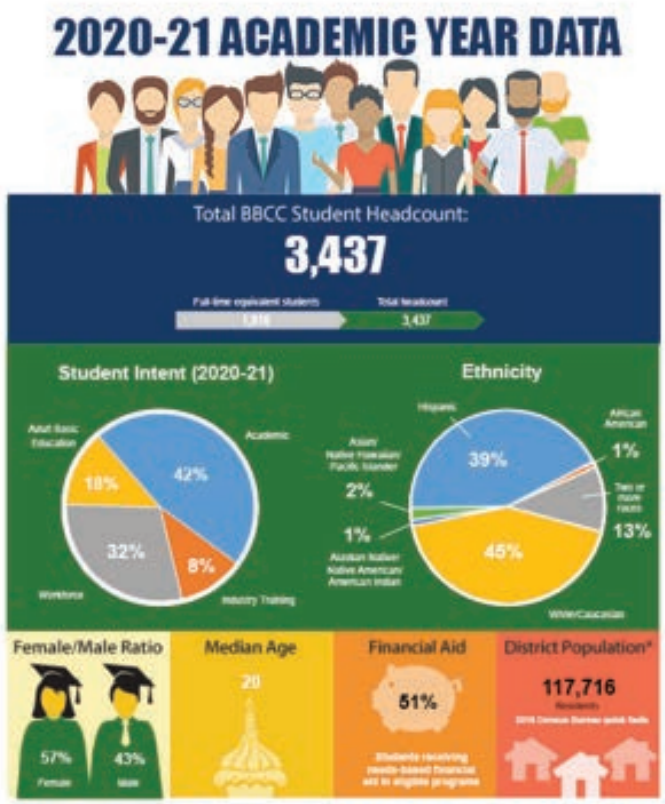
Big Bend is actively building a technology infrastructure that increases its capacity and ability to serve students throughout its 4,600-mile service area.

Additionally, technology is being used to increase student success. Through a learning management system (LMS) such as Canvas, classes are offered online, and are accessible via the Big Bend media portal.

Environmental Scan
STUDENT SURVEYS

Student DEMOGRAPHICS 2020-21

Main reasons for attending Big Bend Community College?



Environmental Scan
STUDENT SURVEYS

In order of priority, most important first, what changes would you like to see at BBCC?

More science classes must be offered in order to complete pre and co-requisites in the allied health programs in a timely manner.

Revised computer science department that includes BBT, so that Comp-Sci students can get real hands-on experience training and education.

Expansion with more buildings and courses.

Complete overhaul of the dorms to prevent people from moving out, modernize.

I would like for the classes to have more seats because by the time I get to register, I don't get anything that I wanted and end up taking classes that don't relate to my major.

I would like to see a place that you can do homework after the library closes. There are times that I cannot get to the library before it closes, and then I have to sit in my car and do homework. I have internet at home, but on occasion it has gone out when I'm in the middle of doing an assignment. I run to the college so that I can finish my work but am disappointed that there is nowhere to work.

Better parking areas. I feel I have a hard time finding parking areas.

More room for people in the Math Lab.

More seating around campus.

Landscape could have more appeal, whether it is with flowers or more benches.

Lights in parking lots/security. Brighter lights in pool room.

More diverse classrooms & workout equipment.

What is your favorite place on campus?

Library. Resource central plus quiet equals one happy student.

In my dorm room or in one of the lounges in the dorm. Because of the resources available to me.

Library. Quiet, computers, Internet and printers.

The square in the middle of campus in front of 1800, 1600 and 1700 buildings. It feels like a park and is relaxing. (Courtyard)

STEM center. It's quiet and always has a tutor available.

Nursing building, it's quiet and relaxing. I can easily think or do work in there.

Machine Shop. What interests me, and I get an opportunity to do some machining, creating different things.

Labs because we work hands on, in which the real world is.

I use my truck to study sometimes; otherwise the library or one of the empty rooms in the Electrical building.

Library, quiet, get my stuff done.

Student Success Center (SSC). Mostly quiet, not a whole lot of people. Clean, new, and I was going there to help others by tutoring.

Besides the classroom, the library. More interaction with people of my age.

The cafeteria because I can eat, study, and interact with other students all at once.

Automotive building is my favorite because of the available equipment.

The library because it is like the perfect environment to study in, and there is a great amount of technology available if you are needing help.

Library, can study and have everything needed to finish a project. Computers, printers, chairs and copy machines. Café, can eat, nice lighted environment.

The auto and welding labs for my technical degree.

The 1400 building because I can get advice and relax with some friends.

Anywhere there is Wi-Fi.

Environmental Scan
INDUSTRY SURVEYS

Programs BBCC should think about starting

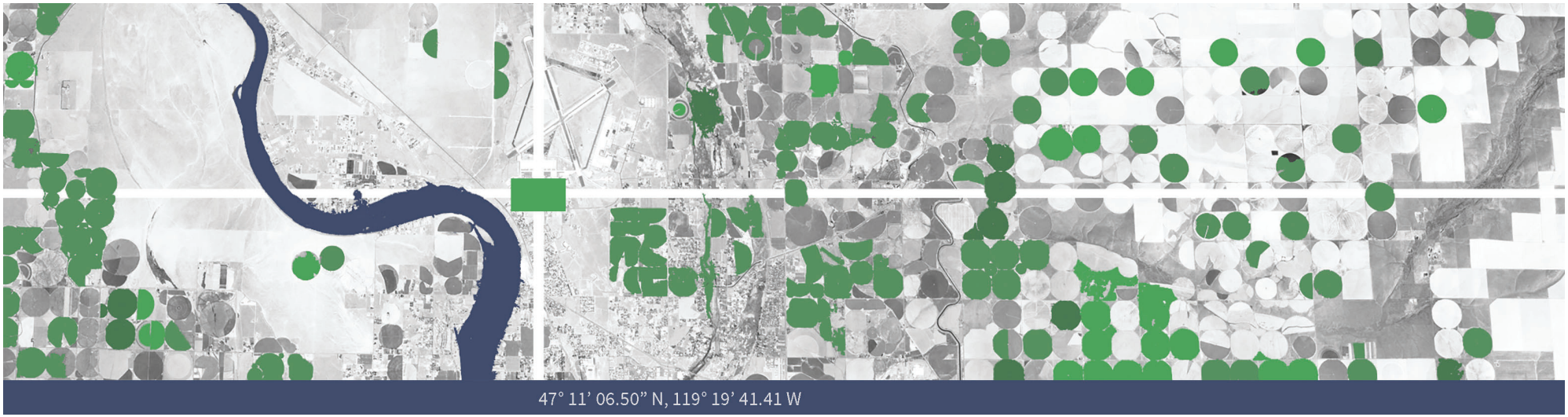
- Local area has a shortage of trained electronic/robotics technicians. BBCC programs could provide graduates with immediate placement.
- Controls. This is a fairly specialized field that takes time to train.
- IT Project Manager.
- PLC Programming, Field Training.
- Process operator certification. Some junior colleges in the south (Texas, Louisiana) offer a certification program for students in the industrial operations area.
- Diesel Mechanics.

Soft Skills Sought by Local Employers:	Score
Bilingual Skills	35%
Computer Skills	83%
Dependable	91%
Innovation	57%
Oral Communication	35%
Strong Morals & Ethics	83%
Work Independently	83%
Creativity	52%
Customer Relations	57%
Effective Listening	78%
Interpersonal Skills	83%
Social Skills	70%
Visualization	52%
Work as a team	87%
Critical Thinking/Problem Solving	87%
Decision Making	74%
Grammar	61%
Math/Computational Skills	83%
Strong Work Ethic	83%

What skills are important to employers?

- Communication skills; must be in high understanding of the laws and policies.
- Agriculture & business backgrounds are very important.
- Process Operations (Chemical, Manufacturing, Food Processing).
- CPR/AED and First Aid; refresher training for electricians.
- Make sure individuals have good communication, writing and verbal skills.
- Customer service, problem solving, & basic budget knowledge.
- Most of the applicants we are finding do not have process operator knowledge. Their math skills and basic chemistry skills are poor. They are lacking problem-solving skills.
- Highly likely that specialized knowledge in computer systems will grow.
- Computer, storage, and network services. Windows and Linux operating systems.
- Most of our manufacturing equipment is very specialized, but the process is not. We are not finding applicants that understand process and process thinking. Most applicants can assemble widgets but do not understand how a change in process will affect the next or the outcome of the change, lack in cause and effect of knowledge.

SPACE UTILIZATION



Space Utilization
EXISTING SPACES

CLASSROOMS (A1)

There are 40 classrooms spread across campus. Nine of the classrooms are unused, and another ten classrooms are used at a rate of less than 33 percent. Calculations are based on 30 hours per week and take into consideration each room's designed capacity. The poor condition of the facilities and classrooms make many of the classrooms nonfunctional for modern day instruction.

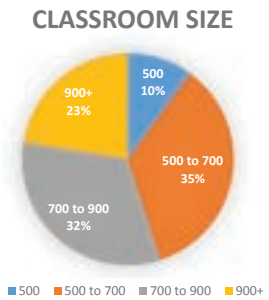
The classrooms with the highest utilization rate are located in the core of campus. Three classrooms are used at a rate of over 100%, and another 13 are used over 60%. The table to the right shows classroom utilization.

SCIENCE LABS (B1)

Most science labs are located in the 1200 Building with the exception of the Ag ScienceLab in the 3700 Building. Recent upgrades to the chemistry lab created a modern day environment that allowed for the instructor and students to move more easily from lecture to lab, promoted active team learning, and allowed the instructor to more easily monitoring students for safety compliance.

AUDITORIUM (C4)

The only auditorium style classroom on campus is located in the Wallenstein Theater (Building 1100). The location is slightly removed from campus and underutilized for instruction purposes. The 1100 building is uninviting and in need of replacement. Replacing the 1100 building and creating a more inviting space would give instructors another tool to use in creating a rich educational environment.



TYPE OF SPACE	CODE	SQUARE FOOTAGE	STATE ALLOWED 1,895 FTEs	FUTURE - 2022 2,588 FTEs	NEEDED SPACE CURRENT	NEEDED SPACE 2022
Classrooms	A1	30046	17512	21014	(12534)	(9032)
Basic Skills Labs	A2	638	6900	8280	6262	7642
Science Labs	B1	8828	8398	10077	(431)	1249
Computer Labs	B2, B4, B5	4545	6064	7277	1519	2732
Art	C1	5260	4000	4000	(1260)	(1260)
Music	C2	2130	6000	6000	3870	3870
Drama	C3	4146	5000	5000	854	854
Vocational Space	B3, D1	104568	104568	104568	0	0
Auditorium	C4	5642	9000	9000	3358	3358
Library/LRC	E1	20441	30636	36763	10195	16322
Physical Education	H3	24651	15390	15390	(9261)	(9261)
Faculty Offices	F1	12947	16940	20328	3993	7381
Admin/Student Services	G1, G2	17871	17017	20421	(854)	2550
Student Center & Related	H1, H2	28911	24995	29994	(3916)	1083
Central Stores/Maintenance	I1	21241	13265	15918	(7976)	(5323)
Child Care	H4	0	6443	8799	6443	8799
Miscellaneous	J, K1, L	6670	0	0	(6670)	(6670)
Informal Learning	M1	4278	4278	4278	0	0
TOTAL NET SQUARE FOOTAGE		302,813	296,405	327,107	-6,408	24,293

CLASSROOMS		
ROOM	SF	CAPACITY
Building 1200		
1202	840	30
1203	812	30
1215	1073	62
1218	974	24
1219	975	30
1250	1162	24
1252	1214	30
Building 1500		
1507	603	25
1508	657	24
1509	620	25
1510	454	
1511	558	24
1534	344	6
1535	378	
1537	261	
Building 1600		
1601	1220	30
1604	774	30
1606	565	25
1607	563	25
1608	567	30
1609	695	30
1610	703	30
1611	803	30
1615	598	
Building 1700		
1701	693	30
1702	743	20
Building 1800		
1801	950	
1802	1265	30
1854	880	
1855A	700	25
1855B	700	25
1856	508.2	25
Building 1900		
1909	840	30
1910	840	30
1911	840	30
Building 3000		
3015	760	70
3016	760	26
3024	506	9
Building 3200		
3203	978	30
3211	978	30
3212	978	30
Building 3700		
37103A	759	25
37103B	757	25
37112	975	30
37113	972	30
37123	2666	24
37162	972	30
37163	975	30
37211	978	30
37212	979	30
37213	979	30
37214	978	30
37218	975	30
37219	972	30
37231	1002	30
37232	985	30
37239	1035	30
37251	978	30
37252	980	30
37253	979	30
37254	977	30
37255	977	30
37259	975	30
37260	972	30
Building 4100		
4102	912	
4103	820	30
TOTALS	57635.2	1708

Space Utilization
EXISTING SPACES

ENHANCED CLASSROOMS

Room Number	SF	No of Stations	Hrs Per Week	Hrs Per Week Utilization Efficiency	Students Per Week	Student Capacity Per Program	Room Capacity Efficiency	Overall Occupancy Efficiency
1215	910	40	23:40:00	99%	229	270	85%	84%
1601	1,220	66	28:30:00	119%	198	230	86%	102%
1609	695	29	19:30:00	81%	157	198	99%	80%
1703	145	1	ARRANGED	ARRANGED	ARRANGED	ARRANGED	ARRANGED	ARRANGED
1855B	700	21	13:40:00	57%	66	.66	96%	54%
1910	840	20	10:05:00	42%	90	90	100%	42%
Total	**5,284**	**217**	**95:25:00**	**79%**	**740**	**854**	**93%**	**72%**

SCIENCE LABS

Room Number	SF	No of Stations	Hrs Per Week	Hrs Per Week Utilization Efficiency	Students Per Week	Student Capacity Per Program	Room Capacity Efficiency	Overall Occupancy Efficiency
1209	1011	40	8:00:00	67%	47	48	98%	65%
1211	1040	40	13:00:00	108%	125	132	95%	103%
1216	1403	40	10:00:00	83%	84	81	104%	86%
1217	1017	40	8:20:00	69%	24	24	100%	69%
37154	1440	36	15:00:00	125%	30	30	100%	125%
Total	**4471**	**160**	**39:20:00**	**82%**	**280**	**285**	**99%**	**81%**

COMPUTER LABS

Room Number	SF	No of Stations	Hrs Per Week	Hrs Per Week Utilization Efficiency	Students Per Week	Student Capacity Per Program	Room Capacity Efficiency	Overall Occupancy Efficiency
1201C	833	50	7:30:00	31%	31	50	62%	50%
1508	657	24	ARRANGED	ARRANGED	ARRANGED	ARRANGED	ARRANGED	ARRANGED
1612	1030	30	11:20:00	47%	67	83	81%	59%
1613	1434	25	ARRANGED	ARRANGED	ARRANGED	ARRANGED	ARRANGED	ARRANGED
1718	1161	40	7:40:00	32%	52	65	80%	40%
1801	950	33	24:30:00	102%	161	161	100%	102%
1910	840	20	10:05:00	42%	90	90	100%	42%
Total	**6905**	**222**	**61:05:00**	**51%**	**401**	**449**	**85%**	**59%**

Technology Enhanced Classrooms (A1)

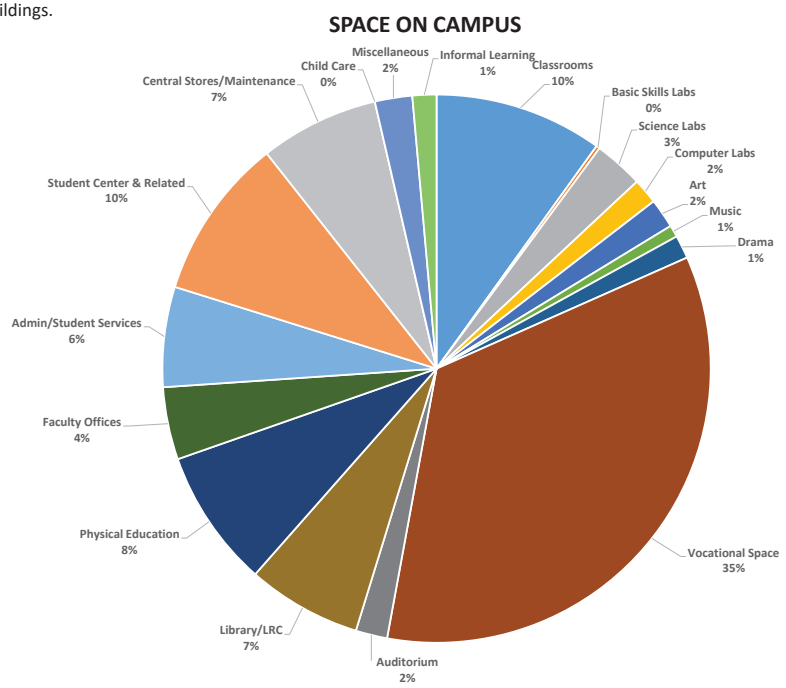
There are seven enhanced classrooms on campus. One is used as an office for individual recordings. The enhanced classroom located in the 1600 Business and Liberal Arts Building and in the 1200 Science, Math and Engineering Building are used at the highest rate.

These classrooms are used between 20 and 30 hours per week. As e-learning and hybrid courses continue to grow and advance, the college will need more enhanced classrooms.

Computer Labs (B2, B4, B5)

Currently, Big Bend hosts six computer labs across campus. Four are for dedicated purposes; one is open when not being used for testing purposes.

Students can access computers in the Library Resource Center and in the Student Success Center. Additional computers are available in the Math Tutoring Lab, and laptop computers can be checked out. Wireless connections throughout campus have been improved. The Big Bend Technology Department has been actively evaluating and upgrading WiFi Services throughout all of the buildings.



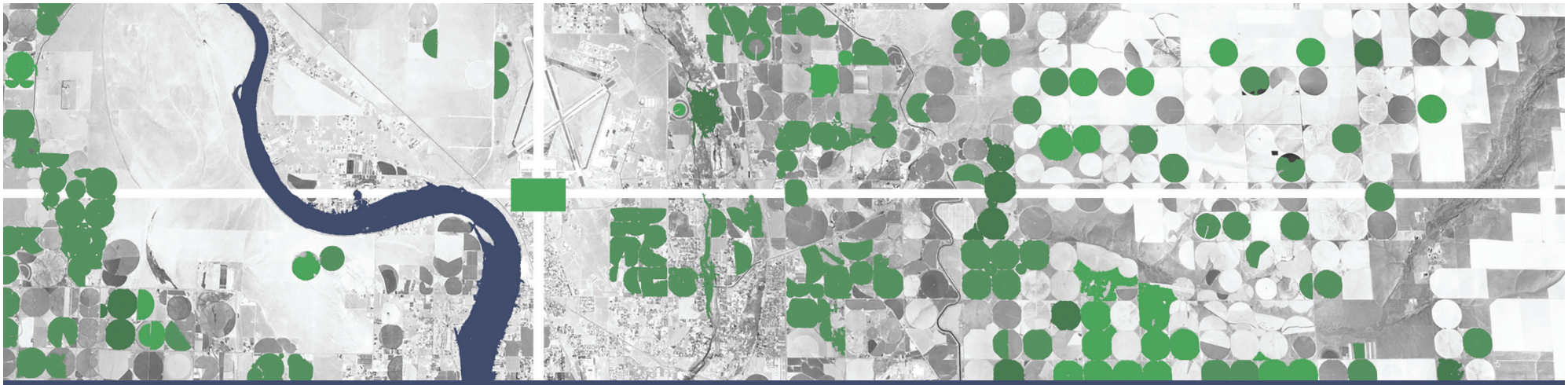
Space Utilization
EXISTING SPACES

Current Space Use

The chart below represents the 2021-22 space allocations for each of the facilities on the BBCC campus. This chart is useful in identifying how space is currently being used and where the college may re-purpose space in the future to align with recommended space guidelines.

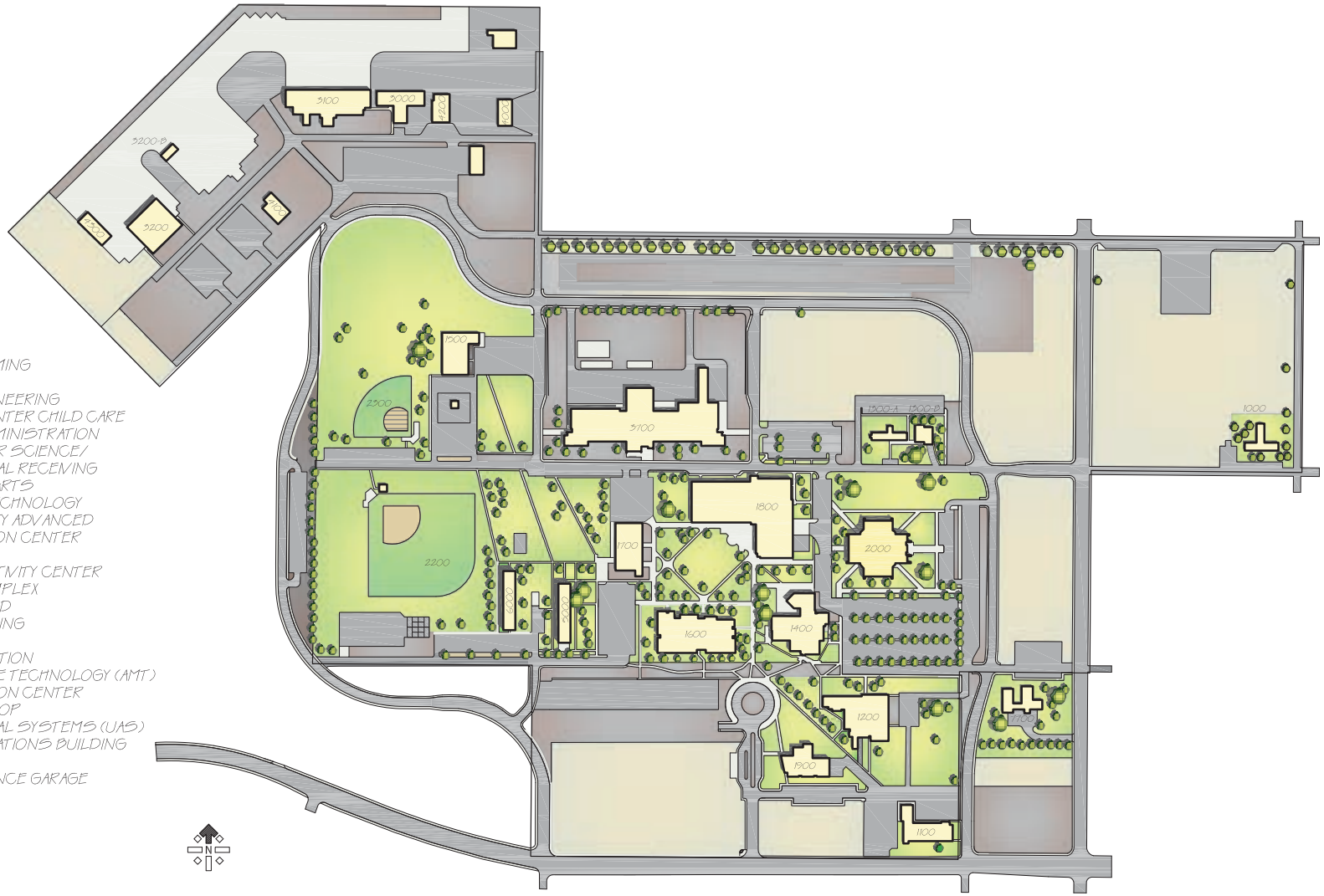
		1000	1100	1200	1300	1300b	1500	1600	1700	1800	1900	2000	3000	3100	3200	3700	4000	4100	4200	4300	4500	4600	SC1	Space
A1	General Classrooms			7050			3875	6488	1436	5003	2520	1168			2934	27397		1732						59,603
A2	Basic Skills																							-
B1	Science Labs			8828																				8,828
B2, B4, B5	Computer Labs						1971	1136		1438						1282								5,827
C1	Art										5260													5,260
C2	Music		2130																					2,130
C3	Drama		4146																					4,146
C4	Theater/Auditorium		5642																					5,642
B3, D1	Vocational	2013			2251	2184	404	2464	5232				4692	25109	11205	33006		1221						89,781
E1	Library/Learning Resource	278							572	18641					1725	1062								22,278
F1	Faculty	556	201	1640		120	1579	2060	1656	592	347		2250	224	560	9292		360						21,437
G1	Administration						1055			3183														4,238
G2	Computing Support								2678															2,678
H1	Student Centers								1072	16307		594				4632								22,605
H2	Exhibition									4000														4,000
H3	Physical Education											24651												24,651
H4	Day Care																							-
I1	Central Stores						3541				1277						4000		5164	2000	2293			18,275
J	Unassignable		1635	305			250			784	270													3,244
K1	Community Relations									2836														2,836
M1	Informal Learning			2316												1800								4,116

CURRENT CONDITIONS



47° 11’ 06.50” N, 119° 19’ 41.41 W

Current Conditions
EXISTING CAMPUS PLAN



LEGEND

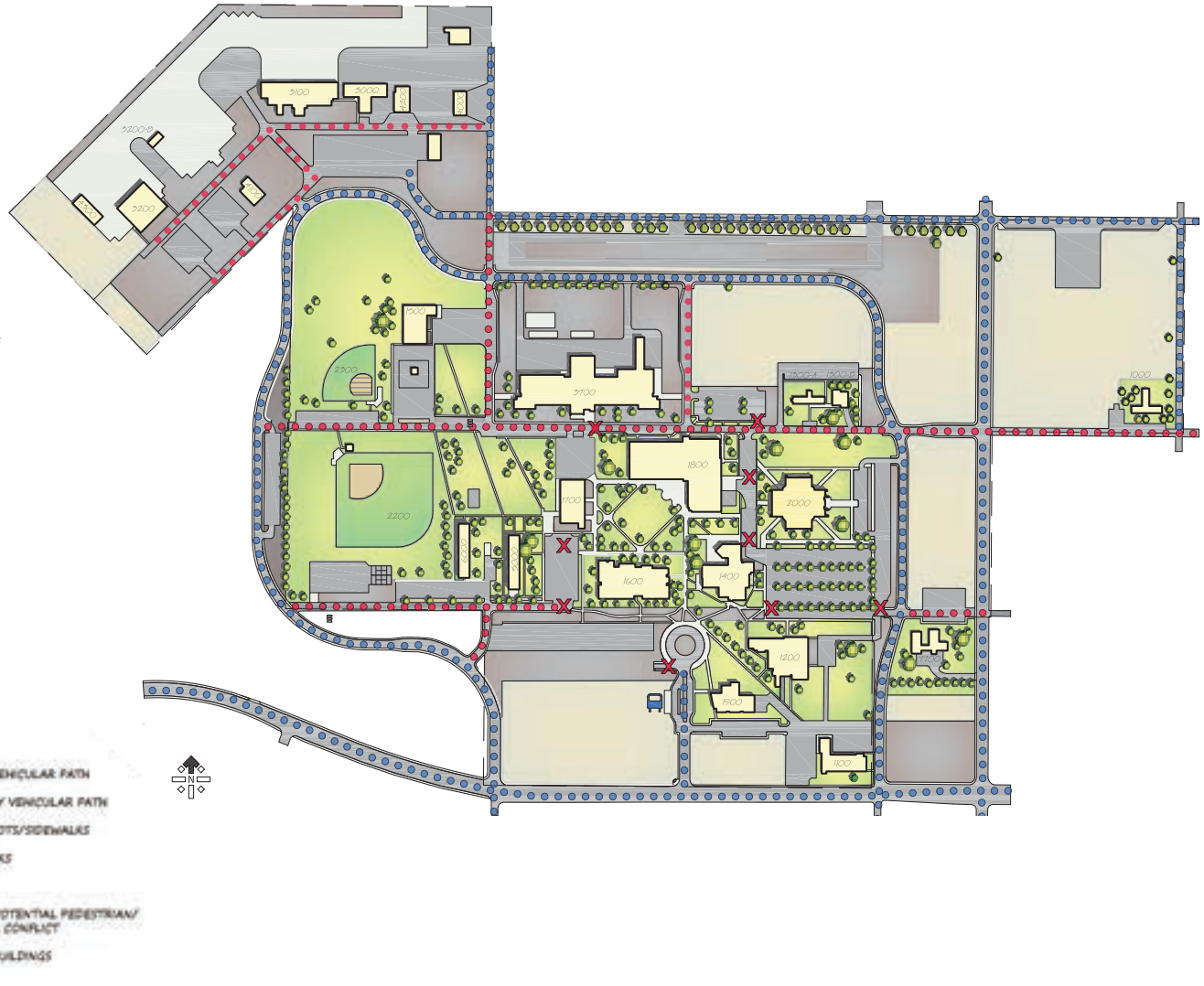
1000 - TRIO UPWARD BOUND
1100 - WALLENSTIEN PERFORMING ARTS CENTER
1200 - SCIENCE, MATH & ENGINEERING
1300a&b - BBCC LEARNING CENTER CHILD CARE
1400 - STUDENT CENTER/ADMINISTRATION
1500 - SMITH HALL/COMPUTER SCIENCE/ WORD SERVICES/CENTRAL RECEIVING
1600 - BUSINESS & LIBERAL ARTS
1700 - NURSING/BIG BEND TECHNOLOGY
1800 - LIBRARY/GRANT COUNTY ADVANCED TECHNOLOGIES EDUCATION CENTER
1900 - FINE ARTS
2000 - PETER D. DEVRIES ACTIVITY CENTER
2200 - VIKING BASEBALL COMPLEX
2300 - VIKING SOFTBALL FIELD
3000 - AVIATION FLIGHT TRAINING
3100 - AIRCRAFT HANGER
3200b - AMT ENGINE RUN STATION
3200 - AVIATION MAINTENANCE TECHNOLOGY (AMT)
3700 - WORKFORCE EDUCATION CENTER
4000 - CARPENTRY/PAINT SHOP
4100 - CDL & UNMANNED AERIAL SYSTEMS (UAS)
4200 - MAINTENANCE & OPERATIONS BUILDING
4300 - STORAGE
4500 - STORAGE & MAINTENANCE GARAGE
4600 - PARKING GARAGE
5000 - PHILIPS HALL
6000 - VIKING HALL

Current Conditions
CIRCULATION VEHICULAR

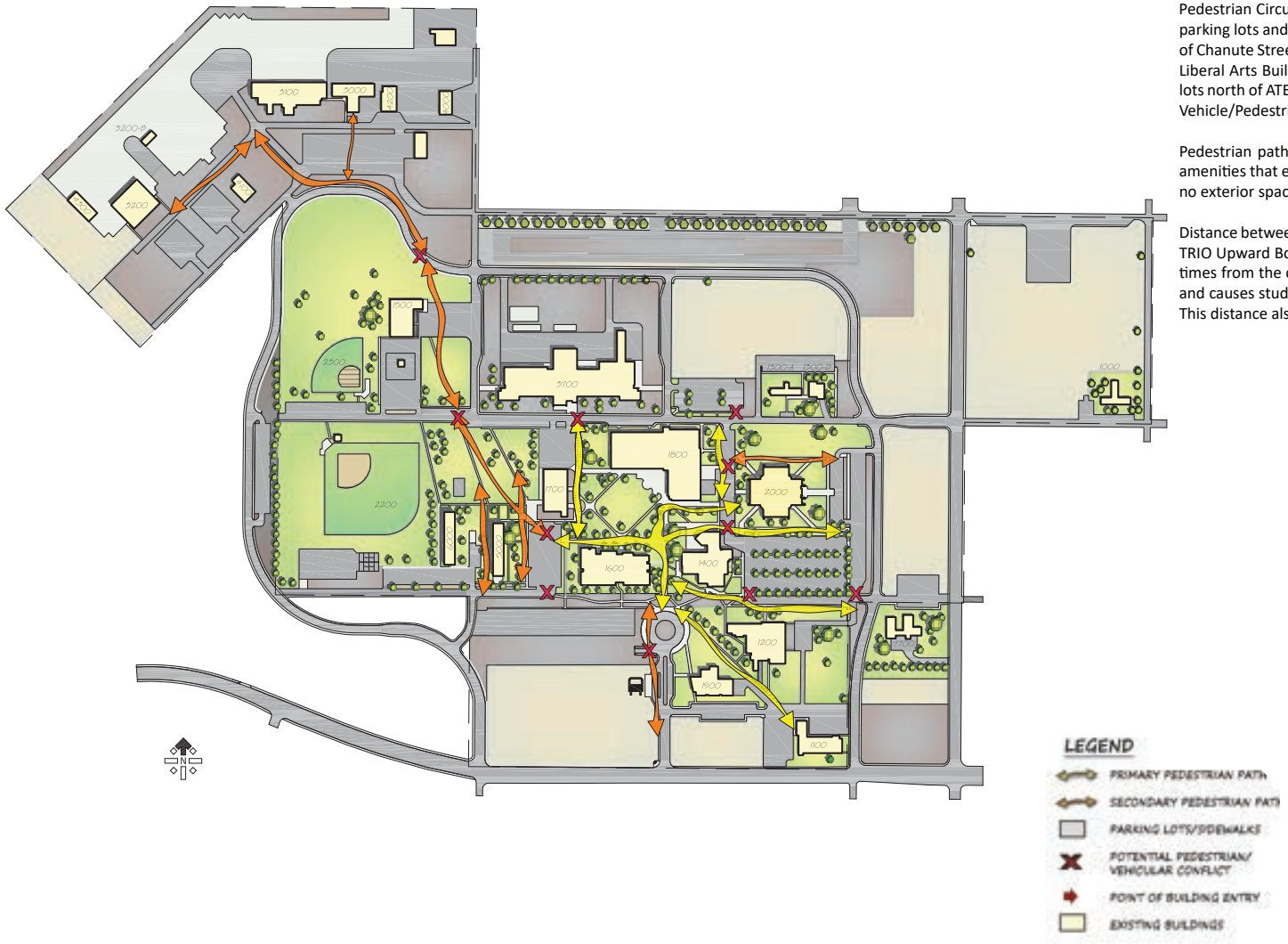
Vehicular Circulation – From a vehicular circulation point of view, several issues require attention. The location of the Big Bend Campus causes students to rely heavily on personal automobiles as the primary way of getting to campus. Past campus improvements have catered to this trend as expansive parking lots have been placed close to major buildings. The continuation of this planning practice will diminish the pedestrian nature of the campus.

Upon arriving at campus, there are eight main vehicle entry points, none of which is clearly defined as a main entry. Some roads are underdeveloped and require paving to be considered useful campus linkages. The new college parkway creates a campus edge, but lacks mature, developed landscaping that would better define it as a boundary. Signage could also be improved along the perimeter drive and secondary streets to better facilitate way finding.

Parking is abundant and free to students, faculty, and visitors. It is evenly dispersed around campus and is close to major buildings. However, two parking lots (north along Bolling St. and the 30th Ave. entrance to campus) are at the perimeter of campus and present safety and security issues, especially at night.



Current Conditions
CIRCULATION PEDESTRIAN



Pedestrian Circulation – For pedestrian access, there is good connectivity between parking lots and buildings. Three areas of concern though are the parking lot north of Chanute Street, the lot north of Wallenstein, and the lot west of the Business and Liberal Arts Building, where pedestrian paths cross parking lots. Also, the parking lots north of ATEC and adjacent to Smith Hall require the pedestrian to cross streets. Vehicle/Pedestrian conflicts can occur at these locations.

Pedestrian paths are abundant on campus, yet there is a shortage of pedestrian amenities that encourage informal gatherings. Outside of the ATEC plaza, there are no exterior spaces that promote social interaction.

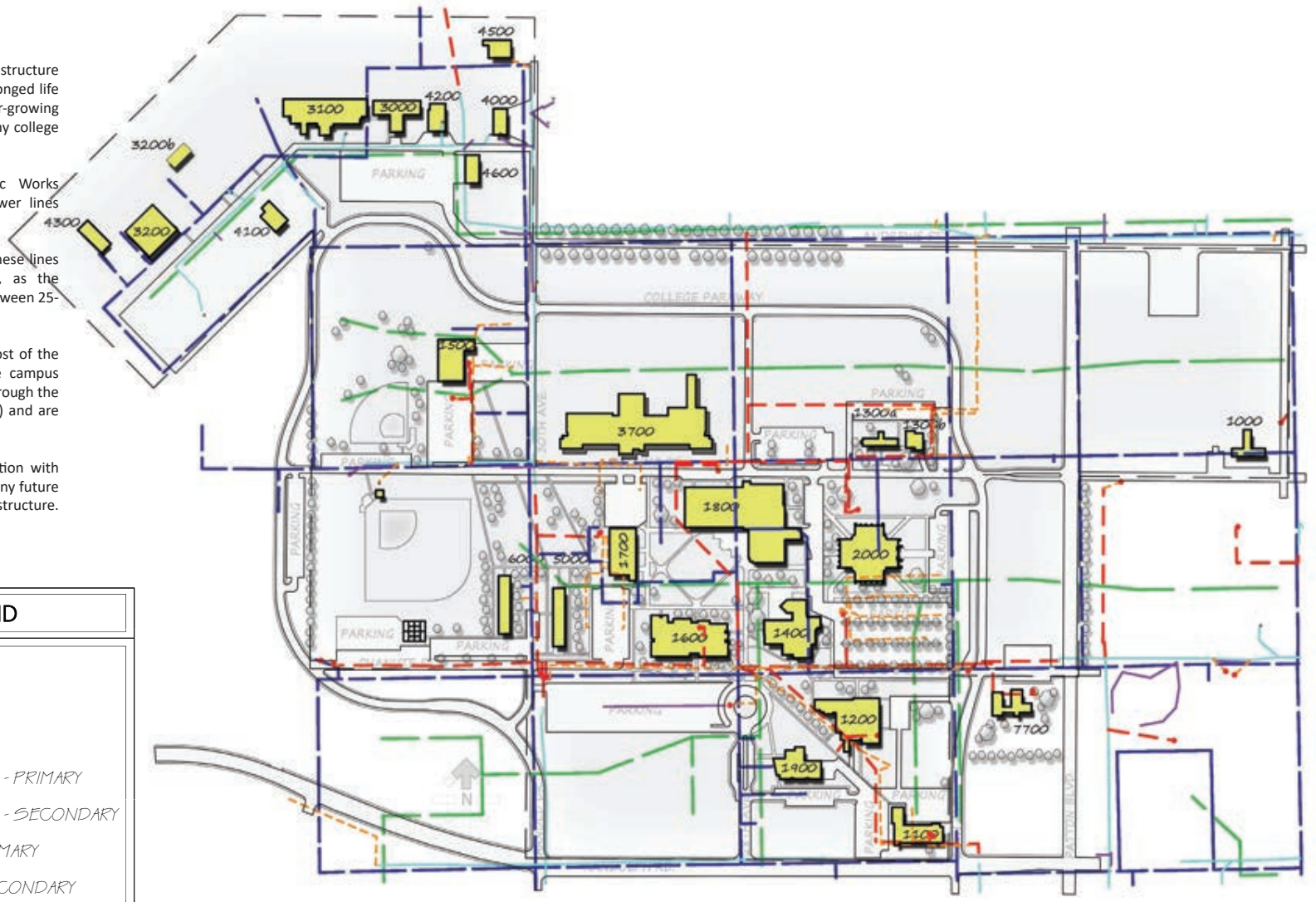
Distance between campus is also a concern. The Aviation, Workforce Education, and TRIO Upward Bound buildings are all located at the perimeter of campus. Walking times from the center of campus from these facilities ranges between 6-8 minutes and causes students of the programs to be disconnected from the core of campus. This distance also limits access to public transit for these students and faculty.

Current Conditions
INFRASTRUCTURE

INFRASTRUCTURE

It is important to undergo routine infrastructure maintenance and upkeep to ensure the prolonged life of water, sewer, and power utilities. In an ever-growing technological age, power is a necessity for any college campus.

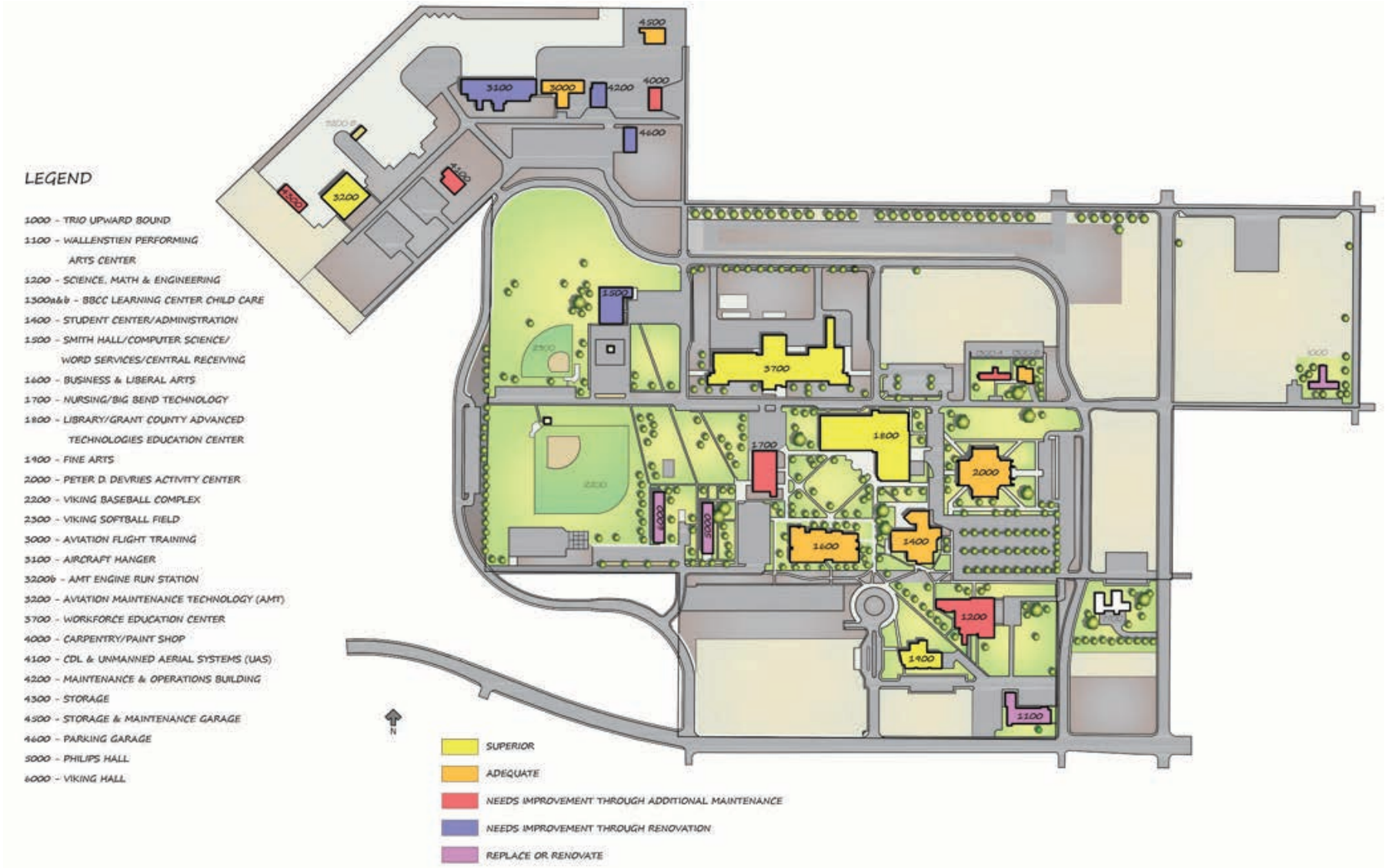
- According to the Moses Lake Public Works Department, the known water and sewer lines were installed in 1956 by the Air Force.
- It is very important to keep an eye on these lines and expect future required upgrades, as the average useful life for these utilities is between 25-50 years.
- As shown on the infrastructure map, most of the power lines run underground near the campus core. All of these lines are maintained through the Grant County Public Utility District (PUD) and are subjected to a 10-year performance test.
- The college needs to work in collaboration with Grant County PUD to take advantage of any future upgrades to incorporate a stronger IT infrastructure.



INFRASTRUCTURE LEGEND

- COLLEGE
- SEWER
- WATER
- POWER UNDERGROUND - PRIMARY
- POWER UNDERGROUND - SECONDARY
- POWER OVERHEAD - PRIMARY
- POWER OVERHEAD - SECONDARY

Current Conditions
FACILITY CONDITION MAP



Current Conditions
FACILITY CONDITION REPORT

Comparing Big Bend's Campus

Each biennium the Washington State Board of Community and Technical Colleges (SBCTC) does a Facility Condition Study on all 34 Campuses. The condition of each campus and building is measured using the same scoring system. In comparison to the SBCTC system of 34 Colleges, for 2019 Big Bend Community College scored last. The average campus weighted score for 2019 was 244, Big Bend scored 303, but from 2019 to 2021 BBCC improved to 290 with the completion of WEC, AMT, and the demolition of: 3200 Old AMT, 3300 Hangar, 3400, 3500, and 3600.

The table below summarizes Big Bend Community College's Campus. The Campus features 549,746 gross square feet with approximately 280,000 being assignable by the state. Capital acquisition and improvement costs at nearly $70,500,000 and the estimated replacement cost is over $178,500,000.

The State ranks 12 of the 26 buildings placed in service as "adequate or superior." Ten are rated, "replace or renovate." Three of those facilities are scheduled to be replaced in the 2023-2025 Biennium as part of the new Health Science and Performing Arts Center (HS&PAC).

Building #	Building Name	Yr Built	Yr Occupied	50 Yrs Old	Last Renovated	GSF	ASF	Acquistion Cost	Total Cost	2019 Score	2021 Score	State Status	State Estimated Replacement Cost	Master Plan Recommendation
3700	Workforce Education Center	2019	2020	2069		122,900	78,471	$ 37,236,064	$ 37,236,064	N/A	146	0. Superior	$ 46,579,100	
1900	Fine Arts	2008	2008	2058		13,568	9,404	$ 3,300,606	$ 3,300,606	146	146	0. Superior	$ 5,142,272	Exterior Connectivity
3200	Aviation Maintenance Tech	2019	2020	2069		18,198	16,424	$ 5,514,870	$ 5,514,870	N/A	146	0. Superior	$ 6,897,042	Note: Not on the 2021 FCS, 2021 Score, Status, and Replacement Costs are estimated as a new facility
1800	Grant County ATEC & Library	2004	2004	2054		66,935		$ 14,151,473	$ 14,151,473	154	161	0. Superior	$ 24,163,535	
3000	Aviation & Flight Training	1955	1977	2005	2003	11,564	8,138	$ 24,342	$ 1,791,571	179	179	1. Adequate	$ 4,382,756	
4500	Grounds Building			50		5,500	0			203	203	1. Adequate	$ 1,048,800	
4600	Van Storage	2006	2006	2056		2,667	0			203	203	1. Adequate	$ 532,000	
3200B	AMP Engine Run Station	2004	2004	2054		1,320	1,260	$ 104,159	$ 104,159	216	216	1. Adequate	$ 167,640	
1300B	BBCC Learning Center & Child Care	2004	2004	2054		3,302	2,304	$ 157,230	$ 157,230	232	219	1. Adequate	$ 835,406	
1600	Business & Liberal Arts	1985	1985	2035	2014	17,760	12,148	$ 1,459,734	$ 1,462,834	229	232	1. Adequate	$ 6,411,360	Renovation and Addition
1400	Student Center, Administration, & Bookstore	1959	1970	2009	2013	33,689	22,076	$ 110,776	$ 1,540,080	226	234	1. Adequate	$ 10,385,419	Continue Phased Renovations
2000	Peter DeVries Activity Center	1981	1981	2031		44,458	26,413	$ 2,779,963	$ 2,980,411	260	260	1. Adequate	$ 14,893,430	Renovation and Addition
1300A&B	BBCC Learning Center & Child Care	A-1959 B-2004	A-1978 B-2004	A-2009 B-2054	A-1978	6,922	4,932	$ 173,192	$ 173,192	266	248	1. Adequate / 2. Additional Maintenance	$ 1,751,266	Renovation / Replacement Note: Scores are averaged
4100	CDL & Unmanned Aerial Systems (UAS)	1955	1966	2005		4,860	3,531	$ 21,561	$ 21,561	277	288	2. Additional Maintenance	$ 1,569,780	Use for Program Startups
1200	Science, Math, Engineering	1961	1975	2011	2013	27,257	19,791	$ 40,149		307	292	2. Additional Maintenance	$ 12,783,533	Continue Phased Renovation
4300	Storage - Behind 3200	1976	1976	2026		3,600	2,000	$ 11,052	$ 11,052	307		2. Additional Maintenance	$ 695,101	
1500	Computer Science - Smith Hall	1952	1966	2002	1991	24,468	12,425	$ 99,986	$ 585,316	332	326	2. Additional Maintenance	$ 8,832,948	Replace
1700	Allied Health	1952	1975	2002	1995	24,464	12,646	$ 109,476	$ 420,615	350	356	2. Additional Maintenance	$ 9,271,856	Replace - Funded 2023-25 PRR
1000	TRIO Upward Bound	1959	1966	2009	1995	5,091	2,847	$ 23,047	$ 165,966	369	369	3. Renovation	$ 1,837,851	Replace - Funded 2023-25 PRR
4200	Maintenance and Operations Building	1955	1966	2005		9,312	5,164	$ 21,561	$ 21,561	384	392	3. Renovation	$ 3,119,520	Renovation or Replacement
4000	Carpentry Shop/Paint Shop	1955	1970	2005		4,606	4,000	$ 20,163	$ 20,163	396	396	3. Renovation	$ 1,022,532	
1100	Wallenstein Theater	1959	1966	2009	2007	13,180	10,046	$ 58,471	$ 382,571	407	398	3. Renovation	$ 5,324,720	Replace - Funded 2023-25 PRR
3100	Aircraft Hangar	1956	1966	2006		30,251	25,333	$ 126,418	$ 138,626	405	415	3. Renovation	$ 10,527,348	Renovation and Addition
180SC1	South Campus Shop	1972	2004	2022		2,400	0	$ 90,094	$ 92,094			3. Renovation	$ 379,200	Estimate from 2013
5000	Phillips Hall	1963	1975	2013		25,737	0	$ 112,949	$ 112,949			3. Renovation		Replace
6000	Viking Hall	1963	1975	2013		25,737	0	$ 112,949	$ 112,949			3. Renovation		Replace
	Averages/Totals					**549,746**	**279,353**	**$ 65,860,285**	**$ 70,497,913**	**285**	**265**		**$ 178,554,415**	

TRIO Upward Bound

1000

FAST FACTS:
5,091 square feet
Year Built: 1959
Recommendation: Replace

Prior Renovation: 1974

STRENGTHS

- *Large Reception area to be used for informal learning and increased interactions*

WEAKNESSES

- *Undersized inflexible space - small and odd-shaped spaces*
- *Disengaged from campus - does not allow for community engagement*
- *Concrete cracking & concrete masonry units (CMU) in poor condition*
- *Roof needs replacement*
- *Mechanical & Electrical Systems poor*
- *Finishes are in poor condition*
- *Code issues (accessibilty)*
- *Building has outlived useful life*

OPPORTUNITIES

- *Renovate and reuse for a program that does not need regular engagement with campus life & community*
- *Moving Testing to campus creates the opportunity to co-locate program with Basic Skills, tutoring labs and other student services to maximize adjacencies and efficiencies*

RISKS OF NON-ACTION

- *Student Success is not being optomized*
- *Students remain isolated*
- *Exposure to other programs limited*
- *Access to student services and resources remains an obstacle*
- *Lower student retention*
- *Economic Development fails to reach full potential*
- *Building remains uninviting*

CLASS	TYPE OF SPACE	SF	NO. OF ROOMS	AVERAGE ROOM SIZE	NO. OF STATIONS	AVERAGE ASSIGNABLE SF
A2	CLASS LABORATORIES	2,013	3	523	54	37
F1	FACULTY SERVICES	556	6	92.67	4	139
E1	LEARNING RESOURCE	278	1	278	5	55.6

ASSIGNABLE SQUARE FOOTAGE	2,847
TOTAL SQUARE FOOTAGE	5,091
EFFICIENCY	56.0%

HISTORY

The TRIO Building was originally designed in 1959 as a dental clinic. In 1974, it was renovated to serve the College's Allied Health programs and in 2009, began housing Big Bend's WorkFirst Program. In 2011, it became the College's Testing Center.

FUTURE OUTLOOK

The facility has outlived its useful life. All major components and finishes in this facility are in poor condition.

Testing Center

FLOOR PLAN - EXISTING

VICINITY MAP

Performing Arts

1100

FAST FACTS: Arts Zone
13,180 square feet
Year Built: 1959
Recommendation: Replace

Prior Renovation: 2007

STRENGTHS
- *Interior finishes are serviceable*
- *Location is near the center of campus*
- *Incorporates informal learning space*
- *Offers an Auditorium*

WEAKNESSES
- *Sole purpose inflexible design - does not work for modern day instruction*
- *Orchestra pit and stage are undersized*
- *Poor outdated technology infrastructure*
- *HVAC System is inefficient and noisy*
- *Poor lighting throughout*
- *Unattractive and uninviting exterior*
- *Code Issues - Accessibility*
- *No informal learning areas*

OPPORTUNITIES
- *Replace with modern day performance art building*
- *Big Bend culture strongly values music and arts programs*
- *This is the only performing arts facility in the area and has tremendous possibility of growth*
- *Create adjacencies and program strength by locating in close proximity to the Fine Arts*

RISKS OF NON-ACTION
- *College forced to reduce quality of music and performing arts programs*
- *Community connectivity reduced*
- *Future funding from community could be affected*

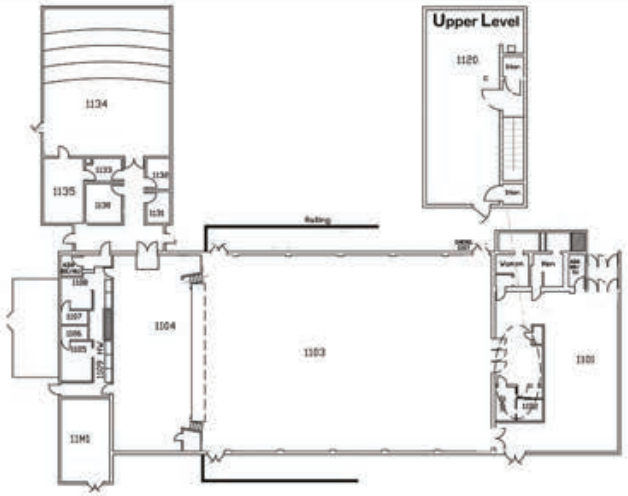
CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.
C2	MUSIC	1,956	4	489	37	52.87
C3	DRAMA	2,073	6	346	1	346
C4	AUDITORIUM	5,642	1	5,642	688	8.2
F1	FACULTY OFFICE	201	2	100.5	2	100.5
ASSIGNABLE SQUARE FOOTAGE			10,046			
TOTAL SQUARE FOOTAGE			13,180			
EFFICIENCY			76%			

HISTORY
The building was originally built in 1959 to serve as the military base theater. A music practice room was added in 1973. In 2007, the project was funded for renovation but funds were used to build the new Fine Arts Building (1900).

FUTURE OUTLOOK
The consultant team recommends replacing the Wallenstien Theater in 2021. Currently, the theater is unattractive and uninviting. Big Bend's strong music culture is a source of pride for the area and a strong connection that the college shares with the surrounding community. Replacement of the facility will allow the college to strengthen ties with the community and grow its Performing Arts programs.

Performing Arts

FLOOR PLAN - EXISTING



VICINITY MAP

Science, Math, Engineering

1200

Fast Facts: STEM Zone
27,257 square feet
Year Built: 1961
Recommendation: Future Renovation Project
Prior Renovation: 1997

STRENGTHS
- *Large facility housing science and math programs in one facility*
- *Located in the Campus Core*
- *Large Classrooms*
- *STEM Learning Center with Informal Learning*
- *Large Computer Lab*
- *New Chemistry Lab*
- *Surrounding Green Space*

WEAKNESSES
- *Access to technology is poor, and labs are outdated*
- *Multiple renovations have created a maze*
- *Poor floor plan*
- *Adjacencies limit interdisciplinary collaborations and interaction space*
- *Some uninviting rooms with odd shapes and sizes*
- *Poor daylighting, acoustics, indoor air quality*
- *Inefficient Mechanical & Electrical Systems*
- *Buildings merged without careful planning*

OPPORTUNITIES
- *Renovate remianing science labs*
- *Add future Planetarium*
- *Create atmosphere that blurs line between lab and classroom*
- *Continue growing connnections with K-12 , Higher Ed. and Industry*
- *Look at faculty office layouts and rework to create more collaborative environment*
- *Greenhouse Upgrade*

RISKS OF NON-ACTION
- *Continuation of science classes being taught in less than ideal conditions*
- *Value of science education not being seen and/or felt throughout campus*
- *Ties with Allied Health and other programs not being maximized*
- *Recruitment challenges, both instructor and student*
- *Loss of more skilled workforce*
- *Ties with K-12 and community not being maximized*

CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.
A1	GENERAL CLASSROOM	6,705	8	838	301	21.82
A2	BASIC SKILLS	1,507	1	1419	50	28.38
B1	SCIENCE LABS	5,763	6	961	231	35.25
B1, B3, B5	CLASS LABORATORY SERV.	2,361	12	197		
B4	COMPUTER LABS	617	1	617	27	22.85
F1	FACULTY OFFICE	1,709	15	113.93	17	100.53
	ASSIGNABLE SQUARE FOOTAGE		18,662			
	TOTAL SQUARE FOOTAGE		27,257			
	EFFICIENCY		68.0%			

HISTORY
Originally this building served as a bowling alley. In 1973, it was converted to a science building and in 1994 and 1999, major additions were made for new laboratories and classrooms. In 2013, the College opened its new STEM Center. The STEM Center is growing the Science and Math programs and providing space needed to connect students and instructors in active learning. Interest in Science and Mathematics is growing. Connections with K-12, Industry and Higher Education is growing.

FUTURE OUTLOOK
The College has been systematically upgrading this facility as funding allows. The facility is becoming the go-to place on campus for studying alone and in small groups. Another major Science Laboratory Renovation is needed to complete the transition. The addition of a Planetarium would be beneficial to programs and strengthening ties with K-12, Industry, and the surrounding community.

Science, Math, Engineering

FLOOR PLAN - EXISTING

VICINITY MAP

Early Childhood Development Center

1300A&B

Fast Facts: Childcare Zone
Building A - 3,620 square feet Building B - 3,302
Year Built: Building A - 1959 Building B - 2004
Recommendation: Future Renovation Project

STRENGTHS
- *Location near campus core*
- *Visibility*
- *Outdoor areas*

WEAKNESSES
- *Access*
- *Adaptability*
- *Health & Safety - heaters*
- *Thermal Comfort*
- *Indoor Air Quality*
- *Circulation Space*
- *Visibility of all areas*

OPPORTUNITIES
- *Fix immediately for safety and health*
- *Increase security, provide viewing areas*
- *Create strong interaction environment for students and parents*
- *Small size of facility allows for inexpensive renovation*
- *Create an inviting facility that visually and spatially connects the interior and exterior*

RISKS OF NON-ACTION
- *Possible safety risk*
- *Condition may cause decreased usage by students and their children*
- *Parenting skill levels decrease*
- *Lower achievement rates for the next generation*
- *Children are provided for in less than a safe and healthy environment*
- *Program Closes*

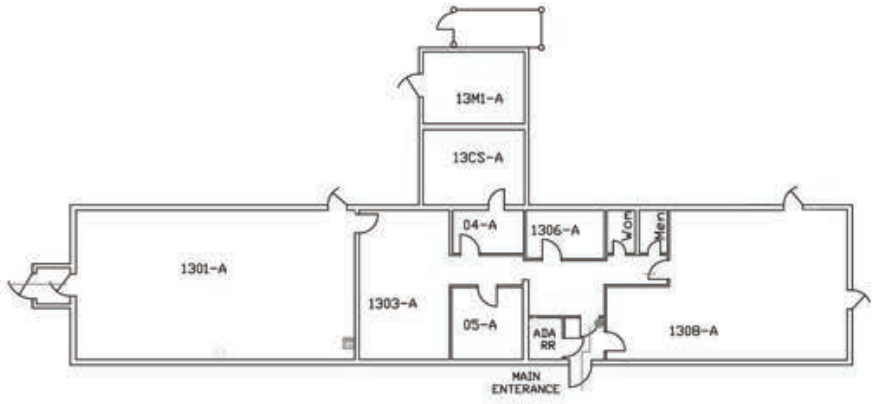
CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.
A2	CLASS LABORATORY	4,190	7	598.57	86	48.72
B1	CLASS LABORATORY SERV.	245	2	122.5		
F1	FACULTY OFFFICE	497	4	124.25	4	124.25
ASSIGNABLE SQUARE FOOTAGE			4,932			
TOTAL SQUARE FOOTAGE			6,922			
EFFICIENCY			71.25%			

HISTORY
This facility was originally built with concrete masonry in 1959 and remodeled in 1974. The facility has CMU interior walls that limits flexibility.

FUTURE OUTLOOK
Adults are returning to the College for skill enhancement and new career opportunities. As the average college age increases, so does the likelihood of students needing access to high-quality affordable childcare.

Demand is increasing for programs that educate and support parents to raise their families in emotionally healthy ways, so that their children can thrive personally, socially and academically.

FLOOR PLAN - EXISTING



VICINITY MAP

Student Center, Administration

1400

Fast Facts: Administration, Student Services Zone
32,153 square feet
Year Built: 1959
Recommendation: Continue Phased Renovation
Prior Renovation: 1993

STRENGTHS

- *Location is central to campus*
- *Interior finishes are in good condition*

WEAKNESSES

- *Recent additions/renovations addressed interior finishes but negleted the building envelope and some functional aspects of the building layout. Exterior is uninviting*
- *Boiler system and exterior glazing are original components of the building*
- *Facility lacks a fire alarm and automatic sprinkler system*
- *Student lounge is undersized, underutilized and lacks access to natural daylight*
- *Elevator in poor condition*

OPPORTUNITIES

- *Relocating the student lounge would increase usable office/ student services space*
- *Open up Student Services to create inviting One-Stop Resource Center. Consider repurposing and relocating Book Store*
- *Addition of fire alarm/sprinkler system as life safety improvements*
- *Increasing student recreation opportunity will keep students on campus longer and increase interactions with peers and instructors*
- *Exterior improvements*

RISKS OF NON-ACTION

- *Operational costs will continue to increase if building systems and envelope are not made more efficient*
- *Acoustics and thermal comfort affects performance and postitive influences*
- *The disconnect of some student ammenities may lead to underutilization*
- *Student retention and recruitment may decrease due to the lack of student recreation opportunities*

CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.
A1	INTERACTIVE CLASSROOM	774	1	774	40	19.35
H1	MERCH. & FACILITY SERV.	2,962	4	740.5		
H1	RECREATIONAL FACILITIES	1,293	1	1,293		
H1	RECREATIONAL FACIL. SVC.	35	1	35		
H1	LOUNGE	581	1	581		
H1	STUDENT ASSISTANCE	409	2	204.5		
F1	FACULTY OFFICE	14,099	60	234.98		
G2	DP COMMUNICATIONS	150	1	150		
G1	CONFERENCE ROOMS	854	3	284.67		
ASSIGNABLE SQUARE FOOTAGE			21,312			
TOTAL SQUARE FOOTAGE			32,153			
EFFICIENCY			66.0%			

HISTORY

The 1400 Building was constructed in 1959 and an addition / renovation was completed in the 1990s, although the renovation did not address some of the functional issues of the existing facility. Finishes and some function were upgraded in 2010. In 2013, the Student Success Center was renovated. A small addition was added to increase student informal and group studying. The boiler system, exterior finishes, and glazing are original to the building.

FUTURE OUTLOOK

Although recent renovations improved the appearance of interior finishes, some current uses of the facility are incompatible with its original design.

The student lounge is a dark and small space that may be better placed in the future Global Learning Opportunity Center.

MAIN FLOOR PLAN - EXISTING

UPPER FLOOR PLAN - EXISTING

VICINITY MAP

Smith Hall
1500

Fast Facts: Computer Science
24,468 square feet
Year Built: 1952
Recommendation: Future Replacement Project
Prior Renovation: 1991

STRENGTHS
- *Houses computer labs and classrooms*
- *Houses Central Receiving & Word Services (print shop)*

WEAKNESSES
- *Safety*
- *Accessibilty*
- *Inefficent*
- *Inflexible*
- *Daylighting minimal*
- *Disengaged from campus core*

OPPORTUNITIES
- *Replace facility as a modern day computer science facility*
- *Relocate in the core of campus*
- *Look at placing Computer Science in the future PTE Center*
- *Create functional, sustainable facility or space that will attract and grow the computer science program at Big Bend*
- *Create effective adjacencies and interdisciplinary engagement*
- *Look at possibility of co-locating Big Bend Technology Department in close proximity to Computer Science program*

RISKS OF NON-ACTION
- *Computer Science remains housed in a facility disengaged from other beneficial programs and the campus core (student life)*
- *Big Bend's ability to grow the computer science program is limited*
- *Beneficial interdisciplinary interactions are limited*
- *Business and Industry demand for Computer Science Graduates is not met*
- *Students are likely to choose other colleges*

CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.
A1	GENERAL CLASSROOM	3,875	7	553.57	20.57	26.91
B2	CLASS LABORATORY	2,375	6	395.83	15	26.39
F1	FACULTY SERVICES	2,634	9	292.67	9	292.67
I1	CENTRAL SUPPORT	3,541	9	393.44	9	393.44

ASSIGNABLE SQUARE FOOTAGE	12,425
TOTAL SQUARE FOOTAGE	24,468
EFFICIENCY	51.0%

HISTORY
This facility has served as a dining hall for the dormitory and as a classroom facility for instructional purposes. Due to the condition of this facility and its inability to flex to accomodate modern day instructional methodologies, replacement is recommended.

FUTURE OUTLOOK
In the Big Bend service area there is a strong need for graduates with computer science skills. The replacement of the 1500 facility will allow the college to develop a state-of-the-art Computer Science program located at the heart of the College Campus. Student-to-student and student-to-instructor exchanges will increase. Interdisiplinary exchanges will be more likely to occur.

The College may consider housing this program in the future Professional Technical Education Center.

Smith Hall

LOWER FLOOR PLAN - EXISTING

MAIN FLOOR PLAN - EXISTING

VICINITY MAP

Business & Liberal Arts

1600

Fast Facts: Administration, Student Services Zone
17,760 square feet
Year Built: 1985
Recommendation: Future Renovation Project
Prior Renovation: NA

STRENGTHS

- *Upgrades to finishes and Mechanical Systems are complete throughout facility*
- *Facility provides classroom space at the core of campus*
- *Informal learning area*

WEAKNESSES

- *Masonry interior walls limit adaptability and expansion*
- *Hard interior finishes are uninviting and create accoustical issues*
- *Masonry construction limits upgrades to technology*
- *Some classrooms are small and configured poorly. Space does not meet current instruction needs*
- *Some classrooms are so uninviting that they are not used*
- *Faculty offices are removed from easy student access*
- *Informal area blocks flow of traffic*

OPPORTUNITIES

- *Provide modern, adaptable classroom space that integrates technology*
- *Integrate a Resource Learning Center into the facility*
- *Captialize on location at campus core in the development of a sustainable, walkable campus*
- *Increase classroom size by strategically adding on to the exterior*
- *The development of the campus core will increase demand for modern, adaptable classroom space*

RISKS OF NON-ACTION

-Not providing more modern classroom space as the campus core develops will lead to a deficiency in classroom space and underutilization of this facility
-Inability to provide a high level of modern educational opportunites

CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.
A1	GENERAL CLASSROOM	6,488	9	721	30	23.92
B2	CLASS LABORATORY	1,136	2	568	37	30.91
B4	COMPUTER LAB	2,464	2	1232	58	44.62
F1	ADMINISTRATION	1,734	14	124	14	124
ASSIGNABLE SQUARE FOOTAGE			11,822			
TOTAL SQUARE FOOTAGE			17,760			
EFFICIENCY			66.5%			

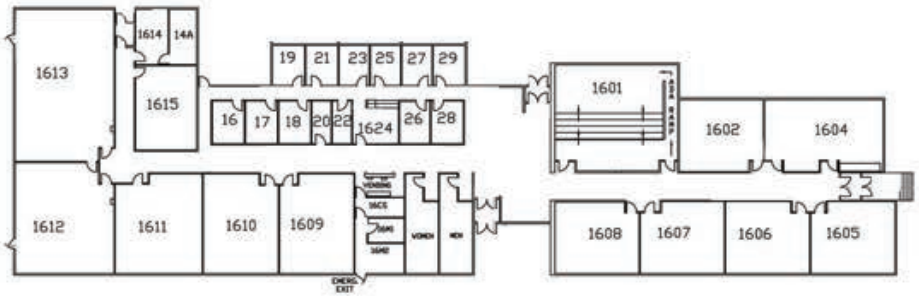
HISTORY

The 1600 Building was constructed in 1985 with no major renovations since completion. In 2015, interior finsihes and Mechanical System were upgraded. Facility is of concrete masonry construction and similar interior partitions limit its adaptability and future expansion.

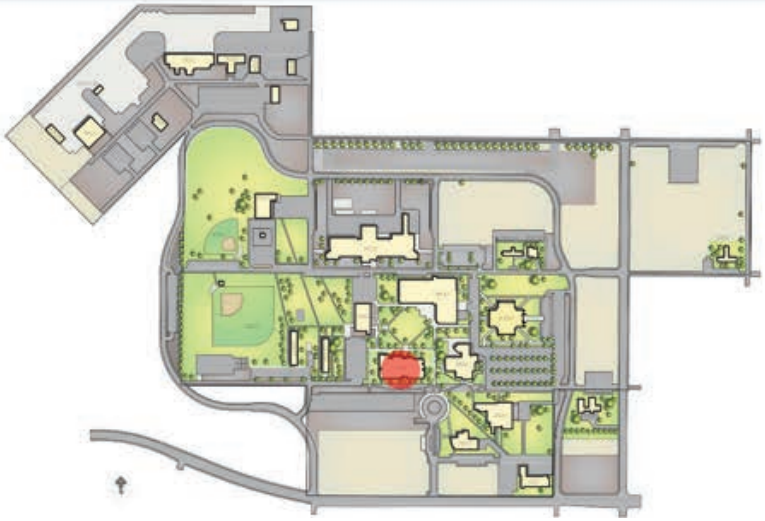
FUTURE OUTLOOK

As the main classroom facility for humanities and social sciences on campus, it is essential that the facility features modern instruction attributes. Technology and interdisciplinary interaction are necessary. Instructors strongly desire enhanced technology in all classrooms. The positive use of lecture capture has created a need for recording of all classes. This facility needs to be kept at the forefront of the technology movement.

MAIN FLOOR PLAN - EXISTING



VICINITY MAP



Allied Health
1700

Fast Facts: Nursing Zone
24,464 square feet
Year Built: 1952
Recommendation: Replace

Prior Renovation: 1995

STRENGTHS
- *Interior finishes are in good condition*
- *Location is near the center of campus*
- *Incorporates informal learning*

WEAKNESSES
- *Narrow spaces and structure limits adaptability.*
- *Accessibility, safety and code issues*
- *Poor acoustics, floor plan does not meet program requirements, poor overall efficiency*
- *Access to water does not meet program need*
- *Poor lighting and inadequate electrical service*
- *Ventilation in basement insufficient*
- *HVAC system in need of replacement*
- *Space inadequate for program use and growth*
- *Boilers in basement supporting other facilities*

OPPORTUNITIES
- *Develop new facility next to Gym.*
- *Create a Wellness, Fitness and Allied Health program that targets prevention and raising the health and wellness of the community.*
- *Create classroom and lab space designed to meet 21st century education*
- *Provide informal space to encourage interactions between students and students and staff*
- *Provide space for community connectivity*
- *Create inspiring space that showcases the program to potential students and the community*
- *Move BBT to a more effective location*

RISKS OF NON-ACTION
- *Increased operational costs as the 60-year-old building continues to age*
- *Growth in program demand will drive students to colleges with more inviting and more technologically updated facilities*
- *Inability to provide indemand specialty programs such as physical therapy may drive students to other campuses*
- *Life safety issues will persist without accessibility improvements to the basement*

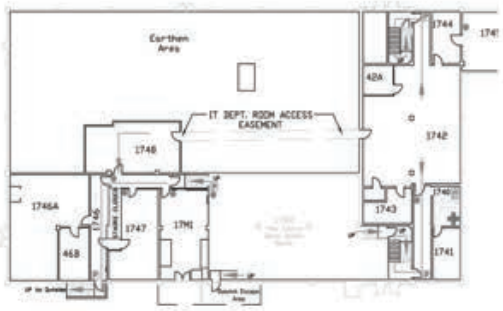
CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.
A1	GENERAL CLASSROOM	1,436	2	718	36	39.89
B2	CLASS LABORATORY	5,118	9	568.67	155	33.019
B2	CLASS LABORATORY SERV.	114	1	114	1	114
F1	ADMINISTRATION	2,314	16	144.63	16	144.63
	INFORMAL	1,644	4	411		
	IT SERVICES	2,020	3	562.67		
	UNASSIGNED	1,688				
ASSIGNABLE SQUARE FOOTAGE			12,646			
TOTAL SQUARE FOOTAGE			24,464			
EFFICIENCY			51.7%			

HISTORY
The 1700 Building was constructed in 1952 and was last renovated in 1995. It is constructed of concrete and concrete masonry. The structural grid limits its adaptability and creates narrow interior spaces. The campus technology department occupies two basement spaces separated by a mechanical pit, neither of which meets current accessibility requirements.

FUTURE OUTLOOK
Nursing is a growing program for the college with strong demand for trained professionals in the service district. They are currently producing as many students as the surrounding area can provide clinical experiences. Waiting lists are substantial, and interest in specialty programs is high. The college would like to expand its programs to offer specialty programs such as physical therapy. Staff is struggling to offer a high level of service in classrooms that are long and narrow and labs with poor electrical service, limited lighting, and no access to water. Additionally, poor HVAC systems are causing low thermal comfort.

MAIN FLOOR PLAN - EXISTING

LOWER FLOOR PLAN - EXISTING



VICINITY MAP

Advanced Technologies Education Center

1800

Fast Facts: Library/Conference Zone
Library - 30,000sf ATEC - 36,935
Year Built: 2004
Recommendation: Maintain
Prior Renovation: NA

STRENGTHS
- *Modern facility with multi-use conference spaces*
- *Provides event space for the service district*
- *Integrates technology throughout*
- *Provides a library, computer lab, and group study spaces*

WEAKNESSES
- *Facility works well for intended purpose*
- *Demand outgrowing space*

OPPORTUNITIES
- *Facility works well for intended purpose*
- *Facility could potentially serve future culinary program*

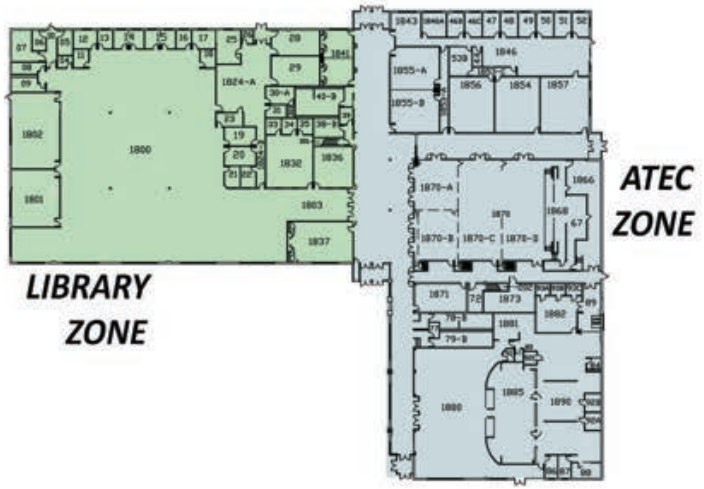
RISKS OF NON-ACTION
- *Loss of revenue*

CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.	STUDENTS PER WEEK	HOURS PER WEEK	CLASSROOM SCHEDULING EFFICIENCY
A1	GENERAL CLASSROOM	5,375	6	895.83	162	33.18			
A2	CLASS LABORATORY	1,438	2	719	65	22.12			
E1	LIBRARY	15,809	3						
E1	MEDIA PRODUCTION	1,724	4						
	STUDY ROOMS	1,108	8	138.5	36	30.78			
	MEETING ROOMS	7,536	7	1,076.57	360	20.93			
	FOOD FACILITIES	11,552	10	1,155.2					
G1, G2	ADMINISTRATION	4,591	21	218.61					
	EXHIBITION	4,000	1	4,000					
	ASSIGNABLE SQUARE FOOTAGE		53,133						
	TOTAL SQUARE FOOTAGE		66,935						
	EFFICIENCY		79.4%						

HISTORY
Built in 2004, the ATEC facility offers Grant County a conferencing center. It also serves as the campus library and food service venue.

FUTURE OUTLOOK
The ATEC Building is a unique facility for the College. It offers a conference center and is a major component in drawing the surrounding communities to campus.

FLOOR PLAN - EXISTING



VICINITY MAP

Fine Arts
1900

Fast Facts: Arts Zone
13,568 square feet
Year Built: 2008
Recommendation: None
Prior Renovation: NA

STRENGTHS
- *Modern facility with spaces for ceramics, drawing, painting, classrooms and a gallery*
- *Good integration of technology and space for networking equipment*
- *Solid structure designed and built to last*

WEAKNESSES
- *Narrow corridor and classroom spaces*

OPPORTUNITIES
- *Expand fine arts programs to attract and retain students*
- *Existing facility allows for the college to host art fairs and showcase their program to the surrounding community*

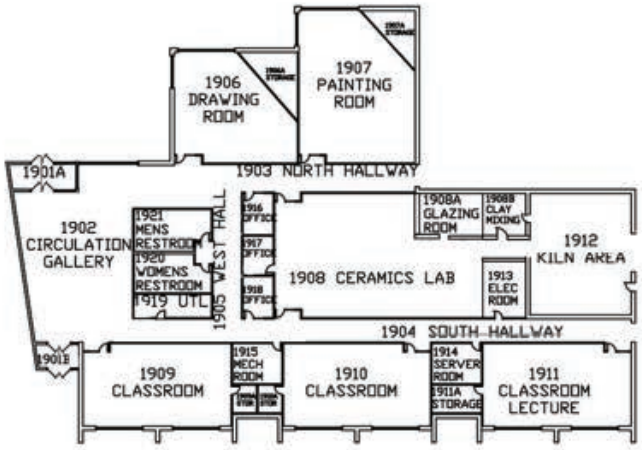
RISKS OF NON-ACTION

CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.
A1	GENERAL CLASSROOM	2,520	3	840	60	42
C1	CLASS LABORATORY	5,260	5	1,052	71	74.09
I1	INFORMAL/RECPT./DEMON.	1,277				
F1	ADMINISTRATION	347	3	115.67	3	115.67
ASSIGNABLE SQUARE FOOTAGE			9,404			
TOTAL SQUARE FOOTAGE			13,568			
EFFICIENCY			69.3%			

HISTORY
Facility is constructed of CMU and features technology throughout. Additional features include natural daylighting, lab space, classrooms, and informal gathering and demonstration areas.

FUTURE OUTLOOK
This facility is in new condition and should serve the college's art department for the foreseeable future. The display areas and areas for community engagement are strong and will allow the college to engage with the community, showcase its program, and grow.

FLOOR PLAN - EXISTING



VICINITY MAP

DeVries Activity Center

2000

Fast Facts: Athletics, Gym Zone
44,458 square feet
Year Built: 1981
Recommendation: Maintain, Minor Renovations

Prior Renovation: 2006

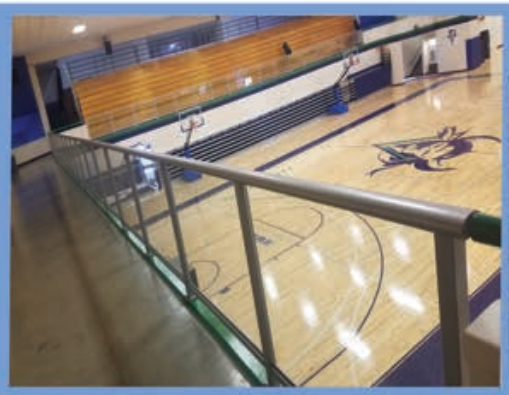
STRENGTHS
- *Size*

WEAKNESSES
- *Indoor Air Quality*
- *HVAC - No air conditioning*
- *Condition of pipes and fixtures*
- *Accessibility*
- *Exterior does not fit with college culture*
- *Space doesn't allow for student demand of amenities*

OPPORTUNITIES
- *Add Fitness and Wellness Center to the facility to better serve students and community*
- *Improve wellness of community, staff and students*
- *Create recreation hub and engage surrounding community with college*

RISKS OF NON-ACTION
- *Decreased connectivity with community*
- *Students attend colleges with more amenities*
- *College Athletic program loses its reputation*

Lorem Ipsum



CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.
A1	GENERAL CLASSROOM	1,168	2	584	51	22.90
H3	ATHLETIC/PE SERVICE	5,641	17	331.82		
H3	ATHLETIC	18,222	6	3,037		
H3	ATHLETIC SEATING	594				
H3	ACADEMIC/STAFF	788				
ASSIGNABLE SQUARE FOOTAGE			26,413			
TOTAL SQUARE FOOTAGE			44,458			
EFFICIENCY			59.4%			

HISTORY

In 2017, BBCC updated the railing around the upper level. The original railing was not up to current code, was a safety hazard, and causing structural damage. The weight of the CMU railing wall on the second floor of the gymnasium was causing instability. The wall was demolished and replaced with the ClearVue Railing System utilizing aluminum extrusions and glass infill, therefore reducing the weight. Additional supports were also installed allowing for the college to keep the balcony portion of the second floor.

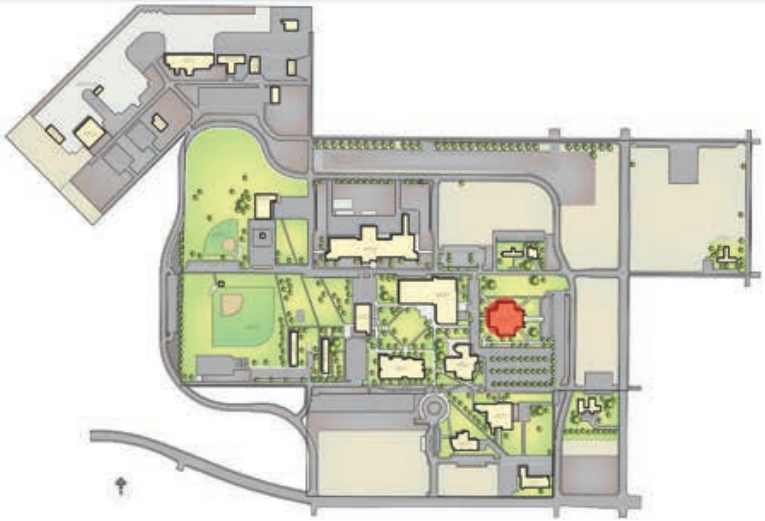
FUTURE OUTLOOK

Many students choose BBCC because of the athletics department. Facilities need to be upgraded in order to serve students properly. Demand for additional treadmills and weight equipment was clear in a recent student survey. The facility is in need of upgrades to the HVAC system and replacement of fixtures throughout.

MAIN FLOOR PLAN - EXISTING

UPPER FLOOR PLAN - EXISTING

VICINITY MAP



Aviation Flight Training Center

3000

Fast Facts: Aviation Zone
11,564 square feet
Year Built: 1955
Recommendation: None
Prior Renovation: 2004

STRENGTHS
- *Location*
- *Condition*
- *Floor plan fits program*

WEAKNESSES
- *Disengaged from campus core*

OPPORTUNITIES
- *Facility meets the needs of the program*

RISKS OF NON-ACTION
- *None*

CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.
D1	INDIVIDUAL CLASS LAB	263	1	263	20	13.15
D1	NON SCHED CLASS LAB	2,246	4	561.5		
D1	CLASS LABORATORY SERV.	2,183	1	2,183		
F1	ACADEMIC/STAFF	3,446	24	143.58	24	143.58
ASSIGNABLE SQUARE FOOTAGE			8,138			
TOTAL SQUARE FOOTAGE			11,564			
EFFICIENCY			70.4%			

HISTORY

The original structure was built in 1955. In 1995 and in 2004, the building received a complete renovation.

FUTURE OUTLOOK

The renovated facility is in great condition and meeting program needs. As the program grows and complementary programs grow, such as Aviation Maintenance, the college may look for ways to create more student-to-student and student-to-instructor interactions. In addition, the parking areas around the building are in poor condition.

FLOOR PLAN - EXISTING

VICINITY MAP

Aircraft Hangar

3100

Fast Facts: Aviation, Power Plant & Air Frame Zone
30,251 square feet
Year Built: 1956
Recommendation: Replacement project
Prior Renovation: 1992

STRENGTHS

- *Facility has large, open space to house the College's aviation training fleet*
- *Location next to Building 3000 Aviation*

WEAKNESSES

- *The original design, although ideal for aircraft storage, is incompatible with its additional use as an aircraft maintenance shop*
- *Exterior and interior finishes are in need of immediate attention/repair*
- *The high ceiling height is inefficient for heating/cooling*
- *Mezzanine levels do not comply with current accessibility requirements*
- *No fire suppression system*

OPPORTUNITIES

- *Consolidation in a new facility will reduce operational costs and improve program integration*
- *Maintenance spaces can be designed to meet functional needs and be adapted to changes in technology*
- *Modern facilities will help attract/retain collaborations with area industries*

RISKS OF NON-ACTION

- *Operational costs of the 56-year-old building will continue to climb, further stretching campus maintenance budgets*
- *Deferred maintenance may lead to unsafe conditions; lack of fire suppression system is an ongoing risk*
- *Functional and technological needs of aircraft maintenance will become increasingly difficult to meet in an inefficient, aging facility*
- *Possible partners and economic growth opportunities may not be realized*

CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.	STUDENTS PER WEEK	HOURS PER WEEK	CLASSROOM SCHEDULING EFFICIENCY
D1	NON SCHED CLASS LAB	3,923	1	3,923					
D1	CLASS LAB SERVICE	21,186	10	2,118.6					
F1	ACADEMIC/STAFF	224	1	224					
ASSIGNABLE SQUARE FOOTAGE			25,333						
TOTAL SQUARE FOOTAGE			30,251						
EFFICIENCY			83.7%						

HISTORY

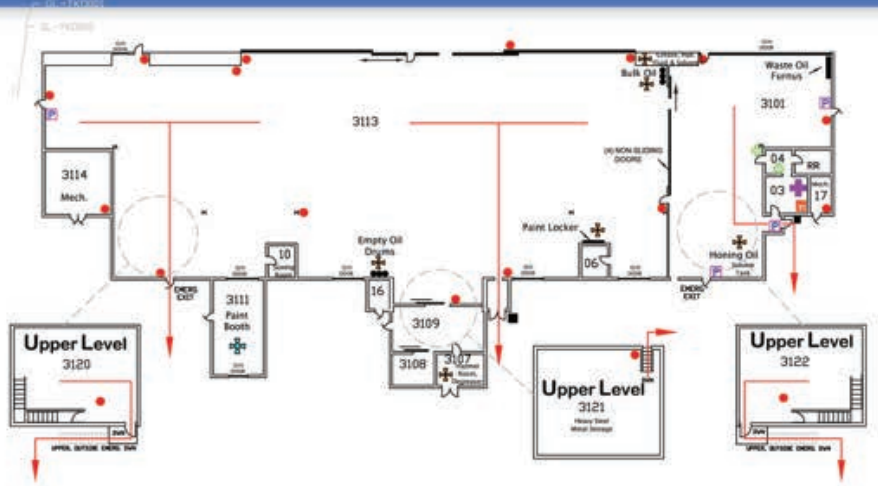
The 3100 Building was constructed in 1956 as part of Larson Air Force Base and was utilized for heavy aircraft storage. It was renovated in the 1970s to house the college's aviation fleet and maintenance shop. The facility is steel framed with metal roofing and siding.

FUTURE OUTLOOK

The age, condition and sheer size of this facility has stretched operational budgets to the point of deferring maintenance. Consolidation of the aviation programs into a single facility would reduce these costs. Therefore, the 3100 Building is recommended for replacement as a part of a new Aircraft, Airframe and Maintenance facility.

The current facility is in need of a fire suppression system due to the storage of aircraft.

FLOOR PLAN - EXISTING



VICINITY MAP

Aviation Maintenance Technology

3200 *Fast Facts: Aviation*

18,198 square feet
Year Built: 2020
Recommendation: Maintain

STRENGTHS
- *Dedicated large lab space for AMT*

WEAKNESSES
- *Large building to operate when not in full use*

OPPORTUNITIES
- *Space for lab expansion*

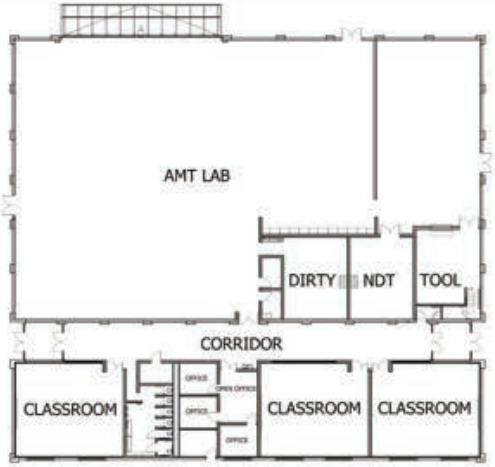
RISKS OF NON-ACTION
- *Since it is a new building, there currently are no threats*

CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.	STUDENTS PER WEEK	HOURS PER WEEK	CLASSROOM SCHEDULING EFFICIENCY
A1	CLASSROOM	2,934	3	978					
D1	VOCATIONAL LAB	11,205	2	5,602.5					
E1	LEARN. SUPPORT	1,725	5	345					
F1	FACULTY	560	4	112					
ASSIGNABLE SQUARE FOOTAGE			16,424						
TOTAL SQUARE FOOTAGE			18,198						
EFFICIENCY			90%						

HISTORY
- *The history is limited to a couple of years with minimal use; because, of close downs from Covid*

FUTURE OUTLOOK
- *Review and inspect building for warranty items*

FLOOR PLAN - EXISTING



VICINITY MAP

Amp Engine Run Station

3200B *Fast Facts:*

1,320 square feet
Year Built: 2004
Recommendation: Maintain

STRENGTHS
- Simple structure to serve it's intended purpose

WEAKNESSES
- Concrete tilt-up walls are cracking

OPPORTUNITIES
- Possible expansion to accommodate larger aircraft

RISKS OF NON-ACTION
- Wall cracks may lead to less useful life of the structure

CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.	STUDENTS PER WEEK	HOURS PER WEEK	CLASSROOM SCHEDULING EFFICIENCY
D1	CLASS LABORATORY	1,320	1	1,320					

ASSIGNABLE SQUARE FOOTAGE	1,237
TOTAL SQUARE FOOTAGE	1,320
EFFICIENCY	94%

HISTORY

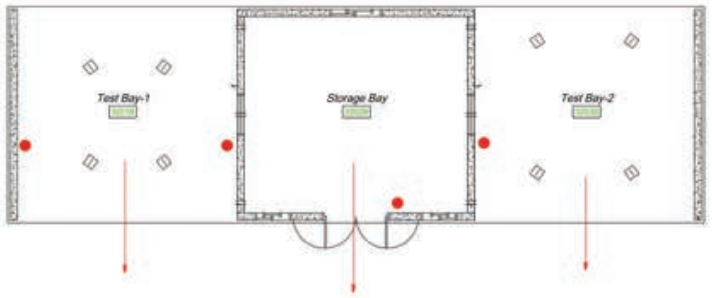
The history is that it was built in 2004 for the purpose of providing a safe secure space to test airplane engines

FUTURE OUTLOOK

General maintenance

Amp Engine Run Station

FLOOR PLAN - EXISTING



VICINITY MAP

Workforce Education Center

3700 *Fast Facts: Certified LEED Silver*

120,461 square feet
Year Built: 2020
Recommendation: Maintain

STRENGTHS
- *Accommodates large lab spaces*
- *Offers flexibility in classroom use*
- *Collaboration Lab and Innovation Lab can host many campus events*
- *Centralized campus location*

WEAKNESSES
- *Large building to operate when not in full use*

OPPORTUNITIES
- *Space for lab expansion*

RISKS OF NON-ACTION
- *Since it is a new building, there currently are no threats*

CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.	STUDENTS PER WEEK	HOURS PER WEEK	CLASSROOM SCHEDULING EFFICIENCY
A1	CLASSROOM	27,397	28	978.5					
B2	COMPUTER LAB	1,282	1	1,282					
D1	VOCATIONAL LAB	33,006	8	4,126					
F1	FACULTY	9,292	3	3,097					
H1	STUDENT CENTERS	4,632	3	1,544					
E1	LEARN. SUPPORT	1,062	1	1,062					
M1	INFORMAL LEARN.	1,800	2	900					
ASSIGNABLE SQUARE FOOTAGE			78,471						
TOTAL SQUARE FOOTAGE			120,461						
EFFICIENCY			65%						

HISTORY
- *The history is limited to a couple of years with minimal use; because, of close downs from Covid*

FUTURE OUTLOOK
- *Review and inspect building for warranty items*

Workforce Education Center

FLOOR PLAN - EXISTING

VICINITY MAP

Carpentry Shop/Paint Shop

4000

Fast Facts: Maintenance Zone
4,606 square feet
Year Built: 1955
Recommendation: Replacement - consolidate in future replacement project
Prior Renovation: NA

STRENGTHS
- *Location is away from campus traffic*

WEAKNESSES
- *Size*
- *Condition*

OPPORTUNITIES
- *Consolidate in future replacement project*

RISKS OF NON-ACTION
- *The condition is not a good reflection of the campus culture*
- *Damages the image of the college*
- *Limits ability to grow*
- *Creates potential safety health problems*

CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.	STUDENTS PER WEEK	HOURS PER WEEK	CLASSROOM SCHEDULING EFFICIENCY
I1	SHOP AREA	4,000	5	800					
ASSIGNABLE SQUARE FOOTAGE			4,000						
TOTAL SQUARE FOOTAGE			4,606						
EFFICIENCY			86.8%						

HISTORY

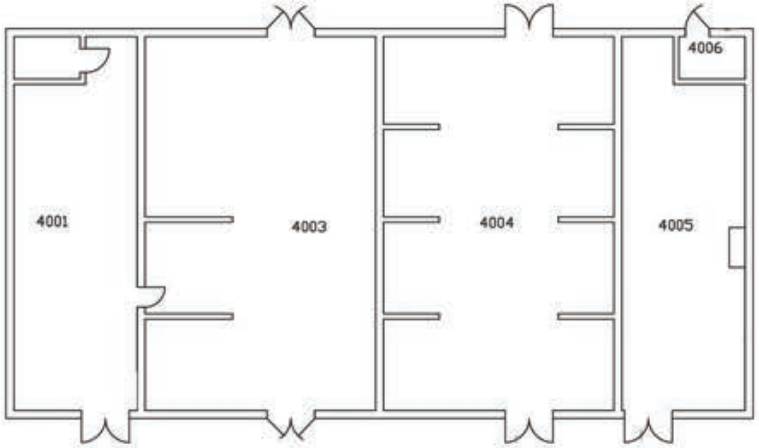
This facility originally served as an Air Force Ammunition Bunker. It is constructed of concrete walls and a concrete roof. The facility was built in 1955, and the college began using it in 1970.

FUTURE OUTLOOK

Consolidating this facility in a future renovation project will allow the college to start creating a more inviting campus atmosphere.

Paint and Carpenter Shop

FLOOR PLAN - EXISTING



VICINITY MAP

CDL & Unmanned Aerial Systems (UAS)

4100

Fast Facts: PTEC Zone
square feet: 4860
Year Built: 1955
Recommendation: Replacement

Prior Renovation: 2000

STRENGTHS
- *Interior Finishes*

WEAKNESSES
- *Exterior deteriorated*
- *Floor plan*
- *Inflexible*
- *Lighting*
- *Acoustics*
- *No program adjacencies*
- *Inefficent technology infastructure*
- *No room for collaborative and outreach opportunities*

OPPORTUNITIES
- *Relocate into future PTEC*
- *Create an industry training classroom*
- *Create a demonstration area that allows students to showcase their work*
- *Create an infrastructure that allows for today's technology and is adaptable and upgradeable to tomorrow's*
- *Bring students into an environment that maximizes student exposure, exchanges and campus life*

RISKS OF NON-ACTION
- *Students may not learn the necessary skills to compete in today's job market*
- *Students may choose other colleges*
- *Collaborative opportunities with area business and industry may not evolve*
- *Economic growth possibilities may not evolve*
- *Student pride may decrease*
- *Campus life and culture may decrease*

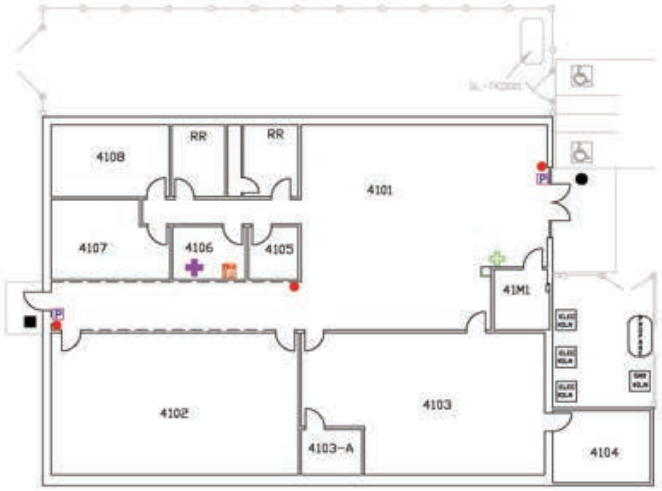
CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.
A1	CLASSROOMS, GENERAL	1,732	2	866	65	26.65
C3	CLASS LABORATORY SERV.	295	2	147.5		
C3	CLASS LABORATORY	1,404	2	702	39	40.41
F1	ACADEMIC/STAFF	360	2	180	2	180
ASSIGNABLE SQUARE FOOTAGE			3,791			
TOTAL SQUARE FOOTAGE			4,860			
EFFICIENCY			78.0%			

HISTORY
The facility was originally constructed in 1955 and remodeled in 2000 for the Fine Arts Program. The facility now houses the

FUTURE OUTLOOK
Adjusting to the new automotive trends like hybrids and advanced diagnostics requires more classroom time. It is essential that the automotive classroom be reflective of a modern learning environment. Being able to record and play back instruction will be essential for the students. Additionally, classrooms must be flexible and able to adapt to meeting the need of industry certifications and seminars. Locating the automotive program closer to campus in a "state of the art" facility will allow for increased business and industry outreach and new collaborative opportunities.

CDL & Unmanned Aerial Systems (UAS)

FLOOR PLAN - EXISTING



VICINITY MAP

Maintenance and Operations

4200

Fast Facts: Maintenance Zone
Square Feet: 9,312
Year Built: 1955
Recommendation: Replacement
Prior Renovation:

STRENGTHS
- *Location*

WEAKNESSES
- *Thermal comfort*
- *Security issues with it being near restricted air space*
- *Poor lighting*
- *Uninviting*
- *Acoustics*
- *Technology infrastructure*
- *Exterior*
- *Adoptability*
- *Maze*

OPPORTUNITIES
- *Consolidate in future replacement project*
- *Combine all facility and maintenance operations under one roof*
- *Create a facility that complements the campus*
- *Improve campus maintenance capabilities*

RISKS OF NON-ACTION
- *Increased utility usage*
- *Lower employee morale*

CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.
I1	SHOP FACILITIES	4,629	9	514		
I1	ADMIN OFFICE	141	1	141		
I1	CONFERENCE ROOM	394	1	394	7	56.29

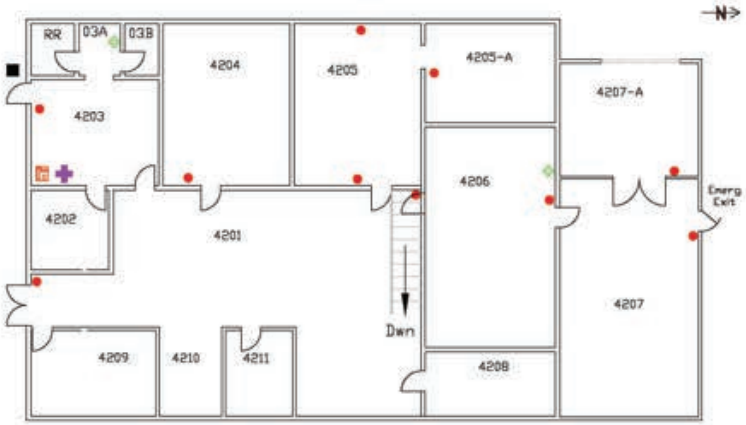
HISTORY
This facility was built in 1955. It features metal framing and siding. The building has outlived its useful life and is housing the College's Maintenance and Operations.

FUTURE OUTLOOK
It is recommended that this building be consolidated with Building 4000 Carpenter and Print Shops in a future replacement project with Aviation Maintenance.

Through strategically replacing deteriorated facilities that have outlived their useful life, the college can decrease its utility usage, decrease its overall square footage, and create a more inviting campus atmosphere.

Maintenance

FLOOR PLAN - EXISTING



VICINITY MAP

Grounds Building

4500

Fast Facts:

5,520 square feet
Year Built:Unknown
Recommendation: Maintain

STRENGTHS
- *Serves the purpose of an enclosed space for equipment storage and maintenance*
- *Low building maintenance*

WEAKNESSES
- *Lacking natural light*
- *Large space to heat/cool*

OPPORTUNITIES
- *Add windows*
- *Explore energy efficiencies*

RISKS OF NON-ACTION
- *Low employee morale*
- *Lost energy savings*

CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.	STUDENTS PER WEEK	HOURS PER WEEK	CLASSROOM SCHEDULING EFFICIENCY
J1	GARAGES	5,520	2	2,760					

ASSIGNABLE SQUARE FOOTAGE	5,324
TOTAL SQUARE FOOTAGE	5,520
EFFICIENCY	96%

HISTORY

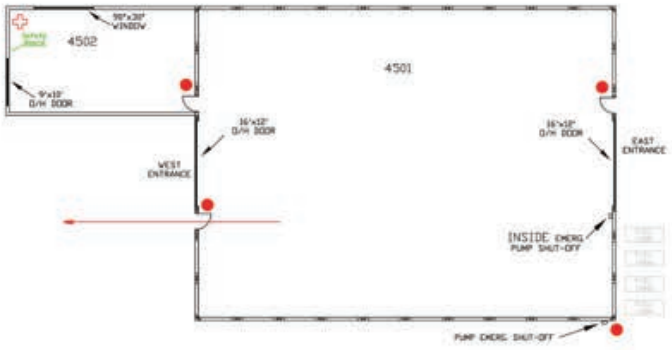
The history is unknown or insignificant because of the nature of the buildings use

FUTURE OUTLOOK

Prepare to replace this building in twenty years

Grounds Building

FLOOR PLAN - EXISTING



VICINITY MAP

Van Garage

4600

Fast Facts:

2,800 square feet
Year Built: 2006
Recommendation: Maintain

STRENGTHS
- *Serves the purpose of an enclosed space for vehicle storage*
- *Low building maintenance*

WEAKNESSES
- *No weaknesses identified*

OPPORTUNITIES
- *No opportunities identified*

RISKS OF NON-ACTION
- *No action necessary at this point*

CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.	STUDENTS PER WEEK	HOURS PER WEEK	CLASSROOM SCHEDULING EFFICIENCY
J1	GARAGES	2,800	1	2,800					
ASSIGNABLE SQUARE FOOTAGE			2,685						
TOTAL SQUARE FOOTAGE			2,800						
EFFICIENCY			96%						

HISTORY

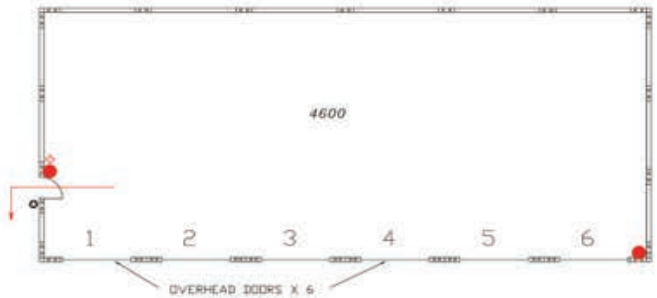
The history is unknown or insignificant because of the nature of the buildings use

FUTURE OUTLOOK

General maintenance

Van Garage

FLOOR PLAN - EXISTING



VICINITY MAP

Philips Hall

5000

Fast Facts: Student Housing Zone
Square Feet: 25,737
Year Built: 1963
Recommendation: Replacement Project
-Other funding sources
Prior Renovation: NA

STRENGTHS

- *It is rare for community colleges to have student housing on campus.*
- *Clean and functional*
- *Provides housing for summer camps and special events*

WEAKNESSES

- *Condition*
- *Finishes need upgrades*
- *Uninviting exterior and interior*
- *Boiler located in 1700 Building*
- *Shared Bathrooms*
- *Single-pane glazing*
- *Not eligible for State funding*

OPPORTUNITIES

- *Opportunity for private investors to assist in replacing dormitories*
- *Locate closer to recreational/athletic zone*
- *Attract students who need housing*
- *Host summer camps for area K-12 or special programs*
- *Provide atmosphere more in line with that of the traditional four-year college experience*

RISKS OF NON-ACTION

- *Increase in maintenance costs and utility usage*
- *Students look for other housing opportunities*
- *Decrease in food service utilization*
- *Decrease in partnerships and collaborative opportunities*

CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.
J6	DORMITORIES	17,464	74	230	76	230
J6	LOUNGE	1,350	3	450		
J6	LOCKER ROOMS	1,600	4	400		
	ASSIGNABLE SQUARE FOOTAGE	0				
	TOTAL SQUARE FOOTAGE	25,737				
	EFFICIENCY	N/A				

HISTORY

The college hosts two concrete masonry unit (cmu) dormitories that were originally built in 1963. In 1994 ADA upgrades were incorporated to allow for accessible entrances, restrooms, and sleeping quarters.

FUTURE OUTLOOK

The dorms provide a place for aviation students and others to reside on campus. Big Bend is known for its aviation programs and attracts students from across the state and country.

As more students choose to start their education at community college, the dorms will become more attractive to those wanting the college experience.

Partnering with a private company to build and manage a new dormitory or apartments on campus is a possibility. Additionally, the college's food service program, in combination with its planned recreational area, will create an inviting campus atmosphere.

Philips Hall

FLOOR PLAN - EXISTING

VICINITY MAP

Viking Hall

6000

Fast Facts: Student Housing Zone
Square Feet: 25,737
Year Built: 1963
Recommendation: Replacement Project - Other funding source.
Prior Renovation: NA

STRENGTHS
- *It is rare for community colleges to have student housing on campus.*
- *Clean & functional*
- *Provides housing for summer camps and special events*

WEAKNESSES
- *Condition*
- *Finishes need upgrades*
- *Uninviting exterior and interior*
- *-Boiler located in 1700 Building*
- *Shared bathrooms*
- *Single-pane glazing*
- *Not eligible for state funding*

OPPORTUNITIES
- *Opportunity for private investors to assist in replacing dormitories*
- *Locate closer to recreational/athletic zone*
- *Attract students who need housing*
- *Host summer camps for area K-12 or special programs*
- *Provide atmosphere more in line with that of the traditional four-year college experience*

RISKS OF NON-ACTION
- *Increase in maintenance costs and utility usage*
- *Students look for other housing opportunities*
- *Decrease in food service utilization*
- *Decrease in partnerships and collaborative opportunities*

CLASS	TYPE OF ROOM	SQUARE FOOTAGE	NUMBER OF ROOMS	AVERAGE ROOM SIZE	STATIONS	AVERAGE ASSIGNABLE SQ. FT.
J6	DORMITORY	17464	74	230	76	230
J6	LOUNGE	1350	3	450		
J6	LOCKER/SHOWER	1600	4	400		

ASSIGNABLE SQUARE FOOTAGE	0
TOTAL SQUARE FOOTAGE	25,737
EFFICIENCY	NA

HISTORY
The College hosts two concrete and concrete masonry unit (cmu) dormitories that were originally built in 1963. In 1994, ADA upgrades were incorporated to allow for accessible entrances, restrooms, and sleeping quarters.

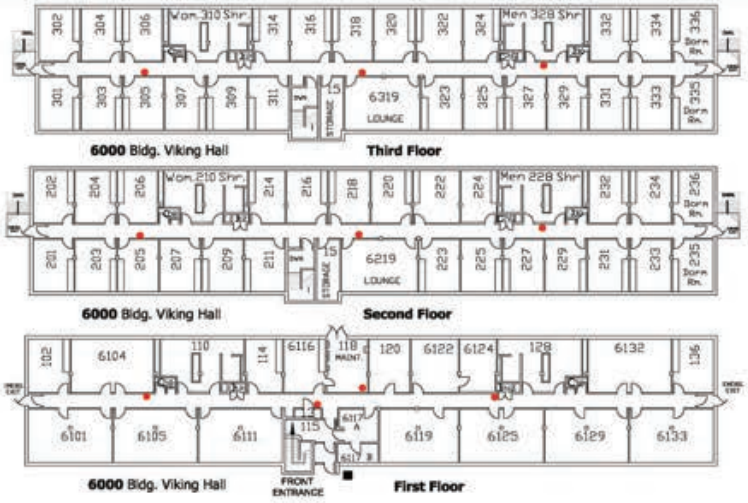
FUTURE OUTLOOK
The dorms provide a place for aviation students and others to reside on campus. Big Bend is known for its aviation programs and attracts students from across the state and country.

As more students choose to start their education at community college, the dorms will become more attractive to those wanting the college experience.

Partnering with a private company to build and manage a new dormitory or apartments on campus is a possibility. Additionally, the college's food service program, in combination with its planned recreational area, will create an inviting campus atmosphere.

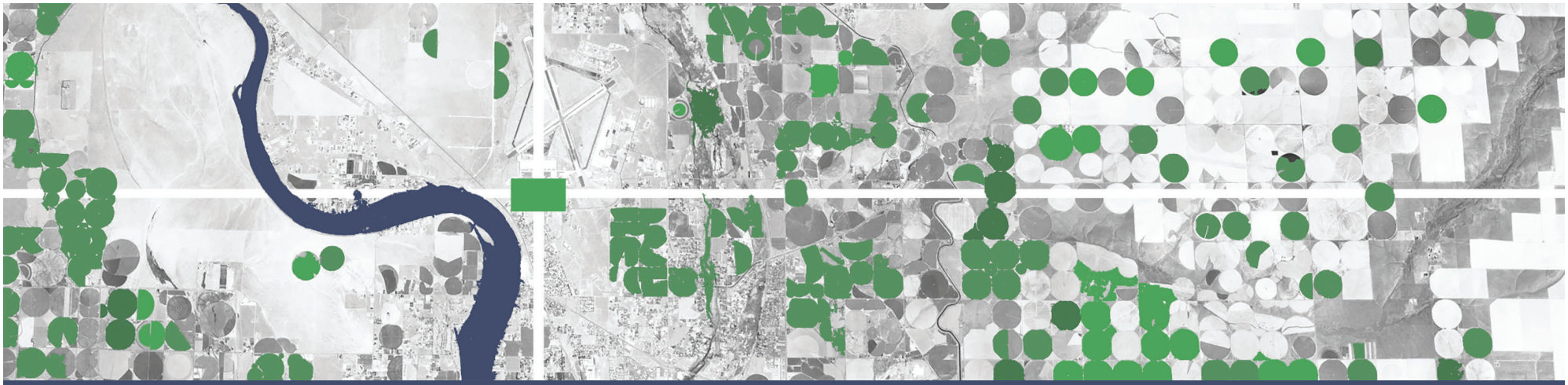
Viking Hall

FLOOR PLAN - EXISTING



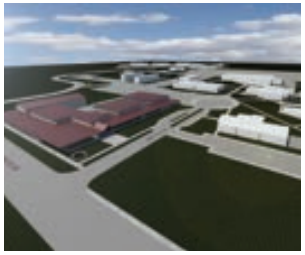
VICINITY MAP

DESIGN STANDARDS



47° 11’ 06.50” N, 119° 19’ 41.41 W

Design Standards
PRIORITIZED APPROACH



PRIORITIZED APPROACH

The facility master plan is based on prioritizing future capital projects. A plan has been created that seamlessly develops both the campus core and defines the campus edge. New facilities are being created to replace those that have outlived their useful life. Facilities placed in service in the 1980s are systematically being renovated to meet the needs of modern instruction. This plan aims to assist the college in creating a plan that will maximize available funding and encourage private partnerships with surrounding industry.

Site

The College encourages the following site and facility boundaries:

- Building placement should shield parking lots and other back-of-the-house items from the interior campus environment.
- Back-of-the-house items should also be shielded from public view.
- Clustering of development within the campus core – this approach encourages multiple story facilities, walking, campus boundaries, a variety of open spaces, and preserves the outer edges for future growth, opportunities, and partnerships.
- Buildings should be orientated toward the campus core and encourage use of walkways.
- Coordinate the placement of shared facilities to ease transition and maximize usage of outdoor space.
- Create public gathering areas such as courtyards, art displays, recreational areas, and an amphitheater.
- Allow for accessibility to technology throughout campus.
- Develop a network of open spaces that facilitate reflective, informal, and formal learning.
- Use landscaping and signage to enhance the campus setting.
- Strategically place lighting, landscaping, and walkways to increase safety and security.
- Standardize landscaping – use native habitat as much as possible.
- Create a strong sense of arrival.
- Orient buildings to maximize passive and active solar technology.
- Preserve green space as much as possible.

Gateways and Entrances

Gateways and Entrances into campus should use the following guidelines:

- Features should be appropriately scaled, constructed of high-quality materials, and well designed.
- Entrances should be reflective of the college's character and vision.
- Complement the adjacent buildings.
- The main entrance should be dominant over other entrances on campus.

Public Spaces

Continuation of the pedestrian and community-friendly design elements needs to continue. Connections to the campus from parking areas and street crossings are of core importance. Further development of sidewalks to connect the entire campus with itself and adjacent services should continue. Informal and formal gathering areas should be placed to encourage spur-of-the-moment interactions and a strong sense of community. Further development of recreational areas and surrounding amenities will encourage community interaction and keep people on campus longer. The following pedestrian and public space design elements are encouraged within campus:

- Pedestrian paths should be safe, attractive and inviting, and should provide direct connections between places.
- Informal, visible, and accessible plazas, courtyards, and outdoor gathering areas should be provided between buildings.
- Benches should be placed and oriented to provide refuge and comfort but not impede access or circulation.
- All benches, lighting, bollards, recycling bins, and waste receptacles should be strategically placed, consistent, and complementary.

Interior Design Elements

To promote student, faculty and community interaction, different sizes and types of gathering places are essential throughout the campus and within the buildings. Interior gathering spaces should be provided in each building and enhanced with movable furnishings to allow for multiple configurations and activities.

- The need for adaptable, flexible, and multi-functional rooms has been strongly expressed during meetings with faculty and staff at the college. Creating rooms that are adaptable to the constant changes in technology is critical to the sustainability of the college. Flexible and functional classrooms enable instructors and students to work together in a variety of learning environments.
- Future buildings are envisioned to have spaces that are designed to be thermally, visually, and acoustically comfortable. Creating environments that promote interaction between students, instructors, and the community is highly desirable. Environments that actively engage students and lead to small and large group conversations outside the classroom will greatly enhance the learning experience.
- The location of faculty offices in all buildings is critical in fostering student and instructor interactions. Designs should allow for easy student interactions Each new building should plan for faculty offices, informal learning areas, and classrooms to be designed to maximize student, instructor, and community interactions.
- Informal learning areas provide thoughtful common spaces for social interactions. Hallways and corridors should be thought of as social areas. Small alcove spaces can be used for small group conversations. Larger areas should provide comfortable and flexible seating, white boards for idea generation, wireless service, power, and proper lighting. Strategic placement of LCD screens and presentation equipment allow for informal group discussions and mini-symposiums.
- Creating interactive areas provide high program visibility that creates high traffic and is popular with students and instructors.

Design Standards
GOALS

Exterior Design Elements

- Consistent in architectural style and pattern language to match existing campus facilities and material
- Use of sustainable materials/construction practices
- Orientation and placement of new facilities (solar orientation, maximizing views, daylighting and campus core).
- Proportion of buildings in keeping with human scale
- Following local, state, and federal building requirements, including accessibility, zoning, codes
- Incorporate elements that lend themselves towards efficiency
- Emergency vehicle and fire access

Campus open spaces give definition to the outdoor environment, connect the buildings, support health/wellness and sustainability goals, provide spaces for outdoor programs and activities and create a "sense of place."

GOALS

In order to support the commitment to the community, Big Bend Community College needs to provide the highest level of academic programs possible and build sustainable facilities. As such, Big Bend Community College facilities aim to convey the “look and feel" as well as embody the inherent construction quality of the best facilities throughout the state at all levels. New buildings are designed to achieve the following goals:

New buildings must “create a place,” rather than constitute stand-alone structures, forming social, aesthetic, contextually-sensitive relationships with the larger campus.

1. New buildings reinforce a consistent design framework of classical contextual architecture applied in ways that convey a feeling of permanence and quality, and interpreted in ways that meet the contemporary and changing needs of a modern community college.
2. New buildings employ materials, systems, and design features that will minimize the expense of major maintenance.
3. New buildings will apply “sustainability” principles -- notably, must now meet LEED Silver Certification for State of Washington buildings.
4. Capital construction projects are designed and delivered within the approved project budget, scope, and schedule.

The design consultant’s role is vital to the success of the overall campus design and translates the detailed project program into a functional, aesthetically pleasing, and economical reality. The Design Consultant is expected to be sensitive to the work of others who have been involved in other facilities designed and constructed on campus.

The following general goals provide the basis for these general design guidelines:

- Buildings and facilities must accommodate the functional requirements set forth in the detailed project program, while contributing to enhancing the campus environment.
- Landscaping and open spaces must preserve and complement existing features, pedestrian and vehicular traffic, and the outdoor environment.
- Infrastructure systems must integrate/interface with and/or improve existing systems and jurisdictions.
- Project aesthetics must contribute to the improvement of the institutional image and establish a sense of visual continuity throughout the campus.
- Cost effectiveness, maintainability, life-cycle costs, budget constraints, safety, and the operational aspects of Big Bend Community College facilities must be considered in all cases.

Design Approach and Objectives

It is recognized that the designer of any project is constantly faced with decisions regarding the selection of materials and methods to achieve an economical, aesthetically pleasing, and well-functioning end product. While these objectives may be universally applicable on an industry-wide basis, there are several design objectives for Big Bend Community College projects to which the designer must devote special attention. These objectives are listed below, and they must all be considered of equal importance.

Stakeholder Involvement

Key stakeholders must be involved in all capital planning. Meetings, surveys, interviews and tours of other similar facilities should guide the capital planning process. Successful projects are designed to meet the needs of end users.

Design Integration

Architectural design for the campus facilities must respond to the environmental characteristics and unique opportunities that characterize the Moses Lake Region as a whole. To this extent, all proposed designs must address and justify their aesthetic/stylistic integration into or departure from existing campus facilities.

Overall Economy

While Big Bend Community College constantly seeks ways of reducing its construction costs, the increasing sophistication of building systems often tends to obscure the fact that they require proportionately increasing operation and/or maintenance costs. Because the lowest first cost does not necessarily mean lowest total cost, life-cycle cost analyses will be an important component of the design process.

Resource Efficient Design

The policy of the State of Washington is to have buildings designed that are resource efficient. To that end, the consultant shall comply with Appendix VIII of the Instructions to Architects and Engineers, titled Energy and Environmental Guidelines (Resource Efficient Design).

Maintenance Based Design

Big Bend Community College requires all new and renovated facilities to be designed to be

Design Standards
GOALS AND SAFETY CONSIDERATIONS

efficiently operated and maintained with minimum expenditure of resources during the useful life of the building. The following is intended to provide general guidance for maintenance based design and construction and is to be used in conjunction with specific campus standards and project specific elements of design as required by BBCC.

- Electrical equipment shall have sufficient access and working space for safe, convenient operations and maintenance per Article 110 of the National Electrical Code.
- Mechanical equipment room layouts shall be arranged to provide access for removal and servicing of all equipment.
- Provisions shall be made for maintenance access to all items of mechanical equipment, such as valves, controls, clean outs, traps, strainers, heaters, filters, heat exchangers, etc.
- Installed equipment should be economical to operate. Avoid discontinued, special order, or high-energy demand equipment that will cost more to replace, repair, and operate than standard materials.
- Lighting fixtures designed for inaccessible locations, such as high ceilings requiring specialized equipment for maintenance, should not be installed; but, if accepted by the owner as part of the design, the project shall provide access and the tools and equipment required to service and maintain fixtures.
- Avoid spatial and functional conflict between HVAC mixing boxes and light fixtures, fire sprinklers, and other systems.

Designers are encouraged to make suggestions for alternative approaches to meet or improve upon these standards as may be justified by engineering factors, operational criteria, or cost. Among the operational factors to be considered in designing building systems are the following:

- Functionality and cost considerations
- Reliability and durability
- Energy conservation
- Maintenance requirements minimization
- Simplicity of operation and adequacy of control systems
- Accessibility and serviceability of mechanical and electrical components
- Availability of replacement parts

Adaptability

A community college instructional building is not something one finishes; it is something one starts. In design, this requires that the emphasis be placed on solid structure and accessible services, not on features that change at a faster pace.

Accessibility

All building project improvements are required to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and Washington State Title 51 WAC. When both are applicable; the most stringent controls will apply. Big Bend Community College reserves the right to exceed minimum code requirements. A mandatory ADA design review will be performed by the Division of Engineering & Architectural Services, and the Design lead is expected to participate.

SAFETY CONSIDERATIONS

All college buildings shall be designed with full consideration for the safety of the occupants and maintainers. In occupied buildings, safety and minimizing the disruption to the instructors and students are of primary concern and may involve tightly phased and scheduled planning for both the consultants and contractor. During renovation projects, the architect and contractor will coordinate with each other to ensure removal and disposal of items containing hazardous materials. The contractor is responsible for maintaining the site and completing work in a safe manner and in accordance with the applicable Occupational Health & Safety Administration (OSHA) regulations.

Approvals

It is the A/E's responsibility to secure the approval of construction documents from all appropriate code authorities. Copies of the approval letters and drawings shall be furnished to the owner's representative. Additionally, the college will review and approve the final construction documents based on considerations identified during the design process and included in these Design Guidelines.

Corridors

Corridors, means of access and egress, shall be of an appropriate width and configuration to provide safe exiting from the building. Doors swinging into corridors shall be recessed when possible to avoid interference with the flow of pedestrian traffic. Movable furniture and equipment shall be placed, and sometimes secured, as not to obstruct the required width or travel path. Space for corridor/lobby seating adjacent to classrooms shall be included per program to encourage small group discussions and pre and post-group interaction.

Stairs

All enclosed stairways shall have engineered smoke evacuation or mechanical pressurization for smoke control as required by the code. All stairs shall have non-slip tread nosing and shall be built of materials appropriate for the location and installation.

Floors

Floor construction shall be designed for vibration criteria appropriate to the use. In critical installations, vibration analysis may be appropriate. When mechanical equipment is located in a penthouse, special consideration shall be given transmission of vibrations into the building; a proper vibration isolation and structural system provided.

Flooring in laboratories and chemical storage rooms shall be constructed with chemical-resistant, liquid-tight flooring materials, including raised sill not less than 4" in height at all points, and in front and behind cabinets but excluding doorways. Flooring of commercial kitchens shall be constructed of a slip resistant, easily maintained material acceptable to the Health Department. Floors of toilet rooms, showers, greenhouses, and other special use spaces shall have flooring appropriate for the use and as approved by the college's project manager.

Design Standards
SAFETY CONSIDERATIONS AND BASIS OF DESIGN

Doors
When utilized, electro-magnetic holders for rated doors shall be connected to the building smoke detection and alarm system. Doors to all laboratory spaces shall swing toward the corridor and shall have a vision panel as large as allowed by the code. Each room entrance door will be sized to handle double the room capacity to allow simultaneous entrance/exiting during class break periods.

Fire Extinguishers
Fire extinguishers are to be located as required by National Fire Protection Association and local code officials. All aspects of fire extinguisher location and installation shall conform to the currently applicable Uniform Fire Code (UFC), International Fire Code (IFC), title 29 of the Code of Federal Regulations (29 CFR) section 1910.157, other sections in this document and other codes (UFC Standard 10-1, ANSI/NFPA 10-1994, e.g.).

- Fire extinguishers shall be 5-lb type ABC dry chemical, unless otherwise determined by the code officials.
- The Architect is responsible for locating the fire extinguisher cabinets on the drawings. Where applicable, the installation of fire extinguisher cabinets is included in the contract.
- Building fire alarm systems shall be connected to the central monitoring network.
- Building exterior and interior designs must identify locations and clear access to the following:
  - Fire and emergency vehicles
  - Hydrant and water supply
  - PIV and Fire Department standpipe
  - Fire alarm annunciator panel(s)
  - Special fire-suppressant agent storage
  - Knox box key and fire plan storage
  - Sprinkler control valve room
  - Emergency exit signage

Fire Protection Sprinkler and Suppression Systems
An automatic fire-suppression system will be required where design and code dictate and when included in the college's project requirements.

- Provide all commercial kitchen hoods with an approved fire-suppression system.
- In chemical storage rooms, a chemical fire-suppression system, such as "Barricade" or "AFFF" is preferred. In central computer rooms, the college, when required, desires gaseous fire extinguishing systems. "Inergen" shall be considered as the extinguishing material and reviewed with the college's representative and Information Technology Department.

Eyewash and Safety Showers
Each laboratory shall have at least one plumbed eyewash unit with a floor drain below, that meets or exceeds the requirements for plumbed eyewash units in the most recent printing of the American National Standards Institute Standard Z387.1 American National Standard for Emergency Eyewash and Shower Equipment. The unit shall be properly tested. Eyewash stations shall be installed in all laboratories. Safety showers shall be installed in laboratory buildings as required by applicable codes.

Asbestos Removal
Most college buildings and utility tunnels constructed before 1970 contain asbestos materials in some form or another. The most typical use is mechanical insulation and other building materials. Generally, it is the policy of the college to remove and dispose of these materials whenever a construction project is undertaken to remodel a building or part of the project.

Based on the scope of work established in the Architecture and Engineer (A/E) documents, the college will provide the contractor a written report from a state-certified inspector identifying the areas of concerns. The actual removal and disposal will be accomplished by facilities services or an outside contractor prior to the start of the remodeling project or when appropriate to the construction sequence of the project. If the removal project is large enough to require a bidding process, the college may contract with a consultant for preparation of contract documents. These services will be separate and distinct from the A/E's services. If during the course of remodel construction additional suspicious material is discovered, the contractor shall notify the college's facilities office immediately. The college, with the contractor's assistance, will assess the situation and remove the material appropriately.

Use of Asbestos or Products with Asbestos
The use of asbestos or any product containing asbestos banned by the Environmental Protection Agency and Department of Labor's Occupational Safety and Health Administration is absolutely prohibited from all projects. Any contractor installing any product with asbestos shall bear full responsibility and liability for any penalties, damages, suits or loss and shall pay for any and all costs of removal and replacement and also all legal costs if they are involved. Any product specified that unknowingly contains asbestos shall be brought to the attention of the architect in writing prior to its purchase and shall not be used.

BASIS OF DESIGN
User-Friendly Designs
Certain aspects of a campus or building should be more obvious to a layperson than others. Specifically, the building's main entrance should create a feeling of welcome.

Sensitivity to Cultural Diversity
Big Bend Community College's intent is to establish a physical environment that stimulates and sustains appreciation of the region's cultural diversity. Big Bend Community College recognizes that cultural, ethnic minorities strengthen the district and college community as a whole and improve the learning process. Attention to vernacular design solutions can be one way to acknowledge cultural diversity.

Commissioning
It is now required by the State of Washington to have buildings commissioned to ensure that the facility's mechanical, electrical, and designated systems' performance meets the design intent and the owner's functional criteria and operational needs. To that end, the consultant shall comply with Appendix VII of the Instructions to Architects and Engineers, titled Commissioning Guidelines. These guidelines are aimed at delivering a facility that operates as it was intended, meets the needs of Big Bend Community College and occupants, and provides training of facility operators to ensure continued proper operation of the building.

Design Standards
BASIS OF DESIGN

Energy Life Cycle Cost Considerations
It is the policy of the State of Washington that major facility designs be based on the total life cycle cost, including the initial construction cost, the cost of the energy consumed, and the costs of the operation and maintenance of the facility over its economic life. To that end, the consultant shall comply with Appendix IX of the Instructions to Architects and Engineers, titled "Energy Life Cycle Cost Guidelines." These guidelines are for the preparation of an Energy Life Cycle Cost Analysis (ELCCA) for a major facility (defined as having twenty-five thousand square feet or more of usable floor space) that is to be constructed or renovated by any public agency.

Site Design
Every project site must blend with its adjacent surroundings. Exterior drainage must flow or connect to storm sewers where possible and drain away from structures and hardscaped areas. Drainage shall not occur across sidewalks. Sheeting, ponding and sedimentation at building entries, walkways, bicycle paths, and other hardscaped areas must be avoided.

Landscaping
Although the college assumes responsibility for campus landscape efforts, each campus construction project is expected to include design for landscaping of project site. The landscape design must be an integral component of the project. It shall respect existing site attributes and respond to the surrounding context. Site design must provide adequate access, views, and noise buffers. Within project specifications and drawings, landscaping vocabulary must be compatible with campus-wide elements such as canopies, portals, shaded areas, passageways, and hardscapes. Softscape is generally preferred to hardscape. Landscape design must help orient visitors and contribute to the legibility of the campus layout.

Acoustical Privacy
These guidelines apply to all rooms requiring acoustic protection. The items to be considered as general design considerations are as follows:

- All plumbing penetrations in walls must be caulked airtight using acoustical caulk.
- Where recessed fixtures of any type are installed (e.g., fire extinguishers, electric panels, drinking fountains, bookcases, etc.) the design team must ensure that required acoustic wall construction extends behind these elements.
- Installation of noise-generating equipment (such as telephones, drinking fountains, etc.) should be avoided on walls or rooms requiring acoustical protection.
- Use surface mounted rather than recessed lighting fixtures and fans at ceilings of rooms requiring acoustical protection in order to minimize sound transference to adjacent spaces.
- Locate doors to rooms requiring acoustical protection so that neighboring rooms do not have direct adjoining doors and in such a manner that doors on opposite sides of corridors do not face each other. In cases where acoustical isolation is imperative at each side of corridors, all doors should be staggered.
- Avoid placing doors to rooms requiring acoustical isolation opposite to stairwells, elevator lobbies, or bathroom doors.
- Whenever possible, the gap at the bottom of all doors should not exceed 1/2".
- Do not locate toilets (public or private) or lounges directly over rooms requiring acoustical protection, especially rooms having non-carpeted flooring.
- Separate studs, with a structural in-wall air gap, must isolate the jambs of all heavily used corridor doors from any adjacent rooms requiring acoustical isolation.
- Mechanical equipment in spaces above, beside, or below rooms requiring acoustical isolation must be vibration isolated, including piping and conduits from walls, floors, and ceilings.
- Demising walls for general purpose instructional spaces should have a Sound Transmission Coefficient (STC) rating of 50, although higher ratings may be required depending on the room(s) proximity to noise-generating spaces, such as mechanical rooms, elevator(s) shafts, restrooms, etc. Ceiling height and material(s) shall provide a Noise Reduction Coefficient (NRC) of .55 to .65.
- Back-to-back electrical, telephone, and electronic installations shall be avoided. Place these installations one stud spacing apart to avoid sound transmission.

Building Configuration
The ratio of surface area of walls and roofing to gross building area will be minimized in order to reduce heat loss and/or heat gain within reasonable design considerations. Roofs will be designed to shed snow, ice, and rain in a controlled manner and away from the path of the building occupants. All entries and exits must be protected from snow and other falling elements by their specific roof design, not by roof-level barriers.

Glazing and Infiltration
Appropriate glazing systems will be used to minimize heat gain and reflected glare to adjacent buildings or public areas. The use of projections and roof overhangs is recommended over windows in sunny locations and especially in south and west orientations. The length of the projection shall be calculated to maximize solar gain in winter and shading during the summer. This function may also be achieved by using horizontal shutters, fixed awnings, or other architectural devices.

Custodial Closets
One custodial closet must be provided for every twenty thousand (20,000) Net Assignable Square Feet (NASF) of floor area. In multi-story buildings, provide one custodial closet per floor, minimum. Ideally, custodial closets are to be located near elevators, toilets, or centralized among the areas they will service.

Custodial closets will not be located on stair landings. Entrances to custodial closets through restrooms, mechanical and electrical rooms, or similar intermediate spaces and vice versa are not permitted. Components of any telecommunications, electrical or mechanical systems are not to be located in custodial closets. Specifically, the following shall not be located inside custodial closets:

- Desks
- Telephone Panels
- Electrical Panels
- Water Heaters

Design Standards
BASIS OF DESIGN

- Circulation Pumps
- Mechanical Equipment
- Roof Hatches/Access Panels

The typical custodial closet floor area needs to be a minimum of 80 square feet (approximate dimensions = 8’ x 10’) with preferably high ceilings. Fluorescent lighting should provide an average of 40 foot-candles, maintained, at the floor. Doors should open outward. A 40” wide single door is adequate except in cases where the closet is wide and relatively shallow in depth. In those cases, double doors may be required. Shelving on three walls will be provided for a minimum of 15 linear feet, with a minimum of 14” clearance measured vertically between shelves. Mop hangers and racks for mops, hoses, or brooms must also be provided. A large capacity floor sink with hot and cold running water and a floor drain must be provided in each custodial closet. Sinks are best located near the door and should be positioned so cleaning machines and equipment can be maneuvered easily and emptied in the sink prior to being refilled.

At least two electrical duplex outlets are required in each custodial closet. Occupancy sensor lighting control is desired, but not imperative. Lighting level design standard should be figured at 50-75 fc.

When occupied, adequate ventilation and exhaust are essential, a minimum of fifteen (15) air changes per hour. Ventilation should provide conditioned air with appropriate exhaust to the building exterior. Mixing with building HVAC should not happen to ensure good indoor air quality. Floors should be either quarry tile or sealed concrete. Wall finishes should be ceramic tile or FRP 8' above finished floor.

A 120-square-foot custodial supplies storage room shall be provided per building in addition to or combined with the wet custodial closets previously mentioned. In a multi-story building, the preferred location is near elevators.

Equipment Rooms
Access to equipment rooms must never be by means of ship ladders and/or vertical ladders. Access to and from equipment rooms must be clearly diagrammed in the schematic design drawings. Mechanical rooms must be thermal, acoustical, and vibration isolated from adjacent spaces. Adequate circulation around equipment, including valves and accessory piping should be provided. Transformers, boilers, chillers, and other large equipment shall be located to permit easy servicing, operation, and removal. Equipment room layouts must indicate graphically how servicing, operation, and repair clearances are assigned. The graphic representation(s) must include all necessary carrying beams and/or cranes locations, as well as equipment and personnel moving paths from equipment location to point of building egress. Also, clearly delineate all housekeeping pads. Similarly, roofing or roof-mounted maintenance tools and equipment clearances must be considered and graphically illustrated when designing roof access points.

One 125-volts, 20-amps duplex outlet, one telephone and one data outlet shall be provided in each mechanical room, electrical room, substation(s), and penthouse(s). A&E will verify with the college’s project manager which equipment room(s) (if any) will require service sinks. All mechanical equipment rooms and penthouses must have a 3-phase, 50-amps receptacle for welders’ equipment.

Cooling towers and chillers shall be located at ground level. They shall never be roof mounted or enclosed at mid-floor levels.

Maintenance/Materials Storage Room
Every new Big Bend Community College building or major remodeling and/or addition project must provide a maintenance and materials storage room. This room shall be 100 square feet minimum (approximate dimensions 10' x 10'), with a 9' high ceiling, and 40'' wide access door. This will be located near the service entrance or as otherwise suggested by the college’s project manager.

Two 125-volts, 15-amps GFI duplex outlets must be provided in the maintenance/materials storage room. The maintenance/materials storage room must have heavy-duty/protected lighting fixture(s). Occupancy sensor lighting control is desired, but not imperative.

Trash and Recycling Facilities
All new facilities must consider and incorporate a location for recycling bins and trash receptacles. All buildings shall include a screened area for trash disposal and recycling of materials.

A recycling paper room of approximately 100 square feet (approximate dimensions: 10’ x 10’) must be provided in each facility. The paper recycling room preferred location is near the loading/unloading area or service entrance. Trash and recycling areas shall be sheltered from wind and easily accessible by the custodial staff. Location must consider the unpleasant odors normally generated by these receptacles. Trash pick-up, disposal operations, and vehicular accessibility must be carefully studied and discussed with college members of the design team prior to selection. Screen all trash collection locations with materials compatible with adjacent structures. A hose bib will be provided at all trash collection areas. Schematic design plans must diagram these considerations.

Loading/Unloading Areas
All new facilities shall be provided with adequate loading and unloading areas. The design consultant shall verify with the college’s project manager if the loading/unloading zone requires full loading dock capabilities and to which extent these facilities must be accessible to specific vehicle sizes. Access to loading/unloading areas must be clearly diagrammed on the schematic design drawings.

Offices
Faculty offices are to be designed to a 120-square-foot space standard. Project dependent, other office sizes may be required. The college's project manager should verify space allocation and general guidelines prior to the start of schematic design. When possible, staff and general administration offices are to be designed following an “office suite” concept. That is, several offices are grouped within areas off main corridors. This is to create a sense of place, improve interactivity

Design Standards
BASIS OF DESIGN

between division staff, and to avoid opening office doors into fire rated exit corridors. All office doors must have an 8" wide vision-lite immediately adjacent to it or a 6" lite in the door itself. Maximum allowable ambient noise level should meet or exceed: NC 30-35.

Instructional Spaces

General use classrooms are essential components in the college's instructional mission. Classrooms have increasingly complex designs and technical requirements. This section is intended to inform the college's professional design consultants of the college's expectations and requirements for instructional spaces.

Programming

The following design goals have been established for Big Bend Community College classrooms:

- To provide the most effective learning environments based on desired pedagogy.
- To provide an environment designed to enhance a student's ability to understand, observe, and participate in active learning.
- To provide an environment that is comfortable for students and instructors, as well as durable, reliable, and easy to maintain.
- To provide a room that is easy for faculty and student equipment operators to use through standardization of controls, layouts, and equipment.

Instructional space is to be designed to meet BBCC accepted standards. Design consultants will reference the Technology in Classrooms handbook when designing an instructional building. All classroom(s) furnishings, accessibility, and required clearances must be diagrammed in the schematic design drawings.

The college requires classroom design to focus on creating comprehensive and flexible teaching environments. In order to do so, all classrooms must have access to technology that instructors need to interact with the student. Closets will be placed in each classroom to provide necessary program storage. The presentation space in the front of the room will allow for simultaneous use of white boards, blackboards, and multiple screens if desired. The front center of the room will accommodate overhead projectors, walking space for pacing instructors, and open space for displays and experiments. White boards will be placed on the sidewalls of the classroom to maximize space for both small and large group activities. Lines of sight, acoustics, and seating space will be of top priority throughout the designing process.

Classroom location

- Large capacity classrooms will be located near the building entrance, to limit impact that concentrated large numbers of students may have on other building occupants.
- Unless the program dictates, locate the classrooms and auditorium on ground and lower floors, convenient to building entrances/exits, to minimize student travel through the buildings, and provide direct pathways to other instructional and student buildings.
- Informal learning, student study/lounge areas are intended to be near classrooms but not so as to impact class activities or impact students waiting for the next class to begin.
- Indoor noise-generating equipment and activities, such as student lounges/vending machine areas, toilets or labs, where hazardous materials are used will be located away from general classroom spaces. If a classroom adjoins such areas, buffers will be provided between them to minimize class disruption.
- Classrooms shall be buffered from internal building noise and exterior building noise (e.g., loading docks.)

Classroom Footprint

- The ideal configuration of small and large classrooms is square. A rectangle with a length-to-width of no greater than 1 to 1.5 with the instructor area along one of the short walls is an acceptable alternate configuration, if based on program pedagogy; the teaching wall can be rotated 90 degrees easily.
- No seat shall be more than 45 degrees off the center axis of a classroom to ensure adequate viewing of the chalk/white board(s) and projection screen(s).
- Classroom footprint shall accommodate the current interactive pedagogical style. AV equipment requirements and seating type planned for the room use will be compliant with this practice. Consideration shall be given to needed infrastructure and its location (conduits in floor/above ceiling, etc).
- Seminar/breakout rooms are generally recognized to be either rectangular or almost square with little distinction of a "front" side of the room.
- Large classrooms and lab configurations will require specific consideration for acoustical design to ensure effective learning interaction.

Auditorium and classrooms with over 100 seats shall be fan-shaped to provide clear viewing angles and acoustics.

Instructor Area

The instructor's area will be easily visible from all student seating and provide instructor seating, writing surface, and electronic controls to all audio/visual and lighting systems in the classroom. Adequate space will be allocated to instructor's area, in addition to student seating areas. The "front" area must be large enough to give a minimum of 42" for instructors to stand behind a podium and/or desk and still allow free movement of students between the front of the podium/desk and the seating. In all technology-enhanced classrooms, the equipment control system touch panel (to control lights, motorized screens, and other remotely controlled equipment), shall be located either on the podium, or a wall location, as specified by BBCC capital projects staff.

Aisles, Spacing, and Clearances

- The preferred convenience aisle width in classrooms is 36" and at a minimum will be full ADA compliant.
- Aisles in large and media presentation classrooms will be evaluated during design to facilitate the optimum viewing areas for students. Side aisles are preferable but will again depend on final design.
- Room layouts will achieve a viewing angle of no more than 45 degrees from either side of the center axis of the room.

Design Standards
BASIS OF DESIGN

Doors

- Interior doors will be per BBCC standard solid core for durability and sound control, constructed with a Lyptus veneer face or sawn Red Oak.
- Doors must meet ADA requirements of 36” in width at 105 degrees open. 40-inch doors will be placed into rooms with heavy cart or materials transfer.
- Classroom and office doors will have 6” by 30” vision panels.
- The main entry to the classroom should be toward the rear to minimize classroom disruption.
- Classroom corridor doors shall have noise reduced closure mechanisms. Entrance/exit door(s) to the room shall be located to minimize disruptive noise from late comers.
- Doors shall have adequate light seals to prevent light from outside the room striking the projection screen.

Equipment

Typical general-purpose classroom equipment must include, but not be limited to, the following:

- Instructor area: desk and podium.
- Marker boards.
- Tackable display surfaces.
- Student seating. Verify seating type on a room-by-room basis.
- Telephone/data outlet.
- Broadband video outlet.
- General purpose electrical duplex outlets: verify type(s), number, and location for each classroom with the college’s project manager.
- Verify specific equipment requirements for special-purpose classrooms, lecture halls, seminar rooms, and computer labs with the college’s pre-design committee through the project manager.
- A certain number of classrooms (as a minimum, one of each size in any given facility) must be provided with distance-learning equipment infrastructure. Verify specific requirements with the college’s pre-design committee through the college’s project manager.

Fixed Equipment

Dry Marker Boards

- Dry marker boards will be placed across entire width of wall in instructor area and along sidewalls for student use. A minimum of 12’ is required.
- Dry marker boards shall be a minimum of 48” high (60” preferably), white or off-white finish with a 25-year warranty.
- Boards may be upward or horizontal sliding.
- Boards shall have a 2” tack strip and map hooks across the full length of the top edge and a continuous tray across the full length of the bottom edge.
- Boards shall be mounted with bottom edge of tray at 34”.

Acoustics

Instructional spaces acoustical characteristics are to be as follows:

- Walls to have a minimum Sound Transmission Coefficient (STC) rating of 50.
- Classroom walls will have a STC rating between 55 and 59.
- Additional noise-control strategies will be required when classroom walls adjoin, due to extra generated noise from equipment and activities, such as restrooms, building systems, and vending areas.
- Floor-ceiling assemblies STC rating of 58-60.
- Walls will be designed to distribute sound evenly throughout the classroom.
- The acoustical design must control the sounds and voices in the room, so instructors and students are heard easily and accurately.
- The surface of the ceiling must be designed to accommodate the required acoustical properties of the room. The area of the ceiling with rated acoustical tile should be covered with a .55-.65 Noise Reduction Coefficient (NRC) and a minimum STC of 40 directly related to the ceiling height as follows:
    - Eight feet (8’) clearance: forty to fifty percent (40%-50%).
    - Ten feet (10’) and twelve feet (12') clearance: fifty to sixty percent (50%-60%).
    - Mechanical systems ambient noise level must meet or exceed: NC 25-30.
    - Reverberation must be controlled by applying acoustical material to the walls as necessary
- Variations in ceiling height and profile may be required to achieve appropriate acoustical design.
- Acoustical reflective ceiling material will be used at instructor area of large classroom.
- Background sound and outside noise must be kept from intrusion (i.e. HVAC System).

Design Standards
BASIS OF DESIGN

Restrooms
Direct or reflected line of sight into restrooms shall be broken. Lighting shall be provided above all enclosed stalls. Specify wall-mounted toilets and waterless urinals. All wall-mounted fixtures and accessories must have adequate backing. All lavatories shall be ceramic.

Lead-free ceramic tile walls to a minimum of 7' above finished floor will be provided; full height walls preferred. Floors shall be lead-free ceramic tile with unglazed, sealed, integral dark grout. Twenty-five cent ($0.25) sanitary napkin/tampon dispensers shall be located in women's restrooms. Big Bend Community College may supply some toilet accessories; verify specifics with the college's project manager.

Lobbies
Access to buildings shall be through a central, enclosed and lockable lobby area. Provide a vestibule at all buildings main entries, unless otherwise indicated in the Detailed Project Program. All vestibules must have walk-off carpet as approved by the BBCC Facilities Department.

Corridors and auditorium lobbies shall be sized to accommodate waiting students and encourage post-lecture discussion and impromptu gatherings.

The building lobby shall be designed to contain a building directory and a lockable bulletin board. Entrance doors shall be recessed or protected by canopies and/or wing walls. Servicing and/or replacement of all lighting in lobbies, atriums, and other high-ceiling/high-volume spaces must be carefully studied during schematic design. The placement of any and all fixtures requiring periodic servicing and/or maintenance must be specifically approved by the college's project manager during the design stage of the project.

Tele-Data-Distribution Rooms
Big Bend Community College requires buildings to be highly developed in support of technology and all learning spaces. Each building design must provide at least one tele-data-distribution room per floor. The tele-data-distribution room(s) shall not be shared by other functions and shall be accessible from a public corridor.

Each room shall be designed for future installation of a card-access system for entry. Door strikes are to be locked when de-energized. Individual cooling connection to the emergency generator will be provided for this room(s). Cooling coils will be located outside the tele-data-distribution room(s). The telephone switching gear and at least one light fixture must also be connected to the emergency generator if provided. The tele-data-distribution room(s) shall be about 120 square feet measuring approximately ten by twelve feet (10' x 12'). This room(s) shall be centrally located on each floor. Each tele-data-distribution room shall be within 300' of any communication outlet (telephone, data and TV). Four by eight feet (4' x 8'), 3/4" thick, fire-retardant painted plywood panels will be placed on all walls. Provide two 120V, 20-amps GFI duplex receptacles, or equivalent wire mold at each tele-data-distribution room. No water lines are allowed in the tele-data-distribution rooms. The tele-data-distribution room(s) shall not be located below restrooms, custodial closets, or any other areas where water spillage may occur.

Stairs
Stairs shall be designed to allow easy passage in both directions at the same time. Interior stairways shall have rubber tread covers with integral risers, stringer skirts, and rubber flooring or carpet at landings, or as approved by the college.

All stairs/stairwells lighting fixtures must be accessible from landings using a six-foot ladder maximum. All exit stairs must have hard-surface floor coverings. Any carpeted stairway must be approved by the college's project manager. One 125-volts, 15-amps GFI duplex outlet at each stairway floor level landing will be provided.

Miscellaneous Elements Guidelines
No vending machines shall be located in main public corridors. Space must be allocated in locations approved by the college's project manager and college design team members.

Specific areas shall be designated for locations for printers and copiers. Spaces for copiers shall have direct ventilation to the exterior of the building. All corridors must have 125-volts, 20-amps GFI duplex outlets located no farther apart than twenty feet from each other. Design consultants must verify corridors, display(s), cabinets and/or bulletin board(s) requirements with the BBCC Administration during the schematic design phase and prior to the schematic design submittal. Roof-mounted equipment shall be minimized. All roof-mounted equipment shall have stair access and be fully screened from street level and other buildings' views. Exterior doors shall be recessed and/or protected from snow, ice, and water. This requirement may be waived for some emergency exits. Verify specifics with the college's project manager.

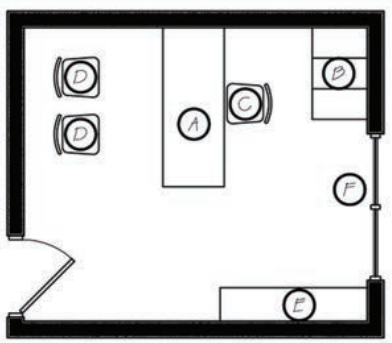
Design Standards
SPATIAL LAYOUTS- FACULTY OFFICES

USE (Functional Description)	**Educational Support**
ADJACENCY (Functional Relationship)	**Adjacent Classrooms, Laboratories, and Informal Learning/Resource Centers**
AREA (Dimensional Requirements)	**Net Program Area:** 150 s.f. each Dean's office 120 s.f. each Faculty office 80 s.f. each PT Faculty office
	Min. Dimensions: Varies by program or building
	Ceiling Height: 10'-0"

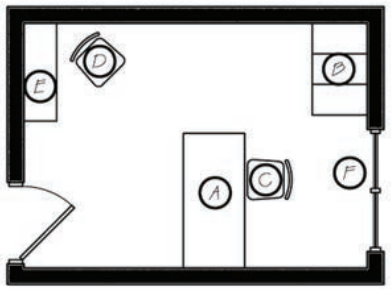
NARRATIVE:
Faculty offices provide space to administer the teaching and research activities of a given program. They are also envisioned to be places where faculty can provide support, counseling, and advising to their students relative to their progression through their coursework. These educational support spaces include dean's offices, full and part-time faculty offices.

Faculty offices will be an integral part of the design of all new classroom and laboratory facilities and will continue to be included in the planned renovations of existing buildings. Faculty offices should be strategically located in close proximity to informal gathering spaces, resource centers, and other spaces where faculty-student encounters can occur. Some guiding design principles may include:

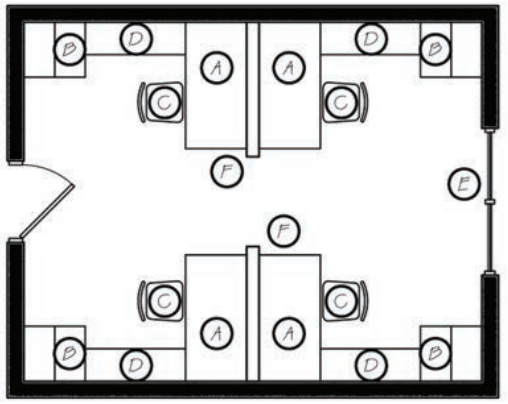
- Provide adjacency to other educational support spaces with a similar function (i.e., administration, conference, break room, workroom, recycling).
- Provide adjacency to spaces that promote faculty-student interactions.
- Integrate technology with ease of access for future upgrades.
- Provide infrastructure that supports portable technology.
- Provide access to natural ventilation and daylight.
- Provide acoustical and visual separation from adjoining spaces.



DEAN'S OFFICE
150 SQUARE FEET EACH



FACULTY OFFICE
120 SQUARE FEET EACH



PT FACULTY OFFICE POD
80 SQUARE FEET EACH

LEGEND

A	DESK
B	FILE CABINET
C	OFFICE CHAIR
D	GUEST CHAIR
E	BOOKSHELF
F	NATURAL DAYLIGHT
G	PARTIAL-HEIGHT WALL

Design Standards
SPATIAL LAYOUTS- RESOURCE CENTER

USE (Functional Description)	**Educational Support**
ADJACENCY (Functional Relationship)	**Adjacent Classrooms, Laboratories, and Faculty Offices**
AREA (Dimensional Requirements)	**Net Program Area:** Varies by program or building
	Min. Dimensions: Varies by program or building
	Ceiling Height: 10'-0"

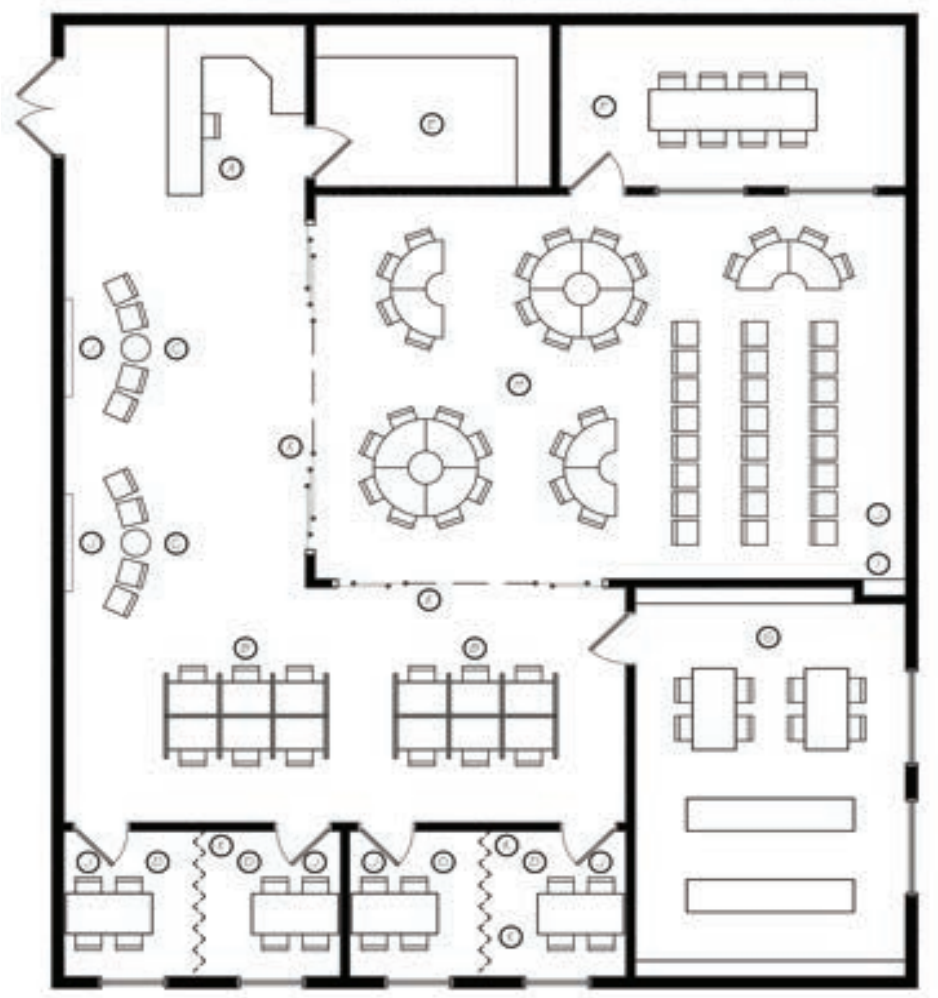
NARRATIVE:
Resource centers are community learning environments. The centers should provide space for both individual study and engagement in collaborative group discussions with a focus on student-centered learning. The space is adaptable to multiple uses such as lectures, conferences, meetings, seminars and webinars, and tutoring. Faculty offices should be located in close proximity to Resource Centers to encourage faculty-student interactions. Technology will be integrated to allow for presentations with smart boards, and white boards. Infrastructure support for portable technology, such as laptops and tablet computers, will be a valuable amenity for the resource center.

It is envisioned that resource centers will be strategically located throughout campus in the design of all new classroom and laboratory facilities, as well as planned renovations of existing buildings. Some guiding design principles include:

- Provide movable partition walls for adaptable-use space.
- Provide flexible, movable furnishings.
- Provide adjustable and task specific lighting.
- Integrate technology with ease of access for future upgrades.
- Provide infrastructure that supports portable technology.
- Provide access to natural ventilation and daylight.
- Provide acoustical separation from adjoining spaces.

LEGEND

A	HELP DESK/RECEPTION	**H**	GROUP DISCUSSION/SUPPORT CENTER
B	INDIVIDUAL STUDY CARRELS	**I**	AUDIO/VISUAL/DATA/LIGHTING EQUIPMENT
C	GROUP DISCUSSION	**J**	WHITEBOARDS
D	GROUP STUDY	**K**	MOVABLE PARTITION WALL
E	COPY/DATA		
F	QUIET LEARNING/CONFERENCE		
G	RESOURCE LABORATORY		



RESOURCE CENTER
MULTIPLE CONFIGURATIONS

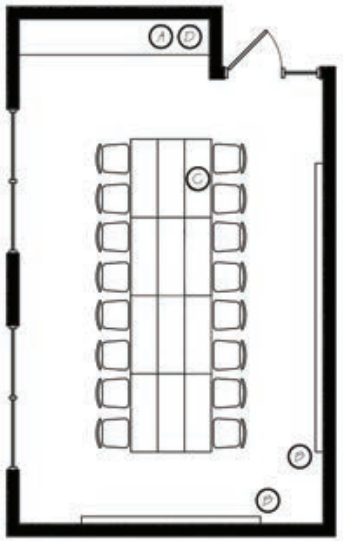
Design Standards
SPATIAL LAYOUTS- CONFERENCE / SEMINAR

USE (Functional Description)	**Educational Support**
ADJACENCY (Functional Relationship)	**Adjacent Classrooms, Laboratories, Administration, Faculty Offices and Informal Learning/Resource Centers**
AREA (Dimensional Requirements)	**Net Program Area:** 500 s.f. depending on program need
	Min. Dimensions: Varies by program or building
	Ceiling Height: 10'-0"

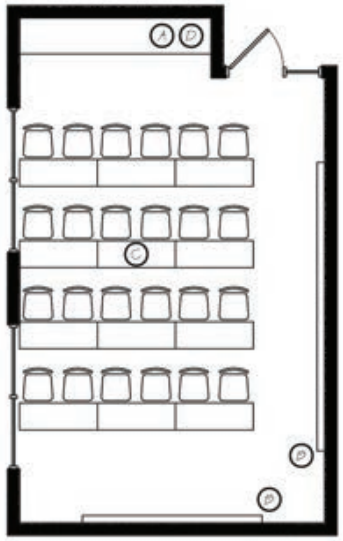
NARRATIVE:
The conference/seminar room is a multi-use space with the flexibility to accommodate a wide range of campus meetings and events. Furnishings can be rearranged for collaborative-based meetings, seminars, faculty training, and student advising. Technology will be integrated allowing for presentations with white boards, as well as support for portable technology such as laptops and tablet computers.

In order to maximize space utilization, these conference/seminar rooms should be responsive to current campus needs, while also adapting to changes in use over time. Design considerations include:

- Provide flexible, movable furnishings.
- Provide adjustable lighting.
- Integrate technology with ease of access for future upgrades.
- Provide infrastructure that supports portable technology.
- Provide access to natural ventilation and daylight.
- Provide acoustical separation from adjoining spaces.



CONFERENCE/SEMINAR ROOM
500 SQUARE FEET
Collaborative Configuration



CONFERENCE/SEMINAR ROOM
500 SQUARE FEET
Seminar Configuration

LEGEND

A	AUDIO/VISUAL/DATA/ LIGHTING EQUIPMENT
B	WHITEBOARDS
C	FLEXIBLE, MOVABLE FURNISHINGS
D	PORTABLE TECHNOLOGY SUPPORT

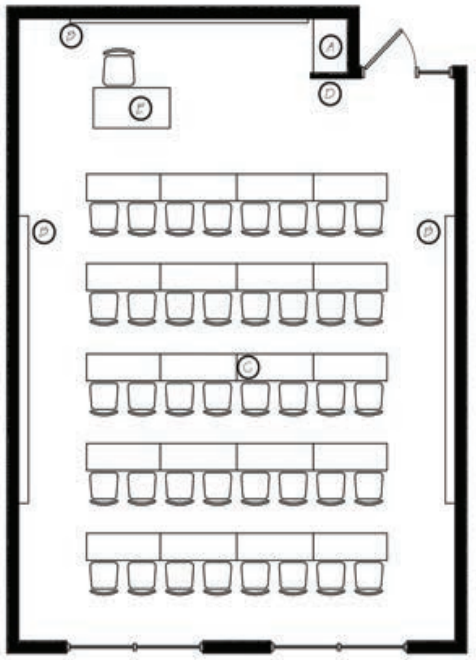
Design Standards
SPATIAL LAYOUTS- GENERAL CLASSROOM

USE (Functional Description)	**Educational Support**
ADJACENCY (Functional Relationship)	**Adjacent Classrooms and Laboratories,**
AREA (Dimensional Requirements)	**Net Program Area:** 900 - 1,500 s.f. depending on program need
	Min. Dimensions: Varies by program or building
	Ceiling Height: 10'-0"

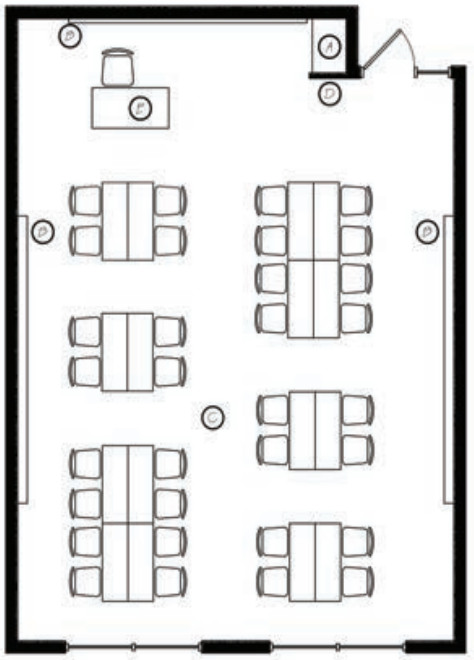
NARRATIVE:
The classroom is the platform for effective instruction and active learning. A simple room with space for tables and chairs is no longer adequate in motivating a student towards academic success. The classroom must be adaptable to changing teaching methodologies and accommodate different group dynamics. This flexibility should allow for instructor-led learning and for student-to-student collaborations with the emphasis on student-centered learning. Technology will be integrated, allowing for presentations with white boards, as well as provide support for portable technology, such as laptops and tablet computers.

Design standards aim to provide guidance in the design and development of new classroom space, as well as the renovation of existing classrooms to accommodate the above goals. Some guiding design principles include:

- Provide open floor space for multiple configurations of student workspace.
- Provide flexible, movable furnishings.
- Provide unobstructed views to the front of the space.
- Provide adjustable lighting.
- Integrate technology with ease of access for future upgrades.
- Provide infrastructure that supports portable technology.
- Provide access to natural ventilation and daylight.
- Provide acoustical separation from adjoining spaces.



GENERAL CLASSROOM
960 SQUARE FEET
Instructor-Led Configuration



GENERAL CLASSROOM
960 SQUARE FEET
Student Collaboration Configuration

LEGEND

A	AUDIO/VISUAL/DATA/ LIGHTING EQUIPMENT
B	WHITEBOARDS
C	FLEXIBLE, MOVABLE FURNISHINGS
D	PORTABLE TECHNOLOGY SUPPORT
E	INSTRUCTOR STATION

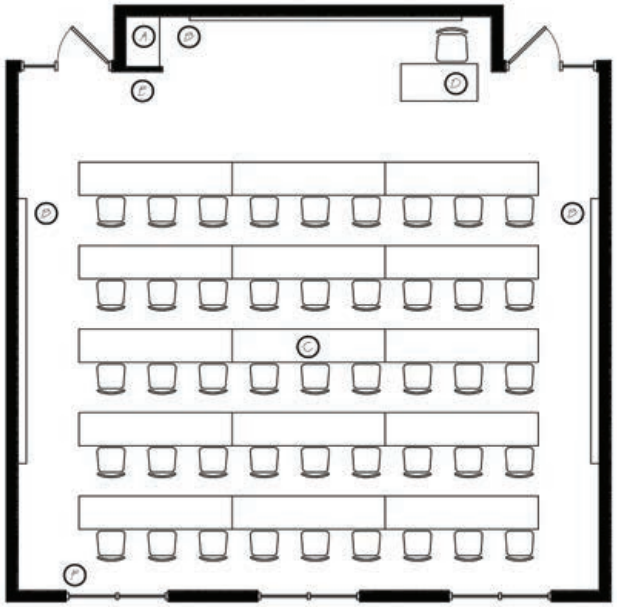
Design Standards
SPATIAL LAYOUTS- COMPUTER LABORATORY

USE (Functional Description)	**Instruction/Education and Educational Support**
ADJACENCY (Functional Relationship)	**Adjacent Classrooms and Laboratories**
AREA (Dimensional Requirements)	**Net Program Area:** 900 - 1,500 s.f. depending on program need
	Min. Dimensions: Varies by program or building
	Ceiling Height: 10'-0"

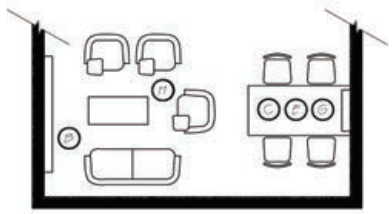
NARRATIVE:
The computer lab is a vital link in support of effective instruction. These spaces must accommodate continual, progressive changes in technology and support systems. While the need for specialized computer labs for certain programs will remain constant, increase in student ownership of computers will change the composition of the traditional computer lab. Labs may become more virtual, less dependent on dedicated spaces, and may take the form of informal gathering spaces. Therefore, new and renovated computer labs should be designed as flexible spaces able to accommodate changing uses.

Traditional and informal computer lab space should be planned for in all new classroom and laboratory facilities as well as the renovation of existing buildings. Design considerations for computer labs include:

- Provide flexible, movable furnishings.
- Provide spaces for both individual and collaborative study.
- Integrate technology with ease of access for future upgrades.
- Provide infrastructure that supports portable technology.
- Provide access to natural ventilation and daylight.
- Provide acoustical separation from adjoining spaces.



COMPUTER LAB
1,100 SQUARE FEET
Tradtitional Configuration

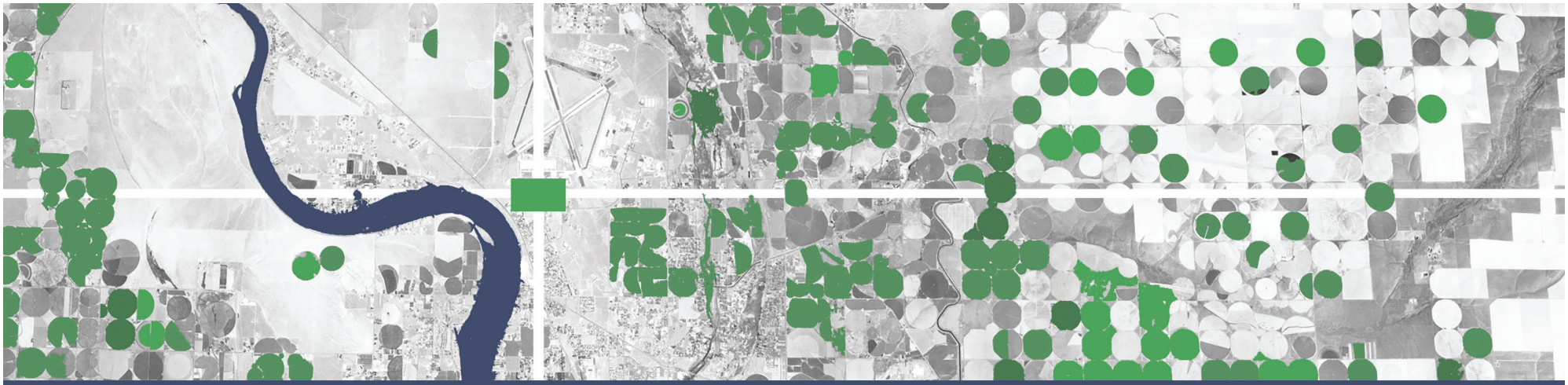


COMPUTER LAB
SIZE VARIES
Informal Configuration

LEGEND

A	AUDIO/VISUAL/DATA/ LIGHTING EQUIPMENT
B	WHITEBOARDS
C	FLEXIBLE, MOVABLE FURNISHINGS
D	INSTRUCTOR STATION
E	PORTABLE TECHNOLOGY SUPPORT
F	NATURAL VENTILATION/ DAYLIGHT
G	NETWORKED COMPUTER MONITOR
H	LOUNGE FURNITURE

RECOMMENDATIONS



47° 11’ 06.50” N, 119° 19’ 41.41 W

Recommendations
PROJECT PRIORITIES

Recommendations
The foundation of Big Bend Community College's Academic and Facility Master Plan is Student Success. Creating a campus focused on student success requires a layered, multi-functional and adaptable campus. A 21st-century campus must be both physical and virtual. Engaging students with the campus will yield both short and long-term success. The growth of lifelong learning increases the likelihood that students will return to the college again and again for educational and skill upgrades. Creating strong ties will ensure future funding and growth for the college.

David Thornburg, a leader in campus environments, believes that in order to maximize learning opportunities, campuses should provide the following environments:

1. The Camp Fire
2. The Watering Hole
3. The Cave
4. Life

The camp fire consists of space where students listen and learn. The watering hole is space where students gather informally to discuss and discover what they have learned. The cave is where students retreat and work on their own. Life is where students put into practice what they have learned. This facility master plan strives to infuse all of these elements into a layered campus environment. Interior and exterior learning spaces need to be carefully thought out, and current trends as well as future requirements need to be taken into account.

An effective modern campus must be accessible, welcoming, integrated, flexible, connected, and able to offer customized instruction. It must move away from rigid schedules, inflexible facilities, and fixed program boundaries. Interior and exterior environments must welcome learners of all ages and levels. Facilities must create a sense of belonging, while celebrating the success of both students and surrounding industry. The campus atmosphere must be welcoming and encourage cultural enrichment, healthy lifestyles, the visual and performing arts, engaging intellectual and recreational activities, and sustainable environments.

Pride must be seen and felt throughout campus. Big Bend must be become "essential and prominent" to surrounding businesses as well as the community.

Technology
Technology is changing the way education is delivered and opening up opportunities for advancement. Big Bend must embrace this change by creating a student-centered campus that is community focused with layered learning environments that serve the needs of modern day education. COVID-19 has impacted higher education and technology has provided a means for instructors to continue the delivery of a learning environment. Distance Education and Hybrid Learning Opportunities need to be accessible both virtually and in the classroom. Students desire flexibility and want to be able to attend class face-to-face and virtually. They want access to recordings to review class information or watch the class if they were unable to attend.

Flexible
To keep pace with the changes that are occurring both in education methodologies and the surrounding community, adaptation and flexibility are crucial. Learning spaces must be inviting and be able to serve both formal and informal learning environments of various sizes simultaneously. Access to instructors, resources, and fellow students must be immediate and ongoing. Programs need to offer both physical and virtual learning opportunities and resources to be successful. Students are demanding 24/7 access. They want to be able ask questions, seek guidance, and complete projects on a flexible schedule.

Moreover, students want to feel as if they belong. Creating environments that encourage students to engage in discussions and activities outside of the classroom, increases student involvement and their attachment to their own learning processes and outcomes. Facilities must discreetly encourage collaboration, innovation, and learning.

Connectivity
BBCC must offer space for community, industry, faculty, staff, and students to connect. Space should display student work and create opportunities that allow students to learn firsthand from those from whom they are likely to seek employment. Project-based learning is becoming more and more essential as lecture moves from the classroom to hybrid and e-learning instruction. Ultimately, this trend will allow instructors to develop methodologies that will shift the learning process from passive to active. The STEM Center in the 1200 Building is a strong example of this methodology. Future facilities and renovations need to incorporate active learning space into their design.

Collaborative
BBCC's success will rely on creating and delivering customized educational curriculum and services. Students and surrounding industry and businesses are demanding customization. Turnaround time for curriculum development and delivery will drive program success. Continual instructor development and skill enhancement will become mandatory. Space for instructors to learn from one another and collaborate on interdisciplinary opportunities will enhance student learning. Demand for modular or stackable credits will increase. Students will likely plug in and out of college as needed for skill upgrades. It is likely that employers will work hand-in-hand with the college to develop this curriculum for these programs.

The infrastructure must mold to this criteria. Embracing technology and incorporating it into the campus core is essential to providing students with modern learning experiences and environments. Spaces will need to encourage gathering, exploring, and sharing of ideas. Programs will partner with higher education, K-12, the community, and the industry. Processes will be streamlined and lend to developing result-oriented programs that train students in the skills that businesses are demanding.

Engaging
Increased collaboration and program customization will lead to students returning to college for skill upgrades and lifelong educational pursuits. The campus needs to serve education; both students and instructors must feel welcome and free to explore new ideas and challenges. Through the creation of high-quality interior and exterior learning environments, both student and instructor engagement with the campus will increase.

Increased campus engagement will assist in retention and elevate learning outcomes. The STEM Center is actively engaging students and instructors in the teaching and learning process. Students are forming learning groups and learning from one another.

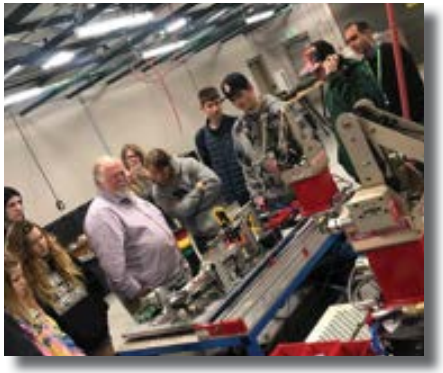
Exterior gathering spaces have also been created; a great example of this includes the area outside of the 1800 ATEC Building. The vast amount of green space and concrete work is inviting and often used by students as a place to sit and study. The strategically placed benches are welcoming and used by students. The Master Plan focuses on continuing this effort and aims at creating an interactive campus that is welcoming, community-centered, and easily accessible and understood.

Comprehensive
Over the last ten years, progress has been made toward achieving a comprehensive campus infrastructure and a unique BBCC culture.

Exterior gathering areas, informal learning environments, improved classrooms and labs have been created to increase student success. Standards are being developed to create more inviting facilities, easy access to instructors, and increased natural daylighting. Although tremendous progress has been made, there remains a shortage of high-quality classroom space, modern science labs, informal learning areas, and quiet learning environments. Additionally, several buildings on campus are rapidly deteriorating and in need of renovation and/or replacement. Throughout this master plan several major and minor capital projects are identified. Tools used to prioritize projects include surveys, facility evaluations, focus groups, and team meetings. Through this process the following major capital priorities have been identified:

1. **Health Science & Performing Arts Center**
2. **Hangar Renovation & Addition 3100**
3. **Student Housing**
4. **Student Success/Child Care**

Recommendations
PROJECT PRIORITIES



Major Capital Project Priorities

The design team, campus planning committee, and 2021 facility condition survey (FCS) have identified the following major capital needs, in order of priority (Over $5,000,000). Costs are given in 2021 dollars and should be escalated accordingly:

Priority	Major Project	Demo SF	Renovated Space	New Space	Total SF	Cost per SF	2021 Estimated Cost
1	Health Science & Performing Arts Center	42,736	0	42,736	42,736	New $571	$24,411,230
2	Aircraft Hangar 3100 Renovation & Addition	0	30,251	9,688	39,939	New $278 Renov $218	$9,287,982
3	Student Housing	51,474	0	80,000	80,000	New $315	$25,168,000
4	Student Success/Child Care	7,727	0	25,000	25,000	New $469	$11,723,546
Total		**101,937**	**30,251**	**157,424**	**187,675**		**$70,590,758**

Minor Capital Project Priorities

The design team, campus planning committee, and 2021 facility condition survey (FCS) have identified the following minor capital needs (Under $5,000,000). Costs are estimated using 2021 construction costs and should be escalated accordingly:

Priority	Minor Capital Project < $2,000,000	Additional Sf	2021 Estimated Cost
1	HVAC Gymnasium	NA	$1,200,000
2	Exterior Improvements & Signage	NA	$968,000
3	Planetarium	2,200	$2,000,000
4	Athletic Upgrades - Track and Soccer Fields	NA	$423,500
5	Athletic Support Building	5,000	$605,000
6	Campus Circulation/Parking Upgrades - Ongoing	NA	$1,028,500
7	Maintenance Facilities Replacement	NA	$1,815,000
8	Greenhouse Behind 3700	5,000	$800,000
	Total	**12,200**	**$8,840,000**

Recommendations
PROJECT PRIORITIES

Project Priority #1
Health Science & Performing Arts Center (Replace 1000, 1100, & 1700)

Project Drivers:
- **Student Need**
- **Emerging Programs**
- **Deteriorating Facility**
- **Industry & Community Connections**
- **Promoting Art & Culture**
- **Functional Instruction Space**

Health Science & Performing Arts Center

The proposed project addresses the needs of the college through replacing outdated and underutilized space. This project combines the programs of three archaic buildings and replaces two major capital projects. Although, Allied Health, the Testing Center and Wallenstien Performing Arts Center all have different programs, each building is undersized with spaces that cannot be adapted nor meet the spatial requirements of their respective programs. All three buildings have poor space utilization that is neither inviting nor accessible. Currently, campus wide, the Capital Analysis Model (CAM) shows overages in general classroom space, but shortages in student centers, labs, music, auditorium, and library spaces. The new Health Science and Performing Arts Center will assist in right sizing the campus. Although, the new facility will not improve the classroom overages, it will provide more efficient and functional spaces for classroom instruction. Replacing underutilized space and reallocating it to much needed auditorium, music, library, and laboratory space will assist in rebalancing space across campus. The project provides an auditorium (large lecture hall) that can be used by all BBCC programs and the service district. Currently, due to the condition of Wallenstien Performing Arts Center theater there is no large gathering area for lectures or cross-curriculum events on campus.

The second floor of the Health Science and Performing Arts Center will be the home to a new highly interactive and clinical setting designed to house the nursing program. The center will feature SimMan laboratories, control booths, debriefing rooms, and a patient floor where students can learn in a clinic-like setting similar to what they will find in the real world. The center will be adjacent to faculty offices and feature informal areas for collaboration and student de-stressing.

Auditorium	Program	ASF	Quantity	Total ASF
Auditorium (500 to 600)	PA	7,000	1	7,000
Stage/Staging Area	PA	1,000	1	1,000
				8,000
Music	**Program**	**ASF**	**Quantity**	**Total ASF**
Stagecraft & Dressing Rooms	PA	1,450	1	1,450
Choir	PA	800	1	800
Band	PA	1,100	1	1,100
Practice Rooms (Small)	PA	50	4	200
Practice Rooms (Large)	PA	400	2	800
Instrument Storage	PA	400	1	400
				4,750
Nursing Laboratories	**Program**	**ASF**	**Quantity**	**Total ASF**
Nursing Laboratory	AH	1,500	2	3,000
Skills Laboratory	AH	1,150	1	1,150
Science Based Labs	AH	1,150	2	2,300
Wellness and Nutrition	AH	1,150	1	1,150
				7,600
Classrooms	**Program**	**ASF**	**Quantity**	**Total ASF**
Music	PA	980	2	1,960
Nursing	AH	980	3	2,940
Pharmacology	AH	980	1	980
Wellness and Nutirtion	AH	980	1	980
Sub-Total (NSF)				**6,860**
Learning Commons		**ASF**	**Quantity**	**Total ASF**
Music Library	PA	100	1	100
Advising/Student Services	Shared	600	1	600
Lockers/Storage	AH	490	1	490
Conference	Shared	600	1	600
Informal Learning	Shared	1,200	2	2,400
Support	Shared	1,000	1	1,000
Lobby/Concessions/Tickets	PA	800	1	800
Sub-Total (NSF)				**5,990**
Space/Name		**ASF**	**Quantity**	**Total ASF**
Faculty Offices	Shared	120	8	960
Dean	Shared	153	1	153
Breakroom	Shared	350	1	350
Workroom	Shared	350	1	350
Adjunct Faculty Space	Shared	600	1	600
Sub-Total (NSF)				**2,413**
Total NSF				**35,613**
Circulation/Support				7,122.6
Total GSF Efficiency =	**20%**			42,736

Project Priority #2
HANGAR RENOVATION & ADDITION TO 3100

Program Drivers:
- **Student Need**
- **Facility Condition**
- **Evovling Program**
- **Community & Industry Connections**
- **Campus Aesthetic Improvement**

Aviation Maintenance Technology

The BBCC Aviation Program is an FAA authorized commercial pilot training program, which started in 1965 with 23 students and 3 airplanes. Today, there are approximately 100 students, 26 aircraft, 3 simulators, and 10-14 full-time instructors. During the course of our two-year program, an average student will fly 220 hours to gain a commercial pilot certificate with an instrument rating. Aviation training at Big Bend is taken in conjunction with academic or vocational courses that the student chooses, to fulfill the requirements of the Associate in Arts and Science transfer option and/or the Associate in Applied Science-Commercial Pilot. Most students will complete both degrees simultaneously without any additional costs. All students who complete Big Bend's aviation program will receive the Restricted-Airline Transport Pilot (R-ATP) authorization, which will lower the ATP certificate requirements by 250 hours and allow them to enter the industry more rapidly.

With an industry that continues to grow, BBCC needs to meet or exceed industry standards of new technology in up to date airplanes. Adequate storage of such valuable assets to the program is just the baseline requirement. Facilities need to provide fire protection and allow for easy removal and storage of equipment.

Laboratory	Program	ASF	Quantity	Total ASF
Aviation Maintenance (Shop)	Aviation	4,000	1	4,000
Paint Booth & Paint	Aviation	1,000	1	1,400
Upholstery	Aviation	500	1	500
Hangar	**Program**	**ASF**	**Quantity**	**Total ASF**
Plane Storage	Aviation	24,000	1	25,000
Parts/Equipment Storage	Aviation	4,000	1	4,000
Hazardous Storage	Aviation	300	1	300
Support	**Program**	**ASF**	**Quantity**	**Total ASF**
Offices	Aviation	120	3	360
Workroom/Breakroom	Aviation	500	1	500
Restroom	Aviation	600	1	600
Mechanical/Electrical/Technology	Aviation	1,200	1	800
Sub-Total (ASF - 30% Growth)				37,460
Circulation/Entry/Lobby (10%)				3,746.0
Total GSF (Efficiency - 90%)				41,206

Biennium	Project	Category						Goals	Project History	Other Actions
		Growth	Renov.	Replace	Minor	Match	COP			
2023-2025	#1 Priority - Health Science & Performing Arts Center	X		X		X	X	• Student Success • Teaching and Learning Opportunities • Safe, Accessible, Sustainable Campus • Create a Sense of Identity • Enhance Partnerships	Currently, the Allied Health Program is in the 1700 Building. The 1700 Building was scheduled to be demolished over ten years ago. The facility has accessibility issues, inadequate HVAC capacity, leaking plumbing, failing roof, and an elevator car that is in need of replacement. The space is nonfunctional and does not offer 21st-century learning environments. The condition and function of the facility limits program expansion and engagement opportunities with the surrounding community. Replacement of building 1700 is now the number one priority of the School. The 1100 building shows its age. Exterior entrances and glazing are deteriorating. The layout does not function for modern instruction. The theater lacks the lighting and technological infrastructure necessary for modern performing arts. Renovations done to this facility have not improved function and have done little to increase the life of this facility. The facility needs to be replaced.	• Minimal improvements • Research Partnership Opportunities • Increase Collaboration with K-12, Higher Education, and Community • Research Program Growth - Specialty Programs • Research collaborative opportunities with other College Programs • Apply for funding • Research Partnership Opportunities
2025-2027	#2 Priority - Aircraft Hanger 3100		X					• Student Success • Teaching and Learning Opportunities • Safe, Accessible, Sustainable Campus • Create a Sense of Identity • Enhance Partnerships	Now, that WEC is built, and 3200, 3400, 3500 & 3600 are demolished and 3100 & 3200 are put into private service, Building 3100 will become the worst scoring building on campus. The facility is in poor condition and currently used to house aircraft. Future use will include housing AMT curriculum that cannot be moved from the runway and emerging programs such as the unmanned aerial vehicle program. The facility exhibits metal wall panel deterioration, accessibility issues, exterior entrance and glazing deterioration, and general aging throughout. It is expensive to maintain and in need of a comprehensive renovation.	• Apply for funding • Research Partnership Opportunities • Increase Collaboration with K-12, Higher Education, and Community
2027-2029	#3 Priority - Student Housing	X					X	• Student Success • Teaching and Learning Opportunities • Safe, Accessible, Sustainable Campus • Create a Sense of Identity • Enhance Partnerships	There are two, three story CMU buildings for student housing; each with a square-footage of 25,740, and finished during 1963. As such, since then building standards have changed and by the very nature of building deterioration these structures are outdated, inefficient, and lack a sense of well-being.	• Apply for funding • Research Partnership Opportunities • Consider Student Funds • Provide Housing Opportunities for Students in need
2029-2031	#4 Priority - Student Success/Child Care	X		X		X		• Student Success • Teaching and Learning Opportunities • Safe, Accessible, Sustainable Campus • Create a Sense of Identity • Enhance Partnerships	Student success depends on many factors; many students find themselves facing real world issues while trying to better their future with an education. A student success center will have people dedicated to students to provide them with solutions that they face in order to place primary focus on their studies.	• Apply for funding • Research Partnership Opportunities • Consider Student Funds • Increase Collaboration with K-12, Higher Education, and Community

Recommendations
CIRCULATION: PEDESTRIAN

Objectives:
To address the concern of campus identity, the first objective will be to develop a main vehicular entrance to campus. The intersection of 28th Ave and Randolph Road has already been identified as the desired point of arrival and provides a link to the campus transit stop. Improvements to the signage and landscaping at this location will help define it as a main campus entrance. Secondary entrances to campus can also be improved to give a cohesive look to the campus border.

Substantial investment has been made in the development of the College Parkway as a campus edge. This roadway can be further enhanced by increasing the density of landscaping elements and improving signage and wayfinding. The corridor can become more pedestrian friendly by including a vegetative buffer between traffic lanes and sidewalks.

Pedestrian Circulation:
To further ensure pedestrian safety, locations where pedestrians cross parking lots and streets need to be improved. Including traffic-calming devices, marked crosswalks, integrated sidewalks and signage will increase pedestrian safety. Defining areas where roads and parking can be vacated in favor of pedestrian access is another strategy to consider.

Campus pedestrian paths should be welcoming and provide features that encourage their use. Plazas, courtyards and benches provide spaces for informal gathering and help create a sense of place in the landscape. The landscaping plan shows grand pedestrian boulevards that create linkages between points of arrival and main campus buildings. More than a sidewalk, the boulevards will include raised planter beds, tree islands, integrated benches and plazas at key intersections with other paths.

An important objective of the landscaping plan is to ensure that all campus zones are an integral part of the campus community. Even though distances between buildings cannot be changed, we can plan for stronger connections from the center of campus to the outlying areas. This can be accomplished by increasing the density of trees and plantings and planning for sidewalks along the paths to the disconnected campus zones. The biennium maps detail the strategic location of new facilities in open spaces between existing buildings. This type of infill development will help establish a more densely developed campus core.

Implementation – Recommendations
The landscaping plan seeks to create a people-oriented campus that promotes sustainability, social interaction, and strong connections with surrounding industries. This can be accomplished by developing special places on campus that enhance student life and create space to strengthen community ties.

Recommendations
CIRCULATION: VEHICULAR

Vehicular Circulation

To reduce reliance on personal cars, the college should work with GTA in determining locations for additional transit stops. Some recommended locations along College Parkway include the intersections of 30th Avenue and the east end of Bolling Street. These locations afford better access to the Aviation facilities and the planned student housing east of the DeVries Center.

A key element in planning for vehicle circulation is deciding where cars will be allowed. As the campus core develops and connections are made with outlying zones, it will become increasingly critical to protect the pedestrian nature of campus. It is recommended that the core of campus between both east and west edges of 26th Avenue and 30th Avenue, and stretching between Bolling Street to the north and Chanute Street to the south, remain a more pedestrian dominated zone. Pedestrian pathway improvements have already occurred along the Chanute Street corridor and could include a future pedestrian boulevard as shown on the landscaping plan. Improvements to create a pedestrian boulevard then could also be mimicked running between the ATEC and the Administration building.

The Bolling Street corridor is an excellent candidate for the creation of a campus main street. The landscaping plan depicts tree islands, integrated sidewalks and crosswalks with varying materials. Signage, banners and lighting along the street could add to the main street feel. Since this roadway serves as the main access point to the ATEC building and future athletic facilities, it follows that the importance of this campus linkage should be celebrated and enhanced.

The Big Bend service district extends approximately 70 miles in each direction, and 70% of students have commuting times ranging between 10 and 30 minutes. This heavy reliance on cars can be reduced with more reliance on public transportation. As the campus develops, additional transit stops can be built to serve more areas. As new facilities are constructed, parking for these projects will need to be carefully planned. To maintain a pedestrian-friendly campus, parking lots should be located at the perimeter of building clusters in order to maintain pathways and open space in the heart of campus. New parking lots should be designed with tree islands, integrated sidewalks, and designed in smaller blocks that relate to human scale.

Road improvements will also support vehicle circulation. Beyond defining the eight entry points, there are underdeveloped roads on campus that can be improved by including them in the scope of future building projects. Future road improvements should follow campus design standards for fenestration, include pedestrian amenities such as crosswalks, and provide signage that promotes wayfinding.

Campus parking lots can be made safer through effective lighting strategies and by reducing the chances of vehicular-pedestrian conflicts. Lighting should sufficiently illuminate all areas of parking during planned use. Traffic-calming devices can help protect pedestrians and include raised or variegated material crosswalks, landscape bulb outs, reduced speed limits near crosswalks, or pedestrian activated crosswalk signals.

Recommendations
PARKING: CONSOLIDATED & NEW

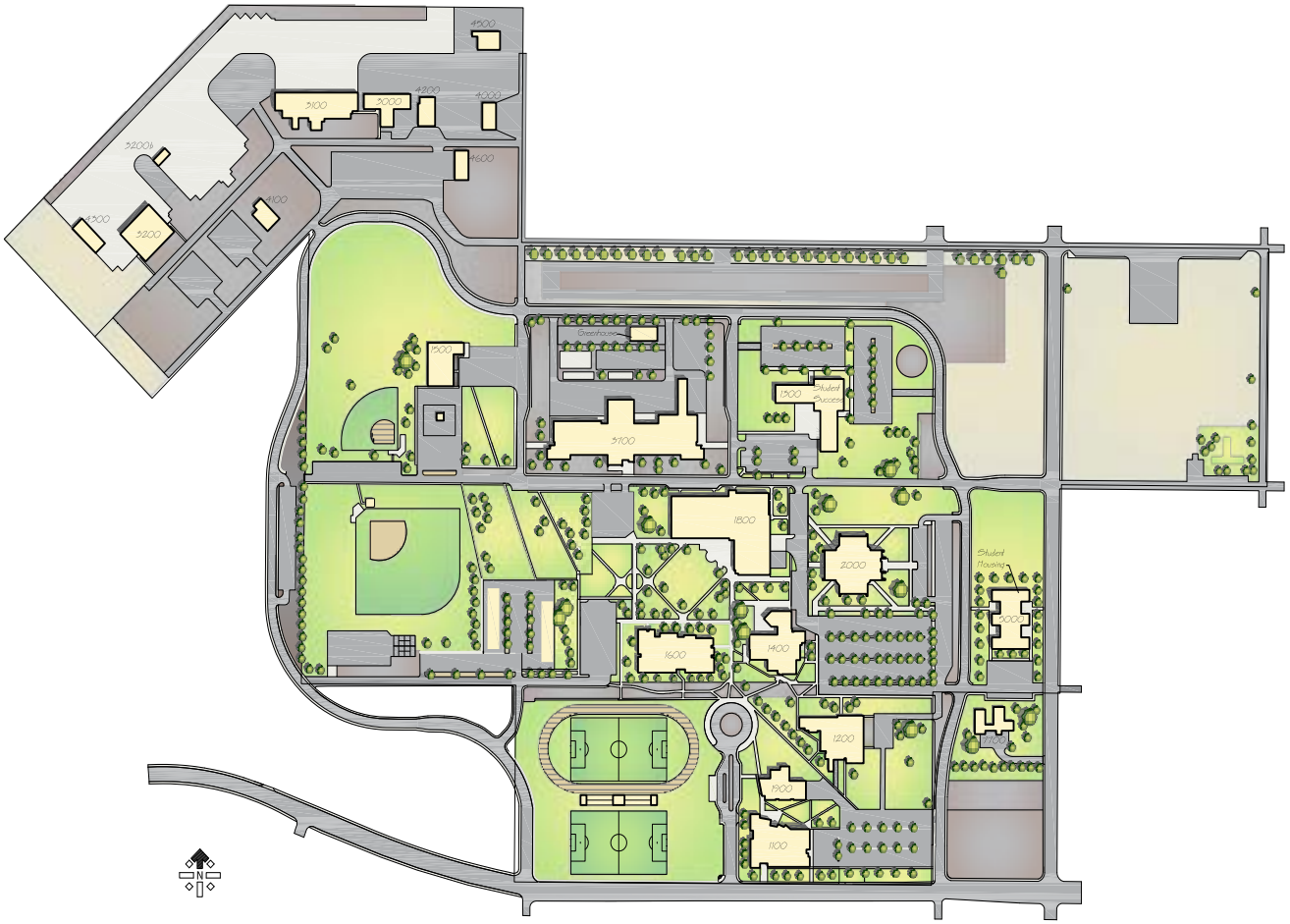
Parking lots have been redistributed throughout the campus perimeter to better serve the campus zones. Their proportions are kept smaller to help reduce the amount of heat generated by the asphalt as it is exposed to the sun. Design elements will include integrated tree islands and sidewalks, appropriate lighting, considerations for drainage and filtration, and traffic-calming devices. The landscaping plan shows new parking lots for the future Health Science and Performing Arts Center, Workforce Education Center, Student Success/Day Care, and between the Baseball and Soccer Feilds. Improvements for existing parking lots will be determined as need basis. A key consideration in the design of future parking lots is the mitigation of possible vehicle-pedestrian conflicts.

Pedestrian Circulation

The main concept in accommodating pedestrians is the development of the campus core as a pedestrian-friendly zone. The landscaping plan shows pedestrian boulevards serving as main linkages between points of arrival and main building clusters. Examples include the east-west corridor of Chanute Street, east from the courtyard to the western end of DeVries Center and the north-south axis from the transit station to ATEC. Some design elements of the boulevards include raised planter beds with integrated benches, pavilions, plazas and courtyards, and varied materials at intersections. It is the intent of these paths not only to find a primary means of access but to offer places for informal gatherings between students and their instructors.

Additional informal gathering spaces are planned for at the location north of the Health Science and Performing Arts Center. . The open space between ATEC and the Business and Liberal Arts center contains the only existing campus quad and plaza, and therefore shows excellent potential for the development of more outdoor gathering space.

Recommendations
PARKING: OVERALL



It should be noted that quality outdoor space must include ample open green space and consider the engagement of the community. The landscaping plan strives to provide this by improving existing lawns, creating green space where it formerly did not exist, offering a disc golf course northeast of campus to engage the community, and by including green space as part of the scope of new capital projects. These will become critical areas for recreation, campus events, and attracting community residents.

Along roadways, pedestrian paths will be separated from traffic with vegetative buffers. Traffic-calming devices at intersections and parking lots will also facilitate pedestrian safety. The landscaping plan shows new pedestrian paths as an integral part of planned capital projects. These paths are planned to connect these new facilities with the campus core and to integrate the outlying campus zones.

Recommendations
LANDSCAPING

Introduction:

A campus landscape is a type of urban park. The mix of recreation fields, green spaces, paths, and plantings make them the ideal place to study, reflect, or just relax in nature. Our perception of how beautiful a campus is can be linked to how well the natural and built environments relate to each other. This landscaping plan looks at current issues, while forecasting items that may arise as the campus continues to develop. Site-specific elements, vehicular and pedestrian circulation are the key points of this master plan.

When addressing circulation, it is important to consider how people will arrive on campus and how they will navigate the landscape once they have arrived. Vehicle and pedestrian concerns drive the planning process in providing a network of roads, parking lots, walkways, and outdoor environments that are welcoming and safe.

The Big Bend campus is blessed with an abundance of space, both developed and open. Green space has the potential of development of beautiful scenic landscapes. However, there are apparent issues that should be addressed when considering how growth on campus will affect ease of circulation.

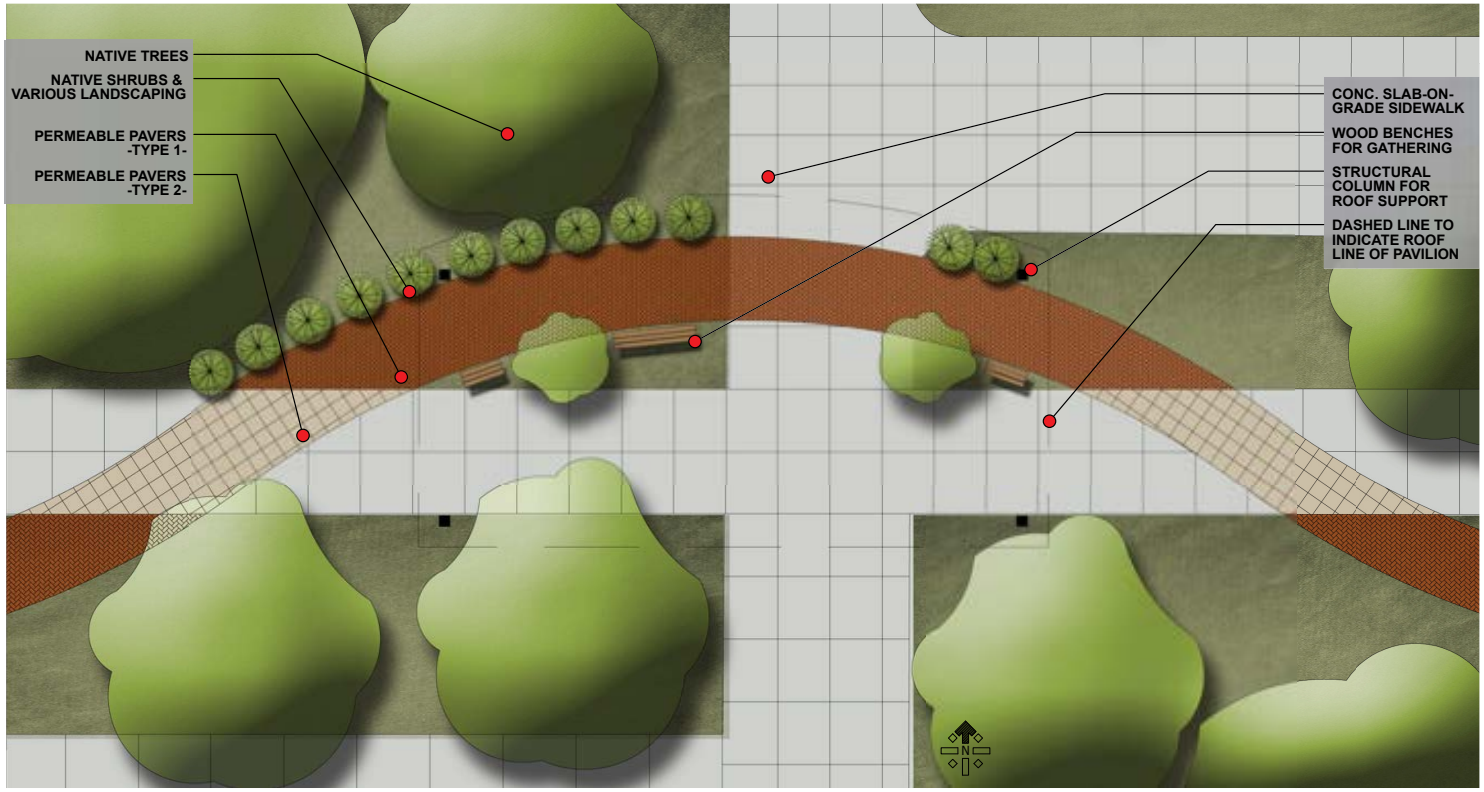
Known Issues:

Site - From a general site perspective, the campus has ample open space. Space between buildings and developed zones is plentiful with good access to parking. Yet there are campus zones that are removed from the core of campus and as a result are disconnected from vital campus services. These areas include: Aviation, Aviation Maintenance Technology, CDL, and Trio Upward Bound.

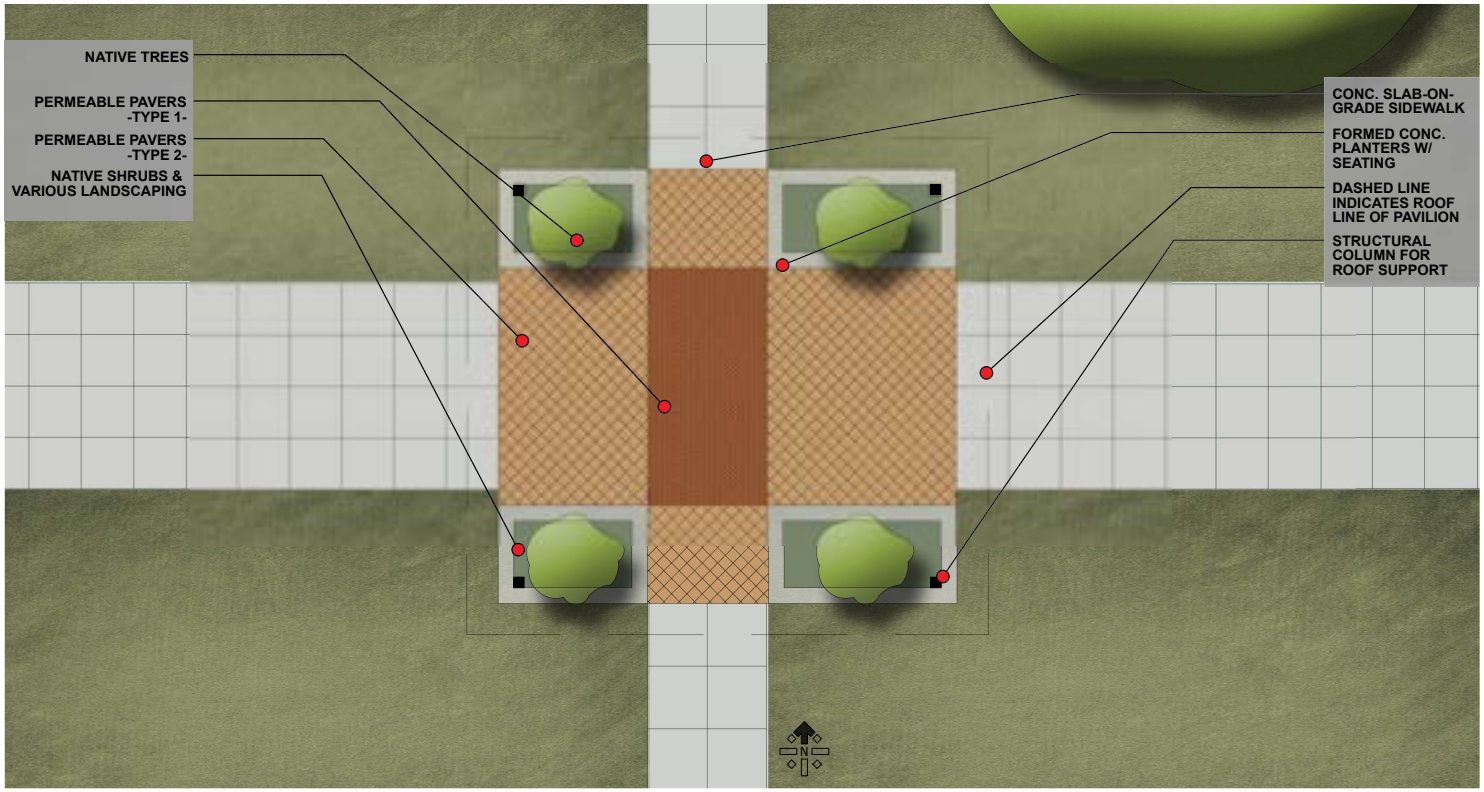
The campus also lacks a strong sense of identity as a place of higher education due to its former use as a military base and distance from the downtown district. There are no meaningful arrival points to campus that signify it as a special place. Since relocation of the campus is not a viable option, improving upon the campus image is central to the landscaping plan. Also, there is a lack of formal connection between the college and its near neighbors. The Port, Housing Authority, the Economic Development Agency, and neighboring industries would all benefit from stronger connection with Big Bend.

Another Site element of concern is the underdeveloped campus perimeter or edge. Although substantial investment has been made in the development of the College Parkway, it requires an increased level of definition if it is to serve as a campus boundary.

The open generous size of the campus is both a blessing and a curse. Campus growth can occur while still maintaining the open space. Yet large expanses of the campus green are left underdeveloped and



Recommendations
LANDSCAPING



lack the charm and inviting qualities one would expect of a college campus. Irrigation costs are a primary reason for the undeveloped landscaping. The college is in the process of trying to transfer water rights to secure affordable irrigation.

Site

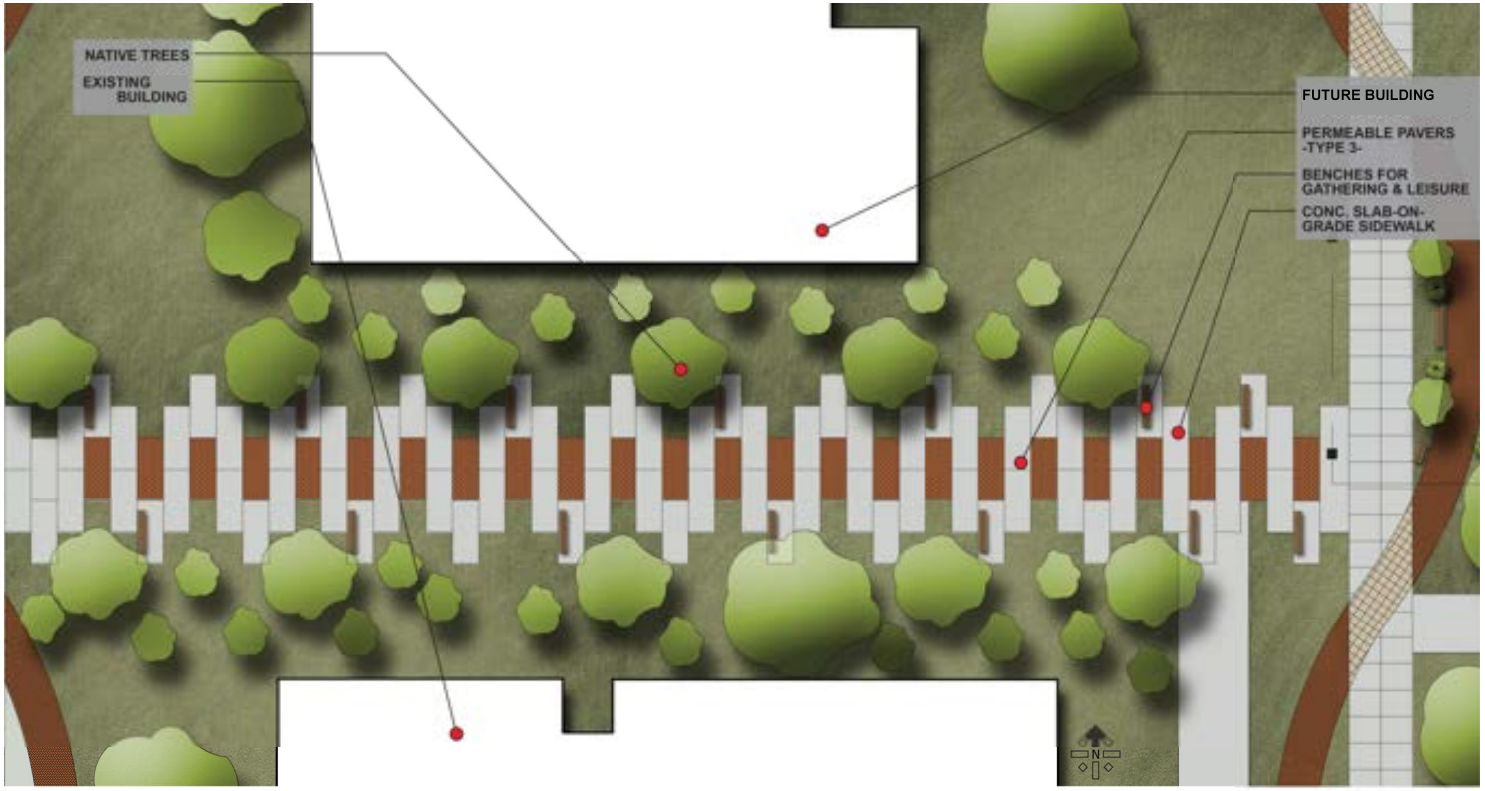
Integrating the many campus zones into a cohesive fabric is the first step in place-making. To make stronger connections to the campus core, the landscaping plan includes increased density of plantings and pathways between the campus core and the Aviation facilities. New recreational fields, tennis courts, and disc golf course will infill the underdeveloped area north of the campus core. New facilities for Workforce Education has brought the Work Force Training and Technical Education programs closer to the center of campus. Planned developments should occur within the existing campus boundary. This sustainable practice will help lessen the environmental impact of campus development. Increasing campus density will also help the college maintain open space within its border.

Campus identity will be strengthened by refining the main and secondary vehicle access points. A main campus entrance is planned for along Randolph Road with enhanced signage and wayfinding. The additional seven secondary vehicle entrances along the College Parkway can also be treated with improved signage and landscaping. On a larger scale, the college should also consider its partnerships with its neighbors by collectively planning to develop the entrance to the greater College, Port, and Airport area. The intersections of Randolph Road with both highway 17 and Patton Boulevard are key locations to consider.

Planning for a consistent landscape will also help the college to create a sense of arrival and identity. Adoption of design standards in the density, grouping and species of plantings will aid the development of a mature landscape. As capital projects are constructed, approved landscaping plans should fit within the desired campus form. Special places such as courtyards, pedestrian boulevards, intersections, vehicle entrances and designated streets can be differentiated from the landscape to signify their importance. Other landscaping features such as sidewalks, benches and light poles should have a consistent finish across the entire campus.

The College Parkway is another area where campus identity can be improved. Design elements that increase the profile of this area should include planting density, vegetative strips, special lighting, banners and signage, and varied materials at key intersections.

Recommendations
LANDSCAPING



Recommendations
WAYFINDING

Wayfinding is a term devised in 1960 by architect Kevin Lynch. The term was meant to utilize signs, maps, and other forms of graphics to illustrate location and directions to travelers along a path. While many believe this to be most useful within a building, it is most necessary when planning a campus.

Utilizing signage as a tool serves as an efficient system for movement throughout a campus. It also helps to provide additional convenience in persuading students to be on time and even come to class. It allows the motor vehicle to be directed easily and efficiently, and it allows for convenience and understanding to students, visiting prospective students, members of the community, staff, and faculty.

Big Bend Community College is currently lacking a clear understanding of wayfinding throughout campus. Signage needs to be installed in a clear and cohesive way. Signage should be incorporated in five different methods:

- Campus Entrance Signage
- Building Main Entrance Signage
- Pedestrian Signage
- Vehicular Signage
- Parking Lot Signage
- Flag Banner Signage

Campus Entrance Signage should be prominent and convey an image of permanence. It should also be the largest scale in terms of hierarchy of signage. This type of signage should give the viewer a sense of entry into campus. Signage at this scale can offer congregation spaces to pedestrians and help to activate the campus to the motor vehicle.

Building Main Entrance Signage should maintain a prominent and permanent image just as the Campus Entry signs do. However, they will reduce in size as they cater more to a pedestrian scale than vehicular. The signage can also offer seating and promote congregation at entrances to buildings.

Pedestrian Signage should be catered to the pedestrian. Maps should be shown in clear form and provide an easily understood graphic to help the pedestrian on foot move throughout campus.

Vehicular Signage should be mainly catered to the motor vehicle. However, it should be visible by the pedestrian as well. It should be a simplified sign with minimal text and arrows pointing in the direction of the buildings being identified. If there is too much text, drivers will not be able to read without slowing or congesting traffic.

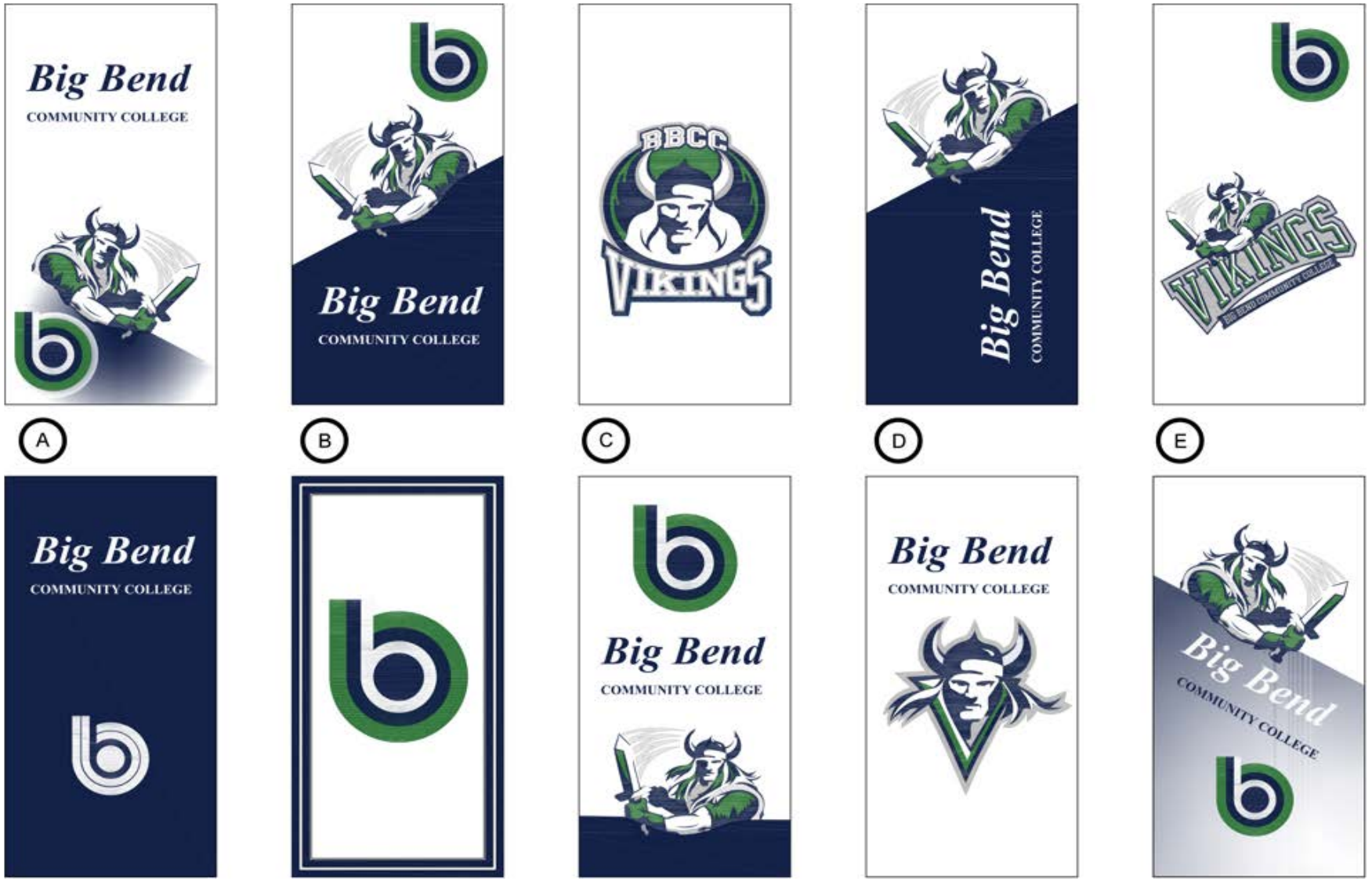
Recommendations
WAYFINDING:CAMPUS ENTRANCE & BUILDING SIGNAGE

Flag Banner Signage is a very convenient tool in creating a cohesive college campus. It helps to create an image within the campus. It becomes an aid to the pedestrian and motor vehicle of being within campus limits. It helps to create school pride and bonding on a campus. Flag banners help to solidify a college campus in our modern era.

Recommendations
WAYFINDING: PEDESTRIAN & VEHICULAR SIGNAGE

Recommendations
WAYFINDING: CAMPUS BANNER SIGNAGE

Recommendations
WAYFINDING: CAMPUS BANNER SIGNAGE



Recommendations
EXTERIOR COLOR OPTIONS

Option A - North Elevation

Option A - South Elevation

Recommendations
EXTERIOR COLOR OPTIONS

Option B - North Elevation

Option B - South Elevation

Recommendations
EXTERIOR COLOR OPTIONS

Option C - North Elevation

Option C - South Elevation

Recommendations
EXTERIOR COLOR OPTIONS

Option D - North Elevation

Option D - South Elevation

Recommendations
EXTERIOR COLOR OPTIONS

Option E - North Elevation

Option E - South Elevation

Recommendations
EXTERIOR COLOR OPTIONS

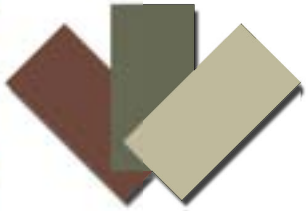
Option F - North Elevation

Option F - South Elevation

Recommendations
INTERIOR COLOR OPTIONS

Existing

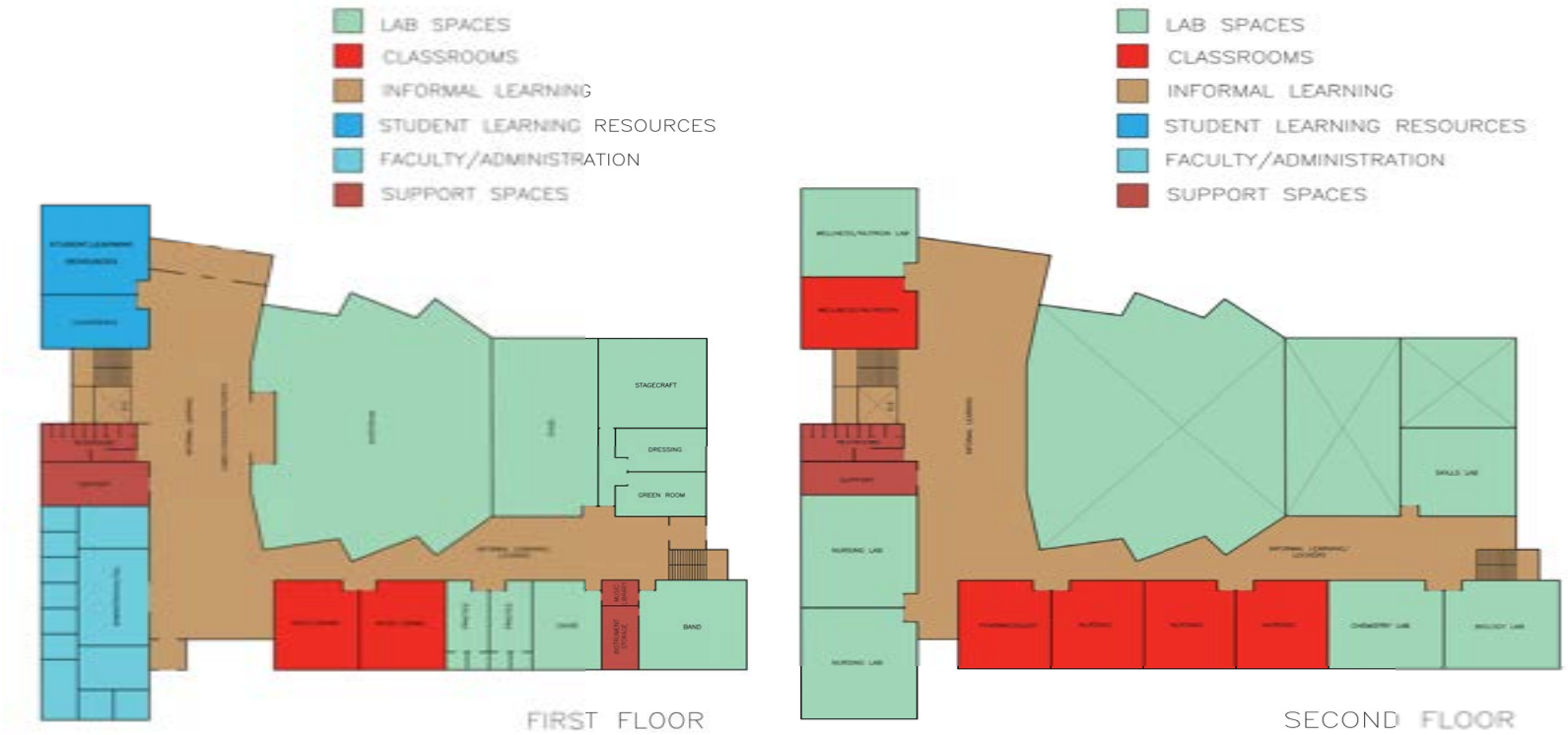
Option A

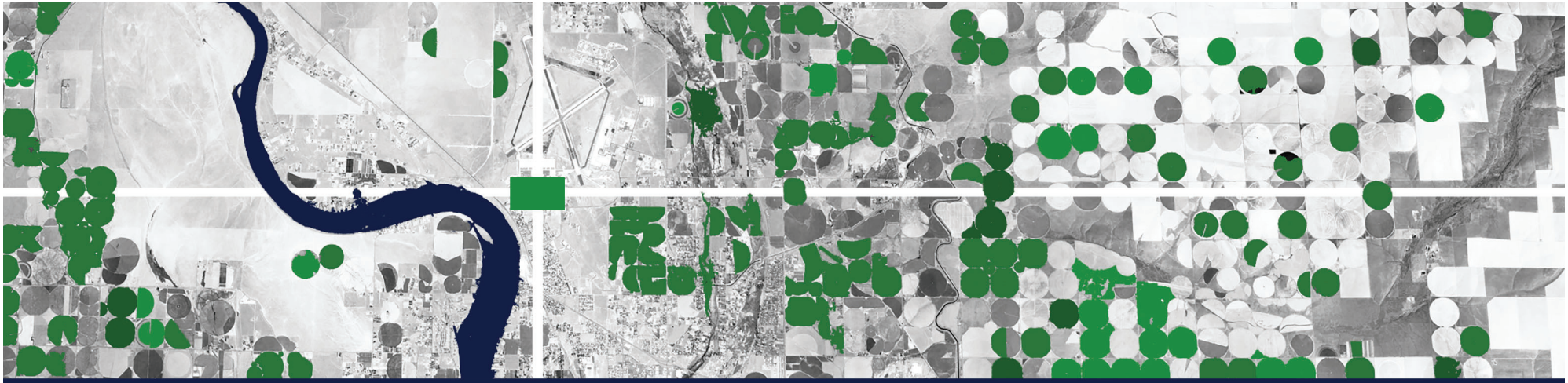


Option B

Option C

Recommendations
HEALTH SCIENCE AND PERFORMING ARTS CENTER





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