I. Introduction

The BBCC Academic Master Plan is designed to help Big Bend Community College (BBCC) fulfill its mission and achieve the strategic goals articulated in the 2017-2020 Strategic Plan by assessing the college's academic offerings and identifying areas of potential growth and change.

BBCC 2017-2020 Strategic Plan			
Academic Master Plan	Facilities Master Plan	Communications & Marketing Plan	Technology Plan (TBD)

II. Overview of Current Academic Offerings

As a comprehensive community college, BBCC has academic offerings that fall within four broad categories: Transfer, Workforce Education, Adult Basic Education, and Community, Business and Industry training. As the title implies, the Transfer category includes degrees and courses designed to help students meet the general education requirements of and earn a baccalaureate degree. BBCC degrees offered in this category are:

- Direct Transfer Agreement (DTA) degree
- Associate in Arts and Science DTA
- Associate in Business DTA/MRP (Major-Related Program)
- Associate in Computer Science DTA/MRP
- Associate in Pre-Nursing DTA/MRP
- Associate in Science Transfer

The Workforce Education category includes degrees and courses designed to prepare students to earn a credential that will allow them to secure employment in a particular field. Historically, Workforce Education degrees were considered terminal with no university transfer options. However, transfer opportunities are increasing for holders of workforce degrees. One option that is rapidly expanding within Washington community and technical colleges is Bachelor of Applied Science (BAS) degrees. BBCC credentials in the workforce education category are:

- Associate in Applied Science (AAS) degree
- Associate in Applied Science – Transfer (AAS-T) degree
- Certificate of Achievement
- Certificate of Accomplishment

The Adult Basic Education category includes courses and credentials that prepare students to perform college-level coursework. Courses are either English as a Second Language (ESL) courses or high school completion courses. Students taking adult basic education classes are prepared to sit for the General Education Development (GED) exams or can earn an adult high school diploma. Students do not earn college credit in adult basic education courses but do earn high school credit in courses leading to an adult high school diploma. BBCC offers the following diploma in this category.

- High School Diploma

The Community, Business, and Industry Training category includes a variety of short-term training opportunities that are usually customized to the needs of a specific employer. Trainees typically do not receive college credit but in some cases have the option of earning college credit or certificates for specific trainings. For those who complete some specialized training such as Air Rescue Fire Fighting (ARFF) training, flagging, or electrical continuing education, BBCC awards professional industry certifications and/or continuing education units (CEUs).

III. Meeting Community Needs

Grant and Adams counties comprise the majority of the BBCC service district. They have a combined estimated 2017 population of 117,149 people, some of whom are the least affluent and educated. A summary of key demographic and economic data for Grant and Adams counties follows.

Primary County Characteristic		Grant County 2017 update	Adams County 2017 update	Washington State 2018 Update	United States 2017 update
Pop.	Population <age 18 years	30.0%	35.1%	22.4%	22.9%
	Population 18-64 years	57.1%	54.2%	52.7%	62.2%
$	Median family income	$48,714	$46,564	$62,848	$55,322
	Poverty level	16.1%	16.5%	11.0%	12.3%
Race & Language	Latinx	40.7%	62.3%	12.7%	17.6%
	White	54.9%	35.2%	68.7%	61.5%
	All persons of color	45.1%	64.8%	21.3%	27.0%
	Speak a language other than English at home	36.5%	54.9%	19.1%	21.3%
	Speak Spanish at home	33.9%	51.3%	8.4%	13.2%
Ed.	Adults with high school diploma	75.5%	66.6%	90.6%	87.0%

Sources: United States Census Bureau - factfinder.census.gov; Washington State Employment Security Division - esd.wa.gov

Both counties are younger, poorer, and more racially diverse than the state or nation. Additionally, the counties have lower educational levels. There is clearly a need for the education that BBCC provides within its service district.

The primary economic sectors in both Grant and Adams counties are agriculture, local government, manufacturing, healthcare, and retail. BBCC currently offers college-level educational programs as well as community, business, and industry trainings that meet employment needs in all five economic sectors. The following table contains a summary of academic programs serving each sector.

Industry	BBCC Programs
Agriculture, forestry and fishing	- Accounting & Business - Agriculture - Automotive - Aviation Flight - Aviation Maintenance - Commercial Driver's License (CDL) - Computer Science - Industrial Electrical Technology

Industry	BBCC Programs
	- Mechatronics - Maintenance Mechanics Technology - Transfer - Unmanned Aerial Systems - Welding
Local government	- Accounting & Business - Administrative Professional Services - Commercial Driver's License - Computer Science - Criminal Justice - Early Childhood Education - Homeland Security Emergency Management - Simulation Technology - Transfer
Manufacturing (includes food processing plants)	- Accounting & Business - Automotive - Aviation Maintenance - Computer Science - Industrial Electrical Technology - Maintenance Mechanics Technology - Mechatronics - Transfer - Welding
Retail Trade	- Accounting & Business - Administrative Professional Services - Computer Science - Transfer
Health Services	- Computer Science - Medical Assistant - Medical Office and Billing Services - Nursing - Nursing Assistant - Simulation Technology - Transfer

In addition to meeting employment demands within the service district, BBCC also has academic programs that meet broader employment needs across the state and Pacific Northwest. Specifically, these programs are:

- Aviation Flight
- Aviation Maintenance
- Nursing
- Simulation Technology
- Transfer
- Unmanned Aerial Systems

IV. Potential Program Growth and/or Changes

BBCC will continue to focus on meeting specific employment needs within its service district. Additionally, BBCC is committed to providing a quality and broad education for all students, especially first-generation college students. Following are lists of activities the college is either undertaking or investigating in each of the four instructional categories. (* Would most likely require the addition of full-time faculty positions.)

Transfer Category
- Ensure courses are accepted to meet general education requirements at primary BBCC transfer institutions: Central Washington University, Eastern Washington University, Washington State University.
- Explore adjustments to humanities and social science course offerings to emphasize cultural issues, especially those that are relevant to historically underrepresented students.
- Explore expansion of humanities offerings to include graphic design and theatre course offerings*.
- Develop, implement, and refine accelerated learning course offerings in the areas of English and math*. These changes often require collaboration with instructors teaching social science, humanities, and natural science courses.
- Offer Nursing DTA and make necessary adjustments to science, humanities, and social science course offerings as needed for the Nursing DTA degree.
- Explore collaborations with other higher education partners to improve engineering course offerings.
- Ensure course offerings continue to meet the needs of a growing high school dual-enrollment population while also maintaining high academic standards.

Workforce Education Category
- Keep curriculum relevant with advances in technology, especially in Computer Science, Automotive, Industrial Electrical, Industrial Maintenance, and Manufacturing programs.
- Explore Computer Science offerings to meet advances in technology in the workplace. Areas of potential growth could include data analytics, physical computing, artificial intelligence, virtual reality, blockchain programming, and cyber security*.
- Continue to refine certificate and degree programs designed to meet the needs of Data Centers.
- Further develop Criminal Justice program to offer full degree*.
- Develop and offer Agriculture Mechanics degree*.
- Develop Geographic Information Systems (GIS) capacity*.
- Develop the capacity to support an elementary education pathway.
- Combine Unmanned Aerial Systems, Simulation, and Advanced Manufacturing programming under a broader Mechatronics program umbrella.
- Investigate expansion of training hours in the Industrial Electrical program toward the journeyman certification.
- Contextualize math courses for workforce education programs.
- Ensure that the Aviation Flight and Aviation Maintenance programs remain current and compliant with Federal Aviation Administration (FAA) requirements, inclusive of records, curriculum, and instruction.

- Explore offerings in the area of supply-chain management and food safety.
- Establish agreements with other colleges to establish consortia for some programs, including Simulation Technology, Unmanned Aerial Systems, and Commercial Driver's License programs.
- Offer Bachelor of Applied Science (BAS) degrees in aviation maintenance management and applied management disciplines.*
- Explore the demand and interest in developing and offering mini-certificates in existing program areas.

Adult Basic Education Category
- Keep courses updated to comply with external federal curricular requirements.
- Develop contextualized high school diploma options in areas such as manufacturing, healthcare, technology, agriculture, and education.
- Develop clear curricular pathways that facilitate the transition of students from adult basic education programming into college-credit bearing programs.

Community, Business, and Industry Training Category
- Ensure training offerings meet the needs of area employers.
- Establish financially sustainable training programs such as agriculture leadership and manufacturing leadership.
- Expand offerings with school districts under Department of Social and Health Services (DSHS) contract.
- Establish clear connections between non-credit and credit-bearing programs so that the non-credit offerings serve as a bridge into credit-bearing programs.

V. Sustainability of Programs

BBCC approaches program sustainability from three perspectives. First, all curricula must be current and relevant to their intended purposes. Second, all academic programs require adequate human, financial, and physical resources to support ongoing operations as well as program updates and renewal. Third, the college uses student enrollment as an indicator of program sustainability. In some cases, enrollment concerns are tied to curricular and/or resource concerns.

Curricular Sustainability

All academic programs engage in annual assessment of student learning activities to ensure instructional practices are continuously improving to meet the needs of current students. Additionally, faculty in all areas are engaged in practices that ensure the courses and programs are preparing students for the next step in their education or employment journey. Courses in the Transfer category are reviewed to ensure they meet university transfer requirements. In the Workforce Education category, the college maintains active advisory boards for each program to ensure the program is appropriately preparing students for entry into the workforce. Moreover, the faculty in the programs undertake program audits that include a review of curricula, resources, and enrollments. Courses in the Adult Basic Education category are kept current with state and federal guidelines around course content, instructional delivery, and high school graduation requirements. In the Community, Business, and Industry Training category, BBCC staff collaborate with community partners and employers to ensure training meets their workforce needs.

Resource Sustainability

All academic programs participate in the annual planning and budgeting process at the college where they have the opportunity to request funding to meet program needs. Additionally, many programs implement fees designed to cover ongoing supply, equipment, and in some instances, personnel costs. These fees are reviewed annually and adjusted as needed. The college secures noncompetitive grant funds through the Washington State Board for Community and Technical Colleges annually to support programs in the Workforce Education and Adult Basic Education categories. The grant funds support physical and human resources as well as employee professional development. Additionally, the college actively pursues competitive grants to strengthen existing programs and create new ones. Some of the disciplines either currently or previously benefited by grants include math, nursing, computer science, simulation technology, unmanned aerial systems, mechatronics, automotive, welding, industrial maintenance, industrial electrical, and aviation maintenance. As grant resources expire, the college makes decisions about what program innovations funded by the grants can be sustained post grant. The Center for Business and Industry Services (CBIS) provides training in the Community, Business, and Industry Training category and operates in a self-support capacity for both physical and human resources.

Adequate human resources are essential for the wellbeing of all academic programs. Through the processes mentioned above, BBCC evaluates the staffing resources for each program and makes adjustments as needed. In addition, as the demographics of the BBCC service district and student body change, the college is committed to increasing the diversity of employees in both faculty and staff positions in an effort to reflect the students the college serves.

Student Enrollment

College faculty and administrators use course enrollment patterns to inform sustainability decisions. Immediate decisions usually center on course scheduling decisions such as what time of day or academic quarter a course should be offered. Medium-term decisions may relate to the modality of course and program offerings (e.g., face-to-face, hybrid, online), securing of additional resources, and/or curricular updates. For instance, as technological changes and other external forces influence curricular change, there are times when the college identifies curricular overlap between programs and consolidates course offerings to maximize student enrollment. Long-term decisions include whether or not to continue offering specific courses or programs.

VI. Enrollment Management

Enrollment management strategies to recruit and retain students is key to the sustainability and health of the college's academic programs. The college has adopted short- and long-term strategies designed to reach its goals in its 2017-20 Strategic Plan of increasing FTEs and completions. Enrollment is cyclical and generally has an inverse relationship with the economy. When the economy is doing well, enrollment suffers and vice versa. BBCC's enrollment management strategies seek to minimize large enrollment swings that result from changes in the economy.

In Washington, colleges are funded to serve a certain number of students, calculated as FTEs (Full-Time Equivalent) and one annual FTE is 15 credits for three quarters for a total of 45 credits. The total number of FTEs a college is funded to serve in a given year is called the college's enrollment target. The State Board tracks the enrollment of each college and adjusts enrollment targets according to a three-
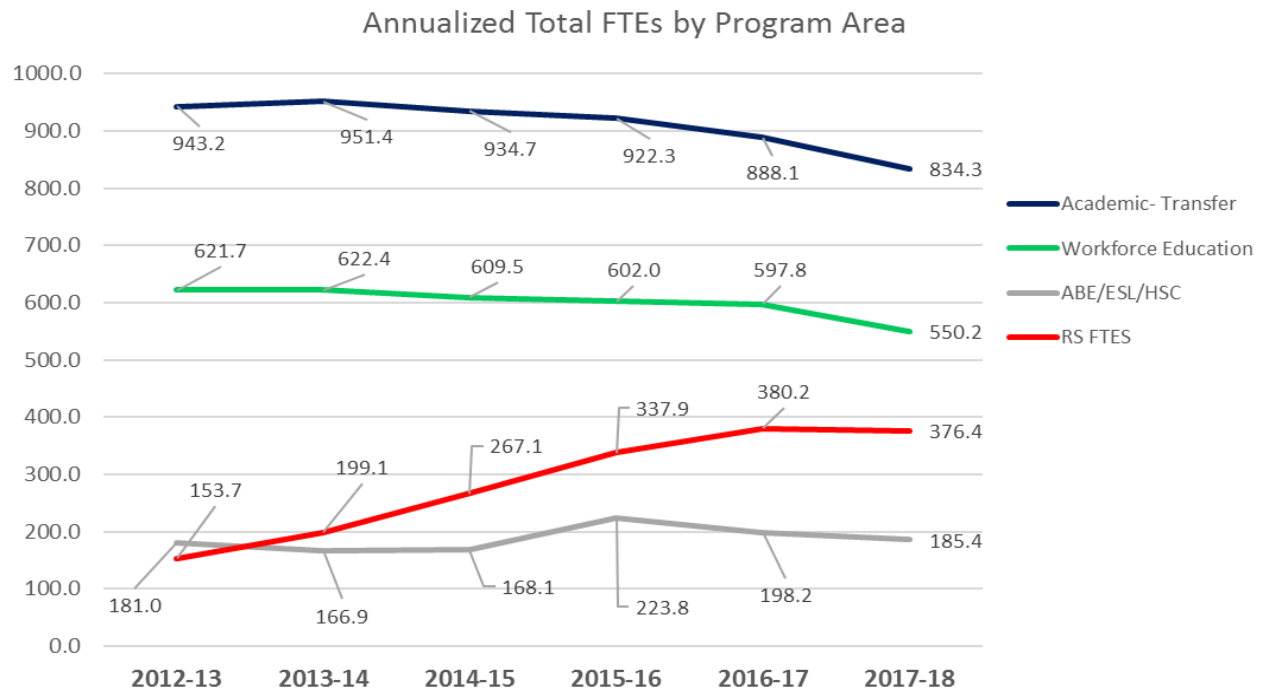
year average of each college's enrollment. If enrollment goes up, the college's enrollment target and funding go up and vice versa. BBCC's enrollment target and corresponding funding for 2018-19 was based on an average of the college's enrollment in 2016-17, 2015-16 and 2014-15. The chart below shows BBCC's enrollment target and actual FTE enrollment for several years.

The chart below shows Total FTE with a blue line and State-Funded FTE with a red line. State-Funded FTE represents students that the state counts towards the college's enrollment target. Non-state-funded FTE represents students that the state does not count towards the college's enrollment target because a different funding model is used to pay for the education of those students. Most of those students at BBCC are Running Start students but also include students in the Community, Business, and Industry Training category.
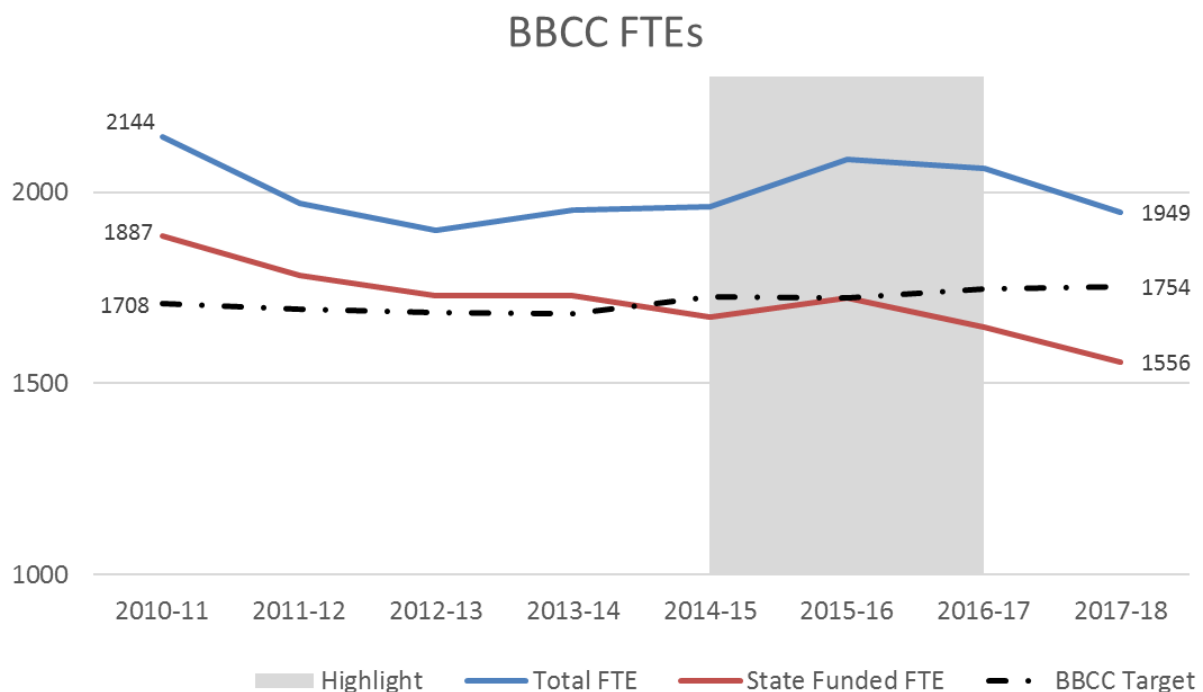
The table below shows enrollment trends in the Transfer, Workforce, and Adult Basic Education categories. In the recent past, the only area of enrollment growth has been with Running Start students.

Annualized Total FTEs by Program Area

Legend:
- Academic- Transfer
- Workforce Education
- ABE/ESL/HSC
- RS FTES

Academic- Transfer: 943.2, 951.4, 934.7, 922.3, 888.1, 834.3
Workforce Education: 621.7, 622.4, 609.5, 602.0, 597.8, 550.2
RS FTES: 153.7, 199.1, 267.1, 337.9, 380.2, 376.4
ABE/ESL/HSC: 181.0, 166.9, 168.1, 223.8, 198.2, 185.4

Years: 2012-13, 2013-14, 2014-15, 2015-16, 2016-17, 2017-18

BBCC's enrollment management strategies take into consideration the unique characteristics of the college while capitalizing on the college's strengths.

- BBCC is a small, rural, and remote college serving a large geographic area with a population that is generally younger, more impoverished, more diverse, and less likely to be educated than both the Washington State and national averages. Unsurprisingly, there is a low college participation rate in BBCC's service district. Therefore, the college needs to use enrollment management strategies that will entice the local population to engage in higher education and attract students from outside the area.
- As described in section II of this document, BBCC has a history of transfer and workforce programs that meet both local and statewide workforce demands.
- BBCC has a history of recruiting out-of-district students through its aviation, nursing, commercial truck driving, and simulation programs as well as its athletics programs. Out-of-district students comprise about 8% of the student body. They are a small but important minority within the student body because they are more likely to be full-time students, are a stable part of the college's enrollment that has not fluctuated as much as our overall headcount, and bring a diversity to the campus that enriches the college's atmosphere.
- BBCC has a legacy of international programming with JATP and the former European program with the military.
- BBCC has a history of successful innovation, development, and implementation in the areas of instruction and support services. The college has a collaborative culture where employees focus on student success. Examples include emporium math, Workforce Education Services, especially with the Working Student Success Network, and offering cutting-edge programs such as Unmanned Systems and Medical Simulation.

- BBCC has a history of being responsive to local employers and seeks to offer programs and services that prepare students to succeed in the workplace and allow students to work and attend college.
- BBCC has seen significant growth in its Running Start student population and needs to pay particular attention to relationships with local school districts.
- The full-time to part-time student ratio at BBCC is about 50/50. Full-time are more likely to complete a degree, and BBCC needs to maintain or expand the number of full-time students.
- BBCC is a federally designated Hispanic Serving Institution (HSI) due to the large number of Hispanic students it enrolls. Hispanic students are the largest number of students in the Historically Underrepresented Groups (HUG). As summarized in the 2017-20 Strategic Plan, HUG students are more likely to be first-generation college students, place into developmental math or English classes, come from financially disadvantaged backgrounds, and complete a college degree at a lower rate. BBCC must develop and implement enrollment management strategies that serve these students and foster their success.

The 2017-20 Strategic Plan identifies three major student groups around which BBCC has developed enrollment ment management strategies. These groups are:

a) Current and Recent High School Graduates who are 24 years of age or younger,
b) Adult students who are 25 years of age or older, and
c) First-generation and HUG students.

Current and Recent High School Graduates

This group of students are comprised of students in dual-enrollment programs and what is often considered "traditional" college students who recently graduated from high school. Because of their age, they are more likely than older students to be single and financial dependents of their parents. These students are predominantly pursuing a transfer, business, nursing, agriculture, automotive, computer science, or aviation degree. The only recent enrollment growth in this group has been due to growth in dual-enrollment programs (Running Start, College in the High School, and Open Doors). As the number of high school graduates across the state stagnates, competition with other higher education providers for these students will increase.

Enrollment Management Strategies for this group includes:
- Strengthening and expanding dual-enrollment opportunities.
- Strengthening relationships with school districts through formal partnerships.
- Proactively reaching out to parents and family members of current and future students.
- Strengthening and expanding athletics.
- Improving student engagement opportunities for existing students.
- Growing international student enrollment for aviation-related programs.

Adult Students

Students in this group are predominantly enrolled in workforce and adult basic education programs. These students are more likely to have dependents and be employed full time than younger students. Enrollment trends with this group are closely tied to economic indicators. Over the past few years in a strong economy, enrollment in workforce, transfer, and adult basic education programs has declined. If more adult students are working, then the college must make all of its educational programs accessible to working adults.

Enrollment Management Strategies for this group include:
- Expanding evening and weekend course offerings & services by offering the DTA, select workforce education degrees, and high school diploma fully online and in the evening.
- Expanding course and degree offerings at off-site locations across the district.
- Offering courses and degrees using competency-based learning strategies and offering college credit for prior learning.
- Making upgrades to existing programs and offering new workforce education programs in response to local employment needs.
- Offering one or more BAS degrees in response to local employment demands.
- Conducting targeted outreach and recruitment for specific workforce education programs.

First-Generation & HUG students

Students in this category are enrolled in all areas of the curriculum but are over-represented in the adult basic education category. Over the past few years, enrollment in the adult basic education category has declined. However, students in this group have increased as a percentage of the overall student population and will continue to increase.

Enrollment Management Strategies for this group includes:
- Implementing comprehensive advising efforts.
- Building an annual schedule.
- Clarifying the curricular pathway and improving the transition from adult basic education into college-level courses and programs.
- Offering accelerated learning classes in English and math.
- Growing comprehensive student supports and services for ALL students.

VII. Service and Physical Infrastructure

In order to ensure the success of its academic programs, BBCC recognizes the necessity of having student-support services that are responsive to student needs as well as strong physical, human, and technological infrastructure. A list of some areas to address in both categories follows.

Services
- Improve comprehensive advising services including new-student intake, academic advising, and comprehensive case management support.
- Support professional development around the College and Career Readiness Standards, online and hybrid instruction, teaching, and engaging HUG students.
- Develop procedures around assessment of prior learning and awarding of credit.
- Explore active learning opportunities for students, including internships, externships, service learning, and undergraduate research.
- Expand academic placement options.
- Improve evening and online instruction and service delivery.
- Investigate offering courses and selected student services off-site.
- Investigate expanded adoption of open resource texts.
- Explore the introduction of esports.
- Improve support for associate faculty.
- Increase collaboration between academic programs.

- Improve onboarding and support/mentorship of employees.
- Sustain and improve support for safety measures.
- Expand academic supports (e.g., tutoring).
- Develop a standardized communication plan with students.
- Build deeper connections with employers, recipients of non-credit training, alumni, community members, etc.
- Enhance college visibility in the community.
- Improve transportation options for students.
- Explore environmentally sustainable practices.
- Examine and improve the efficiency of tasks and procedures with the goal of eliminating the duplication of efforts.
- Secure input of current and former students.
- Develop and implement marketing and outreach plans.
- Further develop and implement specific enrollment-management strategies.

Physical Infrastructure

- Complete and occupy the new Workforce Education Center.
- Plan how to re-allocate and use the space in the Opportunity Center, 1000 and 1500 buildings after staff and programs move into the Workforce Education Center.
- Explore opportunities to update or replace the Wallenstien Theatre.
- Remodel and expand facilities for natural science instruction.
- Expand and improve the wireless network.
- Replace gym floor, add air conditioning to the gym, and create additional classroom space for additional PE classes.
- Update vehicle fleet, including vans and bus.