

# BLINN COLLEGE DISTRICT DISTRICTWIDE FACILITIES MASTER PLAN VOLUME 1 - REPORT

MAY 2021

Gensler

# ACKNOWLEDGMENTS

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## LETTER FROM THE CHANCELLOR



Since its founding in 1883, the Blinn College District has been committed to strengthening the communities it serves by providing quality, comprehensive education, and empowering its students to achieve excellence in their educational careers and personal goals. This districtwide facilities master plan represents a significant

tool to assist in the College's decision-making process as it builds upon the past 138 years of tradition and accomplishment.

As you will see in the pages ahead, this data-driven master planning process includes a site analysis, facility condition assessment, campus enrollment projections, demographic analysis, space utilization study, and labor market analysis related to each campus. This document was a collaborative effort and I would like to thank the trustees, administrators, faculty, staff, and community members who provided valuable input during its development. With this master plan as a resource, Blinn will continue to modernize its campus facilities, develop new partnerships, and find innovative ways to serve the next generation of college students. Already, evidence of this vision can be seen on Blinn's campuses, where Blinn has developed state-ofthe-art facilities that combine comfort and beauty with the technology to prepare students for the next generation of advanced careers.

With facilities specifically designed to cultivate programs that meet the unique needs of future students and employers, Blinn continues to forge new educational paths. With the introduction of new degree pathways in the skilled trades industries and in emerging technologies such as cybersecurity, simulation and game programming, and drone maintenance and repair, Blinn continues to provide its students the skills they need to thrive in the modern workforce.

At a time when our communities' workforce and higher education needs are constantly evolving, Blinn's commitment to its students remains steadfast. I look forward to working alongside our faculty, staff, and community partners as we continue to develop innovative new opportunities for the next generation of Blinn College students.

Sincerely,

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Mary Hensley, Ed.D. Chancellor of the Blinn College District

## BLINN COLLEGE MISSION, VISION, AND CORE VALUES

#### **Mission Statement**

Blinn College is building stronger communities by providing quality, comprehensive education, and empowering students to achieve excellence in their educational careers and personal goals.

#### Vision Statement

Shaping future academic, workforce, cultural, and economic leaders by providing excellent instruction, resources, services, and innovative partnerships, for students and the community.

#### Core Values:

Access Collaboration Diversity Excellence Innovation Respect Service

BLINN COLLEGE DISTRICT DISTRICTWIDE FACILITIES MASTER PLAN May 2021

Prepared by:

## Gensler

Facility Programming & Consulting Campus Growth Projections Lockwood, Andrews & Newnam, Inc. Facility Condition Assessment Project Cost Resources Cost Estimating

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Refer to Volume 2 for Appendix

### **INTRODUCTION**

Blinn's Districtwide Facilities Master Plan is intended as a strategic and tactical guide for the physical development of the district's five college campuses over the next 20 years. Blinn College District embarked on its first comprehensive, districtwide facilities master plan in September 2020 – a strategic process entailing eight months of meetings, analysis and numerous development scenarios to achieve consensus on a plan that will serve the best interests and future needs of its campuses and the communities they serve.

For the past two decades, Blinn College District has enjoyed a period of steady, successful growth. Its leadership recognized the timing was right for a long-term strategic view of the district's current and future direction.

The master plan for Blinn College District over the next 5, 10 and 20 years reflects the school's vision, its current position of strength in the market and the unique challenges facing each campus in the district. The master plan also serves a tactical purpose: providing the district with a road map for implementing its strategic plan with the phased development of prioritized capital improvements on campuses where continued growth is projected.



## **BLINN COLLEGE TODAY**

Established in 1883 as Mission Institute, Blinn College became the first county-owned junior college in Texas when Washington County voters levied a property tax for the creation of a public junior college district in 1937. Since that time, Blinn has continued to operate as one of the most successful community college districts in the state of Texas. Today, Blinn College District's service area encompasses 13 counties, including Washington County.

In addition to its flagship campus in Brenham, the district has four other campuses: Bryan (established 1970; in current location since 1997), Schulenburg (1997), Sealy (2005) and the RELLIS Campus in Bryan (2018). The district's average student enrollment has been over 15,000 students per year for the past five years.

The district offers academic transfer courses and technical programs for associate degrees. The college also offers noncredit, non-transferable workforce education programs. Blinn boasts the highest transfer rate in the State of Texas, sending students to institutions such as Texas A&M University, Sam Houston State University, Texas State University, the University of Texas and the University of Houston. Its transfer rate to four-year universities is 49% compared to the state average of 27%.

### COMPREHENSIVE PLANNING

To be strategic, Blinn College District recognized the importance of having a thorough, common understanding of: the physical condition of its existing campuses and facilities; how effectively and efficiently its existing facilities, classrooms and labs are being utilized; and how much additional space is needed for each campus in the next 5, 10

Photograph of the iconic Old Main building on the Brenham Campus.

and 20 years. To achieve this, the planning process included various detailed studies that, when combined, provided the analysis and data required to help Blinn College District make informed, data-driven decisions. These studies included:

- *Facility Condition Assessment* provides a detailed assessment of the district's facilities and their current condition, life expectancy, replacement costs.
- *Space Utilization Analysis* determines how much existing classroom and lab space is currently underutilized and can be more effectively used to support campus growth.
- *Demographic Analysis & Enrollment Projections* determines the projected student enrollment growth for each Blinn campus in the next 5, 10 and 20 years.
- Space Need Projections quantifies the amount of instructional and support space (new construction, renovations and upgrades) required to meet the district's future facility needs.

When combined with the physical site analysis and understanding of the carrying capacity for each campus, plus the goals identified in the visioning sessions, Blinn College District's leadership team has the tools needed to make informed decisions about the district's short-term needs and long-range development plans.

### CAMPUS PLANS

**Three Development Phases** – During the visioning and planning workshops, potential capital projects were identified for the district's campuses. The Facility Condition Assessment report identified a detailed list of renovations, demolitions and replacement projects. The total list of projects – new construction; renovations; demolitions; infrastructure upgrades; and, enhancement projects – were considered in more depth and prioritized by the district's Leadership & Steering Committee during a series of capital improvement project (CIP) prioritization workshops.

### Phase One (2021-2025)

The Implementation Phase

- Addresses the campuses' current facility needs
- Addresses the campuses' current facility deficiencies
- Addresses the campuses' projected facility needs in the next five years
- Must consider Phase Two projects to ensure a logical sequence of development in the following five years

### Phase Two (2026-2030)

The Positioning Phase

 Addresses the campuses' projected facilities needs in the next five years

## Phase Three (2031-2040)

The Horizon Phase

- Allows the district time to plan for anticipated growth
- Allows the district time to assess the carrying capacity of its current campuses to accommodate projected student enrollment
- Provides the rationale, if necessary, for land acquisition and future district expansion
- Represent the long-term aspirations of the district

Description of the three phases of the master plan.

Based on priority needs and funding streams, the projects for each campus were assigned to one of three development phases:

- Phase 1 [2021-2025]
- Phase 2 [2026-2030]
- Phase 3 [2031-2040]

Phase 1 projects address the most immediate needs of each campus including building renovations, infrastructure upgrades, and the consolidation of programs and services currently in leased or temporary structures. The implementation of Phase 1 is focused on improving Blinn's campuses and facilities in response to market expectations and to remain competitive with peer institutions.

Phase 2 projects support the district's goal to enhance the campus experience for its students, faculty and staff. Student life – housing; recreation; safety; services – is a key theme in this phase. This phase promotes the campuses as 'destinations for learning' and fosters student recruitment.

Phase 3 projects build upon the momentum of Phases 1 and 2, supporting future growth and expansion.

As the world experienced when the COVID-19 pandemic hit in 2020, change happens. The master plan is flexible and able to respond to changes in the market, funding sources and district priorities. The projects identified in the master plan and the phases they are aligned with can adjust as required without impacting the district's overall vision.

*from top to bottom:* Renderings of the long-range visions for the Brenham, Bryan and RELLIS Campuses.





**Brenham Campus** – The district's flagship campus with its iconic landmark, the Old Main Building completed in 1909, is its oldest campus. The average age of buildings on the Brenham Campus is 50+ years old. Bringing the campus and its facilities into the 21st century with renovations, demolitions and renewed focus on student life and the campus experience are the key drivers in the next 5-10 years.

**Bryan Campus** – The campus with the largest student enrollment, Bryan's success has resulted in its facilities being heavily utilized, with some programs located in temporary buildings. The consolidation of programs into new buildings, the expansion and renovation of existing spaces to support its programs, and enhancement of the campus experience to encourage commuter students to stay on campus are the key drivers in the next 5-10 years.

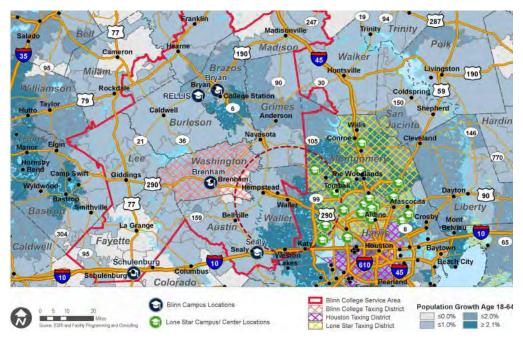
**RELLIS Campus** – The district's newest campus, RELLIS, is positioned to grow at an accelerated pace due to its partnership with the Texas A&M University System and the RELLIS Academic Alliance. New facilities in response to opportunities and market demand will be the key drivers in the next 5-10 years.

**Sealy and Schulenburg Campuses** – The two smallest campuses are both located in parts of the district's service area that are not projected to grow significantly in the next 10-20 years. For the past decade, both campuses have experienced a decline in enrollment. No new projects are planned. Opportunities for growth and strategic value to the district are the key drivers in the next 5-10 years.

### FUTURE EXPANSION

A new campus represents a bold step for an institution that wants to expand its footprint, support its growth, reinforce its brand and enhance its service offerings. During the vision sessions, the district's leadership expressed an interest in the potential for a new campus.

Later in this document, strategic considerations and service area growth projections are examined in greater detail to support the district's discussions about expansion and the possibility of a future new campus.



Map of Study Area for Potential Future District Expansion.

### COMMITMENT AND LEADERSHIP

In all, dozens of meetings were conducted with the leadership hierarchy within the Blinn College District. At specific schedule milestones during the planning process, progress meetings were conducted with the Board of Trustees to update them with an overview of the findings of concurrent tasks and studies and to answer questions from the board members.

Chancellor Mary Hensley and the Leadership & Steering Committee comprised of vice chancellors and key leaders from the Facilities, Planning, and Construction department were active participants throughout the eight-month planning process including the visioning sessions, planning and CIP workshops and progress reviews. Trustee Jim Kolkhorst represented the Board during the vision sessions and planning workshops conducted with each campus. His participation and input were important to the process, ensuring that the plan's direction aligned with the goals and aspirations of the board. The resulting master plan reflects the vision and strategic direction of the Leadership & Steering Committee for the Blinn College District. The plan was presented to the Board of Trustees on April 20, 2021, and formally adopted on May 18, 2021.

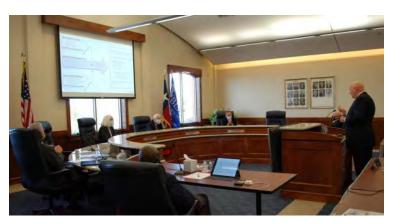


Photo of a design team presentation to the Board of Trustees.

## CONCLUSIONS

Strategically, Blinn College District is positioned to build upon its name recognition and leadership role as the state's primary pipeline to a four-year degree. The location of its flagship campus in Brenham is conveniently located between Houston and Austin, the nation's 4th and 10th largest cities, respectively. Its Bryan and RELLIS Campuses are local partners with Texas A&M University in College Station with wellestablished transfer programs.

The analysis and subsequent findings developed during the master plan suggest that a considerable amount of work is needed to maintain Blinn College District's current position of strength. Consider the following:

#### The Campuses Today

The Brenham Campus is a mature, century-old campus. Many of its buildings are old and in need of substantial renovations. A dozen existing buildings have been identified for demolition in the next 10 years. Today's students and parents base their college choices on access, value, quality of education and the campus experience. The campus experience poses the biggest challenge for the Brenham Campus in the next 5-10 years and will be a differentiator in its comparisons to competitor institutions. A second differentiator for the Brenham Campus is its on-campus student housing. Assuming that the capital improvements are made on campus as planned, it is believed that with sufficient, quality student housing the Brenham Campus could exceed its growth projections and marketability in the next decade.

BLINN COLLEGE DISTRICT | DISTRICTWIDE FACILITIES MASTER PLAN

The Bryan Campus is a 51-year story of success and rapid growth, resulting in its buildings exceeding utilization standards and some programs being placed outside the academic core in temporary and retrofitted buildings. The programs and their students need more space to continue their success. Consolidating its programs in new buildings to be located in the academic core, expanding and renovating existing spaces to support today's programs and enhancing the student on-campus experience are the major areas of focus for Bryan in the next 5-10 years.

The RELLIS Campus is the newest face of Blinn College District and projected to grow more rapidly than Blinn's other campuses given its position in the RELLIS Academic Alliance. With its direct connection to all the campuses in the A&M System, the RELLIS Campus and Blinn College District are expected to expand the Blinn brand even deeper throughout the state. Within the decade, the RELLIS Campus enrollment is anticipated to exceed that of the Brenham Campus.

#### The Next Chapter

Investing in the Brenham, Bryan and RELLIS Campuses is an investment in Blinn College District's future. Investing its limited resources in these campuses offers Blinn the greatest opportunity for a return on the investment. For the district to grow, it must first have a solid foundation. Considerations of future expansion with a sixth campus should be delayed until many of the campus and facilities issues at Brenham and Bryan are addressed. While the Bryan and RELLIS Campuses are fully engaged with the TEAMS program and the Academic Alliance, the Brenham Campus may benefit from an expanded partnership model that includes transfer programs with multiple four-year state universities. The only things keeping the Brenham Campus from doubling in size are available on-campus housing and expanded opportunities to transfer with numerous universities.

At the same time, the district should continue to assess the value of the Sealy and Schulenburg Campuses. Do these campuses reflect the vision and aspirations of the district? Do they add value to, or detract from, the messaging and brand of Blinn College? Furthermore, if a sixth campus becomes a reality, what are the lessons learned from Sealy and Schulenburg?

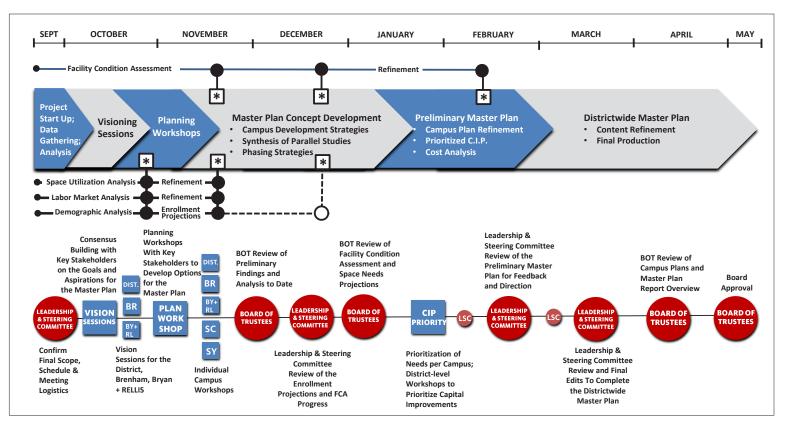
The challenges ahead for Blinn College District are considerable but not insurmountable. This master plan provides the road map for addressing these challenges with a logical, phased approach to development and decision-making. Despite limited resources and evolving needs, the district has laid the groundwork for realizing its vision of continued success. The future belongs to Blinn.

Creating a comprehensive master plan for a multi-campus community college district is a highly collaborative process, requiring a considerable time commitment and input from a variety of constituent groups: board members, administrators, faculty, students and members of the neighboring community. Having each group discuss and define its needs, make projections for growth and come to a consensus on the district's direction is the only way to ensure the master plan serves both present and future stakeholders.

The Blinn College District Master Plan is a strategic and tactical guide for the physical development of its campuses

over the next 5-, 10- and 20-year development phases. The master plan illustrates the district's educational mission as well as its role in serving area communities as part of its strategic long-range planning.

The planning process included eight months of meetings, analysis and development of campus planning scenarios culminating with a districtwide long-range plan that serves the interests and future needs of the Blinn College District, its campuses and the surrounding 13-county service area.

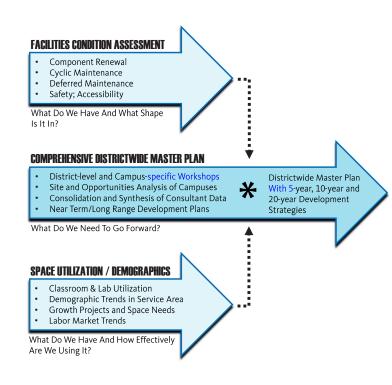


2021 Districtwide Facilities Master Plan project timeline

### DATA-DRIVEN PLANNING

**Concurrent Studies** – The comprehensive master plan reflects the synthesis of data derived from assorted studies developed on parallel tracks during the eight-month planning process. These detailed studies are the backbone of the district's strategy for growth in the coming decades and include:

- · Facility Condition Assessment;
- Space Utilization Analysis;
- · Demographic Analysis;
- Enrollment Projections;
- Space Need Projections.



**Facility Condition Assessment** – The Facility Condition Assessment (FCA) provides a detailed assessment of the district's facilities— their current condition, life expectancy and replacement costs— and their ability to serve the district's educational mission in the future. As the district plans for growth over the next 5, 10 and 20 years, it is important for both the fiscal and physical planning to understand the long-term viability of its current buildings and the cost to maintain or replace those buildings as needed. This study is described in more detail later in this document.

**Space Utilization Analysis** – Concurrent with the FCA, the consultant team conducted a Space Utilization Analysis for each building on each campus to find the utilization rate for classrooms and labs on the campuses. Quantifying the amount of currently underutilized classroom space allows for an understanding of the campuses' future space needs. This study is described in more detail later in this document.

**Demographic Analysis & Enrollment Projections** – Concurrent with the Space Utilization Analysis and FCA, the consultant team conducted a Demographic Analysis that showed catchment areas and growth potential for each campus. Based on historical data, the team developed Enrollment Projections to forecast the student enrollment growth for each Blinn campus in the next 5, 10 and 20 years.

**Space Need Projections** – The findings of the FCA, Space Utilization Analysis and Enrollment Projections informed this assessment of additional instructional space needs on each campus. These projections quantify the total amount of instructional and support space— new construction, renovations and upgrades— required to meet the district's facility needs of the future. This study is described in more detail later in this document.

## "What do we have and what shape is it in?"

"What do we have and how effectively are we using it?"

## "What do we have and what is needed to go forward?"

*left:* Graphic of the concurrent studies that informed the master planning effort.

### STAKEHOLDER ENGAGEMENT

Gensler's approach to developing Blinn College District's long-range master plan promoted stakeholder participation through board meetings, visioning and planning workshops, work sessions and multiple stakeholder meetings and presentations. The district's leadership team were active participants throughout the planning process, providing their insights and direction to the planning team.

**Project Start-Up** – Blinn College District began its planning process in September 2020 with a goal-setting session that included Gensler, its consultants and key representatives of the district's Leadership & Steering Committee. The assembled group identified goals and objectives for the master plan, confirmed the schedule and key milestones, established communication protocols and developed a strategy for engaging the Blinn College community to build consensus for the direction and future growth of the district.

**Vision Sessions** – Gensler conducted three half-day vision sessions with the district's Governance & Leadership Committee, Steering Committee and select stakeholders on October 29, and November 3, 2020. The vision sessions helped build collective understanding and consensus for the overall approach and expected outcome for the master plan. Attendees used the sessions as a forum for active discussion about shared vision, values and guiding principles for the district and individual campus's educational mission and future growth.

During the sessions, Gensler and the district's attendees named key issues, challenges and opportunities for the district and its campuses. The sessions promoted discussions around purpose, mission and the district's direction for the next 5, 10 and 20 years. *The District Session* – Gensler conducted a half-day vision session focused on district-level planning issues including:

- The anticipated opportunities and challenges facing the district in the next 5-10 years;
- The assessment of existing campuses— including the Sealy, Schulenburg and RELLIS Campuses— with focused discussion about the strategic rationale for a Blinn College presence in those communities and their potential growth and return on investment;
- The possibility of new campuses in the future, based on their strategic rationale and growth potential, as well as land acquisition needs to support the expansion of the district's footprint;
- The district's academic model, which is currently built on a solid foundation of academic transfer programs and strategic alliance with the Texas A&M University System.

It's important to note that the Districtwide Facilities Master Plan was initiated and completed during the COVID-19 pandemic. Traditional in-person meetings and workshops were replaced with virtual meetings. Blinn College's leadership team and the Gensler team worked closely to overcome any challenges that virtual engagement presented for the testreview-feedback loop that is important to the decision-making process.

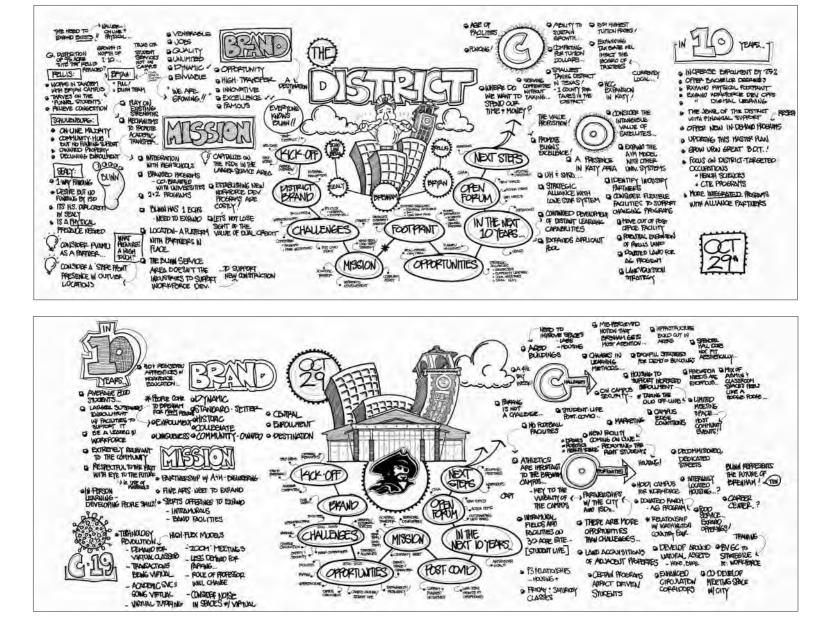


Photo of one of the three virtually-conducted visioning sessions

*The Brenham and Bryan Sessions* – Gensler conducted two half-day vision sessions focused on each of the district's primary campuses— Brenham and Bryan. These campus-specific sessions focused on the following:

- The campuses' goals and aspirations for growth and development;
- Envisioned opportunities and challenges facing the campuses;
- The campuses' educational mission and programs;
- The campuses' role as a community asset.

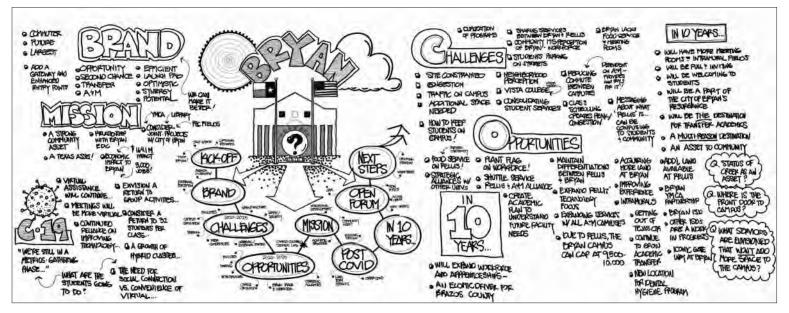
The ideas that came out of these vision sessions provided the planning team with key drivers that informed and influenced the long-range plans for each campus. Combined with the campus site analysis and early findings from the FCA and Space Utilization Analysis, the vision sessions set the stage for conducting the planning workshops that followed on November 18 and 19.



Poster from the district-level visioning session

Poster from the Brenham

visioning session



Poster from the Bryan visioning session

#### DISTRICT-LEVEL VISION SESSION TAKEAWAYS

#### Challenges

- Funding smallest taxing district in Texas
- Funding 5th highest tuition in Texas

#### **Opportunities**

- Expand academic transfer programs with other institutions similar to its partnership with TAMU
- Expand new campus in high growth community within the 13-county service area
- Expand programs with ISD's throughout the service area

#### **BRENHAM CAMPUS** VISION SESSION TAKEAWAYS

#### Challenges

- Aging facilities and Infrastructure
- Replacement/renovation needs are enormous
- Insufficient student housing

#### **Opportunities**

- P3 development of Student Housing
- Local partnerships with City and ISD
- Enhance the student services experience and intramural offerings on campus

#### **BRYAN CAMPUS** VISION SESSION TAKEAWAYS

#### Challenges

- Student Life food service and lack of amenities
- Site constrained to support additional growth
- Significant facilities upgrades needed

#### **Opportunities**

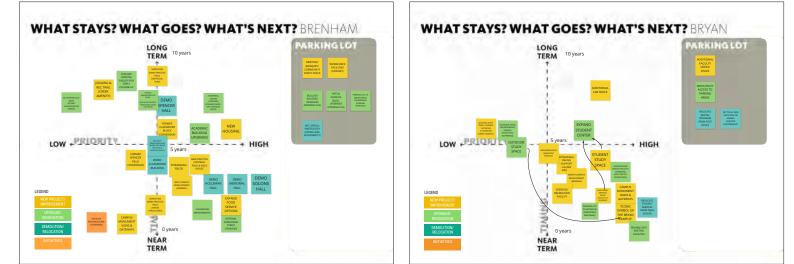
- Manage enrollment with a headcount target and focus on enhanced experience
- Expand strategic alliances with other institutions
- Enhance partnerships with City and ISD

**Planning Workshops** – Similar to the vision sessions, Gensler conducted three planning workshops focusing on: (1) districtwide topics; (2) the Brenham Campus; and (3) the Bryan and RELLIS Campuses. Each workshop began with an overview of the vision session outcomes, campus site analysis, space utilization findings and demographic growth projections, providing the workshop attendees with the data needed to make informed decisions.

*The District Workshop* – Gensler conducted a half-day planning workshop with the Leadership & Steering Committee and invited stakeholders. The workshop focused on the various campuses, facilities and property owned or leased by the district and their importance or relevance in the district's long-range plans. Informed by the data of the demographic growth projections, discussions focused on expansion and a possible new campus in the southeast vicinity of Blinn's service area.

**The Brenham Workshop** – The half-day workshop consisted of mini-sessions with specific topics such as Student Life, Pedestrian & Vehicular Circulation, Security and Student Housing to foster a focused discussion with the campus's subject-matter experts. Participants represented a diverse cross-section of the campus community including its administrative leadership and representatives of both the faculty senate and student body.

The workshop was a forum for the exchange of ideas from participants who brought personal and unique perspectives about how the Brenham Campus works and their ideas for improving the campus experience. During the workshop participants were asked to prioritize a broad list of capital projects (new buildings; expanded services; site improvements) in terms of their importance (low-to-high) to the Brenham Campus and their timing regarding the campus's near-term or long-term needs.



Outcomes of the preliminary prioritization exercised conducted during the Brenham and Bryan planning workshops

### **KEY OUTCOMES**

from the district-level planning workshop included:

Consideration of the district's non-campus properties; their purpose and value to the district's long-range plans including:

- The Leonard Road Tract
- The 187-Acre Ranch
- The Central Administrative
   Services Building
- The Post Office Center
- The Hodde Technical Education Center

Consideration of the performance and strategic rationale for the district's smaller campuses:

- Schulenburg Campus
- Sealy Campus

A review of the findings of the service area's demographic growth projections and labor market study to determine the need for, and the location of, a future campus and District expansion.

### **KEY OUTCOMES**

from the Brenham Campus planning workshop included:

A preliminary list of all future building projects and campus improvements needed to maintain campus operations and enhance the campus experience

Identification of ongoing projects and campus initiatives currently in the pipeline with delivery in the following 24 months

Identification of areas on campus for future development and areas on campus where the district prefers no development to occur

Strategies for increasing oncampus student housing from 64% to 70% of the on-campus/ hybrid student enrollment **KEY OUTCOMES** from the Bryan Campus planning workshop included:

A preliminary list of all future building projects and campus improvements needed to maintain campus operations and enhance the campus experience

The decision to set an enrollment target of 9,500 students due to the carrying capacity of its current facilities and physical site

The consolidation of programs and services currently located in underperforming and/ or metal buildings into new, more accessible buildings consistent with the Blinn brand

Strategies for consolidating decentralized student services into a new, convenient welcoming facility.

**The Bryan Workshop** – The half-day workshop consisted of mini-sessions with specific topics such as Student Life, Campus Circulation, Security and Image & Character to foster a focused discussion with the campus's subject-matter experts. Participants represented a diverse cross-section of the campus community including its administrative leadership and representatives of both the faculty senate and student body.

The workshop was a forum for the exchange of ideas from participants who brought personal and unique perspectives about how the Bryan Campus works and their ideas for improving the campus experience. The district chose to include the RELLIS Campus in this workshop because of its presence in Bryan-College Station, future growth projections and its relationship with the established Bryan Campus. During the workshop participants were asked to prioritize a broad list of capital projects (new buildings; expanded services; site improvements) in terms of their importance (low-to-high) to the Bryan Campus and their timing regarding the campus's near-term or long-term needs.

Schulenburg and Sealy Workshops – Gensler conducted sessions on November 23 and December 2 with the Schulenburg and Sealy Campuses, respectively. Participants included the executive deans for each campus, members of the Leadership & Steering Committee and the Gensler team. In each session the planning team presented the findings of the space utilization analysis, demographic growth projections and site analysis for that campus and facilitated discussions around the following topics:

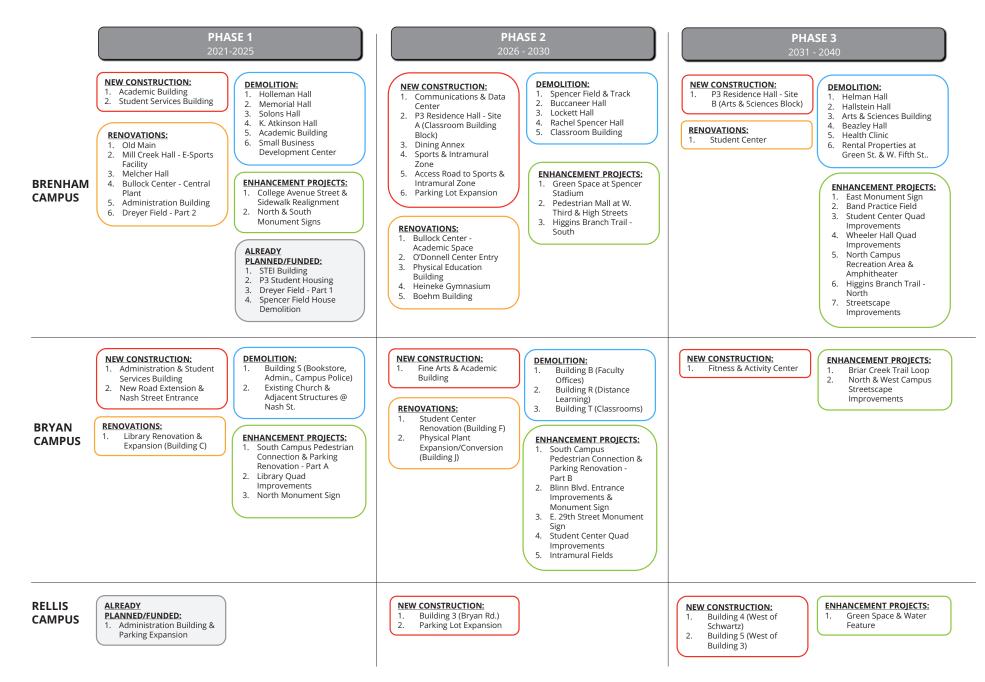
- · Presence and Role within the Community;
- Community Support and Relationship;
- Near-Term Strategies for Continued Operations.

*CIP Prioritization Workshops* – During the visioning and planning workshops, participants identified capital improvement plan (CIP) projects to meet the near-term and long-term needs of each campus. Subsequently, the FCA identified the necessary actions required by Blinn College to address the condition of its aging facilities. When combined with the projected space needs for the next 5, 10 and 20 years based on the demographic growth analysis, a comprehensive list of capital improvements emerged for each campus including new construction, renovations, demolitions and infrastructure upgrades.

Workshops were conducted with the Bryan and Brenham Campuses on January 27 and February 3, respectively, to prioritize the list of projects for implementation and to assign each project to one of three development phases: Phase 1 (2021-2025); Phase 2 (2026-2030); Phase 3 (2031-2040). The Brenham workshop included the RELLIS Campus in its discussions. In each workshop, participants considered both the impact and sequencing of demolition, as well as backfill development to ensure that the campuses' operational needs were supported. Conceptual cost estimates for each of the projects identified (included in Appendix C) were also considered by members of Blinn's project leadership team in determining the phasing of projects for each campus.

The Leadership & Steering Committee reached consensus on the CIP phasing matrix (opposite page) that became the road map for development (new construction; renovations; demolitions and infrastructure upgrades) of the district's campuses for the next 20 years. These decisions gave the planning team the direction needed to complete the districtwide facilities master plan for the Board of Trustees' review in May 2021.

opposite page The project phasing matrix above represents the final outcome of an iterative phasing exercise conducted over multiple workshops and meetings between Blinn leadership and the planning team.



### INTRODUCTION

In October 2020, the planning team traveled to each campus to document the existing conditions for analysis and impact on future development. The site analysis provided the planning team with an idea of each campus's carrying capacity for additional facilities, the potential impact that additional facilities would have on the natural systems, as well as the impact natural systems would have on the design of new facilities and constructions costs.

The analysis and subsequent documentation of the campuses includes examination of the following:

#### **BUILT ENVIRONMENT**

- Existing Buildings;
- Internal Vehicular Circulation;
- Pedestrian Circulation;
- Campus Zones;
- Recent & Anticipated Changes;

#### NATURAL ENVIRONMENT

- Vegetation;
- Hydrology (wetlands & creeks; drainage patterns; flood zones);
- Open Space;

#### CAMPUS CONTEXT

- Adjacent Land Use;
- Acreage;
- Primary and Secondary Access Roads;
- Perimeter Access Points.

Due to their greater size and complexity, the planning team analyzed the Brenham and Bryan Campuses in greater depth.

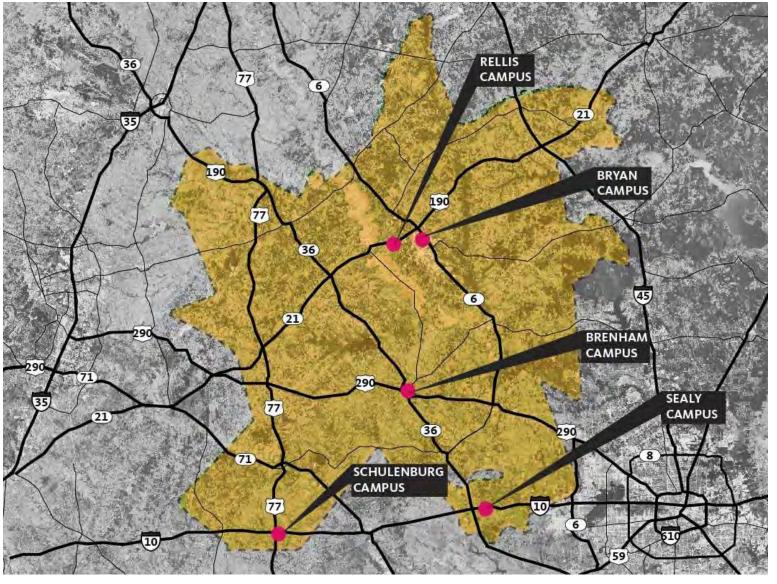
In conjunction with the site analysis diagrams, the planning team assessed the opportunities and constraints associated with the conditions highlighted on each campus. This served as a framework for discussing and evaluating potential opportunities to optimize utilization and experience of each campus.

During the planning workshops held in November 2020 Gensler presented the information that came out of this exercise. The analysis provided Blinn College District and the planning team with direction in identifying the priorities and projects that shaped the ultimate plan of each campus.

## **REGIONAL CONTEXT**

The Blinn College District service area includes Austin, Brazos, Burleson, Fayette, Grimes, Lee, Madison, Waller and Washington Counties as well as portions of Milam, Montgomery, Robertson and Walker Counties. The district's five campuses are located within the Texas Triangle— the region of the state containing the five largest Texas cities (Houston, San Antonio, Dallas, Austin and Forth Worth) and home to the majority of the state's population. The district draws a sizable portion of its enrollment from Houston and Austin and the neighboring community college service areas.

## SITE ANALYSIS INTRODUCTION & REGIONAL CONTEXT



Regional map of the Blinn College District campuses and service area.

Blinn College District Service Area



Local map of Blinn College District facilities in the Brenham area.

Located adjacent to downtown Brenham in Washington County, at the nexus of three major highways (State Highway 105, US Highway 290, and State Highway 36) the 161-acre Brenham Campus is considered the flagship campus of the district and is its oldest and largest in terms of land area.

In addition to being the main campus, Brenham is also home to the A.W. Hodde, Jr. Technical Education Center, which serves as a hub for workforce training. The district was recently gifted a 187-acre ranch property located 15 miles north of the Brenham Campus for use by the Agriculture Department.

## SITE ANALYSIS BRENHAM CAMPUS

## ADJACENT USE



The campus is bordered by cemeteries to the south, largely undeveloped land to the west, and single-family residential properties to the east and north.

The residential zones to the north and east afford the best opportunities for land acquisition to expand convenient housing, retail and amenity options, while the cemeteries pose a challenge for connecting the core of the campus to any future growth that may occur on the far west side of Blinn's campus.

## ACCESS & GATEWAYS



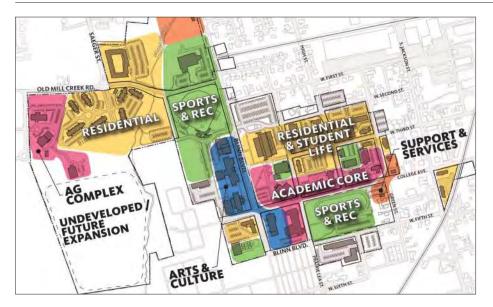
The campus's three primary access points - from the north along W. Main Street, from the south along Prairie Lea Street, and from the east along College Avenue - represent an opportunity to enhance the arrival experience with the addition of new monument signs.

At the campus core, portions of W. Third and High Streets, where vehicular access is already restricted, represent an important opportunity to establish a pedestrian-privileged 'mall' at the heart of the campus.

Development of the west side of campus is contingent on new road access.

## SITE ANALYSIS BRENHAM CAMPUS

### CAMPUS ZONES



The campus has a distinctive academic core that defines the identity of Blinn College.

Distributed sports and recreation facilities promote utilization with convenient access across the campus but also represent an opportunity to benefit from increased synergies and efficiencies if these facilities were consolidated.

Parking lots and small, aging residence halls occupy prime real estate at the heart of the campus. Relocation of these facilities could free up land for other uses at the core of the campus to better meet Blinn's needs.

## OPEN SPACE

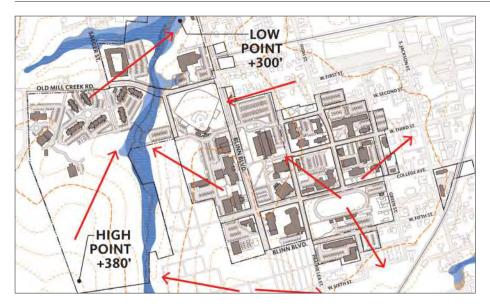


Higgins Branch is a dividing line between the campus core and the currently undeveloped portion to the west. However, this creek has the potential to become a focal point and pedestrian amenity.

Existing green space is well distributed across campus but could better support use and activity with improved amenities, infrastructure and shade.

The terminations of sight lines and views should be carefully considered in the context of future development on campus.

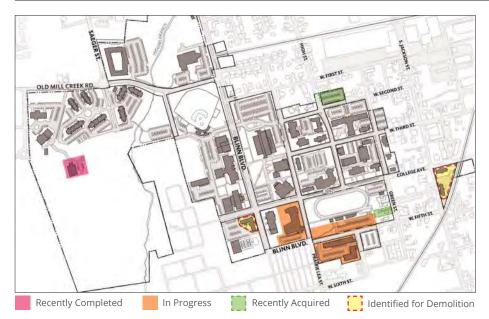
## FUTURE DEVELOPMENT CONSIDERATIONS



Topographic elevations range from roughly 300 to 380 feet above sea level across the entire campus. While existing slopes are generally gradual, they will require significant grading and retaining walls to create level playing fields.

New building projects should be located outside of and away from the floodway associated with Higgins Branch.

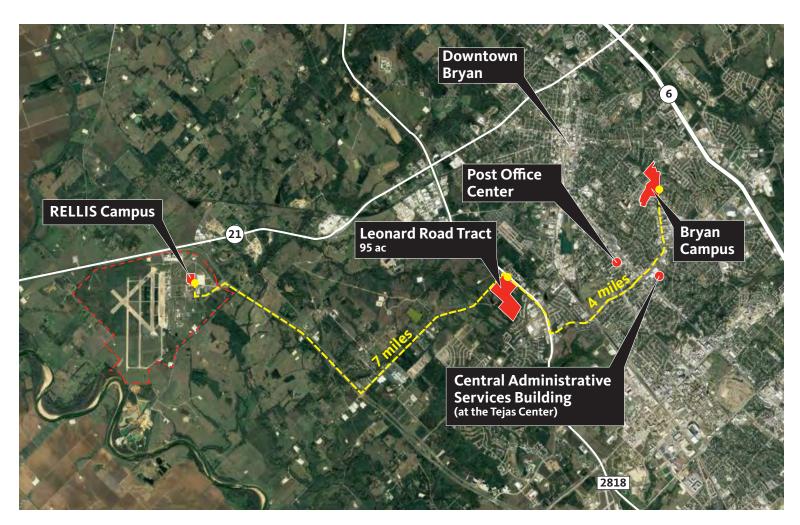
## **RECENT & PLANNED CHANGES**



Opened in 2020, the Agricultural Sciences Building is the newest facility on the Brenham Campus.

Two new projects are planned for the south side of campus: the Science, Technology, Engineering & Innovation (STEI) Building and a new P3 Student Housing complex. These projects will open in the next few years and will have a significant impact on the campus arrival experience from the south.

Recent land acquisitions along the perimeter of campus afford greater flexibility for future development.

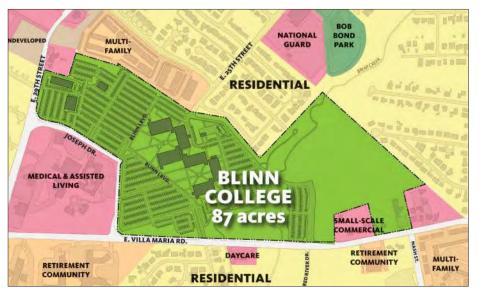


Local map of Blinn College District facilities in the Bryan-College Station area.

> Blinn College District has served the Bryan-College Station area since 1970 and has operated in its current location since 1997. Located in Brazos County, the 87-acre Bryan Campus is Blinn's second largest in size and largest in terms of enrollment. Regional access to the campus is provided by Texas State Highways 6 and 21.

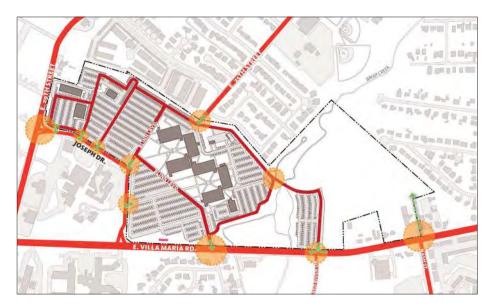
> The Bryan Campus is located only 10 miles from the nearby RELLIS Campus. The district also holds several other properties and locations in the Bryan area: an undeveloped 95-acre property on Leonard Road, the Central Administrative Services Building located in the Tejas Center retail complex and the Post Office Center which is home to Blinn's Dental Hygiene Program.

## ADJACENT USE



The Bryan Campus is bounded primarily by single-family neighborhoods and various multi-tenant complexes including apartments, retirement communities and an assisted living facility. The campus is also adjacent to some small-scale commercial properties along East Villa Maria Road and East 29th Street.

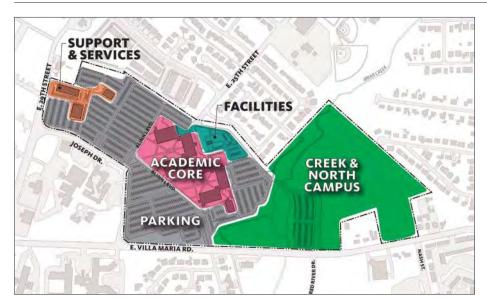
## ACCESS & GATEWAYS



The campus enjoys good visibility from E. Villa Maria Rd. and E. 29th St., but lacks an easily identifiable main entrance. All entrances could be enhanced by the addition of monument signage to announce moments of arrival on campus and promote Blinn's brand.

While the internal loop road accommodates circulation well within the campus, entry and exit points are strained during peak traffic times between classes. The entrance at Red River Dr. is configured for 'right in, right out' flow and could pose access challenges as the north side of campus develops. This could be alleviated by a new entrance at Nash St.

### **CAMPUS ZONES**



The campus is organized around a pedestrianoriented Academic Core that is surrounded by perimeter parking. This affords safety and convenience within the central core, but poses challenges for connectivity to the south and north sides of campus. It also results in an edge condition that is dominated by surface parking lots rather than more welcoming buildings or open space that could better project the Blinn brand.

The north side of campus currently feels very separate from the campus core. An inviting, walkable trail loop could help with integration as this side of the campus develops.

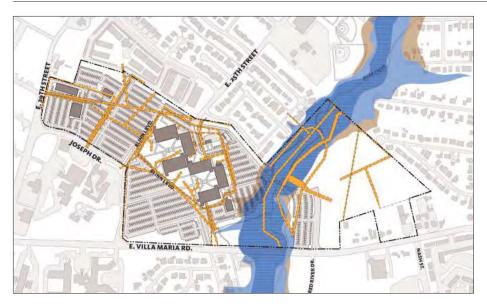
### **OPEN SPACE**



Briar Creek currently divides the Bryan Campus into two distinct areas and is associated with a flood zone and large detention areas which, while undevelopable for future buildings, could be utilized for recreational purposes or developed into a trail amenity.

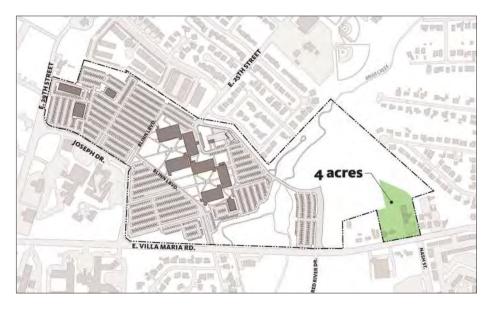
The campus features two quads in the Academic Core, which are nearly identical and could benefit from some differentiation in their appearance and functionality. While green space is plentiful at the heart of the campus, it is lacking on the south side, which could benefit from the addition of a new green space or pedestrian corridor.

## FUTURE DEVELOPMENT CONSIDERATIONS



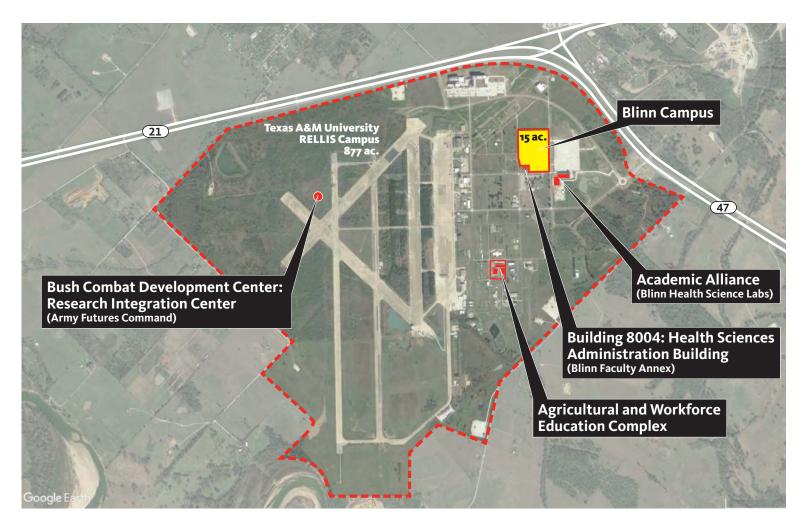
Future building development is precluded in several locations on the Bryan Campus by the floodway and flood zones associated with Briar Creek and the network of pipeline and utility easements that are distributed across the site. While these areas can be used for functions like recreation and parking, they are not appropriate for built structures.

## RECENT CHANGES



In January 2021, the district acquired three land parcels on the north side of the campus totaling 4 acres. Located at the intersection of E. Villa Maria Road and Nash Street, this new property affords opportunities to create a new primary entrance on the north side of the campus and establish a strong street presence with new facilities that project the Blinn brand.

## SITE ANALYSIS **RELLIS CAMPUS**



Map of Blinn's location within the greater **RELLIS** Campus

> Blinn's RELLIS Campus is a 15-acre tract within Texas A&M University's 877-acre RELLIS Campus, which is located at the intersection of State Highways 6 and 47 in Bryan.

> In 2018, Blinn opened its first facility at RELLIS, the Walter C. Schwartz Building. Blinn also utilizes several other facilities across the greater RELLIS Campus, including the Agricultural and Workforce Education Complex, the faculty annex in Building 8004: Health Sciences Administration Building, instructional space within the Academic Alliance buildings and shared student parking facilities.

## SITE ANALYSIS RELLIS CAMPUS

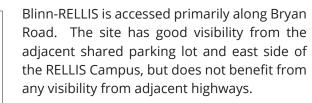
## ADJACENT USE



ACCESS & GATEWAYS

Blinn-RELLIS is situated in a prime location, but currently lacks critical mass. Blinn's land is located within an area envisioned in the RELLIS Master Plan as the future Central Core District, and adjacent to zones designated for future student housing and recreation.

4th Street, which is now used for vehicular traffic and bounds Blinn's land on the south side, is identified as a future pedestrian mall in the RELLIS Master Plan. This thoroughfare and a second future pedestrian mall location identified to the west of Blinn's site will have a significant impact on site access and circulation.



The site's central location within the greater complex is proximate to several planned zones and amenities, and will allow for pedestrian connectivity as those new facilities come online.





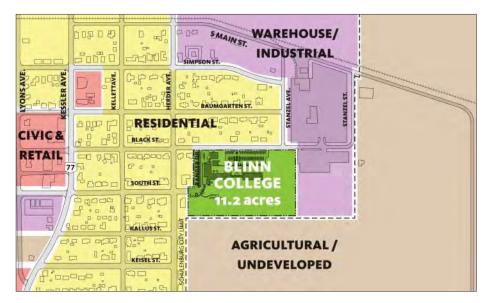
Map of the Schulenburg Campus and surrounding context

The Schulenburg Campus opened in 1997 at the former Bishop Forest High School location. The 11.2-acre campus is home to four facilities: the original high school building, which contains classrooms, a gymnasium and the Bishop Forest Memorial Museum; a second classroom building, which was added in 2005; a vocational shop; and the student center. The campus is also home to the Schulenburg Community Garden and the Schaefer Observatory.

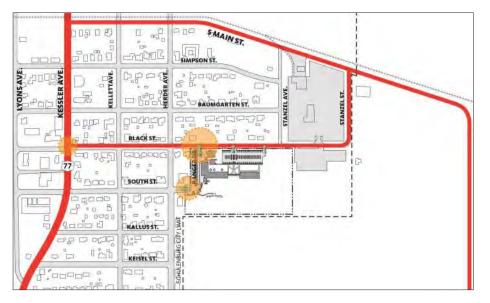
Regional access is provided by State Highway 77, State Highway 90 and Interstate 10.

## SITE ANALYSIS SCHULENBURG CAMPUS

## ADJACENT USE



ACCESS & GATEWAYS



The campus is located along the boundary of Schulenburg's city limits and is bordered by a residential neighborhood to the east and north, light industrial facilities to the west and undeveloped agricultural land to the south.

The open nature of the adjoining properties to the west and south contributes to a sense that the campus lacks defined edges. Rows of trees could be introduced to provide a visual and acoustic buffer from adjacent industrial facilities and provide a more defined, attractive edge for the campus.

The campus is primarily accessed from the east via Black Street and South Street. Its lowprofile location and lack of signage detract from the campus arrival experience.

The vocational shop building, located closest to Black Street, is the first impression of the campus when approaching along this thoroughfare. It also blocks the view of the primary Blinn College signage mounted over the covered walkway that connects the two academic buildings. Landscaping, signage and material changes could be considered to create a more welcoming first impression of the campus.

## SITE ANALYSIS SEALY CAMPUS

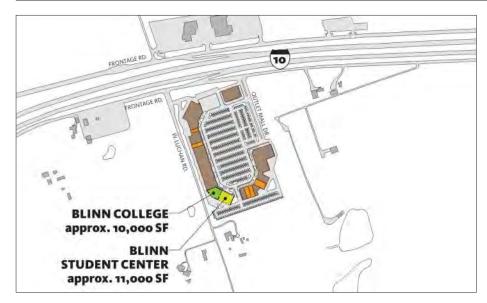


Map of the Sealy Campus and surrounding context

The Sealy Campus is located in a leased suite within the Sealy Mall retail center along Interstate 10.

# SITE ANALYSIS SEALY CAMPUS

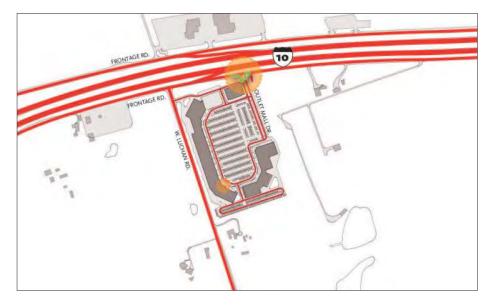
### ADJACENT USE



Sealy Mall currently suffers from a low occupancy rate, which equates to low activation and visibility due to lack of traffic within the center.

The storefront location within a retail center presents a strikingly different image of Blinn from the other four campuses within the district. Blinn's current lease ends in August 2021.

#### ACCESS & GATEWAYS



Blinn benefits from large signage for the shopping center that is highly visible from I-10. However, its location at the back corner of the shopping center is difficult to see and further obscured by trees.

While this location is convenient for those traveling eastbound on I-10, the 'right in, right out' access from the frontage road is inconvenient for westbound travelers.

In addition to its five campuses, Blinn has additional real estate holdings and facilities that the planning team considered as part of the district's overall facility portfolio and growth strategy during the master planning process. Outlined below are the strategies and options identified for each of these auxiliary properties and locations.

#### THE LEONARD ROAD TRACT

Located in Bryan at the intersection of Leonard Road and FM 2818, Blinn acquired this 95-acre undeveloped property in 2015 with the intent to develop it as an additional campus to alleviate overcrowding at the existing Bryan Campus. After the district developed a master plan for the property, they began construction of new underground utility lines to serve the property in anticipation of building a first phase of facilities.

However, once the opportunity arose for Blinn to join the Academic Alliance at the RELLIS Campus, the district opted to focus its resources on future growth there due to the synergies that the RELLIS relationship offered with the Texas A&M System and its partner institutions. With Blinn's RELLIS Campus now open and expanding its facilities, the district does not currently expect a need for a third campus in the Bryan-College Station area in the next twenty years.

Members of the planning team and the Governance and Leadership Committee met with the Oldham Goodwin Group in December 2020 to discuss the district's options for the Leonard Road tract. The options identified are:

- Sell the property
- Hold the property as an asset or for future facility needs of the Blinn College District

### THE POST OFFICE CENTER

Named for its past function as a United States Post Office, this facility is home to the district's Dental Hygiene Program's dental clinic. Located less than two miles south of the Bryan Campus, the clinic is a great asset to the community and offers low-cost dental services.

Blinn College District does not own this facility and the current lease ends in August 2021. In December 2020, members of the planning team and the Governance and Leadership Committee met with the Oldham Goodwin Group to evaluate the options for the future location of the Dental Hygiene Program. These options include:

- *Renew the current lease* Continue to operate the clinic at the Post Office Center;
- Enter a new lease Identify a new property that meets the Dental Hygiene Program's functional and space needs, ideally an existing dental office located with convenient public bus access to allow the clinic to continue serving members of the community who rely on public transit;
- *Build to suit* Build a new dental clinic facility at another location in Bryan.



Photograph of the Post Office Center

# SITE ANALYSIS AUXILIARY PROPERTIES



#### CENTRAL ADMINISTRATIVE SERVICES BUILDING



*from left to right:* Photographs of the Central Administrative Services Building and the A.W. Hodde, Jr. Technical Education Center

Blinn's Central Administrative Services Building is located at the Tejas Center commercial complex in Bryan, and is the home of a Student Services suite that includes the Admissions & Records, Enrollment Services, Financial Aid, Veterans Services, Testing Center, and Academic Advising departments. The district's lease expires at the end of 2023 with the option to extend year-by-year thereafter.

The district anticipates relocating the departments currently housed at the Tejas Center to the Bryan and RELLIS Campuses within the next five years. The new Administration and Student Services Building proposed for construction during Phase 1 on the Bryan Campus will be the primary home for Student Services. The district has programmed additional Student Services space for the new RELLIS Administration Building to better serve the students enrolled at that campus.

#### A.W. HODDE, JR. TECHNICAL EDUCATION CENTER

Located four miles to the southeast of the Brenham Campus, the Hodde Technical Education Center is a major hub of the Blinn College District's Workforce, Technical and Community Education programs. While no expansion or new buildings are proposed at this location as a part of this master plan, the district recognizes the important role this facility will continue to play in building and maintaining partnerships with local industries to provide quality training programs to the community.

#### THE 187-ACRE RANCH

This working farm was gifted to Blinn College District in 2020 for use by the Agricultural Sciences Department at the Brenham Campus. Located 15 miles north of the Brenham Campus, near the intersection of State Highway 36 and Wauls Legion Road, the property's main purpose is providing space for animal husbandry.

The district did not identify any major capital improvement projects for this property as a part of this districtwide facilities master plan. While a small management facility may be needed to support day-to-day operations, the district does not anticipate building any academic facilities here in the next 10 years and will re-evaluate facility needs as a part of the next master planning effort.

# FACILITY CONDITION ASSESSMENT

#### **KEY TERMINOLOGY**

Please refer to the Appendix for a full glossary of terms used in the Facility Condition Assessment.

**Asset**: Free-standing structure, a portion of a structure, or any part of facility infrastructure distinguishable from its surroundings by date of construction, construction type, and/or the Systems that comprise it.

**Backlog:** Facility maintenance that has been deferred on a planned or unplanned basis.

**Deferred Maintenance:** Work deferred on a planned or unplanned basis. Deferred maintenance includes existing major repairs and replacements; it does not include future maintenance, capital improvements, or grandfathered code issues.

**Facility Condition Assessment (FCA):** Collection of detailed facility data to support a capital renewal and deferred maintenance program by identifying, estimating, and prioritizing existing deferred maintenance and predicting capital-renewal requirements.

**Facility Condition Index (FCI):** Industry-standard metric that objectively measures the current condition of a facility, allowing comparison both within and among institutions. To determine FCI for any given set of assets, the total cost of remedying deferred maintenance requirements is divided by the current replacement value. Generally, the higher the FCI, the poorer the condition of the facility.

*Lifetime:* The number of years a System is expected to be useful (its "useful life") before Renewal is required.

**Overhead:** Expense incurred during a project that is in addition to the actual cost of construction. For example, design fees, permits, land acquisition costs, legal fees and administration costs are considered Overheads. Overheads can be added to a Project or the Replacement Value of an Asset.

**Project:** Combination of Requirements plus additional "overhead" cost data. Projects allow organizations to explore how to remedy and fund Requirements in the most cost-effective manner. Projects can be placed in fiscal plans in order to accurately track financials and scheduling.

**Renewal Cost:** Cost of replacing an asset System as it reaches or exceeds the end of its useful life.

**Replacement Value (RV):** Cost required to construct a replacement facility to current building codes, design criteria, and materials. The RV is determined for any given set of assets by multiplying the cost per unit of measurement by the size. This cost may exclude or include Replacement Value Overheads, or soft costs.

**Requirement:** Facility need or a deficient condition that should be addressed, including deferred maintenance, code issues, functional requirements, and capital improvements. A Requirement can effect an assembly, piece of equipment, or any other System.

**Requirements Index (RI):** Total needs Requirements Index. RI includes the costs of all non-closed Requirements, regardless of category and time (depending on FCA database site configurations). To determine RI for any given Asset, the total cost of addressing all Requirements is divided by the current replacement value. The RI may not display on your site if the RI site setting is disabled by the Administrator.

**Soft Costs:** Costs that are necessary to prepare and complete the non-construction needs of a construction project, but not directly associated with construction or equipment costs (for example: design fees, permits, inspections, consultants, environmental studies and regulatory demands). Soft costs may differ according to your locale.

*System:* Assembly, finish, fixture, piece of equipment, or another component that makes up an Asset.

**System Renewal:** Cyclical repair and/or replacement of a System. The act of System Renewal can be called a 'Renewal Event.' System Renewal is forecast to occur at the end of a System's lifetime in its Renewal Year, which is based on the System's expected lifetime or its observed condition. The future costs of System Renewal are predicted in a Renewal Forecast (a Funding Module report) as well as various System Reports.

# FACILITY CONDITION ASSESSMENT INTRODUCTION

The purpose of this Facility Condition Assessment (FCA) is to provide professional consulting services for the assessment of select facilities of the Blinn College District. The scope of this work included the evaluation of 53 facilities on the Brenham and Bryan Campuses. The work included visual assessment and documentation of educational and support facilities through the focus of the following architectural and engineering disciplines:

- Structure and Envelope
- Interior Architectural
- Mechanical and Plumbing
- Electrical

This work included the development of facility replacement values through system inventory, assessment of system condition and evaluation of remaining life, as well as a listing of observed deficiencies and associated cost estimates for consideration by Blinn College District. This facility information was captured in an FCA database established for this work and is intended for subsequent use by Blinn College facilities professionals.

The information provided in this document provides a summary of the resulting building metrics at the time of the assessment, which was conducted in the fall semester of 2020. Information presented throughout the document pertains exclusively to Blinn College's facilities within the scope of work and are limited to the systems and their conditions in place at the time of the assessment. Work currently planned or anticipated at the time of the assessment is not included in the costs and data presented. It is also important to note that the winter storm that hit Texas in February 2021 occurred after the evaluation of Blinn's facilities were completed, and is not

accounted for in the data presented in the FCA. In response to damage from the storm, the priority of certain planning projects was adjusted in the phased campus master plans so that necessary repairs could be planned and coordinated with the projects that had already been identified during the planning process.

#### Contents of this report include:

- 1. Project Approach and Methodology
- 2. Overview of Conditions
- 3. Cost Summary
- 4. Districtwide Recommendations
- 5. Appendix (see Volume 2)
  - Glossary
  - Asset List Report



Blinn College Park Apartments Building #5, Aerial photography utilized for roof condition assessment.

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#### ASSESSMENT

The Facility Condition Assessment (FCA) performed for Blinn College District is a system-level assessment. This FCA is intended to provide an overall understanding of the current conditions of Blinn College District facilities. It is also useful as a planning tool, providing insight into current and anticipated needs.

Facilities (Assets) are comprised of building elements (Systems). For example, a list of systems which make up the entire asset could include: the substructure/foundation, exterior walls/building envelope, interior walls, doors, finishes, mechanical systems, electrical systems and plumbing systems.

The systems are defined and grouped in accordance with the American Society for Testing and Materials (ASTM) Uniformat II Classification for Building Elements. The asset model allows for the establishment of the replacement cost of the asset, employing the consistent and accurate pricing of the various systems from RS Means. RS Means is a nationally recognized, industry standard, for materials estimation and provides pricing for the Uniformat II building systems. It is these systems that are verified and assessed during the FCA site visits.

Systems can be classified as replaceable or non-replaceable. Replaceable systems are typically replaced in their entirety once their serviceable life has been reached or exceeded. The cost to replace a system in place is usually more than the cost to install the same system in new construction. For example, the cost to replace windows in an existing building

with new windows will cost more than installing windows in new construction, because there is a cost associated with removing the existing windows.

Non-replaceable systems are those that are not replaceable such as foundations and most superstructure components. The cost to renew most non-replaceable systems amounts to a smaller portion of the cost to install the system in new construction. For example, the cost to renew a foundation amounts to a small percentage of the replacement cost of a newly installed foundation. The foundation of an existing building cannot be entirely removed and replaced with a new foundation. A smaller renewal cost is more typical than a substantial foundational issue that may be causing other structural issues. Issues of more substantial structural rehabilitation should be considered on a case-bycase basis. Regardless of whether a system is replaceable or non-replaceable, the cost implications associated with either should be considered alongside the asset's age and functionality.

Requirements are facility needs or deficient conditions that should be addressed. These can include lifecycle-based renewal, deferred maintenance, code issues and functional requirements. Both replaceable and non-replaceable systems can carry associated requirements. If a requirement generated for a system was based on its remaining useful life, the associated cost estimate (as a percentage of the replacement value) is contingent upon the anticipated cost to renew that system - whether it is completely replaced as a replaceable system or renewed as a non-replaceable system.

#### The FCA is not intended to serve as a replacement of architectural or engineering design considerations. Considerations of anticipated occupancy or how the facility is or will be used are not factored into the assessment process.

The development of system requirements and replacement or renewal costs were based on the condition of systems in place at the time of the assessment.



Subsequent sections of this report provide detail of the FCA approach and separate discussions of facility conditions noted at each of the assets included in the assessment. A comprehensive cost summary of requirements by category, priority and system group is included in the Cost Summary section of this report. Appendices of this report include detailed building information which is used to summarize the building metrics and provide a listing of building deficiencies and their respective priorities.

#### **Exclusions**

It is important to note specific exclusions from this FCA work to provide an understanding of the specific effort associated within the scope of work. *The following are excluded from the scope of this FCA:* 

- Environmental assessment
- Geotechnical assessment
- Inventory-level data
- Brand identification of systems
- Destructive testing
- Equipment inventory
- · Scientific testing and measurement
- Indoor air quality assessment
- Utility consumption analysis
- Site utilities and improvements

*left:* Photo of Old Main, Blinn College Brenham Campus

### ASSESSMENT TEAM STRUCTURE

The FCA was developed based on the technical expertise of a team of qualified professionals with experience in design, construction, inspection and facility condition assessment of commercial and educational facilities. The assessment team was comprised of professionals with the required skills and training to assess the architectural, structural, mechanical, electrical and plumbing systems encountered in the field.

#### SOFTWARE UTILIZATION

The software component of this effort, VFA.facility, is the FCA database, facility planning and management tool identified as most appropriate for this work and application. The software is a web-based program designed specifically to catalog and report facility system conditions to aid in facility management, priority setting, budget establishment and project grouping.

In its completed and submitted state, the database remains readily accessible to Blinn College personnel who have been granted access by the site administrator. Blinn College will retain access to the web-based database as long as the license (annual agreement) is maintained.

VFA Auditor (Auditor) is a data collection component of the VFA.facility software. Auditor allows the software administrator to assign facility models as surveys to each assessor for response by means of a mobile collection device.

## DATA COLLECTION AND ENTRY

In order to gather necessary facilities data, the assessment team reviewed available record drawings of Blinn College's facilities to gather an overview of the campuses. This effort served to educate the team regarding facility histories and assisted with the initial data population of the FCA database.

In addition to the review of available record drawings, maintenance interviews were conducted for each campus. The maintenance interview provided the team with nuance and insight that may not have otherwise been readily observed at the time of the assessment.

Once the foundation was laid for the database using record information, team members conducted physical condition assessments of facilities. The work performed at each site included:

- Documentation of system information by type, size/ quantity estimation and installation date;
- Photographing building systems and deficiency requirements;
- · Assessment of remaining system life;
- Recording of facility requirements as they relate to code compliance and accessibility requirements;
- Inclusion of requirements discussed during maintenance interviews.

Assessments are both objective and subjective. The nature of facilities construction is such that the condition of some systems, such as electrical distribution systems, cannot be visually inspected without extensive, intrusive and costly methods due to location. In such cases, assessment data was objectively entered into the database and typically based on installation date, unless otherwise known.

Alternatively, many facility systems, such as floor coverings and exterior walls, can be inspected visually. In these instances, and in the case of facility needs or requirements identified, subjective evaluations were performed based on perceived condition and estimated remaining life at the time of assessment.

#### **Requirement Priority Levels**

Requirements and a designated priority level are associated with each of the facilities, where applicable, and are based on the severity of the requirement and the time frame during which it should be scheduled for correction. The time frames described in Requirement Priority Levels are based on the conditions at the time of the assessment and remain as-is unless adjusted manually. During future use of the assessment tool, the designated Blinn College administrator may choose to update the assigned priorities for future analysis.

#### **Requirement Priority Levels** Priority 1

- Currently Critical or Immediate Concerns
- Should be addressed within 1 year of assessment
- The Linked/Prime System is at or exceeding the service life.

#### Priority 2

- Potentially Critical or Short-Term Concerns (within 1-2 years)
- Should be corrected soon to maintain the integrity of the building, including Systems that are functioning improperly.
- The Linked/Prime System is at or exceeding its service life but is well maintained to achieve an extended service life.

#### Priority 3

- Necessary Not Yet Critical or Long-Term Concerns (within 3-5 years)
- Should be corrected to maintain the integrity of the building, including Systems that have exceeded their expected useful life, but are still functioning.
- The Linked/Prime System is at or exceeding its service life but is well maintained to achieve an extended service life.

#### Priority 4

- Not Time Based
- A non-time-based improvement, upgrade, or recommendation.
- The Linked/Prime System is functioning and does not compromise the integrity of the building.
- The condition does not comply to current codes but is grandfathered and thus exempt.
- No action is required unless significant renovation is performed on the facility.

#### DATA ANALYSIS

Once the database is populated and the contents verified, data analysis is conducted. Data analysis consisted of two basic tasks:

- · Development of asset replacement values;
- Development of cost estimates for identified deficiency requirements and system renewals.

The detail provided relating to systems and requirements formed the basis for calculation of a Facility Condition Index (FCI) and Requirement Index (RI) for each facility.

#### FCI and RI Definition

The Facility Condition Index (FCI) is a benchmark metric used to analyze the effect of investing in facility improvements. This was the primary quality indicator in this work and is an industry standard metric established in the early 1990s that portrays a given facility's condition by comparing deferred maintenance costs or required repairs relative to replacement value (Sean C. Rush, Applied Management Engineering, P.C., National Association of College and University Business Officers, Coopers & Lybrand, 1991).

The FCI is an index of current facility condition based on the cost of deferred maintenance requirements relative to the building replacement value.

An FCI of zero (0) suggests a facility has zero, or no current needs or deferred maintenance. Given the nature of facility operation, this generally indicates a newly commissioned building. Alternatively, an index greater than 100% indicates that addressing a facility's requirements calls for a greater capital investment than constructing a new facility of like features. FCI parameters for this work include current (or backlogged) requirements as well as those anticipated within one (1) year. The FCI calculation includes a requirement such as the replacement of an air conditioning system categorized as "Lifecycle" if scheduled for replacement immediately or within one year.

Like the FCI, the Requirement Index (RI) can be used as a gauge to understand requirements tied to a particular facility within a five year planning window. The RI is an index of anticipated facility condition over a five year projection; this includes current requirements, anticipated requirements and all requirements regardless of type or categorization.



### **BUILDING CONDITION DEFINITION**

The relative measure of the building condition of the facility (or facilities) can be organized into a four-tiered subjective condition scale as follows:

- *Excellent:* Above-average condition for the overall asset and building systems assessed. Commonly associated with new or recently renovated facilities. Other than minor maintenance items, no substantial or remedial work is recommended or required.
- *Good:* Average to above-average condition for the overall asset and building systems assessed with consideration of its age. Generally, other than normal maintenance, no remedial work is recommended or required.
- *Fair:* Average condition for the overall asset and building systems assessed. Systems are aging and some work is required or recommended, primarily due to normal aging and wear of the systems, to return the systems to an improved condition.
- *Poor:* Below average condition for the overall asset and building systems assessed. Significant work (major repair or replacement) should be anticipated to restore the building systems or materials to an acceptable condition.

While it is common for an institution to eventually take ownership and define what is and is not acceptable in terms of an FCI threshold for their facilities, the following language and figure are provided to establish initial parameters of building condition for Blinn College. Reviewing both the FCI and RI along with an understanding of the overall condition and use of the asset is helpful in applying a subjective condition rating.

A facility considered to be in an excellent condition commonly has an FCI and RI in the range of 0% to 5%, while a facility in good condition will commonly have an FCI and RI in the range of 5% to 10%. A higher FCI and RI (greater than 10%) signals that the facility is in fair to poor condition; it indicates that the asset has requirements with costs that are at a higher percentage of the asset's current replacement value and depending upon the long-range plan for the facility may not substantiate capital reinvestment.

**Building Condition Definition** 

Excel	lent G	ood	Fair to Poor	
0%	5%	10%	50%	100%

# FACILITY CONDITION ASSESSMENT OVERVIEW OF CONDITIONS

## SUMMARY OF DISTRICTWIDE ASSESSMENT

The following sections provide a summary of building conditions included in the Blinn FCA. Due to location, facility ownership and recent construction at the Blinn College campuses located at Sealy, Schulenburg and RELLIS (Bryan), the scope of work of FCA activities were limited to the Blinn College Brenham and Bryan Campuses.

Results of the Facility Condition Assessment provide the following summarized information for Blinn College located on the Brenham and Bryan Campuses:

- 53 buildings included in the FCA
- Building Size Total: 1,049,697 square feet
- Facility Condition Index (FCI) of 11.5%
- Requirement Index (RI) of 31.3%
- Blinn College's buildings are 35 years old, on average.

#### Blinn College Districtwide Condition Observations

- Majority of immediate condition-based needs are on
  Brenham Campus
- Housing (Residence Halls) are oldest and in most need
   of immediate attention
- Classroom/Training, Multipurpose, and Housing (Residence Halls) will require the most investment over the next five years (if buildings remain)
- HVAC and Interior Finishes constitute most of the requirements by building system, generally 30+ year old buildings require this type of attention

## **BUILDING CONDITION METRICS**

The following figures provide both the FCI and RI along with the age, most recently understood renovation date, and primary use of the asset.

Building Conditions Summary (By Campus)

Campus	Building Count	Total SQ FT	Average Building Age	FCI	RI
Brenham	42	743,097	38	14.4%	32.0%
Bryan	11	306,600	22	3.9%	29.4%

The table above provides an overview summary of building metrics at the Brenham and Bryan Campus. These metrics include: Building Count; Total Square Footage; Average Building Age; associated FCI and RI.



*right:* Photo of Blinn College Park Apartments on the Brenham Campus

# FACILITY CONDITION ASSESSMENT COST SUMMARY

#### COST INFORMATION SOURCE

The primary source of cost information, which is integral to the FCA software, is based on the RS Means cost estimate database for the year 2020, localized for both Brenham and Bryan Campuses. RS Means is an industry-standard cost estimate reference. The RS Means City Cost Index (CCI) is a factor used to adjust RSMeans Construction Data to a specific city, in this case, the geographically most relevant location to each facility. For all facilities included in the assessment, the localized Bryan CCI provides the most geographically relevant location for both the Brenham and Bryan Campuses.

### ASSET REPLACEMENT VALUES

Asset replacement values calculated in the software are based on a buildup of system replacement costs identified and quantified during the field assessment. In addition to the raw cost of system replacement cost buildup, soft costs have been incorporated through the configuration settings of the software and have been incorporated with the following general assumptions:

- General Contractor Overhead and Profit (O&P): 15%
- Architect, Engineer, Survey, and Testing Services: 10%
- Program (or Project) Management: 4%

Soft costs are those that are necessary to prepare and complete the non-construction needs of a construction project but not directly associated with construction or equipment costs, including: design fees, permits, inspections, consultants, environmental studies and regulatory demands. Furthermore, elements related to movable furniture, fixtures, and equipment are not included as part of the asset replacement value.

## **REQUIREMENT COSTS**

Cost estimates for requirements included as part of this work are provided as if they were completed independently rather than bundled into one or several work packages. Cost totals shown in the following summarized sections include current requirements as well as those anticipated over the next five years. The total cost shown in each table is the Requirements Index total for the Blinn College District.

Additional clarity regarding the cost estimates for Requirements derived and displayed in the software is provided below:

#### Included

 Overhead and profit (O&P) markups for the Installing Contractor (typically sub-contractor to a General Contractor)

#### Not Included

- Escalation factor (such as inflation) for when the work is anticipated to occur.
- Allowance for general conditions (typically 5% to 10%)
- General Contractor O&P (typical range of 5% to 15%)
- Professional fees
  - Program/Project Management
  - Architectural Design
  - Engineering Design
- Permitting fees
- The cost of additional land/property acquisition
- Movable Furniture, Fixtures, and Equipment

# FACILITY CONDITION ASSESSMENT COST SUMMARY

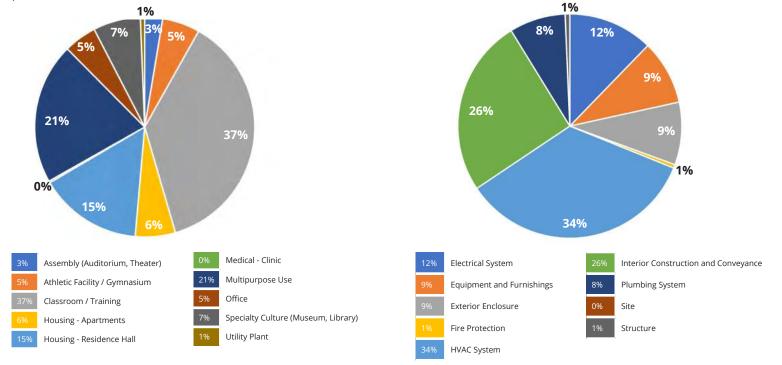
With any construction project - whether it is new construction, a renovation, or an addition - soft costs are a factor that should be considered. Soft costs are those additional expenses incurred to complete construction, these can include, but are not limited to: General Contractor Overhead and Profit; Professional Fees (Management and Design); permitting fees; land acquisition; furniture, fixtures, and equipment. As soft costs vary on a project-by-project basis, these expenses

#### BLINN COLLEGE DISTRICTWIDE BUILDING REQUIREMENTS BY BUILDING USE

The following chart provides a summary breakdown by Building Use for all buildings included in the assessment. The breakdown provided is based on total cost of requirements. are excluded from the costs and metrics presented within the FCA portion of this report and in the software database in order to provide an accurate picture of the condition of the facilities and sites. To provide consideration for soft cost expenses, a markup of 30% provides a general understanding of the potential total that may be anticipated for soft costs without further development of projects and possible work packages.

#### BLINN COLLEGE DISTRICTWIDE BUILDING REQUIREMENTS BY SYSTEM GROUP

The following chart provides a summary breakdown by System Group for all buildings included in the assessment. The breakdown provided is based on total cost of requirements.



*left:* Building Requirements by Building Use

*right:* Building Requirements by System Group

# FACILITY CONDITION ASSESSMENT BRENHAM CAMPUS CONDITION SUMMARY

#### **BRENHAM CAMPUS OBSERVATIONS**

The Blinn College Brenham Campus facilities are considered to be collectively in fair condition based on the resulting overall FCI. While recent construction has helped to improve the overall FCI, several aging facilities (those which range in age of 50+ years) are in need of replacement or substantial renovation. In terms of needs over the next 5 years, the majority of aging facilities such as Classroom/Training, Multipurpose, and Housing (Residence Halls) are expected to accelerate substantially in worsening condition as indicated by the RI. Due to the aging inventory of facilities, several building systems are in need of renewal or replacement. Building systems which have reached or are beyond their expected lifetime are apparent across several facilities. The majority of these systems across the Brenham Campus are interior finishes and heating, ventilation, and air conditioning (HVAC) systems. Electrical capacity issues were also noted at many of the Housing (Residence Hall) facilities. Depending upon the long-range plan for these facilities, these capacity needs may or may not prove practical for funding.

<b>Building Conditions</b>	Summary (By	Building)	Brenham Campus
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				Asset - Year	Asset - Year	Age
Asset - Name	Asset - Use	Asset - FCI	Asset - RI	Constructed	Renovated	(as of 2021)
K. Atkinson Hall	Housing - Residence Hall	45.98%	71.88%	1963		58
Buccaneer Hall	Housing - Residence Hall	23.37%	65.05%	1967	1996	54
Lockett Hall	Housing - Residence Hall	24.21%	60.82%	1960	1996	61
Bob Bullock Center for Business and Computer Science (BULL)	Classroom / Training	50.75%	60.08%	1965	1991	56
Hallstein Hall	Housing - Residence Hall	30.17%	59.12%	1970		51
Health Clinic	Medical - Clinic	19.87%	57.80%	1980		41
Blinn College Small Business Development Center (SBDC)	Classroom / Training	19.71%	54.39%	1976		45
Classroom Building (CLAS)	Classroom / Training	39.84%	54.18%	1962	1974	59
Physical Education Building (PEBD)	Athletic Facility / Gymnasium	31.83%	53.03%	1966	1992	55
Old Main (BNMN)	Specialty Cultural (Museum, Library)	29.43%	52.24%	1906	1989	115
Beazley Hall	Housing - Residence Hall	12.36%	49.95%	1965	1998	56
Academic Building (ACAD)	Classroom / Training	35.81%	48.82%	1973		48
Student Center (SCTR)	Multipurpose Use	11.35%	48.11%	1988	2018	33
Arts and Sciences Building (ARTS)	Classroom / Training	22.87%	46.69%	1969	1995	52
Whigham House	Specialty Cultural (Museum, Library)	10.40%	45.27%	1925	1973	96
Helman Hall	Housing - Residence Hall	10.90%	42.82%	1967	1998	54

# FACILITY CONDITION ASSESSMENT BRENHAM CAMPUS CONDITION SUMMARY

Building Conditions Summary (By Building) Brenham Campus (Continued)

				Asset - Year	Asset - Year	Age
Asset - Name	Asset - Use	Asset - FCI	Asset - Rl	Constructed	Renovated	(as of 2021)
Melcher Hall	Housing - Residence Hall	12.10%	40.62%	1993		28
Administration Building (ADMN)	Office	3.59%	34.29%	2001		20
Blinn College Park Apartments (BCPA #2)	Housing - Apartments	5.78%	34.22%	2000		21
Physical Plant at Intramural Field (IMFD)	Utility Plant	12.28%	32.65%	1988		33
Blinn College Park Apartments (BCPA #3)	Housing - Apartments	6.10%	31.70%	2000		21
Blinn College Park Apartments (BCPA #1)	Housing - Apartments	4.25%	29.94%	2000		21
C.F. Schmidt Building (SHMD)	Classroom / Training	19.20%	29.40%	1951	2008	70
Dr. W.W. O'Donnell Performing Arts Center (THEA)	Assembly (Auditorium, Theater)	6.76%	27.31%	1965	2001	56
Heineke Gymnasium (HEIN)	Athletic Facility / Gymnasium	8.04%	26.29%	1940		81
Henry J. Boehm Building (WTRM)	Athletic Facility / Gymnasium	12.97%	26.12%	1970	2002	51
J. Hal and Allyne Machat Music Facility (BAND)	Classroom / Training	12.87%	21.82%	1973	2011	48
W.L. Moody Jr. Library	Specialty Cultural (Museum, Library)	8.17%	20.98%	1967	2019	54
Blinn College Park Apartments Commons	Housing - Apartments	0.27%	14.89%	2000		21
Blinn College Park Apartments (BCPA #5)	Housing - Apartments	5.79%	13.73%	2002		19
Blinn College Park Apartments (BCPA #7)	Housing - Apartments	5.21%	12.44%	2002		19
Blinn College Park Apartments (BCPA #6)	Housing - Apartments	5.19%	12.41%	2002		19
Leroy Dreyer Baseball Field	Athletic Facility / Gymnasium	8.75%	12.12%	1988		33
Blinn College Park Apartments (BCPA #4)	Housing - Apartments	2.49%	11.62%	2002		19
Wheeler Hall	Housing - Residence Hall	1.46%	8.57%	2010		11
W.J. "Bill" Rankin Agricultural Complex Addition	Classroom / Training	0.00%	7.58%	2011		10
W.J. "Bill" Rankin Agricultural Complex (AGED, RACC, & RACS)	Classroom / Training	0.01%	6.01%	2011		10
A.W. Hodde, Jr., Technical Education Center	Classroom / Training	0.00%	4.56%	2009		12
A.W. Hodde, Jr., Technical Education Center (Annex)	Classroom / Training	0.28%	0.28%	2017		4
Doyle Coatney Center	Athletic Facility / Gymnasium	0.00%	0.27%	2017		4
W.J. "Bill" Rankin Agricultural Science Building	Classroom / Training	0.00%	0.11%	2020		1
Kruse Center (KRSE)	Athletic Facility / Gymnasium	0.02%	0.10%	2017		4

The table above (continued from previous page) provides a summary of building metrics at the Brenham Campus. Information for each of the buildings include name, primary building use, FCI, RI, Year Constructed, Year Renovated, and Age as of 2021. The list of facilities is sorted by RI (indicating worst to best condition).

BLINN COLLEGE DISTRICT | DISTRICTWIDE FACILITIES MASTER PLAN 48

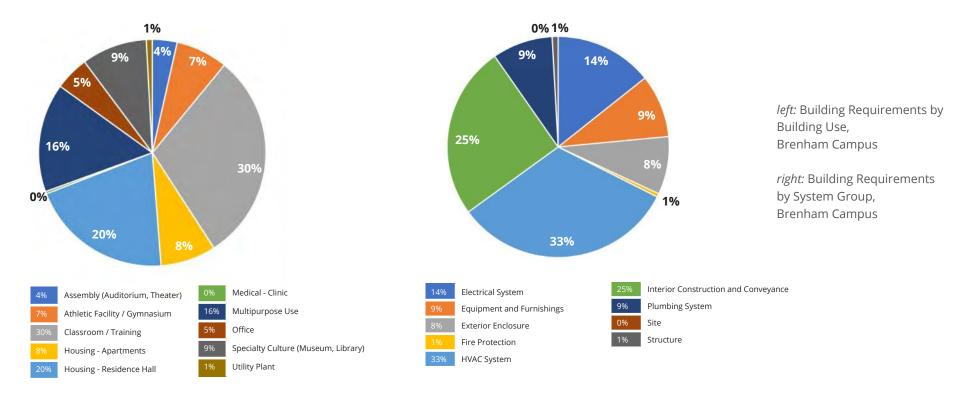
# FACILITY CONDITION ASSESSMENT BRENHAM CAMPUS COST SUMMARY

# BRENHAM CAMPUS BUILDING REQUIREMENTS BY BUILDING USE

The following chart provides a summary breakdown by Building Use for buildings at the Brenham Campus that were included in the assessment. The breakdown provided is based on total cost of requirements.

# BRENHAM CAMPUS BUILDING REQUIREMENTS BY SYSTEM GROUP

The following chart provides a summary breakdown by System Group for buildings at the Brenham Campus that were included in the assessment. The breakdown provided is based on total cost of requirements.



## FACILITY CONDITION ASSESSMENT BRYAN CAMPUS CONDITION SUMMARY

#### BLINN COLLEGE BRYAN CAMPUS OBSERVATIONS

The Blinn College Bryan Campus facilities are considered to be collectively in good condition based on the resulting overall FCI. The majority of the most immediate needs identified on the Bryan Campus relate to interior finish and roofing renewal or replacement. As the facilities on this campus age over the next 5 years, several building systems will require renewal or replacement. These needs are reflected in the respective RI metrics. The majority of building systems which will reach their expected lifetime and have requirements identified over this period are Interior Finishes, Heating, Ventilation, and Air Conditioning (HVAC) systems, Electrical systems, and Plumbing systems.

#### Building Conditions Summary (By Building) Bryan Campus

				Asset - Year	Asset - Year	Age
Asset - Name	Asset - Use	Asset - FCI	Asset - RI	Constructed	Renovated	(as of 2021)
Building C (Library)	Multipurpose Use	5.18%	46.08%	1996		25
Building D	Classroom / Training	6.60%	43.66%	1996		25
Building A	Classroom / Training	2.40%	40.25%	1996		25
Building T	Classroom / Training	9.92%	36.84%	1975	2003	46
Building S	Office	8.22%	34.48%	1996	2015	25
Building F (Student Center)	Multipurpose Use	2.38%	25.44%	2000	2015	21
Building G	Classroom / Training	1.24%	14.23%	2003		18
Building H	Classroom / Training	3.91%	14.07%	1999		22
Building B	Office	0.18%	10.42%	2011		10
Building J	Classroom / Training	0.00%	6.70%	2001	2015	20
Building R	Classroom / Training	0.00%	5.26%	2014		7

The table above provides a summary of building metrics at the Bryan Campus. Information for each of the buildings include name, primary building use, FCI, RI, Year Constructed, Year Renovated, and Age as of 2021. The list of facilities is sorted by RI (indicating worst to best condition).

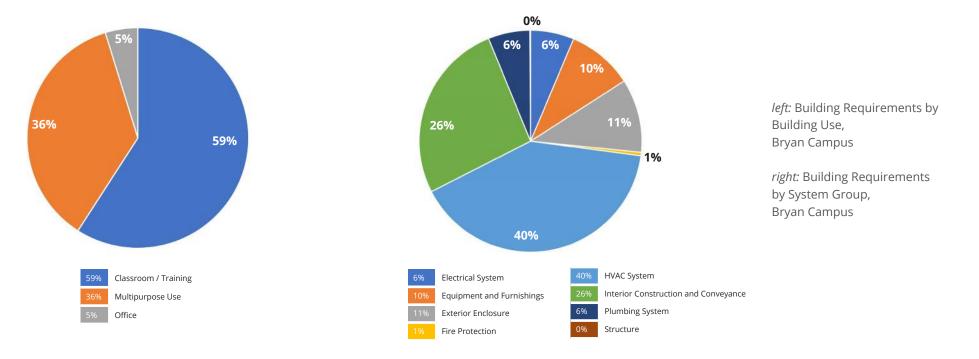
# FACILITY CONDITION ASSESSMENT BRYAN CAMPUS COST SUMMARY

# BRYAN CAMPUS BUILDING REQUIREMENTS BY BUILDING USE

The following chart provide a summary breakdown by Building Use for buildings at the Bryan Campus that were included in the assessment. The breakdown provided is based on total cost of requirements.

# BRYAN CAMPUS BUILDING REQUIREMENTS BY SYSTEM GROUP

The following chart provide a summary breakdown by System Group for buildings at the Bryan Campus that were included in the assessment. The breakdown provided is based on total cost of requirements.



The following recommendations are a result of the 4. assessment team's review and understanding of Blinn College's facilities with knowledge of industry standards and best practices. Some recommendations are not included as specific requirements within the software used for this work but rather as suggestions for general improvement from a districtwide standpoint. Associated cost implications are contingent upon the scope of the work identified and therefore not identified within this document.

Ultimately, the decision to move forward with these recommendations is up to Blinn College. Depending upon the scope of work, the budget for these recommendations may be identified as part of capital planning or long-range facility planning efforts.

#### **GENERAL RECOMMENDATIONS**

- 1. Maintain the facility condition assessment database and update annually (at minimum) based on projects completed.
- 2. Incorporate site/civil and other campus infrastructure to gain a comprehensive understanding of assets owned and managed by Blinn College.
- 3. Incorporate additional facilities not currently identified in the database on Brenham, Bryan, and other campuses owned and managed by Blinn College.

- 4. Begin a regimented annual preventive maintenance program to appropriately allocate funding for the maintenance of the existing facility inventory. Planning should be based on an understanding of the following:
  - a. Results of the Master Plan;
  - b. Current conditions of Blinn College's facility inventory;
  - c. Prioritization of requirements based on Blinn College's institutional mission and facilities maintenance standards.

#### Asbestos Abatement

While asbestos testing and abatement identification was not included in the scope of this assessment, it was noted during the maintenance interview that many of the older facilities on the Brenham Campus will require asbestos abatement should there be any major rehabilitation or demolition identified for the facility.

Inclusion of the potential need for asbestos abatement should be included in the planning process and determined on a case-by-case basis.

### STRUCTURE AND ENVELOPE

The following structure and envelope-related improvements are recommended for district facilities:

- 1. Remove and replace masonry veneer expansion and control joint sealants that are found to be brittle, cracking, separated, or completely missing especially along high solar exposure south and west facades. This will help prolong the life of cavity wall systems and minimize potential water, insect and pest intrusion.
- 2. When roof replacement occurs, materials should be selected to comply with 2015 IECC solar reflectance and thermal emittance requirements. This will facilitate improved visual detection of potential water intrusion locations, lessen solar heat gain and eliminate loose gravel ballast that can overload gutters and cause multiple problems if blown off the roof during high wind events.
- 3. Moisture Penetration Observations
  - a. Keep roofs clear of debris. Excessive debris can puncture or damage roof systems and can prevent water drainage at internal drains, gutters and downspouts. During cold weather season excessive moisture over the exterior walls can freeze and damage brick and stone veneer. Additionally, nearby plants or tree leaves will stain light stone veneer and masonry materials.
  - b. Keep all sources of moisture away from the masonry exterior walls including plants, trees, or site irrigation system.
  - c. Repair or replace all damaged gutters and downspouts to keep moisture away from masonry cavity walls.

- d. Replace missing or deteriorated expansion joints at concrete sidewalks directly abutting building exteriors. This will improve runoff and minimize excessive wetting/expansion of soils at the foundation perimeter.
- Egress doors should be in working condition and have appropriate exit signs.

## INTERIOR ARCHITECTURAL

The following interior-related improvements are recommended:

- 1. Fire Code Observations
  - a. Perform an overall fire code compliance study of each building with regards to door, frame and hardware. The FCA indicated there were doors and walls that need to be rated. This should be conducted in tandem with upgrades to buildings that lack an automatic fire sprinkler system.
  - b. Fire extinguishers and cabinets should be compliant with NFPA.
- 2. If not currently in place, consider a standard manufacturer for specific finishes to bulk purchase and store. This allows the maintenance department to quickly replace materials in short notice if damaged beyond practical use due to normal wear, accidental, or catastrophic conditions. Items to consider are: flooring finishes, wall finishes and ceiling finishes.
- 3. If not currently in place, initiate a program to assess interior restroom accessories and door hardware are following accessibility standards, ensuring that the appropriate hardware is used or in the correct reach range.

4. Initiate a program to coordinate interior remodel projects with this FCA with regards to floor, wall and ceiling system replacement. Perform interior remodel projects around the FCA rating and replacement requirements while taking advantage of replacing light fixtures, or other above ceiling work.

#### MECHANICAL AND PLUMBING

The following Mechanical and Plumbing-related improvements are recommended based on observations made at the time of field assessment:

- 1. Repair and/or re-install pipe insulation and aluminum jacketing on exterior chilled water and/or refrigerant piping. The exterior piping insulation at many locations have deteriorated to the point of not providing thermal and mechanical protection.
- 2. Replace mechanical and plumbing systems when renovating interior spaces. Many older buildings on campus have sanitary sewer lines, domestic water lines, and ductwork that are original to the building. These systems have a recommended life span of around 30 to 50 years. While with proper maintenance these systems can last longer than their recommended life span, systems in buildings with higher demand and greater wear and tear, such as the residence halls and food preparation areas, were found in poor condition. As buildings are identified to undergo a second or third major interior renovation, it is recommended to replace these mechanical and plumbing systems.
- 3. Replace all pneumatic controls with a direct digital control (DDC) system. Standardize the DDC system across all the buildings on the campus. One control system will provide

uniformity, improve ease of use and simplify servicing the system.

- 4. Consider installing monitored sprinkler systems in older buildings. Many older buildings on campus do not have a sprinkler system. Even though these buildings have been grandfathered, consider installing a sprinkler for fire safety. Make sure all residence halls are up to code and have the proper fire safety measures.
- 5. Replace air handling units as they reach the end of their useful life. Many buildings on campus have air handling units that are ten to fifteen years past the recommended useful life and are in poor condition. It was noticed that equipment like boilers and water heaters are in good condition because they were replaced in a timely manner. It is recommended to continue this practice with the replacement of the air handling units as soon as they reach the end of their useful life.
- 5. Add exhaust and fresh air make-up or update exhaust and fresh air make-up to meet ASHRAE 62.1 ventilation requirements. If the mechanical systems are part of a building's renovation, the exhaust and fresh air make-up are required to be brought up to code. This would apply to buildings, such as some of the residence halls, that do not already have these systems or that do not already meet the ventilation requirements.
- 7. Consider redundancy for critical facilities or critical spaces in buildings. If there are critical facilities or spaces that need air or water supplied at a constant temperature, consider adding and maintaining redundant boilers, chillers, air handling units, fan coil units, water heaters, or pumps. Example critical facilities and spaces might be residence halls, apartments, computer sever rooms and critical lab storage.

### ELECTRICAL

The following electrical-related improvements are recommended:

- Install occupancy sensors in the buildings which do not currently have occupancy sensor-controlled lighting schemes in classrooms and other small areas. Doing this in addition to the planned LED retrofits will help reduce energy usage in these buildings.
- 2. If a testing procedure is not already in place, test all battery packs that power existing emergency egress lighting, including exit signs. Replace all batteries that do not meet testing criteria.
- 3. Perform an Arc Flash study for campus electrical systems. This is strongly recommended by NFPA 70E and required for any work on energized equipment. The study would develop a model that could also be utilized for coordination and loading studies. Completing these studies provides a complete understanding of the health of the electrical system.

### GENERAL SITE/ACCESSIBILITY

While a detailed site/civil/accessibility assessment was not included in this scope of work, the following recommendations were developed upon general observations of site conditions at the exterior of many buildings:

- 1. Ensure compliance with applicable building codes for exterior sidewalks and ramps considered part of the accessible path. These should be compliant concerning guardrails, handrails, edge protection, and changes in level.
- 2. Ensure compliance with applicable building codes for handrails at egress, exterior stairs, level differences.







Photos of general site/ accessibility

BLINN COLLEGE DISTRICT | DISTRICTWIDE FACILITIES MASTER PLAN

# CAMPUS GROWTH PROJECTIONS INTRODUCTION

Multiple analyses were completed to assist master plan efforts in projecting enrollment and space requirements for the Blinn College District at each of its existing five campus locations - Brenham, Bryan, RELLIS, Schulenburg and Sealy. These studies were completed districtwide, as well, and included:

- **Demographic Analysis** Assists in understanding the current population (quantity and composition by age, ethnicity, etc.) and anticipated growth within the Blinn College Service Area boundary and the areas surrounding each of the five campuses; this information is also utilized to assist in projecting future enrollment scenarios
- **Space Utilization** Identifies current opportunities within existing campus classroom and class lab inventory to determine if it is capable of supporting projected enrollment or if additional inventory is needed
- **Enrollment Projections** Explores multiple growth scenarios to project enrollment at each of the individual campuses over the next ten to 20 years
- **Space Projections** Estimates the potential shortfall (or surplus), by space type, of the existing campus facility inventory to support the projected enrollment

Analyses utilized Fall 2019 semester student data and campus room utilization provided by the Blinn Office of Institutional Research and Effectiveness (IR). The resulting findings are intended to support future campus planning decisions and maximize the capacity and utilization of existing space to accommodate the projected growth at each of the Blinn campuses.

The supporting analysis is available in the Appendix of this document. A more detailed discussion of the planning assumptions, metrics and methodologies used for each of the studies listed above is included on the pages which follow.

Additional analysis completed as part of this project scope included a labor market analysis and exploration of future campus expansion considerations. These two subjects are covered later in this document.

The following terms are utilized in this section and defined here for reference:

- **Compound Annual Growth Rate (CAGR):** Average exponential rate of annual growth of the population over a given period
- Core-Based Statistical Area (CBSA): Defined by the U.S. Census Bureau as an area consisting of one or more counties anchored by an urban center of at least 10,000 people, plus adjacent counties that are socioeconomically tied to the urban center by commuting
- *Education and General (E&G) Space:* Area used for academic instruction, research, and support of the institution's mission; it does not include auxiliary enterprise space, permanently unassigned space, or space used for operations independent of the mission
- *Full-Time Student Equivalent (FTSE):* Calculated as the total semester credit hours divided by 15
- **Gross Square Feet (GSF):** Sum of the square feet of space of all floor areas within the outside faces of a building's exterior walls
- Net Assignable Square Feet (NASF): Sum of all areas within the interior walls of rooms on all floors of a building assigned to or available to an occupant or use, excluding unassigned space

CAMPUS GROWTH PROJECTIONS METHODOLOGIES AND ASSUMPTIONS - DEMOGRAPHIC ANALYSIS

Data on student enrollment and residence of origin for the Fall 2019 semester, as provided by Blinn College IR, was utilized to understand current and future demographics within the Blinn College Service Area, as well as the vicinity of each of the existing campus locations. An enhanced demographic study of each campus location was conducted which included:

- Identifying change in growth of projected age 18 to 64 population of each campus location by ZIP code over the next 10 years
- Diagramming both the 30, 45, and 60 minute drive-time and the 20, 30, and 40 mile radii from each campus location
- Diagramming density by student residence by location and ZIP code for each campus location
- Identifying the "catchment area" for each campus
- Indicating, within the catchment area, the ZIP codes which are above / below the mean capture rate within a campus catchment area for the Schulenburg and Sealy Campuses; for the remaining three campuses, the top 20 student residency ZIP codes were identified

Demographic data available from ESRI, a global supplier of geographic information system (GIS) software and demographic data, was gathered on both historic and 5-year projected population growth. These were then extrapolated an additional five years, based on ESRI reported values, to obtain a 10-year projection utilizing a simple trend analysis. For this analysis, 20-Year projections were forecast at onehalf the 10-year projected growth.

Unless noted otherwise, the following maps illustrate Fall 2019 students who were reported to be associated with a specific campus; this data includes all learning modes: on-

campus, exclusively 100% online, and / or a blend (hybrid) of both. Hybrid assumes students were enrolled in at least one online course and one on-campus course concurrently. This is an unduplicated headcount. Students who were reported enrolled at multiple campuses were not included in each campus enrollment count; rather they were allocated to a campus as reported by Blinn IR. *Dual credit students attending either on-campus or at a high school location were not included in this study.* 

Additional demographic analysis of each existing campus is included as an Appendix in this document. Analysis includes a market study (with related detailed information on race, ethnicity, income, education) for the Blinn College Service Area, Taxing District, and either the Fall 2019 catchment area (for the Sealy and Schulenburg Campuses) or for the combined college service study area for the Brenham, Bryan, and RELLIS Campus locations (reference "Enrollment Projections" methodology).

## CAMPUS GROWTH PROJECTIONS METHODOLOGIES AND ASSUMPTIONS - SPACE UTILIZATION

Space utilization is a measurement of the efficiency of use of a given space, specifically classrooms and class labs. Methodologies for the measurement of a campus room and building utilization include:

- Average Weekly Classroom or Class Lab Utilization: Measurement of the average hours per week a classroom or class lab is scheduled and utilized for instruction
- Classroom or Class Lab Percent Fill: Calculated as the average enrollment for each individual classroom and class lab, over all scheduled sections / courses for a typical week, versus the available number of seats, or capacity, of the space

When looking at individual classroom and class lab utilization it is important to compare the overall hours per week in use and the fill rate / capacity of those sections with the recommended minimum targets provided by the Texas Higher Education Coordinating Board (THECB). The THECB provides the following minimum utilization guidelines for four-year universities and higher education institutions:

- Classroom: 38 hours per week (average) at 65% fill
   (minimum)
- Class Lab: 25 hours per week (average) at 77% fill
   (minimum)

Classrooms are defined by THECB as "rooms or spaces generally used for regularly scheduled instruction that require no special, restrictive equipment or configuration." Class labs are spaces used for regularly scheduled instruction and characterized by special purpose equipment or a specific space configuration that limits instructional activities to a particular discipline (e.g. biology and chemistry labs). Rooms with computers are not necessarily coded as a class lab unless the usage / equipment is particular to a discipline, such as

information technology networking lab or a computer-aided drafting lab.

The 38-hour week for average classroom utilization typically assumes the majority of instruction occurs Monday through Friday, between the hours of 8am and 5pm. These hours may vary based on institutional need - i.e. evening classes, Saturday classes, etc. While community colleges are not regulated by THECB in the same manner as a four-year institution, the targets noted above are feasible, with some exception. Historically, community colleges have difficulty achieving the same 38-hour weekly utilization as a four-year institution for general classrooms. This is partially due to the student population - those at a four-year institution are more likely to reside on campus, allowing for a greater critical mass and ability for higher scheduled weekly utilization. In addition, the traditional student at a four-year institution versus a community college is different. Community college student populations tend to be older and less likely to enroll in a full-time course load (12 credit hours +) due to work or personal / family obligations. For these reasons, it is both more reasonable and realistic to assume the standard for community colleges, like Blinn College, to target is a 32 hour per week average classroom utilization.

However, because of the unique nature of how Blinn College provides education, primarily as an academic transfer institution which feeds the Texas A&M University System, the campuses are more on par with a university than a typical community college. The exception to this would be the Schulenburg and Sealy Campuses which follow a more traditional commuter-based, community college model. To provide a uniform metric by which to review all campuses, the classroom analysis which follows is thereby measured

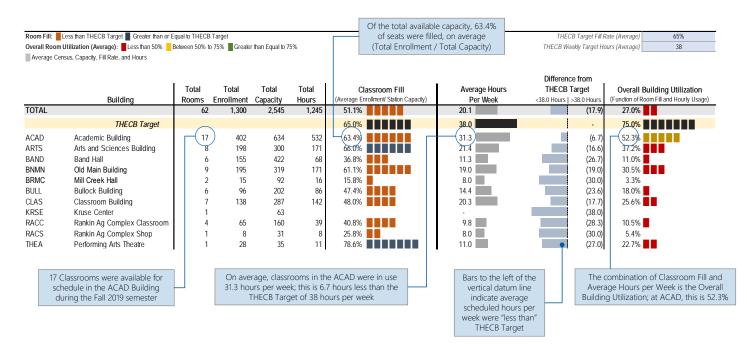
## CAMPUS GROWTH PROJECTIONS METHODOLOGIES AND ASSUMPTIONS - SPACE UTILIZATION

against a 38 hour average weekly utilization. Class labs are still measured against a 25 hour average weekly utilization.

Used in conjunction, the utilization methodologies described above can provide Blinn College with an overall picture of how classrooms and class labs are being utilized on an individual campus. The method provides a quick view of which spaces are being under- or over-utilized in terms of scheduling and / or capacity. It may also useful in "right sizing" the available instructional space for the desired projected student enrollment, as well as identifying spaces which may be available for additional scheduling, at present or in the future, by increasing capacity in courses which were indicated to have multiple empty seats within a section. To calculate both the overall building utilization as a whole, as well as the individual classrooms and class labs, the two metrics previously discussed are applied using the following formula:

Average Enrollment	Х	Average Hours Utilized per Week
Station Capacity	Х	THECB Target Hours

Those buildings or individual rooms with a combined score above 75% are considered to be well-utilized. Those between 50% and 75% are considered "fair" and those below 50% indicate "poor" utilization. The building utilization analysis included in this chapter provides a high level analysis of the overall utilization of classrooms and labs by Blinn College at each campus in the Fall 2019 semester. Additional room-byroom data for each building is included in the Appendix of this document.



*left:* Quick-Reference Guide To Building Utilization Charts

## CAMPUS GROWTH PROJECTIONS METHODOLOGIES AND ASSUMPTIONS - ENROLLMENT PROJECTIONS

Enrollment projections utilize on-campus and hybrid students only. Those students who are 100% online and / or dual credit are excluded from this analysis because their impact on campus space needs are negligible.

When forecasting enrollment at each individual campus, multiple scenarios are utilized. All campuses, except the RELLIS Campus, are forecast using the following three scenarios:

- *Trend Line:* Continued growth at historic enrollment (2011-2019)
- **2019 Capture Rate:** Ratio of Fall 2019 enrollment to the population age 18 to 64 within the Blinn College Service Area; the ratio is then multiplied against the projected growth of the specified 18 to 64 population for the next ten years
- **Dominant High Schools of Origin:** Percent historic change in growth (2014-2019) of the senior class enrollment at a defined top number of high schools of the study campus Fall 2019 student origin; the percent is then multiplied against the Fall 2019 enrollment and carried forward

Because the RELLIS Campus is so new, the trend line scenario is not applied as there is not enough historic enrollment data to provide a realistic projected growth.

One additional scenario is generated using a defined catchment area (i.e. the region / geographic area from which the campus draws the majority of its students). Defining a catchment area allows for additional analysis when examining an existing campus market area and the potential student/community population; it is also instrumental in

forming the basis of assumptions regarding enrollment for existing campuses, as well as potential new campus or center locations under consideration.

A catchment area is typically determined by identifying the top ZIP codes from which a cumulative 80% of students who attended a Blinn College campus in Fall 2019 originated or resided.

However, for this analysis, because the majority of Brenham, Bryan and RELLIS Campus students were found to originate from out-of-district, the traditional approach to defining catchment area may not be appropriate for these campuses. For these three campuses only, because they draw their student enrollment from a larger geographic area, a combined college service study area is proposed. This catchment area utilizes the projected population growth for the age 18 to 64 cohort within the study area, diagrammed in the map which follows, that includes:

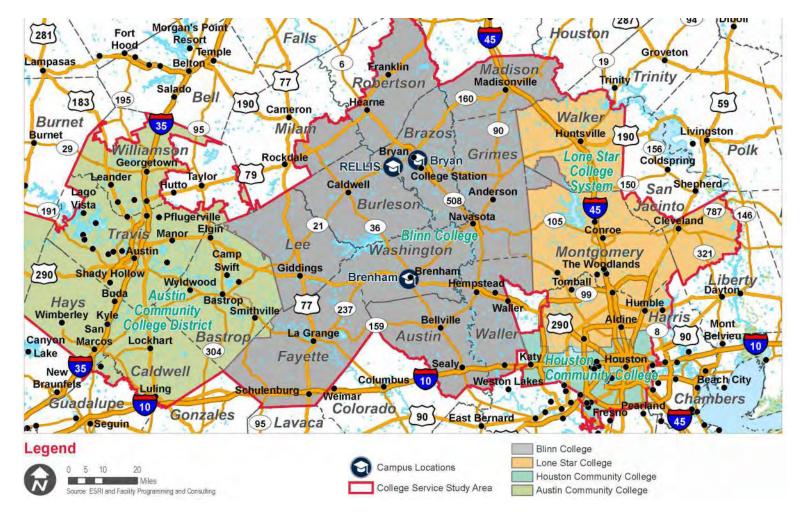
- Blinn College
- Lone Star College
- Houston Community College
- Austin Community College District

Typically, the average of all the scenarios identified above is utilized as the baseline to project space need for the projected headcount for each campus.

Demographic data for the combined college service study area for the Brenham, Bryan, and RELLIS Campus locations is provided in the Appendix of this document.

# CAMPUS GROWTH PROJECTIONS

METHODOLOGIES AND ASSUMPTIONS - ENROLLMENT PROJECTIONS



Combined College Service Area For Brenham, Bryan, And RELLIS Campus Projections

# CAMPUS GROWTH PROJECTIONS METHODOLOGIES AND ASSUMPTIONS - SPACE PROJECTIONS

To project the minimum required space to support the future on-campus / hybrid enrollment at each campus, the "Space Projection Model for Higher Education Institutions in Texas," developed by the THECB, was utilized as a baseline and then customized to better reflect the needs of Blinn College. Space needs were analyzed and projected in the following four education & general (E&G) space categories, per the THECB:

- Instruction (e.g. classrooms, labs, study space, tutoring / student support, etc.)
- Office
- Library
- Support (e.g. data center, central receiving, warehouse, physical plant, etc.)

The model predicts the net assignable square feet (NASF) of E&G space an institution needs in each of the categories above which are incorporated into the state legislature funding formulas for general academic institutions. Space needs are primarily calculated utilizing the following data:

- Enrollment by course program
- Full-time student equivalent (FTSE)
- Full-time equivalent (FTE) faculty

Note that, while online growth above the on-campus enrollment is projected to continue, it generally will not impact building / campus square foot requirements which follow.

Space need in each of the categories is primarily calculated utilizing FTSE; the historic average ratio of FTSE to headcount, from Fall 2015 to Fall 2019, was held constant for each campus, to calculate the future FTSE for the projected enrollment.

# RATIO AVERAGE FULL-TIME STUDENT EQUIVALENT : HEADCOUNT (FALL 2015 - 2019)

	CAMPUS LOCATION									
DISTRICT	BRENHAM	BRYAN	RELLIS	SCHULENBURG	SEALY					
70.9%	83.3%	69.1%	58.7%	71.0%	75.0%					
Courses Dling College Institutional Descarch & Effectiveness and Escility Dreasonning and										

Source: Blinn College Institutional Research & Effectiveness and Facility Programming and Consulting

Instructional space needs were projected using the THECB model allocation for NASF per FTSE by program area. The FTSE average per program area, from Fall 2015 to Fall 2019, was multiplied by the program area factor to establish the total NASF instructional space need districtwide. For this analysis, the percent composition of the programs in the future is presumed unchanged from the current.

#### E&G SPACE PLANNING METRIC

PROGRAM AREA	NASF / FTSE	SAMPLE DISCIPLINES BY PROGRAM AREA
01	90	Agriculture, Architecture, Visual and Performing Arts
02	75	Engineering, Construction Trades, Transportation Technology
03	60	Journalism, Computer Science, Biology,Physical Sciences, Health Professions
04	45	Liberal Arts, History, Education, Social Sciences, Mathematics
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Source: THECB Academic Program Area Summary for Public Universities

To calculate library space need, the model utilizes FTSE and the full-time faculty equivalent. Over the past five years, the average faculty FTE was approximately 457 districtwide. Space required for physical volumes is dependent on the FTSE, faculty FTE, and quantity of degree fields offered. Modern libraries and learning centers tend to focus on more collaborative environments, including both private and group study rooms, and those services which support student success, such as tutoring. While many libraries are moving away from large physical collections, towards e-books and

## CAMPUS GROWTH PROJECTIONS METHODOLOGIES AND ASSUMPTIONS - SPACE PROJECTIONS

publications which are digitally available, the THECB model is still based on traditional library resources with larger physical collections. Office and general administrative support space is calculated at 190 NASF per faculty FTE; 170 NASF per staff. The projected number of FTE staff is calculated at a factor of 1.8 per faculty FTE. Support is calculated at 9% the total of the other three factors, per THECB guidelines. For future planning purposes utilized in this document, the following planning metric has been proposed:

#### E&G SPACE PLANNING METRIC

SPACE TYPE	THECB MODEL NASF / FTSE	DISTRICTWIDE NASF / FTSE (75% MODEL)
Teaching	67.3	
Office	11.4	
Library	21.2	
Support	9.0	
TOTAL	108.9	81.7

Source: THECB and Facility Programming and Consulting

The proposed planning metric of 81.7 NASF/FTSE results from an adjustment to the THECB model for Blinn College. In order to provide a more tangible target and reflect the individuality of each campus, the districtwide target is further adjusted to range between 65% and 85% of the "ideal" model, resulting in an approximate 75% of ideal NASF target districtwide.

SQUARE FOOT PLANNING METRIC FOR PROJECTING SPACE BY CAMPUS

		CAMPUS LOCATION								
	BRENHAM	BRYAN	RELLIS	SCHULENBURG	SEALY					
Percent of District	65%	70%	85%	65%	65%					
	NET ASF PER FULL-TIME STUDENT EQUIVALENT									
Proposed 70.8 76.3 92.6 70.8 70.8										
Existing (Fall 2019)	107.4	27.0	124.9	201.5	58.8					
Source: THECB and Facility Programming and Consulting										

Source: THECB and Facility Programming and Consultir

The above information is consolidated and recommendations of needed projects are incorporated into the "building blocks" in the master plan to address identified shortfalls or space deficits, as required.

Additional auxiliary space will be required to improve the faculty, staff, and student experience on campus. Auxiliary services are calculated as non-E&G space and may include the following categories:

- Food Service
- Child Care
- Lounge
- Merchandising
- Recreation
- Student Meeting Space
- Clinic

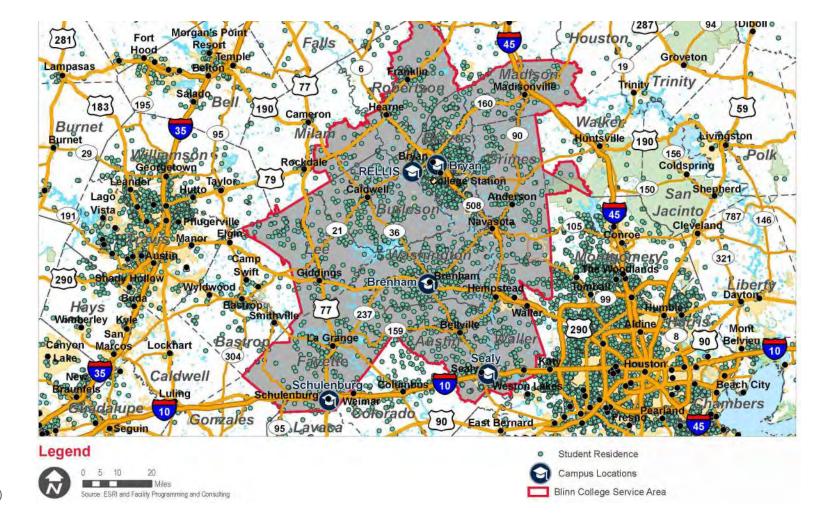
It is recognized that the THECB model is an "ideal" world solution that does not always reflect reality. Institutions often function successfully in a space deficit. Instead, the model should be utilized as a goal towards which Blinn College may work towards over time. Items which will impact the actual amount of space needed in the future include:

- Enrollment growth
- Utilization of existing instructional space
- Demolition of existing buildings
- New building construction
- Re-allocation of existing buildings or spaces for different functions

As new buildings come online and less efficient buildings are demolished or renovated for higher and better use, the district will be able to move closer to the planning target both districtwide and at each individual campus.

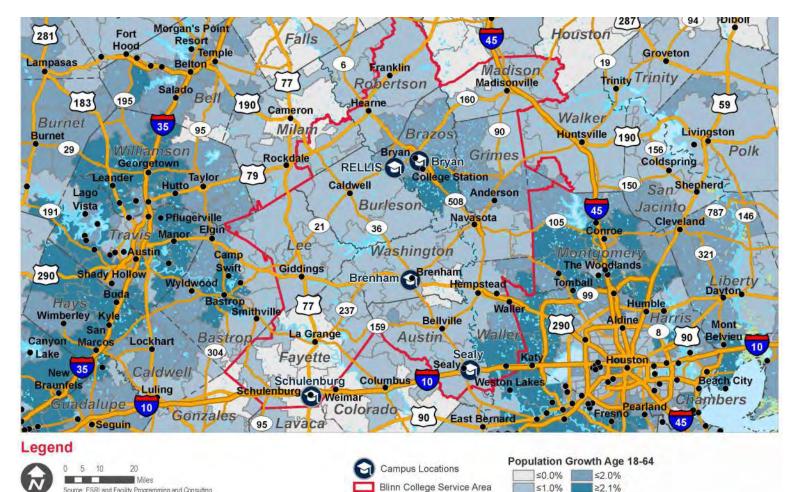
# CAMPUS GROWTH PROJECTIONS DISTRICT OVERVIEW - DEMOGRAPHIC ANALYSIS

Despite being one of the largest community college service areas in Texas, in terms of square miles, the taxing district for Blinn College is limited to Washington County. Analysis of Fall 2019 data indicates that, with the exception of Schulenburg and Sealy, the majority of students attending Blinn College campuses originate not only out-of-district, but also from outside the Service Area. Approximately 71.4% of students listed their residence of origin outside the Service Area and more than 40 miles from their respective campus. This can be attributed to both Blinn's quality of higher education, as well as its recognition as a stepping stone into the Texas A&M University System, among others. Blinn College consistently ranks among



# CAMPUS GROWTH PROJECTIONS **DISTRICT OVERVIEW - DEMOGRAPHIC ANALYSIS**

the highest in Texas two-year colleges for students who continue on to four-year institutions. In 2020, Blinn College ranked first among state institutions for academic transfer, according to the Texas Higher Education Coordinating Board (THECB). In 2020, approximately 314,300 individuals aged 18 to 64 resided within the Blinn College Service Area. Comprising 65% of the total population, this age cohort is projected to grow at a compound annual growth rate (CAGR) of 1.02% between 2020 and 2030. In the Fall 2019 semester, the average age of the Blinn College student was 22 years old.



Source: ESRI and Facility Programming and Consulting

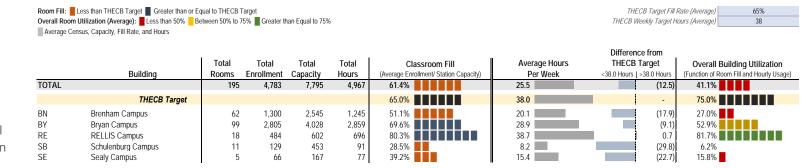
*left:* Population Growth Age 18-64 by ZIP Code; CAGR 2020-2030

## CAMPUS GROWTH PROJECTIONS **DISTRICT OVERVIEW - EXISTING SPACE UTILIZATION**

A review of the Fall 2019 utilization of general purpose classrooms and class laboratories, which were available for scheduled course use, was conducted to identify average hours per week in use and average seats filled versus the room capacity at each campus. Data were then benchmarked against state metrics to identify opportunities for increased efficiencies in the use of the existing inventory, as well as if additional need was present in order to support the student enrollment. Overall preliminary analysis indicates that all campuses, with the exception of RELLIS, have an adequate amount of instructional space to accommodate the near-term potential enrollment growth. However, additional space will ultimately be necessary at the Bryan and RELLIS Campuses,

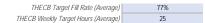
over the next ten to 20 years, to meet the demands of the targeted enrollment. Data also suggest, in the short-term, there is capacity to continue, without significant impact to daily operations, if an instructional space were to be taken offline to allow for upgrades to technology and / or furniture, or to temporarily support relocated functions as part of any proposed building demolition(s) and construction recommended in the master plan.

The chart on the following page shows historic and projected on-campus/hybrid enrollment at each of the five Blinn campuses, as well as the district overall, for the next 20 years. Multiple enrollment growth scenarios for each



top right: Districtwide Overall **Classroom Building Utilization** by Campus (Fall 2019)

> Room Fill: Less than THECB Target Greater than or Equal to THECB Target Overall Room Utilization (Average): Less than 50% Between 50% to 75% Greater than Equal to 75% Average Census, Capacity, Fill Rate, and Hours



Difference from

			Total	Total	Total	Total	Classroom Fill	Average Hours	THECB Target	Overall Building Utilization
		Building	Rooms	Enrollment	Capacity	Hours	(Average Enrollment/ Station Capacity)	Per Week	<25.0 Hours   >25.0 Hours	(Function of Room Fill and Hourly Usage)
	TOTAL		65	1,235	2,230	1,245	55.4%	19.1	(5.9)	42.4%
		THECB Target					77.0%	25.0	-	75.0%
bottom right: Districtwide	BN	Brenham Campus	19	318	807	245	39.4%	12.9	(12.1)	20.3%
-	BY	Bryan Campus	25	533	804	591	66.3%	23.7	(1.3)	62.8%
Overall Class Lab Building	RE	RELLIS Campus	17	347	468	387	74.1%	22.8	(2.2)	67.4%
Utilization by Campus	SB	Schulenburg Campus	3	21	107	12	19.9%	3.8	(21.2)	3.1%
5	SE	Sealy Campus	1	16	44	10	36.4%	10.0	(15.0)	14.5%
(Fall 2019)										—

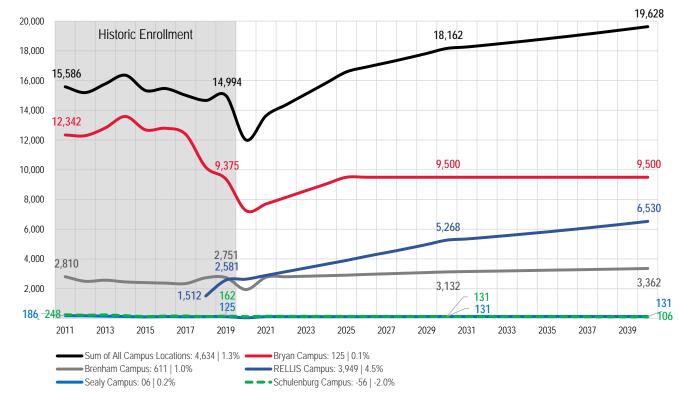
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## CAMPUS GROWTH PROJECTIONS DISTRICT OVERVIEW - ENROLLMENT PROJECTIONS

campus were analyzed and are included in the individual campus discussions which follow. Typically, the average of enrollment projected by year across all scenarios is plotted here. Please note the following:

- Impact to Fall 2020 enrollment, due to COVID-19, has been indicated
- 9,500 Student enrollment target at the Bryan Campus, implemented in 2020, is indicated to be reached in approximately Year 2025; at that time, any additional growth originally projected for the Bryan Campus is proposed to be shifted to the RELLIS Campus
- Dual credit and students enrolled in 100% online courses are excluded from this analysis

By 2030, the projected total on-campus/hybrid enrollment across all campuses is nearly 18,200 students, an addition of approximately 3,200 students. The Schulenburg Campus is projected to have the least compound annual growth (-1.9%) with a decrease of approximately 31 students over the next ten years, while RELLIS is projected to experience the greatest growth. By 2040, the projected total enrollment across all campuses is nearly 19,600 students, an addition of approximately 4,600 students over the next 20 years.



*left:* Districtwide Enrollment Projections (On-Campus / Hybrid Headcount)

# CAMPUS GROWTH PROJECTIONS DISTRICT OVERVIEW - SPACE PROJECTIONS

Planning workshops, conducted by Gensler, in November 2020, included Blinn leadership to better understand the issues facing the district as a whole, within individual campuses, academic program areas, and to discuss master plan topics which may impact future space needs. Using the information gathered in these workshops, plus historic population for students, faculty, and staff provided by Blinn IR, enrollment growth scenarios for each campus were developed and the projected space needs identified. Existing building education and general (E&G) space inventory was identified with assistance from the Blinn Office of Facilities, Planning, and Construction in four space categories:

- Instruction
- Office
- Library
- Support

Utilizing the planning models developed by the state as a baseline, adjusted to better reflect Blinn College needs, the E&G space surplus or deficit was calculated for each of the five campuses. According to data provided by the Blinn Office of Facilities, Planning, and Construction, the existing districtwide E&G building inventory, as of the Fall 2019 semester, totaled approximately 539,500 NASF.

The table on the following page identifies the predicted E&G space needed to support the future enrollment in each of the four THECB space categories, districtwide. Projects which are currently funded, planned, and / or under construction at the time of this master plan have been included in the available NASF, where applicable. The identified surplus or shortage is indicative of the situation if no buildings are constructed or renovated as proposed in the master plan.

As the district continues to grow, additional buildings and/ or renovation of or additions to existing buildings will be required to meet the projected deficit. The required need, based on the proposed Blinn College District planning metric, has been calculated for the years 2025, 2030, and 2040 for each campus, assuming the projected growth at the average of all scenarios studied. As currently projected, the district is forecast to experience a space deficit of approximately 632,000 gross square feet (GSF) by 2040, the greatest need projected at the Bryan and RELLIS Campus.

If all master plan projects are completed as proposed, this deficit will be reduced to approximately 250,700 GSF.

It is recognized that the planning target is just that, a target, and that zeroing out the space deficit is not practical due to budget and other constraints. For this reason, the deficits, where identified, should be considered as targets towards which the district will work over time to correct in order to support the projected enrollment.

# CAMPUS GROWTH PROJECTIONS DISTRICT OVERVIEW - SPACE PROJECTIONS

#### DISTRICTWIDE PROJECTED E&G SPACE NEED TO SUPPORT ENROLLMENT BY YEAR

			YEAR 2025 Projected Enrollment: 16,580 Projected FTSE: 11,475	YEAR 2030 Projected Enrollment: 18,160 Projected FTSE: 12,455	YEAR 2040 Projected Enrollment: 19,620 Projected FTSE: 13,370
	EXISTING E&G NASF (FALL 2019)	ADJUSTED AVAILABLE NASF <sup>1</sup>	TARGET NASF NEED	TARGET NASF NEED	TARGET NASF NEED
Teaching Space	323,200	408,500	555,000	608,500	658,500
Library Space	36,400	36,400	94,000	103,200	111,700
Office Space	155,800	185,200	175,200	192,100	208,000
Support Space	24,100	25,200	74,100	81,300	88,000
TOTAL NASF	539,500	655,300	898,300	985,100	1,066,200
TOTAL GSF <sup>2</sup>	807,000	1,008,100	1,382,000	1,515,700	1,640,100
GSF SURPLUS / (SHORTAGE) <sup>2</sup>			(373,900)	(507,600)	(632,000)

Source: THECB, Blinn Office of Facilities, Planning, and Construction, and Facility Programming and Consulting

All values rounded to nearest hundredth

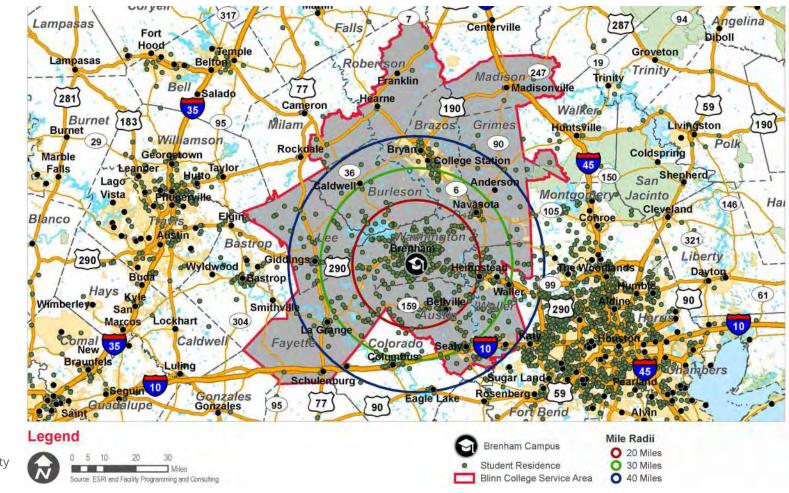
1. Includes all buildings approved / online at time of publication of this report.

2. Gross square feet (GSF) is calculated at 65% net to gross ratio.

# CAMPUS GROWTH PROJECTIONS BRENHAM CAMPUS - DEMOGRAPHIC ANALYSIS

#### **Demographic Analysis**

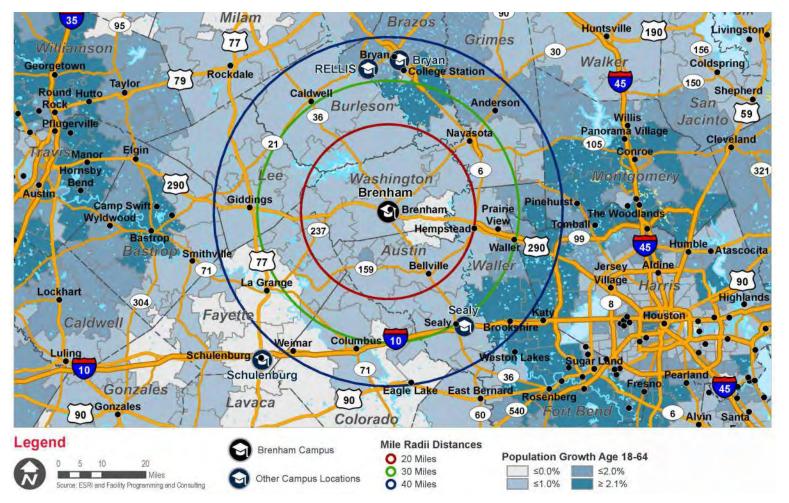
According to the data provided, more than two-thirds (67.4%) of Fall 2019 Brenham Campus students originated from outside the Blinn College Service Area; of these, the largest percent (47.7%) were from the Houston CBSA. The second largest percent came from "other areas"; this is indicative of Blinn's strong brand recognition for quality education and the success with which it is able to recruit from areas all across the state. When student residency density for the Fall 2019 semester is plotted, the large number of students who "choose" to attend the Brenham Campus, even as an out-of-district student, is evident. Each green dot represents the location of a student address. In instances where students have the same address



*right:* Student Residence Density (Fall 2019)

# CAMPUS GROWTH PROJECTIONS BRENHAM CAMPUS - DEMOGRAPHIC ANALYSIS

the dot is placed on top of the other, therefore giving a distorted perspective of student resident density. Regardless of this distortion, one can begin to visualize clusters of student residences by geocoding all of the student addresses which were associated with the campus. The map below illustrates the projected percent change in CAGR in the population age 18 to 64 cohort, by ZIP code, through 2030, in the vicinity of the Brenham Campus. Approximately 97% of students attending the Brenham Campus in the Fall 2019 semester were in the age 18 to 34 cohort.



*left:* Population Growth Age 18-64 By ZIP Code; CAGR 2020-2030

**Overall classroom utilization** by building on campus during the Fall 2019 semester was low, averaging 27.5% campuswide. Of the 62 available classrooms, the average weekly utilization was approximately 20.1 hours per week. The average capacity of a general classroom was 41 seats with an average enrollment of 21 students; this translates into an average fill rate of 52.0%.

The Academic Building (ACAD) had the highest overall building utilization among the campus buildings with general classrooms available for schedule in the Fall 2019. Classrooms in ACAD were scheduled, on average, approximately 31.3 hours per week, just below the state metric of 38.0 hours per week; the fill rate was nearly 65%. While classrooms in the Arts and Sciences Building (ARTS) and Performing Arts Theatre (THEA) both had high fill rates, the average weekly hours were less than one-half the state target, resulting in an overall lower building utilization. While the least utilized classroom building overall was Mill Creek Hall, this building is primarily a residence hall and may be viewed as an anomaly among the other buildings in the survey which are primarily intended for instruction. Of those general academic buildings, the lowest utilized building, in both fill and hours, was the Rankin Ag Complex Shop. The Kruse Center, while available in Fall 2019, was not scheduled for any courses.

Review of the average hours per day during which courses could be scheduled over the course of the week finds that, Monday through Thursday, classrooms are scheduled at approximately 60% of the available hours and approximately 20% on Friday. No classes were scheduled on Saturday or Sunday in the Fall 2019 semester. Peak classroom demand during the Fall 2019 semester was Monday through Thursday,

primarily between the hours of 9:00am and 12:30pm. After 2:00pm, utilization drops significantly, with little to no use of classrooms on campus after 4:00pm. This indicates that there is capacity to accommodate additional enrollment growth within the existing classroom inventory without investment simply by increasing the hours per week classrooms are scheduled (i.e. on Fridays, in the late afternoon and / or evenings during the week, etc.).

**Overall class lab utilization** by building on the Brenham Campus during the Fall 2019 semester, similar to classroom building utilization, was low, averaging approximately 20.3%. Of the 19 available class labs, the average weekly utilization across campus was approximately 12.9 hours per week, approximately 50% of the THECB target for lab utilization. While the average capacity of a class lab on campus was calculated at 43 seats, approximately 17, or 39.4%, were filled.

The highest utilized labs were located in the Classroom Building (CLAS), followed by the Bullock Building (BULL). In both buildings, the average hours of scheduled weekly use approached the THECB target, but the fill was between 10% to 35% lower than the THECB target value. The Marie Heineke Memorial Gym (HEIN) had one lab which was available for scheduled instruction but was not utilized in the Fall 2019 semester. Both the Rankin Ag Complex Shop (RACS) and the Schmidt Building (SHMD) were the poorest performing in overall building utilization for class labs. Similar to HEIN, several rooms were available for instruction, but were not scheduled, resulting in a lower overall utilization for the building as a whole.

65%

38

THECB Target Fill Rate (Average)

THECB Weekly Target Hours (Average)

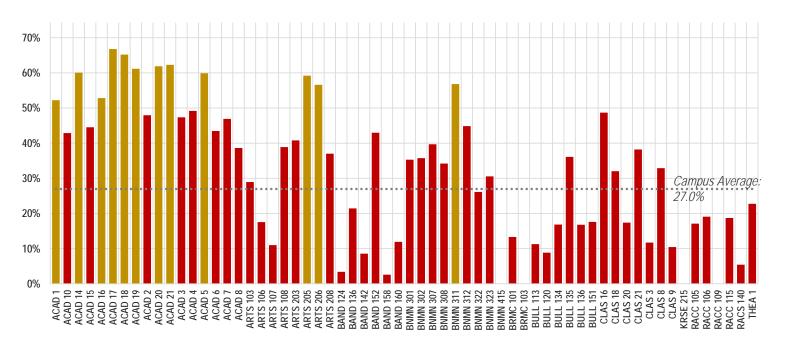
 Room Fill:
 Less than THECB Target

 Overall Room Utilization (Average):
 Less than 50%
 Between 50% to 75%
 Greater than Equal to 75%

 Average Census, Capacity, Fill Rate, and Hours
 Second Hours
 Second Hours
 Second Hours

								Difference from	
		Total	Total	Total	Total	Classroom Fill	Average Hours	THECB Target	Overall Building Utilization
	Building	Rooms	Enrollment	Capacity	Hours	(Average Enrollment/ Station Capacity)	Per Week	<38.0 Hours   >38.0 Hours	(Function of Room Fill and Hourly Usage)
TOTAL		62	1,300	2,545	1,245	51.1%	20.1	(17.9)	27.0%
	THECB Target					65.0%	38.0	-	75.0%
ACAD	Academic Building	17	402	634	532	63.4%	31.3	(6.7)	52.3%
ARTS	Arts and Sciences Building	8	198	300	171	66.0%	21.4	(16.6)	37.2%
BAND	Band Hall	6	155	422	68	36.8%	11.3	(26.7)	11.0%
BNMN	Old Main Building	9	195	319	171	61.1%	19.0	(19.0)	30.5%
BRMC	Mill Creek Hall	2	15	92	16	15.8%	8.0	(30.0)	3.3%
BULL	Bullock Building	6	96	202	86	47.4%	14.4	(23.6)	18.0%
CLAS	Classroom Building	7	138	287	142	48.0%	20.3	(17.7)	25.6%
KRSE	Kruse Center	1		63			-	(38.0)	
RACC	Rankin Ag Complex Classroom	4	65	160	39	40.8%	9.8	(28.3)	10.5%
RACS	Rankin Ag Complex Shop	1	8	31	8	25.8%	8.0	(30.0)	5.4%
THEA	Performing Arts Theatre	1	28	35	11	78.6%	11.0	(27.0)	22.7%

*top left:* Overall Classroom Building Utilization (Fall 2019)



*bottom left:* Room-By-Room Overall Classroom Utilization (Fall 2019)

According to available data, Mondays and Wednesdays were more heavily scheduled than Tuesdays and Thursday; labs were in use approximately 70% of the available hours versus 60%. Class lab instruction on Friday was extremely limited and, like classrooms, no instruction was offered on the weekend. Peak class lab demand during the Fall 2019 semester was generally from Monday through Thursday, primarily between the hours of 9:00am and 4:00pm. After this time, utilization drops significantly, with little to no use of class labs. Similar to the classroom analysis, this indicates that there is capacity to accommodate additional enrollment growth within the existing class lab inventory without investment simply by increasing hours per week labs are scheduled.

#### Conclusion

Overall utilization of instructional space - both general classroom and class lab - was found to be well below the target state metrics for both hours per week utilization and classroom fill (the actual number of seats occupied) in the Fall 2019 semester on the Brenham Campus. Because the

overall utilization is a ratio of classroom fill and average scheduled hours per week, it is possible for the classroom to be well scheduled, but the seats filled below minimum state target and vice versa. While individual classrooms or class labs within a building may be utilized at or above the average overall building utilization, these low utilization rates indicate there are opportunities within the existing campus inventory, in general, to accommodate an increase in enrollment.

While further analysis is required to understand the reason why these rooms were underutilized, in the instances where fill is low but average weekly hours at or above target, it does suggest that a "right sizing" of the campus instructional space may be necessary to better accommodate the optimal class section size at the Brenham Campus. Consideration may also be given to demolition of significantly underutilized buildings from the inventory and / or re-purposing the space for a higher and better function. Additional room-by-room data for each building is included in the Appendix of this document.



*left:* Brenham Campus Classroom Building Utilization

*right:* Brenham Campus Class Lab Building Utilization





250	-5000
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Building Utilization

77%

25

THECB Target Fill Rate (Average)

THECB Weekly Target Hours (Average)

 Room Fill:
 Less than THECB Target

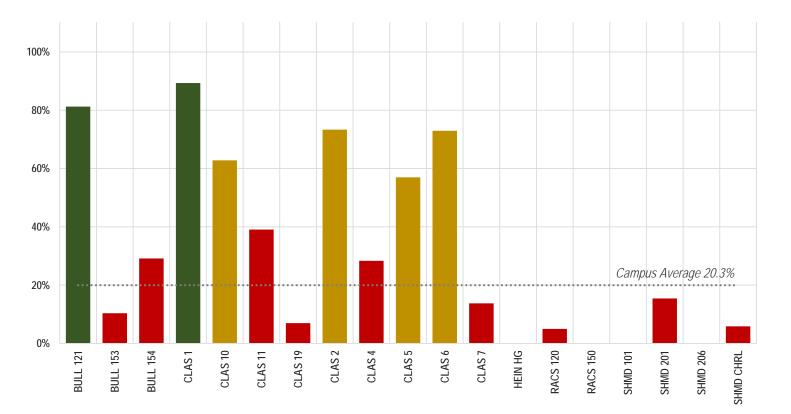
 Overall Room Utilization (Average):
 Less than 50%

 Between 50% to 75%
 Greater than Equal to 75%

 Average Census, Capacity, Fill Rate, and Hours

	Building	Total Rooms	Total Enrollment	Total Capacity	Class Lab Fill (Average Enrollment/ Station Capacity)	Average Hours Per Week	Difference from THECB Target <25.0 Hours   >25.0 Hours	Overall Building Utilization (Function of Room Fill and Hourly Usage)
TOTAL		19	318	807	39.4%	12.9	(12.1)	20.3%
	THECB Target				77.0%	25.0	-	75.0%
BULL CLAS	Bullock Building Classroom Building	3	66 197	156 293	42.3%	21.8	(3.2)	36.9%
HEIN	Marie Heineke Memorial Gym	1		10		-	(25.0)	
RACS SHMD	Rankin Ag Complex Shop Schmidt Building	2	12 43	93 255	12.9% 16.9%	4.0 3.8	(21.0) (21.2)	

*top left:* Overall Class Lab Building Utilization (Fall 2019)



*bottom left:* Room-By-Room Overall Class Lab Utilization (Fall 2019)

### CAMPUS GROWTH PROJECTIONS BRENHAM CAMPUS - ENROLLMENT PROJECTIONS

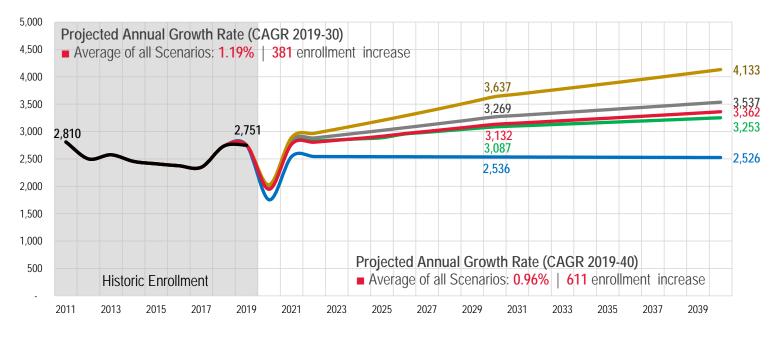
Multiple enrollment growth scenarios were developed to project how the headcount may grow over the next ten to 20 years at the Brenham Campus; this data may then, in turn, be utilized to project the future space needs at the campus to assist in identifying potential projects within the master plan.

In each of these scenarios, the enrollment projection excludes dual credit and 100% online only student growth. In addition, it considers only that of undergraduate/associate degree level and certificate seeking continuing education students who are attending on-campus only classes or at least one class on-campus in combination with online courses (hybrid). To calculate growth scenarios beyond 2030, it was presumed the annual growth rate between 2019 and 2030 would continue, but at approximately one-half of its projected growth rate. The Trend Line projection is the only exception; its growth continues to project future enrollment based on past, historic data points.

#### Conclusion

In general, when utilizing the average of all projection scenarios, enrollment at the Brenham Campus is projected to grow, increasing its enrollment from 2,751 students in the Fall 2019 semester to approximately 3,132 students by the Fall 2030, an approximately 1.19% growth per annum. Beyond 2030, it is anticipated the campus enrollment will continue to grow at approximately 0.96% per annum, resulting in a net enrollment increase of 611 students within the next 20 years.

# **CAMPUS GROWTH PROJECTIONS** BRENHAM CAMPUS - ENROLLMENT PROJECTIONS



#### Enrollment Scenarios: Projections Rates thru 2040

Based on 2011-19 Trend Line

2019 Capture Rate (2019 Enrollment/ 2019 College Service Area Population Age 18-64) Held Constant at 0.89%

Combined College Service Area Population Age 18-64, CAGR 2020-30 Held Constant at 1.6%

Top 8 Dominant TX High Schools of Origin (12th Grade Class Growth), CAGR 2014-19 Held Constant at 2.6%

Average of all Enrollment Projection Scenarios

*Trend Line* = Continued growth at historic enrollment (2011-2019) 2019 Capture Rate = Ratio of Fall 2019 enrollment to the population age 18 to 64 within the Blinn College Service Area; the ratio is then multiplied against the projected growth of the specified 18 to 64 population for the next 10 years

*Combined College Service Area* = Percent projected change in growth (2020-2030) of the population age 18 to 64 cohort in the combined (Blinn, Lone Star, HCC, and ACC) service areas; the percent is then multiplied against the Fall 2019 enrollment and carried forward

**Dominant High Schools of Origin** = Percent historic change in growth (2014-2019) of the senior class enrollment at the top 8 high schools of Brenham Campus Fall 2019 student origin; the percent is then multiplied against the Fall 2019 enrollment and carried forward

*Average All Scenarios* = Average of enrollment projected by year across all scenarios above

# CAMPUS GROWTH PROJECTIONS **BRENHAM CAMPUS - SPACE PROJECTIONS**

For planning purposes in the models which follow, it 83.3% of the total campus enrollment. The proposed planning is assumed the Brenham Campus will target a total of approximately 3,360 student enrollment on-campus by 2040. While online growth above the target on-campus enrollment is likely, it generally will not impact building / campus square foot requirements.

Space need is calculated using the predicted FTSE for a campus. For planning purposes, it has been assumed that the historic five-year average percent FTSE to headcount will be maintained. For the Brenham Campus, the FTSE value is metric to calculate E&G space need for the Brenham Campus is 65% of the Ideal, or 70.8 NASF / FTSE.

The existing inventory analysis includes buildings which were online and in use at the time of the Fall 2019 semester only. Those buildings which are currently online, approved, or in design / construction at the time of publication of this report are factored into the future Fall 2025 space inventory and include the following:

• Science, Technology, Engineering, and Innovation (STEI) Building

BRENHAM CAMPUS PROJECTED E&G SPACE NEED TO SUPPORT ENROLLMENT BY YEAR Proposed Blinn College District Planning Metric = 81.7 NASF / FTSE

Proposed Brenham Campus Planning Metric = 70.8 NASF / FTSE

		_	YEAR 2025 Projected Enrollment: 2,910 Projected FTSE: 2,430	YEAR 2030 Projected Enrollment: 3,130 Projected FTSE: 2,610	YEAR 2040 Projected Enrollment: 3,360 Projected FTSE: 2,800
	E&G NASF (FALL 2019)	ADJUSTED AVAILABLE NASF <sup>1</sup>	TARGET NASF NEED	TARGET NASF NEED	TARGET NASF NEED
Teaching Space	125,051	162,500	106,200	114,100	122,500
Library Space	19,565	19,600	18,000	19,300	20,800
Office Space	68,018	77,400	33,500	36,000	38,700
Support Space	16,597	16,600	14,200	15,300	16,400
TOTAL NASF	229,230	276,000	171,900	184,700	198,400
TOTAL GSF <sup>2</sup>	352,700	424,700	264,400	284,200	305,100
GSF SURPLUS / (SHORTAGE) <sup>2</sup>			160,300	140,500	119,600

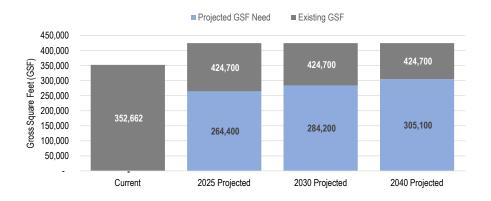
Source: THECB, Blinn Office of Facilities, Planning, and Construction, and Facility Programming and Consulting

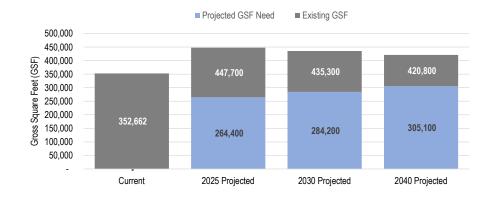
All values rounded to nearest hundredth

1. Includes all buildings approved / online at time of publication of this report.

2. Gross square feet (GSF) is calculated at 65% net to gross ratio.

### CAMPUS GROWTH PROJECTIONS BRENHAM CAMPUS - SPACE PROJECTIONS





#### Conclusion

As identified in the table on the previous page, as of the Fall 2025, the Brenham Campus is projected to have an E&G space surplus of approximately 160,300 GSF. Even if no new buildings are constructed in the next ten to 20 years, the Brenham Campus is still projected to be able to support its projected enrollment within the existing building inventory and have a surplus of approximately 119,600 GSF.

However, Blinn College may also use this as an opportunity to replace outdated and worn facilities with new, more modern facilities better suited to today's teaching methodologies, student needs / expectations, and better align with peer institutions. If the projects proposed in the master plan are completed, the impact to the projected E&G space inventory will be as follows:

- Phase 1: 183,300 GSF surplus
- Phase 2: 151,100 GSF surplus
- Phase 3: 115,700 GSF surplus

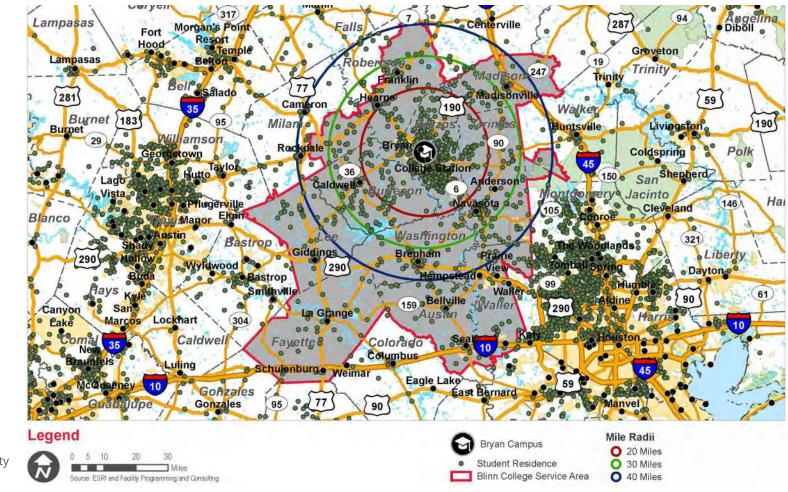
*top:* Projected Space Surplus / Shortfall (Before Master Plan)

*bottom:* Projected Space Surplus / Shortfall (After Master Plan)

# CAMPUS GROWTH PROJECTIONS BRYAN CAMPUS - DEMOGRAPHIC ANALYSIS

#### **Demographic Analysis**

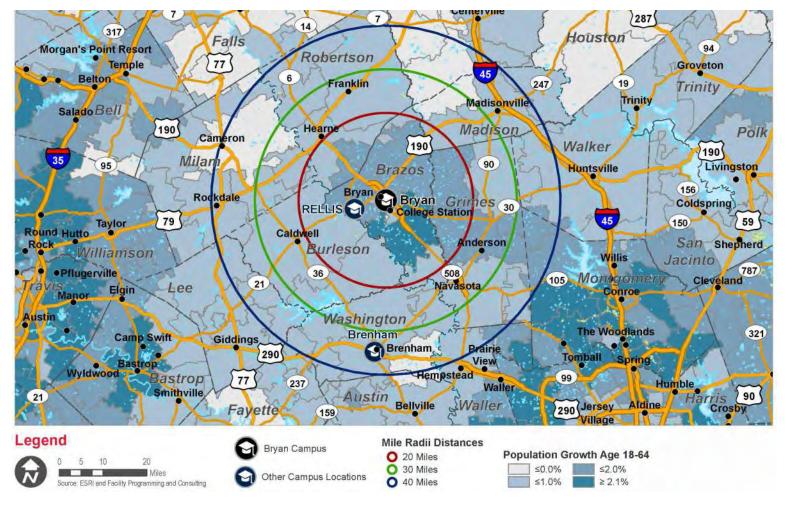
According to the data provided, nearly three-quarters (70.8%) of Fall 2019 Bryan Campus students originated from outside the Blinn College Service Area. Students originated primarily from College Station (24.4%) and the Houston CBSA (27.3%). An additional one-third of students originated from "other areas," once again indicative of Blinn's strong brand recognition for quality education and its reputation as an academic transfer institution. When student residency density for the Fall 2019 semester is plotted, the large number of students who "choose" to attend the Bryan Campus, even as an out-of-district student, is evident. Each green dot represents the location of a student address. In instances where students have the same



*right:* Student Residence Density (Fall 2019)

# CAMPUS GROWTH PROJECTIONS BRYAN CAMPUS - DEMOGRAPHIC ANALYSIS

address the dot is placed on top of the other, therefore giving a distorted perspective of student resident density. Regardless of this distortion, one can begin to visualize clusters of student residences by geocoding all of the student addresses which were associated with the campus. The map below illustrates the projected percent change in CAGR in the population age 18 to 64 cohort, by ZIP code, through 2030, in the vicinity of the Bryan Campus. Approximately 97% of students attending the Bryan Campus in the Fall 2019 semester were in the age 18 to 34 cohort.



*left:* Population Growth Age 18-64 By ZIP Code; CAGR 2020-2030

**Overall classroom utilization** by building on campus during the Fall 2019 semester was fair, averaging 52.9% campus-wide. Of 99 available classrooms, the average weekly utilization was approximately 28.9 hours per week. Average capacity of a classroom was 41 seats, while average enrollment was 28 students. This translates into an average fill rate of 69.6%. In general, most classroom buildings on the Bryan Campus are being used well. Improvement to utilization would be with an increase to hours of weekly use as the fill rate generally meets or exceeds the state metric in all buildings.

Building A had the highest overall building utilization among the campus buildings with general classrooms available for schedule in the Fall 2019. Classrooms in Building A were scheduled, on average, approximately 33.2 hours per week, just below the state metric of 38.0 hours per week; the fill rate was nearly 75%, exceeding the minimum target by 10%. The least performing classroom buildings are the Building R, Building F, and Building T, respectively. While the individual classroom fill rates in these building are at the state metric, the average hours per weekly utilization are generally well below the target, in some cases, as much as 20 hours. Increasing the scheduled hours per week would therefore likely result in a better overall building utilization. Approximately 20% of the individual classrooms on campus are used quite heavily in both scheduled hours per week and average classroom fill, resulting in a 75% or higher overall utilization.

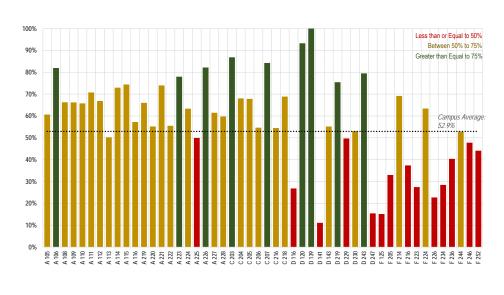
Review of the average hours per day during which courses could be scheduled over the course of the week finds that, Monday through Thursday, classrooms are scheduled at approximately 84% of the available hours and approximately 17% on Friday. In the Fall 2019 semester, one class was scheduled on the weekend, but generally there were no scheduled classes on Saturday or Sunday. Peak classroom demand during the Fall 2019 semester was Monday through Thursday, primarily between the hours of 9:00am and 4:00pm. After 4:00pm, utilization drops approximately onehalf, with little to no use of classrooms on campus after 6:00pm. This indicates that there is capacity to accommodate additional enrollment growth within the existing classroom inventory without investment simply by increasing the hours per week classrooms are scheduled (i.e. on Fridays, in the late afternoon and / or evenings during the week, etc.).

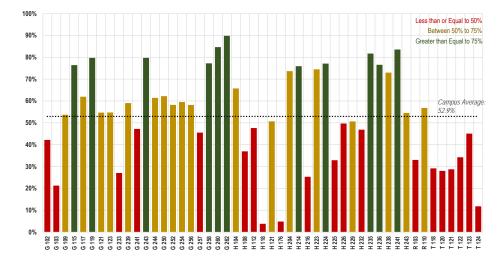
Room Fill: Less than THECB Target Creater than or Equal to THECB Target Overall Room Utilization (Average): Less than 50% Between 50% to 75% Greater than Equal to 75% Average Census, Capacity, Fill Rate, and Hours 
 THECB Target Fill Rate (Average)
 65%

 THECB Weekly Target Hours (Average)
 38

							Difference from	
		Total	Total	Total	Classroom Fill	Average Hours	THECB Target	Overall Building Utilization
	Building	Rooms	Enrollment	Capacity	(Average Enrollment/ Station Capacity)	Per Week	<38.0 Hours i >38.0 Hours	(Function of Room Fill and Hourly Usage)
TOTAL		99	2,805	4,028	69.6%	28.9	(9.1)	52.9%
	THECB Target				65.0%	38.0	-	75.0%
A	Building A	21	606	808	75.0%	33.2	(4.8)	65.6%
С	Building C	7	189	258	73.4%	35.9	(2.1)	69.2%
D	Building D	10	244	347	70.3%	28.3	(9.7)	52.3%
F	Building F	12	293	430	68.1%	22.1	(15.9)	39.6%
G	Building G	21	573	784	73.1%	30.7	(7.3)	59.1%
Н	Building H	20	513	701	73.1%	27.2	(10.8)	52.3%
R	Building R	2	52	66	78.0%	21.5	(16.5)	44.1%
Т	Building T	6	336	634	53.0%	21.8	(16.3)	30.3%

*right:* Overall Classroom Building Utilization (Fall 2019)





Overall class lab utilization by building on the Bryan Campus during the Fall 2019 semester, was fair to good, averaging approximately 62.8%. Of the 25 available class labs, the average weekly utilization across campus was approximately 23.7 hours per week, nearly at the 25.0 hours per week THECB target for lab utilization. While the average capacity of a class lab on campus was calculated at 32 seats, approximately 21, or 66.3%, were filled. The highest utilized labs were located in Buildings D and C, respectively. In both buildings, the average hours of scheduled weekly use approached or exceeded the THECB target; the fill rate in Building C exceeded the THECB metric by nearly 15%. One class lab was available for scheduled instruction, but was not utilized in the Fall 2019 semester. in Building H. In terms of average class lab utilization, Building R was the least performing in terms of average class lab utilization.

Class labs were scheduled at or above the available hours per day Monday through Thursday; on Fridays, labs were in use approximately 18% of the available hours. No instruction was offered on the weekend. Similar to classrooms, peak class lab demand was generally from Monday through Thursday, primarily between the hours of 9:00am and 4:00pm. Unlike classrooms, however, lab utilization continued well into the evening, with some sections meeting as late as 10:00pm. This would indicate that, while there is some

*left:* Room-By-Room Overall Classroom Utilization (Fall 2019)

Room Fill: Less than THECB Target Greater than or Equal to THECB Target

Average Census, Capacity, Fill Rate, and Hours

Overall Room Utilization (Average): Less than 50% Between 50% to 75% Greater than Equal to 75%

		T-4-1	Tetel	Tatal		A	Difference from	
		Total	Total	Total	Class Lab Fill	Average Hours	THECB Target	Overall Building Utilization
	Building	Rooms	Enrollment	Capacity	(Average Enrollment/ Station Capacity)	Per Week	<25.0 Hours   >25.0 Hours	(Function of Room Fill and Hourly Usage)
TOTAL		25	533	804	66.3%	23.7	(1.3)	62.8%
	THECB Target				77.0%	25.0	-	75.0%
С	Building C	2	45	49	92.2%	22.8	(2.2)	84.2%
D	Building D	6	155	221	70.2%	30.7	5.7	86.1%
F	Building F	4	75	110	68.1%	17.2	(7.8)	46.8%
G	Building G	5	116	166	69.7%	20.4	(4.6)	56.9%
Н	Building H	6	110	192	57.4%	26.4	1.4	60.6%
R	Building R	2	32	66	48.7%	16.3	(8.8)	31.7%

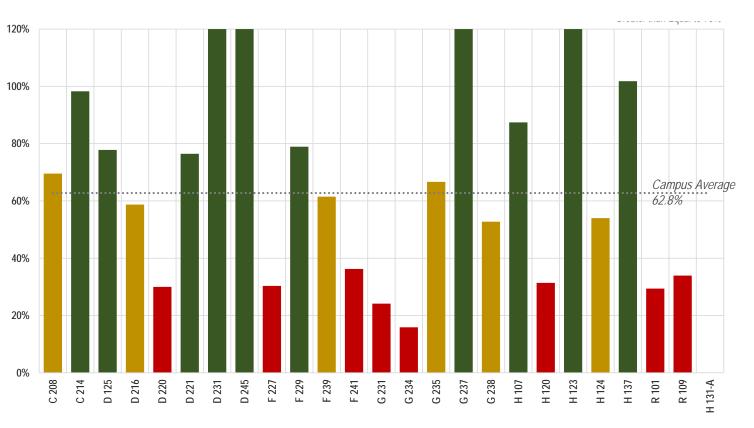
THECB Target Fill Rate (Average)

THECB Weekly Target Hours (Average)

77%

25

*top right:* Overall Class Lab Building Utilization (Fall 2019)



bottom right: Room-By-Room Overall Class Lab Utilization (Fall 2019)

84

capacity to accommodate enrollment growth within the existing class lab inventory, additional labs may be necessary.

#### Conclusion

The Bryan Campus has long been an academic workhorse for the Blinn College District. This is evident in its overall utilization of instructional space - both general classroom and class lab - which was generally found to be fair to good when compared to the target state metrics for both hours per week utilization and classroom fill (the actual number of seats occupied) in the Fall 2019 semester. While individual classrooms or class labs within a building may be utilized at or above the average overall building utilization, the current utilization rates indicate there are still opportunities within the existing campus inventory, in general, to accommodate an

increase in enrollment. If, however, the campus enrollment is limited to the target headcount at the Bryan Campus, the type and quantity of proposed new instructional space should be targeted to provide those which the campus currently lacks.

Consideration may be given to demolition of significantly underutilized buildings from the inventory and / or repurposing the space for a higher and better function. In addition, in the instances where fill is low but average weekly hours at or above target, it may be appropriate to look at "right sizing" of the instructional space to better accommodate the optimal class section size at the Bryan Campus. Additional room-by-room data for each building is included in the Appendix of this document.



*left:* Bryan Campus Classroom Building Utilization

*right:* Bryan Campus Class Lab Building Utilization

# CAMPUS GROWTH PROJECTIONS BRYAN CAMPUS - ENROLLMENT PROJECTIONS

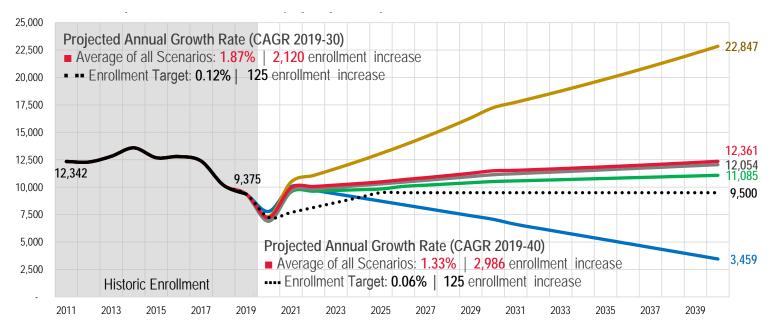
Multiple enrollment growth scenarios were developed to project how the headcount may grow over the next ten to 20 years at the Bryan Campus; this data may then, in turn, be utilized to project the future space needs at the campus to assist in identifying potential projects within the master plan.

In each of these scenarios, the enrollment projection excludes dual credit and 100% online only student growth. In addition, it considers only that of undergraduate/associate degree level and certificate seeking continuing education students who are attending on-campus only classes or at least one class on-campus in combination with online courses (hybrid). To calculate growth scenarios beyond 2030, it was presumed the annual growth rate between 2019 and 2030 would continue, but at approximately one-half of its projected growth rate. The Trend Line projection is the only exception; its growth continues to project future enrollment based on past, historic data points.

#### Conclusion

In general, when utilizing the average of all projection scenarios, enrollment at the Bryan Campus is projected to grow approximately 2,120 students in the next ten years. However, it is the desire of Blinn College to manage the enrollment at this campus and set a target headcount of 9,500 students; this is the scenario which will be utilized in the space projections which follow. For planning purposes, it is assumed it will take approximately five years, or until Fall 2025, for the Bryan Campus to reach this target headcount as it recovers from the impacts of COVID-19 on its Fall 2020 enrollment. Any projected additional growth between the scenario and the average of all scenarios is anticipated to shift to the RELLIS Campus in the future at that time.

# CAMPUS GROWTH PROJECTIONS BRYAN CAMPUS - ENROLLMENT PROJECTIONS



*left:* Enrollment Projections (On-Campus / Hybrid Headcount)

#### Enrollment Scenarios: Projections Rates thru 2040

Based on 2011-19 Trend Line

2019 Capture Rate (2019 Enrollment/ 2019 College Service Area Population Age 18-64) Held Constant at 3.02%

Combined College Service Area Population Age 18-64, CAGR 2020-30 Held Constant at 1.6%

Top 5 Dominant TX High Schools of Origin (12th Grade Class Growth), CAGR 2014-19 Held Constant at 5.7%

Average of all Enrollment Projection Scenarios

•••• Enrollment Target: 125 | 0.1%

*Trend Line* = Continued growth at historic enrollment (2011-2019) 2019 Capture Rate = Ratio of Fall 2019 enrollment to the population age 18 to 64 within the Blinn College Service Area; the ratio is then multiplied against the projected growth of the specified 18 to 64 population for the next 10 years

*Combined College Service Area* = Percent projected change in growth (2020-2030) of the population age 18 to 64 cohort in the combined (Blinn, Lone Star, HCC, and ACC) service areas; the percent is then multiplied against the Fall 2019 enrollment and carried forward

**Dominant High Schools of Origin** = Percent historic change in growth (2014-2019) of the senior class enrollment at the top 5 high schools of Bryan Campus Fall 2019 student origin; the percent is then multiplied against the Fall 2019 enrollment and carried forward

*Average All Scenarios* = Average of enrollment projected by year across all scenarios above

*Enrollment Target* = Enrollment at the Bryan Campus is targeted at 9,500 headcount

# CAMPUS GROWTH PROJECTIONS BRYAN CAMPUS - SPACE PROJECTIONS

For planning purposes in the models which follow, it is assumed the Bryan Campus will target a total enrollment of approximately 9,500 on-campus / hybrid students. Based on the projections presented in this document, this target will be reached as soon as Fall 2025 and maintained moving forward. While online growth above the target on-campus enrollment is likely, it generally will not impact building / campus square foot requirements. Space need is calculated using the predicted FTSE for a campus. For planning purposes, it has been assumed that the historic five-year average percent FTSE to headcount will be maintained. For the Bryan Campus, the FTSE value is 69.1% of the total campus enrollment. The proposed planning metric to calculate E&G space need for the Bryan Campus is 70% of the Ideal, or 76.3 NASF / FTSE.

#### BRYAN CAMPUS PROJECTED E&G SPACE NEED TO SUPPORT ENROLLMENT BY YEAR

Proposed Blinn College District Planning Metric = 81.7 NASF / FTSE

Proposed Bryan Campus Planning Metric = 76.3 NASF / FTSE

			YEAR 2025 Projected Enrollment: 9,500 Projected FTSE: 6,565	YEAR 2030 Projected Enrollment: 9,500 Projected FTSE: 6,565	YEAR 2040 Projected Enrollment: 9,500 Projected FTSE: 6,565
	EXISTING E&G NASF (FALL 2019)	ADJUSTED AVAILABLE NASF <sup>1</sup>	TARGET NASF NEED	TARGET NASF NEED	TARGET NASF NEED
Teaching Space	115,602	N/A	309,200	309,200	309,200
Library Space	14,700	N/A	52,400	52,400	52,400
Office Space	72,727	N/A	97,600	97,600	97,600
Support Space	5,880	N/A	41,300	41,300	41,300
TOTAL NASF	208,908	208,900	500,500	500,500	500,500
TOTAL GSF <sup>2</sup>	298,440	321,400	770,200	770,200	770,200
GSF SURPLUS / (SHORTAGE) <sup>2</sup>			(448,800)	(448,800)	(448,800)

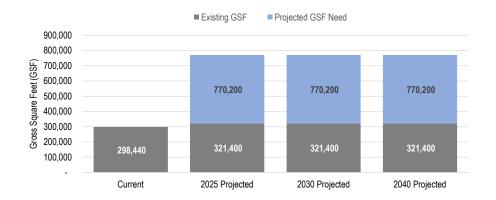
Source: THECB, Blinn Office of Facilities, Planning, and Construction, and Facility Programming and Consulting

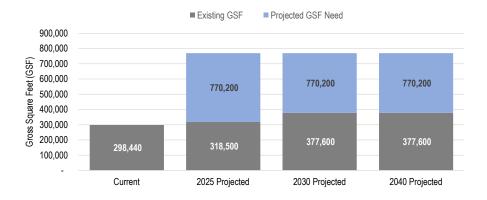
All values rounded to nearest hundredth

1. Includes all buildings approved / online at time of publication of this report.

2. Gross square feet (GSF) is calculated at 70% for existing building inventory and at 65% net to gross ratio for adjusted and future years.

### CAMPUS GROWTH PROJECTIONS BRYAN CAMPUS - SPACE PROJECTIONS





#### Conclusion

As identified in the table on the previous page, as of the Fall 2025, the Bryan Campus is projected to have an E&G space shortfall of approximately 448,800 GSF. This shortfall is reflective of the campus reaching its target 9,500 headcount by year 2025. Therefore, if no new buildings are constructed in the next ten to 20 years, the Bryan Campus will continue to experience a space deficit.

If the projects proposed in the master plan are completed, the impact to the projected E&G space inventory will be as follows:

- Phase 1: 451,700 GSF shortfall
- Phase 2: 392,600 GSF shortfall
- Phase 3: 392,600 GSF shortfall

Because the impact of limiting enrollment at the Bryan Campus and the potential surge of enrollment on the RELLIS Campus, as a result, is unknown, it is recommended that within the next three to five years Blinn College reexamine the need for additional space on the Bryan Campus. At this time, adjustments to the phasing and building type proposed in the master plan, which better reflect the demand required to support the projected enrollment, may be considered.

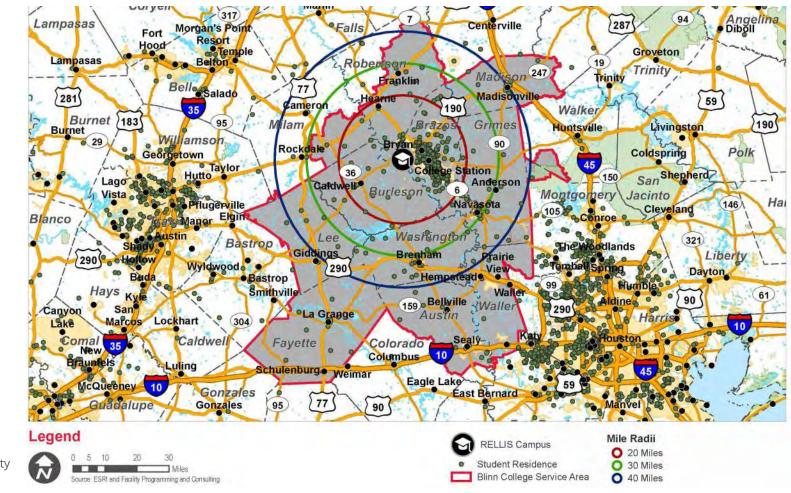
*top:* Projected Space Surplus / Shortfall (Before Master Plan)

*bottom:* Projected Space Surplus / Shortfall (After Master Plan)

# CAMPUS GROWTH PROJECTIONS **RELLIS CAMPUS - DEMOGRAPHIC ANALYSIS**

### **Demographic Analysis**

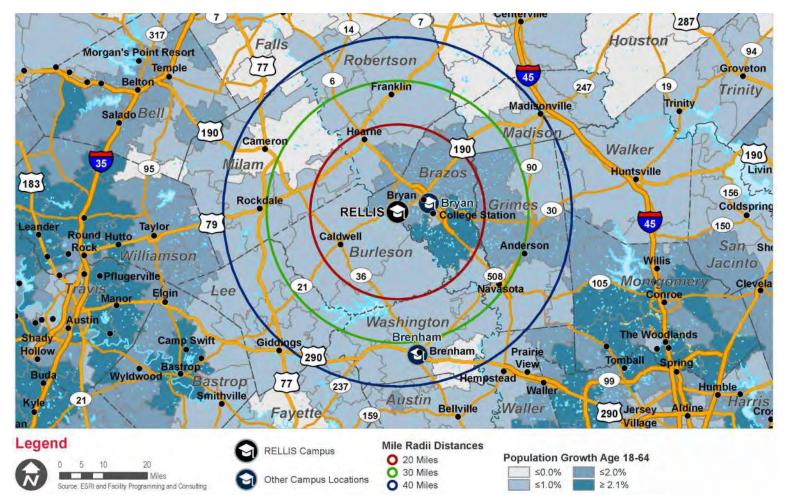
In the Fall 2019, Blinn's RELLIS Campus had the largest percent (81.6%) of students who originated from outside the Blinn College Service Area. The greatest percent (30.0%) was from the Houston CBSA; the second largest was from "other areas." This state-wide draw is likely due to the unique education concept at RELLIS - an alliance of universities, community colleges, and workforce training options offered at one site, where students can access everything from professional certifications to four-year degrees. When student residency density for the Fall 2019 semester is plotted, the large number of students who "choose" to attend the RELLIS Campus, even as an out-of-district student, is evident. Each green dot represents the



right: Student Residence Density (Fall 2019)

# CAMPUS GROWTH PROJECTIONS RELLIS CAMPUS - DEMOGRAPHIC ANALYSIS

location of a student address; where students have the same address the dot is placed on top of the other, therefore giving a distorted perspective of student resident density. Regardless of this distortion, one can begin to visualize clusters of student residences by geocoding all of the student addresses which were associated with the campus. The map below illustrates the projected percent change in CAGR in the population age 18 to 64 cohort, by ZIP code, through 2030, in the vicinity of the RELLIS Campus. Approximately 98% of students attending the RELLIS Campus in the Fall 2019 semester were in the age 18 to 34 cohort.



*left:* Population Growth Age 18-64 By ZIP Code; CAGR 2020-2030

**Overall classroom utilization** preliminary analysis indicates the campus is nearing capacity of the current classroom space to meet the growing enrollment. To accommodate additional growth will require the increased scheduling of classrooms, many of which are already exceeding the target 38 hours per week, resulting in longer instructional days and increased instruction on Friday afternoons and Saturdays. Overall classroom utilization by building on campus during the Fall 2019 semester was good, averaging 81.7%. Of the 18 available classrooms, the average weekly utilization was approximately 38.7 hours per week with an average fill rate of 80.3%.

Of the 18 available classrooms in the Fall 2019, 17 were located in the Schwartz Building. With the exception of two classrooms, the overall utilization of each room was good with an average class fill of 81.7%, nearly 20 points higher than the state target, and with the average weekly scheduled hours near 40.6, more than 2 hours above the target THECB metric. Room 480 was the least utilized; this is largely due to the space being scheduled for other activities and events, including board meetings, outside of scheduled classroom use. Only one classroom was utilized by Blinn in the Texas A&M Academic Complex Building 1 (ACB 1) in the Fall 2019 semester. This classroom was well below the state target in both fill and scheduled average weekly hours. This indicates the classroom would allow for some near-term enrollment growth if scheduled of this room was increased.

Peak classroom demand during the Fall 2019 semester was Monday through Thursday, primarily between the hours of 8:00 am and 5:00 pm. Classroom scheduling spikes between the hours of 1:00pm and 4:00 pm. After 6:00 pm, very few classes are scheduled. Similarly, classrooms were utilized the least on Friday afternoons and Saturdays. No classes were offered on Sunday. There is capacity to accommodate additional enrollment growth within the existing classroom inventory without investment just by increasing the hours per week classrooms are scheduled (i.e. on Fridays, in the late afternoon and/or evenings during the week, etc.).

**Overall class lab utilization** during the Fall 2019 semester was fair, averaging 67.4%. Blinn College scheduled labs in both the Schwartz Building and ACB 1. Of the 17 available class labs, the average weekly utilization was approximately 22.8 hours per week with an average fill rate of 74.1%. Data indicates that short-term enrollment growth in class labs may be accommodated through increased weekly scheduling of the labs and / or increased section fill.

Overall, the ACB 1 class labs were utilized at a higher percent than those in the Schwartz Building. The majority of the labs in the ACB 1 are related to the Health Sciences program and include very specialized instructional spaces that are discipline-specific. All but three class labs exceeded the state target for average hours per week utilization; however, in general, these same labs were at or above the metric for percent fill rate. In the Fall 2019, the least utilized lab was room 229 (high fidelity simulation lab), while the most utilized lab was room 227 (low fidelity simulation lab).

The labs in the Schwartz Building are primarily for instruction in biology, chemistry, and engineering. On average, Schwartz Building utilization was fair, indicating both room for increased capacity in lab scheduling and fill rate. In the Fall 2019, microbiology lab 370 was the least utilized; while the class lab fill was just above the state target value, the lab was only scheduled for six hours, on average, significantly below

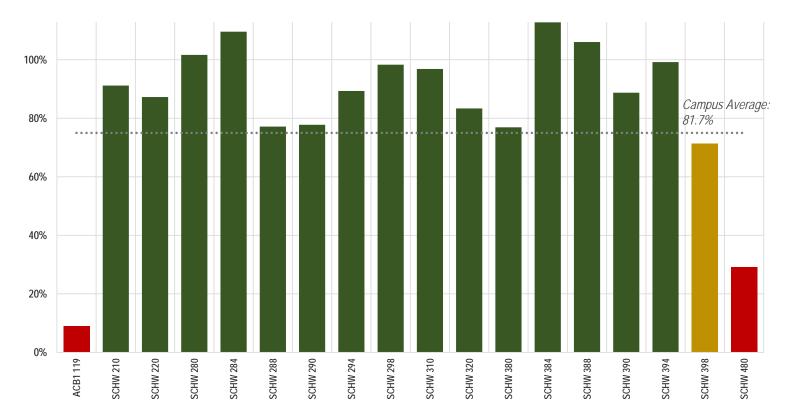
65%

THECB Classroom Fill Target Rate (Average)

Building Utilization: Less than 50% Between 50% to 75% Greater than Equal to 75% THECB Target Hours (Average) 38 Average Census, Capacity, Fill Rate, and Hours Difference from **Overall Building Utilization** Total Total Total Average Hours THECB Target Classroom Fill Building Enrollment per Week <38.0 Hours | >38.0 Hours (Function of Room Fill and Hourly Usage) Rooms Capacity (Average Enrollment / Station Capacity) TOTAL 18 484 602 80.3% 38.7 0.7 81.7% 38.0 THECB Target 65.0% -75.0% ACB1 20 34 6.0 (32.0) 9.1% Academic Complex Building 1 1 57.4% SCHW Walter C. Schwartz Building 17 568 81.7% 40.6 2.6 87.3% 464

Room Fill: Less than THECB Target Greater than or Equal to THECB Target

*top left:* Overall Classroom Building Utilization (Fall 2019)



*bottom left:* Room-By-Room Overall Classroom Utilization (Fall 2019)

the 25 hour THECB target. The heaviest utilized labs, in both terms of fill and average weekly hours, were rooms 450 and 470.

In general, scheduled class lab use is primarily between 8:00 am and 5:00pm, Monday through Thursday. On Fridays, labs are primarily taught in the morning. Similar to classrooms, there is a spike in scheduled courses between 1:00 pm and 4:00 pm during the week. A minimal number of lab offerings were available on Saturday. This indicates that there is capacity to accommodate additional short-term enrollment growth within the existing class lab inventory without investment just by increasing the hours per week the labs are scheduled.

#### Conclusion

Overall utilization of instructional space - both general classroom and class lab - was generally found to exceed the target state metrics for both hours per week utilization and classroom fill (the actual number of seats occupied) in the Fall 2019 semester on the RELLIS Campus. Additional roomby-room data for each building is included in the Appendix of this document.

Note, this analysis does not include the Texas A&M University Academic Complex Building 2 or the recently completed Ag Workforce Building which also include general classroom and class lab space. Access to these spaces will provide a short-term solution to the over-utilization of some of the instructional space included in this analysis, as will the completion of the new Blinn Administration Building which is currently in the early phases of construction.



*left:* RELLIS Campus Classroom Building Utilization

*right:* RELLIS Campus Class Lab Building Utilization

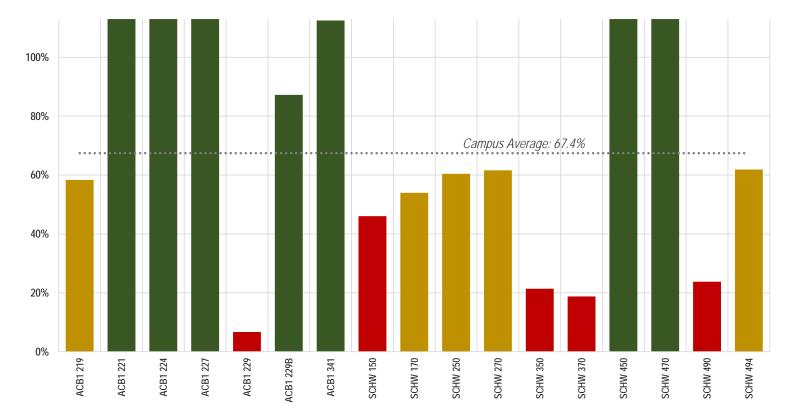
77%

THECB Class Lab Fill Target Rate (Average)

THECB Target Hours (Average) 25 Building Utilization: Less than 50% Between 50% to75% Greater than Equal to 75% Average Census, Capacity, Fill Rate, and Hours Difference from THECB Target Total Total Total Average Hours Class Lab Fill **Overall Building Utilization** Building Enrollment Capacity (Average Enrollment / Station Capacity) Rooms per Week (Function of Room Fill and Hourly Usage) <25.0 Hours | >25.0 Hours TOTAL 468 347 74.1% 22.8 17 (2.2) 67.4% THECB Target 77.0% 25.0 (13.0) 75.0% 129 156 (11.9) ACB1 Academic Complex Building 1 7 82.8% 26.1 86.6% 312 SCHW 10 217 20.4 Walter C. Schwartz Building 69.7% (17.6) 56.8%

Room Fill: Less than THECB Target Greater than or Equal to THECB Target

*top left:* Overall Class Lab Building Utilization (Fall 2019)



*bottom left:* Room-By-Room Overall Class Lab Utilization (Fall 2019)

# CAMPUS GROWTH PROJECTIONS RELLIS CAMPUS - ENROLLMENT PROJECTIONS

Multiple enrollment growth scenarios were developed to project how the headcount may grow over the next ten to 20 years at Blinn's RELLIS Campus; this data may then, in turn, be utilized to project the future space needs at the campus to assist in identifying potential projects within the master plan.

A trend line projection was not used at RELLIS due to its infancy in terms of available data; the campus has only been open since August 2018. In each of these scenarios, the enrollment projection excludes dual credit and 100% online only student growth. In addition, it considers only that of undergraduate / associate degree level and certificate seeking continuing education students who are attending on-campus only classes or at least one class on-campus in combination with online courses (hybrid). To calculate growth scenarios beyond 2030, it was presumed the annual growth rate between 2019 and 2030 would continue, but at approximately one-half of its projected growth rate.

#### Conclusion

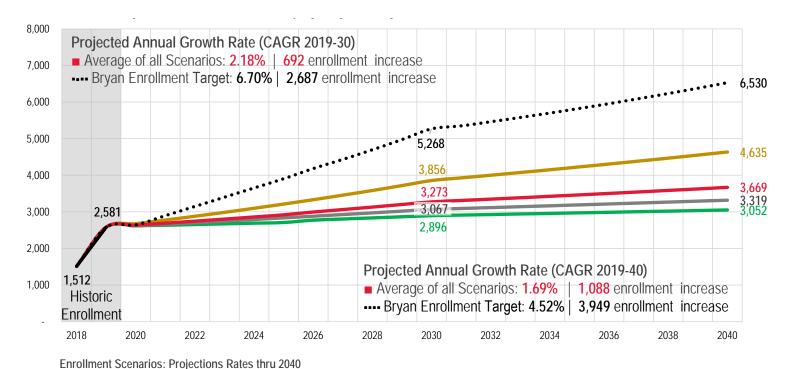
In general, when utilizing the average of all projection scenarios, enrollment at the RELLIS Campus is projected to grow at a steady pace of approximately 2.18% per annum over the next ten years, resulting in a growth of approximately 692 students and a total increase of approximately 1,088 students in the next 20 years. However, it is the desire of Blinn College to target a 9,500 student headcount at the Bryan Campus; this results in a scenario where the additional growth originally projected for the Bryan Campus is, instead, incorporated into the RELLIS projections.

For planning purposes, it is assumed it will take approximately five years, or until Fall 2025, for the Bryan Campus to reach this headcount as it recovers from the impacts of COVID-19 on its Fall 2020 enrollment. At that time, any projected additional growth is anticipated to shift to the RELLIS Campus. This results in a total projected increase of 3,949 students by 2040 at the RELLIS Campus.

# CAMPUS GROWTH PROJECTIONS RELLIS CAMPUS - ENROLLMENT PROJECTIONS

left: Enrollment Projections (On-

Campus / Hybrid Headcount)



Combined College Service Area Population Age 18-64, CAGR 2020-30 Held Constant at 1.6%

Top 6 Dominant TX High Schools of Origin (12th Grade Class Growth), CAGR 2014-19 Held Constant at 3.7%

2019 Capture Rate (2019 Enrollment/ 2019 College Service Area Population Age 18-64) Held Constant at 0.83%

Average of all Enrollment Projection Scenarios

•••• Bryan Campus Enrollment Target: 3,949 | 4.5%

**2019** *Capture Rate* = Ratio of Fall 2019 enrollment to the population age 18 to 64 within the Blinn College Service Area; the ratio is then multiplied against the projected growth of the specified 18 to 64 population for the next 10 years

*Combined College Service Area* = Percent projected change in growth (2020-2030) of the population age 18 to 64 cohort in the combined (Blinn, Lone Star, HCC, and ACC) service areas; the percent is then multiplied against the Fall 2019 enrollment and carried forward

**Dominant High Schools of Origin** = Percent historic change in growth (2014-2019) of the senior class enrollment at the top 6 high schools of RELLIS Campus Fall 2019 student origin; the percent is then multiplied against the Fall 2019 enrollment and carried forward

*Average All Scenarios* = Average of enrollment projected by year across all scenarios above

*Bryan Campus Enrollment Target* = Enrollment growth if students originally projected at the Bryan Campus instead attend RELLIS, once it reaches 9,500 headcount

# CAMPUS GROWTH PROJECTIONS RELLIS CAMPUS - SPACE PROJECTIONS

For planning purposes in the models which follow, it is assumed the RELLIS Campus will target a total of approximately 6,530 student enrollment on-campus by 2040. This value includes the shift in enrollment growth originally projected at the Bryan Campus once it reaches its enrollment target of 9,500 students. While online growth above the target on-campus enrollment is likely, it generally will not impact building / campus square foot requirements.

Space need is calculated using the predicted FTSE for a campus. For planning purposes, it has been assumed that the historic five-year average percent FTSE to headcount will be maintained. Because the RELLIS Campus has only been open since Fall 2018, this average has been adjusted to reflect the

historic two-year average, instead. For the RELLIS Campus, the FTSE value is 58.7% of the total campus enrollment. The proposed planning metric to calculate E&G space need for the RELLIS Campus is 85% of the Ideal, or 92.6 NASF / FTSE.

The existing inventory analysis includes buildings which were online and in use at the time of the Fall 2019 semester only. Those buildings which are currently online, approved, or in design / construction at the time of publication of this report are factored into the future Fall 2025 space inventory and include the following:

- Agriculture and Workforce Education Complex
- Blinn Administration Building
- Academic Complex Building 2

RELLIS CAMPUS PROJECTED E&G SPACE NEED TO SUPPORT ENROLLMENT BY YEAR

Proposed Blinn College District Planning Metric = 81.7 NASF / FTSE

Proposed RELLIS Campus Planning Metric = 92.6 NASF / FTSE

			YEAR 2025 Projected Enrollment: 3,910 Projected FTSE: 2,290	YEAR 2030 Projected Enrollment: 5,270 Projected FTSE: 3,090	YEAR 2040 Projected Enrollment: 6,530 Projected FTSE: 3,830
	EXISTING E&G NASF (FALL 2019)	ADJUSTED AVAILABLE NASF <sup>1</sup>	TARGET NASF NEED	TARGET NASF NEED	TARGET NASF NEED
Teaching Space	61,863	109,800	131,100	176,800	219,200
Library Space	540	500	22,200	30,000	37,100
Office Space	11,073	31,100	41,400	55,800	69,200
Support Space	1,619	2,700	17,500	23,600	29,300
TOTAL NASF	75,095	144,100	212,200	286,200	354,800
TOTAL GSF <sup>2</sup>	115,530	221,700	326,500	440,400	545,900
GSF SURPLUS / (SHORTAGE) <sup>2</sup>			(104,800)	(218,700)	(324,200)

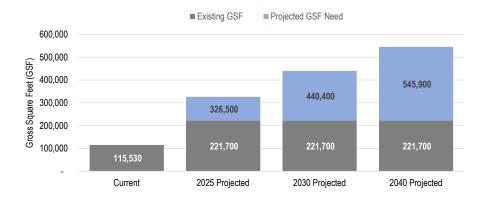
Source: THECB, Blinn Office of Facilities, Planning, and Construction, and Facility Programming and Consulting

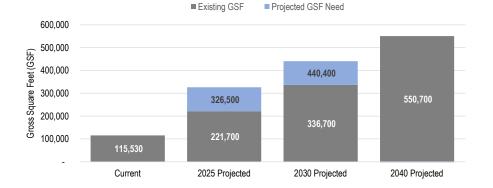
All values rounded to nearest hundredth

1. Includes all buildings approved / online at time of publication of this report.

2. Gross square feet (GSF) is calculated at 65% net to gross ratio.

# CAMPUS GROWTH PROJECTIONS RELLIS CAMPUS - SPACE PROJECTIONS





All space need on the RELLIS Campus assumes that Blinn College will continue to have access to Texas A&M University System buildings in the future (Academic Complex Building 1 and Building 2 (ACB 1; ACB 2) as per the current arrangement.

#### Conclusion

As identified in the table on the previous page, as of Fall 2025, the RELLIS Campus is projected to have an E&G space shortfall of approximately 104,800 GSF. If no new buildings are constructed in the next ten to 20 years, the RELLIS Campus is projected to have a shortfall of approximately 324,200 GSF.

If the projects proposed in the master plan are completed, the impact to the projected E&G space inventory will be as follows:

- Phase 1: 104,800 GSF shortfall
- Phase 2: 103,700 GSF shortfall
- Phase 3: 4,800 GSF surplus

Similar to the Bryan Campus, it is advisable to re-examine the projected space need at RELLIS in the next three to five years to ensure that the projected need is appropriate to support the enrollment at this campus.

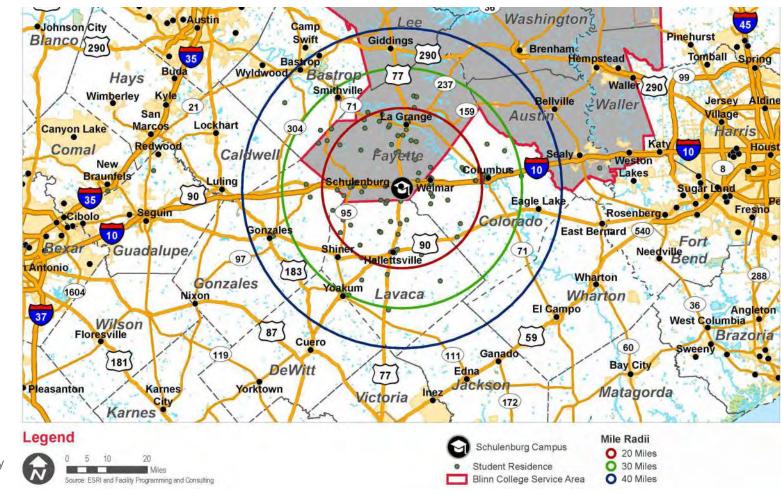
> *top:* Projected Space Surplus / Shortfall (Before Master Plan)

*bottom:* Projected Space Surplus / Shortfall (After Master Plan)

# CAMPUS GROWTH PROJECTIONS SCHULENBURG CAMPUS - DEMOGRAPHIC ANALYSIS

### Demographic Analysis

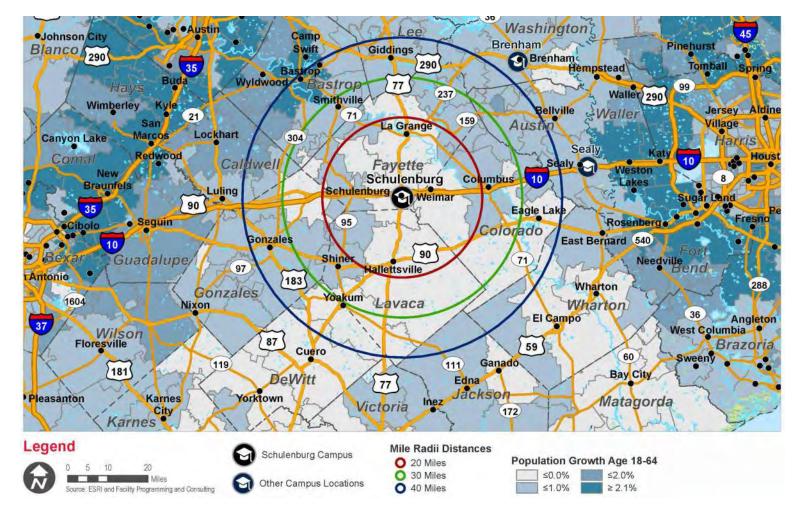
In the Fall 2019 semester, approximately 51.7% of students attending the Schulenburg Campus originated from outside the Blinn College Service Area. As indicated in the map below, the Schulenburg Campus is located just on the edge of the Service Area boundary. When student residency density for the Fall 2019 semester is plotted, the more traditional community college nature of this campus is evident. Each green dot represents the location of a student address. In instances where students have the same address the dot is placed on top of the other, therefore giving a distorted perspective of student resident density. Regardless of this distortion, one can begin to visualize clusters of student residences by geocoding all of



*right:* Student Residence Density (Fall 2019)

# CAMPUS GROWTH PROJECTIONS SCHULENBURG CAMPUS - DEMOGRAPHIC ANALYSIS

the student addresses which were associated with the campus. The map below illustrates the projected percent change in CAGR in the population age 18 to 64 cohort, by ZIP code, through 2030, in the vicinity of the Schulenburg Campus. The bulk of this growth is projected to occur outside a 40-mile radius of the campus location. Approximately 85% of students attending the Schulenburg Campus in the Fall 2019 semester were in the age 18 to 34 cohort.



*left:* Population Growth Age 18-64 By ZIP Code; CAGR 2020-2030

**Overall classroom utilization** by building on campus during the Fall 2019 semester was extremely low, averaging 6.2% campus-wide. Of the 11 available classrooms, the average weekly utilization was approximately 8.2 hours per week. The average capacity of a general classroom was 41 seats with an average enrollment of 12 students; this translates into an average fill rate of 28.5%.

Of the three buildings on campus with general instructional space, the Main Building (SBMN) had the highest overall building utilization in the Fall 2019. However, it was only 0.5% greater than the Liberal Arts Building (SBLA). In both cases, the classrooms were scheduled, on average, less than 12 hours per week, resulting in a deficit of nearly 30 hours per week from the THECB target; the fill rate was between 24.0% and 34.7%, nearly one-half the 65% state metric. One classroom in the Vocational Building (SBVB), while available to schedule in the Fall 2019, was not scheduled for any courses.

Review of the average hours per day during which courses could be scheduled over the course of the week finds that classrooms are scheduled at approximately 34% of their available hours. All classes were scheduled Monday through Thursday, with no use on Friday, Saturday, or Sunday in the Fall 2019 semester. Peak classroom demand during the Fall 2019 semester was primarily between the hours of 9:00am and 1:00pm. While there were classes scheduled in the late afternoon and evening, between the hours of 4:00pm and 8:00pm, these were minimal.

**Overall class lab utilization** by building on the Schulenburg Campus during the Fall 2019 semester, similar to classroom building utilization, was extremely low, averaging approximately 3.1% overall. Of the 3 available class labs, the average weekly utilization across campus was approximately 3.1 hours per week, approximately one-eighth of the THECB target for lab utilization. While the average capacity of a class lab on campus was calculated at 36 seats, approximately 7, or 19.9%, were filled.

The highest utilized of the three available class labs was located in the SBMN. While a welding lab was available for schedule in the SBVB, according to conversations with Blinn IR, no labs were scheduled in the Fall 2019 semester because a replacement for the previous instructor had not been found.

According to available data, similar to the classrooms, courses were primarily held Monday through Thursday, with no instruction on Friday, Saturday, or Sunday. Class labs were typically used approximately three hours per day, generally between the hours of 8:00am to noon, as well as between 2:00pm and 4:00pm.



#### Conclusion

Overall utilization of instructional space - both general classroom and class lab - was found to be well below the target state metrics for both hours per week utilization and classroom fill (the actual number of seats occupied) in the Fall 2019 semester on the Schulenburg Campus. Because the overall utilization is a ratio of classroom fill and average scheduled hours per week, it is possible for the classroom to be well scheduled, but the seats filled below minimum state target and vice versa. While individual classrooms or class labs within a building may be utilized at or above the average overall building utilization, these low utilization rates indicate there are opportunities within the existing campus inventory, in general, to accommodate an increase in enrollment.

Consideration may be given to demolition of significantly underutilized buildings from the inventory and / or repurposing the space for a higher and better function. Additional room-by-room data for each building is included in the Appendix of this document.



*left:* Schulenburg Campus Classroom Building Utilization

*right:* Schulenburg Campus Class Lab Building Utilization



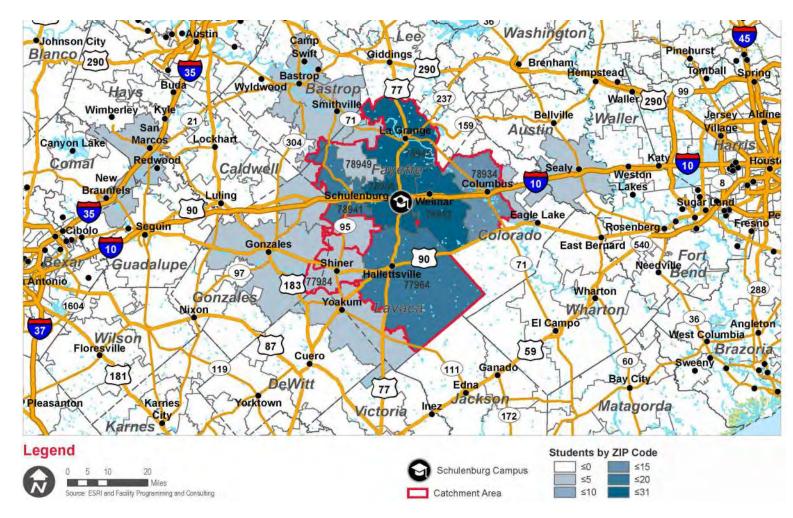


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Building Utilization

### CAMPUS GROWTH PROJECTIONS SCHULENBURG CAMPUS - ENROLLMENT PROJECTIONS

Multiple enrollment growth scenarios were developed to project how the headcount may grow over the next ten to 20 years at the Schulenburg Campus; this data may then, in turn, be utilized to project the future space needs at the campus to assist in identifying potential projects within the master plan. Because the Schulenburg Campus acts as a more traditional, commuter-based community college, one of the scenarios which was explored is the projected growth within the catchment area. In this case, as noted in the "Methodology" section, the catchment area is defined as the top ZIP codes from which a cumulative 80% of Schulenburg enrollment originated in the Fall 2019 semester. This boundary is diagrammed in the adjacent map.



*left:* Schulenburg Catchment Area (Fall 2019)

### CAMPUS GROWTH PROJECTIONS SCHULENBURG CAMPUS - ENROLLMENT PROJECTIONS

*right:* Enrollment Projections (On-Campus / Hybrid Headcount)

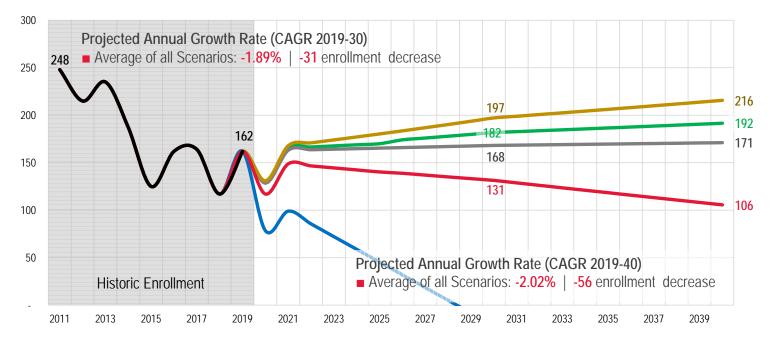
*Trend Line* = Continued growth at historic enrollment (2011-2019) 2019 Capture Rate = Ratio of Fall 2019 enrollment to the population age 18 to 64 within the Blinn College Service Area; the ratio is then multiplied against the projected growth of the specified 18 to 64 population for the next 10 years 2019 Catchment Area = Percent historic change in growth (2010-2020) of the top 80% ZIP Codes of total fall semester enrollment; the percent is then multiplied against the Fall 2019 enrollment and carried forward Dominant High Schools of **Origin** = Percent historic change in growth (2014-2019) of the senior class enrollment at the top 11 high schools of Schulenburg Campus Fall 2019 student origin; the percent is then multiplied against the Fall 2019 enrollment and carried forward

*Average All Scenarios* = Average of enrollment projected by year across all scenarios above

In each of these scenarios, the enrollment projection excludes dual credit and 100% online only student growth. In addition, it considers only that of undergraduate/associate degree level and certificate seeking continuing education students who are attending on-campus only classes or at least one class on-campus in combination with online courses (hybrid). To calculate growth scenarios beyond 2030, it was presumed the annual growth rate between 2019 and 2030 would continue, but at approximately one-half of its projected growth rate. The Trend Line projection is the only exception; its growth continues to project future enrollment based on past, historic data points.

#### Conclusion

When utilizing the average of all projection scenarios, enrollment at the Schulenburg Campus over the next 20 years is projected to decline by approximately one-third of its Fall 2019 enrollment, to 106 students total.



Enrollment Scenarios: Projections Rates thru 2040

Based on 2011-19 Trend Line

- 2019 Capture Rate (2019 Enrollment/ 2019 College Service Area Population Age 18-64) Held Constant at 0.05%
- Campus 2019 Catchment Area (CUML. 80.2% of all Students) Population Age 18-64, CAGR 2010-20 Held Constant at 0.3%
- Top 11 Dominant TX High Schools of Origin (12th Grade Class Growth), CAGR 2014-19 Held Constant at 1.8%

Average of all Enrollment Projection Scenarios

### CAMPUS GROWTH PROJECTIONS SCHULENBURG CAMPUS - SPACE PROJECTIONS

For planning purposes in the models which follow, it is assumed the Schulenburg Campus will target a total of approximately 106 student enrollment on-campus by 2040. While online growth above the target on-campus enrollment is likely, it generally will not impact building / campus square foot requirements. Space need is calculated using the predicted FTSE for a campus. For planning purposes, it has been assumed that the historic five-year average percent FTSE to headcount will be maintained. For the Schulenburg Campus, the FTSE value is 71.0% of the total campus enrollment. The proposed planning metric to calculate E&G space need for the Schulenburg Campus is 65% of the Ideal, or 70.8 NASF / FTSE.

#### Conclusion

As of the Fall 2025, the Schulenburg Campus is projected to have an E&G space surplus of approximately 21,100 GSF. If no new buildings are constructed in the next ten to 20 years, the campus is still projected to have a surplus of approximately 23,700 GSF. Blinn College may use this as an opportunity to replace outdated and worn facilities with new, more modern facilities better suited to today's teaching methodologies, student needs / expectations - and better align with peer institutions - or mothball portions of the campus until additional need is necessary. No additional projects are currently proposed as part of the master plan.

### SCHULENBURG CAMPUS PROJECTED E&G SPACE NEED TO SUPPORT ENROLLMENT BY YEAR

Proposed Blinn College District Planning Metric = 81.7 NASF / FTSE

Proposed Schulenburg Campus Planning Metric = 70.8 NASF / FTSE

	EXISTING E&G NASF (FALL 2019)	ADJUSTED AVAILABLE NASF <sup>1</sup>	YEAR 2025 Projected Enrollment: 140 Projected FTSE: 100 TARGET NASF NEED	YEAR 2030 Projected Enrollment: 130 Projected FTSE: 90 TARGET NASF NEED	YEAR 2040 Projected Enrollment: 100 Projected FTSE: 75 TARGET NASF NEED
Teaching Space	16,738	N/A	4,400	4,100	3,300
Library Space	781	N/A	700	700	600
Office Space	3,231	N/A	1,400	1,300	1,100
Support Space	—	N/A	600	500	400
TOTAL NASF	20,750	20,800	7,100	6,600	5,400
TOTAL GSF <sup>2</sup>	31,923	31,900	10,800	10,200	8,200
GSF SURPLUS / (SHORTAGE) <sup>2</sup>			21,100	21,700	23,700

Source: THECB, Blinn Office of Facilities, Planning, and Construction, and Facility Programming and Consulting

All values rounded to nearest hundredth

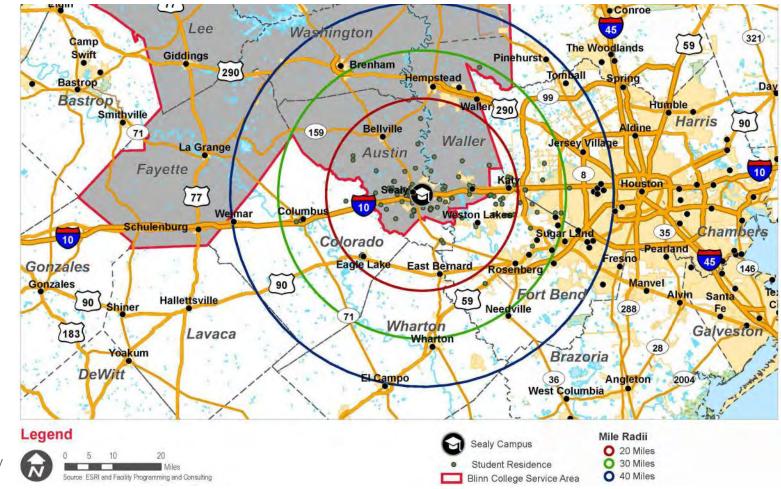
1. Includes all buildings approved / online at time of publication of this report.

2. Gross square feet (GSF) is calculated at 65% net to gross ratio.

## **CAMPUS GROWTH PROJECTIONS** SEALY CAMPUS - DEMOGRAPHIC ANALYSIS

#### **Demographic Analysis**

In the Fall 2019 semester, approximately two-thirds (68.5%) of students attending the Sealy Campus originated from inside the Blinn College Service Area. When student residency density for the Fall 2019 semester is plotted, the more traditional community college nature of this campus is evident. Each green dot represents the location of a student address. In instances where students have the same address the dot is placed on top of the other, therefore giving a distorted perspective of student resident density. Regardless of this distortion, one can begin to visualize clusters of student residences by geocoding all of the student addresses which were associated with the campus. The map below illustrates the projected percent change



*right:* Student Residence Density (Fall 2019)

### CAMPUS GROWTH PROJECTIONS SEALY CAMPUS - DEMOGRAPHIC ANALYSIS

in CAGR in the population age 18 to 64 cohort, by ZIP code, through 2030, in the vicinity of the Sealy Campus. The map identifies the expansion of population just to the east of the campus, in the Katy area, yet outside of the Blinn College Service Area. Approximately 92% of students attending the Sealy Campus in the Fall 2019 semester were in the age 18 to 34 cohort.



*left:* Population Growth Age 18-64 By ZIP Code; CAGR 2020-2030

### CAMPUS GROWTH PROJECTIONS SEALY CAMPUS - EXISTING SPACE UTILIZATION

**Overall classroom utilization** by building on campus during the Fall 2019 semester was low, averaging 15.8% campuswide. Of the 5 available classrooms, the average weekly utilization was approximately 15.4 hours per week. The average capacity of a general classroom was 33 seats with an average enrollment of 13 students, translating to an average fill rate of 39.2%. All instructional space is located in the Sealy Campus Main Building (SYMN). The highest utilized classroom, at 36.2%, was SYMN 112. On average, this room was utilized for approximately 18.8 hours per week with a fill rate of approximately 73.4%; this exceeds the state metric by approximately 10 points. Improvement to the scheduled hours per week would result in a greater overall utilization of this space. The least utilized classroom (1.7% overall) was SYMN 113. Review of the average hours per day during which courses could be scheduled over the course of the week finds that classrooms are scheduled at approximately 58% of their available hours. All classes were scheduled Monday through Thursday, with no use on Friday, Saturday, or Sunday in the



Building Utilization

*right:* Sealy Campus Classroom Building Utilization Fall 2019 semester. Peak classroom demand during the Fall 2019 semester was primarily between the hours of 9:00am and noon; then again between the hours of 4:00pm and 6:00pm.

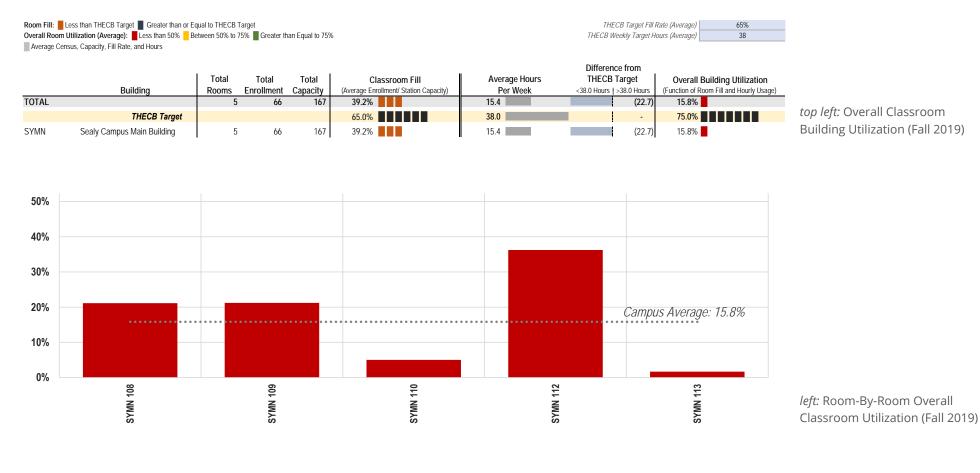
**Overall class lab utilization** by building on the Sealy Campus during the Fall 2019 semester was low, averaging approximately 14.5% overall. Only one class lab was available for schedule in the Fall 2019 semester and it averaged approximately 10.0 hours per week of utilization, approximately 40% the THECB target for lab utilization. While the average capacity of the class lab was calculated at 44 seats, approximately 16, or 36.4%, were filled, on average. The class lab was only in use on Tuesday and Thursday, for approximately five hours per day, generally between the hours of 9:00am to noon and between 1:00pm and 4:00pm.

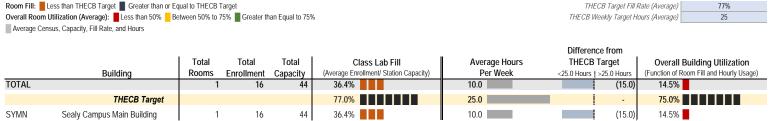
#### Conclusion

Overall utilization of instructional space - both general classroom and class lab - was found to be well below the target state metrics for both hours per week utilization and classroom fill (the actual number of seats occupied) in the Fall 2019 semester on the Sealy Campus. Because the overall utilization is a ratio of classroom fill and average scheduled hours per week, it is possible for the classroom to be well scheduled, but the seats filled below minimum state target and vice versa. Generally, these low utilization rates indicate there are opportunities within the existing campus inventory to accommodate an increase in enrollment. Since this campus is currently operated in leased space, opportunities to improve utilization are limited to the renovation and / or re-purposing the space for a higher and better function. Additional room-by-room data for each building is included in the Appendix of this document.

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### CAMPUS GROWTH PROJECTIONS SEALY CAMPUS - EXISTING SPACE UTILIZATION

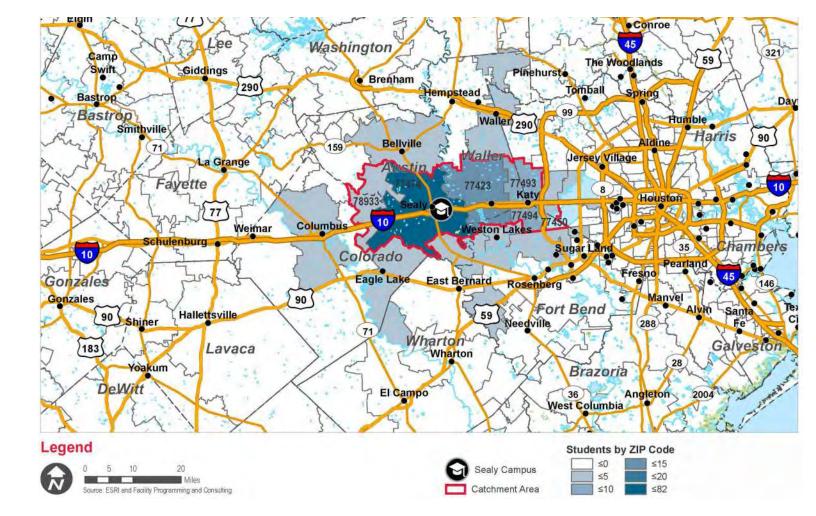




*bottom left:* Overall Class Lab Building Utilization (Fall 2019)

### CAMPUS GROWTH PROJECTIONS SEALY CAMPUS - ENROLLMENT PROJECTIONS

Multiple enrollment growth scenarios were developed to project how the headcount may grow over the next ten to 20 years at the Sealy Campus; this data may then, in turn, be utilized to project the future space needs at the campus to assist in identifying potential projects within the master plan. Because the Sealy Campus acts as a more traditional, commuter-based community college, one of the scenarios which was explored is the projected growth within the catchment area. In this case, as noted in the "Methodology" section, the catchment area is defined as the top ZIP codes from which a cumulative 80% of Sealy enrollment originated in the Fall 2019 semester. This boundary is diagrammed in the adjacent map.



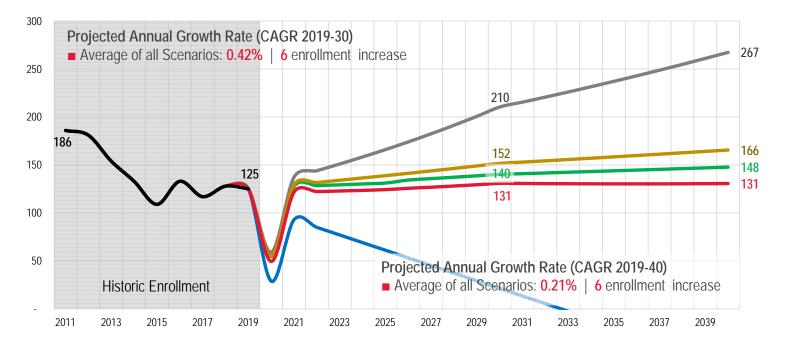
*right:* Sealy Catchment Area (Fall 2019)

### CAMPUS GROWTH PROJECTIONS SEALY CAMPUS - ENROLLMENT PROJECTIONS

In each of these scenarios, the enrollment projection excludes dual credit and 100% online only student growth. In addition, it considers only that of undergraduate/associate degree level and certificate seeking continuing education students who are attending on-campus only classes or at least one class on-campus in combination with online courses (hybrid). To calculate growth scenarios beyond 2030, it was presumed the annual growth rate between 2019 and 2030 would continue, but at approximately one-half of its projected growth rate. The Trend Line projection is the only exception; its growth continues to project future enrollment based on past, historic data points.

#### Conclusion

When utilizing the average of all projection scenarios, enrollment at the Sealy Campus over the next 20 years is projected to remain relatively flat, with an approximate six student increase from its Fall 2019 enrollment.



#### Enrollment Scenarios: Projections Rates thru 2040

- Based on 2011-19 Trend Line
- 2019 Capture Rate (2019 Enrollment/ 2019 College Service Area Population Age 18-64) Held Constant at 0.04%
- Campus 2019 Catchment Area (CUML. 79.2% of all Students) Population Age 18-64, CAGR 2010-20 Held Constant at 4.8%
- Top 7 Dominant TX High Schools of Origin (12th Grade Class Growth), CAGR 2014-19 Held Constant at 1.8%
- Average of all Enrollment Projection Scenarios

*left:* Enrollment Projections (On-Campus / Hybrid Headcount)

*Trend Line* = Continued growth at historic enrollment (2011 - 2019)2019 Capture Rate = Ratio of Fall 2019 enrollment to the population age 18 to 64 within the Blinn College Service Area; the ratio is then multiplied against the projected growth of the specified 18 to 64 population for the next 10 years 2019 Catchment Area = Percent historic change in growth (2010-2020) of the top 80% ZIP Codes of total fall semester enrollment; the percent is then multiplied against the Fall 2019 enrollment and carried forward Dominant High Schools of **Origin** = Percent historic change in growth (2014-2019) of the senior class enrollment at the top 7 high schools of Sealy Campus Fall 2019 student origin; the percent is then multiplied against the Fall 2019 enrollment and carried forward Average All Scenarios = Average of enrollment projected by year across all scenarios above

## CAMPUS GROWTH PROJECTIONS SEALY CAMPUS - SPACE PROJECTIONS

For planning purposes in the models which follow, it is assumed the Sealy Campus will target a total of approximately 131 student enrollment on-campus by 2040. While online growth above the target on-campus enrollment is likely, it generally will not impact building / campus square foot requirements. Space need is calculated using the predicted FTSE for a campus. For planning purposes, it has been assumed that the historic five-year average percent FTSE to headcount will be maintained. For the Sealy Campus, the FTSE value is 75.0% of the total campus enrollment. The proposed planning metric to calculate E&G space need for the Sealy Campus is 65% of the Ideal, or 70.8 NASF / FTSE.

#### Conclusion

As identified in the adjacent table, as of the Fall 2025, the Sealy Campus is projected to have an E&G space shortfall of approximately 1,700 GSF and up to 2,300 GSF by year 2040. While the projections identify a shortfall on the Sealy Campus, this value is negligible and the campus is positioned to support its future projected enrollment over the next 20 years. No additional projects are currently proposed as part of the master plan at the Sealy Campus.

### CAMPUS GROWTH PROJECTIONS SEALY CAMPUS - SPACE PROJECTIONS

#### SEALY CAMPUS PROJECTED E&G SPACE NEED TO SUPPORT ENROLLMENT BY YEAR

Proposed Blinn College District Planning Metric = 81.7 NASF / FTSE

Proposed Sealy Campus Planning Metric = 70.8 NASF / FTSE

	EXISTING E&G NASF (FALL 2019)	ADJUSTED AVAILABLE NASF <sup>1</sup>	YEAR 2025 Projected Enrollment: 120 Projected FTSE: 90 TARGET NASF NEED	YEAR 2030 Projected Enrollment: 130 Projected FTSE: 100 TARGET NASF NEED	YEAR 2040 Projected Enrollment: 130 Projected FTSE: 100 TARGET NASF NEED
Teaching Space	3,904	N/A	4,100	4,300	4,300
Library Space	781	N/A	700	800	800
Office Space	781	N/A	1,300	1,400	1,400
Support Space	_	N/A	500	600	600
TOTAL NASF	5,466	5,500	6,600	7,100	7,100
TOTAL GSF <sup>2</sup>	8,409	8,400	10,100	10,700	10,700
GSF SURPLUS / (SHORTAGE) <sup>2</sup>			(1,700)	(2,300)	(2,300)

Source: THECB, Blinn Office of Facilities, Planning, and Construction, and Facility Programming and Consulting

All values rounded to nearest hundredth

1. Includes all buildings approved / online at time of publication of this report.

2. Gross square feet (GSF) is calculated at 65% net to gross ratio.

### CAMPUS GROWTH PROJECTIONS LABOR MARKET ANALYSIS

In addition to the demographic, space and enrollment analyses, a labor market analysis was also conducted as part of this project in order to understand the forecasted growth of occupations in the State of Texas and alignment with the programs which Blinn college currently offers a degree award or certificate. Analysis focused on those occupations which required an Associates Level degree or less for entry.

Data by occupation, as provided by the Texas Workforce Commission (TWC), was utilized to conduct the analysis. Blinn College Service Area intersects with five of the 28 Workforce Development Areas (WDAs) identified by the TWC identified on the adjacent map (clockwise from top) - Brazos Valley, Gulf Coast, Capital Area (Travis County), Rural Capital (surrounding Travis County), and Central Texas.



*right:* Texas Workforce Commission WDAs with which the Blinn College Service Area Intersects

BLINN COLLEGE DISTRICT | DISTRICTWIDE FACILITIES MASTER PLAN

### CAMPUS GROWTH PROJECTIONS LABOR MARKET ANALYSIS

For each of the five WDAs, the Top 15 occupations in each of the following categories was identified:

- *Highest Aggregate Job Change* occupations which are projected to add the most jobs between 2016 2026
- *Highest Annual Growth* occupations which are anticipated to grow the fastest between 2016 2026
- *Highest Annual Turnover* occupations which turnover was anticipated to be the greatest between 2016 2026
- *Highest Average Annual Wage* occupations which paid the highest wage in 2018

Of the resulting top 15 occupations in each WDA, only those which have an instructional classification to occupation relationship were included in the analysis. As an alternate approach to analyzing occupations by top scoring, a weighted analysis was also completed which applied a point to each of the categories noted above based on parameters developed with the Blinn College leadership. Because the dynamics of each of the WDAs is so different from one another (i.e. population, geography, etc.), the various parameters have been adjusted for each to provide a more balanced analysis.

Finally, the classification of instructional programs (CIP) code, developed by the U.S. Department of Education National Center for Education Statistics, for the degree programs which Blinn College offered, between 2014 and 2019, and for which THECB data on enrollment and awards is available was correlated with the TWC state occupation code (SOC) data. This was compared across all five WDAs to identify those occupations which continued to rise to the top.

In addition, for comparison purposes, data on historic enrollment and award data, as reported to THECB, was also

collected from the four regional peer community colleges: Austin, Houston, Lone Star, and Wharton. When this information is compared against the awards and enrollment, it is possible for Blinn College to begin identifying potential opportunities for future degree programs or expansion of existing programs.

For reference, each of the individual analysis noted above as completed for each WDA is included in the Appendix of this document, as well as the parameters utilized for this analysis.

#### Conclusion

Blinn College may use this data to evaluate existing program offerings and to consider potential opportunities. Key programs for consideration include those programs which support the top recurring occupations in at least four of the categories analyzed and are currently offered by a neighboring peer institution. These include:

- Culinary Arts
- Home Health Aide
- Fashion Merchandising
- Expansion of existing Blinn offerings which support the occupation of Medical Secretaries

Other programs for consideration which ranked in at least three categories:

- Massage Therapy
- Retail Management
- Building / Construction Site Management (this program recently approved by the Blinn College accrediting body)

### BRENHAM CAMPUS OVERVIEW

Located in Brenham, Texas, the Brenham Campus is the flagship campus for the Blinn College District. Founded in 1883, the campus is the historical and administrative heart of the district and, unlike Blinn's other campuses, offers students a traditional college experience with on-campus housing, intercollegiate sports teams and active student life programs.

Over the past five years, the Brenham Campus has averaged 2,150 full time students per year. Many of the Brenham Campus's students are enrolled in programs that will allow them to transfer to Texas A&M University. As a result, the students attending classes on the Brenham Campus are drawn from across the State of Texas. Districtwide, Blinn's academic transfer rate of 45.9% ranks No. 1 in the state and far exceeds the statewide average of 24.1%.

*Potential and Opportunity* – In its role educating and elevating the lives of students for over 130 years, the Brenham Campus is a story of potential and opportunity. This story is also an apt characterization of the campus itself.

With strong name recognition, a statewide enrollment pool and an enviable strategic alliance with the Texas A&M University System, the Brenham Campus is located on the Highway 290 corridor between Houston and Austin, the nation's 4th and 10th largest cities, respectively. Geographically, the campus is ideally situated to capitalize on the growing population pool of southeast and central Texas. Combined with its convenience, affordability and being the state's No. 1 gateway to a four-year degree, the potential for the Brenham Campus to far exceed its demographic growth projections in the next 10-20 years is high.

The historic nature of many buildings in the academic core also figures prominently in the identity of the Brenham Campus. As the campus evolves and facilities are renovated and replaced, preserving this distinctive sense of place is an important priority for this campus. New projects and improvements should reflect a forward-thinking approach as well as a nod to Blinn's history.

**Challenges to Growth** – The Space Utilization Analysis conducted as part of this master plan suggests that the Brenham Campus has sufficient existing space to accommodate its projected student enrollment in the next five to ten years. However, the condition of its aging facilities and infrastructure indicate that significant building modifications and systems upgrades are needed to support the district's educational mission and provide a welcoming and memorable campus experience.

As peer institutions continue to expand and improve their campuses, the competition for students and tuition revenue will continue to grow. For the Brenham Campus to compete and grow in the next five to ten years, its focus must be on the quality of its academic facilities, student housing and the overall campus experience.

*opposite page:* Aerial view of the Brenham Campus with all proposed master plan projects implemented

## BRENHAM CAMPUS OVERVIEW



### BRENHAM CAMPUS TODAY

From a physical campus perspective, the Brenham Campus is facing the same challenges as other mature campuses – aging facilities and infrastructure. The Facility Condition Assessment conducted as a part of this master plan has identified a considerable number of buildings on the Brenham Campus that either require significant modifications and upgrades to support their educational mission or are candidates for demolition and future replacement. Two new projects are currently underway that will help anchor the south side of campus. Construction on the STEI Building at the southwest corner of Prairie Lea and College Streets is scheduled to be completed in the fall of 2021. The new P3 student housing project at Prairie Lea and Fifth Streets recently broke ground for its construction phase and is scheduled to open for occupancy in fall of 2022.

#### **BUILDING LEGEND**

- **1** Administration
- 2 Old Main
- **3** Classroom Building
- 4 J. Hal and Allyne Machat Music Facility
- **5** Student Center
- 6 W.L. Moody Jr. Library
- 7 Arts and Science Building
- 8 C.F. Schmidt Hall
- **9** Bob Bullock Building
- **10** Small Business Development Center
- **11** Marie Heineke Memorial Gym
- 12 Henry J. Boehm Weight Room
- **13** Physical Plant Offices
- **14** Health Clinic
- **15** Whigham House
- **16** Physical Education Building
- **17** O'Donnell Performing Arts Center
- **18** Spencer Stadium Field House
- **19** W.J. "Bill" Rankin Agricultural Shop

- **20** W.J. "Bill" Rankin Agricultural Classroom
- **21** Agricultural Sciences Building
- 22 Kruse Center
- 23 Doyle Coatney Center
- **24** Academic Building
- **25** Leroy Dreyer Baseball Field
- **26** Bert and Mae Dean Wheeler Hall
- **27** Lockett Hall
- 28 Katherine Atkinson Hall
- **29** Beazley Hall
- **30** Melcher Hall
- **31** Helman Hall
- **32** Buccaneer Hall
- 33 Memorial Hall
- 34 Rachel Spencer Hall
- **35** Solons Hall
- **36** Hallstein Hall
- 37 Holleman Hall

- **38** Blinn College Park Apartments -Building #1
- **39** Blinn College Park Apartments -Building #2
- **40** Blinn College Park Apartments -Building #3
- **41** Blinn College Park Apartments -Building #4
- **42** Blinn College Park Apartments -Building #5
- **43** Blinn College Park Apartments -Building #6
- **44** Blinn College Park Apartments -Building #7
- **45** Commons Building
- 46 Mill Creek Hall
- **47** Science, Technology, Engineering & Innovation (STEI) Building *under construction*
- **48** P3 Student Housing *under construction*

### BRENHAM CAMPUS TODAY



# **BRENHAM CAMPUS**

PHASE 1: 2021-2025

Based on the findings of the Facility Condition As- **5.** sessment, Phase 1 addresses the most immediate needs of the campus to remedy existing deficiencies with major renovations, infrastructure upgrades, new construction to support academics 6. Bullock Center - Central Plant and student life and site enhancements to enhance the campus experience. Phase 1 projects include:

#### **NEW CONSTRUCTION**

#### 1. Academic Building

New 2-story, 30,000 SF facility will include instruction and office space. Includes drop-off/ entry plaza from Blinn Boulevard.

#### 2. Student Services Building

New 3-story, 24,000 SF building will contain a student services suite at the ground level and office space on the upper levels. Will serve as the home for Advising, Enrollment Services, Admissions, Financial Aid, Counseling, Disability Services, Housing and Testing.

#### RENOVATIONS

3. Old Main

Full-building interior renovation to include HVAC upgrades, faculty & staff offices and a meeting center. The renovation will maintain Old Main's status on the national Register of Historic Places.

#### 4. Mill Creek Hall - E-Sports Facility

Conversion of two existing classrooms into an **10. North & South Monument Signs** E-sports facility that will include a reception area, office, war room, gaming & competition stations, event seating, and lounge space as well as MEP and AV/IT upgrades.

#### Melcher Hall

Full-building renovation to include HVAC system upgrades, interior finish upgrades, and window & roof replacement.

Significant HVAC system rehabilitation to central plant portion of facility including replacement of various chillers and pumps, reconfiguration of internal piping and addition of a new cooling tower.

#### 7. Administration Building

Renovation of levels 1 & 2 to accommodate new administrative offices relocating from Old Main.

#### 8. Dreyer Field - Part 2

Interior renovation of existing restrooms, concessions and press box buildings to include new finishes, toilet partitions, plumbing fixtures and A/V infrastructure.

#### **ENHANCEMENT PROJECTS**

9. College Avenue Street & Sidewalk Realignment 3-block realignment of College Avenue from Green Street to Blinn Boulevard. Includes removal of existing angled parking; road re-striping and curb extensions; demolition of existing retaining wall and associated regrading; expansion & extension of sidewalks; and new street trees, plantings and pedestrian/ street lighting.

Two new primary monument signs to be located at the intersections of Blinn Blvd. & W. Main St. and Prairie Lea & W. Fifth St.

#### **DEMOLITION** (not pictured)

Several existing facilities have been identified for demolition during this phase: • Spencer Field House • Academic Building

- Holleman Hall
- Memorial Hall
- Solons Hall
- K. Atkinson Hall
- **Development Center** (relocate to Hodde Center)

Small Business

#### **IN-PROGRESS**

In addition to the new capital improvement projects listed above, three projects that are already planned and funded are scheduled to open during Phase 1 of the master plan:

### 11. Science, Technology, Engineering & Innovation (STEI) Building

3-story, 72,000 SF facility features a variety of specialized labs and instruction spaces, meeting facilities and a rooftop weather station. Currently under construction and scheduled to open in Fall 2021.

#### 12. P3 Student Housing

Two new residence halls and associated parking will provide a total of 504 beds. Project is scheduled to open for occupancy in Fall 2022.

#### 13. Dreyer Field - Part 1

Includes a 4.200 SF new clubhouse with locker room, training room and laundry facilities as well as the renovation of the existing 1,500 SF clubhouse.

### **BRENHAM CAMPUS** PHASE 1: 2021-2025



### **BRENHAM CAMPUS** PHASE 2: 2026-2030

Phase 2 campus development continues to focus **4B. Access Road to Sports & Intramural Zone** on major building renovations identified in the Facility Condition Assessment that address existing facilities and their aging systems. In this phase, a new P3 residence hall is planned to replace older housing on campus that can no longer be updated **5.** Parking Lot Expansion to meet housing standards. Site enhancements like the pedestrian mall are intended to improve pedestrian safety and create a desirable car-free zone in the center of campus.

#### **NEW CONSTRUCTION**

1. Communications & Data Center

New 2-story facility will contain a new data center at the ground level and the Communications Center and IT offices on the second level.

2. P3 Residence Hall - Site A

New 300-bed, 4-story residence hall. Includes 180 parking spaces.

3. Dining Annex

Single-story facility with dining room and kitchen facilities. Includes paving for service, loading and some staff parking.

#### 4A. Sports & Intramural Zone

New complex includes regulation-sized fields as follows: (1) practice football field with artificial turf; (1) competition soccer field; (1) competition softball field; and (1) putting/ chipping green. Site will be terraced with a series of retaining walls. The new 27,000 SF field house will contain sports offices, locker rooms and training facilities. Includes 115 new parking spaces and a 2,500 GSF unconditioned storage building.

New road connection from existing roundabout to Appel Way. Includes extension of site infrastructure & utilities.

Expansion of parking lot adjacent to Doyle Coatney center at current site of Solons Hall. Net increase of 97 parking spaces.

#### **RENOVATIONS**

#### 6. Bullock Center - Academic Space

Includes interior renovations to classroom space and exterior envelope upgrades to match styling and materiality of other buildings on south side of campus.

7. O'Donnell Center Entry

Renovation includes drop-off and existing lobby upgrades and a 2,400 SF lobby expansion.

- 8. Physical Education Building Renovations to staff office spaces.
- 9. Heineke Gymnasium Upgrades to existing restrooms.
- **10.** Boehm Building

Renovations to exterior enclosure, interior finishes, plumbing, electrical and restroom upgrades.

#### ENHANCEMENT PROJECTS

11. Green Space at Spencer Field

Conversion of existing Spencer Field to an open lawn space for recreation and events.

12. Pedestrian Mall at W. Third & High Streets

Conversion of portions of W. Third and High Streets to a pedestrian mall with limited vehicular access for service and emergencies. Improvements include decorative paving, new street trees and enhanced plantings, pedestrian lighting and site furnishings.

13. Higgins Branch Trail - South

Decomposed granite trail including one new footbridge connection over Higgins Branch.

### **DEMOLITION** (not pictured)

Several existing facilities have been identified for demolition during this phase:

- Spencer Field & Track
- Buccaneer Hall
- Lockett Hall
- Rachel Spencer Hall
- Classroom Building

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### **BRENHAM CAMPUS** PHASE 2: 2026-2030



Phase 3 campus development continues the trend for expanding opportunities for P3 student housing and enhancing the campus experience. Housing is key to the future growth of the Brenham Campus, and in this phase, the total number of beds provided across campus increases the percentage of on-campus housing to 70% based on projected 2040 on-campus/hybrid enrollment.

Phase 1 focused on addressing the most pressing needs identified in the Facility Condition Assessment. Phase 2 focused on positioning for the future with new student housing and upgrades to facilities that impact student life. Following its transformation with recent upgrades and new facilities between 2021-2030, the Brenham Campus will be in a position to focus on campus improvements that promote continued growth and success, both as a top educational institution and as a partner with the city of Brenham.

#### **NEW CONSTRUCTION**

1. P3 Residence Hall - Site B

New 375-bed, 4-story residence hall. Includes 155 parking spaces.

#### **RENOVATIONS**

#### 2. Student Center

Renovation of all areas except recently renovated cafeteria. Improvements include: HVAC system and interior finish upgrades; exterior envelope improvements; incorporation of a 1,000 SF Health Clinic; a consolidated Campus Police suite; and expansion of dining facilities within existing footprint.

#### ENHANCEMENT PROJECTS

3. East Monument Sign

New primary monument sign located at intersection of College Ave & Green St.

- **4. Band Practice Field** New artificial turf field surface.
- 5. Student Center Quad Improvements Upgrades to plantings, site furnishings and lighting.
- 6. Wheeler Hall Quad Improvements New shade trees; upgrades to plantings, site furnishings and lighting.
- **7. North Campus Recreation Area & Amphitheater** Selective clearing of vegetation for recreational use. Includes a new terraced amphitheater.
- 8. Higgins Branch Trail North

Decomposed granite trail extension on north side of Old Mill Creek Rd. including one new footbridge connections over Higgins Branch.

#### 9. Streetscape Improvements

Improvements include continuation of the central median along Blinn Blvd. as well as extension of sidewalks and new street trees at portions of Blinn Blvd. and Old Mill Creek Rd.

#### **DEMOLITION** (not pictured)

Several existing facilities have been identified for demolition during this phase:

- Helman Hall
- Hallstein Hall
- Arts & Sciences Building
- Beazley Hall
- Health Clinic
- Rental Properties at Green St. & W. Fifth St.

### **BRENHAM CAMPUS** PHASE 3: 2031-2040



Ō' 250′ 500′  New Construction

Renovation

In 1997, Blinn College consolidated its operations in Bryan onto its current campus. In response to its success and market demand, a major expansion took place in 2005 effectively doubling the size of its academic core.

Over the past five years, the Bryan Campus has averaged 7,750 full time students per year. Many of the Bryan Campus's students are enrolled in programs that will allow them to transfer to Texas A&M University. The transfer program and its proximity to the Texas A&M Campus have helped the Bryan Campus grow and become a major stakeholder in the community. Districtwide, Blinn's academic transfer rate of 45.9% ranks first in the state and far exceeds the statewide average of 24.1%.

**Partnerships and Transition** – The Bryan Campus is a story of partnerships and transition. Its alliance and transfer program with Texas A&M University have created the opportunity for thousands of students to earn their diplomas from Texas A&M. The alliance allows Blinn's students to participate in Texas A&M activities on campus and to attend sports events. This program makes the transition to Texas A&M seamless for both the student and the institution.

With strong name recognition, a statewide enrollment pool and enviable strategic alliance with Texas A&M University, the Bryan Campus is located on E. Villa Maria Road, 4.8 miles NE of the A&M Campus. Combined with its convenience, affordability and being the state's No. 1 gateway to a fouryear degree, the potential for the Bryan Campus to continue being the leading feeder school for Texas A&M University in the next 10-20 years is high.

**Challenges to Growth** – The Space Utilization Analysis conducted as part of this master plan suggests that the Bryan Campus is heavily utilized and will require significant renovations and expansions to accommodate its projected student enrollment in the next five to ten years. Additionally, the on-campus consolidation of programs housed in temporary buildings or located off-campus will result in new facilities constructed on campus in the next five to ten years to support the campus's educational mission and provide a welcoming and memorable campus experience.

As peer institutions continue to expand and improve their campuses, the competition for students and tuition revenue will continue to grow. For the Bryan Campus to remain competitive in the next five to ten years, its focus must be on the quality of its academic facilities, student life and the overall campus experience.

*opposite page:* Aerial view of the Bryan Campus with all proposed master plan projects implemented

### BRYAN CAMPUS OVERVIEW



The Bryan Campus on E. Villa Maria Road has experienced incredible growth and success over the past 23 years. The Space Utilization Analysis conducted as part of the master plan found that the utilization of classrooms and labs on campus meet or exceed the utilization criteria established by the Texas Higher Education Coordinating Board. It is a highlyused campus.

Expansion of the existing campus is limited due to the site's location, adjacent streets and land uses, and a complex system of utility and pipeline easements throughout the property. Although the Bryan Campus has numerous vehicular entry and exit points, it experienced challenges with vehicular congestion when enrollment was at its peak in the mid-2010s, and opportunities for additional curbs cuts are limited. With its existing facilities heavily used, a history of congestion challenges and limited opportunities for expansion, an enrollment target of 9,500 students was proposed during the vision session conducted at the beginning of the planning process and confirmed during subsequent planning workshops. This strategy will give the Bryan Campus an opportunity to focus its resources on improving the existing buildings and specialized program spaces such as the library and dining facilities.

The north side of the Bryan Campus represents the best opportunity for new development. The recent acquisition of four acres along E. Villa Maria Road on this side of campus affords an opportunity for a new entrance at Nash Street, which could establish a stronger street presence and visibility along this well-traveled thoroughfare and also help ease ingress and egress congestion. The Facility Condition Assessment conducted as part of this master plan found that the six primary buildings in the academic core on the Bryan Campus are generally in good condition but will require ongoing maintenance, renovations and systems upgrades to continue serving the college's educational mission in the next five years and beyond. The buildings are between 20-25 years old and show the effects of time and high usage.

Several programs and offices on the Bryan Campus are currently housed in temporary structures, while others are located in leased facilities off campus. Some of these programs and services will be consolidated in new buildings on campus over the next five to ten years. The consolidations will create a more cohesive campus, improve internal circulation and enhance the overall campus experience.

#### **BUILDING LEGEND**

- 1 Building A Prospective Student Relations, Writing Center, & Classrooms
- **2** Building B Faculty Offices
- **3** Building C Library, Learning Center, Faculty Offices & Classrooms
- 4 Building D Health Clinic, Disability Services & Classrooms
- **5** Building F Student Center, Faculty Offices & Classrooms

- 6 Building G Classrooms
- 7 Building H Classrooms
- 8 Building J Ceramics Lab
- 9 Building R Distance Learning

#### **10** Building S

Bookstore, Police, HR, Campus Administration & Legal Department

**11** Building T Faculty Offices & Classrooms

### BRYAN CAMPUS TODAY



BLINN COLLEGE DISTRICT | DISTRICTWIDE FACILITIES MASTER PLAN

### BRYAN CAMPUS PHASE 1: 2021-2025

Based on the findings of the Facility Condition Assessment and Space Utilization Analysis, Phase 1 addresses the most immediate needs of the campus. The success of the Bryan Campus has resulted in heavily used academic facilities and student/administrative services being housed in temporary facilities on and off campus. Phase 1 focuses on the consolidation of campus services and programs into a new building as well as the expansion of the library to meet student needs. The new Administration & Student Services Building will anchor Blinn's presence on the recently acquired north end of campus. Phase 1 also addresses specific site improvements needed to enhance the campus experience. Phase 1 projects include:

#### **NEW CONSTRUCTION**

#### 1A. Administration & Student Services Building

New 45,000 SF facility will contain the Student Services suite (Registration, Testing, Financial Aid & Testing) and associated office space, as well as Campus Police, Campus Administration and the Bookstore. Also includes a coffee shop/grab and go dining facility and associated parking (150 spaces).

#### 1B. New Road Extension & Nash Street Entrance

Extend internal road to a new campus entrance at Nash Street. Includes extension of site infrastructure & utilities.

#### **RENOVATIONS**

#### 2. Library Renovation & Expansion (Building C)

Renovation and expansion of existing Library at ground level of facility to include general finish and system upgrades. A one-story 10,000 SF expansion will provide new study, meeting and learning spaces.

#### **ENHANCEMENT PROJECTS**

3. South Campus Pedestrian Connection & Parking Renovation - Part A

New grass parking island with the first portion of a new sidewalk from campus core toward E. 29th St. Includes shade trees and pedestrian lighting as well as parking lot re-striping adjacent to the landscape island. Net parking reduction of 68 spaces.

### 4. Library Quad Improvements

Upgrades to plantings, site furnishings and lighting. Includes new areas of hardscaping and a new monument landmark / large-scale public art piece.

#### 5. North Monument Sign

New primary monument sign located at intersection of Nash Dr. & East Villa Maria Rd.

#### **DEMOLITION** (not pictured)

Two existing facilities have been identified for demolition during this phase:

- Building S
- Existing Church & Adjacent Structures at Nash St

### BRYAN CAMPUS PHASE 1: 2021-2025



BLINN COLLEGE DISTRICT | DISTRICTWIDE FACILITIES MASTER PLAN 133 Phase 2 campus development continues Blinn's focus on consolidating existing on-campus programs into a new facility. The spaces vacated by programs moving into the new Fine Arts & Academic Building will be backfilled with the expansion of other programs as well as additional student meeting and study spaces. Systems upgrades such as, the Physical Plant Expansion and site enhancements are intended to improve pedestrian safety and campus operations. Phase 2 projects include:

#### **NEW CONSTRUCTION**

#### 1. Fine Arts & Academic Building

This new multi-story 60,000 SF facility will co-locate all arts instruction spaces and will include a new black box theater, ceramics lab and additional studio space. The building will also contain the Distance Learning suite, faculty offices and large classrooms.

#### **RENOVATIONS**

2. Student Center Renovation (Building F)

Renovation of existing Student Center at ground level of facility to include general interior finish upgrades and expansion of student meeting and lounge space into the area currently occupied by the black box theater.

3. Physical Plant Expansion/Conversion (Building J) Renovation and expansion of existing ceramics lab for use as Physical Plant. Will include a combination of office space for maintenance staff and warehouse/storage space. Includes removal of existing ice tanks.

#### ENHANCEMENT PROJECTS

# 4. South Campus Pedestrian Connection & Parking Renovation - Part B

Add parking where Buildings R, S & T are demolished and re-stripe balance of south campus parking for improved and more efficient circulation for a total of 260 additional parking spaces. Includes partial curb adjustments to south parking lot; completion of the Phase 1 grass parking island & sidewalk to E. 29th St.; shade trees and pedestrian lighting.

# 5. Blinn Blvd. Entrance Improvements & Monument Sign

Upgrades to plantings, site furnishings and lighting. Includes new street trees on both sides of boulevard and new decorative plantings at median. Primary monument sign to be located on Blinn Blvd.

#### 6. E. 29th Street Monument Sign

New primary monument sign at the corner of E. 29th Street and Joseph Drive.

#### 7. Student Center Quad Improvements

Upgrades to plantings, site furnishings and lighting. Includes a new hardscaped plaza to accommodate outdoor activities & events.

#### 8. Intramural Fields

New regulation-sized intramural fields as follows: (1) soccer field; (1) softball field.

#### **DEMOLITION** (not pictured)

Two existing facilities have been identified for demolition during this phase:

- Building B
- Building R
- Building T

### BRYAN CAMPUS PHASE 2: 2026-2030



BLINN COLLEGE DISTRICT | DISTRICTWIDE FACILITIES MASTER PLAN 135

### BRYAN CAMPUS PHASE 3: 2031-2040

Over the years, the Bryan Campus has operated successfully despite having half the academic space per student offered by local competitor institutions. With new facilities and infrastructure upgrades completed in Phases 1 and 2, the Bryan Campus will still have a projected shortfall of nearly 400,000 square feet of education and general (E&G) space even after capping enrollment at 9,500 students. The planning team and district leaders have identified potential pad sites in the south parking lot and north side of campus that could accommodate additional buildings should the need for more academic space arise in the future. At this time the strategic direction is to address future growth with the expansion of the nearby RELLIS Campus and to focus on facilities and site enhancements on the Bryan Campus that will elevate students' on-campus experience.

In Phase 3, a new Fitness & Activity Center and outdoor recreational opportunities are intended to support Blinn College District's emphasis on building a stronger connection with students outside of the classroom as well as its partnership with the City of Bryan and neighboring community.

#### **NEW CONSTRUCTION**

#### 1. Fitness & Activity Center

Building located for general amenities. Program to be determined.

#### ENHANCEMENT PROJECTS

#### 2. Briar Creek Trail Loop

Decomposed granite trail to connect existing sidewalks into a continuous loop for walking and jogging. Includes one new footbridge over Briar Creek.

**3. North & West Campus Streetscape Improvements** New street trees & decorative plantings along the campus bus route and at the bridge connection to north campus.

### BRYAN CAMPUS PHASE 3: 2031-2040



BLINN COLLEGE DISTRICT | DISTRICTWIDE FACILITIES MASTER PLAN 137

### RELLIS CAMPUS OVERVIEW

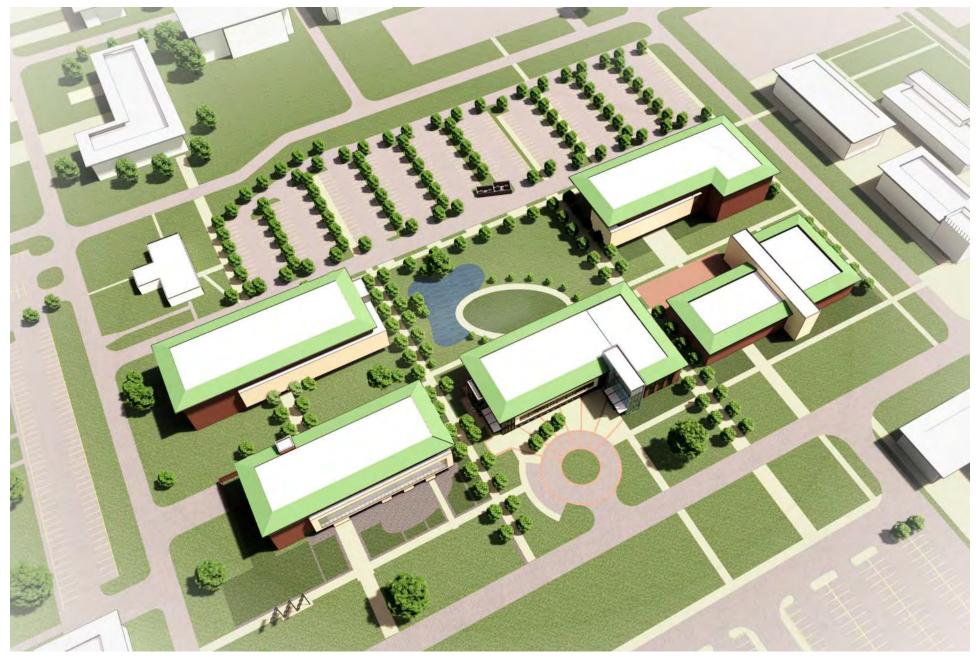
In 2018, Blinn College opened the district's newest academic building, the Walter C. Schwartz Building, on the RELLIS Campus of Texas A&M University. The RELLIS Campus is the newest model of higher education in Texas, bringing ten regional universities and Blinn College to one location in Bryan, Texas. Blinn-RELLIS is located on a 15-acre land lease on the eastern side of the expansive Texas A&M RELLIS Campus.

As a member of the RELLIS Academic Alliance, Blinn students can complete their freshman- and sophomore-level courses through Blinn at its on-campus facilities and seamlessly complete their bachelor's degrees in related fields from one of several A&M System regional universities located on-site. Building upon the incredible success of its partnership with Texas A&M at the Brenham and Bryan Campuses, the RELLIS Academic Alliance positions Blinn College for continued growth and expanded presence in the Bryan-College Station area. In addition to its own facilities, Blinn also utilizes several other Texas A&M facilities for classroom and lab instruction as well as workforce training.

As a convenient, affordable option for students who may not have had the opportunity to enroll at Texas A&M as freshmen, Blinn-RELLIS is expected to enjoy the same success as its predecessors. As a result of the unique Academic Alliance arrangement and the district's decision to explore strategies to manage enrollment on the Bryan Campus due to site and facility limitations, a faster rate of growth is anticipated at the RELLIS Campus in the next five to ten years compared to the district's other four campuses.

opposite page: Aerial view of the RELLIS Campus with all proposed master plan projects implemented

## RELLIS CAMPUS OVERVIEW



### RELLIS CAMPUS TODAY



The Blinn-RELLIS Campus was established in 2018 with the opening of the Walter C. Schwartz Building and was met with early high enrollment. Since opening, the campus has supported nearly 2,600 students. In response to growing demand, a second building is under construction and scheduled to open in 2022. Student parking is provided in the large lot east of the campus across Bryan Road. Faculty parking is located along the western edge of campus.

#### **BUILDING LEGEND**

- **1** Walter C. Schwartz Building
- **2** Building 8004: Health Sciences Administration Building (Texas A&M Facility)
- 3 ACB1 & ACB2 Buildings (Texas A&M Facility)

### RELLIS CAMPUS PHASE 1: 2021-2025



Phase 1 will include the completion of the Administration Building, the campus's second facility, which is scheduled to open in 2022. In addition to the 3-story, 80,000 square foot facility, 71 additional faculty parking spaces and six visitor spaces adjacent to the circle drive drop-off are included in this phase. As the campus continues to expand in the future, the Administration Building will be located in the heart of the 15-acre, multi-building campus.

#### **IN-PROGRESS**

#### 1. Administration Building & Parking Expansion

This 80,000 SF, 3-story administrative and classroom building will include specialized labs, an E-sports arena, staff office spaces, general classrooms and meeting rooms. Also includes the expansion of the faculty parking lot (71 spaces) and entry plaza with visitor parking (6 spaces) and is scheduled for completion by Fall 2022.



New Construction

150' 300'

In Phase 2, a third building will be added to the campus. Based on growth projections and space demands, the building is envisioned to be a 4-story, 115,000 square foot facility and will include additional faculty parking along the campus's western edge. Combined with the Schwartz and Administration Buildings, Building 3 will reinforce a strong visual presence along Bryan Road, directly across from the student parking lot.

#### **NEW CONSTRUCTION**

#### 1. Building 3

New 4-story, 115,000 SF facility; program to be determined.

0'

2. Parking Lot Expansion

Expansion of parking lot. Net increase of 111 parking spaces.

### RELLIS CAMPUS PHASE 3: 2031-2040



By 2030, Blinn-RELLIS is expected to become the second largest campus in terms of enrollment (behind Bryan) in the Blinn College District. By 2040, the RELLIS Campus is projected to reach an enrollment of over 6,500 on-campus/hybrid students. In Phase 3, two additional buildings are planned that will complete the development of the 15-acre site along with a central campus green and water feature.

#### NEW CONSTRUCTION

1. Building 4

New 4-story, 105,000 SF facility; program to be determined.

2. Building 5

New 4-story, 109,000 SF facility; program to be determined.

#### **ENHANCEMENT PROJECTS**

3. Green Space & Water Feature

Open green space with perimeter shade trees and water feature.

### SCHULENBURG CAMPUS CURRENT CONDITIONS & FUTURE CONSIDERATIONS

The Schulenburg Campus opened in 1997 as the district's third campus. Located near I-10 on land acquired by the district, the Schulenburg Campus resides on the southern limits of the district's 13-county service area.

The campus expands the district's footprint but over time has not experienced the growth seen on its other campuses. The campus is small and surrounded by a residential neighborhood, farmland and light industrial properties. Its physical presence in the community is limited and does little to promote the Blinn College brand.

Located outside of the taxing district, the Schulenburg Campus was initially supported by local municipal funding and revenues from the area ISD for its dual credit programs in the high school. Today, the campus is experiencing a decline in local financial support from the city and local ISD.

In turn, the Schulenburg Campus has experienced a steady decline in enrollment over the past ten years. Reaching peak enrollment of 248 students in 2011, the downward trend saw an enrollment of 172 students in the Fall 2019. Of those students, 94% were enrolled in on-campus or blended hybrid classes. The demographic growth analysis conducted as part of this master plan suggests an enrollment of only 131 students in 2030.

The decline in enrollment has resulted in significantly underutilized facilities on campus. Classroom and lab utilization are well below the targets established by the Texas Higher Education Coordinating Board. Given the findings of the demographic growth analysis that suggests a continued decline in enrollment over the next 10 years, it can be assumed the buildings will continue to be underutilized

while costly to maintain and staff. As a result, the strategic rationale for a campus in Schulenburg is a key consideration for the district's leadership.

The planning team has identified three potential scenarios for the near-term and long-term strategy for the Schulenburg Campus:

**STATUS QUO** – Blinn College will maintain its presence in Schulenburg and remain in its current location which the district currently owns. The College will continue its current operations and course offerings.

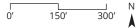
**EVOLVE** – Blinn College will maintain its presence in Schulenburg and remain in its current location which the district currently owns. The district's leadership and campus leadership will work together to assess and update its course offerings to attract more students to the campus and elevate its relevance within Schulenburg and surrounding community, including local industry and area ISDs.

**NO CAMPUS** – Blinn closes its physical campus in Schulenburg. As with everywhere, virtual courses remain available to those wishing to attend on-line. Under this scenario, Blinn could sell the property and use the proceeds to offset land acquisition costs for a future new campus elsewhere in the service area.

## SCHULENBURG CAMPUS **CURRENT CONDITIONS & FUTURE CONSIDERATIONS**



4 5



### SEALY CAMPUS CURRENT CONDITIONS & FUTURE CONSIDERATIONS

The Sealy Campus opened in 2005 and became the fourth campus to fly the Blinn College flag. Visible from I-10, the Sealy Campus is located in leased space of an aging, mostly-vacant retail center. The campus resides on the southeastern limits of the district's 13-county service area. The district's current lease at this location ends in August 2021.

The campus expands the district's footprint but over time has not experienced the growth seen on its other campuses. Its physical presence is negligible with a small space in the back corner of the shopping center. Its community-facing presence is limited due to its location and the aesthetics of the shopping center does little to promote the Blinn College brand. It has been suggested that the property's owner plans to increase Blinn's lease rate.

Located outside of the taxing district, the Sealy Campus receives no financial support from local taxes. The campus represents the I-10 gateway into the district's service area. 22 miles to its east, Houston Community College recently opened its new Katy campus at 1-10 and the Grand Parkway. While the Sealy Campus serves a geographically strategic role for Blinn College, it will be hard for the shopping center location to compete with a real college campus a few miles down the highway.

The Sealy Campus has experienced a steady decline in enrollment over the past ten years. Reaching peak enrollment of 186 students in 2011, the downward trend saw an enrollment of 125 students enrolled in on-campus or blended hybrid classes in the Fall 2019. The demographic growth analysis conducted as part of this master plan suggests an enrollment of only 131 students in 2030 – an increase of six students in the next ten years.

The decline in enrollment has resulted in significantly underutilized space on the shopping center campus. Classroom and lab utilization are well below the targets established by the Texas Higher Education Coordinating Board. Given the findings of the demographic growth analysis that suggests a negligible growth in enrollment over the next ten years, it can be assumed the current space will continue to be underutilized while costly to maintain and staff. As a result, the strategic rationale for a campus in Sealy is a key consideration for the district's leadership.

The planning team has identified three potential scenarios for the near-term and long-term strategy for the Sealy Campus:

**STATUS QUO** – Blinn College will maintain its presence in Sealy and remain in its current location. The College will continue its current operations and course offerings.

**NEW LOCATION** – Blinn College will maintain its presence Sealy, moving to a new location that is more advantageous to Blinn's mission, its brand and accessibility. The District's leadership and Sealy Campus leadership will work together to assess and update its course offerings to attract more students to the campus and elevate its relevance within Sealy and surrounding community, including local industry and area ISDs.

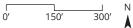
**NO CAMPUS** – Blinn closes its physical campus in Sealy. As with everywhere, virtual courses remain available to those wishing to attend on-line.

## SEALY CAMPUS CURRENT CONDITIONS & FUTURE CONSIDERATIONS

### **BUILDING LEGEND**

- **1** Blinn College Suites
- 2 Blinn College Student Center





Existing Sealy Campus plan (2021).

It is rare for an institution to open a new campus. A new campus represents a bold step for an institution that wants to expand its footprint, support its growth, reinforce its brand and enhance its service offerings. Developing a new campus is a major endeavor requiring unwavering commitment to the district's vision, comprehensive due diligence to support the rationale for a new campus, and sufficient funding to demonstrate the district's commitment to a long-term presence in the community.

During the vision workshops, the district's leadership expressed interest in the potential for a new campus. Blinn's past experiences with opening new campuses has had mixed results.

The Bryan Campus has been so successful that the district is exploring options to manage enrollment in order to maintain alignment with the campus's physical carrying capacity. Similar to the Bryan Campus, the RELLIS Campus has benefited from its strategic alliance with the Texas A&M System and its location in the rapidly growing Bryan-College Station area. In 2-3 years, the RELLIS Campus is projected to be the second largest campus (enrollment-wise) for the district.

On the other hand, the Schulenburg and Sealy Campuses do not demonstrate the same potential for future viability and growth. Both locations have experienced declining enrollment in the past decade. In both cases, the campuses are located in rural communities with little population growth and limited strategic partners.

The district's existing campuses provide important lessons for consideration should the district decide to pursue a

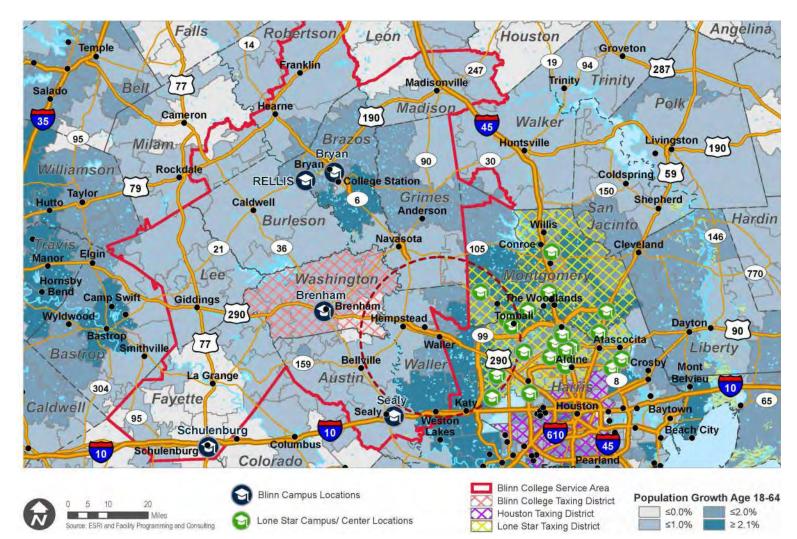
new campus location in the future. Key considerations and questions that should be asked when considering the possibility of opening a new campus include:

- Would the new campus have the civic and financial support of the community it serves?
- Would the new campus have external partners or strategic alliances to build a meaningful presence around?
- Would the new campus be located in an area projected to grow significantly in the next 10-20 years?
- Would the new campus enhance or detract from the district's brand and marketability?
- Would the new campus provide a significant return on the district's investment and attention?

The above five questions are fundamental to building support for expansion. These same questions can be applied to the district's existing campuses when making decisions about investing in their respective futures.

While there is currently no plan to add a new campus to the Blinn College District, demographic data suggests the most opportune area may be in the southeast portion of the existing service area boundary. The projected 10-year growth of the age 18 to 64 demographic, the primary community college population target, is anticipated to be greatest in the northwest and western suburbs of Houston along both the IH-10 and US Route 290 corridors. This is an important consideration if Blinn's intent is to build a campus with the potential to grow in the future.

From a strategic standpoint, the southeast location presents a key opportunity to establish the limits of ongoing expansion by the Lone Star College System and Houston Community College and their encroachment on the district's borders. Combined with the Highway 290 corridor that links Houston to Brenham to Austin and the presence of nearby Prairie View A&M University, the southeast portion of the service area should be considered when weighing the options for a new campus and the potential for strategic alliances.



Study Area for Potential Future District Expansion; Population Growth Age 18-64 by ZIP Code; CAGR 2020-2030

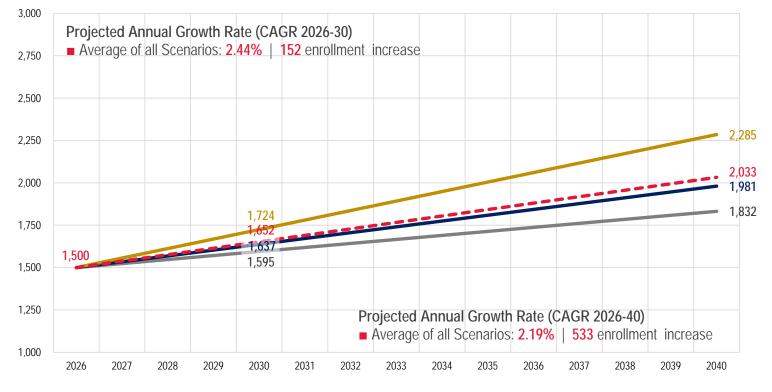
Hypothetical Future Campus Enrollment Projections (On-Campus / Hybrid Headcount) (2026 - 2040)

Combined College Service Area = Percent projected change in growth (2020-2030) of the population age 18 to 64 cohort in the combined (Blinn, Lone Star, HCC, and ACC) service areas; the percent is then multiplied against the proposed initial 2022 enrollment and carried forward.

20-Mile Population Age 18 to 64 = Percent projected change in growth (2020-2030) of the population age 18 to 64 cohort within a 20-mile radius of Waller; the percent is then multiplied against the proposed initial 2022 enrollment and carried forward.

High Schools in 20-Mile Radius = Percent historic change in growth (2014-2019) of the senior class enrollment at the high schools located within a 20-mile radius of Waller; the percent is then multiplied against the proposed initial 2022 enrollment and carried forward.

*Average All Scenarios* = Average of enrollment projected by year across all scenarios above.



Combined College Service Area Population Age 18-64, CAGR 2020-30 Held Constant at 1.6%

Population within 20 Mile Radii from Waller, Age 18-64, CAGR 2020-30 Held Constant at 2.3%

High Schools (12th Grade Class Growth) within 20 Mile Radii from Waller, CAGR 2014-19 Held Constant at 3.7%

- - Average of all Enrollment Projection Scenarios

While locating a campus in this area would put it in competition with nearby Lone Star College campuses, Blinn's reputation would undoubtedly go far in recruiting potential students. To understand the potential enrollment scenario of a future campus in this area, a high level demographic analysis of the area finds that, Information is included here for reference only. Because of its proximity and potential student pool, a new campus in this part of the service area may have an impact on the Sealy and Brenham Campuses, and even potentially on the Bryan Campus enrollment.

Ultimately, the decision to expand, where to expand and when to expand the district's footprint rests with the Blinn College District's leadership. Given the above five key considerations for expansion, below are three scenarios for the district's consideration: **STATUS QUO** – Maintain and support the current campus locations of Brenham, Bryan, RELLIS, Sealy and Schulenburg. Focus the district's resources on continuous improvement and no investment in a sixth campus.

**STATUS QUO + EXPANSION** – Maintain and support the current campus locations of Brenham, Bryan, RELLIS, Sealy and Schulenburg. Expand the district's footprint with a sixth campus in a growing, high-potential location within Blinn's service area.

**REPOSITIONED DISTRICT FOOTPRINT** – Focus the future growth of the Blinn College District and its brand around its high-performing campuses – Brenham; Bryan and RELLIS. Close the Sealy and/or Schulenburg Campuses. Expand the district's footprint with a new campus in a growing, high-potential location within Blinn's service area.

## BLINN COLLEGE DISTRICT DISTRICTWIDE FACILITIES MASTER PLAN MAY 2021

Gensler